National Fire Incident Reporting System 5.0

Complete Reference Guide

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FOREWORD

In 1972, the President's Commission on Fire Prevention and Control published *America Burning*. This document was the first in-depth discussion of this country's fire problem. An outgrowth of *America Burning* was the National Fire Prevention and Control Act, Public Law 93–498, which established the National Fire Prevention and Control Administration.

One of the results of the P.L. 93–498 mandate to collect national data on fires was the establishment of the National Fire Incident Reporting System (NFIRS). In 1976, six states piloted what eventually evolved to NFIRS. The U.S. Fire Administration (USFA), a component of the Department of Homeland Security, developed NFIRS as a means of assessing the nature and scope of the fire problem in the United States.

NFIRS has grown in both participation and use. Over the life of the system, all 50 states, more than 40 major metropolitan areas, and more than 15,000 fire departments have participated in NFIRS. On a yearly basis, approximately 600,000 fire incidents and more than 5 million non-fire incidents are added to the database. NFIRS is the world's largest collection of incidents to which fire departments respond.

NFIRS data are used at all levels of government. At the local level, incident and casualty information is used for setting priorities and targeting resources. The data now being collected are particularly useful for designing fire prevention and educational programs and emergency medical service (EMS)-related activities specifically suited to the real emergency problems the local community faces.

On the state level, NFIRS is used in many capacities. One valuable contribution is that NFIRS data are used by state legislatures to justify budgets and to pass important bills on fire-related issues such as sprinklers, fireworks, and arson.

Many federal agencies, in addition to USFA, make use of NFIRS data—the Consumer Product Safety Commission, the National Highway Traffic Safety Administration, the National Institute of Standards and Technology to name a few. The Consumer Product Safety Commission has found NFIRS very useful in identifying potentially hazardous products.

Nationally, NFIRS is used by various private industries, including national associations for home appliance product manufacturers, the hotel and motel industry, insurance companies, and attorneys.

Because NFIRS is a voluntary system, not all states or fire departments within states participate. In 1977, only 6 states regularly reported data to the National Fire Data Center, and 19 others had data systems in some stage of development. Since then, participation has increased significantly so that an estimated 44 percent of all U.S. fires to which fire departments respond are captured in NFIRS.

States have the flexibility to adapt their state reporting systems to their specific needs, and reporting by localities is voluntary. Therefore, the design of a state's data collection system varies from state to state. However, NFIRS was designed so that data from state systems can be converted to a single format that is used at the national level to aggregate and store NFIRS data.

As participation in NFIRS increased, the system itself has undergone revisions and updates. The latest update of the system is Version 5.0, which provides many improvements both from the standpoint of those who submit the data and for those who use it. This reference guide provides step-by-step instructions for submitting fire incident information to NFIRS 5.0.

Comments and suggestions on further improvements to this guide are solicited and should be submitted to National Fire Data Center, U.S. Fire Administration, Department of Homeland Security, 16825 South Seton Avenue, Emmitsburg, Maryland 21727. Comments can also be made on line on the USFA web form at http://www.usfa.fema.gov/.

Chapter 1

INTRODUCTION

CHAPTER 1

INTRODUCTION

This reference guide is a component of the National Fire Incident Reporting System (NFIRS) Version 5.0. It provides both instructions for reporting data to NFIRS Version 5.0 and an understanding of the data elements collected by the system. It also serves as a reference for the coding of the data. NFIRS (pronounced "en-furs") is a tool that fire departments use both to report fires and other incidents to which fire departments respond and to maintain records of these incidents in a uniform manner.

NFIRS 5.0 is a modular, all-incident reporting system designed by the U.S. Fire Administration, a part of the Department of Homeland Security, with input from the fire service and other users of the data.

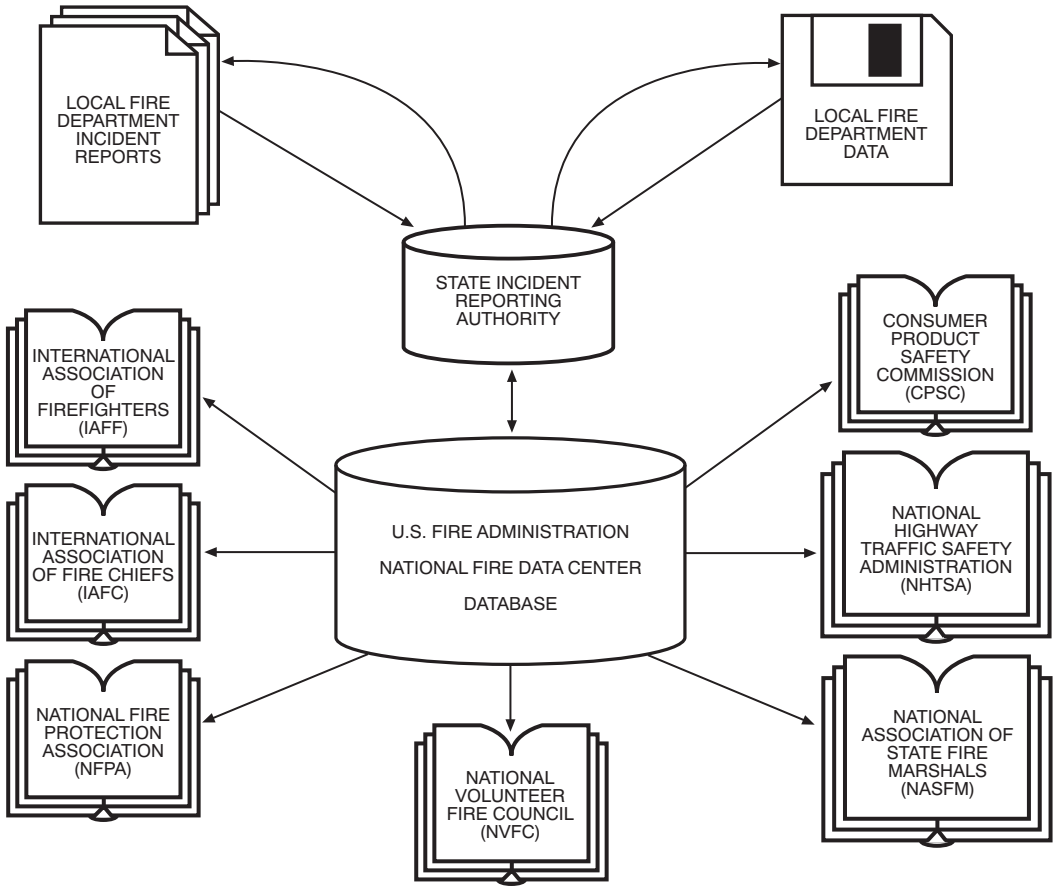
How NFIRS Works

In 2001, more than 12,000 fire departments participated in NFIRS. After responding to an incident, fire department personnel complete one or more of the NFIRS "modules." The information in these modules describes the kind of incident responded to, where it occurred, the resources used to mitigate it and how, losses, and other information designed specifically to understand the nature and causes of fire, hazardous material (HazMat), and emergency medical service (EMS) incidents. Information is also collected on the number of civilian or firefighter casualties and an estimate of property loss. The uniformity of definitions used in coding NFIRS fields makes aggregation of national data possible.

Information is entered about an emergency response either manually on a form or directly through a computer. Local agencies forward the completed NFIRS modules to the state agency responsible for NFIRS data. The state agency combines the information with data from other fire departments into a statewide database and then transmits the data to the National Fire Data Center (NFDC) at the U.S. Fire Administration. The NFDC can then compare and contrast statistics from states and large metropolitan departments to develop national public education campaigns, make recommendations for national codes and standards, guide allocation of federal funds, determine consumer product failures, identify the focus for research efforts, and support federal legislation. NFIRS is the primary source of data for a wide range of analyses and reports, including USFA's publication *Fire in the United States,* which is the single most comprehensive reference on the nature and scope of the fire problem in the United States.

At the national level, data combined from participating states are also used by information partners, as shown in the following graphic.

INCIDENT REPORTING PROCESS



NFIRS Version 5.0 Enhancements

NFIRS 5.0 is an information-based system with data entry, data storage, and data retrieval, whether for a single incident or in aggregate, aggregated via a computer that interacts with the database. Because not all fire departments use computers for their record keeping, paper forms are available. Paper forms are forwarded to a central point where the data are entered to a database. This guide provides detailed instructions for completing paper forms. Automated reporting systems, however, should be designed to capture the data in the same order as these paper forms, so this guide is relevant to anyone who must collect and report incident data.

In Version 5.0, a series of descriptions with assigned code numbers is used to describe incidents. Many of these descriptive phrases were created by the National Fire Protection Association (NFPA) and published in NFPA 901, *Standard Classifications for Incident Reporting and Fire Protection Data,* 1995 edition. Appropriate codes are included in this user guide. Many improvements that have been incorporated into Version 5.0 are the result of suggestions made by participating fire departments, state agencies, and the National Fire Information Council.

The type and content of data collected by NFIRS 5.0 have evolved over more than 25 years and are based on the participation of all 50 states and more than 40 metropolitan fire departments. NFIRS 5.0 captures information on all incidents to which a fire department responds. In addition to many data coding improvements, Version 5.0 provides five new modules that recognize the increasingly diverse activities of fire departments today: an EMS Module, a Wildland Fire Module, an Apparatus Module, a Personnel Module, and an Arson Module. Other modules have been extensively revised.

The modular design of NFIRS 5.0 makes the system easier to use than previous NFIRS versions because it captures only the data required to profile the extent of the incident. Some fires, for example, require just basic information, whereas others require considerably more detail. The accuracy and reliability of the collected data are improved because of the way questions are asked and data are coded.

The selection of data elements and the coding selections for the data have been revised to reduce confusion or improve data quality. For example, codes using 9 to indicate "not otherwise classified" have been changed to the value of 0 (zero) where it may be necessary to code something as "other." The internal codes for "insufficient information to classify further" have been eliminated. A single code of "U" (or "UU" or "UUU" depending on field size) is available to designate "unknown" or "undetermined." Although NFIRS Version 4.1 allowed a distinction between the 9 code ("not otherwise classified") and the 0 code ("insufficient information to classify further"), the distinction between these codes was often unclear to the respondent.

Other improvements incorporated in NFIRS 5.0 include:

- Compound data elements have been eliminated. Some of the previous data elements asked for multiple pieces of information. NFIRS 5.0 splits these data elements into single-issue questions to eliminate often confusing and ambiguous or incorrect answers. Although this increased the number of fields or questions being asked, the choices are clearer and the number of codes has decreased. For example, "Equipment Involved in Ignition" in Version 4.1 is a complex list of equipment that not only identifies the equipment, but also includes data on its power source and portability. Version 5.0 has three categories (Equipment, Equipment Portability, and Equipment Power Source) that makes coding easier, more accurate, and more specific.
- Contained, no-loss fires are simply reported using only the Basic Module, with as few as three codes having to be looked up and entered when using the paper forms.
- Small spills of common hazardous materials are documented only in the Basic Module instead of requiring the fire department to complete all the details that are necessary for spills that are more significant. Detailed information is completed on the HazMat Module (NFIRS–7) if a serious release of hazardous materials occurs.
- Reporting the failures of protective clothing and equipment worn or used by firefighters has been simplified to focus only on items whose failure contributed to a casualty (i.e., injury or fatality).

For convenience to users familiar with the code s of NFIRS 4.1, references are provided in this guide to the titles of the NFIRS 4.1 code lists that have changed in NFIRS 5.0.

Benefits of NFIRS to Firefighters

Firefighters will find that NFIRS 5.0 is easier to use than previous versions. Also, two of the new modules, Apparatus and Personnel, will assist fire departments in managing apparatus, personnel, and resources.

Each fire department is responsible for planning and managing its operations so that firefighters can perform their roles of fire control and fire prevention most effectively and efficiently. The availability of accurate information about fires and other incidents is vital in achieving maximum performance. Patterns that emerge from the analysis of incident data can help departments focus on current problems, predict future problems in their communities, and measure their programs' performance.

Coding

In 1963, NFPA formed a technical committee to devise a uniform system of fire reporting to encourage fire departments to use a common set of definitions. NFPA 901, *Standard Classifications for Incident Reporting and Fire Protection Data,* was developed as a dictionary of fire terminology and associated numerical codes. As the fire service gained experience with this fire data “language,” continuous improvements have been possible. The set of codes used in NFIRS 5.0 represents the merging of the ideas from NFPA 901 with the many suggested improvements from users of the NFIRS 4.1 coding system.

Structure of the User Guide

Chapter 2 briefly describes the 11 NFIRS modules, provides general guidance on when each module should be used, and details standard conventions that are to be used when completing these modules. Chapters 3 through 13 cover NFIRS modules 1 through 11, respectively, in detail. Guidance is provided on how each field of the module form should be completed and defines the codes that are used in the system. Chapter 14 addresses information that might be submitted on a supplemental form (NFIRS–1S). Full-size replicas of all NFIRS forms are found in Appendix A.

Appendix B is an index of NFIRS 5.0 synonyms of selected code lists that have been alphabetized. Appendix C is a glossary of terms and abbreviations. Appendix D is an alphabetized listing of chemicals and hazardous materials.

Chapter 2

NFIRS 5.0 MODULES

CHAPTER 2

NFIRS 5.0 MODULES

NFIRS Version 5.0 consists of 11 modules. The Basic Module is to be completed for every incident, with additional modules used as appropriate to describe the incident.

Description of Modules

The ***Basic Module*** (NFIRS–1) captures general information on every incident (or emergency call) to which the department responds.

THE FOLLOWING MODULES ARE USED IN CONJUNCTION WITH THE BASIC MODULE, WHICH MUST BE COMPLETED FOR EVERY INCIDENT TO WHICH YOUR DEPARTMENT RESPONDS

The ***Fire Module*** (NFIRS–2) is used to describe each fire incident to which the department responds. For wildland fire incidents, the Wildland Module can be used instead of the Fire Module if that option is available by your state reporting authority.

The ***Structure Fire Module*** (NFIRS–3) is used to describe each structure fire to which the department responds. This module is used in conjunction with the Fire Module.

The ***Civilian Fire Casualty Module*** (NFIRS–4) is used to report injuries or deaths to civilians or other emergency personnel (e.g., police officers, non-fire department/EMS personnel) that are related to a fire incident. This module is used in conjunction with the Fire Module and, if applicable, the Structure Fire Module. Non-fire-related injuries or deaths to civilians can be reported on the EMS Module.

The ***Fire Service Casualty Module*** (NFIRS–5) is used to report injuries and deaths of firefighters. The module can also be used to report the exposure of a firefighter to chemicals or biological agents at an incident where that exposure does not result in any symptoms at that time but that manifest themselves at a later date. This module may be used with any of the other modules.

THE FOLLOWING MODULES (NFIRS–6 THROUGH –11) ARE OPTIONAL MODULES THAT ARE USED ONLY WHEN THAT OPTION(S) IS SELECTED BY YOUR STATE REPORTING AUTHORITY

The ***EMS Module*** (NFIRS–6) is completed by fire departments that provide emergency medical services. The module is used to report all medical incidents where the department provided the primary patient care. This includes incidents where there were civilian fire-related casualties and a Civilian Fire Casualty Module was completed and where there were firefighter fire-related casualties and a Fire Service Casualty Module was completed. (This

module does not serve as a patient care record, but it can be used in conjunction with the local requirements for patient care.)

The ***Hazardous Materials Module*** (NFIRS–7) is completed to report spills or releases of 55 gallons or more of hazardous materials or when special HazMat actions were taken. As appropriate, the module is used in conjunction with the Fire Module or other modules to provide detailed information about incidents involving hazardous materials.

The ***Wildland Fire Module*** (NFIRS–8) is completed to report incidents that involve wildland or vegetation fires. The module is used in lieu of the Fire Module for wildland fire incidents.

The ***Apparatus or Resources Module*** (NFIRS–9), a department-use module, is completed to report data specific to each piece of apparatus that responds to an incident. It includes information that can be used to calculate response time and time out of service. This module is not used if the Personnel Module is used.

The ***Personnel Module*** (NFIRS–10), a department-use module, is completed to report the same information as on the Apparatus or Resources Module, but it also provides for tracking the personnel associated with that apparatus.

The ***Arson Module*** (NFIRS–11) is completed to report additional information on fires that have been coded by the department as “intentionally set.”

In addition to the 11 modules, a ***Supplemental Form*** (NFIRS–1S) can be used to report information on additional persons and entities involved in the incident and to collect additional special studies fields. This paper-only form extends the amount of information collected in the Basic Module.

Preparation of Modules

Both local and state agencies should establish standard procedures on how to complete the NFIRS reporting modules and how to submit the modules to the state reporting activity. These procedures will help ensure consistency in the data received and provide guidance to those filling out the modules. Each coded field in on-line NFIRS systems has the capability to be expanded by another alpha-numeric character so that information more specific than the national standard addresses can be collected.

The majority of the information on the modules is obtained at the scene by emergency responder personnel. An emergency responder at the scene should be assigned the responsibility of recording the required information concerning each incident. To gather additional information or to confirm one's own impressions, the individual completing the module should contact others involved with the incident. Contacts may include on-scene fire service personnel, police and civilians at the scene, the dispatcher, EMS personnel, hospital staff, fire and building inspectors, the arson investigator, the local fire module coordinator, and state-level officials responsible for coordinating the reporting system. Most importantly, the module should reflect exactly what happened.

Once the module has been completed, the information should be reviewed at the local level before it is signed by the officer in charge at the incident and by the individual completing the module. Originals of the modules should be kept for departmental use and files, and copies forwarded to the state that will transmit them to the National Fire Data Center.

Modifications to original incident reports can be submitted later when additional information becomes available or if any of the original information changes or is found to be incorrect. A person injured in a fire who dies within 1 year as a result of the injuries is an example of the type of new information that could be cause for submitting a "change report."

Once computerized, the data can be presented in a variety of ways, such as summaries, comparisons, and reports. The web-based reporting tool made available to NFIRS users by the National Fire Data Center is able to produce a variety of reports. Many localities and departments develop data analysis and display programs to meet their own requirements. For more information concerning the new NFIRS 5.0, contact the U.S. Fire Administration or visit its web site at http://www.usfa.fema.gov/ and follow the links to the National Fire Data Center.

Conventions Used in Completing Modules

Each time a fire service unit moves in response to an alarm, the Basic Module (NFIRS–1) must be completed. One report is completed for each incident. Other modules are completed as appropriate.

A form depicting the data for each module is shown at the beginning of that module's chapter. The entire set of forms (full-size) is included in Appendix A. The forms are divided into lettered sections, and blocks divide sections. Blocks are formed by the section letter and the number of the block within the section (e.g., Section A, Block A1). The different blocks within a section contain related information. The modules are designed to help emergency personnel report incident information in a straightforward and orderly manner. Many of the codes are printed on the paper modules to expedite the report process. For many situations, however, the correct codes will need to be looked up.

Modules should be completed according to the type of incident being reported. Instruction is given on the module when necessary. *All sections that have a star (✰) by the title are required fields.* Throughout this guide, notes or important considerations are indicated with a pointed finger (☞).

Each module is discussed one section at a time in the chapters that follow. Each item or block in each section is described by its definition, purpose, entry, and example. In addition, for those items requiring a numerical code, the codes and a coded example are shown.

- The *definition* provides a common meaning for all, which ensures consistency in understanding and application.
- The *purpose* gives a brief explanation as to why the information has been requested; it may also indicate how the information could be of additional use.

- The *entry* provides guidance on the type of information to place in the entry block.
- The *example* shows how the entry might look for a particular situation.

Within the data coding used in this system, a few conventions assist in reporting. The letters "N," "NN," or "NNN" are used to indicate "none" in a field that is normally coded. The letters "U," "UU," or "UUU" are used to indicate "unknown" or "undetermined" in a field that is normally coded. If the field is a numeric field such as dollar loss, 0 (zero) is used to indicate none. Numeric fields such as dollar loss can be left blank if a value is unknown or if the incident is not a fire.

☞ The coded field should not be left blank as that is an indication that the person completing the report missed it or forgot to fill it out.

Please note that the numbers "0," "00," or "000" are valid codes for many coded fields. These have the value for "other" and are intended to be used where the item or issue being coded is identifiable but the code selection list does not contain the description of what has been identified for that data element. In some data elements, codes ending in "0" allow for further identification of the item or issue, as in the case where part of the answer is known but not enough to code it at the specific level required by the options in the list.

The entry of data into fields should follow the following conventions:

- *Text fields* should be left justified.
- *Numeric fields* should be right justified.
- *Coded fields* do not need to be justified since they should fit the entry space exactly.

Fire Department Header

Before data may be entered into NFIRS 5.0, each fire department must have established a header record. This record is established only once in the system and then updated whenever there is a change in the department's information.

☞ Creation of or changes to the header record must be reviewed or approved by each department's state NFIRS program manager.

As a rule of thumb, if a department has a Fire Department Identification (FDID) number, a header has already been established. Most of the existing records were created from the conversion of NFIRS 4.1 header records at the state level; however, many of the fields may be blank because they are new to NFIRS 5.0. It is recommended that each department review their header record to ensure completeness.

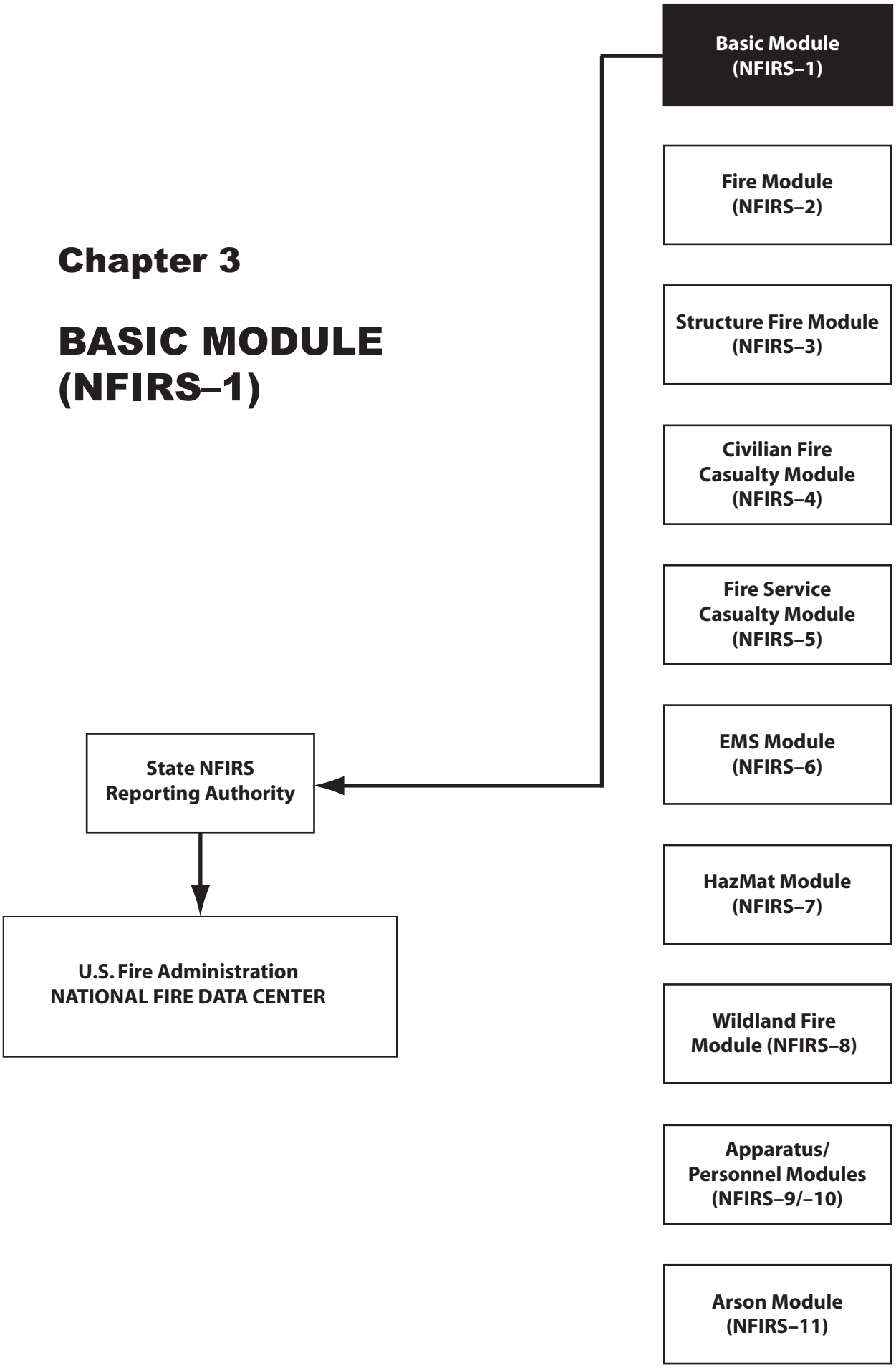
The following table shows the fire department header fields:

Field Name	Field Type	Field Length
Fire Department Identification*	Text	5
Fire Department State*	Coded	2
Record Type	Numeric	5
Transaction Type	Coded	1
Fire Department Name	Text	30
Fire Department Street Number or Milepost*	Text	8
Fire Department Street Prefix*	Coded	2
Fire Department Street or Highway Name*	Text	30
Fire Department Street Type*	Coded	4
Fire Department Street Suffix*	Coded	2
Fire Department City*	Text	20
Fire Department ZIP*	Numeric	9
Fire Department Phone	Numeric	10
Fire Department Fax	Numeric	10
Fire Department E-Mail	Text	45
Fire Department FIPS County Code	Text	3
Number of Stations	Numeric	3
Number of Paid Firefighters	Numeric	4
Number of Volunteer Firefighters	Numeric	4
Number of Volunteer Paid Per Call	Numeric	4

*Definitions and abbreviations for these fields are presented in Chapter 3, Sections A and B.

Chapter 3

BASIC MODULE (NFIRS–1)



A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆

☐ Delete ☐ Change ☐ No Activity

NFIRS–1 Basic

B Location Type ☆

☐ Check this box to indicate that the address for this incident is provided on the Wildland Fire Module in Section B, "Alternative Location Specification." Use only for wildland fires.

Census Tract ___-___

☐ Street address
☐ Intersection
☐ In front of
☐ Rear of
☐ Adjacent to
☐ Directions

Number/Milepost | Prefix | Street or Highway | Street Type | Suffix

Apt./Suite/Room | City | State | ZIP Code

Cross Street or Directions, as applicable

C Incident Type ☆

Incident Type

D Aid Given or Received ☆ ☐ None

1 ☐ Mutual aid received
2 ☐ Auto. aid received
3 ☐ Mutual aid given
4 ☐ Auto. aid given
5 ☐ Other aid given

Their FDID | Their State | Their Incident Number

E1 Dates and Times Midnight is 0000

Check boxes if dates are the same as Alarm Date.

	Month	Day	Year	Hour	Min
Alarm ☆ (ALARM always required)					
☐ Arrival ☆ (ARRIVAL required, unless canceled or did not arrive)					
☐ Controlled (CONTROLLED optional, except for wildland fires)					
☐ Last Unit Cleared (LAST UNIT CLEARED, required except for wildland fires)					

E2 Shifts and Alarms Local Option

Shift or Platoon | Alarms | District

E3 Special Studies Local Option

Special Study ID# | Special Study Value

F Actions Taken ☆

Primary Action Taken (1)

Additional Action Taken (2)

Additional Action Taken (3)

G1 Resources ☆

☐ Check this box and skip this block if an Apparatus or Personnel Module is used.

	Apparatus	Personnel
Suppression		
EMS		
Other		

☐ Check box if resource counts include aid received resources.

G2 Estimated Dollar Losses and Values

LOSSES: Required for all fires if known. Optional for non-fires.

Property $ ___,___,___ ☐ None

Contents $ ___,___,___ ☐

PRE-INCIDENT VALUE: Optional

Property $ ___,___,___ ☐

Contents $ ___,___,___ ☐

Completed Modules

☐ Fire–2
☐ Structure Fire–3
☐ Civilian Fire Cas.–4
☐ Fire Service Cas.–5
☐ EMS–6
☐ HazMat–7
☐ Wildland Fire–8
☐ Apparatus–9
☐ Personnel–10
☐ Arson–11

H1 Casualties ☆ ☐ None

	Deaths	Injuries
Fire Service		
Civilian		

H2 Detector Required for confined fires.

1 ☐ Detector alerted occupants
2 ☐ Detector did not alert them
U ☐ Unknown

H3 Hazardous Materials Release ☐ None

1 ☐ **Natural gas:** slow leak, no evacuation or HazMat actions
2 ☐ **Propane gas:** <21-lb tank (as in home BBQ grill)
3 ☐ **Gasoline:** vehicle fuel tank or portable container
4 ☐ **Kerosene:** fuel burning equipment or portable storage
5 ☐ **Diesel fuel/fuel oil:** vehicle fuel tank or portable storage
6 ☐ **Household solvents:** home/office spill, cleanup only
7 ☐ **Motor oil:** from engine or portable container
8 ☐ **Paint:** from paint cans totaling <55 gallons
0 ☐ **Other:** special HazMat actions required or spill > 55 gal (Please complete the HazMat form.)

I Mixed Use Property ☐ Not mixed

10 ☐ Assembly use
20 ☐ Education use
33 ☐ Medical use
40 ☐ Residential use
51 ☐ Row of stores
53 ☐ Enclosed mall
58 ☐ Business & residential
59 ☐ Office use
60 ☐ Industrial use
63 ☐ Military use
65 ☐ Farm use
00 ☐ Other mixed use

J Property Use ☆ ☐ None

Structures

131 ☐ Church, place of worship
161 ☐ Restaurant or cafeteria
162 ☐ Bar/tavern or nightclub
213 ☐ Elementary school, kindergarten
215 ☐ High school, junior high
241 ☐ College, adult education
311 ☐ Nursing home
331 ☐ Hospital
341 ☐ Clinic, clinic-type infirmary
342 ☐ Doctor/dentist office
361 ☐ Prison or jail, not juvenile
419 ☐ 1- or 2-family dwelling
429 ☐ Multifamily dwelling
439 ☐ Rooming/boarding house
449 ☐ Commercial hotel or motel
459 ☐ Residential, board and care
464 ☐ Dormitory/barracks
519 ☐ Food and beverage sales
539 ☐ Household goods, sales, repairs
571 ☐ Gas or service station
579 ☐ Motor vehicle/boat sales/repairs
599 ☐ Business office
615 ☐ Electric-generating plant
629 ☐ Laboratory/science laboratory
700 ☐ Manufacturing plant
819 ☐ Livestock/poultry storage (barn)
882 ☐ Non-residential parking garage
891 ☐ Warehouse

Outside

124 ☐ Playground or park
655 ☐ Crops or orchard
669 ☐ Forest (timberland)
807 ☐ Outdoor storage area
919 ☐ Dump or sanitary landfill
931 ☐ Open land or field
936 ☐ Vacant lot
938 ☐ Graded/cared for plot of land
946 ☐ Lake, river, stream
951 ☐ Railroad right-of-way
960 ☐ Other street
961 ☐ Highway/divided highway
962 ☐ Residential street/driveway
981 ☐ Construction site
984 ☐ Industrial plant yard

Look up and enter a Property Use code and description only if you have NOT checked a Property Use box.

Property Use | Code

Property Use Description

NFIRS–1 Revision 01/01/04

K1 Person/Entity Involved

Local Option

Business Name (if applicable) | Area Code – Phone Number

☐ Check this box if same address as incident Location (Section B). Then skip the three duplicate address lines.

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | ZIP Code –

☐ **More people involved? Check this box and attach Supplemental Forms (NFIRS–1S) as necessary.**

K2 Owner

Local Option

☐ Same as person involved? Then check this box and skip the rest of this block.

Business Name (if applicable) | Area Code – Phone Number

☐ Check this box if same address as incident Location (Section B). Then skip the three duplicate address lines.

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | ZIP Code –

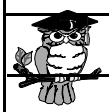
L Remarks:

Local Option

Fire Module Required?

Check the box that applies and then complete the Fire Module based on Incident Type, as follows:

☐ **Buildings 111**	**Complete Fire & Structure Modules**
☐ **Special structure 112**	**Complete Fire Module & Section I, Structure Module**
☐ **Confined 113–118**	**Basic Module Only**
☐ **Mobile property 120–123**	**Complete Fire & Structure Modules**
☐ **Vehicle 130–138**	**Complete Fire Module**
☐ **Vegetation 140–143**	**Complete Fire or Wildland Module**
☐ **Outside rubbish fire 150–155**	**Basic Module Only**
☐ **Special outside fire 160**	**Complete Fire or Wildland Module**
☐ **Special outside fire 161–163**	**Complete Fire Module**
☐ **Crop fire 170–173**	**Complete Fire or Wildland Module**



ITEMS WITH A ☆ MUST **ALWAYS** BE COMPLETED!

☐ **More remarks? Check this box and attach Supplemental Forms (NFIRS–1S) as necessary.**

M Authorization

Officer in charge ID | Signature | Position or rank | Assignment | Month | Day | Year

Check box if same as Officer in charge. ⇨ ☐

Member making report ID | Signature | Position or rank | Assignment | Month | Day | Year

CHAPTER 3

BASIC MODULE (NFIRS–1)

The purpose of the Basic Module is to collect information common to all incidents. *The Basic Module is required for every type of incident to which a department responds.*

Entries in the Basic Module determine what other modules need to be completed based on the type of incident involved. For example, fire incidents are also reported on the Fire Module (NFIRS–2). Additionally, the Structure Fire Module (NFIRS–3) is required if the fire reported in the Fire Module occurs in a structure.

A separate Civilian Fire Casualty Module (NFIRS–4) is required for each civilian who is injured as a direct result of a fire incident. A separate Fire Service Casualty Module (NFIRS–5) is required for each firefighter who is injured in response to an alarm whether or not a fire was involved.

Optional modules include the EMS, HazMat, Wildland Fire, Apparatus and Personnel, and Arson Modules. The type of incident reported or the nature of a particular incident, such as the release of hazardous materials at a fire after the arrival of the fire department, may trigger one or more of these additional modules. The amount of information needed in each module varies based on the type of incident, associated casualties, and property losses.

SECTION A

The field elements in Section A that are marked with a star (☆) are required to be completed. Combined, these fields (FDIC, State, Incident Date, Incident Number, and Exposure) uniquely identify each incident.

A

Fire Department Identification (FDID) ☆

Definition

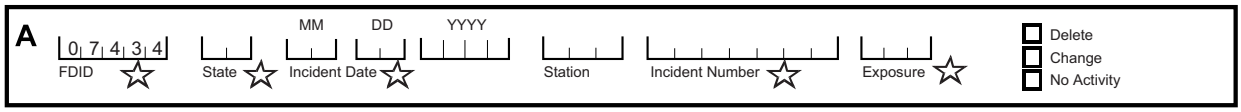
A unique five-character identifier assigned by the state to identify a particular fire department within the state. This identifier may also identify the county, fire district, or other jurisdiction in which the fire department is located. Many states use the two left-most digits to identify the particular department within a jurisdiction. All five spaces in this field must be occupied by numerals or alphanumeric characters. If the FDID is less than five characters, use leading zeros.

Purpose

The FDID number is used to identify incident data that have been collected and reported by individual departments. Feedback on local or regional incident experience can then be prepared and sent to individual agencies or specific fire departments.

Entry
Enter the state-assigned FDID.

Example
An FDID of 07434 is entered as:



State ☆

Definition
The state (or U.S. territory) where the fire department is located.

Purpose
This field provides an additional means of identifying a fire department, and in conjunction with other required Section A fields, uniquely identifies each incident.

Entry
Enter the two-digit alphabetic abbreviation from the following list for the state where the fire department is located:

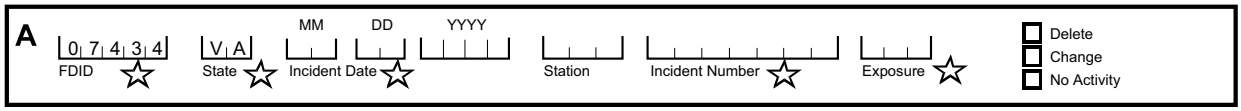
STATE/U.S. TERRITORY CODES

AL	Alabama	KY	Kentucky	ND	North Dakota
AK	Alaska	LA	Louisiana	OH	Ohio
AZ	Arizona	ME	Maine	OK	Oklahoma
AR	Arkansas	MD	Maryland	OR	Oregon
CA	California	MA	Massachusetts	PA	Pennsylvania
CO	Colorado	MI	Michigan	RI	Rhode Island
CT	Connecticut	MN	Minnesota	SC	South Carolina
DE	Delaware	MS	Mississippi	SD	South Dakota
DC	District of Columbia	MO	Missouri	TN	Tennessee
FL	Florida	MT	Montana	TX	Texas
GA	Georgia	NE	Nebraska	UT	Utah
HI	Hawaii	NV	Nevada	VT	Vermont
ID	Idaho	NH	New Hampshire	VA	Virginia
IL	Illinois	NJ	New Jersey	WA	Washington
IN	Indiana	NY	New Mexico	WV	West Virginia
IA	Iowa	NY	New York	WI	Wisconsin
KS	Kansas	NC	North Carolina	WY	Wyoming

U.S. Territories/Possessions

AS	American Samoa	GU	Guam	UM	U.S. Minor Outlying Islands
CZ	Canal Zone	MH	Marshall Islands	VI	Virgin Islands
DD	Department of Defense	MP	Northern Mariana Islands	OO	Other
FM	Federated States of Micronesia	PW	Palau		
		PR	Puerto Rico		

Example
Virginia is entered as VA:



Incident Date ☆

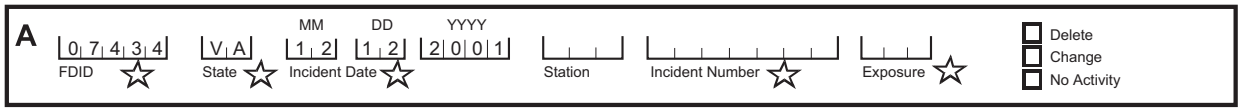
Definition
The month, day, and year of the incident. This date is when the alarm was received by the fire department and must be the same as the date for the alarm time.

Purpose
In conjunction with other required Section A fields, this element uniquely identifies each incident.

Entry
Enter the month, day, and year (mm/dd/yyyy) that the initial incident alarm was received by the department. It must be entered for each incident.

☞ The Incident Date is the same as the Alarm date (Block E1), except if the incident is an exposure and the exposure occurs on a subsequent day.

Example
An incident occurs and is reported on December 12, 2001:



Station

Definition
The number or identifier of a particular fire station within a fire department. This is a local option.

Purpose
The station number provides a means of tracking incident data that have been collected and reported by individual stations. Specific feedback on incident experience can then be prepared and sent to individual stations. The station number is also useful for analyzing different levels of activity within a fire department.

Entry
Enter the station number in the space provided. The fire department should determine which station number should be entered (e.g., first arriving unit, station's area). The station number is left justified. Leave blank if there is only one station in the department.

Example

Station 13 is entered as:

A | 0 7 4 3 4 (FDID ☆) | V A (State ☆) | MM 1 2 DD 1 2 YYYY 2 0 0 1 (Incident Date ☆) | A 3 (Station) | (Incident Number ☆) | (Exposure ☆) | ☐ Delete ☐ Change ☐ No Activity

Incident Number ☆

Definition

A unique number assigned to an incident.

☞ The Incident Number is a sequential number and is numeric only; it is not an incident identification number.

Purpose

In conjunction with other required Section A fields, this element uniquely identifies each incident.

Entry

Enter the number assigned to the incident. The number may be assigned at the local, county, or district level, depending on policies. It may be necessary to obtain this number from an alarm or dispatch center. It must be unique for each incident on a given day.

Example

A call with an incident number of 72672 is entered as:

A | 0 7 4 3 4 (FDID ☆) | V A (State ☆) | MM 1 2 DD 1 2 YYYY 2 0 0 1 (Incident Date ☆) | A 3 (Station) | 7 2 6 7 2 (Incident Number ☆) | (Exposure ☆) | ☐ Delete ☐ Change ☐ No Activity

Exposure Number ☆

Definition

Exposure is defined as a fire resulting from another fire outside that building, structure, or vehicle, or a fire that extends to an outside property from a building, structure, or vehicle. For example, if the building fire ignites a truck parked outside, the truck fire is an exposure fire.

☞ In the case of buildings with internal fire separations, treat the fire spread from one separation to another as an exposure. Treating multiple ownership of property within a building (e.g., condominiums) as exposures, unless separated by fire-rated compartments, is discouraged.

Purpose

Although the Incident Number permits all properties involved in a fire incident to be related together, the Exposure number identifies each separate property type involved in the fire. This makes it possible to capture the specific details of the fire in each exposure and to relate all

the exposures to the basic incident, if necessary. The Exposure Number, in conjunction with other required Section A fields, uniquely identifies each incident itemized in Section C.

When a fire involves more than one building, each building fire should be considered a separate fire, with the ignition for all but the original building fire classified as exposure fires.

Entry

In a fire involving exposures, an additional Basic Module should be completed for each exposure. Each module completed for an exposure should contain the same Incident Number assigned to the original property involved. A separate sequential Exposure number is assigned to each exposure. The original incident is always coded “000,” and exposures are numbered sequentially and incremented by 1 beginning with “001.” The three-character numeric field is zero filled, not right justified.

☞ The Incident Date for each exposure remains the same as that of the basic incident; however, the Alarm Time in Block E1 should reflect the time of each new exposure.

The relevant data for each exposure should then be recorded using the appropriate modules.

☞ Treat similar items in a group as a single exposure (such as a fleet of cars).

☞ Be sure to check or mark the exposure fire check box Cause of Ignition (Block E1) on the Fire Module for each exposure fire, and then skip to Section G on the Fire Module.

Example

The first exposure fire is entered as 001:

Delete/Change/No Activity

When filling out the Basic Module for a new incident, leave the Delete/Change/No Activity boxes blank.

Definition

Indicates a change to information submitted on a previous Basic Module, signifies the deletion of incorrect information, or reports no activity. The officer who signed the original Basic Module report should authorize changes or deletions.

Purpose

These boxes indicate whether previously provided information is to be changed or deleted or to report that no activity occurred during a reporting period.

Entry

Delete: Check or mark this box when you have previously submitted data on this incident and now want to have the data on this incident deleted from the database. If this box is marked, complete Section A and leave the rest of the report blank. This will delete all data regarding the incident. Forward the report according to your normally established procedures.

Change: Check or mark this box only if you previously submitted this fire incident to your state reporting authority and now want to update or change the information in the state database. Complete Section A and any other sections or blocks that need to be updated or corrected. If you need to blank a field that contains data, you must resubmit the original module containing the newly blanked field along with all the other original information in the module for that incident. This action is required only when sending an updated module to your state reporting authority. Forward the report according to your normally established procedures.

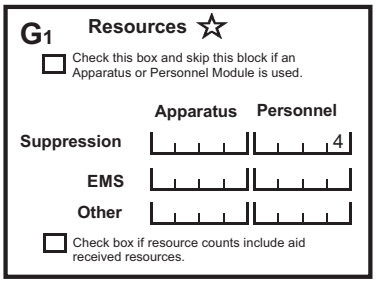
No Activity: If the fire department has had no incidents during the month, a no activity report should be submitted. Unless otherwise specified by the state, this report should be submitted monthly according to your normally established procedures.

Examples

Deleting a previously submitted incident:
Check or mark the Delete box and complete all other fields in Section A exactly as they were entered in the original report.

Changing a previously submitted incident:
It was incorrectly reported that six firefighters responded to a fire incident. Later, the officer in charge corrected the information and sent in a Change report with four fire service personnel responding:

The Change box is checked or marked and Block G1 would look like the following example:



Submitting a report of No Activity:
Check or mark the No Activity box and fill both the Incident Number and the Exposure fields with zeros. The Incident Date fields correspond to the last day of the month of no activity*:*

A | 0 7 4 3 4 | FDID ☆ | V A | State ☆ | MM 0 6 DD 3 0 YYYY 2 0 0 3 | Incident Date ☆ | A 3 | Station | 0 0 0 0 0 0 0 | Incident Number ☆ | 0 0 0 | Exposure ☆ | ☐ Delete ☐ Change ☒ No Activity

SECTION B

Section B collects information on the specific incident location.

☞ The check box at the top of the section should be checked or marked only if the incident address is provided on the Wildland Fire Module (NFIRS–8). The Wildland Fire Module provides an alternative method of recording the incident location.

B

Location Type ☆

The location of the incident, which may be a street address, directions from a recognized landmark, or an intersection of two roadways.

Purpose

The exact location of the incident is used for spatial analyses and response planning that can be linked to demographic data. Incident address information is required at the local government level to establish an official document of record.

Entry

Check or mark the single box that best indicates the address type that will be entered. If the incident is a wildland fire, the alternate address box at the top of Section B may be checked or marked to indicate that the wildland location scheme is provided in the Wildland Fire module.

Street Address: A normal street address. Check or mark this box and complete the address fields.

Intersection: There is no street address. The incident location is at the intersection of two or more streets, roads, etc. Check or mark this box and enter the first street in the Street or Highway field. The intersecting street(s) is entered in the Cross Street or Directions field.

In Front Of: No street address is available. However, the incident location is in front of an area with a street address. Check or mark this box and complete the address fields. An example of this might be a park, plaza, or common area in front of a building with a street address.

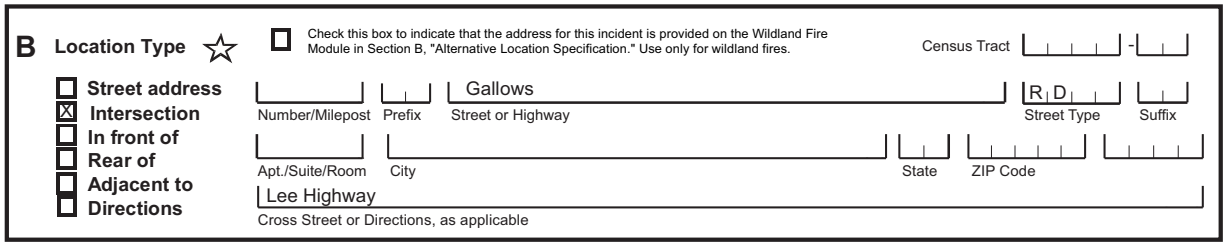
Rear Of: No street address is available. However, the incident location is in the rear of an area with a street address. Check or mark this box and complete the address fields. An example of this might be an alley that runs behind a building with a street address.

Adjacent To: No street address is available. However, the incident location is adjacent to an area with a street address. Check or mark this box and complete the address fields. An example of this might be an empty lot or common area that is next to a building with a street address.

Directions: No street address is available and no street address is available near the incident scene. Check or mark this box and enter brief directions for the location of the incident in the Cross Street or Directions field. If the area is along an interstate or state highway, the closest milepost should be entered in the Number/Milepost address field. An example of this might be a brush fire that occurs in a remote area or a fire that occurs on or near an interstate highway.

Example

The location of an incident that occurred at the intersection of Gallows Road and Lee Highway is entered as:



LOCATION TYPE CODES

1	Street address.
2	Intersection.
3	In front of.
4	Rear of.
5	Adjacent to.
6	Directions.

Census Tract

Definition

The census tract number is a six-digit number assigned by the U.S. Census Bureau that identifies an area of land within the United States. Not all jurisdictions have census tract numbers.

Purpose

This element provides a means to cross-reference geographic and population information that is available from the U.S. Census Bureau to incident data for comparative analysis.

Entry

Enter the census tract number for the property involved in the incident. The right two spaces are always assumed to follow a decimal point. If the incident occurs in an area where a census tract number has not been assigned, leave blank.

☞ Local planning commissions or zoning commissions may be able to provide census tract numbers or maps for your response area.

Example

A location having a census tract number of 1066.01 is entered as:

B Location Type ☆ ☐ Check this box to indicate that the address for this incident is provided on the Wildland Fire Module in Section B, "Alternative Location Specification." Use only for wildland fires. Census Tract 1066-01

☐ Street address
☒ Intersection
☐ In front of
☐ Rear of
☐ Adjacent to
☐ Directions

Number/Milepost | Prefix | Gallows (Street or Highway) | RD (Street Type) | Suffix

Apt./Suite/Room | City | State | ZIP Code

Lee Highway (Cross Street or Directions, as applicable)

Number/Milepost

Definition

The number or milepost of the specific location where the incident occurred.

Purpose

This field further refines the incident address.

Entry

For structures and lots, enter the street number. For highways, railroads, etc., enter the milepost number. For intersections, leave blank. For block addresses, enter the block number. The maximum number of characters available in the Number/Milepost field is 8.

Example

The incident occurred at 8034 Alta Vista Drive:

B Location Type ☆ ☐ Check this box to indicate that the address for this incident is provided on the Wildland Fire Module in Section B, "Alternative Location Specification." Use only for wildland fires. Census Tract -

☒ Street address
☐ Intersection
☐ In front of
☐ Rear of
☐ Adjacent to
☐ Directions

8034 (Number/Milepost) | Prefix | Alta Vista (Street or Highway) | DR (Street Type) | Suffix

Apt./Suite/Room | City | State | ZIP Code

Cross Street or Directions, as applicable

Street Prefix

Definition

The directional descriptor appearing before a street or highway name.

Purpose

This field further refines the incident address.

Entry

Enter the street prefix abbreviation. Leave blank if not applicable

Example

A vehicle fire in front of 1257 East Connecticut Avenue is entered as:

B Location Type ☆

☐ Check this box to indicate that the address for this incident is provided on the Wildland Fire Module in Section B, "Alternative Location Specification." Use only for wildland fires.

Census Tract ___ - ___

☐ **Street address**
☐ **Intersection**
☒ **In front of**
☐ **Rear of**
☐ **Adjacent to**
☐ **Directions**

Number/Milepost	Prefix	Street or Highway	Street Type	Suffix
1257	E	Connecticut	AVE	

Apt./Suite/Room	City	State	ZIP Code

Cross Street or Directions, as applicable

STREET PREFIX CODES

E	East.	NE	Northeast.
N	North.	NW	Northwest.
S	South.	SE	Southeast.
W	West.	SW	Southwest.

Street or Highway Name

Definition

The street or highway name where the incident occurred.

Purpose

This field further refines the incident address. This information can also be useful for identifying local problems, such as checking for multiple incidents at the same address and checking ZIP codes or Census Tract entries.

Entry

Enter the name of the street or highway name in the space provided. The maximum number of characters available in the Street or Highway field is 30.

☞ If the involved property is a motor vehicle, boat, or other property in transit, list the nearest address or describe the location where the incident occurred. If necessary, include a sketch in the Remarks section (L). It is important that a person viewing the report know where the incident occurred.

☞ If a street type is not listed on the code list on the following page (see “Street Type” below), enter the street type as part of the Street or Highway name.

Example

A grass fire on Wolftrap Road about 1/2 mile east of I–66:

B Location Type ☆ ☐ Check this box to indicate that the address for this incident is provided on the Wildland Fire Module in Section B, "Alternative Location Specification." Use only for wildland fires. Census Tract ___ - ___

- ☐ Street address
- ☐ Intersection
- ☐ In front of
- ☐ Rear of
- ☐ Adjacent to
- ☒ Directions

Number/Milepost: ___ Prefix: ___ Street or Highway: Wolftrap Street Type: RD Suffix: ___

Apt./Suite/Room: ___ City: ___ State: ___ ZIP Code: ___

Cross Street or Directions, as applicable: 1/2 mile east of I-66

Street Type

Definition

The street type descriptor appearing after a street or highway name.

Purpose

This field further refines the incident address.

Entry

Enter the appropriate Street Type code (established by the U.S. Postal Service) from the list on the following page. If the street type is not listed, enter the street type as part of the Street or Highway name. (See Street or Highway Name above.)

Example

The accident occurred on Walnut Street:

B Location Type ☆ ☐ Check this box to indicate that the address for this incident is provided on the Wildland Fire Module in Section B, "Alternative Location Specification." Use only for wildland fires. Census Tract ___ - ___

- ☒ Street address
- ☐ Intersection
- ☐ In front of
- ☐ Rear of
- ☐ Adjacent to
- ☐ Directions

Number/Milepost: 1122 Prefix: ___ Street or Highway: Walnut Street Type: ST Suffix: ___

Apt./Suite/Room: ___ City: ___ State: ___ ZIP Code: ___

Cross Street or Directions, as applicable: ___

STREET TYPE CODES

ALY	Alley	BYP	Bypass	CT	Court
ANX	Annex	CP	Camp	CTS	Courts
ARC	Arcade	CYN	Canyon	CV	Cove
AVE	Avenue	CPE	Cape	CVS	Coves
BCH	Beach	CSWY	Causeway	CRK	Creek
BND	Bend	CTR	Center	CRES	Crescent
BLF	Bluff	CTRS	Centers	CRST	Crest
BLFS	Bluffs	CIR	Circle	XING	Crossing
BTM	Bottom	CIRS	Circles	XRD	Crossroad
BLVD	Boulevard	CLF	Cliff	XRDS	Crossroads
BR	Branch	CLFS	Cliffs	CURV	Curve
BRG	Bridge	CLB	Club	DL	Dale
BRK	Brook	CMN	Common	DM	Dam
BRKS	Brooks	CMNS	Commons	DV	Divide
BG	Burg	COR	Corner	DR	Drive
BGS	Burgs	CORS	Corners	DRS	Drives

EST	Estate
ESTS	Estates
EXPY	Expressway
EXT	Extension
EXTS	Extensions
FALL	Fall
FLS	Falls
FRY	Ferry
FLD	Field
FLDS	Fields
FLT	Flat
FLTS	Flats
FRD	Ford
FRDS	Fords
FRST	Forest
FRG	Forge
FRGS	Forges
FRK	Fork
FRKS	Forks
FT	Fort
FWY	Freeway
GDN	Garden
GDNS	Gardens
GTWY	Gateway
GLN	Glen
GLNS	Glens
GRN	Green
GRNS	Greens
GRV	Grove
GRVS	Groves
HBR	Harbor
HBRS	Harbors
HVN	Haven
HTS	Heights
HWY	Highway
HL	Hill
HLS	Hills
HOLW	Hollow
INLT	Inlet
IS	Island
ISS	Islands
ISLE	Isle
JCT	Junction
JCTS	Junctions
KY	Key
KYS	Keys
KNL	Knoll
KNLS	Knolls
LK	Lake
LKS	Lakes
LNDG	Landing
LN	Lane
LGT	Light
LGTS	Lights
LF	Loaf
LCK	Lock
LCKS	Locks
LDG	Lodge
LOOP	Loop
MALL	Mall
MNR	Manor
MNRS	Manors
MDW	Meadow
MDWS	Meadows
MEWS	Mews
ML	Mill
MLS	Mills
MSN	Mission
MTWY	Motorway
MT	Mount
MTN	Mountain
MTNS	Mountains
NCK	Neck
ORCH	Orchard
OVAL	Oval
PARK	Park
PKY	Parkway
PKYS	Parkways
PASS	Pass
PSGE	Passage
PATH	Path
PIKE	Pike
PNE	Pine
PNES	Pines
PL	Place
PLZ	Plaza
PT	Point
PTS	Points
PRT	Port
PRTS	Ports
PR	Prairie
RADL	Radial
RAMP	Ramp
RNCH	Ranch
RPD	Rapid
RPDS	Rapids
RST	Rest
RDG	Ridge
RDGS	Ridges
RIV	River
RD	Road
RDS	Roads
RT	Route
ROW	Row
RUE	Rue
RUN	Run
SHL	Shoal
SHLS	Shoals
SHR	Shore
SHRS	Shores
SKWY	Skyway
SPG	Spring
SPGS	Springs
SPUR	Spur
SPRS	Spurs
SQ	Square
SQS	Squares
STA	Station
STRA	Stravenue
STRM	Stream
ST	Street
STS	Streets
SMT	Summit
TER	Terrace
TRWY	Throughway
TRCE	Trace
TRAK	Track
TRFY	Trafficway
TRL	Trail
TRLR	Trailer
TUNL	Tunnel
TPKE	Turnpike
UPAS	Underpass
UN	Union
UNS	Unions
VLY	Valley
VLYS	Valleys
VIA	Viaduct
VW	View
VWS	Views
VLG	Village
VLGS	Villages
VL	Ville
VIS	Vista
WALK	Walk
WALK	Walks
WALL	Wall
WAY	Way
WL	Well
WLS	Wells

Street Suffix

Definition

The directional descriptor appearing after a street or highway name.

Purpose

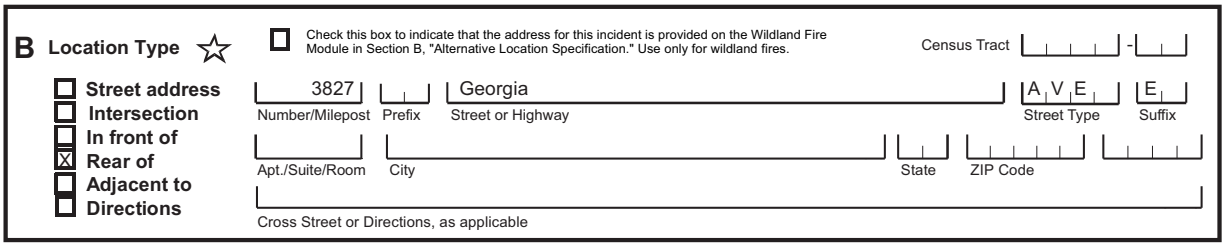
This field further refines the incident address.

Entry

Enter the street suffix abbreviation. Leave blank if not applicable.

Example

A grass fire in the rear of 3827 Georgia Avenue East is entered as:



STREET SUFFIX CODES

E	East.	NE	Northeast.
N	North.	NW	Northwest.
S	South.	SE	Southeast.
W	West.	SW	Southwest.

Apartment, Suite, or Room

Definition

The number of the specific apartment, suite, or room where the incident occurred.

Purpose

This field further refines the incident address. This number is part of the address information when the incident occurs within an apartment, suite, or identifiable room or area generally rented or leased.

Entry

Enter the apartment, suite, or room number in the space provided (any combination of numbers and letters). Leave blank if not applicable. The maximum number of characters available in the Apartment, Suite, or Room field is 15.

Example

The incident occurred in apartment 8–C:

B Location Type ☆ ☐ Check this box to indicate that the address for this incident is provided on the Wildland Fire Module in Section B, "Alternative Location Specification." Use only for wildland fires. Census Tract ___ - ___

☒ Street address
☐ Intersection
☐ In front of
☐ Rear of
☐ Adjacent to
☐ Directions

Number/Milepost: 3827 | Prefix: | Street or Highway: Georgia | Street Type: AVE | Suffix: E

Apt./Suite/Room: 8–C | City: | State: | ZIP Code:

Cross Street or Directions, as applicable:

City

Definition

The city where the incident occurred. If the incident occurred in an unincorporated area, use the city found in the mailing address for the incident location.

Purpose

This field further refines the incident address.

Entry

Enter the city where the incident occurred, or the city used in the mailing address for the incident location. The maximum number of characters available in the City field is 20.

Example

The incident occurred in the city of Hickory:

B Location Type ☆ ☐ Check this box to indicate that the address for this incident is provided on the Wildland Fire Module in Section B, "Alternative Location Specification." Use only for wildland fires. Census Tract ___ - ___

☒ Street address
☐ Intersection
☐ In front of
☐ Rear of
☐ Adjacent to
☐ Directions

Number/Milepost: 1482 | Prefix: | Street or Highway: Center | Street Type: DR | Suffix:

Apt./Suite/Room: | City: Hickory | State: | ZIP Code:

Cross Street or Directions, as applicable:

State

Definition

The state where the incident occurred.

Purpose

This field further refines the incident address, and it provides a means of linking incident data to other geographic and population factors for comparative analysis at the state level.

Entry

Enter the alphabetic abbreviation for the state (see page 3–5) where the incident occurred.

Example

North Carolina is entered as NC:

B Location Type ☆

☐ Check this box to indicate that the address for this incident is provided on the Wildland Fire Module in Section B, "Alternative Location Specification." Use only for wildland fires.

Census Tract ___ - ___

☒ Street address
☐ Intersection
☐ In front of
☐ Rear of
☐ Adjacent to
☐ Directions

Number/Milepost: 1482 | Prefix: | Street or Highway: Center | Street Type: DR | Suffix:

Apt./Suite/Room: | City: Hickory | State: NC | ZIP Code:

Cross Street or Directions, as applicable:

ZIP Code

Definition

The numerical code assigned by the U.S. Postal Service to all U.S. jurisdictions.

Purpose

This field completes the information for identifying the exact incident address, and it provides a means of linking fire incident data to other geographic and population factors for comparative analysis at the local and regional levels.

Entry

Enter the postal ZIP code number for the address of the property involved in the incident. If the last four digits are unknown, leave that field blank.

Example

A house fire occurs in an area with the ZIP code 28602–1109:

B Location Type ☆

☐ Check this box to indicate that the address for this incident is provided on the Wildland Fire Module in Section B, "Alternative Location Specification." Use only for wildland fires.

Census Tract ___ - ___

☒ Street address
☐ Intersection
☐ In front of
☐ Rear of
☐ Adjacent to
☐ Directions

Number/Milepost: 1482 | Prefix: | Street or Highway: Center | Street Type: DR | Suffix:

Apt./Suite/Room: | City: Hickory | State: NC | ZIP Code: 28602 1109

Cross Street or Directions, as applicable:

Cross Street or Directions

Use directions *only* if the location cannot otherwise be identified.

Definition

The nearest cross street to the incident address or directions from a recognized landmark or the second street name of an intersection.

Purpose

This element helps determine the exact location of the incident. This information may also be useful for identifying local problems, such as checking for multiple incidents at the same location.

Entry

In the space provided, describe the nearest cross street or provide directions from a recognized landmark. The maximum number of characters available in the Cross Street or Directions field is 30.

Example

The incident occurred on 10th Street with N Street being the nearest cross street:

B **Location Type** ☆

☐ Check this box to indicate that the address for this incident is provided on the Wildland Fire Module in Section B, "Alternative Location Specification." Use only for wildland fires.

Census Tract ___ - ___

☐ **Street address**
☐ **Intersection**
☐ **In front of**
☐ **Rear of**
☐ **Adjacent to**
☒ **Directions**

Number/Milepost | Prefix | 10th (Street or Highway) | S T (Street Type) | Suffix

Apt./Suite/Room | City | State | ZIP Code

N Street (Cross Street or Directions, as applicable)

SECTION C

C Incident Type ☆

☞ *Incident Type* was known as *Type of Situation Found* in NFIRS 4.1.

Definition

This is the actual situation that emergency personnel found on the scene when they arrived. These codes include the entire spectrum of fire department activities from fires to EMS to public service.

☞ The type of incident reported here is not always the same as the incident type initially dispatched.

Purpose

This critical information identifies the various types of incidents to which the fire department responds and allows the fire department to document the full range of incidents it handles. This information can be used to analyze the frequency of different types of incidents, provide insight on fire and other incident problems, and identify training needs.

☞ This element determines which modules will subsequently be completed.

Entry

Enter the three-digit code and a written description that best describes the type of incident. This entry is generally the type of incident found when emergency personnel arrived at the scene, but if a more serious condition developed after the fire department arrival on the scene, then that incident type should be reported. The codes are organized in a series:

Series	Heading
100	Fire
200	Overpressure Rupture, Explosion, Overheat (No Ensuing Fire)
300	Rescue and Emergency Medical Service (EMS) Incidents
400	Hazardous Condition (No Fire)

Series	Heading
500	Service Call
600	Good Intent Call
700	False Alarm and False Call
800	Severe Weather and Natural Disaster
900	Special Incident Type

☞ For incidents involving fire and hazardous materials or fire and EMS, use the fire codes. Always use the lowest numbered series that applies to the incident. You will have an opportunity to describe multiple actions taken later in the report.

☞ For vehicle fires on a structure, use the mobile property fire codes (130–138) unless the structure became involved.

☞ For fires in buildings that are confined to noncombustible containers, use codes 113–118 of the structure fire codes when there is no flame damage beyond the noncombustible container.

Example

Fire in food on the stove that was confined to the pot (113):

INCIDENT TYPE CODES

Fire. Includes fires out on arrival and gas vapor explosions (with extremely rapid combustion).

Structure fire

111 Building fire. Excludes confined fires (113–118).

112 Fire in structure, other than in a building. Included are fires on or in piers, quays, or pilings: tunnels or underground connecting structures; bridges, trestles, or overhead elevated structures; transformers, power or utility vaults or equipment; fences; and tents.

113 Cooking fire involving the contents of a cooking vessel without fire extension beyond the vessel.

114 Chimney or flue fire originating in and confined to a chimney or flue. Excludes fires that extend beyond the chimney (111 or 112).

115 Incinerator overload or malfunction, but flames cause no damage outside the incinerator.

116 Fuel burner/boiler, delayed ignition or malfunction, where flames cause no damage outside the fire box.

117 Commercial compactor fire, confined to contents of compactor. Excluded are home trash compactors.

118 Trash or rubbish fire in a structure, with no flame damage to structure or its contents.

Fire in mobile property used as a fixed structure. *Includes mobile homes, motor homes, camping trailers.*

121 Fire in mobile home used as a fixed residence. Includes mobile homes when not in transit and used as a structure for residential purposes; and manufactured homes built on a permanent chassis.

122 Fire in a motor home, camper, or recreational vehicle when used as a structure. Includes motor homes when not in transit and used as a structure for residential purposes.

123 Fire in a portable building, when used at a fixed location. Includes portable buildings used for commerce, industry, or education and trailers used for commercial purposes.

120 Fire in mobile property used as a fixed structure, other.

Mobile property (vehicle) fire. *Excludes mobile properties used as a structure (120 series). If a vehicle fire occurs on a bridge and does not damage the bridge, it should be classified as a vehicle fire.*

131 Passenger vehicle fire. Includes any motorized passenger vehicle, other than a motor home (136) (e.g., pickup trucks, sport utility vehicles, buses).

132 Road freight or transport vehicle fire. Includes commercial freight hauling vehicles and contractor vans or trucks. Examples are moving trucks, plumber vans, and delivery trucks.

133 Rail vehicle fire. Includes all rail cars, including intermodal containers and passenger cars that are mounted on a rail car.

134 Water vehicle fire. Includes boats, barges, hovercraft, and all other vehicles designed for navigation on water.

135 Aircraft fire. Includes fires originating in or on an aircraft, regardless of use.

136 Self-propelled motor home or recreational vehicle. Includes only self-propelled motor homes or recreational vehicles when being used in a transport mode. Excludes those used for normal residential use (122).

137 Camper or recreational vehicle (RV) fire, not self-propelled. Includes trailers. Excludes RVs on blocks or used regularly as a fixed building (122) and the vehicle towing the camper or RV or the campers mounted on pickups (131).

138 Off-road vehicle or heavy equipment fire. Includes dirt bikes, specialty off-road vehicles, earth-moving equipment (bulldozers), and farm equipment.

130 Mobile property (vehicle) fire, other.

Natural vegetation fire. *Excludes crops or plants under cultivation (see 170 series).*

141 Forest, woods, or wildland fire. Includes fires involving vegetative fuels, other than prescribed fire (632), that occur in an area in which development is essentially nonexistent, except for roads, railroads, power lines, and the like. Also includes forests managed for lumber production and fires involving elevated fuels such as tree branches and crowns. Excludes areas in cultivation for agricultural purposes such as tree farms or crops (17x series).

142 Brush or brush-and-grass mixture fire. Includes ground fuels lying on or immediately above the ground such as duff, roots, dead leaves, fine dead wood, and downed logs.

143 Grass fire. Includes fire confined to area characterized by grass ground cover, with little or no involvement of other ground fuels; otherwise, see 142.

140 Natural vegetation fire, other.

Outside rubbish fire. *Includes all rubbish fires outside a structure or vehicle.*

151 Outside rubbish, trash, or waste fire not included in 152–155. Excludes outside rubbish fires in a container or receptacle (154).

152 Garbage dump or sanitary landfill fire.

153 Construction or demolition landfill fire.

154 Dumpster or other outside trash receptacle fire. Includes waste material from manufacturing or other production processes. Excludes materials that are not rubbish or have salvage value (161 or 162).

155 Outside stationary compactor or compacted trash fire. Includes fires where the only material burning is rubbish. Excludes fires where the compactor is damaged (162).

150 Outside rubbish fire, other.

Special outside fire. *Includes outside fires with definable value. Excludes crops and orchards (170 series).*

161 Outside storage fire on residential or commercial/industrial property, not rubbish. Includes recyclable materials at dropoff points.

162 Outside equipment fire. Includes outside trash compactors, outside HVAC units, and irrigation pumps. Excludes special structures (110 series) and mobile construction equipment (130 series).

163 Outside gas or vapor combustion explosion without sustained fire.

164 Outside mailbox fire. Includes dropoff boxes for delivery services.

160 Special outside fire, other.

Cultivated vegetation, crop fire

171 Cultivated grain or crop fire. Includes fires involving corn, wheat, soybeans, rice, and other plants before harvest.

172 Cultivated orchard or vineyard fire.

173 Cultivated trees or nursery stock fire. Includes fires involving Christmas tree farms and plants under cultivation for transport off-site for ornamental use.

170 Cultivated vegetation, crop fire, other.

Fire, other

100 Fire, other.

Overpressure Rupture, Explosion, Overheat (No Fire). Excludes steam mistaken for smoke.

Overpressure rupture from steam (no ensuing fire)

211 Overpressure rupture of steam pipe or pipeline.

212 Overpressure rupture of steam boiler.

213 Overpressure rupture of pressure or process vessel from steam.

210 Overpressure rupture from steam, other.

Overpressure rupture from air or gas (no ensuing fire). *Excludes steam or water vapor.*

221 Overpressure rupture of air or gas pipe or pipeline.

222 Overpressure rupture of boiler from air or gas. Excludes steam-related overpressure ruptures.

223 Overpressure rupture of pressure or process vessel from air or gas, not steam.

220 Overpressure rupture from air or gas, other.

Overpressure rupture from chemical reaction (no ensuing fire)

231 Overpressure rupture of pressure or process vessel from a chemical reaction.

Explosion (no fire)

241 Munitions or bomb explosion (no fire). Includes explosions involving military ordnance, dynamite, nitroglycerin, plastic explosives, propellants, and similar agents with a UN classification 1.1 or 1.3. Includes primary and secondary high explosives.

242 Blasting agent explosion (no fire). Includes ammonium nitrate and fuel oil (ANFO) mixtures and explosives with a UN Classification 1.5 (also known as blasting agents).

243 Fireworks explosion (no fire). Includes all classes of fireworks.

240 Explosion (no fire), other.

Excessive heat, scorch burns with no ignition

251 Excessive heat, overheat scorch burns with no ignition. Excludes lightning strikes with no ensuing fire (814).

Overpressure rupture, explosion, overheat, other

200 Overpressure rupture, explosion, overheat, other.

Rescue and Emergency Medical Service Incident

Medical assist

311 Medical assist. Includes incidents where medical assistance is provided to another group/agency that has primary EMS responsibility. (Example, providing assistance to another agency-assisting EMS with moving a heavy patient.)

Emergency medical service incident

321 EMS call. Includes calls when the patient refuses treatment. Excludes vehicle accident with injury (322) and pedestrian struck (323).

322 Motor vehicle accident with injuries. Includes collision with other vehicle, fixed objects, or loss of control resulting in leaving the roadway.

323 Motor vehicle/pedestrian accident (MV Ped). Includes any motor vehicle accident involving a pedestrian injury.

324 Motor vehicle accident with no injuries.

Lock-In

331 Lock-in. Includes opening locked vehicles and gaining entry to locked areas for access by caretakers or rescuers, such as a child locked in a bathroom. Excludes lock-outs (511).

Search for lost person

341 Search for person on land. Includes lost hikers and children, even where there is an incidental search of local bodies of water, such as a creek or river.

342 Search for person in water. Includes shoreline searches incidental to a reported drowning call.

343 Search for person underground. Includes caves, mines, tunnels, and the like.

340 Search for lost person, other.

Extrication, rescue

351 Extrication of victim(s) from building or structure, such as a building collapse. Excludes high-angle rescue (356).

352 Extrication of victim(s) from vehicle. Includes rescues from vehicles hanging off a bridge or cliff.

353 Removal of victim(s) from stalled elevator.

354 Trench/below-grade rescue.

355 Confined space rescue. Includes rescues from the interiors of tanks, including areas with potential for hazardous atmospheres such as silos, wells, and tunnels.

356 High-angle rescue. Includes rope rescue and rescues off of structures.

357 Extrication of victim(s) from machinery. Includes extrication from farm or industrial equipment.

350 Extrication, rescue, other.

Water and ice-related rescue

361 Swimming/recreational water areas rescue. Includes pools and ponds. Excludes ice rescue (362).

362 Ice rescue. Includes only cases where victim is stranded on ice or has fallen through ice.

363 Swift-water rescue. Includes flash flood conditions.

364 Surf rescue.

365 Watercraft rescue. Excludes rescues near the shore and in swimming/ recreational areas (361). Includes people falling overboard at a significant distance from land.

360 Water and ice-related rescue, other.

Electrical rescue

371 Electrocution or potential electrocution. Excludes people trapped by power lines (372).

372 Trapped by power lines. Includes people trapped by downed or dangling power lines or other energized electrical equipment.

370 Electrical rescue, other.

Rescue or EMS standby

381 Rescue or EMS standby for hazardous conditions. Excludes aircraft standby (462).

Rescue, emergency medical service (EMS) incident, other

300 Rescue and EMS incident, other.

Hazardous Condition (No Fire)

Combustible/flammable spills and leaks

411 Gasoline or other flammable liquid spill (flash point below 100 degrees F at standard temperature and pressure (Class I)).

412 Gas leak (natural gas or LPG). Excludes gas odors with no source found (671).

413 Oil or other combustible liquid spill (flash point at or above 100 degrees F at standard temperature and pressure (Class II or III)).

410 Combustible and flammable gas or liquid spills or leaks, other.

Chemical release, reaction, or toxic condition

421 Chemical hazard (no spill or leak). Includes the potential for spills or leaks.

422 Chemical spill or leak. Includes unstable, reactive, explosive material.

423 Refrigeration leak. Includes ammonia.

424 Carbon monoxide incident. Excludes incidents with nothing found (736 or 746).

420 Toxic chemical condition, other.

Radioactive condition

431 Radiation leak, radioactive material. Includes release of radiation due to breaching of container or other accidental release.

430 Radioactive condition, other.

Electrical wiring/equipment problem

441 Heat from short circuit (wiring), defective or worn insulation.

442 Overheated motor or wiring.

443 Breakdown of light ballast.

444 Power line down. Excludes people trapped by downed power lines (372).

445 Arcing, shorted electrical equipment.

440 Electrical wiring/equipment problem, other.

Biological hazard

451 Biological hazard, confirmed or suspected.

Accident, potential accident

461 Building or structure weakened or collapsed. Excludes incidents where people are trapped (351).

462 Aircraft standby. Includes routine standby for takeoff and landing as well as emergency alerts at airports.

463 Vehicle accident, general cleanup. Includes incidents where FD is dispatched after the accident to clear away debris. Excludes extrication from vehicle (352) and flammable liquid spills (411 or 413).

460 Accident, potential accident, other.

Explosive, bomb removal

471 Explosive, bomb removal. Includes disarming, rendering safe, and disposing of bombs or suspected devices. Excludes bomb scare (721).

Attempted burning, illegal action

481 Attempt to burn. Includes situations in which incendiary devices fail to function.

482 Threat to burn. Includes verbal threats and persons threatening to set themselves on fire. Excludes an attempted burning (481).

480 Attempted burning, illegal action, other.

Hazardous condition, other

400 Hazardous condition (no fire), other.

Service Call

Person in distress

511 Lock-out. Includes efforts to remove keys from locked vehicles. Excludes lock-ins (331).

512 Ring or jewelry removal, without transport to hospital. Excludes persons injured (321).

510 Person in distress, other.

Water problem

521 Water (not people) evacuation. Includes the removal of water from basements. Excludes water rescues (360 series).

522 Water or steam leak. Includes open hydrant. Excludes overpressure ruptures (211).

520 Water problem, other.

Smoke, odor problem

531 Smoke or odor removal. Excludes the removal of any hazardous materials.

Animal problem or rescue

541 Animal problem. Includes persons trapped by an animal or an animal on the loose.

542 Animal rescue.

540 Animal problem or rescue, other.

Public service assistance

551 Assist police or other governmental agency. Includes forcible entry and the provision of lighting.

552 Police matter. Incudes incidents where FD is called to a scene that should be handled by the police.

553 Public service. Excludes service to governmental agencies (551 or 552).

554 Assist invalid. Includes incidents where the invalid calls the FD for routine help, such as assisting a person in returning to bed or chair, with no transport or medical treatment given.

555 Defective elevator, no occupants.

550 Public service assistance, other.

Unauthorized burning

561 Unauthorized burning. Includes fires that are under control and not endangering property.

Cover assignment, standby at fire station, move-up

571 Cover assignment, assist other fire agency such as standby at a fire station or move-up.

Service call, other

500 Service call, other.

Good Intent Call

Dispatched and canceled en route

611 Dispatched and canceled en route. Incident cleared or canceled prior to arrival of the responding unit. If a unit arrives on the scene, fill out the applicable code.

Wrong location, no emergency found

621 Wrong location. Excludes malicious false alarms (710 series).

622 No incident found on arrival at dispatch address.

Controlled burning

631 Authorized controlled burning. Includes fires that are agricultural in nature and managed by the property owner. Excludes unauthorized controlled burning (561) and prescribed fires (632).

632 Prescribed fire. Includes fires ignited by management actions to meet specific objectives and have a written, approved prescribed fire plan prior to ignition. Excludes authorized controlled burning (631).

Vicinity alarm

641 Vicinity alarm (incident in other location). For use only when an erroneous report is received for a legitimate incident. Includes separate locations reported for an actual fire and multiple boxes pulled for one fire.

Steam, other gas mistaken for smoke

651 Smoke scare, odor of smoke, not steam (652). Excludes gas scares or odors of gas (671).

652 Steam, vapor, fog, or dust thought to be smoke.

653 Smoke from barbecue or tar kettle (no hostile fire).

650 Steam, other gas mistaken for smoke, other.

EMS call where party has been transported

661 EMS call where injured party has been transported by a non-fire service agency or left the scene prior to arrival.

HazMat release investigation w/no HazMat found

671 Hazardous material release investigation with no hazardous condition found. Includes odor of gas with no leak/gas found.

672 Biological hazard investigation with no hazardous condition found.

Good intent call, other

600 Good intent call, other.

False Alarm and False Call

Malicious, mischievous false alarm

711 Municipal alarm system, malicious false alarm. Includes alarms transmitted on street fire alarm boxes.

712 Direct tie to fire department, malicious false alarm. Includes malicious alarms transmitted via fire alarm system directly tied to the fire department, not via dialed telephone.

713 Telephone, malicious false alarm. Includes false alarms transmitted via the public telephone network using the local emergency reporting number of the fire department or another emergency service agency.

714 Central station, malicious false alarm. Includes malicious false alarms via a central-station-monitored fire alarm system.

715 Local alarm system, malicious false alarm. Includes malicious false alarms reported via telephone or other means as a result of activation of a local fire alarm system.

710 Malicious, mischievous false alarm, other.

Bomb scare

721 Bomb scare (no bomb).

System or detector malfunction. *Includes improper performance of fire alarm system that is not a result of a proper system response to environmental stimuli such as smoke or high heat conditions.*

731 Sprinkler activated due to the failure or malfunction of the sprinkler system. Includes any failure of sprinkler equipment that leads to sprinkler activation with no fire present. Excludes unintentional operation caused by damage to the sprinkler system (740 series).

732 Extinguishing system activation due to malfunction.

733 Smoke detector activation due to malfunction.

734 Heat detector activation due to malfunction.

735 Alarm system activation due to malfunction.

736 Carbon monoxide detector activation due to malfunction.

730 System or detector malfunction, other.

Unintentional system or detector operation (no fire). *Includes tripping an interior device accidentally.*

741 Sprinkler activation (no fire), unintentional. Includes testing the sprinkler system without fire department notification.

742 Extinguishing system activation. Includes testing the extinguishing system without fire department notification.

743 Smoke detector activation (no fire), unintentional. Includes proper system responses to environmental stimuli such as non-hostile smoke.

744 Detector activation (no fire), unintentional. A result of a proper system response to environmental stimuli such as high heat conditions

745 Alarm system activation (no fire), unintentional.

746 Carbon monoxide detector activation (no carbon monoxide detected). Excludes carbon monoxide detector malfunction.

740 Unintentional transmission of alarm, other.

Biohazard scare

751 Biological hazard, malicious false report.

False alarm and false call, other

700 False alarm or false call, other.

Severe Weather and Natural Disaster

811 Earthquake assessment, no rescue or other service rendered.

812 Flood assessment. Excludes water rescue (360 series).

813 Wind storm. Includes tornado, hurricane, or cyclone assessment. No other service rendered.

814 Lightning strike (no fire). Includes investigation.

815 Severe weather or natural disaster standby.

800 Severe weather or natural disaster, other.

Special Incident Type

Citizen complaint

911 Citizen's complaint. Includes reports of code or ordinance violation.

Special type of incident, other

900 Special type of incident, other.

SECTION D

D Aid Given or Received ☆

Definition

Aid given or received, either automatically (i.e., prearranged) or mutually for a specific incident. These actions are defined as:

Aid Received (automatic or mutual): A fire department handles an incident within its jurisdiction with additional manpower or equipment from one or more fire departments outside its jurisdiction. Aid received can be either mutual or automatic aid.

Aid Given (automatic or mutual): A fire department responds into another fire department's jurisdiction to provide assistance at an incident or to cover a vacated station while the receiving fire department is busy at an incident. Aid received can be either mutual or automatic aid.

Other Aid Given: A fire department covers and responds to another jurisdiction or locale that has no fire department.

No Aid: A fire department handles an incident within its jurisdiction without help from adjacent or outside fire departments.

Purpose

Aid information can be used to study response levels necessary to control various fire and emergency situations. It can be used to determine the adequacy of resources at the local level and the need for adjusting cooperative agreements. The Aid Given or Received entry serves as data control to ensure that the same incident is not counted more than once while still giving credit for activity performed by outside departments.

Entry

Check or mark the box indicating whether aid was given or received. If no aid was given or received, check or mark the None box.

☞ Unless otherwise stipulated, whenever the following instructions indicate completion of the "Basic Module," the appropriate supporting and optional modules must also be completed.

Mutual/Automatic Aid Received: If either of these boxes is checked or marked, complete the Basic Module.

Mutual/Automatic Aid Given: If your department provided mutual fill-in service only, check or mark the appropriate aid-given box; complete Their FDID, Their State, and Their Incident Number fields; enter the two-digit Actions Taken code (codes 90, 91, or 92 only) in Section F; and complete Block G1 (Resources).

☞ No other information is required for the Basic Module unless a fire service casualty occurs. In this case, you must also complete Block H1 (Casualties) and a Fire Service Casualty Module.

Other Aid Given: Check or mark this box if your department covers and responds to another jurisdiction or locale that has no fire department. Complete the Basic Module. In Section D, leave the Their FDID and Their Incident Number fields blank; the Their State field is optional.

None: Check or mark this box if no mutual aid was involved.

If the receiving fire department completes the incident, then the giving department should complete the required portion of the module as needed for its own documentation of the incident. This can be particularly important for documenting fire service casualties.

Resources: If you give aid, you may choose to report your own resources as an option (Block G1). Similarly, if you receive aid, you may choose to count only your own resources or count your own resources plus those of the aid-giving department. If you include aid-received resources, check or mark the corresponding box.

Casualties: The aid-receiving department reports the details on all casualties other than the fire service casualties of the aid-giving department. Each department reports the details on its own fire service casualties.

☞ It is *critical* to the reporting system that the aid-receiving departments always report the total number of civilian casualties associated with the incident.

Examples

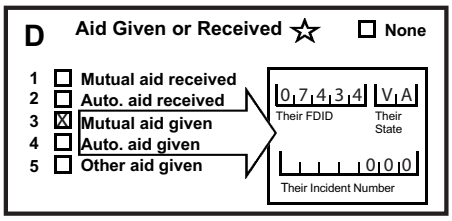
Three examples given below illustrate aid entries.

1. *A fire department receives automatic aid from another department in fighting a fire.* The Gorman County Fire Department responded to a structure fire to assist the Buckley Fire & Rescue Department. Buckley FRD completes all required modules and checks the "Automatic aid received" box in Section D on the Basic Module.

- The equipment provided by the Gorman County FD may be listed in the Remarks section (L). For example, "Gorman County Fire Department: one pumper, one aerial ladder."
- The Gorman County FD completes Section A through Section G1 on the Basic Module. In Section D, check or mark the Automatic Aid Given box and indicate Buckley FRD's FDID, state, and incident number. If the incident number is unknown, then the Gorman County FD is required to complete the entire Basic Module.

2. *A fire department sends apparatus and personnel to a nearby community to "fill-in" for its fire department.* Buckley Fire & Rescue Department sent one pumper to fill-in at Station 13 in Gorman County FD's jurisdiction.

- If the Buckley FRD fill-in unit responded to an incident: Buckley FRD completes the Basic Module using Gorman County FD's FDID and Incident Number because, once they are in the Gorman station, it is the same as if they are Gorman fire department personnel.
- If Buckley FRD did not respond to an incident: Buckley FRD completes the Basic Module with the Action Taken (Section F) as "Fill-in, Standby" (code 92) using the Buckley FDID and Incident Number:



3. *A fire department gives aid to another jurisdiction without a fire department.* The Buckley Fire & Rescue Department covers the neighboring town of Dunnville, which has no fire protection services of its own.

- For each incident that Buckley FRD responds to in Dunnville, the Other Aid Given box should be checked or marked and the Basic Module completed.

AID GIVEN OR RECEIVED CODES

1	Mutual aid received from an outside fire service entity upon request from the initial responding department.
2	Automatic aid received. Includes a department receiving aid from an outside fire service entity that was dispatched automatically based on a prior agreement between two jurisdictions.
3	Mutual aid given to an outside fire service entity on request of the outside entity.
4	Automatic aid given. Includes departments automatically dispatched to give aid to an outside fire service entity based on a prior agreement between two jurisdictions.
5	Other aid given. Includes a fire department responding to another jurisdiction or locale that has no fire department.
N	No aid given or received.

SECTION E

Section E collects the dates and times of the when the alarm was received, when the units arrived on scene, when the incident was controlled, and when the last unit left the scene.

E1 Dates and Times

All dates and time are entered as numerals. For time of day, the 24-hour clock is used. (Midnight is 0000.)

Alarm Time ☆

Definition

The actual month, day, year, and time of day (hour, minute, and (optional in on-line entry) seconds) when the alarm was received by the fire department. This is not an elapsed time.

☞ The Alarm time is the same as the Incident Date (Section A), except if the incident is an exposure and the exposure occurs on a subsequent day.

Purpose

Alarm time is important for three reasons: (1) as a legal requirement for recording the precise time notification was made of the incident, (2) as information for determining the frequency of particular types of incidents by time period, and (3) as the starting time to determine the length of time taken to arrive at an incident and the total amount of time spent on the incident scene.

☞ For all automated systems, NFIRS supports the collection of all times in seconds in addition to hours and minutes, although it is not required. Collection of seconds is usually used by fire departments using computer-aided dispatch.

Entry

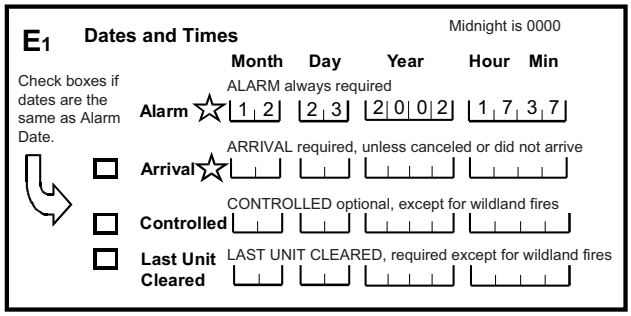
Enter the month, day, year (mm/dd/yyyy), and time to the nearest minute when the original alarm was received by the fire department.

01	January	05	May	09	September
02	February	06	June	10	October
03	March	07	July	11	November
04	April	08	August	12	December

12:00 midnight = 0000	1:06 a.m. = 0106
12:01 a.m. = 0001	2:20 p.m. = 1420

Example

The alarm was received at 5:37 p.m. on December 23, 2002:



Arrival Time ☆

Definition

The actual month, day, year, and time of day when the first responding unit arrived at the incident scene. This is not an elapsed time.

Purpose

This element reflects the time spent traveling to the scene of the incident. This information can be useful to fire department management in determining (1) the actual time spent at an incident and (2) any delay between alarm and arrival.

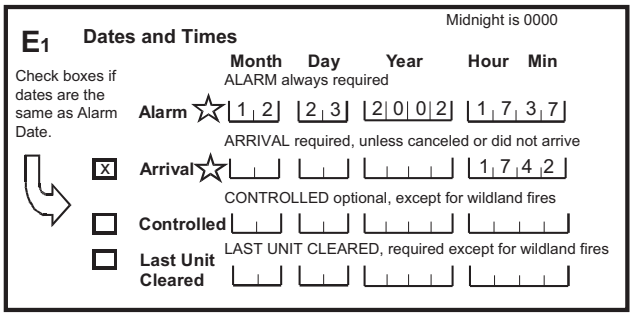
Entry

Enter the month, day, year (mm/dd/yyyy), and time that the first fire department unit arrived on the scene. If the date is the same as the Alarm date, check or mark the corresponding box; do not reenter the date.

☞ If canceled on the way to a call, Arrival time should be the same as Last Unit Cleared time.

Example

The first responding units arrived at 5:42 p.m. on December 23, 2002:



Controlled Time

Definition

The actual month, day, year, and time of day when the fire is brought under control or the incident is stabilized and does not require additional emergency resources. “Controlled” is the time when the incident commander determines that the fire will not escape from its containment perimeter.

☞ This is a required field for wildland fires.

Purpose

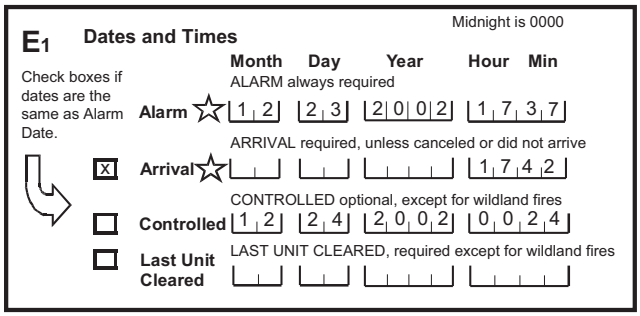
The time spent stabilizing a fire provides fire department management with the information needed to analyze the duration patterns of different types of fires. This can assist in determining service demand and costs for resource allocation.

Entry

Enter the month, day, year (mm/dd/yyyy), and time that the incident was controlled. If the date is the same as the Alarm date, check or mark the corresponding box; do not reenter the date. However, if the incident extended (from the Alarm time to the Controlled time) through midnight, do not check or mark the box; instead, enter the date.

Example

The fire was controlled at 12:24 a.m. on December 24, 2002:



Last Unit Cleared Time

Definition

The actual month, day, year, and time of day when the last unit cleared the incident scene. This is not an elapsed time.

Purpose

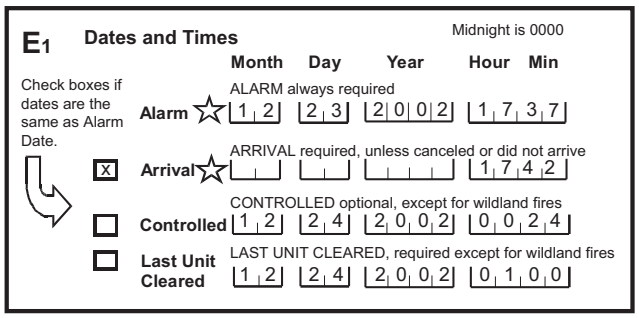
Combined with the previously recorded times, this element is valuable to fire department management in determining the actual time spent at an incident.

Entry

Enter the month, day, year (mm/dd/yyyy), and time that the last unit cleared the scene. If the date is the same as the Alarm date, check or mark the corresponding box; do not reenter the date. However, if the incident extended (from the Alarm time to the Last Unit Cleared time) through midnight, do not check or mark the box; instead, enter the date.

Example

The last unit cleared at 1:00 a.m. on December 24, 2002:



E2 Shift and Alarms

Shift or Platoon

Definition

Identifies the on-duty shift or platoon that responded to the incident. This applies only to fire departments with organized work force arrangements.

Purpose

Recording the shift that responded to an incident assists fire departments in determining workload balances and staffing requirements. *This is a local option.*

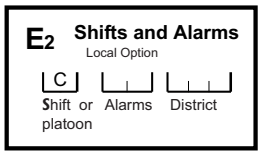
Entry

If your fire department uses this data element, enter the designation of the on-duty shift that responded to the incident. If the incident was of such duration that the shift changed during the control of the incident, record the shift change time and the designation of the new shift in the Remarks section (L).

☞ Fire departments should establish and publish the codes or values to be used in this field.

Example

C Shift responds to an incident:



Alarms

Definition

The actual number of alarms transmitted for the incident. The definition of an alarm is determined at the local level.

Purpose

The number of alarms is one method of measuring incident severity. Knowing the number of alarms can be useful for local analysis of resource requirements. The number of alarms also may be related to mutual aid support. *This is a local option.*

Entry

If your fire department has a standard method of designating alarms, enter the number of alarms required for this incident.

Example

A three-alarm fire in a business district:

E2 Shifts and Alarms
Local Option

C	3	
Shift or platoon	Alarms	District

District

Definition
An area identified by the fire department that is useful for administrative purposes.

Purpose
Fire departments can develop their own method of locating the frequency and severity of incidents by district. District numbers may identify specific townships, contract service areas, political wards, station response areas, inspection or administrative districts, or any other boundary a department may wish to use. This data element can be a powerful tool for local use. *This is a local option.*

Entry
Enter the fire department-assigned District number where the incident occurred. These positions can contain any combination of letters or numbers as designated by your fire department.

Example
The fire occurred in Station 1A's first due area:

E2 Shifts and Alarms
Local Option

C	3	1A
Shift or platoon	Alarms	District

E3 Special Studies

Definition
Temporary data elements that can be used for collection of information that is of special interest for a defined period. Special studies are typically required to capture information on emerging trends, problem areas, or a specific issue being studied. When the answer becomes known through the special study, the collection of that field is no longer required. If the data will always be needed for permanent collection, a state- or department-defined permanent user field should be created and used instead of the Special Studies field. A state, a fire department, or the National Fire Data Center can define special studies.

Special Study ID Number: This number uniquely identifies each special study that is being run by the fire department, state, or National Fire Data Center.

Special Study Value: The value in the field being collected. Responses for special studies can be defined as codes or as alphanumeric entries of numeric values or dates. States, fire departments, and the National Fire Data Center can define Special Studies fields.

Purpose
The use of special studies allows departments, states, and the National Fire Data Center to quickly collect information on an issue or problem and to answer a specific question through the temporary use of a special study field over a defined period of time. *This is a state or local option.*

Entry
If you are participating in a Special Study, your entry will depend on the type of data being collected. Use the codeset defined for the particular Special Study field if it is a coded entry. The data entered may also be a date or a numeric entry if the field has been so defined. Additional Special Study fields are available on the Supplemental Form (NFIRS–1S).

SECTION F

F

Actions Taken ☆

☞ *Actions Taken* was known as *Type of Action Taken* in NFIRS 4.1.

Definition
The duties performed at the incident scene by the responding fire department personnel.

Purpose
These data elements, together with Incident Type, enable a fire department to document the breadth of activities and the resources required by the responding fire department to effectively handle the incident. This information also provides some indication of the specific types of services provided by the fire department.

Entry
The Actions Taken field(s) is required for all incidents where actions were taken, including "investigation only." Enter the two-digit codes and descriptions for up to three of the *most significant* actions taken at the scene of the incident. Specific actions may include extinguishing fires, forcible entry, providing first aid, identifying and analyzing hazardous materials, and transporting the injured. The action may involve simply standing by at an incident for possible service.

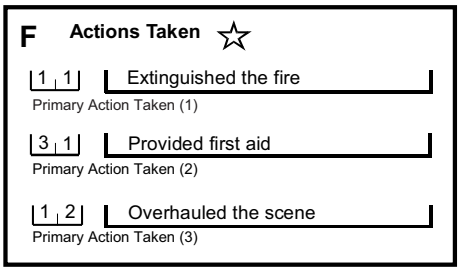
Be as specific as possible in stating the action taken. The Additional Action Taken fields are optional. If this is a HazMat incident and the HazMat Module is being completed, list the non-HazMat actions taken in this field and the Actions Taken specific to handling the hazardous materials incident in the HazMat Module.

☞ The Primary Action Taken is the most significant action taken by the fire department at the scene (i.e., use the code with the lowest numerical value). This is a required field.

☞ When canceled en route, enter code 93, “Canceled en route”; in the case, the Incident Type (Section C) must be code 611.

Example

The fire department extinguished the fire (11), provided first aid to a fire victim (31), and overhauled the fire scene (12):



ACTIONS TAKEN CODES

Fire Control or Extinguishment

11 Extinguishment by fire service personnel.
12 Salvage and overhaul.
13 Establish fire lines around wildfire perimeter. Includes clearing firebreaks using direct, indirect, and burnout tactics as appropriate.
14 Contain fire (wildland). Includes taking suppression action that can reasonably be expected to check the fire spread under prevailing and predicted conditions.
15 Confine fire (wildland). Includes when fire crews or resources stop the forward progress of a fire but have not put in all control lines.
16 Control fire (wildland). Includes when fire crews or resources completely surround the fire perimeter with control lines; extinguish any spot fires; burn any area adjacent to the fire side of the control lines; and cool down all hot spots that are immediate threats to the control line, until the lines can reasonably be expected to hold under foreseeable conditions.
17 Manage prescribed fire (wildland).
10 Fire control or extinguishment, other.

Search and Rescue

21 Search for lost or missing person. Includes animals.
22 Rescue, remove from harm. Excludes vehicle extrication (23).
23 Extrication or disentangling of a person. Excludes body recovery (24).
24 Recover body or body parts.
20 Search and rescue, other.

EMS and Transport

31 Provide first aid and check for injuries. Medical evaluation of patient.
32 Provide basic life support (BLS).
33 Provide advanced life support (ALS).
34 Transport of person from scene in fire service ambulance or apparatus.
30 Emergency medical services, other.

Hazardous Condition

41 Identification, analysis of hazardous materials.
42 Hazardous materials detection, monitoring, sampling, and analysis using a variety of detection instruments including combustible gas indicators (CGIs) or explosimeter, oxygen monitors, colorimetric tubes, specific chemical monitors, and others. Results

from these devices must be analyzed to provide information about the hazardous nature of the material or environment.

43 Hazardous materials spill control and confinement. Includes confining or diking hazardous materials. These are actions taken to confine the product released to a limited area including the use of absorbents, damming/diking, diversion of liquid runoff, dispersion, retention, or vapor suppression.

44 Hazardous materials leak control and containment. Includes actions taken to keep a material within its container, such as plugging/patching operations, neutralization, pressure isolation/reduction, solidification, and vacuuming.

45 Remove hazard. Includes neutralizing a hazardous condition.

46 Decontaminate persons or equipment. Includes actions taken to prevent the spread of contaminants from the “hot zone” to the “cold zone.” This includes gross, technical, or advanced personal decontamination of victims, emergency responders, and equipment.

47 Decontamination of occupancy or area exposed to hazardous materials.

48 Remove hazardous materials. Includes a broad range of actions taken to remove hazardous materials from a damaged container or contaminated area. Examples of actions to remove hazards include product offload/transfer, controlled burning or product flaring, venting, and overpacking.

40 Hazardous condition, other.

Fires, Rescues, and Hazardous Conditions

51 Ventilate. Includes nonhazardous odor removal and removal of smoke from nonhazardous materials-related fires.

52 Forcible entry, performed by fire service. Includes support to law enforcement.

53 Evacuate area. Removal of civilians from an area determined to be hazardous. Includes actions taken to isolate the contaminated area and/or evacuate those persons affected by a hazardous materials release or potential release.

54 Determine if the materials released are nonhazardous through product identification and environmental monitoring.

55 Establish safe area. Includes isolating the area affected by denying entry to unprotected persons and establishing hazard control zones (hot, warm, cold).

56 Provide air supply.

57 Provide light or electrical power.

58 Operate apparatus or vehicle.

50 Fires, rescues, and hazardous conditions, other.

Systems and Services

61 Restore municipal services. Includes turning water back on and notifying the gas company to turn the gas on.

62 Restore sprinkler or fire protection system.

63 Restore fire alarm system. Includes restoring fire alarm systems monitored by the fire service.

64 Shut down system. Includes shutting down water, gas, and fire alarm systems.

65 Secure property. Includes property conservation activities such as covering broken windows or holes in roofs.

66 Remove water or control flooding condition.

60 Systems and services, other.

Assistance

71 Assist physically disabled. Includes providing nonmedical assistance to physically disabled, handicapped, or elderly citizens.

72 Assist animal. Includes animal rescue, extrication, removal, or transport.

73 Provide manpower. Includes providing manpower to assist rescue/ambulance units lift patients or providing manpower to assist police.

74 Provide apparatus.

75 Provide equipment, where equipment is used by another agency.

76 Provide water. Includes tanker shuttle operations and pumping in a relay or from a water source. Excludes normal fire suppression operations.
77 Control crowd. Includes restricting pedestrian access to an area. Excludes control of vehicles (78).
78 Control traffic. Includes setting up barricades and directing traffic.
79 Assess damage from severe weather or the results of a natural disaster.
70 Assistance, other.

Information, Investigation, and Enforcement

81 Incident command. Includes providing support to incident command activities.
82 Notify other agencies. Includes notifications of utility companies, property owners, and the like.
83 Provide information to the public or media.
84 Refer to proper authority. Includes turnover of incidents to other authorities or agencies such as the police.
85 Enforce fire code and other codes. Includes response to public complaints and abatement of code violations.
86 Investigate. Includes investigations done on arrival to determine the situation and post-incident investigations; and collecting incident information for incident reporting purposes.
80 Information, investigation, and enforcement, other.

Fill-in, Standby

91 Fill in, move up to another fire station.
92 Standby.
93 Canceled en route.
00 Actions taken, other.
90 Fill-in, standby, other.

SECTION G

Section G collects data on the number of personnel and equipment used for suppression, EMS, etc., in the response to a specific incident.

G1 Resources ☆

Definition

The total complement of fire department personnel and apparatus (suppression, EMS, other) that responded to the incident. This includes all fire and EMS personnel assigned to the incident whether they arrived at the scene or were canceled before arrival.

Purpose

This information is used to determine actual personnel and apparatus requirements for different types of incidents and for different levels of incident severity. This data element may be examined with respect to casualties and damage estimates.

Entry

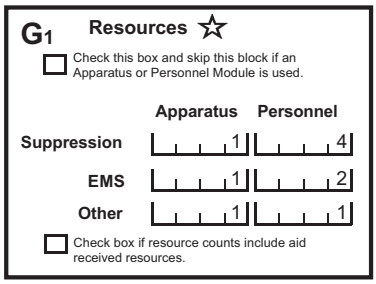
Enter the total number of fire department personnel and apparatus that responded to the incident for the Suppression, EMS, and Other fields. If the Apparatus Module or Personnel

Modules is used, check or mark the appropriate box (top) and skip this section. If these personnel and apparatus counts include mutual aid resources, check or mark the box at the bottom of Block G1.

☞ Chief officer vehicles and privately owned vehicles should be counted as "Other." The personnel arriving in these vehicles should be counted according to their primary assignment at the incident.

Example

Four firefighters (one engine), two EMS personnel (one ambulance), and one incident commander (one car) responded to an incident:



G2 Estimated Dollar Losses and Values

Definition

Estimates of the total property and contents dollar loss and the pre-incident value of the property and contents.

☞ An estimate of the property and contents dollar loss is required for all fires where the value is known.

Losses: Rough estimation of the total loss to the structure and contents, in terms of the cost of replacement in like kind and quantity. This estimation of the fire loss includes contents damaged by fire, smoke, water, and overhaul. This does not include indirect loss, such as business interruption.

Pre-incident Value: Estimation of the replacement cost of the structure and contents.

Purpose

Collecting property and contents losses illustrates the magnitude of the fire problem, provides an additional indicator of the incident severity, and can be used to evaluate progress in fire protection. This information can help local communities, states, and the country determine the amount of money that should be spent on fire protection.

Estimated property and contents losses are also crucial for identifying types of situations where high monetary losses are common. This information helps target fire prevention programs. Loss estimates also can be used to evaluate the cost effectiveness of various equipment and fire protection practices.

Pre-incident values help delimit the magnitude of the potential fire problem by providing a basis for comparison.

Entry

Enter the best estimates of dollar losses (required for all fires when obtainable) and pre-incident values (local option) that are practical to make or obtain. Monetary losses should be estimated as accurately as possible, though it is understood that the estimates may be rough approximations. If there was no loss or no pre-incident value, check or mark the appropriate None boxes.

☞ *I*n making this entry, use only whole dollars; do not include cents.

☞ A better estimate of losses for a fire often becomes available after the incident report is submitted. Revision of the original estimate should be made as a change entry when better information becomes available, especially for large fires.

Example

The estimated dollar loss was $3,450; the estimated pre-incident value was $7,500:

G2 Estimated Dollar Losses and Values

LOSSES: Required for all fires if known. Optional for non-fires.		**None**
Property	$ ___ , 3 , 4 5 0	☐
Contents	___ , ___ , ___	☒
PRE-INCIDENT VALUE: Optional		
Property	$ ___ , 7 , 5 0 0	☐
Contents	$ ___ , ___ , ___	☒

COMPLETED MODULES

This area of the Basic Module is used to determine the totality of all the modules submitted for a specific incident. It acts as a checklist for completed modules under the paper form system.

Definition

Listing of NFIRS–2 through NFIRS–11 modules completed for the incident.

Purpose

This section is for paper form management to ensure receiving authorities that the incident package is complete. It also serves as a reminder to the responder as to which modules must be completed.

Entry

Check or mark all the Completed Module boxes that apply to the incident.

Example

A fire department responded to fire in an apartment building; one firefighter was injured. Three additional forms will be attached to the Basic Module: Fire, Structure Fire, and Fire Service Casualty:

Completed Modules

- [X] Fire–2
- [X] Structure Fire–3
- [ ] Civilian Fire Cas.–4
- [X] Fire Service Cas.–5
- [ ] EMS–6
- [ ] HazMat–7
- [ ] Wildland Fire–8
- [ ] Apparatus–9
- [ ] Personnel–10
- [ ] Arson–11

SECTION H

Section H captures information on the number of civilians and firefighters injured or killed as a result of the incident. Other information in this section relates to whether a detector alerted occupants in a structure and whether hazardous materials were released.

H1 Casualties ☆

Definition

A person injured or killed either as a result of the incident or during the mitigation of the incident. An injury is physical damage to a person that requires either (1) treatment by a practitioner of medicine within 1 year of the incident, or (2) at least 1 day of restricted activity immediately following the incident. Deaths also include people who die within 1 year because of injuries sustained from the incident.

☞ Either the None box is checked or marked or the number of casualties is entered.

Civilians include emergency personnel who are not members of the fire department, such as police officers or utility workers.

Purpose

This information can be correlated with occupancy type, structural conditions, and other data to help understand how to reduce future fire injuries and deaths. Furthermore, this information can be used to reduce firefighter injuries and deaths through better equipment, training, and physical conditioning.

Entry

Identify and separately record the number the number of fire service personnel and the number of civilians or other non-fire department personnel killed or injured as a result of the incident. Check the None box if there were no civilian or fire service personnel casualties.

Fire Service Deaths: Enter the number of fire service personnel from your department who died in connection with this incident regardless of incident type. A Fire Service Casualty Module must be completed for each individual counted here.

Fire Service Injuries: Enter the number of fire service personnel from your department who were injured (but did not die) in connection with this incident regardless of incident type. A Fire Service Casualty Module must be completed for each individual counted here.

☞ Include those people injured or killed while responding to or returning from the incident. If the injury or death occurred on fire department property after the apparatus was placed back in service, do not include it in this section.

☞ On-duty firefighter injuries or deaths that did not occur during an incident may be collected using the Fire Service Casualty Module. Remember when reporting a firefighter casualty of this type, the Basic Module must still be filled out, complete with an incident number. In this event, create an EMS incident with the appropriate response information.

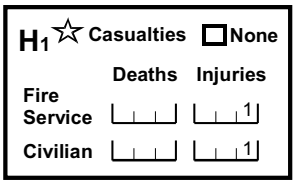
Civilian Deaths: Enter the number of civilians or non-fire department personnel who died in connection with this incident. Enter only fire-related deaths here. For HazMat deaths, enter the number in Section P of the HazMat Module when that optional module is selected by your state reporting authority. A Civilian Casualty Module must be completed for each individual counted here.

Civilian Injuries: Enter the number of civilians or non-fire department personnel who were injured (but did not die) in connection with this incident. Enter only fire-related injuries here. For HazMat injuries, enter the number in Section P of the HazMat Module when that optional module is selected by your state reporting authority. The Civilian Casualty Module must be completed for each individual counted here.

☞ EMS civilian deaths or injuries are not entered on either the Basic or the HazMat Modules.

Example

One civilian and one firefighter were injured at the scene of a tractor-trailer accident:



H2 Detector

Definition

The presence in the general area of fire origin of one or more detectors that was within the operational range of the detector(s) at the time of an incident.

☞ This is required for all confined fires (Incident Type codes 113–118, Section C).

Purpose

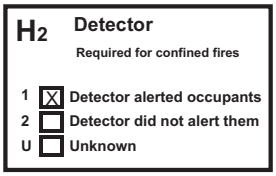
The information on whether or not a detector alerted the occupants of a structure to an emergency is important for understanding fire control and life safety with and without detection equipment.

Entry

Check or mark the box if a detector alerted the occupants in this incident (regardless of whether the detector was smoke, heat, carbon monoxide, etc.). This block can be left blank for non-fire incidents, and can optionally be used for a carbon dioxide (CO_2) incident and whether a CO_2 detector operated.

Example

Burning food on the stove set off the smoke detector and alerted the occupants:



DETECTOR CODES

1	Detector alerted occupants.
2	Detector did not alert occupants.
U	Unknown.

H3 Hazardous Materials Release

Definition

The occurrence and nature of a hazardous material release at the incident.

Purpose

This element provides information on whether or not hazardous materials were released at the incident, what the materials were, and whether the HazMat Module should be completed. This allows fire departments to document releases of hazardous materials as minor spills that occur in the everyday environment without the need to complete the HazMat Module.

Entry

Check or mark the box best describing the type of spill or release that occurred at the incident. If no hazardous materials were involved or no HazMat release, check or mark the None box.

Complete the HazMat Module if special HazMat actions were required, including the need for special protective clothing or equipment, or if the spill was equal to or greater than 55 gallons.

Example

Gasoline was leaking from the car involved in a motor vehicle accident:

H3 Hazardous Materials Release ☐ None

1 ☐ **Natural gas:** slow leak, no evacuation or HazMat actions
2 ☐ **Propane gas:** <21-lb tank (as in home BBQ grill)
3 ☒ **Gasoline:** vehicle fuel tank or portable container
4 ☐ **Kerosene:** fuel burning equipment or portable storage
5 ☐ **Diesel fuel/fuel oil:** vehicle fuel tank or portable storage
6 ☐ **Household solvents:** home/office spill, cleanup only
7 ☐ **Motor oil:** from engine or portable container
8 ☐ **Paint:** from paint cans totaling <55 gallons
0 ☐ **Other:** special HazMat actions required or spill > 55 gal (Please complete the HazMat form.)

HAZARDOUS MATERIALS RELEASE CODES

1	Natural gas, slow leak, no evacuation or HazMat actions taken.
2	Propane gas, less than a 21-pound tank (as in home BBQ grill).
3	Gasoline, vehicle fuel tank or portable container. Includes leaks or releases from equipment tanks where the release is less than 55 gallons.
4	Kerosene, fuel-burning equipment or portable storage container less than 55 gallons.
5	Diesel fuel or fuel oil, vehicle fuel tank or portable storage container less than 55 gallons.
6	Household/office solvent or chemical spill. Includes spills of mineral spirits, acetone, and turpentine. Cleanup only.
7	Motor oil from engine or portable container less than 55 gallons.
8	Paint from paint cans less than 55 gallons.
0	Other special HazMat actions were required or the spill was equal to or greater than 55 gallons. Complete the HazMat Module.
N	No HazMat involved.

SECTION I

I

Mixed Use Property

☞ *Mixed Use Property* is similar to *Complex* in NFIRS 4.1.

Definition

This data element captures the overall use of a property. If a property has two or more uses, then the Mixed Use Property designation applies.

Purpose

Documenting an incident that occurs on a property with more than one use is important to better identify the overall or main use of the property in which emergency incidents occur. Knowing the overall property use allows for better analysis of incident causes and targeting of

prevention strategies. It also is important information for use in code development and enforcement as well as for inspection activities.

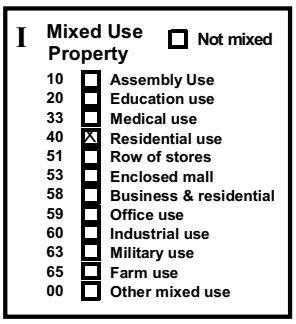
Entry

If the property is of mixed use, check or mark the box best describing the *overall* use of the property where the incident occurred. Check or mark the appropriate box even if the incident did not involve the entire complex (for example, a single store in a row of stores). If it is not a mixed use property, check or mark the Not Mixed box.

☞ For example, a restaurant in an office building would be a structure with two or more property uses, assembly use and office use. The Mixed Use Property designation would be office use (code 59). A warehouse on the property of an amusement park would have a designation of assembly use (10). A standalone service station would not be a Mixed Use although it has a driveway and parking area.

Example

An electrical fire in the store of a hotel lobby (40):



MIXED USE PROPERTY CODES

10 Assembly use. Places for the gathering of people for amusement, recreation, social, religious, civic, patriotic, travel, and similar purposes. The occupants are present voluntarily and for a limited duration.

20 Educational use. Properties used for the gathering of groups of persons for purposes of instruction. These occupancies differ from assembly occupancies in that persons are present regularly and under some control or discipline.

33 Medical use. Properties dedicated to health care, including hospitals, treatment centers, clinics, and doctor's office buildings. Medical complexes include facilities for psychological and physical care.

40 Residential use. A property in which sleeping accommodations are furnished. Accommodations may be permanent, as in an apartment; transient, as in a hotel; or temporary, as in a dormitory or barracks.

51 Row of stores. Includes strip malls. Excludes enclosed malls (53).

53 Enclosed mall. A shopping center with multiple stores sharing a common, enclosed area. The principal use is for retail trade, with incidental other uses such as office and business. Excludes strip malls (51).

58 Business and residential properties containing a mixture of commercial activity with residential uses. Includes mixed-use developments and apartments with first-floor retailing.

59 Office use. Office properties are those used primarily for the transaction of business and the keeping of records. Includes those with incidental retail sales or eating establishments.

60 Industrial use. Properties characterized by the mechanical, chemical, or electromagnetic transformation of inorganic or organic substances into new products via machinery or by hand. Includes the assembly of component parts to produce finished or intermediate goods for further processing.

63 Military use. Any property under the regular control of the U.S. military or authorized state militias. Includes military bases, training centers, armories, and related facilities.

65 Farm use. Included are croplands, orchards, and livestock production.

00 Mixed use, other.

NN Not mixed use. Incident property consists of a single use.

SECTION J

J Property Use ☆

☞ *Property Use* was known as *Fixed Property Use* in NFIRS 4.1.

Definition

Each individual property has a specific use, whether a structure or open land. This entry refers to the actual use of the property where the incident occurred, not the overall use of mixed use properties of which the property is part (see Mixed Use Property, Section I). The intent of this entry is to specify the property use, not the configuration of the building or other details of the property.

Purpose

This element permits analyses of differing fire problems that occur on a wide range of property types. Information on the frequency, losses, and types of fires for each property use can assist in targeting fire prevention programs and fire protection or suppression systems for each type of property. It often assists in ordering priorities for inspection, developing new building codes, and evaluating the success of programs directed at particular types of properties.

Entry

Check or mark the box best describing the specific property use. If the property use is not listed in Section J of the paper form, look up the specific property use code and enter the appropriate three-digit code and the code's description. If no property was involved in the incident (e.g., Incident Type code 611), check or mark the None box.

☞ If the property is a structure that is under construction, select the use for which it will be used. This is not applicable to construction site incidents (code 981). If the structure is vacant or being demolished, select its last significant use.

☞ Property that is mobile or in transit is reported separately, and the property it is located on at that time is reported in this entry box. If the mobile property is not in transit, indicate its current location. The most common property use classifications for structures and outside property are listed.

☞ *Mobile homes.* Use code 419 for mobile homes used primarily as fixed residences. Incident Type code 121 (Section C) should have been used to indicate that this was a fire in a mobile home used as a fixed residence. If the mobile home is in transit, use the code describing the property where the mobile home is located at the time of the incident.

☞ If the Property Type is in the 400 series, Block B1, Estimated Number of Residential Living Units in the Building, on the Fire Module must be completed.

☞ *Property Type 500s, 600s, 700s, or 800s.* If the property use code falls in the 500, 600, 700, or 800 series, the On-Site Materials field (Section C) on the Fire Module must be completed.

Example

Fire in a small electronics warehouse (891):

J **Property Use** ☆ ☐ None

Structures		341	☐ Clinic, clinic-type infirmary	539	☐ Household goods, sales, repairs
131	☐ Church, place of worship	342	☐ Doctor/dentist office	571	☐ Gas or service station
161	☐ Restaurant or cafeteria	361	☐ Prison or jail, not juvenile	579	☐ Motor vehicle/boat sales/repairs
162	☐ Bar/tavern or nightclub	419	☐ 1- or 2-family dwelling	599	☐ Business office
213	☐ Elementary school, kindergarten	429	☐ Multifamily dwelling	615	☐ Electric-generating plant
215	☐ High school, junior high	439	☐ Rooming/boarding house	629	☐ Laboratory/science laboratory
241	☐ College, adult education	449	☐ Commercial hotel or motel	700	☐ Manufacturing plant
311	☐ Nursing home	459	☐ Residential, board and care	819	☐ Livestock/poultry storage (barn)
331	☐ Hospital	464	☐ Dormitory/barracks	882	☐ Non-residential parking garage
		519	☐ Food and beverage sales	891	☒ Warehouse
Outside		936	☐ Vacant lot	981	☐ Construction site
124	☐ Playground or park	938	☐ Graded/cared for plot of land	984	☐ Industrial plant yard
655	☐ Crops or orchard	946	☐ Lake, river, stream		
669	☐ Forest (timberland)	951	☐ Railroad right-of-way		
807	☐ Outdoor storage area	960	☐ Other street		
919	☐ Dump or sanitary landfill	961	☐ Highway/divided highway		
931	☐ Open land or field	962	☐ Residential street/driveway		

Look up and enter a Property Use code and description only if you have NOT checked a Property Use box.

⇨ **Property Use** Code

Property Use Description

The above example requires completion of Section C, On-Site Materials or Products, on the Fire Module. There, code 712 would be entered as the On-Site Material, Electronics Parts would be entered as the description, and the code 1 box indicating Bulk Storage or Warehousing would be checked or marked.

☞ An alphabetized synonym list for the following Property Use codes is presented in Appendix B.

PROPERTY USE CODES

Assembly

111 Bowling establishment.

112 Billiard center, pool hall.

113 Electronic amusement center. Includes video arcades and the like.

114 Ice rink. Includes indoor or outdoor facilities for use exclusively as ice rinks. Excludes combination ice rinks/basketball or other uses (123).

115 Roller rink. Includes indoor or outdoor facilities for use exclusively as roller skating rinks or skateboard parks. Excludes facilities with multiple uses (123).

116 Swimming facility. Includes indoor or outdoor swimming pools, related cabanas, bathhouses, and equipment locations.

110 Fixed-use recreation places, other. Includes miniature golf courses, driving, and batting ranges.
121 Ballroom, gymnasium. Includes dance halls, basketball courts, indoor running tracks.
122 Convention center, exhibit hall. Includes large open hall without fixed seating, such as convention center, exhibit hall, armory hall, and field house.
123 Stadium, arena. Includes fixed seating in large areas, such as ballpark, football stadium, grandstand, and race track.
124 Playground or outdoor area with fixed recreational equipment.
129 Amusement center, indoor/outdoor. Includes carnivals, circuses. Excludes video arcades (113).
120 Variable-use amusement, recreation places, other.
131 Church, mosque. Includes synagogues, temples, chapels, religious educational facilities, and church halls.
134 Funeral parlor. Includes crematoriums, mortuaries, morgues, and mausoleums.
130 Places of worship, funeral parlors, other.
141 Athletic or health club. Includes YMCA or YWCA, lodge, swimming, and baths. If sleeping facilities are included, use 449.
142 Clubhouse associated with country club that includes golf, tennis, hunting, fishing, and riding activities.
143 Yacht club. Includes boating and yacht club facilities. Excludes marinas, boat mooring facilities (898); boat repair/refueling facilities (571); or boat sales, services, and repairs (579).
144 Casino, gambling clubs. Includes bingo halls. Use only where primary use is for gambling.
140 Clubs, other.
151 Library.
152 Museum. Includes art galleries, planetariums, and aquariums.
154 Memorial structure. Includes monuments and statues.
155 Courthouse. Includes courtrooms.
150 Public or government, other.
161 Restaurant or cafeteria. Places specializing in on-premises consumption of food. Includes carryout and drive-through restaurants.
162 Bar, nightclub, saloon, tavern, pub.
160 Eating, drinking places, other.
171 Airport passenger terminal. Includes heliports.
173 Bus station.
174 Rapid transit station. Includes subway stations, rail stations, light rail stations, monorail stations, and the like.
170 Passenger terminal, other.
181 Live performance theater.
182 Auditorium, concert hall.
183 Movie theater. Includes facilities designed exclusively for showing motion pictures.
185 Radio, television studio.
186 Film/movie production studio. For film processing facilities, use (700). On the Fire Module, use Onsite Materials (714).
180 Studio, theater, other.
100 Assembly, other.

Educational

210 Schools, non-adult, other.
211 Preschool, not in same facility with other grades. Includes nursery schools. Excludes kindergartens (213) and daycare facilities (254, 255).
213 Elementary school. Includes kindergarten.
215 High school, junior high, middle school.
241 Adult education center, college classroom. Includes any building containing adult education classrooms. The building may include other uses incidental to teaching.

254 Day care in commercial property.
255 Day care in residence, licensed.
256 Day care in residence, unlicensed.
200 Educational, other.

Health Care, Detention, and Correction

311 Nursing homes licensed by the state, providing 24-hour nursing care for four or more persons.
321 Mental retardation/development disability facility that houses, on a 24-hour basis, four or more persons.
322 Alcohol or substance abuse recovery center where four or more persons who are incapable of self-preservation are housed on a 24-hour basis.
323 Asylum, mental institution. Includes facilities for the criminally insane. Must include sleeping facilities.
331 Hospital: medical, pediatrics, psychiatric. Includes hospital-type infirmaries and specialty hospitals where treatment is provided on a 24-hour basis.
332 Hospices. Includes facilities where the care and treatment of the terminally ill is provided on a 24-hour basis.
341 Clinic, clinic-type infirmary. Includes ambulatory care facilities. Excludes facilities that provide overnight care (331).
342 Doctor, dentist, or oral surgeon office.
343 Hemodialysis unit, free standing, not a part of a hospital.
340 Clinics, doctors' offices, hemodialysis centers, other.
361 Jail, prison (not juvenile). Excludes police stations (365) or courthouses (153) where a jail is part of the facility.
363 Reformatory, juvenile detention center.
365 Police station.
300 Health care, detention, and correction, other. Includes animal care.

Residential

419 1- or 2-family dwelling, detached, manufactured home, mobile home not in transit, duplex.
429 Multifamily dwelling. Includes apartments, condos, town houses, row houses, tenements.
439 Boarding/rooming house. Includes residential hotels and shelters.
449 Hotel/motel, commercial.
459 Residential board and care. Includes long-term care facilities, halfway houses, and assisted-care housing facilities. Excludes nursing facilities (311).
460 Dormitory-type residence, other.
462 Sorority house, fraternity house.
464 Barracks, dormitory. Includes nurses' quarters, military barracks, monastery/convent dormitories, bunk houses, workers' barracks.
400 Residential, other.

Mercantile, Business

511 Convenience store. Excludes service stations with associated convenience stores (571).
519 Food and beverage sales, grocery store. Includes supermarkets, specialty food stores, liquor stores, dairy stores, and delicatessens.
529 Textile, wearing apparel sales. Includes clothing, shoes, tailor furs, and dry goods shops.
539 Household goods, sales, repairs. Includes furniture, appliances, hardware, paint, wallpaper, music, and video stores.
549 Specialty shop. Sale of materials commonly used in the home, such as books, stationery, newspapers, tobacco, licit drugs, jewelry, leather goods, flowers, optical goods. Excludes liquor stores (519).
557 Personal service. Includes barber and beauty shops.

559 Recreational stores. Includes hobby supply, sporting goods, toy, pet, photographic supply, garden supply, lumber, and fireworks stores and sales.

564 Laundry, dry cleaning. Includes self-service facilities.

569 Professional supplies, services. Includes art supply, home maintenance service, and linen supply firms.

571 Service station, gas station. Includes LP-gas stations with associated convenience stores and boat refueling stations. Excludes vehicle sales (579).

579 Motor vehicle or boat sales, services, repair. Includes facilities that have incidental fuel dispensing.

581 Department or discount store. Includes stores selling a wide range of items that cannot readily be classified, such as mall kiosks, drug stores, and discount buying club stores that require memberships.

580 General retail, other.

592 Bank. Includes ATM kiosks when not part of another structure.

593 Office: veterinary or research. Excludes laboratories (629).

596 Post office or mailing firms.

599 Business office. Includes engineering, architectural, and technical offices. Excludes military offices (631).

500 Mercantile, business, other.

Industrial, Utility, Defense, Agriculture, Mining

614 Steam- or heat-generating plant.

615 Electric-generating plant, regardless of fuel source. Includes power generation for public or private use, power generation for rail transport, and nuclear powerplants that generate electrical power.

610 Energy production plant, other.

629 Laboratory or science laboratory. Includes chemical, medical, biological, physical materials testing, psychological, electronics, and general research laboratories. Also includes classrooms and offices incidental to laboratory facilities. Minor laboratory areas incidental to operations in another property should be considered part of the predominating property.

631 Defense, military installation.

635 Computer center. Includes computer laboratories.

639 Communications center. Includes radio, TV, and telecommunications facilities.

642 Electrical distribution. Includes electrical substations, transformers, and utility poles.

644 Gas distribution, gas pipeline.

645 Flammable liquid distribution system, flammable liquid pipeline.

647 Water utility. Includes collection, treatment, storage, and distribution of water.

648 Sanitation utility. Includes incinerators and industrial rubbish burners. Excludes dumps and landfills.

640 Utility or distribution system, other.

655 Crops or orchard. Includes plant nurseries and greenhouses as well as the processing or packaging of agricultural crops or fruit that occurs on the property.

659 Livestock production. Includes milking facilities, poultry and egg production, and fish hatcheries. Excludes crops or orchard (655), meat, and milk processing plants.

669 Forest, timberland, woodland. Includes standing timber without logging operations; wildlife preserves; timber tracts where planting, replanting, and conservation of forests are conducted; and areas where uncultivated materials such as wild rubber, barks, and roots are gathered. Also includes facilities for extracting, concentrating, and distilling of such materials when the facilities are located within the forest. Excludes grasslands and brush (931).

679 Mine, quarry. Mining and quarrying of raw and natural materials. Includes underground and surface mines, gravel pits, oil wells, coal mines, ore mines, salt mines, chemical mines, stone and gravel quarries, mineral mines, peat mines, natural gas wells, and the like.

600 Industrial, utility, defense, agriculture, mining, other.

Manufacturing, Processing

700 Manufacturing, processing. Properties where there is mechanical or chemical transformation of inorganic or organic substances into new products. Includes factories making products of all kinds and properties devoted to operations such as processing, assemblies, mixing, packing, finishing or decorating, and repairing.

Storage

807 Outside material storage area.
808 Outbuilding or shed. Includes tool and contractor sheds. Excludes contractor field offices (599).
816 Grain elevator, silo.
819 Livestock, poultry storage. Includes barns, stockyards, and animal pens.
839 Refrigerated storage. Includes storage lockers.
849 Outside storage tank.
880 Vehicle storage, other. Includes airplane and boat hangars. Excludes parking garages (881, 882).
881 Parking garage, detached residential garage. Includes detached parking structures associated with multifamily housing. If the garage is attached to the residence, use the 400 series.
882 Parking garage, general vehicle. Includes bus, truck, fleet, or commercial parking structures.
888 Fire station.
891 Warehouse. Includes all general storage facilities. Excludes refrigerated storage (839).
898 Dock, marina, pier, wharf. Includes associated passenger facilities.
899 Residential storage or self-storage units. Includes mini-storage units.
800 Storage, other.

Outside or Special Property

919 Dump, sanitary landfill. Includes recycling collection points.
921 Bridge, trestle.
922 Tunnel.
926 Outbuilding, protective shelter. Includes toll booths, weather shelters, mailboxes, telephone booths, privies, charitable collection boxes, and aerial tramways. Excludes parking garages.
931 Open land or field. Includes grasslands and brushlands. Excludes crops or areas under cultivation.
935 Campsite with utilities. Includes parks for camping trailers or recreational vehicles.
936 Vacant lot. Undeveloped land, not paved, may include incidental untended plant growth or building materials or debris.
937 Beach.
938 Graded and cared-for plots of land. Includes parks, cemeteries, golf courses, and residential yards.
941 Open ocean, sea, or tidal waters. Includes ports. Excludes piers and wharves (898).
946 Lake, river, stream.
940 Water area, other.
951 Railroad right-of-way. Includes light rail or rapid transit when their right-of-way usage is exclusive (i.e., not part of the street).
952 Railroad yard, switch or classification area.
961 Highway or divided highway. Includes limited-access highways with few intersections or at grade crossings.
962 Residential street, road, or residential driveway.
963 Street or road in commercial area.
965 Vehicle parking area. Excludes parking garages (882). Includes paved non-residential driveways.
960 Street, other.
972 Aircraft runway.

973 Aircraft taxiway. Includes all aircraft operation areas other than runways and aircraft loading areas (974).
974 Aircraft loading area. Includes helipads and helistops.
981 Construction site. Excludes buildings under construction or demolition. Buildings or structures under construction or demolition should be classified by their proposed or former use.
982 Oil or gas field.
983 Pipeline, power line, or other utility right-of-way.
984 Industrial plant yard area, not outdoor storage.
900 Outside or special property, other.
000 Property use, other.
NNN None.
UUU Undetermined.

SECTION K

The entries for Section K are for identifying both the property occupant and the property owner involved in the incident. One completed example is presented at the end of Block K1 that shows all the field entries for both Blocks K1 and K2.

K1 Person/Entity Involved

Business Name

Definition
The full name of the company or agency occupying, managing, or leasing the property where the incident occurred.

Purpose
This element provides a basis for long-term analysis in recognizing patterns of repeated fires in the same or different locations over a period of time. The business name is required at the local government level to establish an official document of record.

Entry
Enter the full name of the company or agency occupying the property where the incident occurred. This may or may not be the same as the owner.

Example
A fire in the rear office of Rex Associates.

Telephone

Definition
The telephone number of the person or entity involved in the incident.

Purpose
This field collects additional information on the person or entity involved, which may be required at a later date.

Entry
Enter the area code and telephone number in the spaces provided.

Example
Rex Associates' telephone number is 828–867–5309.

Person Involved

Definition
The full name of the person involved in the incident. If an entity, enter the name under Business Name at the top of Block K1.

Purpose
This information provides a basis for long-term analysis in recognizing patterns of repeated incidents in the same or different locations over a period of time. The name of the person involved is required at the local government level to establish an official document of record.

Entry
Enter the full name of the person as normally written. Enter the name using the format: prefix, first name, middle initial, last name, and suffix. If the name is unknown, several available resources may be checked for this information, such as street directory publications, utility company records, or other public agencies. Leave blank if unknown. Name prefixes and suffixes are as follows:

Name Prefix		Name Suffix	
MR	Mr.	JR	Junior
MRS	Mrs.	SR	Senior
MS	Ms.	I	The First
DR	Doctor	II	The Second
REV	Reverend	III	The Third
		IV	The Fourth
		MD	Medical Doctor
		DDS	Doctor of Dental Science

Example
The manager's name is Mr. Morgan I. Teal, Jr.

Address

Definition
The address of the person or entity involved in the incident.

Purpose
The complete address provides local authorities with the location of the person or entity involved in the incident. The incident address is required at the local government level to establish an official document of record.

Entry
Enter the address where the person or entity involved in the incident can be contacted. The full address includes the street number, prefix, street or highway name, street type, and suffix. (For a more detailed explanation of the address components, see Section B of this module.)

Example
The manager who reported and attempted to put out the fire lives at 1001 Wilson Street.

Post Office Box (P.O. Box)

Definition
The number of a rented compartment in a post office for the storage of mail that is picked up by the business occupant.

Purpose
The complete address provides local authorities with the location of the person or entity involved in the incident. The incident address is required at the local government level to establish an official document of record.

Entry
Enter the post office box number in the spaces provided. Leave blank if not applicable.

Apartment, Suite, or Room

Definition
The number of the specific apartment, suite, or room where the incident occurred.

Purpose
The complete address provides local authorities with the location of the person or entity involved in the incident. The incident address is required at the local government level to establish an official document of record.

Entry
Enter the apartment, suite, or room number in the block. Leave blank if not applicable.

Example
The manager's apartment was 2–B.

City

Definition
The city where the person or entity involved in the incident lives.

Purpose
The complete address provides local authorities with the location of the person or entity involved in the incident. The incident address is required at the local government level to establish an official document of record.

Entry
Enter the city associated with the person's or entity's address.

Example
The manager lived in Asheville.

State

Definition
The state or U.S. territory where the person or entity involved in the incident lives.

Purpose
The complete address provides local authorities with the location of the person or entity involved in the incident, and provides a means of linking fire incident data to other geographic and population factors for comparative analysis at the local or state level.

Entry
Enter the abbreviation for the state or U.S. territory associated with the person's or entity's address.

Example
Asheville is in North Carolina and is entered as NC.

☞ A list of state/territory abbreviations is on page 3–5.

ZIP Code

Definition
A numerical code assigned by the U.S. Postal Service to all jurisdictions within the United States and U.S. Territories.

Purpose
The complete address provides local authorities with the location of the person or entity involved in the incident, and provides a means of linking fire incident data to other geographic and population factors for comparative analysis at the local or state level.

Entry
Enter the postal ZIP code for the address of the person or entity involved in the incident. Include the Plus Four digits of the ZIP code if known.

☞ If more than one person or entity is involved, mark the box at the bottom of K1 and fill out and attach Supplemental Forms (NFIRS–1S) as necessary.

Example
The ZIP code for the manager involved is 28806:

K1 Person/Entity Involved
Local Option

Rex Associates — Business Name (if applicable)
828-867-5309 — Area Code, Phone Number

☐ Check this box if same address as incident Location (Section B). Then skip the three duplicate address lines.

M R — Mr., Ms., Mrs.
Morgan — First Name
I — MI
Teal — Last Name
J R — Suffix

1001 — Number
Prefix
Wilson — Street or Highway
S T — Street Type
Suffix

Post Office Box
2–B — Apt./Suite/Room
Asheville — City

N C — State
28806 — ZIP Code

☐ **More people involved? Check this box and attach Supplemental Forms (NFIRS–1S) as necessary.**

K2 Owner

The type of information required for the fields in this block are the same as those in Block K1 above. The example shown in Block K1 is also applicable to the following Block K2 fields.

Business Name

Definition
The full name of the company or agency that owns the property where the incident occurred.

Purpose
This element provides a basis for long-term analysis in recognizing patterns of repeated fires in the same or different locations over a period of time. The business name is required at the local government level to establish an official document of record.

Entry
Enter the full name of the company or agency that owns the property where the incident occurred. If the owner is the same as the person or entity listed in Block K1, check or mark the box at the top of the K2 block and skip to Section L.

Telephone

Definition
The telephone number of the property owner involved in the incident.

Purpose
This field collects additional information on the owner of the property involved, which may be required at a later date.

Entry
Enter the area code and telephone number of the owner in the spaces provided.

Owner Name

Definition
The full name of the person who owns the property where the incident occurred. If an entity, enter the name under Business Name at the top of Block K2.

Purpose
This information provides a basis for long-term analysis in recognizing patterns of repeated incidents. The name of the owner of the property involved is required at the local government level to establish an official document of record.

Entry
Enter the full name of the person as normally written. Enter the name using the format: prefix, first name, middle initial, last name, and suffix. If the owner name is unknown, several available resources may be checked for this information, such as street directory publications, utility company records, or other public agencies. Leave blank if unknown.

☞ Name prefixes and suffixes are listed in Block K1.

Address

Definition
The address of the owner of the property where the incident occurred.

Purpose
The complete address provides local authorities with the location of the person or entity who owns the property involved in the incident. This information is a critical part of the documentation of the incident at the local level and may be used by jurisdictions to help investigate the cause of the fire and for insurance purposes.

Entry
Enter the address where the owner of the property where the incident occurred can be contacted. The full address includes the street number, prefix, street or highway name, street type, and suffix. (For a more detailed explanation of the address components, see Section B of this module.)

Post Office Box (P.O. Box)

Definition
The number of a rented compartment in a post office for the storage of mail that is picked up by the owner.

Purpose
The complete address provides local authorities with the location of the person or entity who owns the property involved in the incident. The address is required at the local government level to establish an official document of record.

Entry
Enter the post office box number in the spaces provided. Leave blank if not applicable.

Apartment, Suite, or Room

Definition
The number of the specific apartment, suite, or room of the owner of the property involved in the incident.

Purpose
The complete address provides local authorities with the location of the person or entity who owns the property involved in the incident. The address is required at the local government level to establish an official document of record.

Entry
Enter the apartment, suite, or room number in the block. Leave blank if not applicable.

City

Definition
The city where the owner of the property involved in the incident lives, or the city that is used in the mailing address if the property is not located within city limits.

Purpose
The complete address provides local authorities with the location of the person or entity who owns the property involved in the incident. The address is required at the local government level to establish an official document of record.

Entry
Enter the city associated with the owner's address.

State

Definition
The state or U.S. territory where the owner of the property lives.

Purpose
The complete address provides local authorities with the location of the person or entity who owns the property involved in the incident, and provides a means of linking fire incident data to other geographic and population factors for comparative analysis at the state level.

Entry
Enter the abbreviation for the state or U.S. territory associated with the owner's address. If the owner lives outside the United States or its territories, enter the code for "Other" (OO).

☞ A list of state/territory abbreviations is on page 3–5.

ZIP Code

Definition
A numerical code assigned by the U.S. Postal Service to all jurisdictions within the United States.

Purpose

The complete address provides local authorities with the location of the person or entity who owns the property involved in the incident, and provides a means of linking fire incident data to other geographic and population factors for comparative analysis at the state level.

Entry

Enter the postal ZIP code associated with the owner's address. Include the Plus Four digits of the ZIP code if known.

SECTION L

L Remarks

The Remarks section is an area for any comments that might be made concerning the incident. It is also a place to describe what happened, fire department operations, or unusual conditions encountered. Use this space to describe the incident in your own words. Of particular importance are observations that could aid investigators. Use additional sheets (i.e., Supplemental Form (NFIRS–1S)) as necessary. Additional sheets must have Section A at the top of each sheet completed.

This section also includes an instructional box (paper form only) intended to provide guidance to the person filling out the report. The block indicates whether a Fire Module or Structure Fire Module is required according to the Incident Type recorded in Section C of this module.

Fire Module Required?

Check the box that applies and then complete the Fire Module based on Incident Type, as follows:

☐ Buildings 111	Complete Fire & Structure Modules
☐ Special structure 112	Complete Fire Module & Section I, Structure Module
☐ Confined 113–118	Basic Module Only
☐ Mobile property 120–123	Complete Fire & Structure Modules
☐ Vehicle 130–138	Complete Fire Module
☐ Vegetation 140–143	Complete Fire or Wildland Module
☐ Outside rubbish fire 150–155	Basic Module Only
☐ Special outside fire 160	Complete Fire or Wildland Module
☐ Special outside fire 161–163	Complete Fire Module
☐ Crop fire 170–173	Complete Fire or Wildland Module

SECTION M

Section M requires the identification and signatures of the person completing the incident report and his/her supervisor. A completed example of the fields used is presented at the end of this section.

M

Authorization

Officer in Charge

Definition
The officer in charge is the ranking fire service person dealing with the incident. Position refers to the person's rank, while assignment refers to the job held at the time of the incident. The date is the day the form is signed.

Purpose
The signature and the date make the report a legal document and indicate a source for further information on the incident.

Entry
Enter the personnel or ID number as assigned by the fire department, the position, and the assignment of the officer in charge of the incident. That officer should then sign and date the report after he/she has reviewed and agreed with the information.

Example
The officer in charge was Captain John Hart.

Member Making Report

If the member making the report is the same as the officer in charge, check or mark the box by the member ID and skip the rest of Section M.

Definition
The member of the fire department who completed the report.

Purpose
When someone other than the officer in charge completes the report, the signature of that person indicates a source for further information on the incident. In these cases, the officer in charge should review the completed report and sign it as well.

Entry
Enter the personnel or ID number as assigned by the fire department, the position, and the assignment of the member completing the report. That member should then sign and date the report after he/she has reviewed and agreed with the information.

Example

The person completing the report was Firefighter Kate Ivey:

M **Authorization**

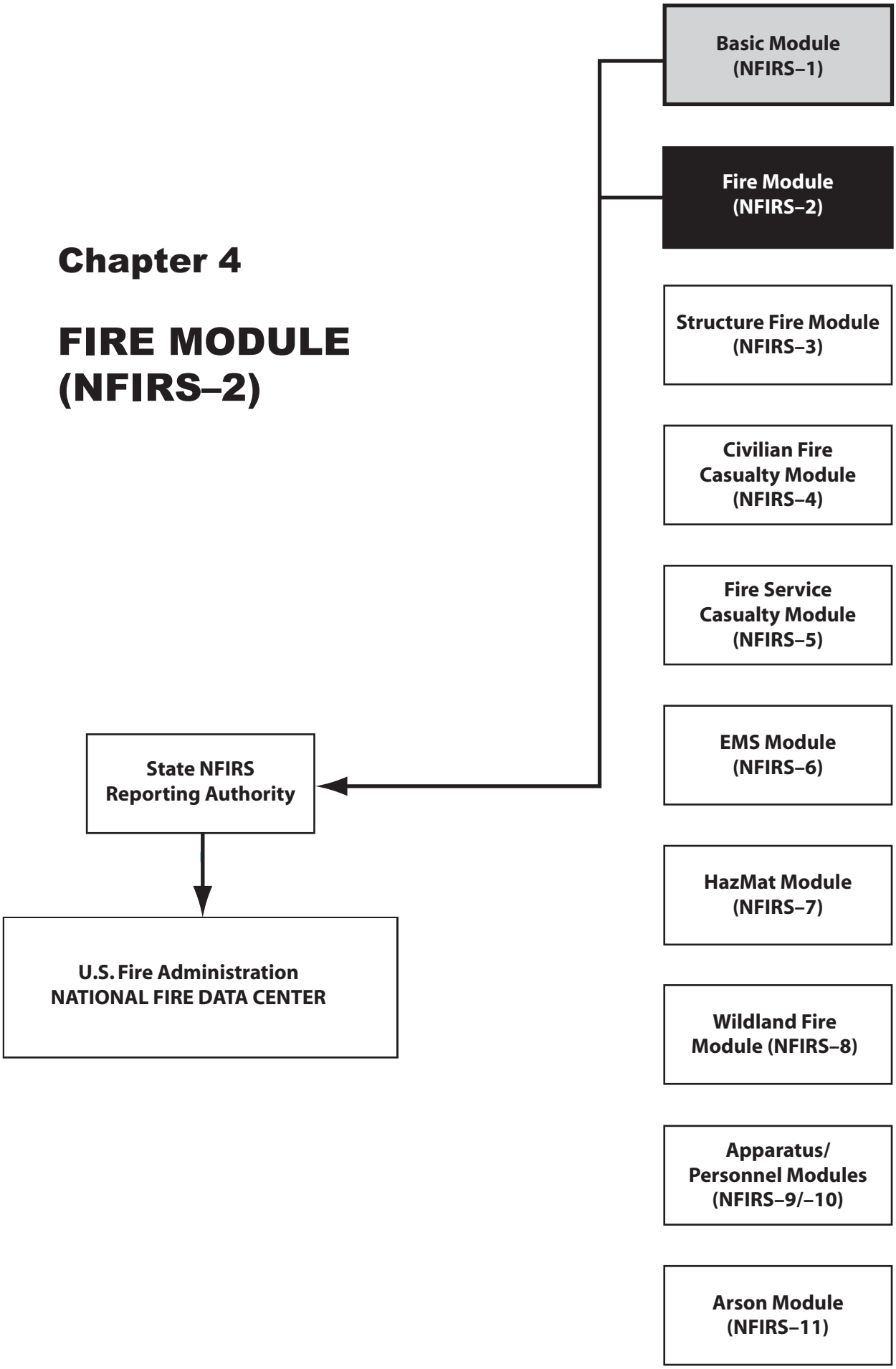
Officer in charge ID	Signature	Position or rank	Assignment	Month	Day	Year
1 1 9 9	*[Signature by John Hart]*	Captain	Fire suppression	0 1	0 7	2 0 0 2

Check box if same as Officer in charge. ☐

Member making report ID	Signature	Position or rank	Assignment	Month	Day	Year
2 1 0 7	*[Signature by Kate Ivey]*	Firefighter	Fire suppression	0 1	0 7	2 0 0 2

Chapter 4

FIRE MODULE (NFIRS–2)



A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | ☐ Delete ☐ Change

NFIRS–2 Fire

B Property Details

B1 Estimated number of residential living units in building of origin *whether or not all units became involved* ☐ **Not Residential**

B2 Number of buildings involved ☐ **Buildings not involved**

B3 Acres burned (outside fires) , ☐ **None** ☐ **Less than one acre**

C On-Site Materials or Products ☐ None

Complete if there were any significant amounts of commercial, industrial, energy, or agricultural products or or materials on the property, *whether or not they became involved*

Enter up to three codes. Check one box for each code entered.

On-site material (1)
On-site material (2)
On-site material (3)

On-Site Materials Storage Use

1 ☐ Bulk storage or warehousing
2 ☐ Processing or manufacturing
3 ☐ Packaged goods for sale
4 ☐ Repair or service
U ☐ Undetermined

D Ignition

D1 Area of fire origin ☆

D2 Heat source ☆

D3 Item first ignited ☆ 1 ☐ Check box if fire spread was confined to object of origin.

D4 Type of material first ignited — Required only if item first ignited code is 00 or <70

E1 Cause of Ignition ☆

☐ Check box if this is an exposure report. ⇨ Skip to Section G

1 ☐ Intentional
2 ☐ Unintentional
3 ☐ Failure of equipment or heat source
4 ☐ Act of nature
5 ☐ Cause under investigation
U ☐ Cause undetermined after investigation

E2 Factors Contributing to Ignition ☐ None

Factor contributing to ignition (1)
Factor contributing to ignition (2)

E3 Human Factors Contributing to Ignition

Check all applicable boxes ☐ None

1 ☐ Asleep
2 ☐ Possibly impaired by alcohol or drugs
3 ☐ Unattended person
4 ☐ Possibly mentally disabled
5 ☐ Physically disabled
6 ☐ Multiple persons involved
7 ☐ Age was a factor

Estimated age of person involved

1 ☐ Male 2 ☐ Female

F1 Equipment Involved in Ignition

☐ None ⇨ If equipment was not involved, skip to Section G

Equipment Involved
Brand
Model
Serial #
Year

F2 Equipment Power Source

Equipment Power Source

F3 Equipment Portability

1 ☐ Portable
2 ☐ Stationary

Portable equipment normally can be moved by one or two persons, is designed to be used in multiple locations, and requires no tools to install.

G Fire Suppression Factors ☐ None

Enter up to three codes.

Fire suppression factor (1)
Fire suppression factor (2)
Fire suppression factor (3)

H1 Mobile Property Involved ☐ None

1 ☐ Not involved in ignition, but burned
2 ☐ Involved in ignition, but did not burn
3 ☐ Involved in ignition and burned

H2 Mobile Property Type and Make

Mobile property type
Mobile property make
Mobile property model
Year
License Plate Number
State
VIN

Structure fire? Please be sure to complete the Structure Fire form (NFIRS–3).

Local Use

☐ **Pre-Fire Plan Available**

Some of the information presented in this report may be based upon reports from other agencies:

☐ Arson report attached
☐ Police report attached
☐ Coroner report attached
☐ Other reports attached

NFIRS–2 Revision 01/01/04

CHAPTER 4

FIRE MODULE (NFIRS–2)

The Fire Module (NFIRS–2) is completed for incidents involving a noncontained fire. Each section or block in the Fire Module asks for information on particular types of fires or items involved in the fire.

This module should be completed for Incident Types 111, 112, 120–143, 160–173, and 170–173 found in Section C of the Basic Module. The optional Wildland Fire Module may be used instead of the Fire Module for Incident Types 140–143, 160, 170–173, 631, and 632. Users may also optionally complete the Fire Module for confined fires (Incident Types 113–118), although it is not required.

SECTION A

The guidance and directions for completing Section A of the Fire Module are the same as for Section A in the Basic Module. It is stressed that the entries in Section A of the Fire Module must be identical with the entries on the corresponding Basic Module. An example of a completed Section A can be found on page 3–8.

A

Fire Department Identification (FDID) ☆

Entry
Enter the same FDID number found in Section A of the Basic Module.

State ☆

Entry
Enter the same state abbreviation found in Section A of the Basic Module.

Incident Date ☆

Entry
Enter the same incident date found in Section A of the Basic Module.

Station Number

Entry
Enter the same station number found in Section A of the Basic Module.

Incident Number ☆

Entry
Enter the same incident number found in Section A of the Basic Module.

Exposure Number ☆

Entry
Enter the same exposure number found in Section A of the Basic Module.

Delete/Change

Definition
Indicates a change to information submitted on a previous Fire Module or the deletion of an incorrect report.

Purpose
To delete or correct previously reported information.

Entry
Delete: Check or mark this box when you have previously submitted data on this incident and now want to have the data on this incident deleted from the database. If this box is marked, complete Section A and leave the rest of the report blank. This will delete all data regarding the incident. Forward the report according to your normally established procedures.

Change: Check or mark this box only if you previously submitted this fire incident to your state reporting authority and now want to update or change the information in the state database. Complete Section A and any other sections or blocks that need to be updated or corrected. If you need to blank a field that contains data, you must resubmit the original module containing the newly blanked field along with all the other original information in the module for that incident. This action is required only when sending an updated module to your state reporting authority. Forward the report according to your normally established procedures.

SECTION B

Property Details

Section B collects details about the specific property involved in the fire, whether a structure or an open piece of land.

B1

Number of Residential Living Units

Definition
The estimated total number of residential living units in the building of origin, whether or not all of the units became involved in the fire.

☞ This field is required when the Property Use on the Basic Module (Section J) is coded in the 400s.

Purpose

This information permits analysis of the fire problem by specific property use details. Information on the number of residential living units in the fire building provides a measure of the potential human exposure and can assist in targeting fire prevention and suppression programs.

Entry

Enter the estimated total number of residential living units in the building of origin, whether or not all the units became involved or were occupied at the time of the fire. If the fire did not occur in a residential property, check or mark the Not Residential box.

One- and two-family dwelling: Enter 1 or 2 as appropriate.

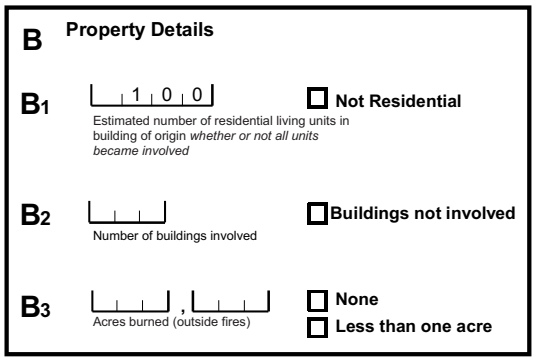
Apartment buildings, condominiums, townhouses, and rowhouses: Enter the number of separately owned or rented units in the building of origin.

Hotels and motels: Enter the number of lodging units in the building of origin.

Dormitories, rooming houses, and live-in-care centers: Enter the number of beds.

Example

For an apartment fire in a high-rise building with 100 total apartments, enter “100” for the number of residential living units:



B2 Number of Buildings Involved

Definition

The number of buildings directly involved in the fire. Each building involved in the fire should be documented as a separate exposure.

Purpose

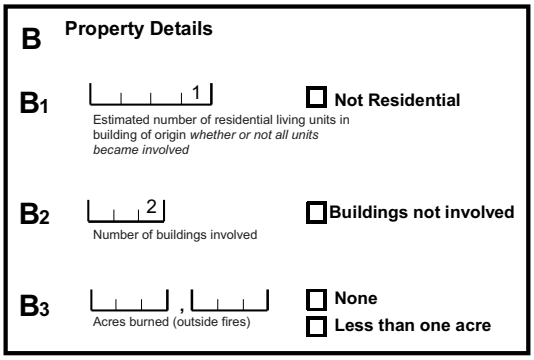
This element helps measure the size of the fire, which can assist with analyzing issues such as exposure protection and building density.

Entry

Enter the total number of buildings involved in the fire. If the fire was confined to the building of origin, enter a "1." If no buildings were involved, check or mark the Buildings Not Involved box.

Example

For a fire in a single-family house that extended to a neighboring house due to radiant heat transmission, enter "2" for the number of buildings involved:



B3 Number of Acres Burned (outside fires)

Definition

The estimated number of acres burned in the fire incident.

Purpose

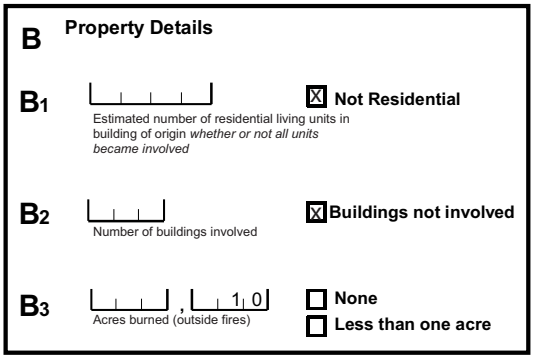
The outside fire situation can be assessed by examining the extent of the property involved. Information on the number of acres burned can assist in targeting fire prevention programs and planning fire suppression activities.

Entry

Enter the total number of acres burned in the fire. If it was not a brush/grass fire, or no acres were burned, or less than one acre burned, check or mark the appropriate box.

Example

For a fire that burned approximately 10 acres of a field, enter "10":



SECTION C

C

On-Site Materials or Products and On-Site Materials Storage Use

Definition

Identifies any significant amounts of commercial, industrial, energy, or agricultural products or materials on the property, whether or not they became involved in the fire.

☞ If a Property Use in the 500s, 600s, 700s, or 800s was listed in Block J of the Basic Module, then this field is required. This field may also be useful for other property uses.

Purpose

This element permits analysis of the fire problem by the materials and products present on the property involved in the fire. Information on materials and products present can assist in targeting fire prevention and suppression programs and identifying training and equipment needs.

Entry

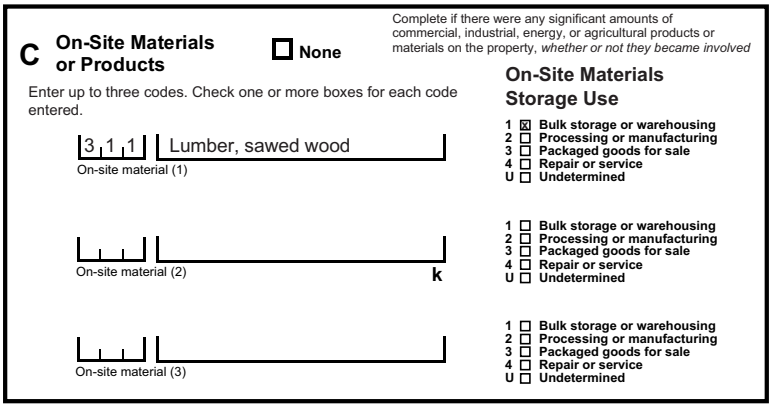
Enter the three-digit codes and descriptions for up to three of the most significant on-site materials or products, whether or not they became involved in the fire. Check or mark the Undetermined box if the on-site material is unknown. If there is no on-site material, check or mark the None box and go to Block D.

For each material or product entered, check or mark the box to the right that best describes whether the material is being stored, processed or manufactured, sold, or repaired or serviced on the property (required whenever an On-Site Material or Product entry is made).

☞ Storage incidental to a retail or industrial operation does not have to be reported separately. Bulk storage or warehousing is generally associated with storage of large quantities of raw material awaiting transformation into a finished product or storage of finished products awaiting shipment for sale or final use.

Example

A lumberyard involved in the fire incident was coded as an outside material storage area in Section J of the Basic Module (Property Use code 807); enter “311” Lumber as the on-site material or product:


C On-Site Materials or Products
None
Complete if there were any significant amounts of commercial, industrial, energy, or agricultural products or materials on the property, *whether or not they became involved*
Enter up to three codes. Check one or more boxes for each code entered.
On-Site Materials Storage Use
3 1 1 Lumber, sawed wood
On-site material (1)
1 ☒ Bulk storage or warehousing
2 ☐ Processing or manufacturing
3 ☐ Packaged goods for sale
4 ☐ Repair or service
U ☐ Undetermined
On-site material (2)
k
1 ☐ Bulk storage or warehousing
2 ☐ Processing or manufacturing
3 ☐ Packaged goods for sale
4 ☐ Repair or service
U ☐ Undetermined
On-site material (3)
1 ☐ Bulk storage or warehousing
2 ☐ Processing or manufacturing
3 ☐ Packaged goods for sale
4 ☐ Repair or service
U ☐ Undetermined

☞ An alphabetized synonym list for the following On-Site Materials or Products codes is presented in Appendix B.

ON-SITE MATERIALS OR PRODUCTS CODES

Food, Beverages, Agriculture

Food

111 Baked goods.
112 Meat products. Includes poultry and fish.
113 Dairy products.
114 Produce, fruit, or vegetables.
115 Sugar, spices.
116 Deli products.
117 Cereals, grains; packaged.
118 Fat/cooking grease. Includes lard and animal fat.
110 Food, other.

Beverages

121 Alcoholic beverage.
122 Nonalcoholic beverage.
120 Beverages, other.

Agriculture

131 Trees, plants, flowers.
132 Feed, grain, seed.
133 Hay, straw.
134 Crop, not grain.
135 Livestock.
136 Pets.
137 Pesticides.
138 Fertilizer.
130 Agriculture, other.

Food, beverages, agriculture, other

100 Foods, beverages, agriculture, other.

Personal and Home Products

Fabrics

211 Curtains, drapes.
212 Linens.

213 Bedding.
214 Cloth, yarn, dry goods.
210 Fabrics, other.

Wearable products

221 Clothes.
222 Footwear.
223 Eyeglasses.
225 Perfumes, colognes, cosmetics.
226 Toiletries.
220 Wearable products, other.

Accessories

231 Jewelry, watches.
232 Luggage, suitcases.
233 Purses, satchels, briefcases, wallets, belts, backpacks.
230 Accessories, other.

Furnishings

240 Furnishings, other.
241 Furniture.
242 Beds, mattresses.
243 Clocks.
244 Housewares.
245 Glass, ceramics, china, pottery, stoneware, earthenware.
246 Silverware.

Personal and home products, other

200 Personal and home products, other.

Raw Materials

Wood

311 Lumber, sawn wood.
312 Timber.
313 Cork.
314 Pulp
315 Sawdust, wood chips.
310 Wood, other.

Fibers

321 Cotton.
322 Wool.
323 Silk.
320 Fibers, other.

Animal skins

331 Leather.
332 Fur.
330 Animal skins, other.

Other raw materials

341 Ore.
342 Rubber.
343 Plastics.
344 Fiberglass.
345 Salt.
300 Raw materials, other

Paper Products, Rope

Paper products

411 Newspaper, magazines.
412 Books.
413 Greeting cards.
414 Paper, rolled
415 Cardboard.
416 Packaged paper products. Includes stationery.
417 Paper records or reports.
410 Paper products, other.

Rope, twine, cordage

421 Rope, twine, cordage.

Paper products, rope, other

400 Paper products, rope, other.

Flammables, Chemicals, Plastics

Flammables, combustible liquids

511 Gasoline, diesel fuel.
512 Flammable liquid. Excludes gasoline (511).
513 Combustible liquid. Includes heating oil. Excludes diesel fuel (511).
514 Motor oil.
515 Heavy oils, grease, noncooking related.
516 Asphalt.
517 Adhesive, resin, tar.
510 Flammables, combustible liquids, other.

Flammable gases

521 Natural gas.
522 LP gas, butane, propane.
523 Hydrogen gas.
520 Flammable gases, other.

Solid fuel, coal type

531 Charcoal.
532 Coal.
533 Peat.
534 Coke.
530 Solid fuel, coal type, other.

Chemicals, drugs

541 Hazardous chemicals.
542 Nonhazardous chemicals.
543 Cleaning supplies.
544 Pharmaceuticals, drugs.
545 Illegal drugs.
540 Chemicals, drugs, other.

Radioactive materials

551 Radioactive materials.

Flammables, chemicals, plastics, other

500 Flammables, chemicals, plastics, other.

Construction, Machinery, Metals

Machinery, tools

611 Industrial machinery.
612 Machine parts.
613 Tools (power and hand tools).
610 Machinery, tools, other.

Construction supplies

621 Hardware products.
622 Construction and home improvement products. Excludes pipes and fittings (623), electrical parts and supplies (626), insulation (627), lumber (311).
623 Pipes, fittings.
624 Stone-working materials.
625 Lighting fixtures and lamps.
626 Electrical parts, supplies, equipment. Excludes light fixtures (625).
627 Insulation.
628 Abrasives. Includes sandpaper and grinding materials.
629 Fencing, fence supplies.
620 Construction supplies, other.

Floor and wall coverings

631 Carpets, rugs.
632 Linoleum, tile.
633 Ceramic tile.
634 Wallpaper.
635 Paint.
630 Floor and wall coverings, other.

Metal products

641 Steel, iron products.
642 Nonferrous metal products. Includes aluminum products (no combustible metals).
643 Combustible metal products. Includes magnesium and titanium.
640 Metal products, other.

Construction, machinery, metals, other

.600 Construction, machinery, metals, other.

Appliances, Electronics, Medical, Laboratory

Appliances, electronics

711 Appliances. Includes refrigerators, stoves, irons.
712 Electronic parts, supplies, equipment. Includes components such as circuit boards, radios, computers.
713 Electronic media. Includes diskettes, CD-ROMs, recorded music.
714 Photographic equipment, supplies, materials. Includes cameras, film. Excludes digital electronic cameras (712) and electronic storage media (713).
710 Appliances, electronics, other.

Medical, laboratory products

721 Dental supplies.
722 Medical supplies. Includes surgical products.
723 Optical products.
724 Veterinary supplies.
725 Laboratory supplies.
720 Medical, laboratory products, other.

Appliances, electronics, medical, laboratory, other

700 Appliances, electronics, medical, laboratory, other.

Vehicles, Vehicle Parts

Motor vehicles and parts

811 Autos, trucks, buses, recreational vehicles, riding mowers, farm vehicles.
812 Construction vehicles.
813 Motor vehicle parts. Excludes tires (814).
814 Tires.
810 Motor vehicles and parts, other.

Watercraft

821 Boats, ships.
820 Watercraft, other.

Aircraft

830 Aircraft, other.
831 Planes, airplanes.
832 Helicopters.

Rail

841 Trains, light rail, rapid transit cars.
842 Rail equipment.
840 Rail, other.

Non-motorized vehicles

851 Bicycles, tricycles, unicycles. Includes tandem bicycles.
850 Non-motorized vehicles, other.

Other Products

Containers, packing materials

911 Bottles, barrels, boxes.
912 Packing material.
913 Pallets.
910 Containers, packing materials, other.

Previously owned products

921 Antiques.
922 Collectibles.
923 Used merchandise.
920 Previously owned products, other.

Ordnance, explosives, fireworks

931 Guns.
932 Ammunition.
933 Explosives
934 Fireworks, commercially made.
935 Rockets, missiles.
930 Ordnance, explosives, fireworks, other.

Recreation, arts products

941 Musical instruments.
942 Hobby, crafts. Excludes artwork (943).
943 Art supply/artwork. Includes finished works, paint, finishing materials.
944 Sporting goods. Includes balls, nets, rackets, protective equipment used in sport.
945 Camping, hiking, outdoor products. Includes related equipment such as portable stoves, rope.

946 Games, toys.
940 Recreation, arts products, other.

Mixed sales products

951 Office supplies.
952 Restaurant supplies. Excludes food (110 series).
950 Mixed sales products, other.

Discarded material

961 Junkyard materials.
962 Recyclable materials. Includes materials gathered specifically for the purpose of recycling.
960 Discarded material, other.
963 Trash, not recyclable.

Other On-Site Materials

000 On-site materials, other.
NNN None.
UUU Undetermined.

ON-SITE MATERIALS STORAGE USE CODES

1 Bulk storage or warehousing.
2 Processing or manufacturing.
3 Packaged goods for sale.
4 Repair or service.
N None.
U Undetermined.

SECTION D

Ignition

Section D is intended to collect data on several factors related to the ignition of the fire including the area of fire origin, heat source, item first ignited, and type of material first ignited.

D1

Area of Fire Origin ☆

Definition

The primary use of the area where the fire started within the property. The area of origin may be a room, a portion of a room, a vehicle, a portion of a vehicle, or an open area devoted to a specific use. Every fire has an area of fire origin.

Purpose

Combined with data on the fire's ignition, knowing the area where the fire originated assists in determining the cause of the fire. Such information is useful for targeting fire prevention, investigation, and suppression efforts.

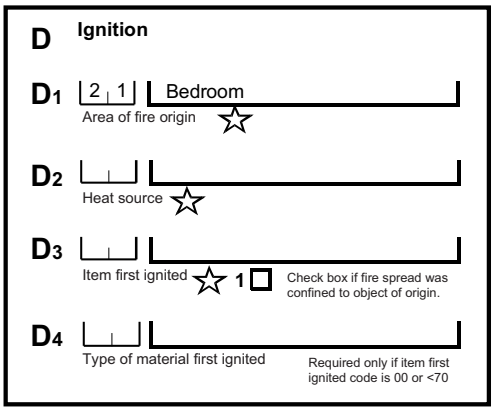
Entry

Enter the two-digit code and description that best describes the area of fire origin.

☞ For chimney fires, the area of fire origin is classified as the first area where ignition occurred. For example, if the chimney is associated with a fireplace in the family room, the code would be "14." The chimney is considered the Equipment Involved in Ignition (Section F).

Example

A fire started in a bedroom (21) of a home:



☞ An alphabetized synonym list for the following Area of Fire Origin codes is presented in Appendix B.

AREA OF FIRE ORIGIN CODES

Means of Egress

01 Hallway corridor, mall.
02 Exterior stairway. Includes fire escapes, exterior ramps.
03 Interior stairway or ramp. Includes interior ramps.
04 Escalator: exterior, interior.
05 Entranceway, lobby.
09 Egress/exit, other.

Assembly or Sales Areas (Groups of People)

11 Arena, assembly area with fixed seats for 100 or more people. Includes auditoriums, chapels, places of worship, classrooms, lecture halls, arenas, theaters.
12 Assembly area without fixed seats for 100 or more people. Includes ballrooms, bowling alleys, gymnasiums, multiuse areas, roller or ice skating rinks.
13 Assembly area without fixed seats for less than 100 people. Includes meeting rooms, classrooms, multiuse areas.
14 Common room, den, family room, living room, lounge, music room, recreation room, sitting room.
15 Sales area, showroom. Excludes display windows (56).
16 Art gallery, exhibit hall, library.
17 Swimming pool.
10 Assembly or sales areas, other.

Function Areas

21 Bedroom for less than five people. Includes jail or prison cells, lockups, patient rooms, sleeping areas.
22 Bedroom for more than five people. Includes barracks, dormitories, patient wards.
23 Bar area, beverage service area, cafeteria, canteen area, dining room, lunchroom, mess hall.
24 Cooking area, kitchen.
25 Bathroom, checkroom, lavatory, locker room, powder room, outhouse, portable toilet, sauna area.
26 Laundry area, wash house (laundry).
27 Office.
28 Personal service area. Includes barber/beauty salon area, exercise/health club, massage area.
20 Function areas, other.

Technical Processing Areas

31 Laboratory.
32 Dark room, photography area, printing area.
33 Treatment: first-aid area, surgery area (minor procedures).
34 Surgery area: major operations, operating room or theater, recovery room.
35 Computer room, control room or center, data processing center, electronic equipment area, telephone booth or area, radar room.
36 Stage area: performance, basketball court, boxing ring, dressing room (backstage), ice rink.
37 Projection room, spotlight area, stage light area.
38 Processing/manufacturing area, workroom, assembly area.
30 Technical processing areas, other.

Storage Areas

41 Storage room, area, tank, bin. Includes all areas where products are held awaiting process, shipment, use, sale.
42 Closet.
43 Storage: supplies or tools. Includes dead storage, maintenance supply room, tool room, basement (unfinished).
44 Records storage room, storage vault.
45 Shipping/receiving area: loading area, dock or bay, mail room, packing area.
46 Chute/container: trash, rubbish, waste. Includes compactor and garbage areas. Excludes incinerators (64).
47 Vehicle storage area: garage, carport.
40 Storage areas, other.

Service Areas

51 Dumbwaiter or elevator shaft.
52 Conduit, pipe, utility, or ventilation shaft.
53 Light shaft.
54 Chute. Includes laundry or mail chutes. Excludes trash chutes (46).
55 Duct. Includes HVAC, cable, exhaust.
56 Display window.
58 Conveyor.
50 Service areas, other.

Service or Equipment Areas

61 Machinery room or area. Includes elevator machinery room, engine room, head house, pump room, refrigeration room.
62 Heating room or area, water heater area.
63 Switchgear area, transformer vault.

64 Incinerator area.
65 Maintenance shop or area. Includes paint shop, repair shop, welding area, workshop.
66 Cell, test.
67 Enclosure, pressurized air.
68 Enclosure with enriched oxygen atmosphere.
60 Service or equipment areas, other.

Structural Areas

71 Substructure area or space, crawl space.
72 Exterior balcony, unenclosed porch. Excludes enclosed porches (93)
73 Ceiling and floor assembly, crawl space between stories.
74 Attic: vacant, crawl space above top story. Includes cupola, concealed roof/ceiling space, steeple.
75 Wall assembly, concealed wall space.
76 Wall surface, exterior.
77 Roof surface, exterior.
78 Awning.
70 Structural areas, other.

Transportation, Vehicle Areas

81 Operator/passenger area of transportation equipment.
82 Cargo/trunk area—all vehicles.
83 Engine area, running gear, wheel area.
84 Fuel tank, fuel line.
85 Separate operator/control area of transportation equipment. Includes bridges of ships, cockpit of planes. Excludes automobile, trucks, buses (81).
86 Exterior, exposed surface.
80 Vehicle areas, other.

Outside Areas

91 Railroad right-of-way: on or near.
92 Highway, parking lot, street: on or near.
93 Courtyard, patio, terrace. Includes screened-in porches. Excludes unenclosed porches (72).
94 Open area, outside. Includes farmland, fields, lawns, parks, vacant lots.
95 Wildland, woods.
96 Construction/renovation area.
97 Multiple areas.
98 Vacant structural area.
90 Outside areas, other.

Other Area of Fire Origin

00 Area of fire origin, other.
UU Undetermined.

D2

Heat Source ☆

☞ *Heat Source* was known as *Form of Heat of Ignition* in NFIRS 4.1.

Definition

The heat source that ignited the Item First Ignited (Block D3) to cause the fire.

Purpose

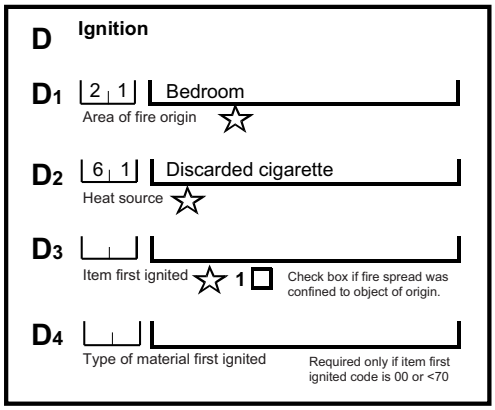
This information, combined with other factors in the ignition sequence, permits analysis of how fire start. Also, some heat sources (e.g., cigarettes, lighters) are objects whose frequency of involvement in fires is of direct interest for fire prevention efforts.

Entry

Enter the two-digit code and description that best describes the heat source that ignited the fire.

Example

A discarded cigarette (61) ignited the bed (21):



HEAT SOURCE CODES

Operating Equipment

11 Spark, ember, or flame from operating equipment.
12 Radiated or conducted heat from operating equipment.
13 Electrical arcing.
10 Heat from operating equipment, other.

Hot or Smoldering Object

41 Heat, spark from friction. Includes overheated tires.
42 Molten, hot material. Includes molten metal, hot forging, hot glass, hot metal fragment, brake shoe, hot box, and slag from arc welding operations.
43 Hot ember or ash. Includes hot coals, coke, and charcoal; and sparks or embers from a chimney that ignite the roof of the same structure. Excludes flying brand, embers, and sparks (83); and embers accidentally escaping from operating equipment (11).
40 Hot or smoldering object, other.

Explosives, Fireworks

51 Munitions. Includes bombs, ammunition, and military rockets.
53 Blasting agent, primer cord, black powder fuse. Includes fertilizing agents, ammonium nitrate, and sodium, potassium, or other chemical agents.
54 Fireworks. Includes sparklers, paper caps, party poppers, and firecrackers.
55 Model and amateur rockets.
56 Incendiary device. Includes Molotov cocktails and arson sets.
50 Explosive, fireworks, other.

Other Open Flame or Smoking Materials

61 Cigarette.
62 Pipe or cigar.
63 Heat from undetermined smoking material.
64 Match.
65 Lighter: cigarette lighter, cigar lighter.
66 Candle.
67 Warning or road flare; fusee.
68 Backfire from internal combustion engine. Excludes flames and sparks from an exhaust system (11).
69 Flame/torch used for lighting. Includes gas light and gas-/liquid-fueled lantern.
60 Heat from open flame or smoking materials, other.

Chemical, Natural Heat Sources

71 Sunlight. Usually magnified through glass, bottles, etc.
72 Spontaneous combustion, chemical reaction.
73 Lightning discharge.
74 Other static discharge. Excludes electrical arcs (13) or sparks (11).
70 Chemical, natural heat sources, other.

Heat Spread From Another Fire. Excludes operating equipment.

81 Heat from direct flame, convection currents spreading from another fire.
82 Radiated heat from another fire. Excludes heat from exhaust systems of fuel-fired, fuel-powered equipment (12).
83 Flying brand, ember, spark. Excludes embers, sparks from a chimney igniting the roof of the same structure (43).
84 Conducted heat from another fire.
80 Heat spread from another fire, other.

Other Heat Sources

97 Multiple heat sources, including multiple ignitions. If one type of heat source was primarily involved, use that classification.
00 Heat sources, other.
UU Undetermined.

D3 Item First Ignited ☆

☞ *Item First Ignited* was known as *Form of Material Ignited* in NFIRS 4.1.

Definition

The use or configuration of the item or material first ignited by the heat source. This block identifies the first item that had sufficient volume or heat intensity to extend to uncontrolled or self-perpetuating fire.

Purpose

This data element permits analysis of how fires start and spread. A study of this entry also helps assess the need for flammability and other materials standards. This information is helpful to manufacturers for product improvement, as well as for fire prevention efforts.

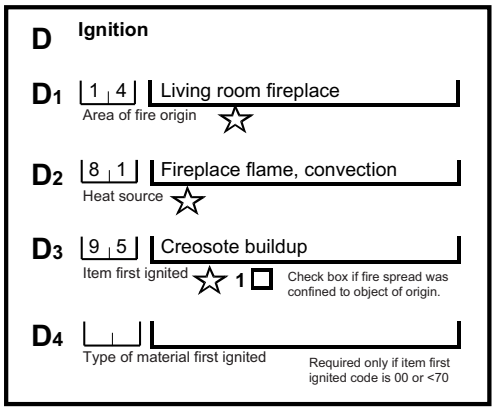
Entry

Enter the two-digit code and description that best describes the item first ignited by the heat source.

☞ If fire spread was confined to the object of origin, check or mark the box (1) below the written entry. This is the *only* opportunity to enter this code—Confined to Object of Origin is not an option in Block J2 of the Structure Fire Module.

Example

Fire in a living room fireplace (14) ignited (81) creosote (95) that had built up in the chimney, causing a fire:



☞ An alphabetized synonym list for the following Item First Ignited codes is presented in Appendix B.

ITEM FIRST IGNITED CODES

Structural Component, Finish

11 Exterior roof covering, surface, finish.
12 Exterior sidewall covering, surface, finish. Includes eaves.
13 Exterior trim, appurtenances. Includes doors, porches, and platforms.
14 Floor covering or rug/carpet/mat, surface.
15 Interior wall covering. Includes cloth wall coverings, wood paneling, and items permanently affixed to a wall or door. Excludes curtains and draperies (36) and decorations (42).
16 Interior ceiling covering or finish. Includes cloth permanently affixed to ceiling and acoustical tile.
17 Structural member or framing.
18 Thermal, acoustical insulation within wall, partition or floor/ceiling space. Includes fibers, batts, boards, loose fills.
10 Structural component or finish, other.

Furniture, Utensils. Includes built-in furniture.

21 Upholstered sofa, chair, vehicle seats.
22 Non-upholstered chair, bench.
23 Cabinetry. Includes filing cabinets, pianos, dressers, chests of drawers, desks, tables, and bookcases. Excludes TV sets, bottle warmers, and appliance housings (25).
24 Ironing board.
25 Appliance housing or casing.
26 Household utensils. Includes kitchen and cleaning utensils.
20 Furniture, utensils, other.

Soft Goods, Wearing Apparel

31 Mattress, pillow.
32 Bedding: blanket, sheet, comforter. Includes heating pads.
33 Linen, other than bedding. Includes towels and tablecloths.
34 Wearing apparel not on a person.
35 Wearing apparel on a person.
36 Curtain, blind, drapery, tapestry.
37 Goods not made up. Includes fabrics and yard goods.
38 Luggage.
30 Soft goods, wearing apparel, other.

Adornment, Recreational Material, Signs

41 Christmas tree.
42 Decoration.
43 Sign. Includes outdoor signs such as billboards.
44 Chips. Includes wood chips.
45 Toy, game.
46 Awning, canopy.
47 Tarpaulin, tent.
40 Adornment, recreational material, signs, other.

Storage Supplies

51 Box, carton, bag, basket, barrel. Includes wastebaskets.
52 Material being used to make a product. Includes raw materials used as input to a manufacturing or construction process. Excludes finished products.
53 Pallet, skid (empty). Excludes palletized stock (58).
54 Cord, rope, twine, yarn.
55 Packing, wrapping material.
56 Baled goods or material. Includes bale storage.
57 Bulk storage.
58 Palletized material, material stored on pallets.
59 Rolled, wound material. Includes rolled paper and fabrics.
50 Storage supplies, other.

Liquids, Piping, Filters

61 Atomized, vaporized liquid. Included are aerosols.
62 Flammable liquid/gas (fuel) in or escaping from combustion engines.
63 Flammable liquid/gas in or escaping from final container or pipe before engine or burner. Includes piping between the engine and the burner.
64 Flammable liquid/gas in or escaping from container or pipe. Excludes engines, burners, and their fuel systems.
65 Flammable liquid/gas, uncontained. Includes accelerants.
66 Pipe, duct, conduit, hose.
67 Pipe, duct, conduit, or hose covering. Includes insulating materials whether for acoustical or thermal purposes, and whether inside or outside the pipe, duct, conduit, or hose.
68 Filter. Includes evaporative cooler pads.
60 Liquids, piping, filters, other.

Organic Materials

71 Agricultural crop. Includes fruits and vegetables.
72 Light vegetation (not crop). Includes grass, leaves, needles, chaff, mulch, and compost.
73 Heavy vegetation (not crop). Includes trees and brush.
74 Animal, living or dead.

75 Human, living or dead.
76 Cooking materials. Includes edible materials for man or animal. Excludes cooking utensils (26).
77 Feathers or fur not on a bird or animal, but not processed into a product.
70 Organic materials, other.

General Materials

81 Electrical wire, cable insulation. Do not classify the insulation on the wiring as the item first ignited unless there were no other materials in the immediate area, such as might be found in a cable tray or electrical vault.
82 Transformer. Includes transformer fluids.
83 Conveyor belt, drive belt, V-belt.
84 Tire.
85 Railroad ties.
86 Fence, pole.
87 Fertilizer.
88 Pyrotechnics, explosives.

General Materials Continued

91 Book.
92 Magazine, newspaper, writing paper. Includes files.
93 Adhesive.
94 Dust, fiber, lint. Includes sawdust and excelsior.
95 Film, residue. Includes paint, resin, and chimney film or residue and other films and residues produced as a by-product of an operation.
96 Rubbish, trash, waste.
97 Oily rags.
99 Multiple items first ignited. Use only where there are multiple fires started at approximately the same time on the same property and more than one item was initially involved.

Other Items First Ignited

00 Item first ignited, other.
UU Undetermined.

D4 Type of Material First Ignited

☞ *Type of Material First Ignited* was known as *Type of Material Ignited* in NFIRS 4.1.

Definition

The composition of the material in the item first ignited by the heat source. The type of material ignited refers to the raw, common, or natural state of the material. The type of material ignited may be a gas, flammable liquid, chemical, plastic, wood, paper, fabric, or any number of other materials.

☞ This field is required only if the Item First Ignited code is “00” or a code less than “70.”

Purpose

This information assists in determining why fires start and spread and their severity. A study of this entry also helps assess the need for flammability and other material characteristic standards. This information is important to manufacturers for product improvement, as well as for fire prevention efforts.

Entry

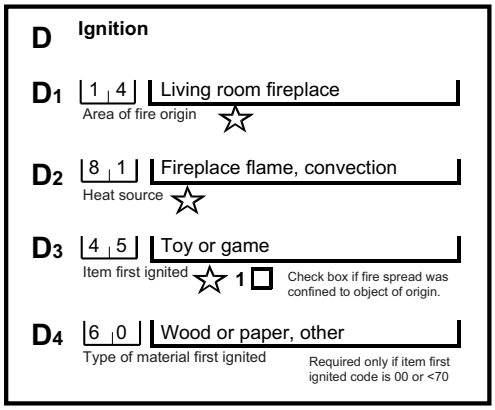
Enter the code and description that best describes the type of material first ignited by the heat source.

☞ Be certain to enter the *first* material ignited by the heat source. For example, if an arsonist poured gasoline on a wooden floor, it was the gasoline and not the wood that was the material first ignited.

☞ If an insulated wire short circuits, it may be the wire's insulation that was first ignited; *or* it may be the wood studs in the wall, thermal insulation nearby, or another material.

Example

A board game (41) made of cardboard (60) ignited (81) after being left too close to the living room fireplace (14), causing a fire:



☞ An alphabetized synonym list for the following Type of Material First Ignited codes is presented in Appendix B.

TYPE OF MATERIAL FIRST IGNITED CODES

Flammable Gas

11 Natural gas. Includes methane and marsh gas.
12 LP gas. Includes butane, butane and air mixtures, and propane gas.
13 Anesthetic gas.
14 Acetylene gas
15 Hydrogen.
10 Flammable gas, other. Includes benzene, benzol, carbon disulfide, carbon monoxide, ethylene, ethylene oxide, and vinyl chloride.

Flammable or Combustible Liquid

21 Ether, pentane-type flammable liquid. Includes all Class 1A flammable liquids.
22 JP–4 jet fuel and methyl-ethyl-ketone-type flammable liquid. Includes all Class 1B flammable liquids. Excludes gasoline (23).
23 Gasoline.
24 Turpentine, butyl-alcohol-type flammable liquid. Includes all Class IC flammable liquids.
25 Kerosene; Nos.1 and 2 fuel oil; diesel-type combustible liquid. Includes all Class II combustible liquids.

26 Cottonseed oil; Nos. 4, 5, and 6 fuel oil; creosote-oil-type combustible liquid. Includes all Class IIIA combustible liquids.
27 Cooking oil, transformer oil, lubricating oil. Includes all Class IIIB combustible liquids.
20 Flammable or combustible liquid, other.

Volatile Solid or Chemical

31 Fat, grease, butter, margarine, lard, tallow.
32 Petroleum jelly and nonfood grease.
33 Polish, paraffin, wax.
34 Adhesive, resin, tar, glue, asphalt, pitch, soot.
35 Paint, varnish—applied.
36 Combustible metal. Includes magnesium, titanium, and zirconium.
37 Solid chemical. Includes explosives. Excludes liquid chemicals (division 2) and gaseous chemicals (division 1).
38 Radioactive material.
30 Volatile solid or chemical, other.

Plastics

41 Plastic, regardless of type. Excludes synthetic fibers, coated fabrics, plastic upholstery.

Natural Product

51 Rubber, tire rubber. Excludes synthetic rubbers (classify as plastics (41)).
52 Cork.
53 Leather.
54 Hay, straw.
55 Grain, natural fiber. Includes cotton, feathers, felt, barley, corn, coconut. Excludes fabrics and furniture batting (71).
56 Coal, coke, briquettes, peat. Includes briquettes of carbon black and charcoal.
57 Food, starch. Includes flour. Excludes fat or grease (31).
58 Tobacco.
50 Natural product, other. Includes manure.

Wood or Paper – Processed

61 Wood chips, sawdust, wood shavings.
62 Round timber. Includes round posts, poles, and piles.
63 Sawn wood. Includes all finished lumber and wood shingles.
64 Plywood.
65 Fiberboard, particleboard, and hardboard. Includes low-density pressed wood fiberboard products.
66 Wood pulp, wood fiber.
67 Paper. Includes cellulose, waxed paper, sensitized paper, and ground-up processed paper and newsprint used as thermal insulation.
68 Cardboard.
60 Wood or paper, processed, other.

Fabric, Textiles, Fur

71 Fabric, fiber, cotton, blends, rayon, wool, finished goods. Includes yarn and canvas. Excludes fur and silk (74).
74 Fur, silk, other fabric, finished goods. Excludes fabrics listed in Code 71.
75 Wig.
76 Human hair.
77 Plastic-coated fabric. Includes plastic upholstery fabric and other vinyl fabrics.
70 Fabric, textiles, fur, other.

Material Compounded With Oil

81 Linoleum.
82 Oilcloth.
86 Asphalt-treated material. Excludes by-products of combustion, soot, carbon, creosote (34).
80 Material compounded with oil, other.

Other Material

99 Multiple types of material.
00 Type of material first ignited, other.
UU Undetermined.

SECTION E

This section deals with the causes and factors that contribute to a fire's ignition, which are essential pieces of information in guiding fire prevention efforts.

E1 Cause of Ignition ☆

Definition

The general causal factor that resulted in a heat source igniting a combustible material. The cause could be the result of a deliberate act, mechanical failure, or act of nature.

Purpose

This information is used to determine if further information about the factors related to the fire's ignition will be collected later in the module. When combined with other data elements that make up the fire's "ignition chain," if provides critical information about the nature of the events and the circumstances that caused the fire. This is an important element in understanding the causes of fires.

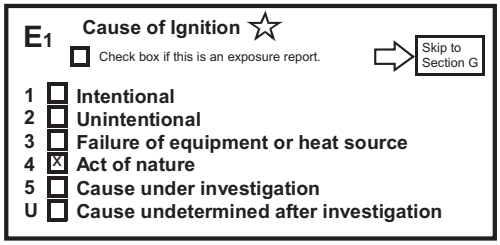
Entry

Check or mark the box best describing why the heat source and the combustible material were able to combine to initiate the fire. If this is an exposure report, check or mark the top box in this block and skip to Section G.

☞ This is the best determination of the firefighter at the scene and may be changed later as a result of further investigation or other information.

Example

A house caught fire as a result of a lightning strike on the combustible roof (4):



CAUSE OF IGNITION CODES

1 Intentional. Includes deliberate misuse of heat source or a fire of an incendiary nature.
2 Unintentional. Includes fires caused by careless, reckless, or accidental acts.
3 Failure of equipment or heat source. Includes mechanical problems.
4 Act of nature. Includes causes related to weather, earthquakes, floods, and animals.
5 Cause under investigation.
0 Cause, other.
U Cause undetermined after investigation.

E2 Factors Contributing to Ignition

☞ *Factors Contributing to Ignition* was known as *Ignition Factors* in NFIRS 4.1.

Definition

The contributing factors that allowed the heat source and combustible material to combine to ignite the fire.

☞ This field is completed when the Cause of Ignition (Block E1) is “2,” “3,” or “4.”

Purpose

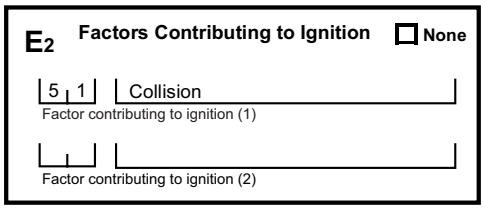
Combined with Cause of Ignition and Human Factors Contribution to Ignition, this information explains how and why the fire started. It can also indicate whether a fire is potentially preventable through public education, code enforcement, or other strategies.

Entry

Enter the two-digit codes and descriptions for up to two contributing factors. The primary factor should be entered first. If there were no factors contributing to ignition, check or mark the None box.

Example

A vehicle caught fire immediately after colliding with a garbage truck; enter “51” Collision:



FACTORS CONTRIBUTING TO IGNITION CODES

Misuse of Material or Product

11 Abandoned or discarded materials or products. Includes discarded cigarettes, cigars, tobacco embers, hot ashes, or other burning matter. Excludes outside fires left unattended.
12 Heat source too close to combustibles.
13 Cutting, welding too close to combustibles.
14 Flammable liquid or gas spilled. Excludes improper fueling technique (15) and release due to improper container (18).

15 Improper fueling technique. Includes overfueling, failure to ground. Excludes fuel spills (14) and using the improper fuel (27).
16 Flammable liquid used to kindle fire.
17 Washing part or material, painting with flammable liquid.
18 Improper container or storage procedure. Includes gasoline in unimproved containers, gas containers stored at excessive temperature, and storage conditions that lead to spontaneous ignition.
19 Playing with heat source. Includes playing with matches, candles, and lighters and bringing combustibles into a heat source.
10 Misuse of material or product, other.

Mechanical Failure, Malfunction

21 Automatic control failure.
22 Manual control failure.
23 Leak or break. Includes leaks or breaks of containers or pipes. Excludes operational deficiencies and spill mishaps.
25 Worn out.
26 Backfire. Excludes fires originating as a result of hot catalytic converters (41).
27 Improper fuel used. Includes the use of gasoline in a kerosene heater and the like.
20 Mechanical failure, malfunction, other.

Electrical Failure, Malfunction

31 Water-caused short-circuit arc.
32 Short-circuit arc from mechanical damage.
33 Short-circuit arc from defective, worn insulation.
34 Unspecified short-circuit arc.
35 Arc from faulty contact, broken conductor. Includes broken power lines and loose connections.
36 Arc, spark from operating equipment, switch, or electric fence.
37 Fluorescent light ballast.
30 Electrical failure, malfunction, other.

Design, Manufacturing, Installation Deficiency

41 Design deficiency.
42 Construction deficiency.
43 Installation deficiency.
44 Manufacturing deficiency.
40 Design, manufacturing, installation deficiency, other.

Operational Deficiency

51 Collision, knock down, run over, turn over. Includes automobiles and other vehicles.
52 Accidentally turned on, not turned off.
53 Equipment unattended.
54 Equipment overloaded.
55 Failure to clean. Includes lint and grease buildups in chimneys, stove pipes.
56 Improper startup/shutdown procedure.
57 Equipment not used for purpose intended. Excludes overloaded equipment (54).
58 Equipment not operated properly.
50 Operational deficiency, other.

Natural Condition

61 High wind.
62 Storm.
63 High water, including floods.
64 Earthquake.
65 Volcanic action.

66 Animal.
60 Natural condition, other.

Fire Spread or Control

71 Exposure fire.
72 Rekindle.
73 Outside/open fire for debris or waste disposal.
74 Outside/open fire for warming or cooking.
75 Agriculture or land management burns. Includes prescribed burns.
70 Fire spread or control, other.

Other Factors Contributing to Ignition

00 Factors contributing to ignition, other.
NN None.
UU Undetermined.

E3 Human Factors Contributing to Ignition

Definition

The *human* condition or situation that allowed the heat source and combustible material to combine to ignite the fire.

Purpose

Combined with Cause of Ignition and Factors Contributing to Ignition, this element explains how and why the fire started. It can also indicate whether a fire is potentially preventable through public education, code enforcement, or other strategies.

Entry

Check or mark all applicable boxes. If age was a factor, enter the estimated age of the person involved in the space provided. If known, the gender of the person involved should also be checked or marked. If there were no known human factors contributing to ignition, check or mark the None box.

Example

An elderly man (1) who was physically disabled (5) and home alone (3) fell asleep (1) in his chair while smoking. The dropped cigarette contacted combustible materials next to his chair. The respondent determined that even had the occupant awakened, he would have been unable to extinguish the fire due to his age (7):

E3 Human Factors Contributing to Ignition

Check all applicable boxes ☐ None

1 ☒ Asleep
2 ☐ Possibly impaired by alcohol or drugs
3 ☒ Unattended person
4 ☐ Possibly mentally disabled
5 ☒ Physically disabled
6 ☐ Multiple persons involved

7 ☒ Age was a factor

Estimated age of person involved 8 8

1 ☒ Male 2 ☐ Female

HUMAN FACTORS CONTRIBUTING TO IGNITION CODES

1 Asleep. Includes fires that result from a person falling asleep while smoking.
2 Possibly impaired by alcohol or drugs. Includes people who fall asleep or act recklessly or carelessly as a result of drugs or alcohol. Excludes people who simply fall asleep (1).
3 Unattended or unsupervised person. Includes “latch key” situations whether the person involved is young or old and situations where the person involved lacked supervision or care.
4 Possibly mentally disabled. Excludes impairments of a temporary nature such as those caused by drugs or alcohol (2).
5 Physically disabled.
6 Multiple persons involved. Includes gang activity.
7 Age was a factor.
N None.

AGE FACTOR GENDER CODES

1 Male.
2 Female.

SECTION F

This section identifies the equipment where the heat of ignition originated, the power source that actually operated the equipment, and whether the equipment is normally stationary or is designed to move from location to location.

☞ The three blocks in this section—*Equipment Involved in Ignition, Equipment Power Source,* and *Equipment Portability*—were collectively known as *Equipment Involved in Ignition* in NFIRS 4.1.

F1 Equipment Involved in Ignition

Equipment Type

Definition

The piece of equipment that provided the principal heat source to cause ignition if the equipment malfunctioned or was used improperly.

Purpose

Analysis of the equipment involved in ignition is useful for improving product safety and preventive maintenance. It is just as important to know the kind of equipment that was used improperly as it is to know the kind of equipment that malfunctioned. Misuse can be the direct result of the way the equipment is designed and constructed. When involved in ignition, equipment information provides an important part of the causal data. Equipment involved in ignition can be compared to other causal data to determine if the equipment was (or was not) operating properly.

Entry

Enter the three-digit code and description that best describes the equipment involved in ignition. If no equipment was involved, check or mark the None box and skip to Section G.

☞ If a vehicle was involved in ignition, use Section H.

Example

A fire started by a short circuit in a dryer (811):

F1 Equipment Involved in Ignition

☐ **None** ⇨ If equipment was not involved, skip to Section G

8 1 1 Clothes dryer
Equipment Involved

Brand

Model

Serial #

Year

☞ An alphabetized synonym list for the following Equipment Involved in Ignition codes is presented in Appendix B.

EQUIPMENT INVOLVED IN IGNITION CODES

Heating, Ventilation, and Air Conditioning

111 Air conditioner.
112 Heat pump.
113 Fan.
114 Humidifier, non-heat producing. Excludes heaters with built-in humidifiers (131, 132).
115 Ionizer.
116 Dehumidifier, portable.

117 Evaporative cooler, cooling tower.
121 Fireplace, masonry.
122 Fireplace, factory-built.
123 Fireplace, insert/stove.
124 Stove, heating.
125 Chimney connector, vent connector.
126 Chimney: brick, stone, masonry.
127 Chimney: metal. Includes stovepipes and flues.
120 Fireplace, chimney, other.
131 Furnace, local heating unit, built-in. Includes built-in humidifiers. Excludes process furnaces, kilns (353).
132 Furnace, central heating unit. Includes built-in humidifiers. Excludes process furnaces, kilns. (353)
133 Boiler (power, process, heating).
141 Heater. Includes floor furnaces, wall heaters, and baseboard heaters. Excludes catalytic heaters (142), oil-filled heaters (143), hot water heaters (152).
142 Heater, catalytic.
143 Heater, oil-filled. Excludes kerosene heaters (141).
144 Heat lamp.
145 Heat tape.
151 Water heater. Includes sink-mounted instant hot water heaters and waterbed heaters.
152 Steam line, heat pipe, hot air duct. Includes radiators and hot water baseboard heaters.
100 Heating, ventilation, and air conditioning, other.

Electrical Distribution, Lighting, and Power Transfer

211 Electrical power (utility) line. Excludes wires from the utility pole to the structure.
212 Electrical service supply wires; wires from utility pole to meter box.
213 Electric meter, meter box.
214 Electrical wiring from meter box to circuit breaker board, fuse box, or panel board.
215 Panel board (fuse); switchboard, circuit breaker board with or without ground-fault interrupter
216 Electrical branch circuit. Includes armored (metallic) cable, nonmetallic sheathing, or wire in conduit.
217 Outlet, receptacle. Includes wall-type receptacles, electric dryer and stove receptacles.
218 Wall-type switch. Includes light switches.
219 Ground-fault interrupter (GFI), portable, plug-in.
210 Electrical wiring, other.
221 Transformer, distribution-type.
222 Overcurrent, disconnect equipment. Excludes panel boards.
223 Transformer, low-voltage (not more than 50 volts).
224 Generator.
225 Inverter.
226 Uninterrupted power supply (UPS).
227 Surge protector.
228 Battery charger, rectifier.
229 Battery. Includes all battery types.
231 Lamp: tabletop, floor, desk. Excludes halogen fixtures (235) and light bulbs (238).
232 Lantern, flashlight.
233 Incandescent lighting fixture.
234 Fluorescent lighting fixture, ballast.
235 Halogen lighting fixture or lamp.
236 Sodium, mercury vapor lighting fixture or lamp.

237 Portable or movable work light, trouble light.
238 Light bulb.
230 Lamp, lighting, other.
241 Night light.
242 Decorative lights, line voltage. Includes holiday lighting, Christmas lights.
243 Decorative or landscape lighting, low voltage.
244 Sign. Includes neon signs.
251 Fence, electric.
252 Traffic control device
253 Lightning rod, arrester/grounding device.
261 Power cord, plug; detachable from appliance.
262 Power cord, plug; permanently attached to appliance.
263 Extension cord.
260 Cord, plug, other.
200 Electrical distribution, lighting, and power transfer, other.

Shop Tools and Industrial Equipment

311 Power saw.
312 Power lathe.
313 Power shaper, router, jointer, planer.
314 Power cutting tool.
315 Power drill, screwdriver.
316 Power sander, grinder, buffer, polisher.
317 Power hammer, jackhammer.
318 Power nail gun, stud driver, stapler.
310 Power tools, other.
321 Paint dipper.
322 Paint flow coating machine.
323 Paint mixing machine.
324 Paint sprayer.
325 Coating machine. Includes asphalt-saturating and rubber-spreading machines.
320 Painting tools, other.
331 Welding torch. Excludes cutting torches (332).
332 Cutting torch. Excludes welding torches (331).
333 Burners. Includes Bunsen burners, plumber furnaces, and blowtorches. Excludes weed burners (523).
334 Soldering equipment.
341 Air compressor.
342 Gas compressor.
343 Atomizing equipment. Excludes paint spraying equipment (324).
344 Pump. Excludes pumps integrated with other types of equipment.
345 Wet/dry vacuum (shop vacuum).
346 Hoist, lift, crane.
347 Powered jacking equipment. Includes hydraulic rescue tools.
348 Drilling machinery or equipment. Includes water or gas drilling equipment.
340 Hydraulic equipment, other.
351 Heat-treating equipment.
352 Incinerator.
353 Industrial furnace, oven, kiln. Excludes ovens for cooking (646).
354 Tarpot, tar kettle.
355 Casting, molding, forging equipment.
356 Distilling equipment.
357 Digester, reactor.

358 Extractor, waste recovery machine. Includes solvent extractors such as used in dry-cleaning operations and garnetting equipment.
361 Conveyor. Excludes agricultural conveyors (513).
362 Power transfer equipment: ropes, cables, blocks, belts.
363 Power takeoff.
364 Powered valves.
365 Bearing or brake.
371 Picking, carding, weaving machine. Includes cotton gins.
372 Testing equipment.
373 Gas regulator. Includes propane, butane, LP, or natural gas regulators and flexible hose connectors to gas appliances.
374 Motor, separate. Includes bench motors. Excludes internal combustion motors (375).
375 Internal combustion engine (nonvehicular).
376 Printing press.
377 Car washing equipment.
300 Shop tools and industrial equipment, other.

Commercial and Medical Equipment

411 Dental, medical, or other powered bed or chair. Includes powered wheelchairs.
412 Dental equipment, other.
413 Dialysis equipment.
414 Medical imaging equipment. Includes MRI, CAT scan, and ultrasound.
415 Medical monitoring equipment.
416 Oxygen administration equipment.
417 Radiological equipment, x-ray, radiation therapy.
418 Sterilizer, medical.
419 Therapeutic equipment.
410 Medical equipment, other.
421 Transmitter.
422 Telephone switching gear, including PBX.
423 TV monitor array. Includes control panels with multiple TV monitors and security monitoring stations. Excludes single TV monitor configurations (753).
424 Studio-type TV camera. Includes professional studio television cameras. Excludes home camcorders and video equipment (756).
425 Studio-type sound recording/modulating equipment.
426 Radar equipment.
431 Amusement ride equipment.
432 Ski lift.
433 Elevator or lift.
434 Escalator.
441 Microfilm, microfiche viewing equipment.
442 Photo processing equipment. Includes microfilm processing equipment.
443 Vending machine.
444 Nonvideo arcade game. Includes pinball machines and the like. Excludes electronic video games (755).
445 Water fountain, water cooler.
446 Telescope. Includes radio telescopes.
451 Electron microscope.
450 Laboratory equipment, other.
400 Commercial and medical equipment, other.

Garden Tools and Agricultural Equipment

511 Combine, threshing machine.
512 Hay processing equipment.

513 Farm elevator or conveyor.
514 Silo loader, unloader, screw/sweep auger.
515 Feed grinder, mixer, blender.
516 Milking machine.
517 Pasteurizer. Includes milk pasteurizers.
518 Cream separator.
521 Sprayer, farm or garden.
522 Chain saw.
523 Weed burner.
524 Lawn mower.
525 Lawn, landscape trimmer, edger.
531 Lawn vacuum.
532 Leaf blower.
533 Mulcher, grinder, chipper. Includes leaf mulchers.
534 Snow blower, thrower.
535 Log splitter.
536 Post hole auger.
537 Post driver, pile driver.
538 Tiller, cultivator.
500 Garden tools and agricultural equipment, other.

Kitchen and Cooking Equipment

611 Blender, juicer, food processor, mixer.
612 Coffee grinder.
621 Can opener.
622 Knife.
623 Knife sharpener.
631 Coffee maker or teapot.
632 Food warmer, hot plate.
633 Kettle.
634 Popcorn popper.
635 Pressure cooker or canner.
636 Slow cooker.
637 Toaster, toaster oven, countertop broiler.
638 Waffle iron, griddle.
639 Wok, frying pan, skillet.
641 Bread-making machine.
642 Deep fryer.
643 Grill, hibachi, barbecue.
644 Microwave oven.
645 Oven, rotisserie.
646 Range with or without an oven or cooking surface. Includes counter-mounted stoves.
647 Steam table, warming drawer/table.
651 Dishwasher.
652 Freezer when separate from refrigerator.
653 Garbage disposer.
654 Grease hood/duct exhaust fan.
655 Ice maker (separate from refrigerator).
656 Refrigerator, refrigerator/freezer.
600 Kitchen and cooking equipment, other.

Electronic and Other Electrical Equipment

711 Computer. Includes devices such as hard drives and modems installed inside the computer casing. Excludes external storage devices (712).
712 Computer storage device, external. Includes CD-ROM devices, tape drives, and disk drives. Excludes such devices when they are installed within a computer (711).
713 Computer modem, external. Includes digital, ISDN modems, cable modems, and modem racks. Excludes modems installed within a computer (711).
714 Computer monitor. Includes LCD or flat-screen monitors.
715 Computer printer. Includes multifunctional devices such as copier, fax, and scanner.
716 Computer projection device, LCD panel, projector.
710 Computer device, other.
721 Adding machine, calculator.
722 Telephone or answering machine.
723 Cash register.
724 Copier. Includes large standalone copiers. Excludes small copiers and multifunctional devices (715).
725 Fax machine.
726 Paper shredder.
727 Postage, shipping meter equipment.
728 Typewriter.
720 Office equipment, other.
731 Guitar.
732 Piano, organ. Includes player pianos. Excludes synthesizers and musical keyboards (733).
733 Musical synthesizer or keyboard. Excludes pianos, organs (732).
730 Musical instrument, other.
741 CD player (audio). Excludes computer CD, DVD players (712).
742 Laser disk player. Includes DVD players and recorders.
743 Radio. Excludes two-way radios (744).
744 Radio, two-way.
745 Record player, phonograph, turntable.
747 Speakers, audio; separate components.
748 Stereo equipment. Includes receivers, amplifiers, equalizers. Excludes speakers (747).
749 Tape recorder or player.
740 Sound recording or receiving equipment, other.
751 Cable converter box.
752 Projector: film, slide, overhead.
753 Television.
754 VCR or VCR–TV combination.
755 Video game, electronic.
756 Camcorder, video camera.
757 Photographic camera and equipment. Includes digital cameras.
750 Video equipment, other.
700 Electronic equipment, other.

Personal and Household Equipment

811 Clothes dryer.
812 Trash compactor.
813 Washer/dryer combination (within one frame).
814 Washing machine, clothes.
821 Hot tub, whirlpool, spa.
822 Swimming pool equipment.
830 Floor care equipment, other.
831 Broom, electric.

832 Carpet cleaning equipment. Includes rug shampooers.
833 Floor buffer, waxer, cleaner.
834 Vacuum cleaner.
841 Comb, hair brush.
842 Curling iron.
843 Electrolysis equipment.
844 Hair curler warmer.
845 Hair dryer.
846 Makeup mirror, lighted.
847 Razor, shaver (electric).
848 Suntan equipment, sunlamp.
849 Toothbrush (electric).
850 Portable appliance designed to produce heat, other.
851 Baby bottle warmer.
852 Blanket, electric.
853 Heating pad.
854 Clothes steamer.
855 Clothes iron.
861 Automatic door opener. Excludes garage door openers (863).
862 Burglar alarm.
863 Garage door opener.
864 Gas detector.
865 Intercom.
866 Smoke or heat detector, fire alarm. Includes control equipment.
868 Thermostat.
871 Ashtray.
872 Charcoal lighter, utility lighter.
873 Cigarette lighter, pipe lighter.
874 Fire-extinguishing equipment. Includes electronic controls.
875 Insect trap. Includes bug zappers.
876 Timer.
881 Model vehicles. Includes model airplanes, boats, rockets, and powered vehicles used for hobby and recreational purposes.
882 Toy, powered.
883 Woodburning kit.
891 Clock.
892 Gun.
893 Jewelry-cleaning machine.
894 Scissors.
895 Sewing machine.
896 Shoe polisher.
897 Sterilizer, non-medical.
800 Personal and household equipment, other.

Other Equipment Involved in Ignition

000 Equipment involved in ignition, other.
NNN None.
UUU Undetermined

Equipment Brand, Model, Serial Number, and Year

Definition

The information in this block precisely identifies the equipment that was involved in ignition. As possible, the following information should be recorded:

Brand: The name by which the equipment is most commonly known.

Model: The model name or number assigned to the equipment by the manufacturer. If there is no specific model name or number, use the common physical description of the equipment.

Serial Number: The manufacturer's serial number that is generally stamped on an identification plate on the equipment.

Year: The year that the equipment was built.

Purpose

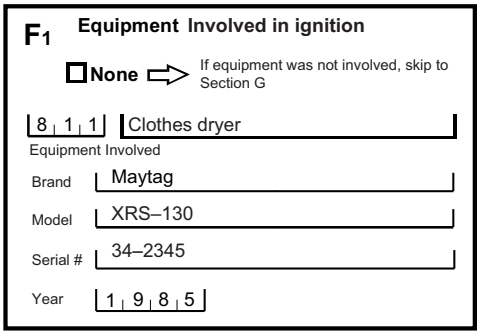
Provides detailed information identifying specific types of equipment that failed or contributed to the fire. This information can be used to determine whether particular brands or models cause problems more frequently than others; and to identify equipment for product recalls or in the development of new product safety codes.

Entry

Enter the brand, model, serial number, and year of the equipment involved in ignition. If no equipment was involved in ignition, check or mark the None box and go to Section G.

Example

The clothes dryer was a 1985 Maytag Model XRS–130, serial number 34–2345:


F1 Equipment Involved in ignition

☐ None ⇨ If equipment was not involved, skip to Section G

8 1 1 Clothes dryer
Equipment Involved

Brand Maytag

Model XRS–130

Serial # 34–2345

Year 1 9 8 5

F2 Equipment Power Source

Definition

The type of power used by the equipment involved in ignition of the fire. This does not include what actually produces the power.

Purpose

Combined with other factors in the ignition sequence, this element helps identify fire causes for analysis. Power source data are useful for determining compliance with standards, analyzing the effectiveness of codes and regulations, and targeting prevention programs.

Entry

Enter the two-digit code and description that best describes the power source of the equipment involved in ignition.

Example

Enter electrical line voltage (11) to describe the power source of an electric range:

F2 **Equipment Power Source**

1 1	240V Electric

Equipment Power Source

EQUIPMENT POWER SOURCE CODES

Electrical

11 Electrical line voltage (50 volts or greater). Includes typical house current.
12 Batteries and low voltage (less than 50 volts).
10 Electrical, other.

Gas Fuels

21 Natural gas or other lighter-than-air gas. Includes hydrogen.
22 LP gas or other heavier-than-air gas. Includes propane and butane gas.
20 Gas fuels, other.

Liquid Fuels

31 Gasoline.
32 Alcohol.
33 Kerosene, diesel fuel, No. 1 and 2 fuel oil. Includes industrial furnace oils and bunker oils.
34 No. 4, 5, and 6 fuel oils.
30 Liquid fuels, other.

Solid Fuels

41 Wood, paper.
42 Coal, charcoal.
43 Chemicals.
40 Solid fuels, other.

Other Power Sources

51 Compressed air.
52 Steam.
53 Water.
54 Wind.
55 Solar.
56 Geothermal.
57 Nuclear.
58 Fluid/hydraulic power source.

00 Power source, other.
UU Undetermined.

F3 Equipment Portability

Definition
Describes the equipment involved in ignition as either portable or stationary.

Purpose
This information is useful for better defining the type of equipment involved in ignition, improving product safety, and highlighting possible preventive maintenance.

Entry
Check or mark the box best indicating the portability of the equipment involved in ignition of the fire.

☞ Portable equipment normally can be moved by one or two persons, is designed to be used in multiple locations, and requires no tools to install.

Example
A fire involves a tripod-mounted halogen quartz light used at a construction site:

F3 Equipment Portability

1 ☒ **Portable**
2 ☐ **Stationary**

Portable equipment normally can be moved by one or two persons, is designed to be used in multiple locations, and requires no tools to install.

EQUIPMENT PORTABILITY CODES

1 Portable. Includes equipment that can be carried or moved by one or two persons and designed to be used in a variety of locations. Tools are not needed to install or operate the equipment.
2 Stationary. Includes equipment that is mounted at a fixed site or location or designed to be operated in one location.

SECTION G

The data elements in this section help provide a uniform way to identify factors contributing to the growth and spread of the fire. This is useful to report incident information that has not been captured by other data elements and that may have a bearing on the incident.

G

Fire Suppression Factors

Definition

Factors that contributed to the growth, spread, or suppression of the fire. This is used to report incident information that directly impacted the ignition, spread of fire or smoke, incident complexity, or presence of hazardous conditions.

Purpose

Fire suppression factors provide essential guides for planning strategic and tactical procedures for future incidents, as well as for identifying fire training and equipment needs.

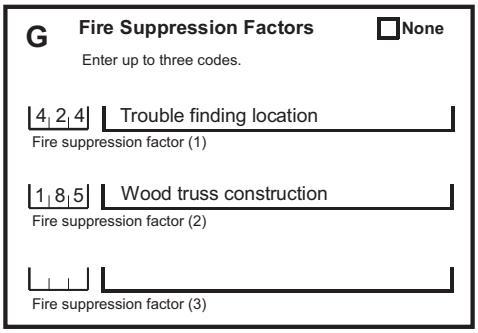
Entry

Enter the three-digit code and description for up to three fire suppression factors or conditions that constituted a significant fire suppression problem or affected how the fire was managed. If no conditions or factors affected fire suppression efforts, check or mark the None box.

Example

The first-due engine company was delayed due to “trouble finding location” (424) after incorrect information was given by the dispatcher.

Due to the instability of the “wood truss construction” (185) roof, firefighters halted their interior attack and went into a defensive fire suppression mode:



FIRE SUPPRESSION FACTORS CODES

Building Construction or Design

112 Roof collapse.
113 Roof assembly combustible.
121 Ceiling collapse.
125 Holes or openings in walls or ceilings.
131 Wall collapse.
132 Difficult to ventilate.
134 Combustible interior finish.
137 Balloon construction.
138 Internal arrangement of partitions.
139 Internal arrangement of stock or contents.
141 Floor collapse.
151 Lack of fire barrier walls or doors.
153 Transoms.
161 Attic undivided.

166 Insulation combustible.
173 Stairwell not enclosed.
174 Elevator shaft.
175 Dumbwaiter.
176 Duct, vertical.
177 Chute: rubbish, garbage, laundry.
181 Supports unprotected.
182 Composite plywood I-beam construction.
183 Composite roof/floor sheathing construction.
185 Wood truss construction.
186 Metal truss construction.
187 Fixed burglar protection assemblies (bars, grills on windows or doors).
188 Quick release failure of bars on windows or doors.
192 Previously damaged by fire.
100 Building construction or design, other.

Act or Omission

213 Doors left open or outside door unsecured.
214 Fire doors blocked or did not close properly.
218 Violation of applicable or locally adopted fire, building, or life safety code.
222 Illegal and clandestine drug operation.
232 Intoxication, drugs or alcohol.
253 Riot or civil disturbance. Includes hostile acts.
254 Person(s) interfered with operations.
283 Accelerant used.
200 Act or omission, other.

On-Site Materials

311 Aisles blocked or improper width.
312 Significant and unusual fuel load from structure components.
313 Significant and unusual fuel load from contents of structure.
314 Significant and unusual fuel load outside from natural environment conditions.
315 Significant and unusual fuel load from man-made condition.
316 Storage, improper.
321 Radiological hazard onsite.
322 Biological hazard onsite.
323 Cryogenic hazard onsite.
324 Hazardous chemical, corrosive material, or oxidizer.
325 Flammable/combustible liquid hazard.
327 Explosives hazard present.
331 Decorations. Includes crepe paper, garland.
341 Natural or other lighter-than-air gas present.
342 Liquefied petroleum (LPG) or other heavier-than-air gas present.
361 Combustible storage >12 feet to top of storage. Excludes rack storage (362).
362 High rack storage.
300 On-site materials, other.

Delays

411 Delayed detection of fire.
412 Delayed reporting of fire. Includes occupants investigating the source of the alarm or smoke before calling the fire department.
413 Alarm system malfunction.
414 Alarm system shut off for valid reason. Includes systems being maintained or repaired.
415 Alarm system inappropriately shut off.

421 Unable to contact fire department. Includes use of wrong phone number and cellular mobile phone problems.
424 Information incomplete or incorrect.
425 Communications problem; system failure of local, public, or other telephone network.
431 Blocked or obstructed roadway. Includes blockages due to construction or illegal parking.
434 Poor or no access for fire department apparatus.
435 Traffic delay.
436 Trouble finding location.
437 Size, height, or other building characteristic delayed access to fire.
438 Power lines down/arcing.
443 Poor access for firefighters.
444 Secured area.
445 Guard dogs.
446 Aggressive animals. Excludes guard dogs (445).
447 Suppression delayed due to evaluation of hazardous or unknown materials at incident scene.
448 Locked or jammed doors.
451 Apparatus failure before arrival at incident.
452 Hydrants inoperative.
461 Airspace restriction.
462 Military activity.
481 Closest apparatus unavailable.
400 Delays, other.

Protective Equipment

510 Automatic fire suppression system problem. Includes system failures, shutoffs, inadequate protection to cover hazard, and the like.
520 Automatic sprinkler or standpipe/fire department connection problem. Includes damage, blockage, failure, improper installation.
531 Water supply inadequate: private.
532 Water supply inadequate: public.
543 Electrical power outage.
561 Failure of rated fire protection assembly. Includes fire doors, fire walls, floor/ceiling assemblies, and the like.
562 Protective equipment negated illegally or irresponsibly. Includes fire doors, dampers, sprinklers, and the like.
500 Protective equipment, other.

Egress/Exit Problems

611 Occupancy load above legal limit.
612 Evacuation activity impeded fire department access.
613 Window type impeded egress. Includes windows too small.
614 Windowless wall.
621 Young occupants.
622 Elderly occupants
623 Physically disabled occupants.
624 Mentally disabled occupants.
625 Physically restrained/confined occupants.
626 Medically disabled occupants.
641 Special event.
642 Public gathering.
600 Egress/exit problems, other.

Natural Conditions

711 Drought or low fuel moisture.
712 Humidity, low.
713 Humidity, high.
714 Temperature, low.
715 Temperature, high.
721 Fog.
722 Flooding.
723 Ice.
724 Rain.
725 Snow.
732 Wind. Includes hurricanes and tornados.
741 Earthquake.
760 Unusual vegetation fuel loading.
771 Threatened or endangered species.
772 Timber sale activity.
773 Fire restriction.
774 Historic disturbance (past fire history can dictate fire behavior).
775 Urban-wildland interface area.
700 Natural conditions, other.

Other Fire Suppression Factors

000 Fire suppression factors, other.
NNN None.

SECTION H

Mobile property is property that is designed to be movable in relation to fixed property whether or not it still is. Mobile property is always located on a specific property and, when mobile property is involved, the Property Use (Basic Module, Section J) should always be completed.

H1 Mobile Property Involved

Definition

This element is used to determine how mobile property relates to a fire (i.e., if involved in the ignition and whether or not it burned).

Purpose

The role that mobile property played in the incident can reveal problems and lead to appropriate corrective actions.

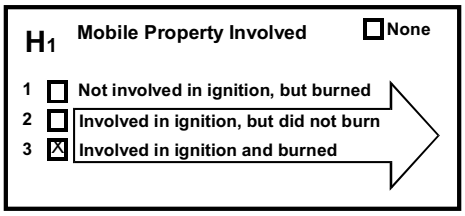
Entry

Check or mark the box best describing the role that mobile property had in the fire. If no mobile property was involved in ignition, check or mark the None box.

☞ If “1” is checked or marked, it is not necessary to complete Block H2. If “2” or “3” is checked or marked, proceed to Block H2.

Example

A fire started under the hood of an automobile (3):



MOBILE PROPERTY INVOLVED CODES

1	Mobile property not involved in ignition, but burned in fire following ignition.
2	Mobile property was involved in ignition, but did not burn. Includes fires started by exhaust systems of automobiles and sparks thrown off by trains.
3	Mobile property involved in ignition, and it burned.
N	None.

H2 Mobile Property: Type, Make, Model, Year, License Number, State, VIN

Definition

The information in this block precisely identifies the mobile property involved in a fire's ignition. As possible, the following information should be recorded:

Type: Property that is designed and constructed to be mobile, movable under its own power, or towed, such as an airplane, automobile, boat, cargo trailer, farm vehicle, motorcycle, or recreational vehicle.

Make: The name of the manufacturer of the mobile property.

Model: The manufacturer's model name. If one does not exist, use the physical description of the property that is commonly used to describe it, such as "three-bedroom" (mobile home) or "four-door" (sedan).

Year: The year the mobile property was manufactured.

License Plate Number (if any): The number on the license plates affixed to the vehicle; plates are generally issued by a state agency of motor vehicles. License numbers may also be available for boats, airplanes, and farm vehicles.

State: The state in which the vehicle is licensed.

☞ If a commercial vehicle that is involved in the incident is licensed in multiple states, record the state license where the incident occurred. If no license exists for the incident's state, use the state license of the vehicle's home origin.

VIN: The manufacturer's Vehicle Identification Number that is generally stamped on an identification plate on the mobile property.

Purpose

This element provides detailed information that identify the specific types of mobile property involved in an incident, which can be used to determine whether particular brands or models are more often a problem than others. Data on make, model, year, and other information are useful for determining compliance to standards of mobile properties and analyzing the effectiveness of these codes, standards, and regulations. The data also can be used to identify special hazards.

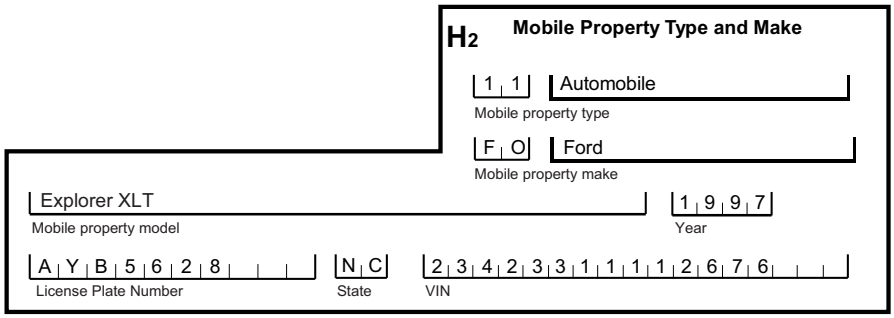
Entry

Enter the two-digit code and description of the property type. Enter the two-character code (from the list at the end of this chapter) and description of the property make. Enter the remaining information in Block H2 as appropriate. Be as specific as possible in making these entries.

☞ Both the License Plate Number and VIN are left-justified in their fields.

Example

A 1997 Ford XLT (11), licensed in North Carolina (AYB5628), ignited when it hit a telephone pole. The vehicle identification number was 234–233–1111–2676:



MOBILE PROPERTY TYPE CODES

Passenger Road Vehicles

11 Automobile, passenger car, ambulance, limousine, race car, taxicab.
12 Bus, school bus. Includes “trackless” trolley buses.
13 Off-road recreational vehicle. Includes dune buggies, golf carts, go-carts, snowmobiles. Excludes sport utility vehicles (11) and motorcycles (18).
14 Motor home (has own engine), camper mounted on pickup, bookmobile.
15 Trailer, travel; designed to be towed.
16 Trailer, camping; collapsible, designed to be towed.
17 Mobile home, bank, classroom, or office (all designed to be towed), whether mounted on a chassis or on blocks for semipermanent use.
18 Motorcycle, trail bike. Includes motor scooters and mopeds.
10 Passenger road vehicles, other.

Freight Road Transport Vehicles

21 General use truck, dump truck, fire apparatus.
22 Hauling rig (non-motorized), pickup truck.
23 Trailer, semi; designed for freight (with or without tractor).
24 Tank truck, nonflammable cargo. Includes milk and water tankers, liquid nitrogen tankers.

25 Tank truck, flammable or combustible liquid, chemical cargo.
26 Tank truck, compressed gas or LP gas.
27 Garbage, waste, refuse truck. Includes recyclable material collection trucks. Excludes roll-on-type trash containers (73).
20 Freight road transport vehicles, other.

Rail Transport Vehicles

31 Diner car, passenger car.
32 Box, freight, or hopper car.
33 Tank car.
34 Container or piggyback car (see 73 for container).
35 Engine/locomotive.
36 Rapid transit car, trolley (self-powered for use on track). Includes self-powered rail passenger vehicles.
37 Maintenance equipment car. Includes cabooses and cranes.
30 Rail transport vehicles, other.

Water Vessels

41 Boat less than 65 ft (20 m) in length overall. Excludes commercial fishing vessels (48).
42 Boat or ship equal to or greater than 65 ft (20 m) in length but less than 1,000 tons.
43 Cruise liner or passenger ship equal to or greater than 1,000 tons.
44 Tank ship.
45 Personal water craft. Includes one- or two-person recreational water craft.
46 Cargo or military ship equal to or greater than 1,000 tons. Includes vessels not classified in 44 and 47.
47 Non-self-propelled vessel. Includes all vessels without their own motive power, such as towed petroleum balloons, barges, and other towed or towable vessels. Excludes sailboats (49).
48 Commercial fishing or processing vessel. Includes shell fishing vessels.
49 Sailboats. Includes those with auxiliary power.
40 Water vessels, other.

Aircraft

51 Personal, business, utility aircraft less than 12,500 lb (5,670 kg) gross weight. Includes gliders.
52 Personal, business, utility aircraft equal to or greater than 12,500 lb (5,670 kg) gross weight.
53 Commercial aircraft: propeller-driven, fixed-wing. Includes turbo props.
54 Commercial aircraft: jet and other turbine-powered, fixed-wing.
55 Helicopters, nonmilitary. Includes gyrocopters.
56 Military fixed-wing aircraft. Includes bomber, fighter, patrol, vertical takeoff and landing (fixed-wing vertical stall) aircraft.
57 Military non-fixed-wing aircraft. Includes helicopters.
58 Balloon vehicles. Includes hot air balloons and blimps.
50 Aircraft, other.

Industrial, Agricultural, Construction Vehicles

61 Construction vehicle. Includes bulldozers, shovels, graders, scrapers, trenchers, plows, tunneling equipment, and road pavers.
63 Loader, industrial. Includes fork lifts, industrial tow motors, loaders, and stackers.
64 Crane.
65 Agricultural vehicle, baler, chopper (farm use).
67 Timber harvest vehicle. Includes skycars, loaders.
60 Industrial, construction, or agricultural vehicles, other.

Mobile Property, Miscellaneous

71 Home, garden vehicle. Includes riding lawnmowers, snow removal vehicles, riding tractors. Excludes equipment where operator does not ride. See Equipment Involved in Ignition.

73 Shipping container, mechanically moved. Includes haulable trash containers, intermodal shipping containers.

74 Armored vehicle. Includes armored cars and military vehicles. Excludes armored aircraft and ships.

75 Missile, rocket, and space vehicles.

76 Aerial tramway vehicle.

00 Mobile property, other.

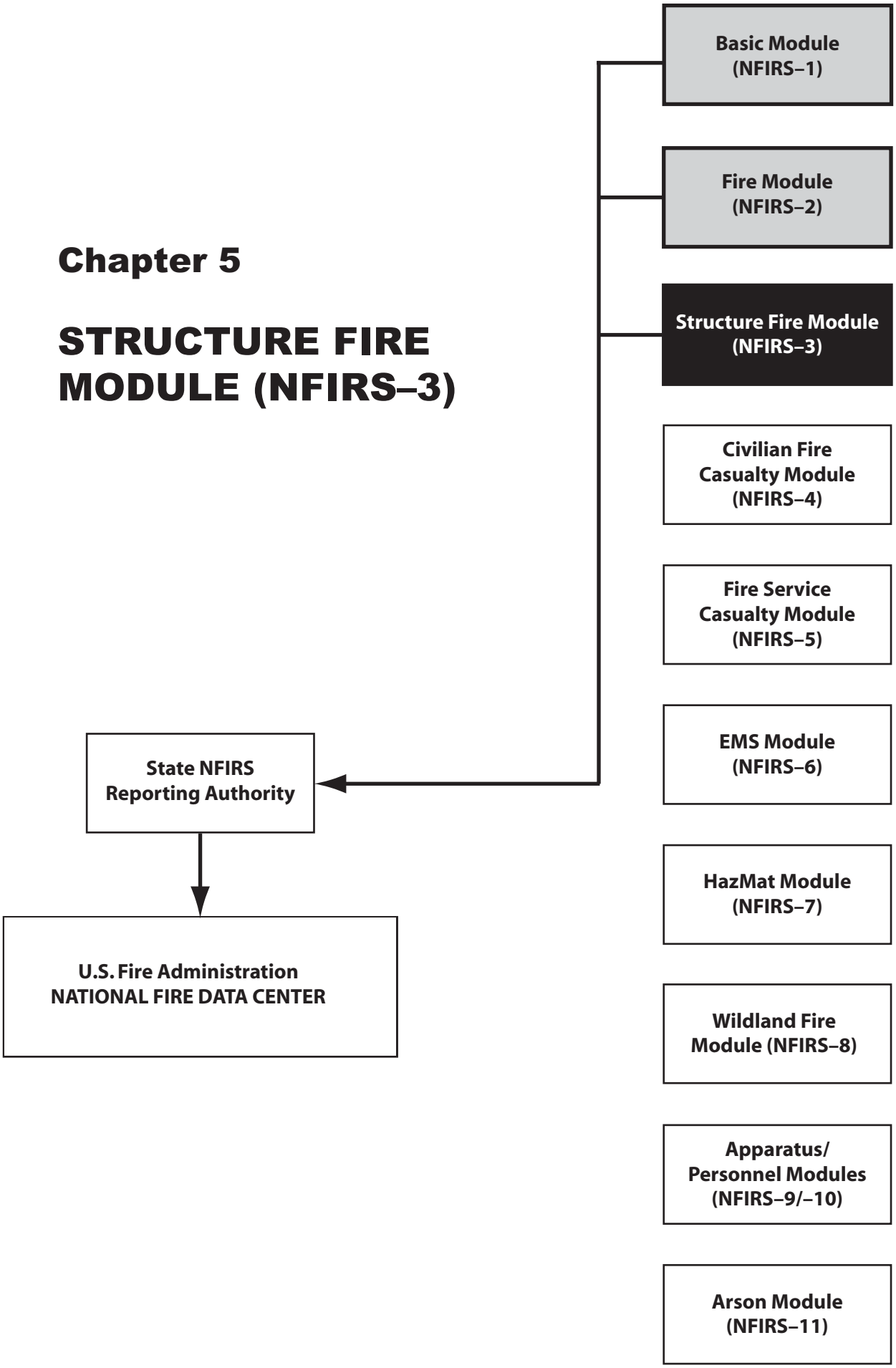
NN No mobile property.

MOBILE PROPERTY MAKE CODES

AC	Acura	IF	Infiniti	PT	Peterbilt
AR	Alfa Romeo	IN	International	PU	Peugeot
AN	Antique Vehicle	IS	Isuzu	PI	Pierce
AM	Aston Martin	IT	Italjet	PL	Plymouth
AT	ATK	IV	Iveco	PN	Pontiac
AU	Audi	JA	Jaguar	PR	Porsche
BE	Beta	JE	Jeep	RG	Range Rover
BM	BMW	KA	Kawasaki	RN	Rogue (Ottowa)
BL	Buell	KE	Kenworth	RR	Rolls Royce
BU	Buick	KI	Kia	SB	Saab
CD	Cadillac	KT	KTM	SA	Saturn
CP	Caterpillar	LR	Land Rover	SC	Scania
CH	Chevrolet	LE	Lexus	SD	Simon Duplex
CR	Chrysler	LI	Lincoln	ST	Sterling
CV	Classic Vehicle	LO	Lotus	SU	Subaru
CC	Crane Carrier (CCC)	MK	Mack	SZ	Suzuki
DA	Daihatsu	ML	Maely	TO	Toyota
DR	Diamond Reo	MA	Maico	TR	Triumph
DO	Dodge	MH	Marmon	UD	UD
DU	Ducati	MS	Maserati	UT	Utilmaster
EA	Eagle	MZ	Mazda	VE	Vespa
FE	Ferrari	MB	Mercedes Benz	VO	Volkswagen
FO	Ford	MC	Mercury	VL	Volvo
FR	Freightliner	MR	Merkur	VG	Volvo GMC
FW	FWD	MT	Mitsubishi	WK	Walker
GE	Geo	MO	Montesa	WL	Walter
GM	GMC (General Motors)	MG	Moto Guzzi	WS	Western Star
HD	Harley Davidson	MM	Moto Morini	WG	White GMC
HI	Hino	NA	Navistar	YA	Yamaha
HO	Honda	NI	Nissan	YU	Yugo
HU	Husqvarna	OL	Oldsmobile	OO	Other Make
HY	Hyundai	OS	Oshkosh		

Chapter 5

STRUCTURE FIRE MODULE (NFIRS–3)



I1 Structure Type ☆

If fire was in an enclosed building or a portable/mobile structure, complete the rest of this form.

- 1 ☐ Enclosed building
- 2 ☐ Portable/mobile structure
- 3 ☐ Open structure
- 4 ☐ Air-supported structure
- 5 ☐ Tent
- 6 ☐ Open platform (e.g., piers)
- 7 ☐ Underground structure (work areas)
- 8 ☐ Connective structure (e.g., fences)
- 0 ☐ Other type of structure

I2 Building Status ☆

- 1 ☐ Under construction
- 2 ☐ Occupied & operating
- 3 ☐ Idle, not routinely used
- 4 ☐ Under major renovation
- 5 ☐ Vacant and secured
- 6 ☐ Vacant and unsecured
- 7 ☐ Being demolished
- 0 ☐ Other
- U ☐ Undetermined

I3 Building Height ☆

Count the **roof** as part of the highest story.

Total number of stories at or above grade

Total number of stories below grade

I4 Main Floor Size ☆

NFIRS–3 Structure Fire

Total square feet

OR

Length in feet BY Width in feet

J1 Fire Origin ☆

Story of fire origin

☐ Below grade

J2 Fire Spread ☆

If fire spread was confined to object of origin, do not check a box (Ref. Block D3, Fire Module).

- 2 ☐ Confined to room of origin
- 3 ☐ Confined to floor of origin
- 4 ☐ Confined to building of origin
- 5 ☐ Beyond building of origin

J3 Number of Stories Damaged by Flame

Count the **roof** as part of the highest story.

- Number of stories w/minor damage (1 to 24% flame damage)
- Number of stories w/significant damage (25 to 49% flame damage)
- Number of stories w/heavy damage (50 to 74% flame damage)
- Number of stories w/extreme damage (75 to 100% flame damage)

K Type of Material Contributing Most to Flame Spread

☐ Check if no flame spread **OR** if same as Material First Ignited (Block D4, Fire Module) **OR** if unable to determine. → Skip to Section L

K1 Item contributing most to flame spread

K2 Type of material contributing most to flame spread

Required only if item contributing code is 00 or <70.

L1 Presence of Detectors ☆

(In area of the fire)

- N ☐ None Present → Skip to Section M
- 1 ☐ Present
- U ☐ Undetermined

L2 Detector Type

- 1 ☐ Smoke
- 2 ☐ Heat
- 3 ☐ Combination smoke and heat
- 4 ☐ Sprinkler, water flow detection
- 5 ☐ More than one type present
- 0 ☐ Other
- U ☐ Undetermined

L3 Detector Power Supply

- 1 ☐ Battery only
- 2 ☐ Hardwire only
- 3 ☐ Plug-in
- 4 ☐ Hardwire with battery
- 5 ☐ Plug-in with battery
- 6 ☐ Mechanical
- 7 ☐ Multiple detectors & power supplies
- 0 ☐ Other
- U ☐ Undetermined

L4 Detector Operation

- 1 ☐ Fire too small to activate
- 2 ☐ Operated → Complete Block L5
- 3 ☐ Failed to operate → Complete Block L6
- U ☐ Undetermined

L5 Detector Effectiveness

Required if detector operated.

- 1 ☐ Alerted occupants, occupants responded
- 2 ☐ Alerted occupants, occupants failed to respond
- 3 ☐ There were no occupants
- 4 ☐ Failed to alert occupants
- U ☐ Undetermined

L6 Detector Failure Reason

Required if detector failed to operate

- 1 ☐ Power failure, shutoff, or disconnect
- 2 ☐ Improper installation or placement
- 3 ☐ Defective
- 4 ☐ Lack of maintenance, includes not cleaning
- 5 ☐ Battery missing or disconnected
- 6 ☐ Battery discharged or dead
- 0 ☐ Other
- U ☐ Undetermined

M1 Presence of Automatic Extinguishing System ☆

- N ☐ None Present
- 1 ☐ Present → Complete rest of Section M
- U ☐ Undetermined

M2 Type of Automatic Extinguishing System

Required if fire was within designed range of AES

- 1 ☐ Wet-pipe sprinkler
- 2 ☐ Dry-pipe sprinkler
- 3 ☐ Other sprinkler system
- 4 ☐ Dry chemical system
- 5 ☐ Foam system
- 6 ☐ Halogen-type system
- 7 ☐ Carbon dioxide (CO_2) system
- 0 ☐ Other special hazard system
- U ☐ Undetermined

M3 Operation of Automatic Extinguishing System

Required if fire was within designed range

- 1 ☐ Operated/effective (go to M4)
- 2 ☐ Operated/not effective (go to M4)
- 3 ☐ Fire too small to activate
- 4 ☐ Failed to operate (go to M5)
- 0 ☐ Other
- U ☐ Undetermined

M4 Number of Sprinkler Heads Operating

Required if system operated

Number of sprinkler heads operating

M5 Reason for Automatic Extinguishing System Failure

Required if system failed or not effective

- 1 ☐ System shut off
- 2 ☐ Not enough agent discharged
- 3 ☐ Agent discharged but did not reach fire
- 4 ☐ Wrong type of system
- 5 ☐ Fire not in area protected
- 6 ☐ System components damaged
- 7 ☐ Lack of maintenance
- 8 ☐ Manual intervention
- 0 ☐ Other
- U ☐ Undetermined

NFIRS–3 Revision 01/01/04

CHAPTER 5

STRUCTURE FIRE MODULE (NFIRS–3)

The Structure Fire Module (NFIRS–3) should be completed for all structure fires. A *structure* is an assembly of materials forming a construction for occupancy or use to serve a specific purpose. This includes, but is not limited to, buildings, open platforms, bridges, roof assemblies over open storage or process areas, tents, air-supported structures, and grandstands. Users may also optionally complete the Fire Module for confined building fires (Incident Types 113–118), although it is not required.

Like the other modules, the Structure Fire Module is divided into sections and further subdivided into blocks. Only Block I1 must be completed for all structure fires. Completion of the remainder of the module is required only for building fires, although that portion of the module may also be completed for non-building structure fires if desired.

SECTION I

This section collects information about the structure involved in the fire, including its type, current status, height, and size.

I1 Structure Type ☆

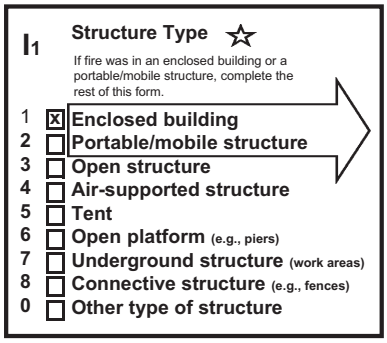
Definition
The identification of a structure as a specific property type.

Purpose
Information on the structure type, combined with other structural characteristics, is useful for understanding fire behavior and provides assistance in targeting fire prevention or protection efforts.

Entry
Check or mark the box best indicating the type of structure involved in the fire. If the fire was in an enclosed building or a portable or mobile structure, complete the rest of the module.

☞ If the fire was not in an enclosed building (codes 0 and 3–8), no other entries on this module are required.

Example
The fire occurred in a two-story house (1):



STRUCTURE TYPE CODES

1 Enclosed building. Includes subway terminals and underground buildings.
2 Fixed portable or mobile structure. Includes mobile homes, campers, portable buildings, and the like that are used as permanent fixed structures.
3 Open structure. Includes bridges, trestles, drilling structures, open stairways and walkways, and the like.
4 Air-supported structure.
5 Tent.
6 Open platform. Includes piers, wharves without a superstructure, loading docks without a roof, and the like.
7 Underground structure work area. Includes tunnels and mines. Excludes subway terminals and underground buildings (1).
8 Connective structure. Includes fences, telephone poles, and pipelines.
0 Structure type, other.

I2 Building Status ☆

Definition

The operational status of the building involved in the fire. This element indicates the actual use of the building at the time of the fire.

Purpose

Building status, combined with other structural characteristics, is useful for understanding fire behavior, the potential for loss of life and property, and the likely effectiveness of fire protection that existed before the fire.

Entry

Check or mark the box best indicating the status of the building involved in the fire.

Example

A family of four occupied the house (2):

I2 Building Status ☆

- 1 ☐ Under construction
- 2 ☒ Occupied & operating
- 3 ☐ Idle, not routinely used
- 4 ☐ Under major renovation
- 5 ☐ Vacant and secured
- 6 ☐ Vacant and unsecured
- 7 ☐ Being demolished
- 0 ☐ Other
- U ☐ Undetermined

BUILDING STATUS CODES

1	Under construction.
2	Occupied and operating.
3	Idle, not routinely used (furnishings are in place). Includes seasonal properties during the off-season.
4	Under major renovation.
5	Vacant and secured.
6	Vacant and unsecured.
7	Being demolished.
0	Building status, other.
U	Undetermined.

I3 Building Height ☆

Definition

The number of stories at or above grade level and the number of stories below grade level in the fire building.

Purpose

Building height and depth below grade, combined with other structural characteristics, are useful for pre-fire planning as well as for gaining a better understanding of fire behavior. Some fire departments use building height and depth to determine *life safety hazard* values. The more difficult it is for people to escape, the higher the life safety hazard value for the building.

Entry

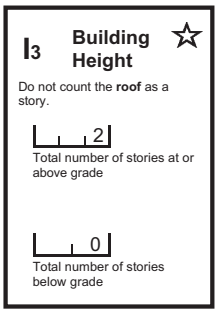
Enter the total number of stories at or above grade level and the total number of stories below grade level.

☞ For split grades, consider the main egress point as the “at grade” portion of the building.

☞ Do not count normally inaccessible attics, attics with less than standing height, or the roof as a story (i.e., the roof is counted as part of the highest story).

Example

The house was two stories high with no basement:



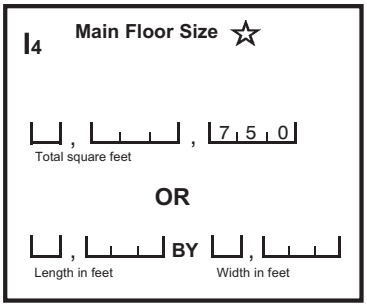
I4 Main Floor Size ☆

Definition
The size of the main floor in square feet. This is an estimate.

Purpose
Main floor size, combined with other structural characteristics, is useful for evaluating fire-fighting operations and the need to allocate resources based on size and complexity of structures. It also helps in understanding the potential life and property at risk.

Entry
Enter the total square footage of the main floor, or enter the area using length-by-width measurements (in feet). Do not enter both.

Example
The main floor was 750 square feet:



SECTION J

This section collects information on where in the structure the fire originated, how far the fire spread, and the number of stories damaged by flame.

J1 Fire Origin ☆

Definition
Identifies the story where the fire originated within the building.

Purpose

The story of fire origin, combined with other structural characteristics, is helpful for gaining a better understanding of fire behavior and identifying any special problems in fire strategy and tactics. Information on the frequency and nature of above- or below-grade-level fires is needed for assessing aerial apparatus needs and performance. A fire in the upper levels of a high-rise building is often difficult to control because of delays in moving personnel and equipment to the fire floor.

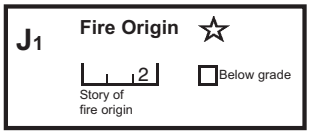
Entry

Enter the story of fire origin. If below grade level, check or mark the Below Grade box.

☞ Checking or marking the Below Grade box has the effect of entering a negative number in NFIRS 5.0.

Example

The fire began in the master bedroom on the second story:



J2 Fire Spread ☆

Definition

The extent of fire spread in terms of how far the flame damage extended. The extent of flame damage is the area actually burned or charred and does not include the area receiving only heat, smoke, or water damage.

Purpose

In combination with other information, this element describes the magnitude or seriousness of the fire. It can be used to evaluate the effectiveness of built-in fire protection features or the effectiveness of the fire suppression force relative to the conditions faced. The confinement and extinguishment of a fire is influenced by many factors. Fire spread indicates the combined effect of these conditions. Also, the analysis of fire spread over many fires can reveal the effects of individual factors.

Entry

Check or mark the box best describing the extent of fire spread.

☞ If the fire was *confined to the object of origin,* an entry should have been made in Block D3 of the Fire Module. Do not check or mark any additional box in this block.

☞ A room is a partitioned part of the inside of a building. If the flame damage extends beyond the area of origin in a one-room building, such as a shed, the damage should be described as Confined to the Building of Origin. The Confined to the Building of Origin box is also the appropriate description if the fire was on the roof or outside wall of a building.

Example

A fire causes flame damage only in the room of origin (2):

J2 **Fire Spread** ☆
If the fire spread was confined to object of origin, do not check a box (Ref. Block D3, Fire Module).

2 ☒ **Confined to room of origin**
3 ☐ **Confined to floor of origin**
4 ☐ **Confined to building of origin**
5 ☐ **Beyond building of origin**

FIRE SPREAD CODES

1 Confined to object of origin.
2 Confined to room of origin.
3 Confined to floor of origin.
4 Confined to building of origin.
5 Beyond building of origin.

J3 Number of Stories Damaged by Flame

Definition

The number of stories damaged by flame spread. Flame damage is the area actually burned or charred and does not include areas receiving only heat, smoke, or water damage.

Purpose

In combination with other information, this element describes the magnitude or seriousness of the fire. It can be used to evaluate the effectiveness of built-in fire protection features or the effectiveness of the fire suppression force relative to the conditions faced. The confinement and extinguishment of a fire is influenced by many factors. Fire spread indicates the combined effect of these conditions. Also, the analysis of fire spread over many fires can reveal the effects of individual factors.

Entry

Enter the number of stories damaged by flame according to the indicated criteria.

☞ Count the roof as part of the top story.

Example

Two stories were heavily damaged by the fire, and one story had only minor flame damage:

J3 **Number of Stories Damaged by Flame**

Count the **roof** as part of the highest story.

1 **Number of stories w/minor damage (1 to 24% flame damage)**

Number of stories w/significant damage (25 to 49% flame damage)

2 **Number of stories w/heavy damage (50 to 74% flame damage)**

Number of stories w/extreme damage (75 to 100% flame damage)

SECTION K

This section captures information on the actual item and material that were most involved in the spread of the fire (if different from the item first ignited)

Check or mark the box at the top of this section and skip to Section L *if* (1) there was no significant flame spread, (2) the flame spread was confined to the material first ignited, or (3) determining the flame spread was not possible.

K1 Item Contributing Most to Flame Spread

Definition

The item contributing most to flame spread, if different from the Item First Ignited (Fire Module, Block D3).

Purpose

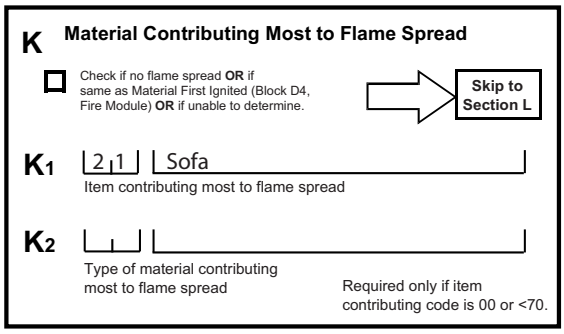
This information helps determine why fires advance through a structure and understand the rate at which they develop. A study of this entry also aids in assessing the need for flammability standards and other safety standards. This information can also be helpful to manufacturers for product improvement.

Entry

Enter the two-digit code and description best describing the item contributing most to flame spread.

Example

A sofa (21) contributed most to flame spread:



☞ An alphabetized synonym list for the following Item Contributing Most to Flame Spread codes is presented in Appendix B.

ITEM CONTRIBUTING MOST TO FLAME SPREAD CODES

Structural Component, Finish

11 Exterior roof covering, surface, finish.
12 Exterior sidewall covering, surface, finish. Includes eaves.
13 Exterior trim, appurtenances. Includes doors, porches, and platforms.
14 Floor covering or rug/carpet/mat, surface.
15 Interior wall covering. Includes cloth wall coverings, wood paneling, and items permanently affixed to a wall or door. Excludes curtains and draperies (36) and decorations (42).
16 Interior ceiling covering or finish. Includes cloth permanently affixed to ceiling and acoustical tile.
17 Structural member or framing.
18 Thermal, acoustical insulation within wall, partition or floor/ceiling space. Includes fibers, batts, boards, loose fills.
10 Structural component or finish, other.

Furniture, Utensils. Includes built-in furniture.

21 Upholstered sofa, chair, vehicle seats.
22 Non-upholstered chair, bench.
23 Cabinetry. Includes filing cabinets, pianos, dressers, chests of drawers, desks, tables, and bookcases. Excludes TV sets, bottle warmers, and appliance housings (25).
24 Ironing board.
25 Appliance housing or casing.
26 Household utensils. Includes kitchen and cleaning utensils.
20 Furniture, utensils, other.

Soft Goods, Wearing Apparel

31 Mattress, pillow.
32 Bedding: blanket, sheet, comforter. Includes heating pads.
33 Linen, other than bedding. Includes towels and tablecloths.
34 Wearing apparel not on a person.
35 Wearing apparel on a person.
36 Curtain, blind, drapery, tapestry.
37 Goods not made up. Includes fabrics and yard goods.
38 Luggage.
30 Soft goods, wearing apparel, other.

Adornment, Recreational Material, Signs

41 Christmas tree.
42 Decoration.
43 Sign. Includes outdoor signs such as billboards.
44 Chips. Includes wood chips.
45 Toy, game.
46 Awning, canopy.
47 Tarpaulin, tent.
40 Adornment, recreational material, signs, other.

Storage Supplies

51 Box, carton, bag, basket, barrel. Includes wastebaskets.
52 Material being used to make a product. Includes raw materials used as input to a manufacturing or construction process. Excludes finished products.
53 Pallet, skid (empty). Excludes palletized stock (58).
54 Cord, rope, twine, yarn.
55 Packing, wrapping material.
56 Baled goods or material. Includes bale storage.
57 Bulk storage.
58 Palletized material, material stored on pallets.
59 Rolled, wound material. Includes rolled paper and fabrics.
50 Storage supplies, other.

Liquids, Piping, Filters

61 Atomized, vaporized liquid. Included are aerosols.
62 Flammable liquid/gas (fuel) in or escaping from combustion engines.
63 Flammable liquid/gas in or escaping from final container or pipe before engine or burner. Includes piping between the engine and the burner.
64 Flammable liquid/gas in or escaping from container or pipe. Excludes engines, burners, and their fuel systems.
65 Flammable liquid/gas, uncontained. Includes accelerants.
66 Pipe, duct, conduit, hose.
67 Pipe, duct, conduit, or hose covering. Includes insulating materials whether for acoustical or thermal purposes, and whether inside or outside the pipe, duct, conduit, or hose.
68 Filter. Includes evaporative cooler pads.
60 Liquids, piping, filters, other.

Organic Materials

71 Agricultural crop. Includes fruits and vegetables.
72 Light vegetation (not crop). Includes grass, leaves, needles, chaff, mulch, and compost.
73 Heavy vegetation (not crop). Includes trees and brush.
74 Animal, living or dead.
75 Human, living or dead.
76 Cooking materials. Includes edible materials for man or animal. Excludes cooking utensils (26).
77 Feathers or fur. Excludes feathers or fur not on bird or animal, and not processed into a product.
70 Organic materials, other.

General Materials

81 Electrical wire, cable insulation. Do not classify the insulation on the wiring as the item first ignited unless there were no other materials in the immediate area, such as might be found in a cable tray or electrical vault.
82 Transformer. Includes transformer fluids.
83 Conveyor belt, drive belt, V-belt.

84 Tire.
85 Railroad ties.
86 Fence, pole.
87 Fertilizer.
88 Pyrotechnics, explosives.

General Materials Continued

91 Book.
92 Magazine, newspaper, writing paper. Includes files.
93 Adhesive.
94 Dust, fiber, lint. Includes sawdust and excelsior.
95 Film, residue. Includes paint, resin, and chimney film or residue and other films and residues produced as a by-product of an operation.
96 Rubbish, trash, waste.
97 Oily rags.
00 Item contributing most to flame spread, other.
UU Undetermined.

K2 Type of Material Contributing Most to Flame Spread

☞ This field is required only if the Item Contributing Most to Flame Spread code is “00” or a number less than “70.”

Definition

The type of material contributing most to flame spread, if different from the Type of Material First Ignited (Fire Module, Block D4). Skip this block if the material is unknown.

Type of material refers to the raw, common, or natural state in which the material exists. The type of material may be a gas, flammable liquid, chemical, plastic, wood, paper, fabric, or any number of other materials.

Purpose

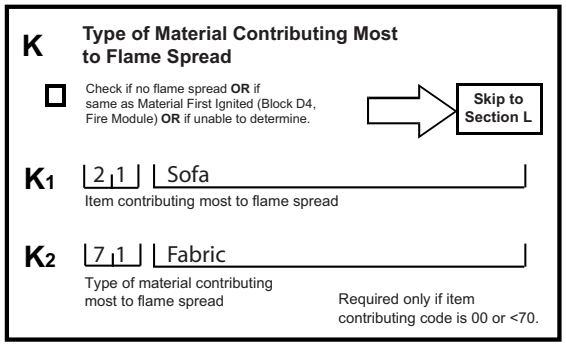
Knowing what type of material contributed most to flame spread is helpful in finding out why fires advance through a structure and understanding the rate at which fires develop. A study of this entry also aids in assessing the need for standards on the flammability of materials. This information can also be helpful to manufacturers for improving products.

Entry

Enter the two-digit code and description that best describes the type of material contributing most to flame spread.

Example

The fabric (71) that the sofa was upholstered with contributed most to flame spread:



☞ An alphabetized synonym list for the following Type of Material Contributing Most to Flame Spread codes is presented in Appendix B.

TYPE OF MATERIAL CONTRIBUTING MOST TO FLAME SPREAD CODES

Flammable Gas

11 Natural gas. Includes methane and marsh gas.
12 LP gas. Includes butane, butane and air mixtures, and propane gas.
13 Anesthetic gas.
14 Acetylene gas
15 Hydrogen.
10 Flammable gas, other. Includes benzene, benzol, carbon disulfide, carbon monoxide, ethylene, ethylene oxide, and vinyl chloride.

Flammable or Combustible Liquid

21 Ether, pentane-type flammable liquid. Includes all Class 1A flammable liquids.
22 JP–4 jet fuel and methyl-ethyl-ketone-type flammable liquid. Includes all Class 1B flammable liquids. Excludes gasoline (23).
23 Gasoline.
24 Turpentine, butyl-alcohol-type flammable liquid. Includes all Class IC flammable liquids.
25 Kerosene; Nos.1 and 2 fuel oil; diesel-type combustible liquid. Includes all Class II combustible liquids.
26 Cottonseed oil; Nos. 4, 5, and 6 fuel oil; creosote-oil-type combustible liquid. Includes all Class IIIA combustible liquids.
27 Cooking oil, transformer oil, lubricating oil. Includes all Class IIIB combustible liquids.
20 Flammable or combustible liquid, other.

Volatile Solid or Chemical

31 Fat, grease, butter, margarine, lard, tallow.
32 Petroleum jelly and nonfood grease.
33 Polish, paraffin, wax.
34 Adhesive, resin, tar, glue, asphalt, pitch, soot.
35 Paint, varnish—applied.
36 Combustible metal. Includes magnesium, titanium, and zirconium.
37 Solid chemical. Includes explosives. Excludes liquid chemicals (division 2) and gaseous chemicals (division 1).
38 Radioactive material.
30 Volatile solid or chemical, other.

Plastics

41 Plastic, regardless of type. Excludes synthetic fibers, coated fabrics, plastic upholstery.

Natural Product

51 Rubber, tire rubber. Excludes synthetic rubbers (classify as plastics (41)).
52 Cork.
53 Leather.
54 Hay, straw.
55 Grain, natural fiber. Includes cotton, feathers, felt, barley, corn, coconut. Excludes fabrics and furniture batting (71).
56 Coal, coke, briquettes, peat. Includes briquettes of carbon black and charcoal.
57 Food, starch. Includes flour. Excludes fat or grease (31).
58 Tobacco.
50 Natural product, other. Includes manure.

Wood or Paper – Processed

61 Wood chips, sawdust, wood shavings.
62 Round timber. Includes round posts, poles, and piles.
63 Sawn wood. Includes all finished lumber and wood shingles.
64 Plywood.
65 Fiberboard, particleboard, and hardboard. Includes low-density pressed wood fiberboard products.
66 Wood pulp, wood fiber.
67 Paper. Includes cellulose, waxed paper, sensitized paper, and ground-up processed paper and newsprint used as thermal insulation.
68 Cardboard.
60 Wood or paper, processed, other.

Fabric, Textiles, Fur

71 Fabric, fiber, cotton, blends, rayon, wool, finished goods. Includes yarn and canvas. Excludes fur and silk (74).
74 Fur, silk, other fabric, finished goods. Excludes fabrics listed in Code 71.
75 Wig.
76 Human hair.
77 Plastic-coated fabric. Includes plastic upholstery fabric and other vinyl fabrics.
70 Fabric, textiles, fur, other.

Material Compounded With Oil

81 Linoleum.
82 Oilcloth.
86 Asphalt-treated material. Excludes by-products of combustion, soot, carbon, creosote (34).
80 Material compounded with oil, other.
00 Type of material contributing most to flame spread, other.
UU Undetermined.

SECTION L

These data elements identify the type and operating principle of detectors present in the area of origin or in near proximity to the area of origin such that they would be instrumental in detecting the fire in its early stages.

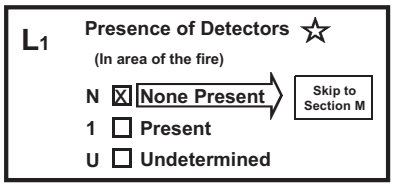
L1 Presence of Detectors ☆

Definition
The existence of fire detection equipment within its designed range of the fire.

Purpose
Knowing whether or not detectors were present at the fire is useful for evaluating their effectiveness can be evaluated if they were present and within their designed range.

Entry
Check or mark the box that best describes the presence of detectors. If no detectors were present within their designed range of the fire, check or mark the None Present box and skip to Section M.

Example
No detectors (N) were present in a structure where the fire occurred:



PRESENCE OF DETECTORS CODES

1	Present.
N	None present.
U	Undetermined.

L2 Detector Type

Definition
Identifies the type of fire detection system that was present in the area of fire origin.

Purpose
The type of detectors present at the fire is important to the understanding of fire control and life safety in properties with and without detection equipment.

Entry
Check or mark the box that indicates the type of detector present in the area of fire origin.

☞ This field is required if the fire was within the designed range of the detector.

Example
A smoke detector (1) was present in the area of fire origin:

L2 Detector Type

- 1 ☒ Smoke
- 2 ☐ Heat
- 3 ☐ Combination smoke and heat
- 4 ☐ Sprinkler, water flow detection
- 5 ☐ More than one type present
- 0 ☐ Other
- U ☐ Undetermined

DETECTOR TYPE CODES

1	Smoke.
2	Heat.
3	Combination smoke and heat in a single unit.
4	Sprinkler, water flow detection.
5	More than one type present.
0	Detector type, other.
U	Undetermined.

L3 Detector Power Supply

Definition
Identifies the type of power supplying the detector.

Purpose
The reliability of detectors present at a fire is an important part of detector performance, especially if maintenance was poor or a power failure occurred before or during the fire.

Entry
Check or mark the box best indicating the type of power supply used by the detector.

☞ This field is required if the fire was within the designed range of the detector.

Example
The smoke detector ran on battery (1) power:

L3 Detector Power Supply

- 1 ☒ Battery only
- 2 ☐ Hardwire only
- 3 ☐ Plug-in
- 4 ☐ Hardwire with battery
- 5 ☐ Plug-in with battery
- 6 ☐ Mechanical
- 7 ☐ Multiple detectors & power supplies
- 0 ☐ Other
- U ☐ Undetermined

DETECTOR POWER SUPPLY CODES

1	Battery only.
2	Hardwire only
3	Plug-in.
4	Hardwire with battery backup.
5	Plug-in with battery backup.
6	Mechanical. Includes spring-wound, stored pressure source, etc.
7	Multiple detectors and power supplies.
0	Detector power supply, other.
U	Undetermined.

L4 Detector Operation

Definition

The operation and effectiveness of the detector relative to the area of fire origin.

Purpose

The information on the usage, reliability, and effectiveness of automatic detection equipment is important to the understanding of fire control and life safety with and without detection equipment. This item is not designed to evaluate any alarm transmission capability of the system, only the detection of the fire.

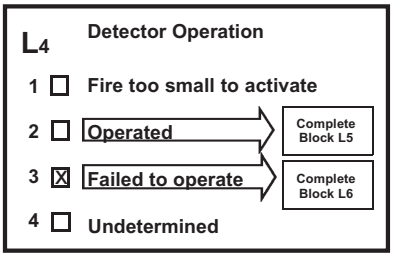
Entry

Check or mark the box best describing the location and operation of the detector.

☞ This field is required if the fire was within the designed range of the detector.

Example

The smoke detector failed to operate (3):



DETECTOR OPERATION CODES

1	Fire too small to activate detector.
2	Detector operated.
3	Detector failed to operate.
U	Undetermined.

L5 Detector Effectiveness

Definition
The effectiveness of the fire detection equipment in alerting occupants.

Purpose
Information on the effectiveness of automatic detection equipment is important for understanding whether fire detection equipment is accomplishing the task for which it is designed.

Entry
Check or mark the box best describing the effectiveness of the detector.

☞ This field is required if the detector operated.

Example
Heat detectors in the room of origin alerted the building occupants (1), who promptly evacuated:

L5 Detector Effectiveness
Required if detector operated.

- 1 ☒ **Alerted occupants, occupants responded**
- 2 ☐ **Alerted occupants, occupants failed to respond**
- 3 ☐ **There were no occupants**
- 4 ☐ **Failed to alert occupants**
- U ☐ **Undetermined**

DETECTOR EFFECTIVENESS CODES

1	Detector alerted occupants, occupants responded.
2	Detector alerted occupants, occupants failed to respond.
3	There were no occupants.
4	Detector failed to alert occupants.
U	Undetermined.

L6 Detector Failure Reason

Definition
The reason why the detector failed to operate or did not operate properly.

Purpose
Information on why automatic detection equipment did not operate is important to the evaluation of detection equipment and can be used to improve reliability or installation of detectors.

Entry
Check or mark the box best describing why the detector failed to operate or did not operate properly.

☞ This field is required if the detector failed to operate.

Example
Heat detectors in the room of origin did not activate because they were improperly installed (2):

L6 **Detector Failure Reason**

Required if detector failed to operate

- 1 ☐ **Power failure, shutoff, or disconnect**
- 2 ☒ **Improper installation or placement**
- 3 ☐ **Defective**
- 4 ☐ **Lack of maintenance, includes not cleaning**
- 5 ☐ **Battery missing or disconnected**
- 6 ☐ **Battery discharged or dead**
- 0 ☐ **Other**
- U ☐ **Undetermined**

DETECTOR FAILURE REASON CODES

1	Power failure or hardwired detector shut off or disconnected.
2	Improper installation or placement of detector.
3	Defective detector.
4	Lack of maintenance. Includes not cleaning.
5	Battery missing or disconnected.
6	Battery discharged or dead.
0	Detector failure reason, other.
U	Undetermined.

SECTION M

These data elements identify the type and operating principle of an automatic extinguishing system (AES) present in the area of origin or in near proximity to the area of origin such that it would be instrumental in suppressing the fire in its early stages.

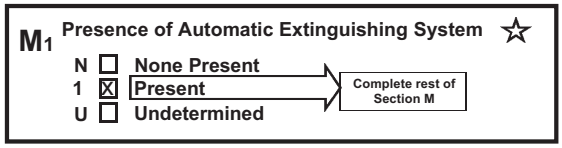
M1 Presence of Automatic Extinguishing System ☆

Definition
The existence of an AES within the AES's designed range of a fire.

Purpose
If an AES was present at the fire, its effectiveness can be evaluated if it was within its designed range of the fire.

Entry
Check or mark the box that best describes the presence of an AES. If no AES was present, check or mark the None Present box; no other entries are required on this module.

Example
An AES was present (1) in the structure where the fire occurred:



PRESENCE OF AUTOMATIC EXTINGUISHING SYSTEM CODES

1 Present.
N None present.
U Undetermined.

M2 Type of Automatic Extinguishing System

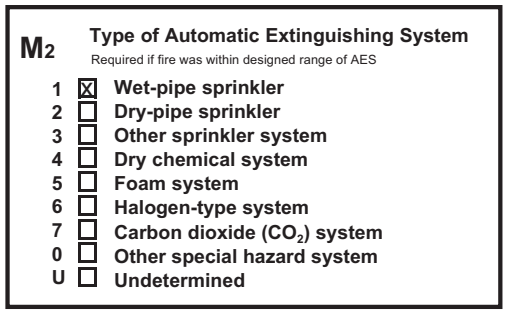
Definition
Identifies the type of automatic extinguishing system that was present in the area of fire origin.

Purpose
Information on the type of AES present at the fire is important to the understanding of fire control and life safety in properties with and without automatic extinguishing system.

Entry
Check or mark the box that indicates the type of AES present in the area of fire origin. If multiple systems are present, indicate the system designed to protect the hazard where the fire started.

☞ This field is required if the fire was within the designed range of the AES.

Example
The AES was a wet-pipe sprinkler system (1):



TYPE OF AUTOMATIC EXTINGUISHING SYSTEM CODES

1 Wet-pipe sprinkler system.
2 Dry-pipe sprinkler system.
3 Other sprinkler system. Includes deluge sprinkler systems and pre-action sprinkler systems.
4 Dry chemical system.
5 Foam system.

6 Halogen-type system. Includes nonhalogenated suppression systems that operate on the same principle.
7 Carbon dioxide system.
0 Special hazard system, other.
U Undetermined.

M3 Operation of Automatic Extinguishing System

Definition
The operation and effectiveness of the automatic extinguishing system relative to the area of fire origin.

Purpose
Knowing the usage, reliability, and effectiveness of AESs is important to the understanding of fire control and life safety in buildings with and without extinguishing equipment.

Entry
Check or mark the box that indicates if the AES operated and was or was not effective. Effective does not necessarily mean complete extinguishing, but the system must at least contain and control the fire until the fire department can complete extinguishment.

Example
The fire was too small to activate the system (3):

M3 Operation of Automatic Extinguishing System
Required if fire was within designed range

1 ☐ **Operated & effective** (go to M4)
2 ☐ **Operated & not effective** (go to M4)
3 ☒ **Fire too small to activate**
4 ☐ **Failed to operate** (go to M5)
0 ☐ **Other**
U ☐ **Undetermined**

OPERATION OF AUTOMATIC EXTINGUISHING SYSTEM CODES

1 System operated and was effective.
2 System operated and was not effective.
3 Fire too small to activate the system.
4 System did not operate.
0 Operation of AES, other.
U Undetermined.

M4 Number of Sprinkler Heads Operating

Definition
The total number of sprinkler heads that operated during the fire.

Purpose
Recording the number of sprinkler heads that operated is useful in determining how fast the fire developed. This is not an indication of the effectiveness of the sprinkler system.

Entry
Enter the total number of sprinkler heads that operated during the fire.

☞ This field is required if the sprinkler system activated.

Example
One sprinkler head activated:

M4 Number of Sprinkler Heads Operating
Required if system operated
1
Number of sprinkler heads operating

M5 Reason for Automatic Extinguishing System Failure

Definition
The reason why the automatic extinguishing system failed to operate or did not operate properly.

Purpose
Information on the effectiveness of an AES is important for understanding the reasons why systems fail so they can be redesigned or additional safeguards put in place.

Entry
Check or mark the box that best describes why the AES failed to operate or was not effective.

☞ This field is required if the system failed to operate.

Example
The system did not operate because the fire was in the ceiling space above the AES (5):

M5 Reason for Automatic Extinguishing System Failure
Required if system failed or not effective

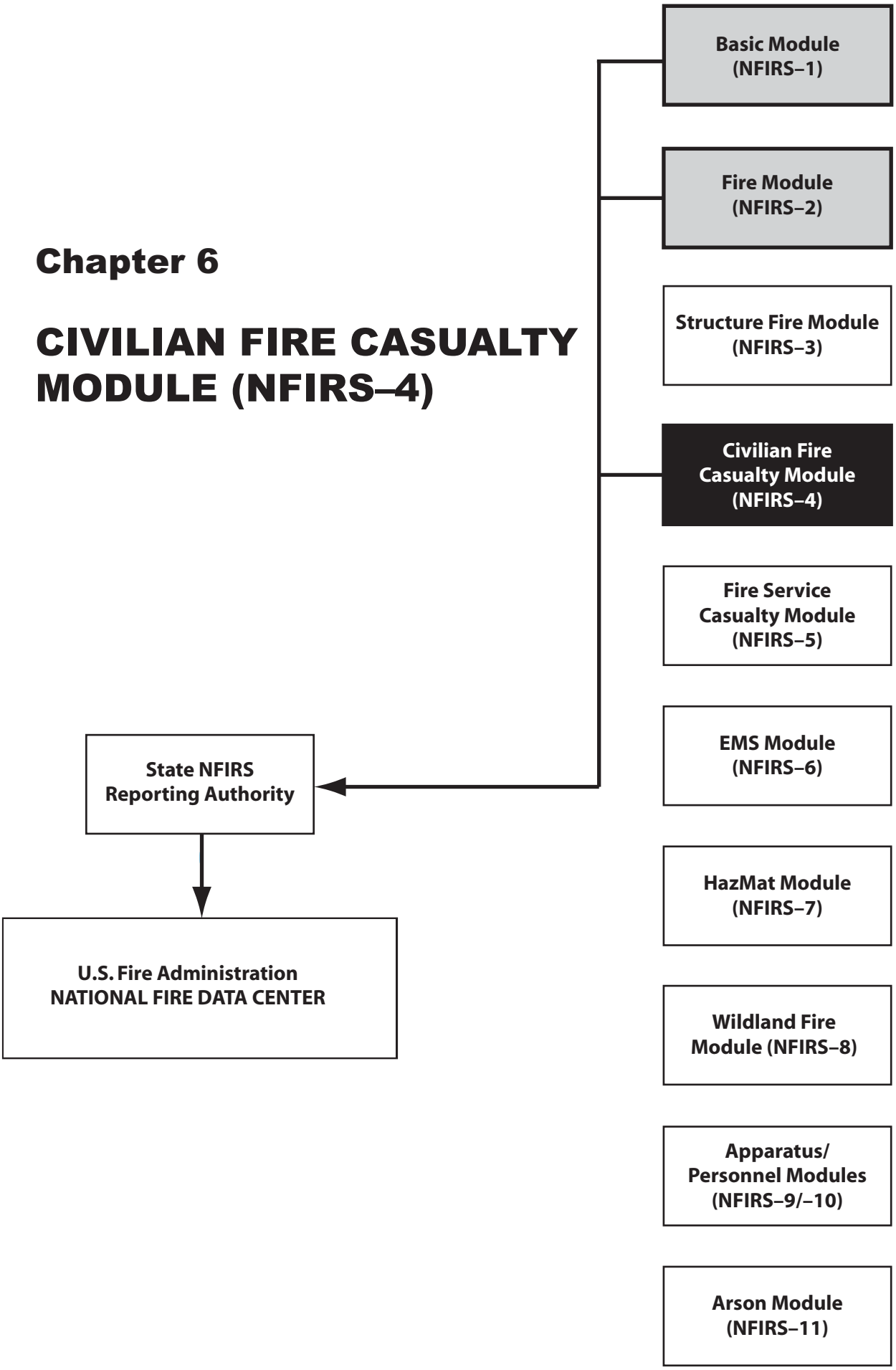
- 1 ☐ System shut off
- 2 ☐ Not enough agent discharged
- 3 ☐ Agent discharged but did not reach fire
- 4 ☐ Wrong type of system
- 5 ☒ Fire not in area protected
- 6 ☐ System components damaged
- 7 ☐ Lack of maintenance
- 8 ☐ Manual intervention
- 0 ☐ Other
- U ☐ Undetermined

REASON FOR AUTOMATIC EXTINGUISHING SYSTEM FAILURE CODES

1	System shut off.
2	Not enough agent discharged to control the fire.
3	Agent discharged, but did not reach the fire.
4	Inappropriate system for the type of fire.
5	Fire not in area protected by the system.
6	System components damaged.
7	Lack of maintenance. Includes corrosion or heads painted.
8	Manual intervention defeated the system.
0	Reason system not effective, other.
U	Undetermined.

Chapter 6

CIVILIAN FIRE CASUALTY MODULE (NFIRS–4)



A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | ☐ Delete ☐ Change

NFIRS–4 Civilian Fire Casualty

B Injured Person ☆ **Gender** 1 ☐ Male 2 ☐ Female

First Name | MI | Last Name | Suffix

C Casualty Number ☆

Casualty Number

D Age or Date of Birth ☆

Age ☐ Months (for infants)

OR

Date of Birth: Month | Day | Year

E1 Race

1 ☐ White
2 ☐ Black, African American
3 ☐ Am. Indian, Alaska Native
4 ☐ Asian
5 ☐ Native Hawaiian, Other Pacific Islander
0 ☐ Other, multiracial
U ☐ Undetermined

E2 Ethnicity

1 ☐ Hispanic or Latino
0 ☐ Non Hispanic or Latino

F Affiliation

1 ☐ Civilian
2 ☐ EMS, not fire department
3 ☐ Police
0 ☐ Other

G Date and Time of Injury Midnight is 0000.

Date of Injury: Month | Day | Year

Time of Injury: Hour | Minute

H Severity ☆

1 ☐ Minor
2 ☐ Moderate
3 ☐ Severe
4 ☐ Life threatening
5 ☐ Death
U ☐ Undetermined

I Cause of Injury

1 ☐ Exposed to fire products including flame heat, smoke, and gas
2 ☐ Exposed to toxic fumes other than smoke
3 ☐ Jumped in escape attempt
4 ☐ Fell, slipped, or tripped
5 ☐ Caught or trapped
6 ☐ Structural collapse
7 ☐ Struck by or contact with object
8 ☐ Overexertion or strain
9 ☐ Multiple causes
0 ☐ Other
U ☐ Undetermined

J Human Factors Contributing to Injury ☐ None

Check all applicable boxes

1 ☐ Asleep
2 ☐ Unconscious
3 ☐ Possibly impaired by alcohol
4 ☐ Possibly impaired by other drug
5 ☐ Possibly mentally disabled
6 ☐ Physically disabled
7 ☐ Physically restrained
8 ☐ Unattended person

K Factors Contributing to Injury ☐ None

Enter up to three contributing factors

Contributing factor (1)

Contributing factor (2)

Contributing factor (3)

L Activity When Injured

1 ☐ Escaping
2 ☐ Rescue attempt
3 ☐ Fire control
4 ☐ Return to fire before control
5 ☐ Return to fire after control
6 ☐ Sleeping
7 ☐ Unable to act
8 ☐ Irrational act
0 ☐ Other
U ☐ Undetermined

M1 Location at Time of Incident

1 ☐ In area of origin and not involved
2 ☐ Not in area of origin and not involved
3 ☐ Not in area of origin, but involved
4 ☐ In area of origin and involved
0 ☐ Other location
U ☐ Undetermined

M2 General Location at Time of Injury

1 ☐ In area of fire origin → Skip to Section N
2 ☐ In building, but not in area
3 ☐ Outside, but not in area → Skip to Block M5
U ☐ Undetermined

M3 Story at Start of Incident

Complete ONLY if injury occurred INSIDE

Story at start of incident ☐ Below grade

M4 Story Where Injury Occurred

Story where injury occurred, if different from M3 ☐ Below grade

M5 Specific Location at Time of Injury

Complete ONLY if casualty NOT in area of origin

Specific location at time of injury

N Primary Apparent Symptom

01 ☐ Smoke only, asphyxiation
11 ☐ Burns and smoke inhalation
12 ☐ Burns only
21 ☐ Cut, laceration
33 ☐ Strain or sprain
96 ☐ Shock
98 ☐ Pain only

Look up a code only if the symptom is NOT found above

Primary apparent symptom

O Primary Area of Body Injured

1 ☐ Head
2 ☐ Neck and shoulder
3 ☐ Thorax
4 ☐ Abdomen
5 ☐ Spine
6 ☐ Upper extremities
7 ☐ Lower extremities
8 ☐ Internal
9 ☐ Multiple body parts

P Disposition

☐ Transported to emergency care facility

Remarks Local option

NFIRS–4 Revision 01/01/04

CHAPTER 6

CIVILIAN FIRE CASUALTY MODULE (NFIRS–4)

The Civilian Fire Casualty Module should be completed whenever there are civilian casualties resulting from a fire. A *fire casualty* is a person who is injured or killed as a result of a fire, including injuries or deaths from natural or accidental causes sustained while involved in the activities of fire control, attempting rescue, or escaping from the dangers of the fire. Fires include Incident Types 100–199 as recorded on the Basic Module, Section C.

☞ If a civilian injury is not directly related to fire, it may be reported on an EMS Module with the same incident ID information.

A separate Civilian Fire Casualty Module is required for each fire casualty.

SECTION A

The guidance and directions for completing Section A of the Civilian Fire Casualty Module are the same as for Section A in the Basic Module. It is stressed that the entries in Section A of the Civilian Fire Casualty Module must be identical with the entries on the corresponding Basic Module. If injuries occur in an exposure fire, the casualty report should have the same entries as those from Section A of the Basic Module for that exposure fire. An example of a completed Section A can be found on page 3–8.

A

Fire Department Identification (FDID) ☆

Entry
Enter the same FDID number found in Section A of the Basic Module.

State ☆

Entry
Enter the same state abbreviation found in Section A of the Basic Module.

Incident Date ☆

Entry
Enter the same incident date found in Section A of the Basic Module.

Station Number

Entry
Enter the same station number found in Section A of the Basic Module.

Incident Number ☆

Entry
Enter the same incident number found in Section A of the Basic Module.

Exposure Number ☆

Entry
If the casualty resulted from an exposure fire, enter the same exposure number that was entered in Section A of the Basic Module for that exposure.

Delete/Change

Definition
Indicates a change to information submitted on a previous Civilian Fire Casualty Module or a deletion of all information regarding the casualty.

Purpose
To delete or change previously reported information.

Entry
Delete. Check or mark this box when you have previously submitted data on this civilian casualty and now want to have the data on this casualty deleted from the database. If this box is marked, complete Section A, the Casualty Number originally assigned (Section C), and leave the rest of the report blank. Forward the report according to your normally established procedures.

Change. Check or mark this box only if you previously submitted this fire incident to your state reporting authority and now want to update or change the information in the state database. Complete Section A and any other sections or blocks that need to be updated or corrected. If you need to blank a field that contains data, you must resubmit the original module containing the newly blanked field along with all the other original information in the module for that incident. This action is required only when sending an updated module to your state reporting authority. Forward the report according to your normally established procedures.

SECTION B

B

Injured Person

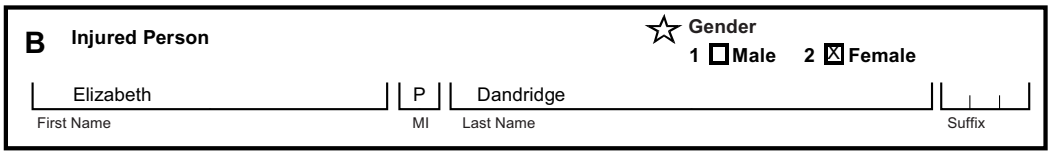
Definition
The first name, middle initial, last name, and gender that identifies the casualty.

Purpose
The name of the casualty may be required for legal purposes. It may also be useful for notification to employers, for insurance purposes, and for filing disability claims.

Entry
Enter the full name of the person. Names should be clearly printed or typed. Check or mark the appropriate box that indicates the injured person's gender.

☞ Gender is a required field.

Example
The casualty's name is Elizabeth P. Dandridge:



GENDER CODES

1 Male.
2. Female.

SECTION C

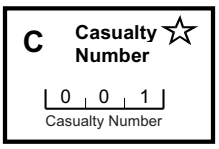
Casualty Number ☆

Definition
A unique number is assigned to each casualty occurring at a single incident or resulting from an incident.

Purpose
The casualty number identifies each casualty separately in the casualty file. Data and information concerning the casualty can be accessed using this number in conjunction with other unique field information.

Entry
Enter the casualty number assigned to this casualty. A separate Casualty Number is assigned to each casualty. The first casualty is always coded "001," and each succeeding casualty is numbered sequentially and incremented by 1 beginning with "002." The three-character numeric field is zero filled, not right justified.

Example
There were four casualties as a result of a vehicle fire; the first casualty's number is 001:



SECTION D

D

Age or Date of Birth ☆

Enter either the fire casualty's age or the casualty's date of birth. Do not enter both.

Age ☆

Definition

The casualty's age in years or, if the casualty is an infant, the age in months.

Purpose

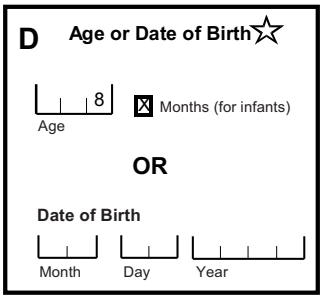
The age of the casualty provides a critical piece of demographic information on fire losses and allows further analysis of population groups at high risk from fires. This information is important for prevention efforts and allows NFIRS fire casualty data to be combined with other fire mortality or demographic databases.

Entry

Enter the age of the casualty. Estimate the age if it cannot be determined. If the age is calculated in months, check or mark the Months (for Infants) box.

Example

The casualty was an 8-month-old baby:



Date of Birth ☆

Definition

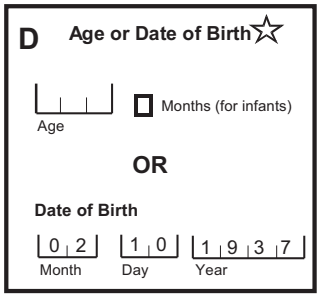
The month, day, and year of birth of the casualty.

Purpose
This data element is an alternative entry for Age. It can provide an indication of fire loss, and can be used to indicate type, severity, and cause of injury to identify trends and patterns that might be helpful in planning injury prevention techniques.

☞ This data element is used as an alternate method for calculating the casualty's age. Age is collected in NFIRS but Date of Birth is not.

Entry
Enter the date of birth showing the month, day, and year (mm/dd/yyyy).

Example
A casualty was born on February 10, 1937:



SECTION E

E1 Race

Definition
The identification of the race of the casualty, based on U.S. Office of Management and Budget (OMB) designations.

Purpose
This entry is useful for the study of diseases and important to data systems in order to obtain certain federal or state funds that are directed toward specific racial groups.

Entry
Check or mark the appropriate box. If race cannot be determined, check or mark the Undetermined box.

☞ Hispanic is not considered a race, because a person can be black *and* Hispanic, white *and* Hispanic, etc.

Example
The casualty was an African American (2):

E1 Race

- 1 ☐ White
- 2 ☒ Black, African American
- 3 ☐ Am. Indian, Alaska Native
- 4 ☐ Asian
- 5 ☐ Native Hawaiian, Other Pacific Islander
- 0 ☐ Other, multiracial
- U ☐ Undetermined

RACE CODES

1	White.
2	Black or African American.
3	American Indian or Alaska Native.
4	Asian.
5	Native Hawaiian or other Pacific Islander.
0	Other. Includes multiracial.
U	Undetermined.

E2 Ethnicity

Definition

Identifies the ethnicity of the casualty. Ethnicity is an ethnic classification or affiliation. Ethnicity designates a population subgroup having a common cultural heritage, as distinguished by customs, characteristics, language, common history, etc. Currently, Hispanic/Latino is the only OMB designation for ethnicity.

Purpose

This entry permits an analysis of casualties by ethnicity with type, severity, and cause of injury to identify trends and patterns that might be helpful in planning casualty prevention techniques. It is also useful for studies of diseases and important to data systems in order to obtain certain federal or state funds that are directed toward specific ethnic groups.

Entry

Check or mark the appropriate box.

Example

The casualty was an Hispanic (1):

E2 Ethnicity

- 1 ☒ Hispanic or Latino
- 0 ☐ Non Hispanic or Latino

ETHNICITY CODES

1	Hispanic or Latino.
0	Non Hispanic or Latino.

SECTION F

F Affiliation

Definition

Indicates whether the casualty involved in the incident was an emergency services responder or a civilian.

☞ Firefighter casualties are not reported on this module; instead, use the Fire Service Casualty Module (NFIRS–5).

Non-firefighter casualties who may be injured directly by the fire include:

Civilian: Non-emergency services personnel such as occupants, passers-by, and onlookers.

EMS: Emergency EMS personnel who are not members of the fire department.

Police: Persons from law enforcement agencies working at the scene.

Other: Persons working at the scene from other public or private service organizations such as the utility company, other city agencies, the Red Cross, the Salvation Army, etc.

Purpose

This entry identifies the groups suffering casualties. This information, along with data on the cause of the casualty and associated incident, can help target programs for reducing casualties and can be used to measure their success.

Entry

Check or mark the box that best describes the casualty's affiliation.

☞ If an injury occurs to EMS fire service personnel, use the Fire Service Casualty Module instead.

Example

A police officer (3) falls and sprains his ankle while helping an occupant leave an apartment building that was on fire:

F Affiliation

- 1 ☐ Civilian
- 2 ☐ EMS, not fire department
- 3 ☒ Police
- 0 ☐ Other

AFFILIATION CODES

1 Civilian.
2 EMS, not fire department.
3 Police.
0 Other.

SECTION G

G

Date and Time of Injury

Date

Entry
Enter the month, day, and year when the injury occurred (mm/dd/yyyy). (See example at Time.)

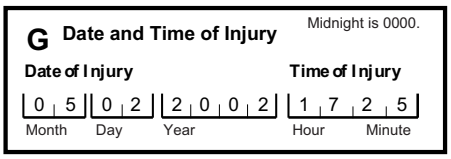
Time

Definition
The time of day, using the 24-hour clock, when the injury occurred. Midnight is 0000 and signifies the start of a new day.

Purpose
This information is sometimes needed for legal or insurance purposes. It is most frequently used to analyze the time of day fatalities occur for different types of incidents.

Entry
Enter as closely as possible the time when the injury occurred using the 24-hour clock (i.e., 0000–2359). This could be before or after the alarm time shown on the Basic Module.

Example
A woman burned her hand at 5:25 p.m. on May 2, 2002:



SECTION H

H Severity ☆

☞ *Severity* was known as *Case Severity* in NFIRS 4.1.

Definition

The relative severity or seriousness of the injury on a scale from “least serious” (minor) to “most serious” (death).

Purpose

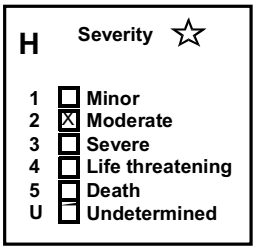
The severity of a casualty’s injury is often used as an indicator of the impact of the incident. It can be used as a measure for prevention programs aimed at reducing injuries and deaths.

Entry

Check or mark the box that best describes the severity of the injury.

Example

A second degree burn (2) on the forearm and shoulder:



SEVERITY CODES

1	Minor. The patient is not in danger of death or permanent disability. Immediate medical care is not necessary.
2	Moderate. There is little danger of death or permanent disability. Quick medical care is advisable. This category includes injuries such as fractures or lacerations requiring sutures.
3	Severe. The situation is potentially life threatening if the condition remains uncontrolled. Immediate medical care is necessary even though body processes may still be functioning and vital signs may be normal.
4	Life threatening. Death is imminent; body processes and vital signs are not normal. Immediate medical care is necessary. This category includes cases such as severe hemorrhaging, severe multiple trauma, and multiple internal injuries.
5	Death.
U	Undetermined.

SECTION I

I Cause of Injury

Definition

The physical event that caused the injury.

Purpose

This is another dimension in describing the cause of an injury and how and why the injury occurred. The analysis of this information may further an understanding of the conditions causing the injury and provide a means for planning suitable preventive techniques.

Entry

Check or mark the box that best describes the cause of the injury.

Example

The fire burned (1) the victim's hand:

I Cause of Injury

- 1 ☒ **Exposed to fire products including flame, heat, smoke, and gas**
- 2 ☐ **Exposed to toxic fumes other than smoke**
- 3 ☐ **Jumped in escape attempt**
- 4 ☐ **Fell, slipped, or tripped**
- 5 ☐ **Caught or trapped**
- 6 ☐ **Structural collapse**
- 7 ☐ **Struck by or contact with object**
- 8 ☐ **Overexertion or strain**
- 9 ☐ **Multiple causes**
- 0 ☐ **Other**
- U ☐ **Undetermined**

CAUSE OF INJURY CODES

1	Exposed to fire products, such as flame, heat, smoke, or gas.
2	Exposed to hazardous materials or toxic fumes other than smoke.
3	Jumped in escape attempt.
4	Fell, slipped, or tripped.
5	Caught or trapped.
6	Structural collapse.
7	Struck by or contact with object. Includes assaults by persons or animals.
8	Overexertion or strain.
9	Multiple causes.
0	Cause of injury, other.
U	Undetermined.

SECTION J

J Human Factors Contributing to Injury

☞ *Human Factors Contributing to Injury* was known as *Condition Before Injury* in NFIRS 4.1.

Definition

The physical or mental state of the person before becoming a casualty.

Purpose

One purpose for understanding the human factors that contributed to the injury is to design programs that specifically deal with the problems either through education or by reengineering the environment.

Entry

Check or mark all applicable boxes describing the human factors that contributed to this person's injury. If no preexisting human factors contributed to the injury, check or mark the None box.

Example

A disabled man (6) was asleep (1) in a wheelchair when the fire trapped him in the room:

J Human Factors Contributing to Injury ☐ None

Check all applicable boxes

1 ☒ Asleep
2 ☐ Unconscious
3 ☐ Possibly impaired by alcohol
4 ☐ Possibly impaired by other drug
5 ☐ Possibly mentally disabled
6 ☒ Physically disabled
7 ☐ Physically restrained
8 ☐ Unattended person

HUMAN FACTORS CONTRIBUTING TO INJURY CODES

1	Asleep, no known impairment.
2	Unconscious.
3	Possibly impaired by alcohol.
4	Possibly impaired by other drug or chemical.
5	Possibly mentally disabled.
6	Physically disabled. Includes temporary conditions or overexertion.
7	Physically restrained.
8	Unattended or unsupervised person. Includes persons too young/old to act.
N	None.

SECTION K

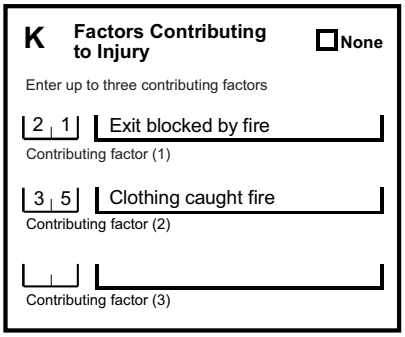
K Factors Contributing to Injury

Definition
The most significant factors contributing to the injury of the casualty.

Purpose
This additional information on how an injury occurred can help in targeting fire prevention programs and checking the adequacy and enforcement of codes. For example, if many casualties resulted from illegally locked window bars, inspection practices might need to be reviewed.

Entry
Enter the two-digit code and description for up to three factors that best describe the contributions to the injury. If no factors were involved, check or mark the None box.

Example
The casualty was injured because the exits were blocked by fire (21) and his clothing caught fire (35) while he was trying to escape:



FACTORS CONTRIBUTING TO INJURY CODES

Egress Problem

11 Crowd situation, limited exits.
12 Mechanical obstacles to exit. Includes items blocking exit.
13 Locked exit or other problem with exit.
14 Problem with quick-release burglar or security bar.
15 Burglar or security bar, intrusion barrier.
16 Window type or size impeded egress.
10 Egress problem, other.

Fire Pattern

21 Exits blocked by flame.
22 Exits blocked by smoke.
23 Vision blocked or impaired by smoke.
24 Trapped above fire.

25 Trapped below fire.
20 Fire pattern, other.

Escape
31 Unfamiliar with exits.
32 Excessive travel distance to nearest clear exit.
33 Chose inappropriate exit route.
34 Re-entered building.
35 Clothing caught fire while escaping. Excludes clothing on a person intimately involved with ignition (91).
30 Escape, other.

Collapse
40 Collapse, other.
41 Roof collapse.
42 Wall collapse.
43 Floor collapse.

Vehicle-Related Factors
51 Trapped in/by vehicle.
52 Vehicle collision, rollover.
50 Vehicle-related, other.

Equipment-Related Factors
61 Unvented heating equipment.
62 Improper use of heating equipment.
63 Improper use of cooking equipment.
60 Equipment-related factors, other.

Other Special Factors
91 Clothing burned, not while escaping. Includes clothing on a person intimately involved with ignition. Excludes clothing that caught fire while escaping (35).
92 Overexertion.
00 Factor contributing to injury, other.
NN None.

SECTION L

L

Activity When Injured

☞ *Activity When Injured* was known as *Activity at Time of Injury* in NFIRS 4.1.

Definition
The action or activity in which the person was engaged at the time of the injury.

Purpose
This element identifies the situations when people are injured most frequently so that public education programs can be targeted at reducing fire injuries.

Entry
Check or mark the box that best describes the activity of the casualty when injured.

Example
A person was injured while trying to control the fire (3):

L Activity When Injured

- 1 ☐ Escaping
- 2 ☐ Rescue attempt
- 3 ☒ Fire control
- 4 ☐ Return to fire before control
- 5 ☐ Return to fire after control
- 6 ☐ Sleeping
- 7 ☐ Unable to act
- 8 ☐ Irrational act
- 0 ☐ Other
- U ☐ Undetermined

ACTIVITY WHEN INJURED CODES

1	Escaping.
2	Rescue attempt.
3	Fire control.
4	Returning to vicinity of fire before control of fire. Excludes rescue attempt (2).
5	Returning to vicinity of fire after control of fire. Includes cleanup and salvage.
6	Sleeping.
7	Unable to act.
8	Irrational act.
0	Activity, other.
U	Undetermined.

SECTION M

This section captures the relationship between the location of a casualty at the time of the incident, location of the origin of the fire, and whether the casualty was intimately involved with the ignition of the fire.

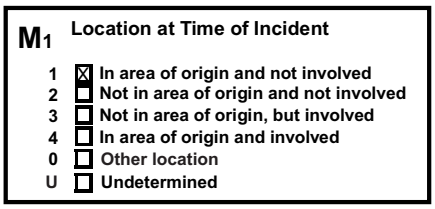
M1 Location at Time of Incident

Definition
The location of the casualty in relationship to the area of fire origin *at the time the fire started.*

Purpose
This element provides specific information on how the injury occurred. This can be helpful in directing public education efforts and injury prevention.

Entry
Check or mark the box that best describes the location of the casualty in relation to the area of fire origin and whether the casualty was involved with the ignition at the time the fire started.

Example
The casualty was in the area of the fire origin and was not involved in the ignition of the fire (1):



LOCATION AT TIME OF INCIDENT CODES

1	In area of origin and not involved in starting the fire.
2	Not in area of origin and not involved in starting the fire.
3	Not in area of origin, but involved in starting the fire.
4	In area of ignition and involved in starting the fire.
0	Other location.
U	Undetermined.

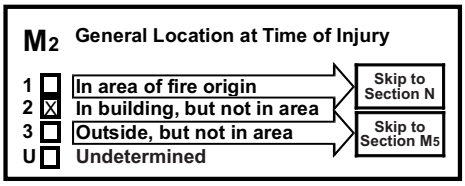
M2 General Location at Time of Injury

Definition
The general location of the casualty in relationship to the area of fire origin *at the time the injury was sustained.*

Purpose
This element provides more information on how the injury occurred and the relationship of the ignition to the casualty location at time of injury and at the time of ignition.

Entry
Check or mark the box that best describes the casualty's general location at the time of injury. If Code "1" or "U" is marked, skip to Section N. If Code "3" is marked, skip to Block M5. If the general location is undetermined, leave this block blank and skip to Section N.

Example
The casualty was in the building, but not in the area of origin (2):



GENERAL LOCATION AT TIME OF INJURY CODES

1	In area of fire origin, whether that is inside or outside a building.
2	In building of origin, but not in area of origin.
3	Outside, but not in area of origin.
U	Undetermined.

M3 Story at Start of Incident

Definition
Identifies the story where the casualty was located at the start of the incident.

Purpose
Providing information on the physical separation between the person injured and the area of origin at the start of the fire can be helpful in assessing the adequacy of exits.

Entry
If the injury occurred inside a structure, enter the story where the casualty was located at the start of the incident. If the story is below grade, check or mark the Below Grade box.

☞ For split grades, consider the main egress point as the first story.

☞ Checking or marking the Below Grade box has the effect of entering a negative number in NFIRS 5.0.

Example
The casualty was on the fifth story at the start of the incident:

M4 Story Where Injury Occurred

Definition
Identifies the story where the casualty was located when the injury occurred.

Purpose
This element provides more information on how far the casualty was from the area of origin when the injury occurred. This can be helpful in assessing the adequacy of detection, alarm, and exit systems as well as assisting in code enforcement.

Entry
If the injury occurred in a structure and the person was on a story different from that in Block M3, enter the story where the injury occurred. If the story is below grade, check or mark the Below Grade box.

Example
The injury occurred on the third story:

M4 Story Where Injury Occurred
Story where injury occurred, if different from M3 | 3 | ☐ Below grade

M5 Specific Location at Time of Injury

☞ *Specific Location at Time of Injury* was known as *Area of Fire Origin* in NFIRS 4.1.

Definition
Identifies the specific location of the casualty at the time of the injury.

Purpose
This element provides more information on how the injury occurred.

Entry
If the injury did not occur in the area of fire origin, enter the two-digit code and description that best describes the specific location or area where the casualty was located when injured.

Example
The casualty occurred in the maintenance shop of the factory (65):

M5 Specific Location at Time of Injury
Complete ONLY if casualty NOT in area of origin
| 6 5 | Maintenance Shop |
Specific location at time of injury

☞ An alphabetized synonym list for Specific Location at Time of Injury Codes is presented in Appendix B.

SPECIFIC LOCATION AT TIME OF INJURY CODES

Means of Egress

01 Hallway corridor, mall.
02 Exterior stairway. Includes fire escapes, exterior ramps.
03 Interior stairway or ramp. Includes interior ramps.
04 Escalator: exterior, interior.
05 Entranceway, lobby.
09 Egress/exit, other.

Assembly or Sales Areas (Groups of People)

11 Arena, assembly area with fixed seats for 100 or more people. Includes auditoriums, chapels, places of worship, classrooms, lecture halls, arenas, theaters.
12 Assembly area without fixed seats for 100 or more people. Includes ballrooms, bowling alleys, gymnasiums, multiuse areas, roller or ice skating rinks.
13 Assembly area without fixed seats for less than 100 people. Includes meeting rooms, classrooms, multiuse areas.
14 Common room, den, family room, living room, lounge, music room, recreation room, sitting room.

15 Sales area, showroom. Excludes display windows (56).
16 Art gallery, exhibit hall, library.
17 Swimming pool.
10 Assembly or sales areas, other.

Function Areas

21 Bedroom for less than five people. Includes jail or prison cells, lockups, patient rooms, sleeping areas.
22 Bedroom for more than five people. Includes barracks, dormitories, patient wards.
23 Bar area, beverage service area, cafeteria, canteen area, dining room, lunchroom, mess hall.
24 Cooking area, kitchen.
25 Bathroom, checkroom, lavatory, locker room, powder room, outhouse, portable toilet, sauna area.
26 Laundry area, wash house (laundry).
27 Office.
28 Personal service area. Includes barber/beauty salon area, exercise/health club, massage area.
20 Function areas, other.

Technical Processing Areas

31 Laboratory.
32 Dark room, photography area, printing area.
33 Treatment: first-aid area, surgery area (minor procedures).
34 Surgery area: major operations, operating room or theater, recovery room.
35 Computer room, control room or center, data processing center, electronic equipment area, telephone booth or area, radar room.
36 Stage area: performance, basketball court, boxing ring, dressing room (backstage), ice rink.
37 Projection room, spotlight area, stage light area.
38 Processing/manufacturing area, workroom, assembly area.
30 Technical processing areas, other.

Storage Areas

41 Storage room, area, tank, bin. Includes all areas where products are held awaiting process, shipment, use, sale.
42 Closet.
43 Storage: supplies or tools. Includes dead storage, maintenance supply room, tool room, basement (unfinished).
44 Records storage room, storage vault.
45 Shipping/receiving area: loading area, dock or bay, mail room, packing area.
46 Chute/container: trash, rubbish, waste. Includes compactor and garbage areas. Excludes incinerators (64).
47 Vehicle storage area: garage, carport.
40 Storage areas, other.

Service Areas

51 Dumbwaiter or elevator shaft.
52 Conduit, pipe, utility, or ventilation shaft.
53 Light shaft.
54 Chute. Includes laundry or mail chutes. Excludes trash chutes (46).
55 Duct. Includes HVAC, cable, exhaust.
56 Display window.
58 Conveyor.
50 Service areas, other.

Service or Equipment Areas

61 Machinery room or area. Includes elevator machinery room, engine room, head house, pump room, refrigeration room.
62 Heating room or area, water heater area.
63 Switchgear area, transformer vault.
64 Incinerator area.
65 Maintenance shop or area. Includes paint shop, repair shop, welding area, workshop.
66 Cell, test.
67 Enclosure, pressurized air.
68 Enclosure with enriched oxygen atmosphere.
60 Service or equipment areas, other.

Structural Areas

71 Substructure area or space, crawl space.
72 Exterior balcony, unenclosed porch. Excludes enclosed porches (93)
73 Ceiling and floor assembly, crawl space between stories.
74 Attic: vacant, crawl space above top story. Includes cupola, concealed roof/ceiling space, steeple.
75 Wall assembly, concealed wall space.
76 Wall surface, exterior.
77 Roof surface, exterior.
78 Awning.
70 Structural areas, other.

Transportation, Vehicle Areas

81 Operator/passenger area of transportation equipment.
82 Cargo/trunk area—all vehicles.
83 Engine area, running gear, wheel area.
84 Fuel tank, fuel line.
85 Separate operator/control area of transportation equipment. Includes bridges of ships, cockpit of planes. Excludes automobile, trucks, buses (81).
86 Exterior, exposed surface.
80 Vehicle areas, other.

Outside Areas

91 Railroad right-of-way: on or near.
92 Highway, parking lot, street: on or near.
93 Courtyard, patio, terrace. Includes screened-in porches. Excludes unenclosed porches (72).
94 Open area, outside. Includes farmland, fields, lawns, parks, vacant lots.
95 Wildland, woods.
96 Construction/renovation area.
97 Multiple areas.
98 Vacant structural area.
90 Outside areas, other.

Other Specific Area of Fire Origin

00 Specific area of fire origin, other.
UU Undetermined.

SECTION N

N

Primary Apparent Symptom

Definition

The casualty's most serious apparent injury.

Purpose

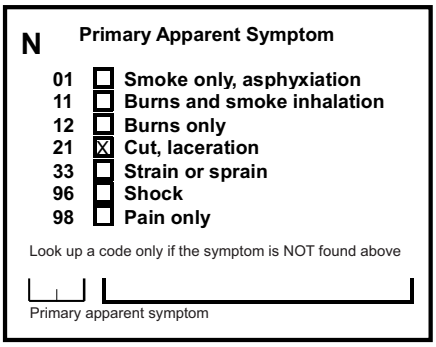
Knowing the types of injuries caused by fire incidents allows analyses of the frequency and nature of injuries at different types of fires. This aids in creating correct and effective public prevention messages and in determining and improving the emergency responders' equipment and training.

Entry

Seven of the most common symptoms are listed on the paper form. Check or mark the box that best describes the casualty's most apparent serious injury. If the symptom is not listed on the paper form, enter the two-digit code and description that best describes the primary apparent symptom.

Example

The casualty received a cut (21) to the forearm:



N Primary Apparent Symptom

- 01 ☐ Smoke only, asphyxiation
- 11 ☐ Burns and smoke inhalation
- 12 ☐ Burns only
- 21 ☒ Cut, laceration
- 33 ☐ Strain or sprain
- 96 ☐ Shock
- 98 ☐ Pain only

Look up a code only if the symptom is NOT found above

Primary apparent symptom

PRIMARY APPARENT SYMPTOM CODES

01	Smoke inhalation.
02	Hazardous fumes inhalation.
03	Breathing difficulty or shortness of breath.
11	Burns and smoke inhalation.
12	Burns only, thermal
13	Burn, scald.
14	Burn, chemical
15	Burn, electric.
21	Cut or laceration.
22	Stab or puncture wound: penetrating.
23	Gunshot wound, projectile wound.
24	Contusion/bruise, minor trauma.
25	Abrasion.

31 Dislocation.
32 Fracture.
33 Strain or sprain.
34 Swelling.
35 Crushing.
36 Amputation.
41 Cardiac symptoms.
42 Cardiac arrest.
43 Stroke.
44 Respiratory arrest.
51 Chills.
52 Fever.
53 Nausea.
54 Vomiting.
55 Numbness or tingling, paresthesia.
56 Paralysis.
57 Frostbite.
50 Sickness, other.
61 Miscarriage.
63 Eye trauma, avulsion.
64 Drowning.
65 Foreign body obstruction.
66 Electric shock.
67 Poison.
71 Convulsion or seizure.
72 Internal trauma.
73 Hemorrhaging, bleeding internally.
81 Disorientation.
82 Dizziness/fainting/weakness.
83 Exhaustion/fatigue. Includes heat exhaustion.
84 Heat stroke.
85 Dehydration.
91 Allergic reaction. Includes anaphylactic shock and hypersensitivity to medication.
92 Drug overdose.
93 Alcohol impairment.
94 Emotional/psychological stress.
95 Mental disorder.
96 Shock.
97 Unconscious.
98 Pain only.
00 Primary apparent symptom, other.
UU Undetermined.

SECTION O

O Primary Area of Body Injured

Definition

The part of the body that sustained the most serious injury.

Purpose
An analysis of the data from Sections L, N, and O will assist in planning for the emergency treatment of injuries and for injury prevention.

Entry
Check or mark the box that best describes the area of the body that was most seriously injured. It should be the same part of the body affected by the Primary Apparent Symptom (Section N).

Example
The casualty's shoulder (2) was dislocated while escaping the burning building:

O Primary Area of Body Injured

1 ☐ Head
2 ☒ Neck and shoulder
3 ☐ Thorax
4 ☐ Abdomen
5 ☐ Spine
6 ☐ Upper extremities
7 ☐ Lower extremities
8 ☐ Internal
9 ☐ Multiple body parts

PRIMARY AREA OF BODY INJURED CODES

1 Head.
2 Neck or shoulder.
3 Thorax. Includes chest and back. Excludes spine (5).
4 Abdomen.
5 Spine. Excludes back (3).
6 Upper extremities. Includes arms and hands.
7 Lower extremities. Includes legs and feet.
8 Internal.
9 Multiple body parts.

SECTION P

P Disposition

Definition
Stipulates whether the casualty was taken to an emergency care facility.

Purpose
This information assists in determining the personnel and equipment requirements for handling civilian fire casualties.

Entry
Check or mark the box if the casualty was transported to an emergency care facility by the fire department, other emergency medical service provider, or any other means.

Example
The patient was transported to the hospital by the fire department:

P **Disposition**

☒ **Transported to emergency care facility**

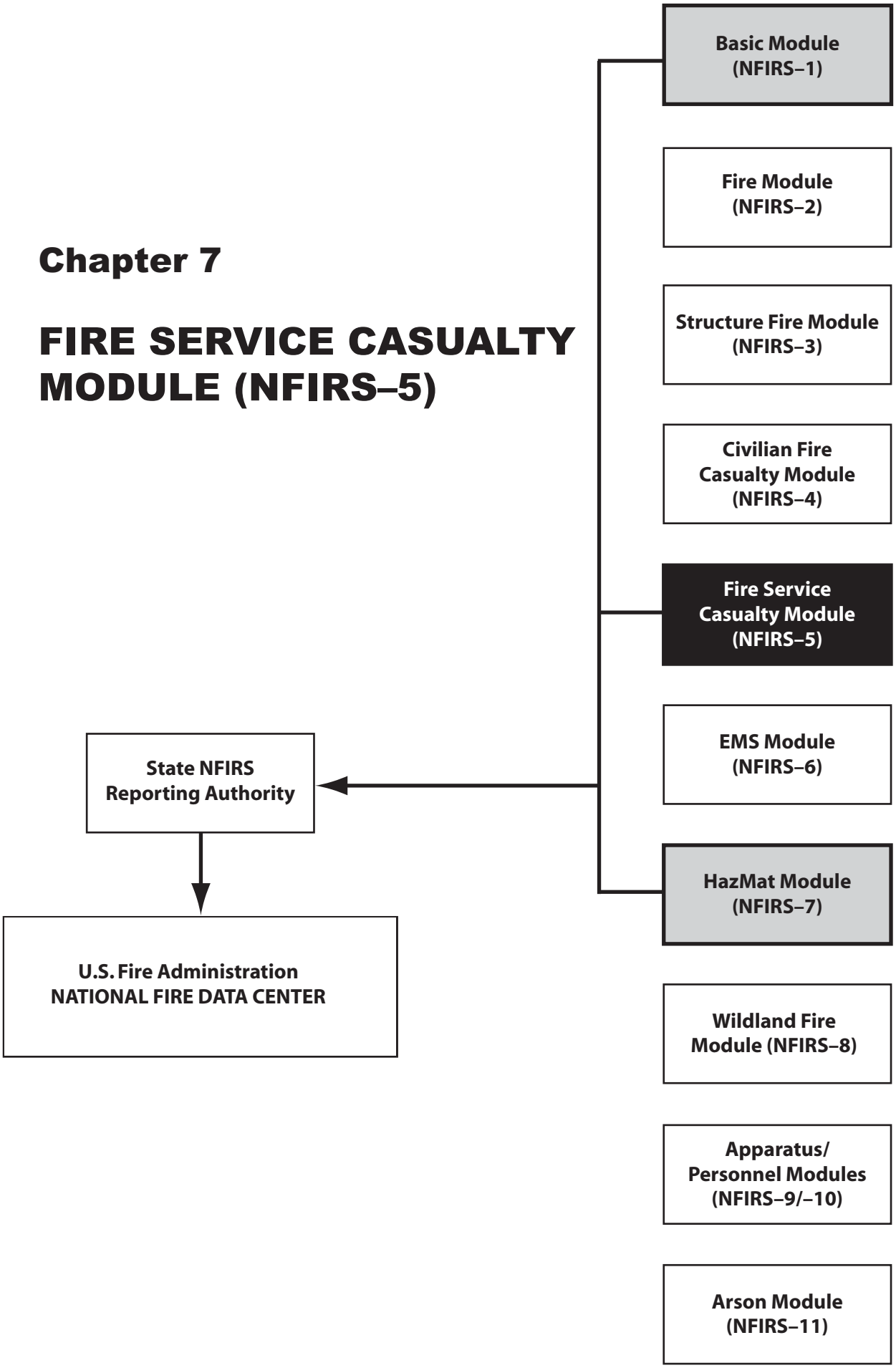
Remarks

The Remarks section is an area for any other remarks that might be made concerning the incident. A narrative description of the incident may be written in this block.

Remarks Local option

Chapter 7

FIRE SERVICE CASUALTY MODULE (NFIRS–5)



A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | ☐ Delete ☐ Change

NFIRS–5 Fire Service Casualty

B Injured Person

Identification Number | 1 ☐ Male ☆ 2 ☐ Female | 1 ☐ Career 2 ☐ Volunteer

First Name | MI | Last Name | Suffix

C Casualty Number ☆

Casualty Number

D Age or Date of Birth ☆

Age: In years — OR — Date of Birth: Month, Day, Year

E Date and Time of Injury ☆ Midnight is 0000.

Date of Injury: Month, Day, Year — Time of Injury: Hour, Minute

F Responses

Number of prior responses during past 24 hours

G1 Usual Assignment

1 ☐ Suppression
2 ☐ EMS
3 ☐ Prevention
4 ☐ Training
5 ☐ Maintenance
6 ☐ Communications
7 ☐ Administration
8 ☐ Fire investigation
0 ☐ Other

G2 Physical Condition Just Prior to Injury

1 ☐ Rested
2 ☐ Fatigued
4 ☐ Ill or injured
0 ☐ Other
U ☐ Undetermined

G3 Severity

1 ☐ Report only, including exposure
2 ☐ First aid only
3 ☐ Treated by physician (no lost time)
4 ☐ Moderate (lost time)
5 ☐ Severe (lost time)
6 ☐ Life threatening (lost time)
7 ☐ Death

G4 Taken To ☐ Not transported

1 ☐ Hospital
4 ☐ Doctor's office
5 ☐ Morgue/funeral home
6 ☐ Residence
7 ☐ Station or quarters
0 ☐ Other

G5 Activity at Time of Injury

Activity at time of injury

H1 Primary Apparent Symptom

Primary apparent symptom

H2 Primary Part of Body Injured ☐ None

Primary injured body part

I1 Cause of Firefighter Injury

Cause of injury

I2 Factor Contributing to Injury ☐ None

Contributing factor

I3 Object Involved in Injury ☐ None

Object involved in injury

J1 Where Injury Occurred

1 ☐ En route to FD location
2 ☐ At FD location
3 ☐ En route to incident scene
4 ☐ En route to medical facility
5 ☐ At scene in structure
6 ☐ At scene outside
7 ☐ At medical facility
8 ☐ Returning from incident
9 ☐ Returning from med facility
0 ☐ Other
U ☐ Undetermined

J2 Story Where Injury Occurred

1 ☐ Check this box and enter the story if the injury occurred inside or on a structure

Story of injury ☐ Below grade

2 ☐ Injury occurred outside

J3 Specific Location Where Injury Occurred

65 ☐ In aircraft
64 ☐ In boat, ship, or barge
63 ☐ In rail vehicle
61 ☐ In motor vehicle
54 ☐ In sewer
53 ☐ In tunnel
49 ☐ In structure
45 ☐ In attic
36 ☐ In water
35 ☐ In well
34 ☐ In ravine
33 ☐ In quarry or mine
32 ☐ In ditch or trench
31 ☐ In open pit
28 ☐ On steep grade
27 ☐ On fire escape/outside stairs
26 ☐ On vertical surface or ledge
25 ☐ On ground ladder
24 ☐ On aerial ladder or in basket
23 ☐ On roof
22 ☐ Outside at grade

Complete Block J4

00 ☐ Other
UU ☐ Undetermined

J4 Vehicle Type

Complete ONLY if Specific Location code is >60

1 ☐ Suppression vehicle
2 ☐ EMS vehicle
3 ☐ Other FD vehicle
4 ☐ Non-FD vehicle

Remarks

If protective equipment failed and was a factor in this injury, please complete the other side of this form.

NFIRS–5 Revision 01/01/04

K1 Did protective equipment fail and contribute to the injury?
Please complete the remainder of this form ONLY if you answer YES.

Yes Y ☐
No N ☐

Equipment Sequence Number

NFIRS–5 Fire Service Casualty

K2 Protective Equipment Item

Head or Face Protection

- 11 ☐ Helmet
- 12 ☐ Full face protector
- 13 ☐ Partial face protector
- 14 ☐ Goggles/eye protection
- 15 ☐ Hood
- 16 ☐ Ear protector
- 17 ☐ Neck protector
- 10 ☐ Other

Coat, Shirt, or Trousers

- 21 ☐ Protective coat
- 22 ☐ Protective trousers
- 23 ☐ Uniform shirt
- 24 ☐ Uniform T-shirt
- 25 ☐ Uniform trousers
- 26 ☐ Uniform coat or jacket
- 27 ☐ Coveralls
- 28 ☐ Apron or gown
- 20 ☐ Other

Boots or Shoes

- 31 ☐ Knee length boots with steel baseplate and steel toes
- 32 ☐ Knee length boots with steel toes only
- 33 ☐ 3/4 length boots with steel baseplate and steel toes
- 34 ☐ 3/4 length boots with steel toes only
- 35 ☐ Boots without steel baseplate and steel toes
- 36 ☐ Safety shoes with steel baseplate and steel toes
- 37 ☐ Safety shoes with steel toes only
- 38 ☐ Non-safety shoes
- 30 ☐ Other

Respiratory Protection

- 41 ☐ SCBA (demand) open circuit
- 42 ☐ SCBA (positive pressure) open circuit
- 43 ☐ SCBA closed circuit
- 44 ☐ Not self-contained
- 45 ☐ Cartridge respirator
- 46 ☐ Dust or particle mask
- 40 ☐ Other

Hand Protection

- 51 ☐ Firefighter gloves with wristlets
- 52 ☐ Firefighter gloves without wristlets
- 53 ☐ Work gloves
- 54 ☐ HazMat gloves
- 55 ☐ Medical gloves
- 50 ☐ Other

Special Equipment

- 61 ☐ Proximity suit for entry
- 62 ☐ Proximity suit for non-entry
- 63 ☐ Totally encapsulated, reusable chemical suit
- 64 ☐ Totally encapsulated, disposable chemical suit
- 65 ☐ Partially encapsulated, reusable chemical suit
- 66 ☐ Partially encapsulated, disposable chemical suit
- 67 ☐ Flash protection suit
- 68 ☐ Flight or jump suit
- 69 ☐ Brush suit
- 71 ☐ Exposure suit
- 72 ☐ Self-contained underwater breathing apparatus (SCUBA)
- 73 ☐ Life preserver
- 74 ☐ Life belt or ladder belt
- 75 ☐ Personal alert safety system (PASS)
- 76 ☐ Radio distress device
- 77 ☐ Personal lighting
- 78 ☐ Fire shelter or tent
- 79 ☐ Vehicle safety belt
- 70 ☐ Special equipment, other
- 00 ☐ Protective equipment, other

Was the failure of more than one item of protective equipment a factor in the injury? If so, complete an additional page of this form for each piece of failed equipment.

K3 Protective Equipment Problem

Check one box to indicate the main problem that occurred.

- 11 ☐ Burned
- 12 ☐ Melted
- 21 ☐ Fractured, cracked or broken
- 22 ☐ Punctured
- 23 ☐ Scratched
- 24 ☐ Knocked off
- 25 ☐ Cut or ripped
- 31 ☐ Trapped steam or hazardous gas
- 32 ☐ Insufficient insulation
- 33 ☐ Object fell in or onto equipment item
- 41 ☐ Failed under impact
- 42 ☐ Face piece or hose detached
- 43 ☐ Exhalation valve inoperative or damaged
- 44 ☐ Harness detached or separated
- 45 ☐ Regulator failed to operate
- 46 ☐ Regulator damaged by contact
- 47 ☐ Problem with admissions valve
- 48 ☐ Alarm failed to operate
- 49 ☐ Alarm damaged by contact
- 51 ☐ Supply cylinder or valve failed to operate
- 52 ☐ Supply cylinder/valve damaged by contact
- 53 ☐ Supply cylinder—insufficient air/oxygen
- 94 ☐ Did not fit properly
- 95 ☐ Not properly serviced or stored prior to use
- 96 ☐ Not used for designed purpose
- 97 ☐ Not used as recommended by manufacturer
- 00 ☐ Other equipment problem
- UU ☐ Undetermined

K4 Equipment Manufacturer, Model and Serial Number

Manufacturer

Model

Serial Number

NFIRS–5 Revision 05/01/03

CHAPTER 7

FIRE SERVICE CASUALTY MODULE (NFIRS–5)

The Fire Service Casualty Module is used to report all injuries, deaths, or exposures to fire service personnel. This includes casualties that occur in conjunction both with incident responses and with non-incident events such as station duties or training.

☞ *Important:* In the event of a non-incident casualty, it is critical that an EMS incident report is created in the system and that it is treated as if the same department with the injury responded to the EMS.

A *health exposure* occurs when fire service personnel come in contact with a toxic substance or harmful physical agent through any route of entry into the body (e.g., inhalation, ingestion, skin absorption, direct contact). These exposures can be reported regardless of the presence of clinical signs and symptoms. *An exposure fire, which is captured in Section A of the Basic Module, is not the same as a health exposure to personnel.*

A separate Fire Service Casualty Module is required for each casualty or health exposure.

SECTION A

The guidance and directions for completing Section A of the Fire Service Casualty Module are the same as for Section A in the Basic Module. It is stressed that the entries in Section A of the Fire Service Casualty Module must be identical with the entries on the corresponding Basic Module. If injuries occur in an exposure fire, the casualty report should have the same entries as those from Section A of the Basic Module for that exposure fire. An example of a completed Section A can be found on page 3–8.

A

Fire Department Identification (FDID) ☆

Entry
Enter the same FDID number found in Section A of the Basic Module.

State ☆

Entry
Enter the same state abbreviation found in Section A of the Basic Module.

Incident Date ☆

Entry
Enter the same incident date found in Section A of the Basic Module.

Station Number

Entry
Enter the same station number found in Section A of the Basic Module.

Incident Number ☆

Entry
Enter the same incident number found in Section A of the Basic Module.

Exposure Number ☆

Entry
If the casualty resulted from an exposure fire, enter the same exposure number that was entered in Section A of the Basic Module for that exposure.

Delete/Change

Definition
Indicates a change to information submitted on a previous Fire Service Casualty Module or a deletion of all information regarding the casualty.

Purpose
To delete or change previously reported information.

Entry
Delete. Check or mark this box when you have previously submitted data on this fire service casualty and now want to have the data on this casualty deleted from the database. If this box is marked, complete Section A, the Casualty Number originally assigned (Section C), and leave the rest of the report blank. Forward the report according to your normally established procedures.

Change. Check or mark this box only if you previously submitted this fire incident to your state reporting authority and now want to update or change the information in the state database. Complete Section A and any other sections or blocks that need to be updated or corrected. If you need to blank a field that contains data, you must resubmit the original module containing the newly blanked field along with all the other original information in the module for that incident. This action is required only when sending an updated module to your state reporting authority. Forward the report according to your normally established procedures.

SECTION B

B

Injured Person ☆

Name

Definition
The first name, middle initial, and last name that identifies the fire service casualty.

Purpose
The name of the casualty may be required for legal or insurance purposes, filing disability claims, and tracking injuries and health exposures by the individual fire department

Entry
Enter the full name of the person. Names should be clearly printed or typed.

Example
The casualty's name is Jeff R. MacFadyen. (see example at Affiliation.)

Identification Number

Definition
The identification or employee number of the fire service casualty. This number is often the individual's social security number, but it may be any combination of letters or numbers up to nine characters in length.

Purpose
The identification number uniquely identifies each fire service casualty.

Entry
Enter the casualty's identification number in the spaces provided. This field is left-justified.

Example
The firefighter's identification number is A23–4556–6789. (See example at Affiliation).

Gender ☆

Definition
The identification of the fire service casualty as male or female.

Purpose
Combined with other field information, this data element assists in the identification of each firefighter injury.

Entry
Check or mark the appropriate gender of the fire service casualty.

Example
The firefighter is male (1). (See example at Affiliation.)

GENDER CODES

1 Male.
2 Female.

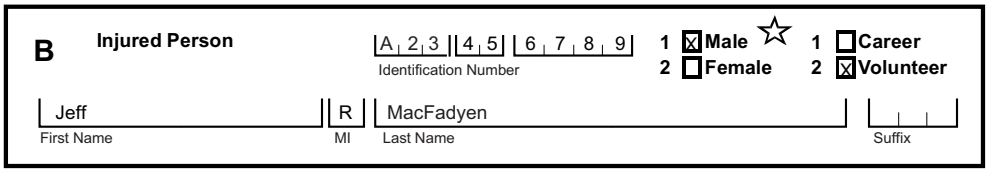
Affiliation

Definition
The identification of the fire service casualty as a volunteer (includes paid on-call) or career firefighter at the time of injury.

Purpose
This data element contributes to the identification of the fire service casualty and helps track injury trends and patterns of volunteer vs. career personnel.

Entry
Check or mark the box that best describes the affiliation of the fire service casualty.

Example
The casualty is a volunteer firefighter (2):



AFFILIATION CODES

1 Career.
2 Volunteer. Includes paid on-call firefighter.

SECTION C

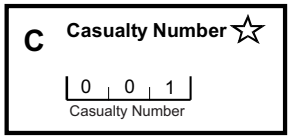
Casualty Number ☆

Definition
A unique number is assigned to each fire service casualty occurring at a single incident or resulting from an incident.

Purpose
The casualty number of the firefighter identifies each fire service casualty separately in the casualty file. Data and information concerning the casualty can be accessed using this number in conjunction with other unique field information.

Entry
Enter the firefighter casualty number assigned to this casualty. A separate Casualty Number is assigned to each fire service casualty. The first casualty is always coded “001,” and each succeeding casualty is numbered sequentially and incremented by 1 beginning with “002.” The three-character numeric field is zero filled, not right justified.

Example
Three firefighters were injured at a warehouse fire on 32nd street; the first firefighter injured is assigned the casualty number of 001:



SECTION D

D

Age or Date of Birth ☆

Enter either the fire service casualty’s age or the casualty’s date of birth. Do not enter both.

Age ☆

Definition
The fire service casualty’s age in years.

Purpose
The age of the fire service casualty provides an indication of fire loss. Age can also be used to indicate type, severity, and cause of injury to identify trends and patterns that might be helpful in preventing future firefighter injuries and deaths.

Entry
Enter the age of the firefighter.

Example
The injured firefighter is 39 years old:

D Age or Date of Birth ☆

Age: 3 9 (In years) OR Date of Birth: Month Day Year

Date of Birth ☆

Definition
The month, day, and year of birth of the fire service casualty.

Purpose
This data element is an alternative entry for Age. It can provide an indication of fire loss, and can be used to indicate type, severity, and cause of injury to identify trends and patterns that might be helpful in preventing future firefighter injuries and deaths.

☞ This data element is used as an alternate method for calculating the casualty's age. Age is collected in NFIRS but Date of Birth is not.

Entry
Enter the date of birth showing the month, day, and year (mm/dd/yyyy).

Example
The fire service casualty was born on August 5, 1959:

D Age or Date of Birth ☆

Age: (In years) OR Date of Birth: 0 8 (Month) 0 5 (Day) 1 9 5 9 (Year)

SECTION E

E

Date and Time of Injury ☆

Date ☆

Entry
If the injury date is the same as the Incident Date in Section A, enter the same date as the Alarm date entry in Block E1 of the Basic Module. If different, enter the appropriate month, day, and year (mm/dd/yyyy). (See example at Time.)

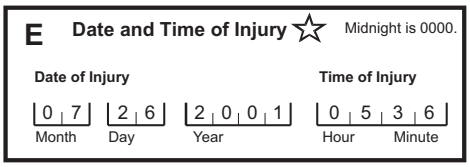
Time ☆

Definition
The time of day, using the 24-hour clock, when the injury occurred. Midnight is 0000 and signifies the start of a new day.

Purpose
This information is sometimes needed for legal or insurance purposes. In addition, it may be used to analyze when firefighter injuries occur during the course of a fire and during fire suppression activities.

Entry
Enter as closely as possible the time when the injury occurred using the 24-hour clock (i.e., 0000–2359).

Example
A firefighter received a burn on his back and hip at 5:36 a.m. on July 26, 2001:



SECTION F

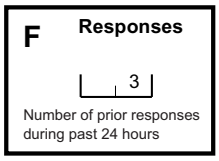
F Responses

Definition
The number of incidents the firefighter responded to in the 24-hour period prior to the time of injury.

Purpose
The number of incidences that a firefighter responds to in a short period of time, when analyzed with the other casualty data, can be a useful indicator for identifying possible reasons for the injury or death. This is useful in determining cases of fatigue and cumulative exposure to heat and gases, which may have contributed to the injury.

Entry
Enter the number of incidents responded to by the firefighter in the immediate 24-hour period prior to the time of injury. Do not count the incident at which the injury occurred.

Example
The fire service casualty had been on three other calls prior to the injury.



SECTION G

This section collects information pertaining to the injured firefighter's assignment, physical condition before the injury, the severity of the injury, where the injury was treated, and the activity being performed when injured.

G1 Usual Assignment

☞ *Usual Assignment* was known as *Assignment* in NFIRS 4.1.

Definition

This element describes the official assignment of the fire service casualty. This may not coincide with the firefighter's activity at the time of injury (Block G5).

Purpose

When analyzed with the other firefighter casualty data, the duty to which the firefighter was assigned can be used to identify possible reasons for injury or death.

Entry

Check or mark the box that best describes the primary duty assignment of the injured firefighter.

Example

The injured firefighter is normally assigned to the training division (4):

G1 Usual Assignment

- 1 ☐ Suppression
- 2 ☐ EMS
- 3 ☐ Prevention
- 4 ☒ Training
- 5 ☐ Maintenance
- 6 ☐ Communications
- 7 ☐ Administration
- 8 ☐ Fire investigation
- 0 ☐ Other

USUAL ASSIGNMENT CODES

1	Fire suppression. Includes HazMat, rescue, incident command, and safety.
2	EMS.
3	Prevention or inspection.
4	Training.
5	Maintenance.
6	Communications. Includes fire alarm.
7	Administration.
8	Fire investigation.
0	Other assignment.

G2 Physical Condition Just Prior to Injury

☞ *Physical Condition Just Prior to Injury* was known as *Physical Condition at Time of Injury* in NFIRS 4.1.

Definition

The general physical condition of the firefighter prior to injury.

Purpose

The condition of the firefighter at the time of injury is important in determining and understanding how and why the injuries occurred.

Entry

Check or mark the box that best describes the physical condition of the firefighter at the time of injury.

Example

A firefighter was injured while under treatment for a cold (4):

G2 Physical Condition Just Prior to Injury

1	☐	Rested	0	☐	Other
2	☐	Fatigued	U	☐	Undetermined
4	☒	Ill or injured			

PHYSICAL CONDITION JUST PRIOR TO INJURY CODES

1	Rested.
2	Fatigued.
4	Ill or injured.
0	Physical condition, other.
U	Undetermined.

G3 Severity

Definition

The relative severity or seriousness of the injury based on a scale ranging from “no time lost from work” to “death.”

Purpose

An indication of severity can be used as a measure for prevention programs aimed at reducing injuries and deaths. At the local level, this element can be used to track lost-time injuries.

Entry

Check or mark the box that best describes the severity of the casualty.

Example

The injured firefighter would not be able to go work the next day because of his injury (4):

G3	Severity	
1	☐	Report only, including exposure
2	☐	First aid only
3	☐	Treated by physician (no lost time)
4	☒	Moderate (lost time)
5	☐	Severe (lost time)
6	☐	Life threatening (lost time)
7	☐	Death

☞ A *health exposure* occurs when fire service personnel are exposed to a toxic substance or harmful physical agent through any route of entry into the body (e.g., inhalation, ingestion, skin absorption, direct contact). These exposures can be reported regardless of the presence of clinical signs and symptoms. Exposures are treated as "report only" (1).

SEVERITY CODES

1 Report only. Includes exposures to toxic substances or harmful physical agents through any route of entry into the body (e.g. inhalation, ingestion, skin absorption, direct contact).
2 First aid only.
3 Treated by physician, not a lost-time injury.
4 Moderate severity, lost-time injury. There is little danger of death or permanent disability.
5 Severe, lost-time injury. The situation is potentially life threatening if the condition remains uncontrolled.
6 Life threatening, lost-time injury. Death is imminent; body processes and vital signs are not normal.
7 Death.

G4 Taken To

☞ *Taken To* was known as *Patient Taken To* in NFIRS 4.1.

Definition
Identifies where the fire service casualty was taken after the injury occurred.

Purpose
This information is useful in determining the personnel and equipment requirements for handling fire service casualties.

Entry
Check or mark the box that best describes where the fire service casualty was taken, regardless of who transported the firefighter. If the firefighter was not transported, check or mark the Not Transported box.

Example
An injured firefighter was taken to the hospital (1):

G4 Taken To ☐ Not transported

1 ☒ Hospital
4 ☐ Doctor's office
5 ☐ Morgue/funeral home
6 ☐ Residence
7 ☐ Station or quarters
0 ☐ Other

TAKEN TO CODES

1	Hospital.
4	Doctor's office, non-emergency health care facility.
5	Morgue or funeral home.
6	Residence (firefighter's home).
7	Station or quarters.
0	Taken to, other
N	Not transported.

G5 Activity at Time of Injury

☞ *Activity at Time of Injury* was known as *Fire Fighter Activity* in NFIRS 4.1.

Definition
The activity being performed by the firefighter at the time the injury occurred.

Purpose
The activity at the time of injury is a prime factor in determining the cause of the injury and developing methods to minimize the hazards involved with that activity.

Entry
Enter the two-digit code and description of the activity of the casualty when injured.

Example
A firefighter was injured using power tools to ventilate the roof (42):

G5 Activity at Time of Injury

4 2 | Ventilating w/power tools
Activity at time of injury

ACTIVITY AT TIME OF INJURY CODES

Driving or Riding Vehicle

11	Boarding fire department vehicle.
12	Driving fire department vehicle.
13	Tillering fire department vehicle.
14	Riding fire department vehicle.
15	Exiting fire department vehicle.
16	Driving/riding non-fire department vehicle.
17	Boarding/exiting non-fire department vehicle.
10	Driving or riding vehicle, other.

Operating Fire Department Apparatus

21 Operating engine or pumper.
22 Operating aerial ladder or elevating platform.
23 Operating EMS vehicle.
24 Operating HazMat vehicle.
25 Operating rescue vehicle.
20 Operating fire department apparatus, other.

Extinguishing Fire or Neutralizing Incident

31 Handling charged hose lines.
32 Using hand extinguishers.
33 Operating master steam device.
34 Using handtools in extinguishment activity.
35 Removing power lines.
36 Removing flammable liquids/chemicals.
37 Shutting off utilities, gas lines, etc.
30 Extinguishing fire/neutralizing incident, other.

Suppression Support

41 Forcible entry.
42 Ventilation with power tools.
43 Ventilation with hand tools.
44 Salvage.
45 Overhaul.
40 Suppression support, other.

Access or Egress

51 Carrying ground ladder.
52 Raising ground ladder.
53 Lowering ground ladder.
54 Climbing ladder.
55 Scaling.
56 Escaping fire or hazard.
57 Moving/lifting patient with carrying device.
58 Moving/lifting patient without carrying device.
50 Access/egress, other.

EMS or Rescue

61 Searching for victim.
62 Rescuing fire victim.
63 Rescuing non-fire victim.
64 Water rescue.
65 Providing EMS care.
66 Diving operations.
67 Extraction with power tools.
68 Extraction with hand tools.
60 EMS/rescue, other.

Other Incident Scene Activity

71 Directing traffic.
72 Catching hydrant.
73 Laying hose.
74 Moving tools or equipment around scene.
75 Picking up tools, equipment, or hose on scene.
76 Setting up lighting. Includes portable generator operations.

77 Operating portable pump.
70 Other incident scene activity, other.

Station Activity
81 Moving about station, alarm sounding.
82 Moving about station, normal activity.
83 Station maintenance.
84 Vehicle maintenance.
85 Equipment maintenance.
86 Physical fitness activity, supervised.
87 Physical fitness activity, unsupervised.
88 Training activity or drill.
80 Station activity, other.

Other Activity
91 Incident investigation, during incident.
92 Incident investigation, after incident.
93 Inspection activity.
94 Administrative work.
95 Communications work.
00 Activity at time of injury, other.
UU Undetermined.

SECTION H

This section focuses on the injury itself—the symptom that appears to be the most serious and the part of the body that has been injured.

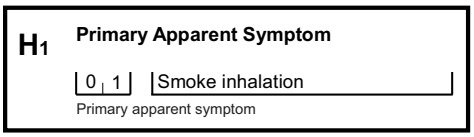
H1 Primary Apparent Symptom

Definition
The firefighter's most serious apparent injury.

Purpose
This entry, in conjunction with other related entries, can improve the understanding of the nature and cause of firefighter casualties and can aid in improving firefighter equipment and training needs. For example, large numbers of smoke inhalation injuries to firefighters would indicate a need to reevaluate the uses or adequacy of breathing apparatus.

Entry
Enter the two-digit code and description of the casualty's that appears to be the most serious.

Example
A firefighter is overcome by smoke (01):



PRIMARY APPARENT SYMPTOM CODES

01 Smoke inhalation.
02 Hazardous fumes inhalation.
03 Breathing difficulty or shortness of breath.
11 Burns and smoke inhalation.
12 Burns only, thermal
13 Burn, scald.
14 Burn, chemical
15 Burn, electric.
21 Cut or laceration.
22 Stab or puncture wound: penetrating.
23 Gunshot wound, projectile wound.
24 Contusion/bruise, minor trauma.
25 Abrasion.
31 Dislocation.
32 Fracture.
33 Strain or sprain.
34 Swelling.
35 Crushing.
36 Amputation.
41 Cardiac symptoms.
42 Cardiac arrest.
43 Stroke.
44 Respiratory arrest.
51 Chills.
52 Fever.
53 Nausea.
54 Vomiting.
55 Numbness or tingling, paresthesia.
56 Paralysis.
57 Frostbite.
50 Sickness, other.
61 Miscarriage.
63 Eye trauma, avulsion.
64 Drowning.
65 Foreign body obstruction.
66 Electric shock.
67 Poison.
71 Convulsion or seizure.
72 Internal trauma.
73 Hemorrhaging, bleeding internally.
81 Disorientation.
82 Dizziness/fainting/weakness.
83 Exhaustion/fatigue. Includes heat exhaustion.
84 Heat stroke.
85 Dehydration.
91 Allergic reaction. Includes anaphylactic shock and hypersensitivity to medication.
92 Drug overdose.
93 Alcohol impairment.
94 Emotional/psychological stress.
95 Mental disorder.
96 Shock.

97 Unconscious.
98 Pain only.
00 Primary apparent symptom, other.
UU Undetermined.

H2 Primary Part of Body Injured

Definition
The body part or area that was affected or sustained the most serious injury.

Purpose
An analysis of the data from Blocks G5, H1, and H2 will assist in the development of protective clothing, equipment, safe operating procedures, and safety training.

Entry
Enter the two-digit code and description of the part of the body that was most seriously injured. It should be the same part of the body affected by the Primary Apparent Symptom. If no body part was injured, check or mark the None box.

Example
A firefighter was overcome by smoke (81):

PRIMARY PART OF BODY INJURED CODES

Head
11 Ear.
12 Eye.
13 Nose.
14 Mouth. Includes lips, teeth, and interior.
10 Head, other.

Neck and Shoulders
21 Neck.
22 Throat.
23 Shoulder.

Thorax
31 Back. Excludes spine (51).
32 Chest.

Abdominal Area
41 Abdomen.
42 Pelvis or groin.
43 Hip, lower back, or buttocks.

Spine
51 Spine. Excludes back (31).

Upper Extremities

61 Arm, upper. Excludes elbows (63) and shoulders (23).
62 Arm, lower. Excludes elbows (63) and wrists (64).
63 Elbow.
64 Wrist.
65 Hand and fingers.

Lower Extremities

71 Leg, upper. Excludes knees (73).
72 Leg, lower. Excludes knees (73), ankles (74), and foot and toes (75).
73 Knee.
74 Ankle.
75 Foot and toes.

Internal

81 Trachea and lungs.
82 Heart.
83 Stomach.
84 Intestinal tract.
85 Genito-urinary.
80 Internal, other.

Multiple Parts

91 Multiple body parts, upper body.
92 Multiple body parts, lower body.
93 Multiple body parts, whole body.

Other Body Parts

00 Part of body injured, other.
NN None.
UU Undetermined.

SECTION I

This section collects information on the cause and factor that contributed to the firefighter's injury and whether an object was involved.

I1 Cause of Firefighter Injury

Definition

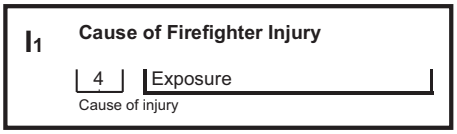
The action or lack of action that directly resulted in the injury.

Purpose

An analysis of this information may permit an understanding of the condition causing the injury and a means of planning suitable preventive techniques. For example, firefighter injuries resulting from a blow to the head may indicate inadequacies in helmet design.

Entry
Enter the code and a written description for the immediate cause or condition responsible for the injury.

Example
A firefighter receives burns (4) on the forearm:



CAUSE OF FIREFIGHTER INJURY CODES

1	Fall.
2	Jump.
3	Slip/trip.
4	Exposure to hazard. Includes exposure to heat, smoke, or toxic agents.
5	Struck or assaulted by person, animal, moving object.
6	Contact with object (firefighter moved into or onto object). Includes running into objects, stepping on objects, or grabbing a hot or electrically charged object.
7	Overexertion/strain.
0	Cause of injury, other.
U	Undetermined.

I2 Factor Contributing to Injury

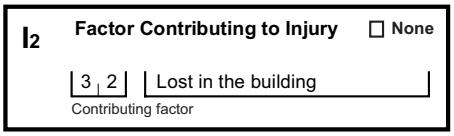
☞ *Factor Contributing to Injury* was a part of *Cause of Fire Fighter Injury* in NFIRS 4.1.

Definition
The most significant factor contributing to the injury of the fire service casualty.

Purpose
This element provides additional information on how an injury occurred. The analysis of this information may permit an understanding of the events causing the injury and a means of planning suitable preventive techniques.

Entry
Enter the two-digit code and description of the most significant factor contributing to the injury. Check or mark the None box if there was no apparent factor that contributed to the injury.

Example
The firefighter suffered from smoke inhalation after becoming disoriented and lost in the building (32):



FACTOR CONTRIBUTING TO INJURY CODES

Collapse or Falling Object

11 Roof collapse.
12 Wall collapse.
13 Floor collapse.
14 Ceiling collapse.
15 Stair collapse.
16 Falling objects.
17 Cave-in (earth).
10 Collapse or falling object, other.

Fire Development

21 Fire progress. Includes smoky conditions.
22 Backdraft.
23 Flashover.
24 Explosion.
20 Fire development, other.

Lost, Caught, Trapped, or Confined

31 Person physically caught or trapped. Excludes persons directly injured by a structural collapse or falling object (10 series).
32 Lost in building.
33 Operating in confined structural areas. Includes attics and crawl spaces.
34 Operating under water or ice.
30 Lost, caught, trapped, or confined, other.

Holes

41 Unguarded hole in structure.
42 Hole burned through roof.
43 Hole burned through floor.
40 Holes, other.

Slippery or Uneven Surfaces

51 Icy surface.
52 Wet surface. Includes water, soap, foam, lubricating materials, etc.
53 Loose material on surface.
54 Uneven surface. Includes holes in the ground.
50 Slippery or uneven surfaces, other.

Vehicle or Apparatus

61 Vehicle left road or overturned.
62 Vehicle collided with another vehicle.
63 Vehicle collided with nonvehicular object.
64 Vehicle stopped too fast.
65 Seat belt not fastened.
66 Firefighter standing on apparatus.
60 Vehicle or apparatus, other.

Other Contributing Factors

91 Civil unrest. Includes riots and civil disturbances.
92 Hostile acts.
00 Factor contributing to injury, other.
NN None.
UU Undetermined.

I3 Object Involved in Injury

Definition

The description of the object, if one was involved, that contributed to the injury of the fire service casualty.

Purpose

This field provides additional information on how a casualty occurred. The analysis of this information, in combination with other entries, may permit an understanding of the events causing the injury and a means of planning suitable preventive techniques.

Entry

Enter the two-digit code and description of the object involved in the injury. If no object was involved, check or mark the None box.

Example

The firefighter received a cut on the forearm when a piece of glass dropped from a second-story window (43):

OBJECT INVOLVED IN INJURY CODES

11	Coupling.
12	Hose, not charged.
13	Hose, charged.
14	Water from master stream.
15	Water from hose line.
16	Water, not from a hose.
17	Steam.
18	Extinguishing agent, not water.
21	Ladder, aerial.
22	Ladder, ground.
23	Tools/equipment.
24	Knife, scissors.
25	Syringe.
26	Fire department vehicle or apparatus.
27	Fire department vehicle door. Includes apparatus compartments.
28	Station sliding pole.
31	Curb.
32	Door in building.
33	Fire escape.
34	Ledge.
35	Stairs.
36	Wall. Includes other vertical surfaces such as cliffs.
37	Window.
38	Roof.
39	Floor or ceiling.
30	Structural component, other.

41 Asbestos.
42 Dirt, stones, or debris.
43 Glass.
45 Nails.
46 Splinters.
47 Embers.
48 Hot tar.
49 Hot metal.
51 Biological agents.
52 Chemicals.
53 Fumes, gases, or smoke.
54 Poisonous plants.
55 Insects.
56 Radioactive materials.
61 Electricity.
62 Extreme weather.
63 Utility flames, flares, torches.
64 Heat or flame.
91 Person: victim.
92 Property and structure contents.
93 Animal.
94 Non-fire department vehicle.
95 Gun. Includes all other projectile weapons.
90 Person, other.
00 Object involved in injury, other.
NN None.
UU Undetermined.

SECTION J

This section captures information on the specific location where the firefighter was injured and, if in a vehicle, the type of vehicle involved.

J1 Where Injury Occurred

Definition

The place where the injury occurred. This location may be en route to or from the scene, at the incident scene, at the station, or some other location.

Purpose

In conjunction with other fields, this element can help identify why the firefighter sustained a certain type of injury. It can indicate areas in which safety training and safer operating procedures may be necessary.

Entry

Check or mark the box that best describes where the injury took place.

Example
A firefighter was killed en route to a call when the tanker overturned (3):

J1 Where Injury Occurred

- 1 ☐ En route to FD location
- 2 ☐ At FD location
- 3 ☒ En route to incident scene
- 4 ☐ En route to medical facility
- 5 ☐ At scene in structure
- 6 ☐ At scene outside
- 7 ☐ At medical facility
- 8 ☐ Returning from incident
- 9 ☐ Returning from med facility
- 0 ☐ Other
- U ☐ Undetermined

WHERE INJURY OCCURRED CODES

1	En route to fire department location. Includes volunteers responding to the fire station or apparatus traveling between fire department locations.
2	At fire department location.
3	En route to incident or assignment.
4	En route to medical facility.
5	At scene, in structure.
6	At scene, outside structure.
7	At medical facility.
8	Returning from incident or assignment.
9	Returning from medical facility.
0	Where injury occurred, other.
U	Undetermined.

J2 Story Where Injury Occurred

Definition
This element identifies the story where the injury occurred.

Purpose
This entry provides additional information on where the injury occurred, which can help in directing injury prevention efforts. This element, combined with other elements, better describes the accident scene.

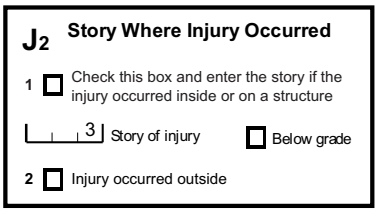
Entry
If the injury occurred inside or on a structure, enter the story where the injury occurred. If the story is below grade, check or mark the Below Grade box.

☞ Complete this block only if the injury occurred inside a structure.

☞ Checking or marking the Below Grade box has the effect of entering a negative number in NFIRS 5.0.

Example

The casualty occurred inside the building on the third story:



J3 Specific Location Where Injury Occurred

Definition

This element identifies the specific location of the fire service casualty at the time of injury.

Purpose

This element provides additional information on where the injury occurred. This can be helpful in directing injury prevention efforts.

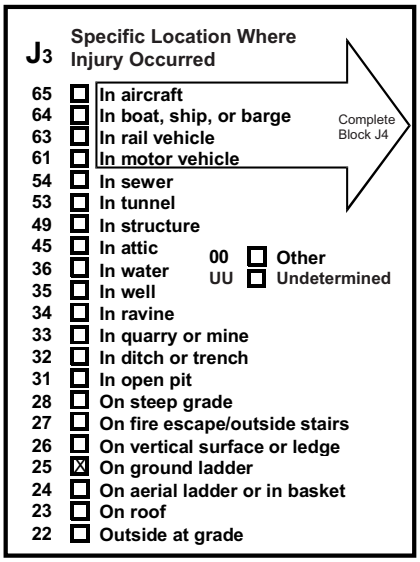
Entry

Check or mark the box that best describes the specific location at time of injury.

☞ If any code greater than 60 is checked or marked, continue to Block J4.

Example

The firefighter sprained an ankle climbing down a ground ladder (25):



SPECIFIC LOCATION WHERE INJURY OCCURRED CODES

22	Outside at grade.
23	On roof.
24	On aerial ladder or in basket.
25	On ground ladder.
26	On vertical surface or ledge.
27	On fire escape or outside stairway.
28	On steep grade.
31	In open pit.
32	In ditch or trench.
33	In quarry or mine.
34	In ravine.
35	In well.
36	In water.
45	In attic or other confined structural space.
49	In structure. Excludes attic, roof, or wall.
53	In tunnel.
54	In sewer.
61	In motor vehicle.
63	In rail vehicle.
64	In boat, ship, or barge.
65	In aircraft.
00	Specific location where injury occurred, other.
UU	Undetermined.

J4 Vehicle Type

Definition
Identifies the type of vehicle that the firefighter was in at time of injury.

Purpose
This element provides more information on where and how the injury occurred. This can be helpful in directing injury prevention efforts.

Entry
Check or mark the box that best describes the vehicle type.

☞ Complete this block only if the Specific Location code (Block J3) is greater than 60.

Example
The volunteer firefighter was injured in his personal vehicle on the way to a call:

J4 Vehicle Type — Complete ONLY if Specific Location code is >60

1 ☐ **Suppression vehicle**
2 ☐ **EMS vehicle**
3 ☐ **Other FD vehicle**
4 ☒ **Non-FD vehicle**

VEHICLE TYPE CODES

1 Suppression vehicle.
2 EMS vehicle.
3 Other fire department vehicle. Includes passenger vehicles.
4 Non-fire department vehicle. Includes private auto.
N None.

SECTION K

Information on whether firefighter equipment failed and contributed to the injury is collected in this section.

K1 Equipment Sequence Number

Definition
A unique number assigned to each piece of faulty equipment worn or used by the injured firefighter.

Purpose
In conjunction with other field in the section, the sequence number permits each piece of equipment associated with an injury to be identified separately on the casualty file.

Entry
If no equipment failed, check or mark the No box, which completes the entries of this module. If protective equipment failed and it contributed to the injury, check or mark the Yes box and complete the remainder of this section (Blocks K1 through K4). Enter the equipment sequence number. A separate Equipment Sequence Number is assigned to each piece of equipment that failed and contributed to the injury. The first equipment is always coded "001," and each succeeding equipment is numbered sequentially and incremented by 1 beginning with "002." The three-character numeric field is zero filled, not right justified.

☞ A separate form is required for each piece of equipment that failed and contributed to the injury.

Example
The first piece of faulty equipment associated with an injury to a firefighter:

K1	**Did protective equipment fail and contribute to the injury?** Please complete the remainder of this form ONLY if you answer YES.	**Yes** Y ☒ **No** N ☐	Equipment Sequence Number	0 0 1

EQUIPMENT FAILED CODES

Y Yes.
N No.

K2 Protective Equipment Item

☞ *Protective Equipment Item* replaces the five individual equipment lists in NFIRS 4.1

Definition

This block records information about the faulty protective equipment item that was a factor in the firefighter's injury.

Purpose

This element provides more information on why the injury occurred and may help detect problems with equipment that could lead to future injuries.

Entry

Check or mark the box that best describes the piece of protective equipment that failed and contributed to the injury.

Example

The firefighter's face piece melted (12) causing burns on the side of his face:

K2 Protective Equipment Item

Head or Face Protection

- 11 ☐ **Helmet**
- 12 ☒ **Full face protector**
- 13 ☐ **Partial face protector**
- 14 ☐ **Goggles/eye protection**
- 15 ☐ **Hood**
- 16 ☐ **Ear protector**
- 17 ☐ **Neck protector**
- 10 ☐ **Other**

Note: *This example represents only one portion of Block K2. The actual module lists all Protective Equipment Item codes.*

PROTECTIVE EQUIPMENT ITEM CODES

Head or Face Protection

11	Helmet.
12	Full face protector.
13	Partial face protector.
14	Goggles/eye protection.
15	Hood.
16	Ear protector.
17	Neck protector.
10	Head or face protection, other.

Coat, Shirt, or Trousers

21	Protective coat.
22	Protective trousers.
23	Uniform shirt.
24	Uniform T-shirt.
25	Uniform trousers.
26	Uniform coat or jacket.
27	Coveralls.
28	Apron or gown.
20	Coat, shirt, or trousers, other.

Boots or Shoes

31 Knee-length boots with steel baseplate and steel toes.
32 Knee-length boots with steel toes only.
33 3/4-length boots with steel baseplate and steel toes.
34 3/4-length boots with steel toes only.
35 Boots without steel baseplate or steel toes.
36 Safety shoes with steel baseplate and steel toes.
37 Safety shoes with steel toes only.
38 Non-safety shoes.
30 Boots or shoes, other.

Respiratory Protection

41 Self-contained breathing apparatus (SCBA), demand, open circuit.
42 Self-contained breathing apparatus (SCBA), positive pressure, open circuit.
43 Self-contained breathing apparatus (SCBA), closed circuit.
44 Non-self-contained breathing apparatus.
45 Cartridge respirator.
46 Dust or particle mask.
40 Respiratory protection, other.

Hand Protection

51 Firefighter gloves with wristlets.
52 Firefighter gloves without wristlets.
53 Work gloves.
54 HazMat gloves.
55 Medical gloves.
50 Hand protection, other.

Special Equipment

61 Proximity suit for entry.
62 Proximity suit for non-entry.
63 Totally encapsulated, reusable chemical suit.
64 Totally encapsulated, disposable chemical suit.
65 Partially encapsulated, reusable chemical suit.
66 Partially encapsulated, disposable chemical suit.
67 Flash protection suit.
68 Flight or jump suit.
69 Brush suit.

Special Equipment Continued

71 Exposure suit.
72 Self-contained underwater breathing apparatus (SCUBA).
73 Life preserver.
74 Life belt or ladder belt.
75 Personal alert safety system (PASS).
76 Radio distress device.
77 Personal lighting.
78 Fire shelter or tent.
79 Vehicle safety belt.
70 Special equipment, other.
00 Protective equipment item, other.

K3 Protective Equipment Problem

☞ *Protective Equipment Problem* replaces the five individual equipment problem lists in NFIRS 4.1

Definition

The most serious problem with the piece of equipment that failed and contributed to the injury.

Purpose

Provides additional information on why the injury occurred and highlights problems with specific equipments.

Entry

Check or mark the box that best describes the protective equipment problem.

Example

The firefighter's face piece melted (12):

K3 Protective Equipment Problem

Check one box to indicate the main problem that occurred

- 11 ☐ Burned
- 12 ☒ Melted
- 21 ☐ Fractured, cracked or broken
- 22 ☐ Punctured
- 23 ☐ Scratched
- 24 ☐ Knocked off
- 25 ☐ Cut or ripped
- 31 ☐ Trapped steam or hazardous gas
- 32 ☐ Insufficient insulation
- 33 ☐ Object fell in or onto equipment item
- 41 ☐ Failed under impact
- 42 ☐ Face piece or hose detached
- 43 ☐ Exhalation valve inoperative or damaged
- 44 ☐ Harness detached or separated
- 45 ☐ Regulator failed to operate
- 46 ☐ Regulator damaged by contact
- 47 ☐ Problem with admissions valve
- 48 ☐ Alarm failed to operate
- 49 ☐ Alarm damaged by contact
- 51 ☐ Supply cylinder or valve failed to operate
- 52 ☐ Supply cylinder/valve damaged by contact
- 53 ☐ Supply cylinder—insufficient air/oxygen
- 94 ☐ Did not fit properly
- 95 ☐ Not properly serviced or stored prior to use
- 96 ☐ Not used for designed purpose
- 97 ☐ Not used as recommended by manufacturer
- 00 ☐ Other equipment problem
- UU ☐ Undetermined

PROTECTIVE EQUIPMENT PROBLEM CODES

11	Burned.
12	Melted.
21	Fractured, cracked, or broke.
22	Punctured.
23	Scratched.
24	Knocked off.
25	Cut or ripped.
31	Trapped steam or hazardous gas.
32	Insufficient insulation.
33	Object fell in or onto equipment item.
41	Failed under impact.
42	Face piece or hose detached.
43	Exhalation valve inoperative or damaged.
44	Harness detached or separated.
45	Regulator failed to operate.
46	Regulator damaged by contact.
47	Problem with admissions valve.
48	Alarm failed to operate.
49	Alarm damaged by contact.
51	Supply cylinder or valve failed to operate.
52	Supply cylinder or valve damaged by contact.
53	Supply cylinder contained insufficient air or oxygen.
94	Did not fit properly.
95	Not properly serviced or stored prior to use.
96	Not used for designed purpose.
97	Not used as recommended by manufacturer.
00	Protective equipment problem, other.
UU	Undetermined.

K4 Equipment Manufacturer, Model, and Serial Number

Definition

This block identifies the specific equipment that failed.

Manufacturer is to the name of the company that made the piece of equipment.

Model is to the manufacturer's model name. If one does not exist, use the equipment's common physical description.

Serial Number is to the manufacturer's serial number that is generally stamped on an identification plate on the equipment. Lot number may also be used here if no serial number is available.

Purpose

These data elements provide detailed information on the specific equipment that failed and contributed to the injury. Data on model and other information are useful in determining the compliance with standards for protective equipment involved in firefighting and for analyzing the effectiveness of these codes, standards, and regulations.

Entry

Enter the manufacturer's name, the model name, and the serial number.

☞ The actual length of each of these three fields is 12 characters. Complete as much as possible to provide a positive identification.

Example

The face piece that melted was a Lingo Model 23–001, serial number 147AC01.

K4 **Equipment Manufacturer, Model, and Serial Number**

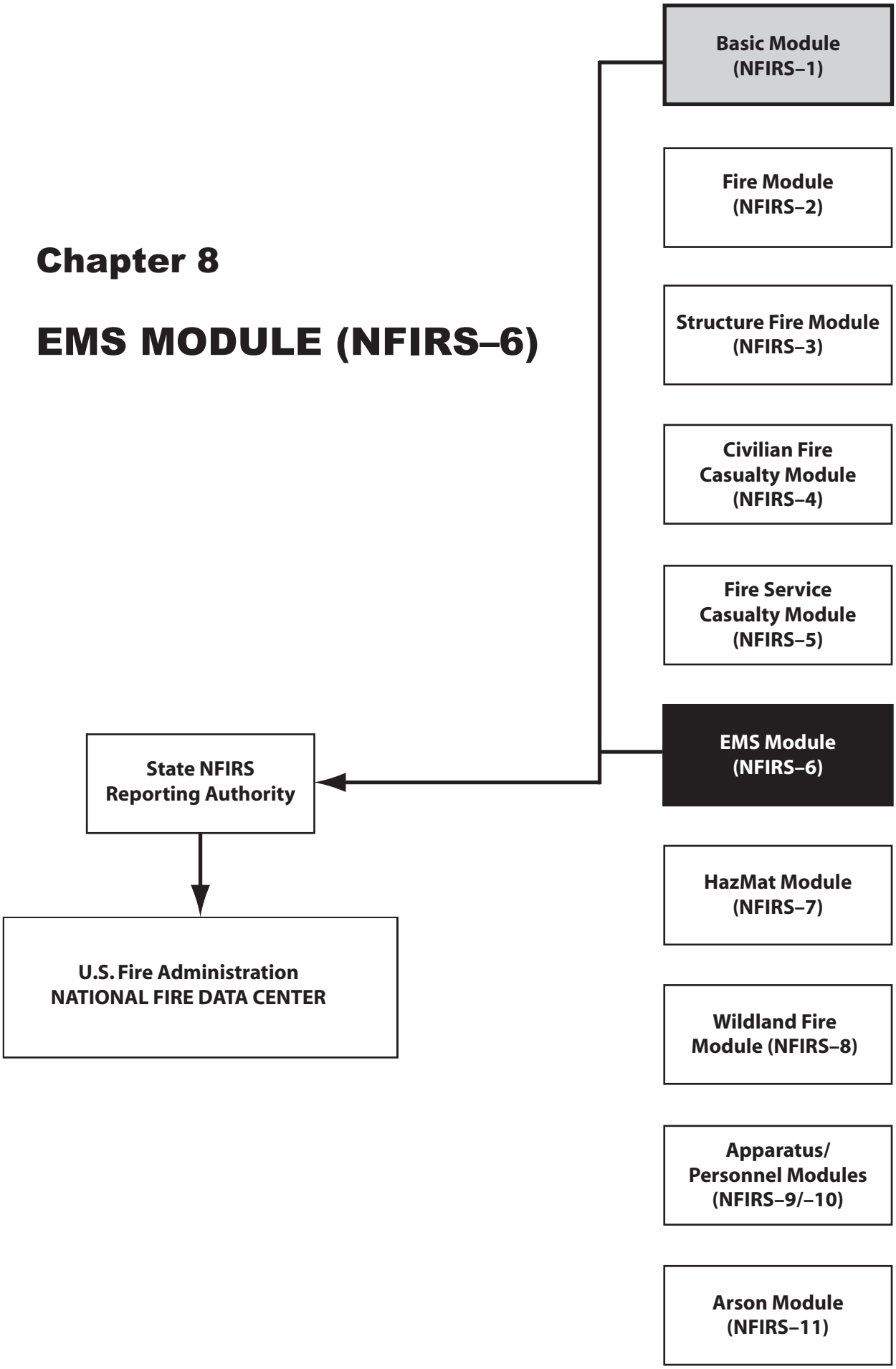
Lingo Inc.
Manufacturer

Z3-001
Model

1 4 7 A C 0 1
Serial Number

Chapter 8

EMS MODULE (NFIRS–6)



A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | ☐ Delete ☐ Change | **NFIRS–6 EMS**

B Number of Patients | Patient Number ☆
Use a separate form for each patient

C Date/Time (Month Day Year Hour/Min)
Check if same date as Alarm date
☐ Time Arrived at Patient
☐ Time of Patient Transfer

D Provider Impression/Assessment ☆ Check one box only ☐ None/no patient or refused treatment

10	☐ Abdominal pain	18	☐ Chest pain	26	☐ Hypovolemia	34	☐ Sexual assault
11	☐ Airway obstruction	19	☐ Diabetic symptom	27	☐ Inhalation injury	35	☐ Sting/bite
12	☐ Allergic reaction	20	☐ Do not resuscitate	28	☐ Obvious death	36	☐ Stroke/CVA
13	☐ Altered LOC	21	☐ Electrocution	29	☐ OD/poisoning	37	☐ Syncope
14	☐ Behavioral/psych	22	☐ General illness	30	☐ Pregnancy/OB	38	☐ Trauma
15	☐ Burns	23	☐ Hemorrhaging/bleeding	31	☐ Respiratory arrest	00	☐ Other
16	☐ Cardiac arrest	24	☐ Hyperthermia	32	☐ Respiratory distress		
17	☐ Cardiac dysrhythmia	25	☐ Hypothermia	33	☐ Seizure		

E1 Age or Date of Birth
Age ☐ Months (for infants)
OR
Month Day Year

F1 Race
1 ☐ White
2 ☐ Black, African American
3 ☐ Am. Indian, Alaska Native
4 ☐ Asian
5 ☐ Native Hawaiian, Other Pacific Islander
0 ☐ Other, multiracial
U ☐ Undetermined

E2 Gender
1 ☐ Male 2 ☐ Female

F2 Ethnicity
1 ☐ Hispanic or Latino
2 ☐ Non Hispanic or Latino

G1 Human Factors Contributing to Injury ☐ None
Check all applicable boxes
1 ☐ Asleep
2 ☐ Unconscious
3 ☐ Possibly impaired by alcohol
4 ☐ Possibly impaired by drug
5 ☐ Possibly mentally disabled
6 ☐ Physically disabled
7 ☐ Physically restrained
8 ☐ Unattended person

G2 Other Factors ☐ None
If an illness, not an injury, skip G2 and go to H3
1 ☐ Accidental
2 ☐ Self-inflicted
3 ☐ Inflicted, not self

H1 Body Site of Injury
List up to five body sites

H2 Injury Type
List one injury type for each body site listed under H1

H3 Cause of Illness/Injury
Cause of illness/injury

I Procedures Used Check all applicable boxes ☐ No treatment

01	☐ Airway insertion	14	☐ Intubation (EGTA)
02	☐ Anti-shock trousers	15	☐ Intubation (ET)
03	☐ Assist ventilation	16	☐ IO/IV therapy
04	☐ Bleeding control	17	☐ Medications therapy
05	☐ Burn care	18	☐ Oxygen therapy
06	☐ Cardiac pacing	19	☐ OB care/delivery
07	☐ Cardioversion (defib) manual	20	☐ Prearrival instructions
08	☐ Chest/abdominal thrust	21	☐ Restrain patient
09	☐ CPR	22	☐ Spinal immobilization
10	☐ Cricothyroidotomy	23	☐ Splinted extremities
11	☐ Defibrillation by AED	24	☐ Suction/aspirate
12	☐ EKG monitoring	00	☐ Other
13	☐ Extrication		

J Safety Equipment ☐ None
Used or deployed by patient. Check all applicable boxes.
1 ☐ Safety/seat belts
2 ☐ Child safety seat
3 ☐ Airbag
4 ☐ Helmet
5 ☐ Protective clothing
6 ☐ Flotation device
0 ☐ Other
U ☐ Undetermined

K Cardiac Arrest
Check all applicable boxes
1 ☐ Pre-arrival arrest?
If pre-arrival arrest, was it:
1 ☐ Witnessed?
2 ☐ Bystander CPR?
2 ☐ Post-arrival arrest?
Initial Arrest Rhythm
1 ☐ V-Fib/V-Tach
0 ☐ Other
U ☐ Undetermined

L1 Initial Level of Provider ☆
1 ☐ First Responder
2 ☐ EMT-B (Basic)
3 ☐ EMT-I (Intermediate)
4 ☐ EMT-P (Paramedic)
0 ☐ Other provider
N ☐ No Training

L2 Highest Level of Care Provided On Scene ☐ None
1 ☐ First Responder
2 ☐ EMT-B (Basic)
3 ☐ EMT-I (Intermediate)
4 ☐ EMT-P (Paramedic)
0 ☐ Other provider

M Patient Status
1 ☐ Improved
2 ☐ Remained same
3 ☐ Worsened
Check if:
1 ☐ Pulse on transfer
2 ☐ No pulse on transfer

N EMS Disposition ☐ Not transported
1 ☐ FD transport to ECF
2 ☐ Non-FD transport
3 ☐ Non-FD trans/FD attend
4 ☐ Non-emergency transfer
0 ☐ Other

NFIRS–6 Revision 01/01/04

The ☆ denotes a required field.

CHAPTER 8

EMS MODULE (NFIRS–6)

The EMS Module is an optional module. It should be used when that option has been chosen by your state or local authorities.

☞ This module is completed *only* if the fire department provides emergency medical service. If an independent provider performs EMS, do not use this module.

The purpose of the EMS Module is to gather basic data as it relates to the provision of emergency medical care to the community. It is may be used by both responding EMS unit(s) and responding fire suppression unit(s) that provide emergency medical services. This module does not include patient car information. The data collected from this form are incident based not patient based.

The EMS Module is not intended to replace or otherwise interfere with state or local EMS patient care reporting requirements. Instead, it is the intent that the data elements contained in this module be viewed as “core elements” and be included in the design of upgrades or new EMS data collection systems.

The EMS Module may be completed when an Incident Type 100–243, 311, 321-323, 351–381, 400–431, 451, or 900 is reported in Section C of the Basic Module (NFIRS–1).

☞ If the EMS is a fire casualty, completion of a separate Fire Service Casualty Module (NFIRS–5) is required

SECTION A

The guidance and directions for completing Section A of the EMS Module are the same as for Section A in the Basic Module. It is stressed that the entries in Section A of the EMS Module must be identical with the entries on the corresponding Basic Module. An example of a completed Section A can be found on page 3–8.

A

Fire Department Identification (FDID) ☆

Entry
Enter the same FDID number found in Section A of the Basic Module.

State ☆

Entry
Enter the same state abbreviation found in Section A of the Basic Module.

Incident Date ☆

Entry
Enter the same incident date found in Section A of the Basic Module.

Station Number

Entry
Enter the same station number found in Section A of the Basic Module.

Incident Number ☆

Entry
Enter the same incident number found in Section A of the Basic Module.

Exposure Number ☆

Entry
If the casualty resulted from an exposure fire, enter the same exposure number that was entered in Section A of the Basic Module for that exposure.

Delete/Change

Definition
Indicates a change to information submitted on a previous EMS Module or a deletion of all information regarding that patient.

Purpose
To delete or change previously reported information.

Entry
Delete. Check or mark this box when you have previously submitted data on this EMS patient and now want to have the data on this patient deleted from the database. If this box is marked, complete Section A, the Patient Number originally assigned (Section B), and leave the rest of the report blank. Forward the report according to your normally established procedures.

Change. Check or mark this box only if you previously submitted this fire incident to your state reporting authority and now want to update or change the information in the state database. Complete Section A and any other sections or blocks that need to be updated or corrected. If you need to blank a field that contains data, you must resubmit the original module containing the newly blanked field along with all the other original information in the module for that incident. This action is required only when sending an updated module to your state reporting authority. Forward the report according to your normally established procedures.

SECTION B

B Number of Patients

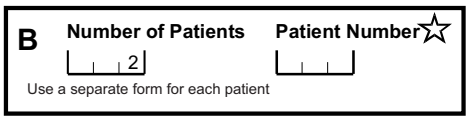
Definition
Total number of patients who were treated by fire department emergency responders at the EMS incident.

Purpose
Fire departments can track the number of patients they treated at each EMS incident and identify how many EMS Modules should be completed for the incident (one per patient).

Entry
Enter the total number of patients.

☞ Complete a separate EMS Module for each patient treated.

Example
Two people were injured in a bicycle accident:



Patient Number ☆

Definition
A unique number is assigned to each patient treated at a single EMS incident.

Purpose
The patient number identifies each EMS patient separately in the EMS file. Data and other information concerning the patient can be accessed using this number in conjunction with other unique field information.

Entry
Enter the identification number assigned to this patient. A separate Patient Number is assigned to each EMS patient. The first patient is always coded “001,” and each succeeding patient is numbered sequentially and incremented by 1 beginning with “002.” The three-character numeric field is zero filled, not right justified.

Example
Three patients needed medical attention in the wrecked automobile; this report is for patient number two:

B	Number of Patients	Patient Number ☆
	3	0 0 2

Use a separate form for each patient

SECTION C

C

Date and Time Arrived at Patient and Time of Patient Transfer

Definitions

Time arrived at patient. The time when the fire department's emergency personnel established direct contact with the patient.

Time of patient transfer. The time when the response unit physically left the scene to transport the patient to an emergency care facility or the time when the patient was transferred to another care provider.

Purpose

This information is needed to analyze time spent providing patient care on the scene of an incident. If the Apparatus/Personnel Module (NFIRS–9/–10) is also used, then this element can document situations when there is a significant delay between the time the response unit arrives on the scene and the time at which personnel can access the patient.

Entry

For each incident, enter the dates (mm/dd/yyyy) and times of day (using the 24-hour clock) when emergency personnel arrived at the patient and when the patient was transferred to another care provider. Midnight is 0000 and signifies the start of a new day.

☞ If the date(s) is the same as the Alarm date (Block E1, Basic Module), check the box(es) and enter only the time of day.

Example

The fire department BLS unit arrived at the patient at 0105 on July 2, 2002. The patient was transferred to the hospital 14 minutes later at 0199:

C Date/Time		Month	Day	Year	Hour/Min
Check if same date as Alarm date ☐	☐ Time Arrived at Patient	0 7	0 2	2 0 0 2	0 1 0 5
	☐ Time of Patient Transfer	0 7	0 2	2 0 0 2	0 1 1 9

SECTION D

D Provider Impression/Assessment ☆

Definition

The emergency care provider's primary clinical assessment that led to the management (treatments, medications, procedures) given to the patient.

Purpose

This element identifies whether or not the treatments or medications provided were consistent with the protocols related to the clinical impression.

Entry

Check or mark the box *(one only)* that best describes the emergency provider's impression/assessment. When more than one choice is applicable to the patient, choose the single most significant clinical assessment that drove the choice of treatment. Check or mark the None/No Patient or Refused Treatment box when there is no patient upon arrival or if the patient refused treatment.

Example

The patient suffered a traumatic injury as a result of a bicycle fall (38):

D Provider Impression/Assessment ☆ Check one box only

☐ None/no patient or refused treatment

10	☐ Abdominal pain	18	☐ Chest pain	26	☐ Hypovolemia	34	☐ Sexual assault
11	☐ Airway obstruction	19	☐ Diabetic symptom	27	☐ Inhalation injury	35	☐ Sting/bite
12	☐ Allergic reaction	20	☐ Do not resuscitate	28	☐ Obvious death	36	☐ Stroke/CVA
13	☐ Altered LOC	21	☐ Electrocution	29	☐ OD/poisoning	37	☐ Syncope
14	☐ Behavioral/psych	22	☐ General illness	30	☐ Pregnancy/OB	38	☒ Trauma
15	☐ Burns	23	☐ Hemorrhaging/bleeding	31	☐ Respiratory arrest	00	☐ Other
16	☐ Cardiac arrest	24	☐ Hyperthermia	32	☐ Respiratory distress		
17	☐ Cardiac dysrhythmia	25	☐ Hypothermia	33	☐ Seizure		

PROVIDER IMPRESSION/ASSESSMENT CODES

10 Abdominal pain. Includes an acute or painful abdomen and cramps. Excludes abdominal trauma (38).

11 Airway obstruction. Includes choking, swelling of the neck, croup, epiglottis, and a foreign body in the airway.

12 Allergic reaction. Includes reaction to drugs, plants, and insects. Reactions include hives, urticaria, and wheezing. Excludes stings and venomous bites (35).

13 Altered level of consciousness. Includes patients who appear to be substance abusers or under the influence of drugs or alcohol.

14 Behavioral: mental status, psychiatric disorder. Includes all situations in which a behavioral or psychiatric problem is considered the major problem for the EMS provider.

15 Burns.

16 Cardiac arrest.

17 Cardiac dysrhythmia. Includes any rhythm disturbance that was noted on the physical examination or with a cardiac monitor when the rhythm was the major clinical reason for care rendered by the EMS responder.

18 Chest pain. Includes patients with chest pain related to heart disease, upset stomach, or muscle pain in the chest wall.
19 Diabetic symptom, related to history of diabetes. Includes hypoglycemia, ketoacidosis, and other complications of diabetes.
20 Do not resuscitate. Use when there is a legal requirement to prevent emergency medical personnel from initiating CPR.
21 Electrocution.
22 General illness.
23 Hemorrhaging/bleeding. Includes vaginal bleeding, GI bleeding, and epistaxis. When pregnancy is involved, only use bleeding if this is the major concern to the EMS responder.
24 Hyperthermia.
25 Hypothermia. Usually relates to environmental hypothermia, such as following submersion in cold water, avalanches, or other environmental exposures.
26 Hypovolemia. Includes patients with clinical shock, usually felt to be hypovolemic.
27 Inhalation injury, toxic gases. Includes smoke inhalation. Excludes overdose and poisoning (29).
28 Obvious death. Patients who were dead upon arrival and no therapy was undertaken.
29 Overdose/poisoning. Includes taking inappropriate drugs, overdosing, and poisoning from chemicals. Excludes inhalation of toxic gases (27).
30 Pregnancy/OB. Includes all aspects of obstetric care rendered in the pre-hospital setting.
31 Respiratory arrest. Includes incidents where the patient stops breathing and requires ventilatory support on at least a temporary basis.
32 Respiratory distress. Includes patients who have only spontaneous breathing.
33 Seizure. Includes major and minor seizures.
34 Apparent sexual assault or rape.
35 Sting/bite. Includes poisonous snakes, insects, bees, wasps, ants, etc. If an allergic reaction occurs, use code 12.
36 Stroke, cerebrovascular accidents (CVA), or transient ischemic attack (TIA).
37 Syncope, fainting.
38 Trauma. Excludes abdominal pain (10).
00 Provider impression/assessment, other.
NN None/no patient or refused treatment.

SECTION E

E1 Age or Date of Birth

Enter either the patient's age or the patient's date of birth. Do not enter both.

Age

Definition

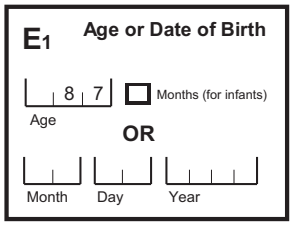
The patient's age in years or, if the patient is an infant, the age in months.

Purpose

The age of the patient provides an indication of fire loss. Age can also be used to indicate type, severity, and cause of illness/injury to identify trends and patterns that might be helpful in planning injury prevention techniques.

Entry
Enter the age of the patient. Estimate the age if it cannot be determined. If the age is calculated in months, check or mark the Months (for Infants) box.

Example
The patient was 87 years old:



Date of Birth

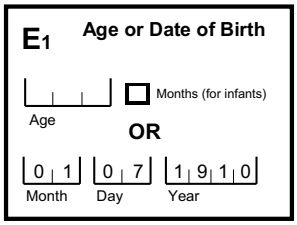
Definition
The month, day, and year of birth of the patient.

Purpose
This data entry is an alternative entry to Age. It can provide an indication of fire loss, and can be used to indicate type, severity, and cause of illness/injury to identify trends and patterns that might be helpful in planning injury prevention techniques.

☞ This data element is used as an alternate method for calculating the patient's age. Age is collected in NFIRS but Date of Birth is not.

Entry
Enter the date of birth showing the month, day, and year (mm/dd/yyyy).

Example
The patient was born on January 7, 1910:



E2 Gender

Definition
The identification of the patient as male or female.

Purpose
This entry assists in identifying the individual and for tracking trends and patterns.

E2 Gender

1 ☒ Male 2 ☐ Female

Entry
Check or mark the box that indicates the patient's gender.

Example
The patient was a male (1):

GENDER CODES

1 Male.
2 Female.

SECTION F

F1 Race

Definition
The identification of the race of the patient, based on U.S. Office of Management and Budget (OMB) designations.

Purpose
This entry is useful for the study of diseases and important to data systems in order to obtain certain federal or state funds that are directed toward specific racial groups.

Entry
Check or mark the appropriate box. If race cannot be determined, check or mark the Undetermined box.

☞ Hispanic is not considered a race, because a person can be black *and* Hispanic, white *and* Hispanic, etc.

Example
The patient was a white male (1):

F1 Race

1 ☒ White
2 ☐ Black, African American
3 ☐ American Indian, Alaska Native
4 ☐ Asian
5 ☐ Native Hawaiian, Other Pacific Islander
0 ☐ Other, multiracial
U ☐ Undetermined

RACE CODES

1 White.
2 Black or African American.
3 American Indian or Alaska Native.
4 Asian.
5 Native Hawaiian or other Pacific Islander.
0 Other. Includes multiracial.
U Undetermined.

F2 Ethnicity

Definition

Identifies the ethnicity of the patient. Ethnicity is an ethnic classification or affiliation. Ethnicity designates a population subgroup having a common cultural heritage, as distinguished by customs, characteristics, language, common history, etc. Currently, Hispanic/Latino is the only OMB designation for ethnicity.

Purpose

This entry permits an analysis of patients by ethnicity with type, severity, and cause of injury to identify trends and patterns that might be helpful in planning injury prevention techniques. It is also useful for studies of diseases and important to data systems in order to obtain certain federal or state funds that are directed toward specific ethnic groups.

Entry

Check or mark the appropriate box.

Example

The patient was an Hispanic (1):

F2 Ethnicity
1 [X] Hispanic or Latino
0 [ ] Non Hispanic or Latino

ETHNICITY CODES

1 Hispanic or Latino.
0 Non Hispanic or Latino.

SECTION G

This entries in this section collects information on the factors that contributed to the injury of the patient.

G1 Human Factors Contributing to Injury

☞ *Human Factors Contributing to Injury* was known as *Condition Before Injury* in NFIRS 4.1.

Definition

The physical or mental state of the person shortly before becoming a patient.

Purpose

This is an important data element for injury research used by public health researchers and policy makers. It is also useful for understanding the relationship between human factors and incident type, such as automobile accidents where the driver was "possibly impaired by alcohol."

Entry

Check or mark all the applicable boxes describing the human factors that contributed to the patient's injury. If no human factor was involved, check or mark the None box.

Example

A cigarette burned the patient after she fell asleep (1):

G1 Human Factors Contributing to Injury ☐ None

Check all applicable boxes

1 ☒ Asleep
2 ☐ Unconscious
3 ☐ Possibly impaired by alcohol
4 ☐ Possibly impaired by drug
5 ☐ Possibly mentally disabled
6 ☐ Physically disabled
7 ☐ Physically restrained
8 ☐ Unattended person

HUMAN FACTORS CONTRIBUTING TO INJURY CODES

1	Asleep, no known impairment.
2	Unconscious.
3	Possibly impaired by alcohol.
4	Possibly impaired by other drug or chemical.
5	Possibly mentally disabled.
6	Physically disabled. Includes temporary conditions or overexertion.
7	Physically restrained.
8	Unattended or unsupervised person. Includes persons too young/old to act.
N	None.

G2 Other Factors

Definition

Factors contributing to the patient's injury other than those covered by Human Factors (Block G1).

☞ If the response was to an illness instead of an injury, skip to Block H3.

Purpose

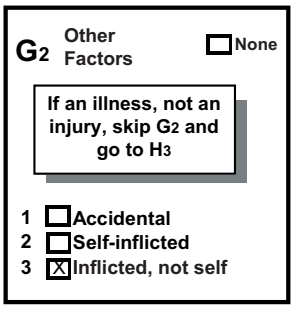
This is an important data element for injury research used by public health researchers and policy makers. This information is useful in determining the need for special training and safety precautions. It also helps identify trends and patterns such as the trend of inflicted (hostile) injuries over an extended period of time.

Entry

Check or mark the appropriate box. If the three codes are not applicable, check or mark the None box.

Example

A dog attacked the patient (3):



OTHER FACTORS CODES

1	Accidental.
2	Self-inflicted.
3	Inflicted, not self-inflicted. Includes attacks by animals and persons.
N	None.

SECTION H

This section collects information cause, type and location of the patient's injury.

H1 Body Site of Injury

☞ *Body Site of Injury* was known as *Part of Body Injured* in NFIRS 4.1

Definition

The area of the body that sustained the injury. This field is designed to be used in conjunction with Injury Type (Block H2).

Purpose

When combined with Injury Type and Cause of Injury, this entry provides useful data for EMS planners to track patient's injuries that required the use of the EMS system.

Entry

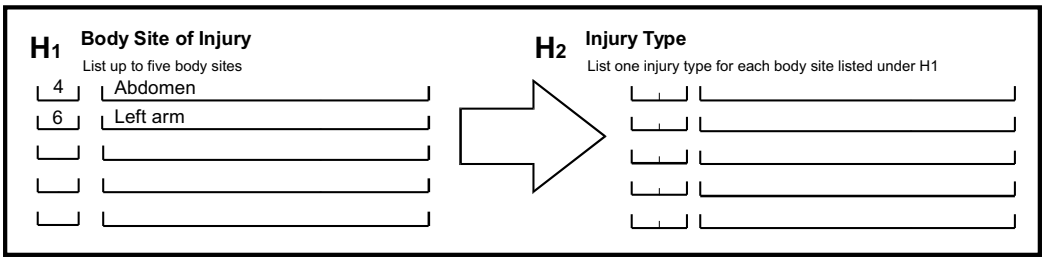
Enter up to five parts of the body where injuries occurred. List the body site with the most serious injury first. If the patient is suffering from an illness and not an injury, skip to Block H3.

☞ This data element should reflect the clinical impression of the injury by the EMS responder, not necessarily the final or correct diagnosis.

☞ Each Body Site entered should have an associated Injury Type (Block H2). There is a one-to-one correspondence between Body Site and Injury Type.

Example

The patient's abdomen (4) and left arm (6) were injured in the accident:



BODY SITE OF INJURY CODES

1	Head.
2	Neck and shoulder.
3	Thorax. Includes chest and back. Excludes spine (5).
4	Abdomen.
5	Spine. Excludes back (3).
6	Upper extremities. Includes arms and hands.
7	Lower extremities. Includes legs and feet.
8	Internal.
9	Multiple body parts.

H2 Injury Type

Definition

The clinical description of the injury received by the patient.

Purpose

When combined with Body Site an Cause of Injury, this element enables EMS planners to analyze the types of injuries treated by EMS responders. This entry can be correlated with other data collected in the Basic and EMS Modules to provide useful information for tracking trends and reducing injuries. When used in conjunction with follow-up patient information, this data element is valuable in assessing the correlation between injury assessment in the field and actual injuries as evaluated in medical facilities.

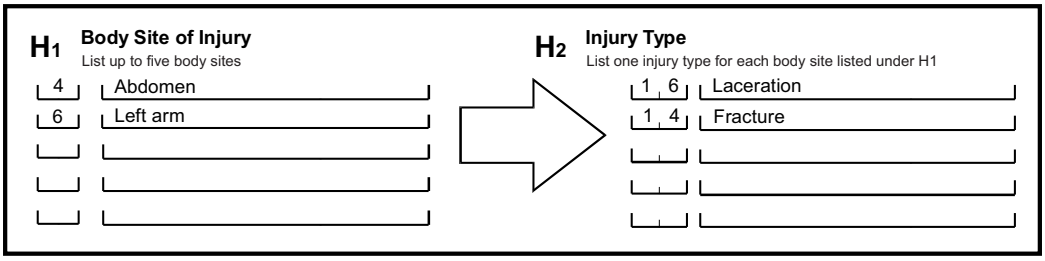
Entry

Enter a description of the primary injuries sustained by a patient for each part of the body listed in Block H1. The first Injury Type is associated with the first Body Site of Injury listed in Block H1, the second type with the second site, etc. Then select and record the appropriate code number for injury type recorded. If the patient is suffering from an illness and not an injury, skip to Block H3.

☞ Each Injury Type entered should have an associated Body Site (Block H2). There is a one-to-one correspondence between Injury Type and Body Site.

Example

The patient had a laceration on the abdomen (16) and a fracture of the upper left arm (14):



INJURY TYPE CODES

10	Amputation.
11	Blunt injury.
12	Burn.
13	Crush.
14	Dislocation/fracture.
15	Gunshot.
16	Laceration.
17	Pain without swelling.
18	Puncture/stab.
19	Soft tissue swelling.
00	Injury type, other.

H3 Cause of Illness/Injury

Definition

The physical event that caused the injury or illness.

Purpose

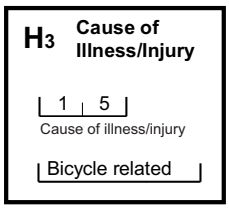
When combined with Body Site and Type of Injury, this element permits an understanding of the conditions causing injury or illness and provide a means of developing strategies to reduce injuries and sudden illnesses.

Entry

Enter the two-digit code that indicates the immediate cause or condition responsible for the injury or illness.

Example

The cause of the patient's injuries was a fall from a bicycle (15):



CAUSE OF ILLNESS/INJURY CODES

10	Chemical exposure. Includes accidental poisoning by solid or liquid substances, gases, and vapors, which are not included under accidental drug poisoning (11).
11	Drug poisoning. Includes accidental poisoning by drugs, medicinal substances, or biological products.
12	Fall. Excludes falls that occur in the context of other external causes of injury, such as fires, falling off boats, or falling in accidents involving machinery in operation.
13	Aircraft-related accident. Includes spacecraft.
14	Bite. Includes animal bites, including non-venomous snakes and lizards. Excludes venomous stings (36).
15	Bicycle accident. Includes any pedal cycle accident. Pedal cycle is defined to include bicycles and tricycles. Excludes motor vehicle or motorbike accidents.
16	Building collapse/construction accident. Includes all accidents on construction sites. Not to be used for specific mechanism of injury (e.g., "Fall").
17	Drowning, not related to watercraft use. Includes swimming accidents, bathtubs, etc.
18	Electrical shock. Includes accidents related to electric current from exposed wires, faulty appliances, high-voltage cables, live rails, or open electric sockets. Excludes lightning (26).
19	Cold. Includes cold injuries due to weather exposure or cold produced by man, such as in a freezer.
20	Heat. Includes thermal injuries related to weather or heat produced by man, such as in a boiler room or factory. Excludes heat injury from conflagration (22).
21	Explosives. Includes all injuries related to explosives. Excludes fireworks (25).
22	Fire and flames. Includes burning by fire, asphyxia or poisoning from conflagration or ignition, and fires secondary to explosions.
23	Firearm. Includes accidental and purposeful firearm injuries.
25	Fireworks. Injuries caused by pyrotechnics designed for or used for display purposes. Includes consumer fireworks.

26 Lightning. Excludes falling objects as a result of lightning and injuries from fires that are a result of lightning.

27 Machinery. Includes machinery accidents except when machinery is not in operation. Excludes electrocution (18).

28 Mechanical suffocation. Includes suffocation in bed or cradle (crib death), closed space suffocation, plastic bag asphyxia, and accidental hanging.

29 Motor vehicle accident. Includes any motor vehicle accident occurring on or off a public roadway or highway.

30 Motor vehicle accident, pedestrian. Motor vehicle accidents in which the patient was a pedestrian struck by a motor vehicle of any type. Includes individuals on skates, in baby carriages, in wheelchairs, on skateboards, and on skis.

31 Non-traffic vehicle accident. Includes any motor vehicle accident occurring entirely off public roadways or highways. For instance, an accident involving an all-terrain vehicle (ATV) in an off-road location would be a non-traffic accident.

32 Physical assault/abuse. Includes all forms of battering and non-accidental injury to patients.

33 Scalds/other thermal. Includes all burn injuries resulting from hot liquids or steam.

34 Smoke inhalation. Includes smoke and fume inhalation from fire.

35 Stabbing assault. Includes cuts, punctures, or stabs of any part of the body.

36 Venomous sting. Includes bites and stings from venomous snakes, lizards, spiders, scorpions, insects, marine life, or plants. For animal bite, use 14.

37 Water transport. Includes all accidents related to watercraft. Excludes drowning and submersion accidents (17) unless they are related to watercraft use. Thus, if a person falls out of a boat and drowns, it should be coded within this category. If a person drowns in a swimming pool or bathtub, it should be coded as “Drowning.”

00 Cause of illness/injury, other

UU Unknown. Includes situations when data cannot be accurately reconstructed from the run record.

SECTION I

I Procedures Used

Definition

The nature of the procedures attempted or performed on a patient by emergency personnel. The term *procedures* include anything done by way of assessment or treatment of the patient.

Purpose

Planners and educators use this information to determine which procedures are conducted in the field, by whom, and for what indications. This information can also help determine the equipment and supplies needed by emergency responders.

Entry

Check or mark all applicable boxes. If no treatment was provided, check only the No Treatment box.

Example

A laceration was bandaged to control bleeding (04), and a fractured arm was splinted (23):

I	Procedures Used	Check all applicable boxes			No treatment
01	☐	Airway insertion	14	☐	Intubation (EGTA)
02	☐	Anti-shock trousers	15	☐	Intubation (ET)
03	☐	Assist ventilation	16	☐	IO/IV therapy
04	☒	Bleeding control	17	☐	Medications therapy
05	☐	Burn care	18	☐	Oxygen therapy
06	☐	Cardiac pacing	19	☐	OB care/delivery
07	☐	Cardioversion (defib) manual	20	☐	Prearrival instructions
08	☐	Chest/abdominal thrust	21	☐	Restrain patient
09	☐	CPR	22	☐	Spinal immobilization
10	☐	Cricothyroidotomy	23	☒	Splinted extremities
11	☐	Defibrillation by AED	24	☐	Suction/aspirate
12	☐	EKG monitoring	00	☐	Other
13	☐	Extrication			

PROCEDURES USED CODES

01 Airway insertion.
02 Anti-shock trousers.
03 Assist ventilation.
04 Bleeding control.
05 Burn care.
06 Cardiac pacing.
07 Cardioversion (defibrillation), manual.
08 Chest/abdominal thrust.
09 CPR.
10 Cricothyroidotomy.
11 Defibrillation by AED.
12 EKG monitoring.
13 Extrication.
14 Intubation (EGTA).
15 Intubation (ET).
16 IO/IV therapy.
17 Medications therapy.
18 Oxygen therapy.
19 Obstetrical care/delivery.
20 Prearrival instructions.
21 Restrained patient.
22 Spinal immobilization.
23 Splinted extremities.
24 Suction/aspirate.
00 Procedures used, other.
NN No treatment.

SECTION J

J

Safety Equipment

Definition

The types of safety equipment in use by the patient at time of injury.

Purpose

This element provides important information about safety devices used. The data can be used with police reports concerning collisions, tracking various trends and patterns, and determining the focus of public education campaigns.

Entry

Check or mark all applicable boxes to indicate the safety equipment that was in use. If no safety equipment was used, check or mark the None box

Example

The patient was wearing a helmet when the bicycle accident occurred (4):

J Safety Equipment ☐ None

Used or deployed by patient.
Check all applicable boxes.

1 ☐ Safety/seat belts
2 ☐ Child safety seat
3 ☐ Airbag
4 ☒ Helmet
5 ☐ Protective clothing
6 ☐ Flotation device
0 ☐ Other
U ☐ Undetermined

SAFETY EQUIPMENT CODES

1	Safety, seat belts.
2	Child safety seat.
3	Airbag.
4	Helmet.
5	Protective clothing.
6	Flotation device.
0	Safety equipment, other.
N	None.
U	Undetermined.

SECTION K

This section is completed only if the patient went into or was found in cardiac arrest.

K

Cardiac Arrest

When Cardiac Arrest Occurred

Definition

When the cardiac arrest occurred in relation to the arrival of fire department's EMS personnel and whether CPR was performed before EMS personnel arrived.

Purpose
The effectiveness of bystander CPR on morbidity (or patient outcome) on a cardiac arrest patient can be determined.

Entry
Check or mark all applicable boxes. The intent here is to determine whether it was a pre-arrival or post-arrival arrest. If it was a pre-arrival arrest, check whether it was witnessed or whether bystander CPR was performed.

Example
The patient went into cardiac arrest while eating dinner (1) and a bystander witnessed the incident and initiated CPR (2):

K Cardiac Arrest
Check all applicable boxes

1 [X] **Pre-arrival arrest?**
If pre-arrival arrest, was it:
1 [X] **Witnessed?**
2 [X] **Bystander CPR?**

2 [ ] **Post-arrival arrest?**

Initial Arrest Rhythm

1 [ ] **V-Fib/V-Tach**
0 [ ] **Other**
U [ ] **Undetermined**

CARDIAC ARREST CODES

1 Pre-arrival arrest.
2 Post-arrival arrest.

PRE-ARRIVAL DETAILS CODES

1 Witnessed.
2 Bystander CPR.

Initial Arrest Rhythm

Definition
The patient's initial heart arrest rhythm as measured by the fire department's EMS personnel with an EKG monitor.

Purpose
This element tracks trends and patterns in the types and the survival of cardiac patients.

Entry
Check or mark the appropriate box.

Example
The patient's arrest rhythm was V-Tach (1):

K Cardiac Arrest
Check all applicable boxes
1 ☒ **Pre-arrival arrest?**
If pre-arrival arrest, was it:
1 ☒ **Witnessed?**
2 ☒ **Bystander CPR?**
2 ☐ **Post-arrival arrest?**
Initial Arrest Rhythm
1 ☒ **V-Fib/V-Tach**
0 ☐ **Other**
U ☐ **Undetermined**

INITIAL ARREST RHYTHM CODES

1	V-Fib/V-Tach.
0	Initial arrest rhythm, other.
U	Undetermined.

SECTION L

This section collects information on the level of training of the fire department responder who treated the patient and the level of can the responder provided.

L1 Initial Level of Provider ☆

Definition
The training level of the first fire department responder(s) to treat the patient.

Purpose
This element aids researchers in identifying trends of pre-hospital care delivered by the fire service. This information may also aid researchers in evaluating the effect of pre-hospital CPR and cardiac care on morbidity (or patient outcomes).

Entry
Check or mark the box that best describes the initial level of care the patient received from the fire department.

Example
The first fire department responder to arrive on the scene and treat the patient was a first responder (1):

L1 Initial Level of Provider ☆

1 ☒ First Responder
2 ☐ EMT-B (Basic)
3 ☐ EMT-I (Intermediate)
4 ☐ EMT-P (Paramedic)
0 ☐ Other provider
N ☐ No training

INITIAL LEVEL OF PROVIDER CODES

1 First responder.
2 EMT-B (Basic).
3 EMT-I (Intermediate).
4 EMT-P (Paramedic).
0 Other health care provider. Includes doctor, nurses, etc.
N No training.

L2 Highest Level of Care Provided on Scene

Definition

The highest level of fire department care that the patient received at the scene of the EMS incident.

Purpose

This element determine the personnel and equipment requirements for handling EMS incidents. This information may also aid researchers in evaluating the effect of pre-hospital care on morbidity (or patient outcome).

Entry

Check or mark the box that indicates the highest level of care provided at the scene by the fire department. If no care was provided, check or mark the None box.

Example

The fire department provided intermediate-level treatment at the scene (3):

L2 Highest Level of Care Provided On Scene ☐ None

1 ☐ First Responder
2 ☐ EMT-B (Basic)
3 ☒ EMT-I (Intermediate)
4 ☐ EMT-P (Paramedic)
0 ☐ Other provider

HIGHEST LEVEL OF CARE PROVIDED ON SCENE CODES

1 First responder.
2 EMT-B (Basic).
3 EMT-I (Intermediate).
4 EMT-P (Paramedic).
0 Other health care provider. Includes doctors, nurses, etc.
N No care provided.

SECTION M

M Patient Status

Definition

The overall change in the status of the patient as recorded at the time responsibility for the patient is transferred to another agency.

Purpose

This element is used to track trends and patterns in relation to the status of the patient at the time of transfer. This entry can also be correlated with other data collected in the EMS module to evaluate pre-hospital care and its influence on patient outcomes.

Entry

Check or mark the box that best describes the patient's status when he/she was transferred to another agency for care as compared to the patient's status when the fire department began treatment.

☞ Remember to check or mark the box indicating whether or not the patient had a Pulse on Transfer.

Example

The patient's status worsened as the incident progressed (3): by the time he was transferred to hospital care, he had no pulse (2)

M Patient Status

1 ☐ **Improved**
2 ☐ **Remained same**
3 ☒ **Worsened**

Check if:

1 ☐ **Pulse on transfer**
2 ☒ **No pulse on transfer**

PATIENT STATUS CODES

1 Improved.
2 Remained same.
3 Worsened.

PULSE ON TRANSFER CODES

1 Pulse on transfer.
2 No pulse on transfer.

SECTION N

N EMS Disposition

Definition

A description of whether or not the patient was transported from the scene and, if transported, who provided the transport.

Purpose

This element is used to correlate the initial call for service with the final actions in the field by providers. For instance, it may be valuable to know how often EMS is activated for patients who require no treatment or transport. Reports generated from this data element may be of use in coordinating the dispatch and responder functions.

Entry

Check or mark the box that describes the disposition of the patient. Check or mark the Not Transported box if the patient was not removed from the scene.

Example

The patient was transported to the hospital by the fire department (1):

N EMS Disposition ☐ Not transported

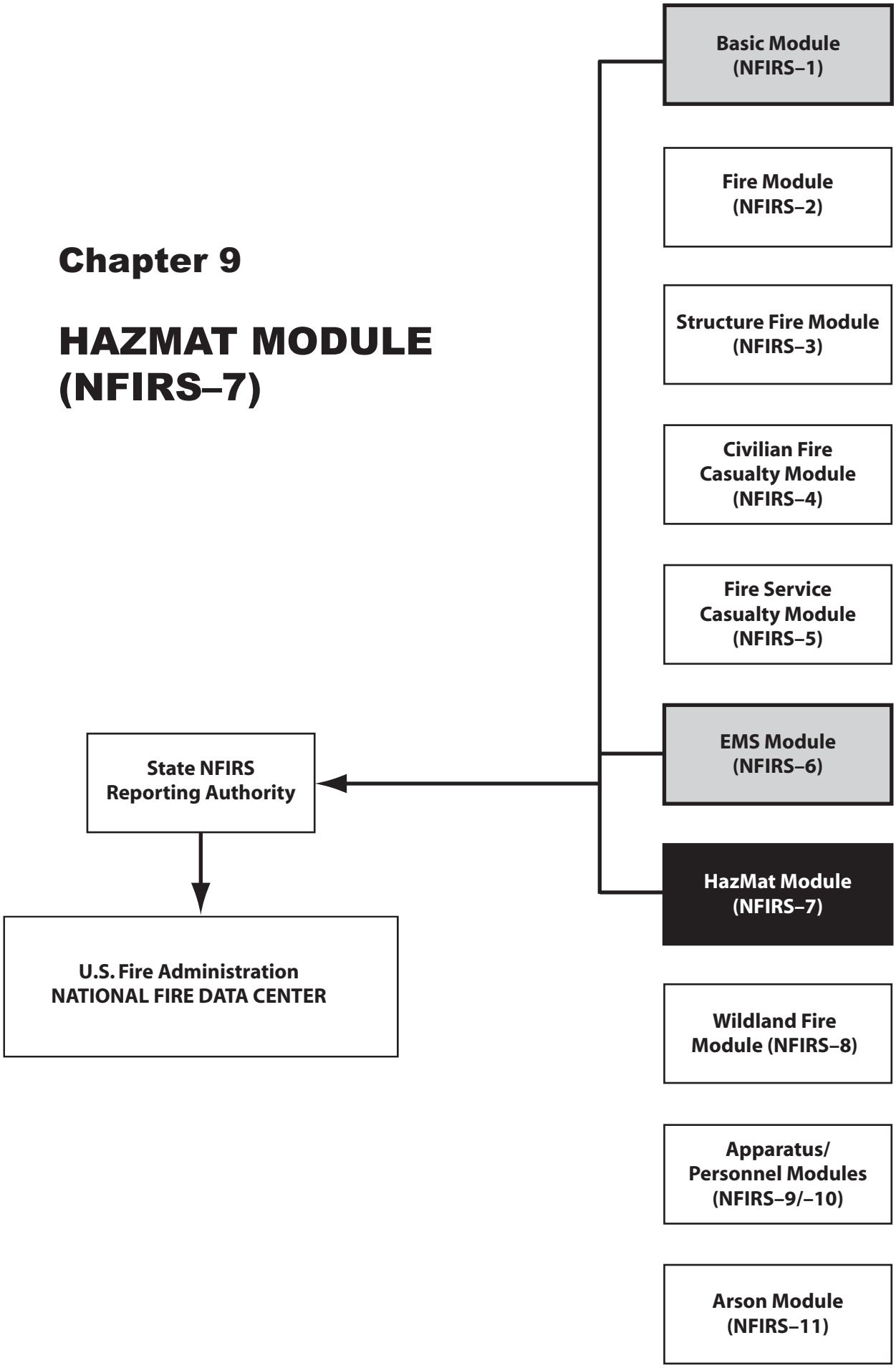
1 ☒ FD transport to ECF
2 ☐ Non-FD transport
3 ☐ Non-FD trans/FD attend
4 ☐ Non-emergency transfer
0 ☐ Other

EMS DISPOSITION CODES

1	Fire department transport to emergency care facility (ECF). Includes situations where the EMS responder transports a patient to a rendezvous point for transfer to another EMS responder.
2	Non-fire department transport. Fire department EMS responder provided treatment at the scene, but the patient was transferred to the care of another service (at the scene).
3	Non-fire department transport with fire department attendant. Fire department EMS responder provided treatment or came upon the scene of a private provider giving treatment and assisted, then rode with the non-fire department transport to the ECF.
4	Non-emergency transfer. Includes interfacility transfers under non-emergency conditions.
0	EMS disposition, other.
N	Not transported by EMS.

Chapter 9

HAZMAT MODULE (NFIRS–7)



NFIRS–7 HazMat

A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | Haz No. ☆ | ☐ Delete ☐ Change

B HazMat ID UN Number | DOT Hazard Classification | CAS Registration Number | Chemical Name ☆

C1 Container Type ☐ None

Container Type

More hazardous materials? Use additional sheets.

C2 Estimated Container Capacity

Capacity: by volume or weight

C3 Units: Capacity Check one box

VOLUME		WEIGHT	
11	☐ Ounces	21	☐ Ounces
12	☐ Gallons	22	☐ Pounds
13	☐ Barrels: 42 gal.	23	☐ Grams
14	☐ Liters	24	☐ Kilograms
15	☐ Cubic feet		
16	☐ Cubic meters		

D1 Estimated Amount Released ☆

Amount released: by volume or weight

D2 Units: Released Check one box

VOLUME		WEIGHT	
11	☐ Ounces	21	☐ Ounces
12	☐ Gallons	22	☐ Pounds
13	☐ Barrels: 42 gal.	23	☐ Grams
14	☐ Liters	24	☐ Kilograms
15	☐ Cubic feet		
16	☐ Cubic meters		

E1 Physical State When Released

1 ☐ Solid
2 ☐ Liquid
3 ☐ Gas
U ☐ Undetermined

E2 Released Into

Released into

Complete the remainder of this form only for the first hazardous material involved in this incident.

F1 Released From

Check all applicable boxes

☐ Below grade
1 ☐ Inside/on structure
Story of release
2 ☐ Outside of structure

F2 Population Density

1 ☐ Urban
2 ☐ Suburban
3 ☐ Rural

G1 Area Affected

1 ☐ Square feet
2 ☐ Blocks
3 ☐ Square miles

Enter measurement

G2 Area Evacuated ☐ None

1 ☐ Square feet
2 ☐ Blocks
3 ☐ Square miles

Enter measurement

G3 Estimated Number of People Evacuated

G4 Estimated Number of Buildings Evacuated ☐ None

H HazMat Actions Taken

Enter up to three actions taken

Primary action taken (1)

Additional action taken (2)

Additional action taken (3)

I If fire or explosion is involved with a release, which occurred first?

1 ☐ Ignition
2 ☐ Release
U ☐ Undetermined

J Cause of Release ☆

1 ☐ Intentional
2 ☐ Unintentional release
3 ☐ Container/containment failure
4 ☐ Act of nature
5 ☐ Cause under investigation
U ☐ Cause undetermined after investigation

K Factors Contributing to Release

Enter up to three contributing factors

Factor contributing to release (1)

Factor contributing to release (2)

Factor contributing to release (3)

L Factors Affecting Mitigation ☐ None

Enter up to three factors or impediments that affected the mitigation of the incident

Factor or impediment (1)

Factor or impediment (2)

Factor or impediment (3)

M Equipment Involved in Release ☐ None

Equipment involved in release

Brand

Model

Serial #

Year

N Mobile Property Involved in Release ☐ None

Mobile property type

Mobile property make

Model | Year

License plate number | State

DOT number/ ICC number

O HazMat Disposition ☆

1 ☐ Completed by fire service only
2 ☐ Completed w/fire service present
3 ☐ Released to local agency
4 ☐ Released to county agency
5 ☐ Released to state agency
6 ☐ Released to federal agency
7 ☐ Released to private agency
8 ☐ Released to property owner or manager

P HazMat Civilian Casualties

Deaths | Injuries

NFIRS–7
Revision 01/01/04

CHAPTER 9

HAZARDOUS MATERIALS MODULE (NFIRS–7)

The Hazardous Materials (HazMat) Module is an optional module. It should be used when that option has been chosen by your state or local authorities.

The HazMat Module is used when the Other box in Block H3 ("Hazardous Materials Release") of the Basic Module (NFIRS–1) has been checked. Its purpose is to document *reportable* HazMat incidents. Generally speaking, a reportable HazMat incident is when either:

1. Specialized HazMat resources were dispatched or used, or should have been dispatched or used, for assessing, mitigating, or managing the situation.

OR

2. Releases or spills of hazardous materials that exceed 55 gallons occur.

Nothing in this definition is meant to alter compliance with state or local HazMat reporting requirements. In states with mandatory reporting, the state reporting authority determines which optional modules (EMS, HazMat, Wildland, etc.) are to be submitted to the state.

The HazMat Module permits hazardous materials incidents to be thoroughly profiled for incident management analysis and response strategy development. It collects relevant information on:

- Hazardous materials identification
- Container information
- Release amounts and location
- Actions taken
- Mitigating factors.

In addition, aggregated data on hazardous materials incidents will provide invaluable information that can be used by policy makers who develop regulations for the storage, use, and transportation of hazardous materials. It can also be used to develop recommended guidance for emergency personnel response to HazMat incidents.

☞ If more than one HazMat was involved, one form is completed for each HazMat released. (The term *release* is intended to include spill.)

SECTION A

The guidance and directions for completing Section A of the HazMat Module are essentially the same as for Section A in the Basic Module. One additional field is included in Section A of the HazMat Module (Haz No.). It is stressed that the entries in Section A of the HazMat Module must be identical with the entries on the corresponding Basic Module. An example of a completed Section A can be found on page 3–8.

A

Fire Department Identification (FDID) ☆

Entry
Enter the same FDID number found in Section A of the Basic Module.

State ☆

Entry
Enter the same state abbreviation found in Section A of the Basic Module.

Incident Date ☆

Entry
Enter the same incident date found in Section A of the Basic Module.

Station Number

Entry
Enter the same station number found in Section A of the Basic Module.

Incident Number ☆

Entry
Enter the same incident number found in Section A of the Basic Module.

Exposure Number ☆

Entry
If the HazMat release was in connection with a fire incident and the release was in an exposure property, enter the same exposure number that was entered in Section A of the Basic Module for that exposure.

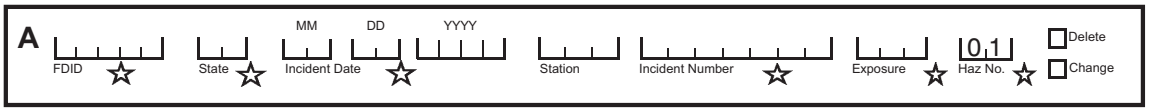
HazMat Number (Haz No.) ☆

Definition
A unique HazMat number is assigned to each hazardous material involved in the incident.

Purpose
Distinguishes among multiple hazardous materials involved in the incident. Data and information concerning the HazMat can be accessed using this number in conjunction with other unique field information.

Entry
Enter the HazMat number for the particular HazMat reported on this module. A separate Haz No. is assigned to each HazMat involved. The first material is always coded “01,” and each succeeding material is numbered sequentially and incremented by 1 beginning with “02.” The two-character numeric field is zero filled, not right justified.

Example
An incident involving a release from two drums, where the first drum is filled with a flammable liquid and the second drum contains a weak acid. Since two hazardous materials are involved, two separate HazMat Modules are completed. The Haz No. for the first drum would be “01” and the second would be “02”:



Delete/Change

Definition
Indicates a change to information submitted on a previous HazMat Module or a deletion of all information regarding that specific HazMat release.

Purpose
To delete or change previously reported information.

Entry
Delete. Check or mark this box when you have previously submitted data on this HazMat release and now want to have the data on this release deleted from the database. If this box is marked, complete Section A, including the HazMat number assigned to this HazMat, and leave the rest of the report blank. Forward the report according to your normally established procedures.

Change. Check or mark this box only if you previously submitted this HazMat release to your state reporting authority and now want to update or change the information in the state database. Complete Section A and any other sections or blocks that need to be updated or corrected. If you need to blank a field that contains data, you must resubmit the original module containing the newly blanked field along with all the other original information in the module for that incident. This action is required only when sending an updated module to your state reporting authority. Forward the report according to your normally established procedures.

SECTION B

B HazMat ID

The purpose of Section B is to identify the hazardous materials involved in an incident as specifically as possible. Several identification systems exist that can aid fire department personnel in identifying hazardous materials:

- UN Number
- DOT Hazard Classification
- CAS Registration Number
- Chemical Name

Identification of specific hazardous materials involved in fire or rescue incidents is a priority for emergency response personnel.

UN Number

Definition

A four-digit number assigned to the hazardous material that conforms to United Nations (UN) standards for the identification of hazardous materials in international transportation. In some cases, a single UN number will be assigned to several materials with similar properties. Not all hazardous materials have been assigned a UN number.

Purpose

Aggregate information on the identities of hazardous materials being released can reveal trends or patterns for particular materials or classes of materials. These trends may provide direction for policy makers, prevention efforts, and training curricula.

Entry

Enter the four-digit UN number assigned to the hazardous material. Leave the entry blank if a UN number has not been assigned.

These numbers may be found in a variety of reference materials, including USFA's *Hazardous Materials Guide for First Responders* and the *North American Emergency Response Guidebook* (NAERG), published by the Research and Special Programs Administration, U.S. Department of Transportation (DOT). A list of commonly encountered materials is included in Appendix D.

Example

Enter the UN Number "1203" for a hazardous materials release involving gasoline:

B	HazMat ID	1 2 0 3			Chemical Name ☆	
		UN Number	DOT Hazard Classification	CAS Registration Number		

The ☆ denotes a required field.

DOT Hazard Classification

Definition

The Department of Transportation hazard classification describes the primary hazard associated with various categories of hazardous materials. The DOT hazard classification is intended for use on placards or labels during the transportation of hazardous materials. Since many materials have multiple hazards, these placards or labels may not describe all of the potential hazards faced by emergency responders at a HazMat incident.

Purpose

Aggregate information on the identities of hazardous materials being released can reveal trends or patterns for particular materials or classes of materials. These trends may provide direction for policy makers, prevention efforts, and training curricula.

Entry

Enter the two-digit code that corresponds with the hazard classification and division code as found on a placard or label, in the NAERG, or from the list below.

☞ The DOT Hazard Classification consists of a single-digit hazard class code, followed by a decimal point and a single-digit code for the division. For NFIRS data collection, this two-part hazard class/division code has been converted into a two-digit code.

Example

The HazMat release was a flammable liquid (30):

B	HazMat ID	1 2 0 3	3 0		Chemical Name ☆	
		UN Number	DOT Hazard Classification	CAS Registration Number		

DOT HAZARD CLASSIFICATION CODES

Class 1 – Explosives

11 Division 1.1 – Explosives with mass explosion hazard.
12 Division 1.2 – Explosives with projectile hazard.
13 Division 1.3 – Explosives with predominant fire hazard.
14 Division 1.4 – Explosives with no significant blast hazard.
15 Division 1.5 – Very insensitive explosives; blasting agents.
16 Division 1.6 – Extremely insensitive detonating articles.

Class 2 – Gases

21 Division 2.1 – Flammable gases.
22 Division 2.2 – Non-flammable, non-toxic compressed gases.
23 Division 2.3 – Gases toxic by inhalation.
24 Division 2.4 – Corrosive gases (Canada).

Class 3 – Flammable Liquids (and Combustible Liquids (U.S.))

30 Flammable and combustible liquids.

Class 4 – Flammable Solids, Spontaneously Combustible Materials, and Dangerous-When-Wet Materials

41 Division 4.1 – Flammable solids.
42 Division 4.2 – Spontaneously combustible materials.
43 Division 4.3 – Dangerous-when-wet materials.

Class 5 – Oxidizers and Organic Peroxides

51 Division 5.1 – Oxidizers.
52 Division 5.2 – Organic peroxides.

Class 6 – Toxic Materials and Infectious Substances

61 Division 6.1 – Toxic materials.
62 Division 6.2 – Infectious substances.

Class 7 – Radioactive Materials

70 Radioactive materials.

Class 8 – Corrosive Materials

80 Corrosive materials.

Class 9 – Miscellaneous Dangerous Goods

91 Division 9.1 – Miscellaneous dangerous goods (Canada).
92 Division 9.2 – Environmentally hazardous substances (Canada).
93 Division 9.3 – Dangerous wastes (Canada).
UU Undetermined.

CAS Registration Number

Definition

The identification number assigned to a chemical by the Chemical Abstract Service (CAS) of the Chemical Abstract Society. Not all hazardous materials have an assigned CAS number.

Purpose

Aggregate information on the identities of hazardous materials being released can reveal trends or patterns for particular materials or classes of materials. These trends may provide direction for policy makers, prevention efforts, and training curricula.

Entry

Enter the number assigned by the CAS to the chemical. This number may be found in reference materials, on Material Safety Data Sheets (MSDSs), and on some product labels. A list of CAS numbers for commonly encountered chemicals is included in Appendix D. Leave the entry blank if a CAS registration number has not been assigned.

☞ Enter the number as it appears, including dashes.

Example

For gasoline, enter the CAS number “8006–61–9”:

B	HazMat ID	1 2 0 3	3 0	8 0 0 6 - 6 1 - 9	Chemical Name ☆	
		UN Number	DOT Hazard Classification	CAS Registration Number		

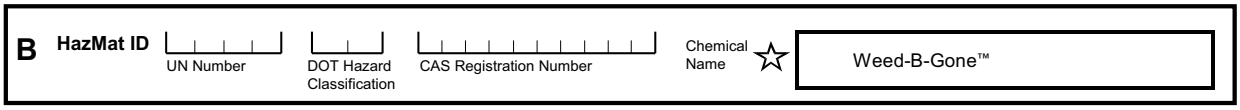
Chemical Name ☆

Definition
A standard chemical or trade name by which the hazardous material is commonly known. Products from different manufacturers with similar active chemical ingredients may have different trade names.

Purpose
Aggregate information on the identities of hazardous materials being released can reveal trends or patterns for particular materials or classes of materials. These trends may provide direction for policy makers, prevention efforts, and training curricula.

Entry
Enter the chemical or trade name of the hazardous material as shown on the MSDS, product label, packaging, or container.

Example
A common herbicide used for household applications may be entered by the trade name "Weed-B-Gone™," or by the chemical name "2,4-Dichlorophenoxyacetic acid":



☞ Those chemicals listed in the *Hazardous Materials Guide for First Responders,* published by the U.S. Fire Administration, are also cross-referenced in Appendix D.

SECTION C

This section collects information on the type and capacity of the container involved in the HazMat release.

C1 Container Type

Definition
The type or configuration of the container, equipment, or facility used to transport or store the hazardous material.

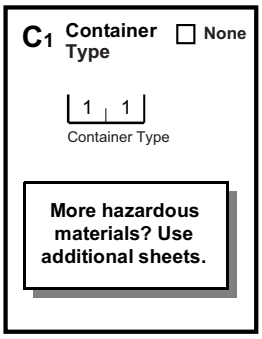
Purpose
Aggregate information on the types of containers involved in HazMat incidents may provide (1) guidance to regulators that establish container design requirements and (2) direction to prevention and code development efforts, emergency response training, and policy making.

Entry

Enter the two-digit code for the container type. If no container was involved, check or mark the None box and skip to Block D1.

Example

The release was from a drum (11):



CONTAINER TYPE CODES

Portable Container. A container designed to be transported to a location and left there until emptied, when it may be disposed of or returned to a vendor for refill and reuse.

11 Drum. Cylindrical container used to hold non-bulk quantities of product typically in the 55-gallon range. Drums can be of closed- or open-head design and can be constructed of a range of materials, including metal, plastic, or fiberboard. Drums can be used for liquid or solid materials, including flammable liquids or solvents, corrosives, poisons, and other hazardous materials.

12 Cylinder. Container used for storing pressurized, liquefied, and dissolved gases. The three types of cylinders include aerosol containers, uninsulated containers, and cryogenic/insulated containers. Cylinders are usually constructed of metal, but some aerosol containers may be plastic or glass. Cylinders have a wide range of service pressures from a few psi to several thousand psi. Some examples of materials stored in cylinders include acetylene, oxygen, carbon dioxide, nitrogen, and propane. Large cylinders known as “ton containers” are used to store chlorine.

13 Can or bottle. Container used to store quantities of liquids or solids often intended for household or laboratory use. Cans and bottles can be constructed of metal, glass, plastic, or ceramic. Flammable liquids, solvents, corrosives, and other hazardous materials can be stored in these containers.

14 Carboy. A glass or plastic container used to store moderate amounts (up to over 20 gallons) of liquids in industrial or laboratory settings. Carboys are usually shipped in an outer packaging of polystyrene or wood.

15 Box or carton. Rigid packages that completely enclose their contents; they can be constructed of metal, plastic, fiberboard, or wood. Boxes or cartons can be used to store liquids or solids and can contain a wide range of hazardous materials. They can also be used as exterior packaging around bottles or cans and can contain radioactive or infectious materials packaged for use in medical facilities or laboratories.

16 Bag or sack. Most commonly used for the storage of solid materials, but can also be used for liquids. Bags and sacks can be constructed of cloth, paper, plastic, or a combination of materials in sizes ranging from a few to 100 pounds of material. Flexible intermediate bulk containers (FIBCs), known as “supersacks,” can contain from 119 to 793 gallons of product.

17 Cask. Specially designed, tested, and certified containers designed to transport highly radioactive materials. They are constructed to withstand high impacts and have a very low potential of container failure.

18 Hose. A portable, flexible tube used to transfer liquid product from one location to another.

10 Portable container, other. A container that meets the definition of a portable container but is not specified below.

Fixed Container. A container designed and built in a fixed location that is not intended to be moved or transported from that location.

21 Tank or silo. These containers can hold a wide range of liquid or solid materials in quantities ranging from several pounds or gallons to bulk storage tanks that can hold thousands of gallons of product. They are usually constructed of metal and may or may not be pressurized.

22 Pipe or pipeline. Pipes are used to transport liquids or gases from one location to another. They can be constructed of metal, PVC, or plastic. Pipes can begin and end within a fixed facility, or they may travel some distance as part of a pipeline.

23 Bin. Used to store any quantity of solid or granular materials at a fixed facility. Bins can be open or closed and are often used for materials that are insensitive to moisture or minimally reactive.

24 Machinery or process equipment. Equipment used for the manufacture of chemical compounds at a fixed facility. Process equipment may include a variety of containers that are combined to facilitate the reaction of chemicals into different compounds.

28 Hose. A fixed, flexible hose that can be permanently attached to a storage vessel or can be used to transport materials from one location to another within a facility.

20 Fixed container, other. A container that meets the definition of a fixed container but is not specified below.

Natural Containment. Any feature that is part of the permanent topography of the area. Natural containment areas can be manmade (for example, a manmade lake or pond).

31 Sump or pit. A depression created in the ground that forms a containment area for the storage of liquid or solid materials. Includes sewage treatment or sludge pits.

32 Pond or surface impoundment. A natural containment feature used to hold liquid or solid materials, such as a manure pond at a farm or water storage areas at a wastewater treatment facility.

33 Well. A well is a deep hole in the ground that was originally intended to provide access to groundwater. Dry wells can be used for the storage of hazardous materials.

34 Dump site or landfill. A location where various articles of trash and rubbish are routinely deposited (legally or otherwise). Dump sites and landfills may contain a wide variety of hazardous substances.

30 Natural containment, other. A containment that meets the definition of a natural container but is not specified below.

Mobile Container. A container designed to be transported from one location to another, intended to store quantities of product that can be offloaded at intermediate locations, or provided for the use of the transporting vehicle itself.

41 Vehicle fuel tank and associated piping. Vehicle fuel tanks are mobile tanks that can hold from a few gallons to several thousand gallons of product. Vehicle fuel tanks provide fuel solely for the operation of the vehicle.

42 Product tank on or towed by vehicle. These mobile containers may be on the vehicle or towed behind it. They are usually intended to transport product from one location to another for offloading or storage. This includes semi-trailers, trailers, or vehicles specifically designed for the transport of a commodity such as home heating oil or propane.

43 Piping associated with mobile product tank loading or offloading. The piping and associated loading/offloading hardware attached to the mobile container.

48 Hose. A flexible hose used for loading or offloading mobile containers after it is attached to a discharge pipe or outlet.

40 Mobile container, other. Any container that fits the definition of a mobile container but is not classified below.

Other Containers

91	Rigid intermediate bulk containers. RIBCs can contain from 119 to 793 gallons of liquid or solid product. They are used for the transport and storage of a wide variety of materials and may be constructed of steel or aluminum, but are often formed from rigid polyethylene. RIBCs are transported to a fixed facility where they are used until they are emptied of product, after which they are returned to a vendor for refill and reuse.
00	Container type, other.
NN	None.
UU	Undetermined.

C2 Estimated Container Capacity

Definition

The amount of material the container was designed to hold. The container capacity is reported as two data elements. One is a numeric entry and expresses quantity (Block C2); the other defines the unit of measure (Block C3).

☞ Both the quantity (Block C2) and the unit of measure (Block C3) must be reported for the data to be meaningful.

Purpose

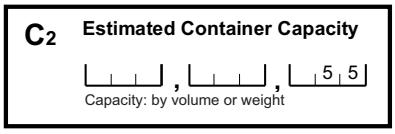
Aggregate information on the size of containers involved in HazMat incidents may provide (1) guidance to regulators that establish container design requirements and (2) direction to prevention and code development efforts, emergency response training, and policy making.

Entry

Enter the estimated amount of material that the container was designed to hold, by volume or weight, to the nearest whole unit of measure.

Example

Enter “55” for a 55-gallon drum:



C3 Units: Capacity

Definition

The unit of measure that defines, by volume or weight, the capacity of the hazardous materials container.

☞ Both the quantity (Block C2) and the unit of measure (Block C3) must be reported for the data to be meaningful.

Entry

Check or mark the appropriate unit of measure.

Example

The unit of measure for the drum is gallons (12):

C3 Units: Capacity Check one box

	VOLUME		WEIGHT
11 ☐	Ounces	21 ☐	Ounces
12 ☒	Gallons	22 ☐	Pounds
13 ☐	Barrels: 42 gal.	23 ☐	Grams
14 ☐	Liters	24 ☐	Kilograms
15 ☐	Cubic feet		
16 ☐	Cubic meters		

UNITS: CAPACITY CODES

Volume Units

11 Ounces (liquid).
12 Gallons.
13 Barrels (42 gal).
14 Liters.
15 Cubic feet.
16 Cubic meters.

Weight Units

21 Ounces (weight).
22 Pounds.
23 Grams.
24 Kilograms.

SECTION D

D1 Estimated Amount Released ☆

Definition

The amount of hazardous material released from a container expressed as a standard unit of measure. The quantity released is reported as two data elements. One is a numeric entry and expresses quantity (Block D1); the other defines the unit of measure (Block D2).

☞ Both the quantity (Block D1) and the unit of measure (Block D2) must be reported for the data to be meaningful.

Purpose

Aggregate information on the amount of HazMat released provides an important measure of the magnitude of the release problem.

Entry

Enter the estimated amount of material released from the container, by volume or weight, to the nearest whole unit of measure.

Example

The HazMat release was estimated at 100 gallons of material:

D1 Estimated Amount Released ☆

[ ] [ ] [ ] , [ ] [ ] [ ] , [1] [0] [0]

Amount released: by volume or weight

D2 Units: Released

Definition

The unit of measure, by volume or weight, for the amount of the hazardous material released from the container.

☞ Both the quantity (Block D1) and the unit of measure (Block D2) must be reported for the data to be meaningful.

Entry

Check or mark the appropriate unit of measure.

Example

The unit of measure for the release is gallons (12)

D2 Units: Released Check one box

VOLUME			WEIGHT		
11	☐	Ounces	21	☐	Ounces
12	☒	Gallons	22	☐	Pounds
13	☐	Barrels: 42 gal.	23	☐	Grams
14	☐	Liters	24	☐	Kilograms
15	☐	Cubic feet			
16	☐	Cubic meters			

UNITS: RELEASED CODES

Volume Units

11 Ounces (liquid).
12 Gallons.
13 Barrels (42 gal).
14 Liters.
15 Cubic feet.
16 Cubic meters.

Weight Units

21 Ounces (weight).
22 Pounds.
23 Grams.
24 Kilograms.

SECTION E

This section deals with the physical state of the HazMat and the environment in which it was released.

E1 Physical State When Released

Definition
The simple physical state of the material during release.

Purpose
Aggregate information on the physical state of hazardous materials being released can reveal trends or patterns for particular materials, classes of materials, and physical states. These trends may provide direction for policy makers, prevention efforts, and training curricula.

Entry
Check or mark the box best describing the physical state of the material when released.

Example
The release of hazardous material was in a liquid state (2).

E1 Physical State When Released

1 ☐ Solid
2 ☒ Liquid
3 ☐ Gas
U ☐ Undetermined

PHYSICAL STATE WHEN RELEASED CODES

1	Solid.
2	Liquid.
3	Gas.
U	Undetermined.

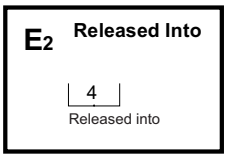
E2 Released Into

Definition
The general environment contaminated by the hazardous material after release.

Purpose
Aggregate information on environmental contamination can provide insight on the extent and environmental impact of hazardous materials releases. This may provide important information to resource planners and policy makers who develop zoning ordinances and regulations for the use or transportation of hazardous materials.

Entry
Enter the code that best describes the environment contaminated by the hazardous material.

Example
A hazardous materials release spread down a street and into a river (4):



RELEASED INTO CODES

1	Air.
2	Water.
3	Ground
4	Water and ground.
5	Air and ground.
6	Water and air.
7	Air, water, and ground.
8	Confined, no environmental impact; not released into air, water, or ground.

SECTION F

Information on the location of the release and the population density in the area of the release is captured in this section.

F1 Released From

Definition
The physical location from which the hazardous material was released.

Purpose
Aggregate information on the physical location of hazardous material releases may reveal trends or patterns for particular materials, classes of materials, and physical states. These trends may provide direction for code enforcement or prevention efforts, policy makers, and training curricula.

Entry
If the location of the release was below grade, check or mark the Below Grade box. If the release was inside or on a structure, check or mark the Inside/On Structure box and enter the Story of Release directly below. If the release was outside a structure, check or mark the Outside of Structure box.

☞ For purposes of HazMat data collection, Below Grade also refers to underground releases.

☞ Checking or marking the Below Grade box has the effect of entering a negative number in NFIRS 5.0.

Example

The HazMat release came from an above-ground pipeline (2):

F1 Released From

Check all applicable boxes

☐ Below grade

1 ☐ Inside/on structure

Story of release

2 ☒ Outside of structure

RELEASED FROM CODES

1 Inside or on structure.
2 Outside of structure.

F2 Population Density

Definition

An estimate of the population density in the area of the hazardous materials release.

Purpose

Aggregate information on the population density of areas where hazardous materials are released can help define prevention, enforcement, training, and emergency response needs for different areas.

Entry

Check or mark the box best describing the area where the hazardous material was released.

Example

The HazMat release occurred in a busy city center (1):

F2 Population Density

1 ☒ **Urban**
2 ☐ **Suburban**
3 ☐ **Rural**

POPULATION DENSITY CODES

1 Urban center. Densely populated with extensive development.
2 Suburban. Predominantly single-family residential, within a short distance of an urban area. Suburban communities are less densely populated than urban areas but may contain areas of significant development.
3 Rural. Scattered small communities and isolated family dwellings. Rural areas may be sparsely populated with widely scattered homes or housing developments.

SECTION G

This section collects information on the size of the area affected by a HazMat release and whether an evacuation occurred.

G1 Area Affected

Definition

The amount of area or space directly affected by the hazardous material release. This does not include the area evacuated, on the area contaminated. Evacuation information is recorded in Blocks G1 and G2.

☞ Both the Area Affected (Block G1) and the Area Evacuated (Block G2) must be reported for the data to be meaningful.

Purpose

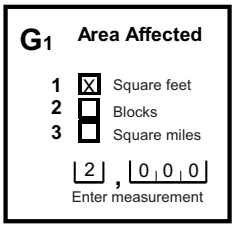
Information on the area affected guides future planning and incident management efforts.

Entry

Check or mark the appropriate unit-of-measurement box and enter the numeric value for the measurement of the area affected.

Example

A HazMat release affected a 2,000-square-foot area (1):



AREA AFFECTED CODES

1	Square feet.
2	Blocks.
3	Square miles.

G2 Area Evacuated

Definition

The amount of area or space evacuated as a result of the hazardous materials release or potential release. This includes the contaminated area (Block G1).

☞ Both the Area Affected (Block G1) and the Area Evacuated (Block G2) must be reported for the data to be meaningful.

Purpose

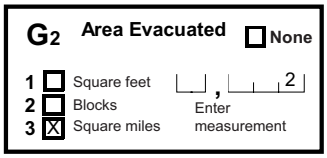
Information on the area evacuated can guide future training and incident management efforts. It is also an indirect measure of the amount of emergency resources needed to deal with the release.

Entry

Check or mark the appropriate unit-of-measurement box and enter the numeric value for the measurement (rounded to the nearest whole number) of the area evacuated. If there was no evacuation, check or mark the None box.

Example

A daytime chlorine release necessitated the evacuation of 2 square miles (3).



AREA EVACUATED CODES

1 Square feet.
2 Blocks.
3 Square miles.

G3 Estimated Number of People Evacuated

Definition

The estimated number of people evacuated due to the hazardous materials release or potential release.

Purpose

Information on the number of people evacuated can provide important information to resource planners and policy makers developing zoning ordinances or regulations for the use and transportation of hazardous materials. This information may also help direct future training and incident management efforts for emergency response personnel. It is also an indirect measure of the amount of emergency resources needed to deal with the release.

Entry

Enter the estimated number of people evacuated.

Example

An estimated 800 people were evacuated from a high school that was the site of a hazardous material release in a chemistry laboratory:

G3 Estimated Number of People Evacuated

,800

G4 Estimated Number of Buildings Evacuated

Definition

The estimated number of buildings evacuated due to the hazardous materials release or potential release.

Purpose

Information on the number of buildings evacuated can provide important information to resource planners and policy makers developing zoning ordinances or regulations for the use and transportation of hazardous materials. This information may also help direct future training and incident management efforts for emergency response personnel. It is also an indirect measure of the amount of emergency resources needed to deal with the release.

Entry

Enter the estimated number of buildings evacuated. Include buildings that were already empty in the evacuated area (e.g., houses during the day with no one home). If no buildings were evacuated, check or mark the None box.

Example

A two-story commercial structure with a hazardous materials release from a dry cleaning establishment on the first floor was evacuated:

G4 Estimated Number of Buildings Evacuated

,1 ☐ None

SECTION H

H HazMat Actions Taken

Definition

Specialized HazMat response actions taken at the scene of an incident by personnel specifically trained and equipped to mitigate hazards arising from hazardous materials releases. Other actions taken by fire service personnel should be entered in the Basic Module.

Purpose

Information on the actions taken by specialized hazardous materials response personnel can guide future training and incident management efforts.

Entry

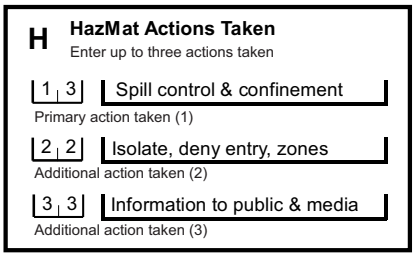
Enter the two-digit code and description for up to three significant HazMat actions taken.

☞ Significant non-HazMat actions taken should be entered in the Actions Taken section (F) of the Basic Module.

☞ If more than three significant HazMat actions were taken, the additional actions can be documented on the Basic Module.

Example

Flammable liquid from a semi-trailer was released. HazMat personnel controlled the spill (13), isolated the area (22), and released a statement to the media (33):



HAZMAT ACTIONS TAKEN CODES

Hazardous Condition

11 Identify, analyze hazardous materials.

12 HazMat detection, monitoring, sampling, and analysis. Actions taken to detect, monitor, and sample hazardous materials using a variety of detection instruments including combustible gas indicators (CGIs) or explosimeter, oxygen monitors, colorimetric tubes, specific chemical monitors, and others. Results from these devices must be analyzed to provide information about the hazardous nature of the material or environment.

13 HazMat spill control and confinement. These are actions taken to confine the product release to a limited area including the use of absorbents, damming/diking, diversion of liquid runoff, dispersion, retention, or vapor suppression.

14 HazMat leak control and containment. These are actions taken to keep a material within its container including plugging/patching operations, neutralization, pressure isolation/reduction, solidification, and vacuuming.

15 Remove hazard or hazardous materials. A broad range of actions taken to remove hazardous materials from a damaged container or contaminated area. Examples of actions to remove hazards include product offload/transfer, controlled burning or product flaring, venting, and overpacking.

16 Decontaminate persons or equipment. Actions taken to prevent the spread of contaminants from the “hot zone” to the “cold zone.” This includes gross, technical, or advanced personal decontamination of victims, emergency responders, and equipment.

Isolation and Evacuation. Actions taken to isolate the contaminated area or evacuate those persons affected by a hazardous materials release or potential release.

21 Determine the materials released to be non-hazardous through product identification and environmental monitoring.

22 Isolate area and establish hazard control zones. Actions taken to isolate the affected area, deny entry to unprotected persons, and establish hazard control zones (hot, warm, cold).

23 Provide apparatus. Actions taken to provide apparatus to conduct evacuation and isolation efforts.

24 Provide equipment. Actions taken to provide equipment for evacuation and isolation efforts. Includes equipment provided to care for evacuees.

25 Provide water. Actions taken to provide water supply for exposure protection or fire control efforts.

26 Control crowd. Actions taken by fire department personnel to control crowds and onlookers.

27 Control traffic. Actions taken by fire department personnel to control traffic along evacuation routes.

28 Protect in-place operations. Actions taken to protect civilians in their homes, schools, or places of work, without evacuating them from a potentially hazardous area.

Information, Investigation, and Enforcement. Actions taken to disseminate information about a hazardous materials incident for the purposes of notifying the public; requesting mutual aid from local, state, or federal agencies; and conducting investigation or enforcement operations.

31 Refer to proper authority. Actions taken to "hand off" the incident from emergency response personnel to cleanup crews or other agencies responsible for restoring the facility and environment to a pre-incident condition.

32 Notify other agencies. Actions taken to ensure that other agencies are involved or notified of the incident so that they may provide assistance or fulfill their legally mandated responsibilities.

33 Provide information to the public or media. Actions taken to provide information to the public through media resources or through alerting systems like the Emergency Broadcast System. Horns, klaxons, and other warning devices located at fixed facilities for evacuation purposes are included here.

34 Investigate. Actions taken to investigate the cause of a hazardous materials release, identify the financially responsible party, and enable cost-recovery efforts.

35 Standby. Actions taken to ensure that sufficient resources are on standby for possible use at a hazardous materials incident.

00 HazMat actions taken, other. Any other actions taken during the course of a hazardous materials incident that are not identified on the Basic or HazMat Modules.

SECTION I

I

Release/Ignition Sequence

Definition

The indication of when a fire or explosion occurred in relation to the actual release of the hazardous material.

Purpose

Information on the causal relationship of the events occurring during a hazardous materials release can guide future training and incident management efforts.

Entry

Check or mark the Ignition box if a fire led to a release of hazardous materials. Check or mark the Release box if a hazardous material was spilled or released and then caught fire.

Example
An explosion and fire occurred following the spill of a flammable liquid (2):

I **If fire or explosion is involved with a release, which occurred first?**

1 ☐ Ignition U ☐ Undetermined
2 ☒ Release

RELEASE/IGNITION SEQUENCE CODES

1 Ignition.
2 Release.
U Undetermined.

SECTION J

J Cause of Release ☆

Definition
The cause of the situation present at the time and location of the incident that caused the release or threatened release of a hazardous material.

Purpose
Information on the cause of release can guide prevention and enforcement efforts.

Entry
Check or mark the box that best describes the cause or reason for the release.

Example
The hazardous material was released from a rusted drum (3):

J **Cause of Release** ☆

1 ☐ Intentional
2 ☐ Unintentional release
3 ☒ Container/containment failure
4 ☐ Act of nature
5 ☐ Cause under investigation
U ☐ Cause undetermined after investigation

CAUSE OF RELEASE CODES

1 Intentional.
2 Unintentional release.
3 Container or containment failure.
4 Act of nature.
5 Cause under investigation.
U Cause undetermined after investigation.

SECTION K

K

Factors Contributing to Release

Definition

Factors present at the time and location of the incident that contributed to the release or threatened release of a hazardous material.

Purpose

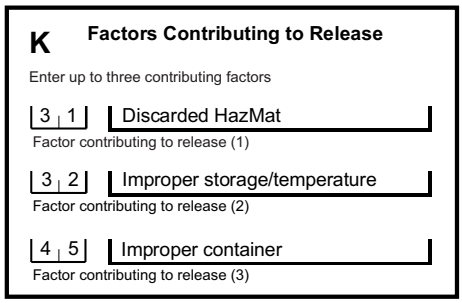
Information on factors contributing to the release can guide prevention and enforcement efforts.

Entry

Enter the two-digit codes and descriptions for up to three significant factors that contributed to the release or threatened release of the hazardous material.

Example

Hazardous materials were released from rusted drums (32) (45) at an illegal dump site (31):



FACTORS CONTRIBUTING TO RELEASE CODES

Failure To Control Hazardous Material. Factors where human failure to control the hazardous material contributed to a release or potential release.

- 31 Abandoned or discarded hazardous material. Excludes falling asleep (33), impairment by drugs or alcohol (37), and other impairments (38).
- 32 Failure to maintain the hazardous material within the proper storage or use temperature range.
- 33 Failure to control the hazardous material due to a vehicle or process operator falling asleep.
- 34 Inadequate control of hazardous materials. Includes improper transfer or overfilling of a container. Excludes accidental release due to improper container (45).
- 37 Person possibly impaired by drugs or alcohol while controlling hazardous materials. Excludes people who simply fall asleep (33).
- 38 Person otherwise impaired or unconscious. Includes mental or physical impairment. Excludes people who simply fall asleep (33).
- 30 Failure to control hazardous materials, other. A human failure to control hazardous materials not classified below.

Misuse of Hazardous Materials

42 Improper mixing technique. Includes mixing and compounding of chemicals. Excludes hazardous materials spills (34).
43 Hazardous materials used improperly. Includes chemicals used for the wrong purpose.
45 Improper container. Includes containers not designed for the hazardous material contained.
46 Improper movement of hazardous materials containers.
47 Improper storage procedures. Includes storage near heating equipment and moving parts.
48 Children playing with hazardous materials and having no knowledge of the dangers of hazardous materials.
40 Misuse of hazardous materials, other.

Mechanical Failure, Malfunction. (Where there is human failure to control, classify in division 3.)

51 Automatic control failure.
52 Manual control failure.
53 Short circuit, ground fault.
54 Other part failure, leak, or break.
55 Other electrical failure.
56 Lack of maintenance, worn out. Includes failures to maintain hazardous materials handling equipment. Excludes short circuits and ground faults (53) and failure to clean (75).
50 Mechanical failure, malfunction, other.

Design, Construction, Installation Deficiency

61 Design deficiency. Includes structures and containers improperly designed for the specific hazardous material.
62 Construction deficiency. Includes improperly built structures and containers.
64 Installation deficiency. Includes the improper installation of equipment for handling or processing hazardous materials.
60 Design, construction, installation deficiency, other.

Operational Deficiency. (Where equipment was misused, classify in division 7; misuse of hazardous materials should be classified in division 4.)

71 Collision, overturn, knockdown. Includes automobiles and other vehicles.
72 Accidentally turned on, not turned off.
73 Equipment unattended.
74 Equipment overload.
75 Failure to clean equipment.
76 Improper startup, shutdown procedures.
77 Equipment used for purpose not intended. Excludes overloaded equipment (74).
78 Equipment not being operated properly. Includes situations where safety or control devices are bypassed.
70 Operational deficiency, other.

Natural Condition. (For use where the natural condition changed a normally safe operation into an unsafe one.)

81 High wind. Includes tornadoes and hurricanes.
82 Earthquake.
83 High water, flood.
84 Lightning.
85 Low humidity.
86 High humidity.
87 Low temperature.

88 High temperature.
80 Natural condition, other.

Special Release Factors

91 Animal.
92 Secondary release following previous release.
93 Reaction with other chemical.
97 Failure to use ordinary care under the circumstances, other than as classified above.
00 Factors contributing to release, other.
UU Undetermined.

SECTION L

L

Factors Affecting Mitigation

Definition

Factors present at the time and location of the incident that affected the fire department's mitigation of the release or threatened release of a hazardous material.

Purpose

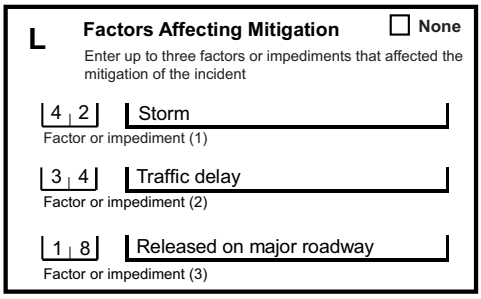
Information on factors affecting or impeding the mitigation of a release can guide training efforts, resource planning, incident management, and prevention efforts.

Entry

Enter the two-digit codes and descriptions for up to three significant factors that impeded or affected the mitigation of the release or threatened release of the hazardous material. If no factors affected the mitigation of the release, check or mark the None box.

Example

Flammable liquid was released from an overturned semi-trailer on an interstate highway (18) during rush hour (34) in a severe thunderstorm (42):



FACTORS AFFECTING MITIGATION CODES

Site Factors

11 Released into water table.
12 Released into sewer system.
13 Released into wildland/wetland area.

14 Released in residential area.
15 Released in occupied building.
16 Air release in confined area.
17 Released, slick on waterway.
18 Released on major roadway.
10 Site factors, other.

Release Factors

21 Release of extremely dangerous agent. Includes chemical or biohazard agent; population at risk.
22 Threatened release of extremely dangerous agent. Includes chemical or biohazard agent; population at risk.
23 Combination of release and fire impeded mitigation of HazMat incident.
24 Multiple chemicals released, unknown potential effects.
25 Release of unidentified chemicals, unknown potential effects.
20 Release factors, other.

Impediment or Delay Factors

31 Access to release area.
32 HazMat apparatus unavailable.
33 HazMat apparatus failure.
34 Traffic delay.
35 Trouble finding location.
36 Communications delay.
37 HazMat-trained crew unavailable or delayed.
30 Impediment or delay factors, other.

Natural Conditions

41 High wind.
42 Storm.
43 High water. Includes floods.
44 Earthquake.
45 Extreme high temperature.
46 Extreme low temperature.
47 Ice or snow conditions.
48 Lightning.
49 Animal.
40 Natural conditions, other.
00 Factors affecting mitigation, other.
NN None.

SECTION M

M Equipment Involved in Release

☞ Most of the *Equipment Involved in Release* codes were included in *Equipment Involved in Ignition* in NFIRS 4.1.

Equipment Type

Definition

The piece of equipment that either malfunctioned or, while working properly, allowed the release or threatened release of hazardous materials.

Purpose

Analysis of the equipment involved in a HazMat release is useful for improving product safety and preventive maintenance. It is just as important to know the kind of equipment that was used improperly as it is to know the kind of equipment that malfunctioned. Misuse can be the direct result of the way the equipment is designed and constructed. When involved in release, equipment information provides an important part of the causal data. Equipment involved in release can be compared to other causal data to determine if the equipment was (or was not) operating properly.

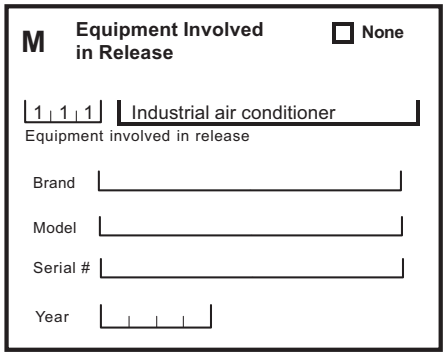
Entry

Enter the three-digit code and description that best describes the equipment involved in the release. If no equipment was involved, check or mark the None box.

☞ If a vehicle was involved in the release, use Section N.

Example

Refrigerant from a large commercial air conditioning unit was released (111):



☞ An alphabetized synonym list for the following Equipment Involved in Release codes is presented in Appendix B.

EQUIPMENT INVOLVED IN RELEASE CODES

Heating, Ventilation, and Air Conditioning

111 Air conditioner.
112 Heat pump.
113 Fan.
114 Humidifier, non-heat producing. Excludes heaters with built-in humidifiers (131, 132).
115 Ionizer.
116 Dehumidifier, portable.
117 Evaporative cooler, cooling tower.

121 Fireplace, masonry.
122 Fireplace, factory-built.
123 Fireplace, insert/stove.
124 Stove, heating.
125 Chimney connector, vent connector.
126 Chimney: brick, stone, masonry.
127 Chimney: metal. Includes stovepipes and flues.
120 Fireplace, chimney, other.
131 Furnace, local heating unit, built-in. Includes built-in humidifiers. Excludes process furnaces, kilns (353).
132 Furnace, central heating unit. Includes built-in humidifiers. Excludes process furnaces, kilns. (353)
133 Boiler (power, process, heating).
141 Heater. Includes floor furnaces, wall heaters, and baseboard heaters. Excludes catalytic heaters (142), oil-filled heaters (143), hot water heaters (152).
142 Heater, catalytic.
143 Heater, oil-filled. Excludes kerosene heaters (141).
144 Heat lamp.
145 Heat tape.
151 Water heater. Includes sink-mounted instant hot water heaters and waterbed heaters.
152 Steam line, heat pipe, hot air duct. Includes radiators and hot water baseboard heaters.
100 Heating, ventilation, and air conditioning, other.

Electrical Distribution, Lighting, and Power Transfer

211 Electrical power (utility) line. Excludes wires from the utility pole to the structure.
212 Electrical service supply wires; wires from utility pole to meter box.
213 Electric meter, meter box.
214 Electrical wiring from meter box to circuit breaker board, fuse box, or panel board.
215 Panel board (fuse); switchboard, circuit breaker board with or without ground-fault interrupter
216 Electrical branch circuit. Includes armored (metallic) cable, nonmetallic sheathing, or wire in conduit.
217 Outlet, receptacle. Includes wall-type receptacles, electric dryer and stove receptacles.
218 Wall-type switch. Includes light switches.
219 Ground-fault interrupter (GFI), portable, plug-in.
210 Electrical wiring, other.
221 Transformer, distribution-type.
222 Overcurrent, disconnect equipment. Excludes panel boards.
223 Transformer, low-voltage (not more than 50 volts).
224 Generator.
225 Inverter.
226 Uninterrupted power supply (UPS).
227 Surge protector.
228 Battery charger, rectifier.
229 Battery. Includes all battery types.
231 Lamp: tabletop, floor, desk. Excludes halogen fixtures (235) and light bulbs (238).
232 Lantern, flashlight.
233 Incandescent lighting fixture.
234 Fluorescent lighting fixture, ballast.
235 Halogen lighting fixture or lamp.
236 Sodium, mercury vapor lighting fixture or lamp.
237 Portable or movable work light, trouble light.

238 Light bulb.
230 Lamp, lighting, other.
241 Night light.
242 Decorative lights, line voltage. Includes holiday lighting, Christmas lights.
243 Decorative or landscape lighting, low voltage.
244 Sign. Includes neon signs.
251 Fence, electric.
252 Traffic control device
253 Lightning rod, arrester/grounding device.
261 Power cord, plug; detachable from appliance.
262 Power cord, plug; permanently attached to appliance.
263 Extension cord.
260 Cord, plug, other.
200 Electrical distribution, lighting, and power transfer, other.

Shop Tools and Industrial Equipment

311 Power saw.
312 Power lathe.
313 Power shaper, router, jointer, planer.
314 Power cutting tool.
315 Power drill, screwdriver.
316 Power sander, grinder, buffer, polisher.
317 Power hammer, jackhammer.
318 Power nail gun, stud driver, stapler.
310 Power tools, other.
321 Paint dipper.
322 Paint flow coating machine.
323 Paint mixing machine.
324 Paint sprayer.
325 Coating machine. Includes asphalt-saturating and rubber-spreading machines.
320 Painting tools, other.
331 Welding torch. Excludes cutting torches (332).
332 Cutting torch. Excludes welding torches (331).
333 Burners. Includes Bunsen burners, plumber furnaces, and blowtorches. Excludes weed burners (523).
334 Soldering equipment.
341 Air compressor.
342 Gas compressor.
343 Atomizing equipment. Excludes paint spraying equipment (324).
344 Pump. Excludes pumps integrated with other types of equipment.
345 Wet/dry vacuum (shop vacuum).
346 Hoist, lift, crane.
347 Powered jacking equipment. Includes hydraulic rescue tools.
348 Drilling machinery or equipment. Includes water or gas drilling equipment.
340 Hydraulic equipment, other.
351 Heat-treating equipment.
352 Incinerator.
353 Industrial furnace, oven, kiln. Excludes ovens for cooking (646).
354 Tarpot, tar kettle.
355 Casting, molding, forging equipment.
356 Distilling equipment.
357 Digester, reactor.
358 Extractor, waste recovery machine. Includes solvent extractors such as used in dry-cleaning operations and garnetting equipment.

361 Conveyor. Excludes agricultural conveyors (513).
362 Power transfer equipment: ropes, cables, blocks, belts.
363 Power takeoff.
364 Powered valves.
365 Bearing or brake.
371 Picking, carding, weaving machine. Includes cotton gins.
372 Testing equipment.
373 Gas regulator. Includes propane, butane, LP, or natural gas regulators and flexible hose connectors to gas appliances.
374 Motor, separate. Includes bench motors. Excludes internal combustion motors (375).
375 Internal combustion engine (nonvehicular).
376 Printing press.
377 Car washing equipment.
300 Shop tools and industrial equipment, other.

Commercial and Medical Equipment

411 Dental, medical, or other powered bed or chair. Includes powered wheelchairs.
412 Dental equipment, other.
413 Dialysis equipment.
414 Medical imaging equipment. Includes MRI, CAT scan, and ultrasound.
415 Medical monitoring equipment.
416 Oxygen administration equipment.
417 Radiological equipment, x-ray, radiation therapy.
418 Sterilizer, medical.
419 Therapeutic equipment.
410 Medical equipment, other.
421 Transmitter.
422 Telephone switching gear, including PBX.
423 TV monitor array. Includes control panels with multiple TV monitors and security monitoring stations. Excludes single TV monitor configurations (753).
424 Studio-type TV camera. Includes professional studio television cameras. Excludes home camcorders and video equipment (756).
425 Studio-type sound recording/modulating equipment.
426 Radar equipment.
431 Amusement ride equipment.
432 Ski lift.
433 Elevator or lift.
434 Escalator.
441 Microfilm, microfiche viewing equipment.
442 Photo processing equipment. Includes microfilm processing equipment.
443 Vending machine.
444 Nonvideo arcade game. Includes pinball machines and the like. Excludes electronic video games (755).
445 Water fountain, water cooler.
446 Telescope. Includes radio telescopes.
451 Electron microscope.
450 Laboratory equipment, other.
400 Commercial and medical equipment, other.

Garden Tools and Agricultural Equipment

511 Combine, threshing machine.
512 Hay processing equipment.
513 Farm elevator or conveyor.
514 Silo loader, unloader, screw/sweep auger.

515 Feed grinder, mixer, blender.
516 Milking machine.
517 Pasteurizer. Includes milk pasteurizers.
518 Cream separator.
521 Sprayer, farm or garden.
522 Chain saw.
523 Weed burner.
524 Lawn mower.
525 Lawn, landscape trimmer, edger.
531 Lawn vacuum.
532 Leaf blower.
533 Mulcher, grinder, chipper. Includes leaf mulchers.
534 Snow blower, thrower.
535 Log splitter.
536 Post hole auger.
537 Post driver, pile driver.
538 Tiller, cultivator.
500 Garden tools and agricultural equipment, other.

Kitchen and Cooking Equipment

611 Blender, juicer, food processor, mixer.
612 Coffee grinder.
621 Can opener.
622 Knife.
623 Knife sharpener.
631 Coffee maker or teapot.
632 Food warmer, hot plate.
633 Kettle.
634 Popcorn popper.
635 Pressure cooker or canner.
636 Slow cooker.
637 Toaster, toaster oven, countertop broiler.
638 Waffle iron, griddle.
639 Wok, frying pan, skillet.
641 Bread-making machine.
642 Deep fryer.
643 Grill, hibachi, barbecue.
644 Microwave oven.
645 Oven, rotisserie.
646 Range with or without an oven or cooking surface. Includes counter-mounted stoves.
647 Steam table, warming drawer/table.
651 Dishwasher.
652 Freezer when separate from refrigerator.
653 Garbage disposer.
654 Grease hood/duct exhaust fan.
655 Ice maker (separate from refrigerator).
656 Refrigerator, refrigerator/freezer.
600 Kitchen and cooking equipment, other.

Electronic and Other Electrical Equipment

711 Computer. Includes devices such as hard drives and modems installed inside the computer casing. Excludes external storage devices (712).
712 Computer storage device, external. Includes CD-ROM devices, tape drives, and disk drives. Excludes such devices when they are installed within a computer (711).

713 Computer modem, external. Includes digital, ISDN modems, cable modems, and modem racks. Excludes modems installed within a computer (711).
714 Computer monitor. Includes LCD or flat-screen monitors.
715 Computer printer. Includes multifunctional devices such as copier, fax, and scanner.
716 Computer projection device, LCD panel, projector.
710 Computer device, other.
721 Adding machine, calculator.
722 Telephone or answering machine.
723 Cash register.
724 Copier. Includes large standalone copiers. Excludes small copiers and multifunctional devices (715).
725 Fax machine.
726 Paper shredder.
727 Postage, shipping meter equipment.
728 Typewriter.
720 Office equipment, other.
731 Guitar.
732 Piano, organ. Includes player pianos. Excludes synthesizers and musical keyboards (733).
733 Musical synthesizer or keyboard. Excludes pianos, organs (732).
730 Musical instrument, other.
741 CD player (audio). Excludes computer CD, DVD players (712).
742 Laser disk player. Includes DVD players and recorders.
743 Radio. Excludes two-way radios (744).
744 Radio, two-way.
745 Record player, phonograph, turntable.
747 Speakers, audio; separate components.
748 Stereo equipment. Includes receivers, amplifiers, equalizers. Excludes speakers (747).
749 Tape recorder or player.
740 Sound recording or receiving equipment, other.
751 Cable converter box.
752 Projector: film, slide, overhead.
753 Television.
754 VCR or VCR–TV combination.
755 Video game, electronic.
756 Camcorder, video camera.
757 Photographic camera and equipment. Includes digital cameras.
750 Video equipment, other.
700 Electronic equipment, other.

Personal and Household Equipment

811 Clothes dryer.
812 Trash compactor.
813 Washer/dryer combination (within one frame).
814 Washing machine, clothes.
821 Hot tub, whirlpool, spa.
822 Swimming pool equipment.
830 Floor care equipment, other.
831 Broom, electric.
832 Carpet cleaning equipment. Includes rug shampooers.
833 Floor buffer, waxer, cleaner.
834 Vacuum cleaner.
841 Comb, hair brush.
842 Curling iron.

843 Electrolysis equipment.
844 Hair curler warmer.
845 Hair dryer.
846 Makeup mirror, lighted.
847 Razor, shaver (electric).
848 Suntan equipment, sunlamp.
849 Toothbrush (electric).
850 Portable appliance designed to produce heat, other.
851 Baby bottle warmer.
852 Blanket, electric.
853 Heating pad.
854 Clothes steamer.
855 Clothes iron.
861 Automatic door opener. Excludes garage door openers (863).
862 Burglar alarm.
863 Garage door opener.
864 Gas detector.
865 Intercom.
866 Smoke or heat detector, fire alarm. Includes control equipment.
868 Thermostat.
871 Ashtray.
872 Charcoal lighter, utility lighter.
873 Cigarette lighter, pipe lighter.
874 Fire-extinguishing equipment. Includes electronic controls.
875 Insect trap. Includes bug zappers.
876 Timer.
881 Model vehicles. Includes model airplanes, boats, rockets, and powered vehicles used for hobby and recreational purposes.
882 Toy, powered.
883 Woodburning kit.
891 Clock.
892 Gun.
893 Jewelry-cleaning machine.
894 Scissors.
895 Sewing machine.
896 Shoe polisher.
897 Sterilizer, non-medical.
800 Personal and household equipment, other.

Other Equipment Involved in Release

000 Equipment involved in release, other.
NNN None.
UUU Undetermined

Equipment Brand, Model, Serial Number, and Year

Definition

The information in this block precisely identifies the equipment that was involved in the HazMat release. As possible, the following information should be recorded:

Brand: The name by which the equipment is most commonly known.

Model: The model name or number assigned to the equipment by the manufacturer. If there is no specific model name or number, use the common physical description of the equipment.

Serial Number: The manufacturer's serial number that is generally stamped on an identification plate on the equipment.

Year: The year that the equipment was built.

Purpose

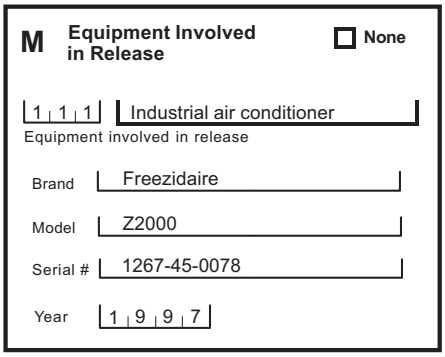
This element identifies specific types of equipment that failed or contributed to the release. This information can be used to determine whether particular brands or models cause problems more frequently than others; and to identify equipment for product recalls or in the development of new product safety codes.

Entry

Enter the brand, model, serial number, and year of the equipment involved in the release.

Example

The commercial air conditioner was a 1997 Freezidaire Model Z2000, serial number 1267–45–0078:



SECTION N

Mobile Property Involved in Release

Property Type

Definition

Property designed and constructed to be mobile, movable under its own power, or towed, such as an airplane, automobile, boat, cargo trailer, farm vehicle, motorcycle, or recreational vehicle, that either failed or, while working properly, allowed the release or threatened release of hazardous materials.

Purpose

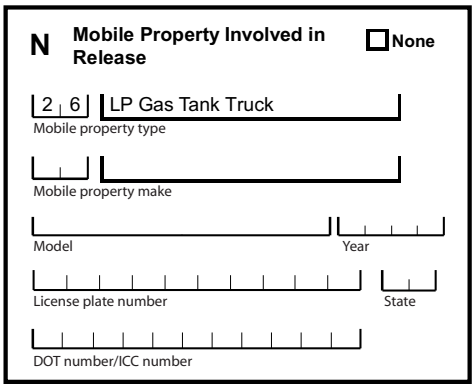
This information can guide prevention, enforcement, and product design efforts. Depending on state and local laws, specific documentation on mobile property involved in the release of a hazardous material may assist the fire department in collecting reimbursement from the responsible party for the expenses incurred in mitigating the hazardous materials incident.

Entry

Enter the two-digit code and description of the type of mobile property. If no mobile property was involved, check or mark the None box.

Example

Flammable gas was released from a propane delivery truck (26):



Make, Model, Year, License Number, State, DOT/ICC Number

Definitions

The information in this block precisely identifies the mobile property involved in a HazMat release. As possible, the following information should be recorded:

Make: The name of the manufacturer of the property.

Model: The manufacturer's model name. If one does not exist, use the physical description of the property that is commonly used to describe it, such as an "8,500-gallon tank truck."

Year: The year the property was manufactured.

License Plate Number (if any): The number on the license plates affixed to the vehicle; plates are generally issued by the state agency of motor vehicles. License numbers may also be available for boats, airplanes, and farm vehicles.

State: The state where the vehicle is licensed.

☞ If a commercial vehicle that is involved in the incident is licensed in multiple states, record the state license where the release occurred. If no license exists for the state where the release occurred, use the state license of the vehicle's home origin.

DOT/ICC Number: The identification number assigned to the commercial carrier by either the Interstate Commerce Commission (ICC) or the Department of Transportation (DOT). It is generally stenciled on the vehicle or trailer.

Purpose

This element provides detailed information that identifies the specific types of mobile property involved in a hazardous materials release, which can be used to determine whether particular brands or models are more often a problem than others. Data on make, model, year, and other information are useful for determining compliance to standards of mobile properties and analyzing the effectiveness of these codes, standards, and regulations. The data also can be used to identify any special hazards.

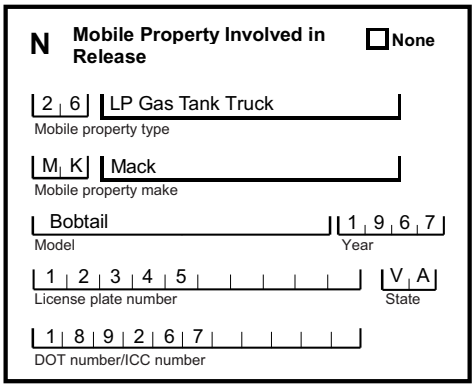
Entry

Enter the two-digit code and description of the property type. Enter the two-character code (from the list at the end of this section) and description of the property make. Enter the remaining information as appropriate. Be as specific as possible in making these entries.

☞ Both the License Plate Number and DOT Number/ICC Number are left-justified in their fields.

Example

A release of LP gas from a 1967 Mack (MK) Bobtail tank truck occurred. The truck was licensed in Virginia (plate 12345) and was stenciled with a DOT number of 189267:



MOBILE PROPERTY TYPE CODES

Passenger Road Vehicles

11 Automobile, passenger car, ambulance, limousine, race car, taxicab.
12 Bus, school bus. Includes “trackless” trolley buses.
13 Off-road recreational vehicle. Includes dune buggies, golf carts, go-carts, snowmobiles. Excludes sport utility vehicles (11) and motorcycles (18).
14 Motor home (has own engine), camper mounted on pickup, bookmobile.
15 Trailer, travel; designed to be towed.
16 Trailer, camping; collapsible, designed to be towed.
17 Mobile home, bank, classroom, or office (all designed to be towed), whether mounted on a chassis or on blocks for semipermanent use.
18 Motorcycle, trail bike. Includes motor scooters and mopeds.
10 Passenger road vehicles, other.

Freight Road Transport Vehicles

21 General use truck, dump truck, fire apparatus.
22 Hauling rig (non-motorized), pickup truck.
23 Trailer, semi; designed for freight (with or without tractor).
24 Tank truck, nonflammable cargo. Includes milk and water tankers, liquid nitrogen tankers.
25 Tank truck, flammable or combustible liquid, chemical cargo.
26 Tank truck, compressed gas or LP gas.
27 Garbage, waste, refuse truck. Includes recyclable material collection trucks. Excludes roll-on-type trash containers (73).
20 Freight road transport vehicles, other.

Rail Transport Vehicles

31 Diner car, passenger car.
32 Box, freight, or hopper car.
33 Tank car.
34 Container or piggyback car (see 73 for container).
35 Engine/locomotive.
36 Rapid transit car, trolley (self-powered for use on track). Includes self-powered rail passenger vehicles.
37 Maintenance equipment car. Includes cabooses and cranes.
30 Rail transport vehicles, other.

Water Vessels

41 Boat less than 65 ft (20 m) in length overall. Excludes commercial fishing vessels (48).
42 Boat or ship equal to or greater than 65 ft (20 m) in length but less than 1,000 tons.
43 Cruise liner or passenger ship equal to or greater than 1,000 tons.
44 Tank ship.
45 Personal water craft. Includes one- or two-person recreational water craft.
46 Cargo or military ship equal to or greater than 1,000 tons. Includes vessels not classified in 44 and 47.
47 Non-self-propelled vessel. Includes all vessels without their own motive power, such as towed petroleum balloons, barges, and other towed or towable vessels. Excludes sailboats (49).
48 Commercial fishing or processing vessel. Includes shell fishing vessels.
49 Sailboats. Includes those with auxiliary power.
40 Water vessels, other.

Aircraft

51 Personal, business, utility aircraft less than 12,500 lb (5,670 kg) gross weight. Includes gliders.
52 Personal, business, utility aircraft equal to or greater than 12,500 lb (5,670 kg) gross weight.
53 Commercial aircraft: propeller-driven, fixed-wing. Includes turbo props.
54 Commercial aircraft: jet and other turbine-powered, fixed-wing.
55 Helicopters, nonmilitary. Includes gyrocopters.
56 Military fixed-wing aircraft. Includes bomber, fighter, patrol, vertical takeoff and landing (fixed-wing vertical stall) aircraft.
57 Military non-fixed-wing aircraft. Includes helicopters.
58 Balloon vehicles. Includes hot air balloons and blimps.
50 Air, other.

Industrial, Agricultural, Construction Vehicles

61 Construction vehicle. Includes bulldozers, shovels, graders, scrapers, trenchers, plows, tunneling equipment, and road pavers.
63 Loader, industrial. Includes fork lifts, industrial tow motors, loaders, and stackers.
64 Crane.
65 Agricultural vehicle, baler, chopper (farm use).
67 Timber harvest vehicle. Includes skycars, loaders.
60 Industrial, construction, or agricultural vehicles, other.

Mobile Property, Miscellaneous

71 Home, garden vehicle. Includes riding lawnmowers, snow removal vehicles, riding tractors. Excludes equipment where operator does not ride. See Equipment Involved in Ignition.
73 Shipping container, mechanically moved. Includes haulable trash containers, intermodal shipping containers.
74 Armored vehicle. Includes armored cars and military vehicles. Excludes armored aircraft and ships.
75 Missile, rocket, and space vehicles.
76 Aerial tramway vehicle.
00 Mobile property, other.
NN No mobile property.

MOBILE PROPERTY MAKE CODES

AC	Acura	IF	Infiniti	PT	Peterbilt
AR	Alfa Romeo	IN	International	PU	Peugeot
AN	Antique Vehicle	IS	Isuzu	PI	Pierce
AM	Aston Martin	IT	Italjet	PL	Plymouth
AT	ATK	IV	Iveco	PN	Pontiac
AU	Audi	JA	Jaguar	PR	Porsche
BE	Beta	JE	Jeep	RG	Range Rover
BM	BMW	KA	Kawasaki	RN	Rogue (Ottowa)
BL	Buell	KE	Kenworth	RR	Rolls Royce
BU	Buick	KI	Kia	SB	Saab
CD	Cadillac	KT	KTM	SA	Saturn
CP	Caterpillar	LR	Land Rover	SC	Scania
CH	Chevrolet	LE	Lexus	SD	Simon Duplex
CR	Chrysler	LI	Lincoln	ST	Sterling
CV	Classic Vehicle	LO	Lotus	SU	Subaru
CC	Crane Carrier (CCC)	MK	Mack	SZ	Suzuki
DA	Daihatsu	ML	Maely	TO	Toyota
DR	Diamond Reo	MA	Maico	TR	Triumph
DO	Dodge	MH	Marmon	UD	UD
DU	Ducati	MS	Maserati	UT	Utilmaster
EA	Eagle	MZ	Mazda	VE	Vespa
FE	Ferrari	MB	Mercedes Benz	VO	Volkswagen
FO	Ford	MC	Mercury	VL	Volvo
FR	Freightliner	MR	Merkur	VG	Volvo GMC
FW	FWD	MT	Mitsubishi	WK	Walker
GE	Geo	MO	Montesa	WL	Walter
GM	GMC (General Motors)	MG	Moto Guzzi	WS	Western Star
HD	Harley Davidson	MM	Moto Morini	WG	White GMC
HI	Hino	NA	Navistar	YA	Yamaha
HO	Honda	NI	Nissan	YU	Yugo
HU	Husqvarna	OL	Oldsmobile	OO	Other Make
HY	Hyundai	OS	Oshkosh		

SECTION O

O HazMat Disposition ☆

Definition

The fire department either completed the handling of the hazardous materials incident or the incident was released to another agency or to the property owner for completion.

Purpose

This element assists in understanding the extent to which the fire department is involved in resolving the incident and the frequency in which other agencies or contractors are used for incident
mitigation.

Entry

Check or mark the box that best describes the final disposition of the incident by the fire department.

Example

The scene was released to a qualified cleanup contractor (7):

O HazMat Disposition ☆

- 1 ☐ Completed by fire service only
- 2 ☐ Completed w/fire service present
- 3 ☐ Released to local agency
- 4 ☐ Released to county agency
- 5 ☐ Released to state agency
- 6 ☐ Released to federal agency
- 7 ☒ Released to private agency
- 8 ☐ Released to property owner or manager

HAZMAT DISPOSITION CODES

1 Completed by fire service only.
2 Completed with fire service present.
3 Released to local agency.
4 Released to county agency.
5 Released to state agency.
6 Released to federal agency.
7 Released to private agency.
8 Released to property owner or manager.

SECTION P

P HazMat Civilian Casualties

Definition

The number of civilians injured or killed, either as a result of a HazMat incident or the action of handling the HazMat incident. The term *injury* refers to physical damage to a person that requires either:

- Treatment within 1 year of the incident by a practitioner of medicine,

OR

- At least 1 day of restricted activity immediately following the incident. An injured person is a casualty.

Purpose

The collection of information on the number of persons injured or killed as a result of their contact or exposure to hazardous materials that have been spilled or released can provide a concise measure of the scope of the human cost associated with hazardous materials incidents. This information can also be correlated with container types, transport conditions, actions taken, and other data to help understand how to reduce future HazMat injuries.

Entry

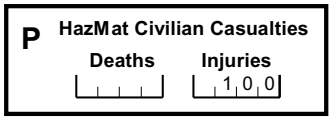
Identify and record separately the number of civilians injured and the number of civilians killed as a result of a HazMat incident.

☞ The optional EMS Module may be completed for all non-fire service persons injured or killed as a result of their contact or exposure to hazardous materials. The Civilian Fire Casualty Module should not be used for this purpose unless the release resulted in a fire and the civilians were injured as a result of the fire. The Fire Service Casualty Module should be completed for all fire service personnel injured or killed as a result of their contact or exposure to hazardous materials.

☞ HazMat civilian casualties should not be entered in Block H1 of the Basic Module.

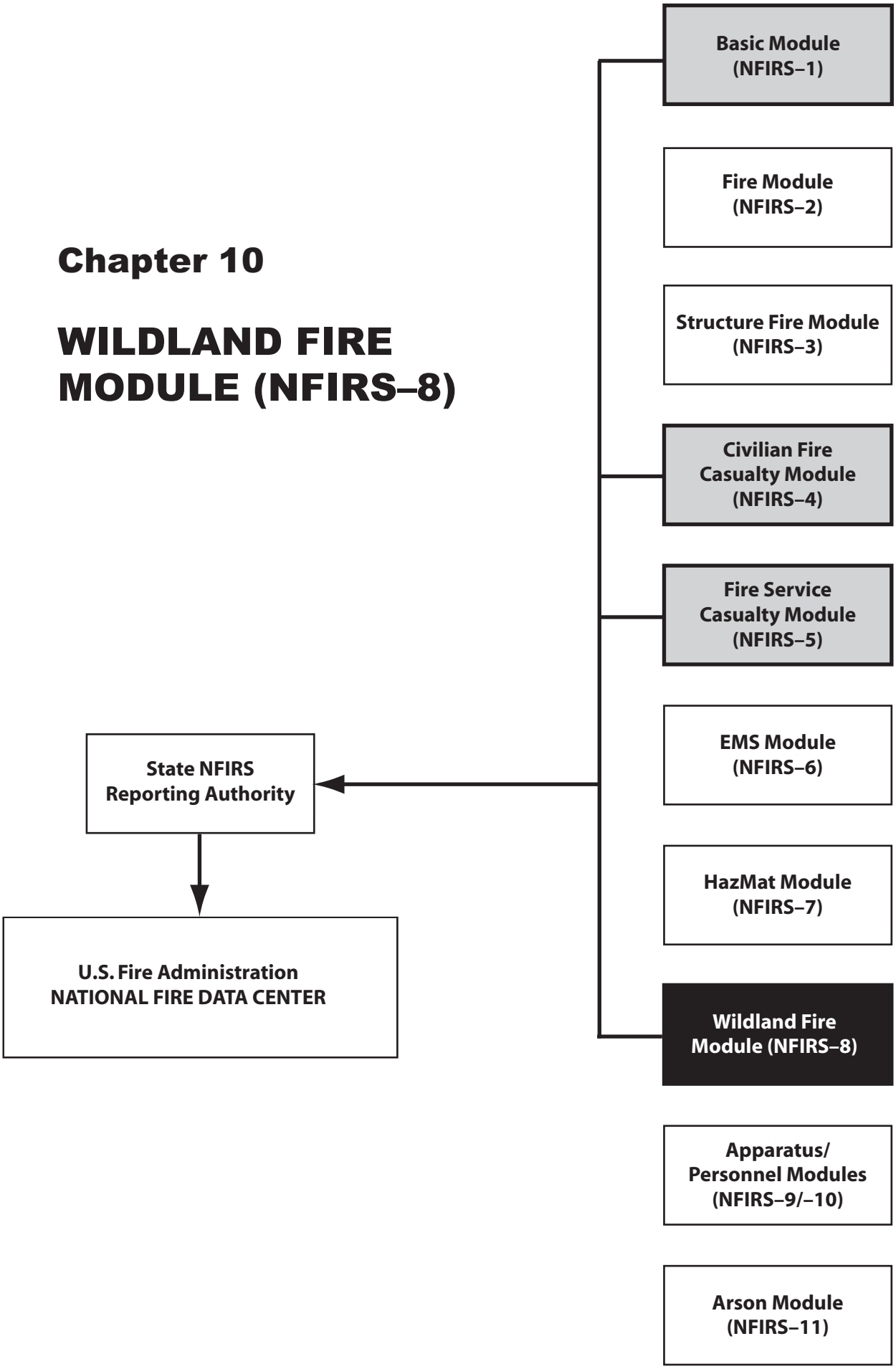
Example

One hundred civilians had varying degrees of nausea and dizziness as a result of the HazMat release:



Chapter 10

WILDLAND FIRE MODULE (NFIRS–8)



A

FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆

☐ Delete
☐ Change

NFIRS–8 Wildland Fire

B Alternate Location Specification

Enter Latitude/Longitude OR Township/Range/Section/Subsection Meridian if Section B on the Basic Module is not completed

Latitude • Longitude

OR

Township • ☐ North ☐ South | Range ☐ East ☐ West

Section | Subsection | Meridian

C Area Type ☆

1 ☐ Rural, farms >50 acres
2 ☐ Urban (heavily populated)
3 ☐ Rural/urban or suburban
4 ☐ Urban-wildland interface area

D1 Wildland Fire Cause ☆

1 ☐ Natural source
2 ☐ Equipment
3 ☐ Smoking
4 ☐ Open/outdoor fire
5 ☐ Debris/vegetation burn
6 ☐ Structure (exposure)
7 ☐ Incendiary
8 ☐ Misuse of fire
0 ☐ Other
U ☐ Undetermined

D2 Human Factors Contributing to Ignition

☐ None

Check as many boxes as are applicable.

1 ☐ Asleep
2 ☐ Possibly impaired by alcohol or drugs
3 ☐ Unattended person
4 ☐ Possibly mentally disabled
5 ☐ Physically disabled
6 ☐ Multiple persons involved
7 ☐ Age was a factor

D3 Factors Contributing to Ignition

☐ None

#1 | #2

D4 Fire Suppression Factors

☐ None

Enter up to three factors

#1
#2
#3

E Heat Source

F Mobile Property Type

☐ None

G Equipment Involved in Ignition

☐ None

H Weather Information

NFDRS Weather Station ID

Weather Type | Wind Direction

Wind Speed (mph) | Air Temperature F° ☐ Check if negative

Relative Humidity % | Fuel Moisture % | Fire Danger Rating

I1 Number of Buildings Ignited

☐ None

Number of buildings that were ignited in Wildland fire

I2 Number of Buildings Threatened

☐ None

Number of buildings that were threatened by Wildland fire but were not involved

I3 Total Acres Burned ☆

, , •

I4 Primary Crops Burned

Identify up to 3 crops if any crops were burned

Crop 1
Crop 2
Crop 3

J Property Management

Indicate the percent of the total acres burned for *each* ownership type then check the ONE box to identify the property ownership at the origin of the fire. If the ownership at origin is Federal, enter the Federal Agency Code.

Ownership ⇩ | % Total Acres Burned ⇩

U ☐ Undetermined %

Private

1 ☐ Tax paying %
2 ☐ Non-tax paying %

Public

3 ☐ City, town, village, local %
4 ☐ County or parish %
5 ☐ State or province %
6 ☐ Federal % (Federal Agency Code)
7 ☐ Foreign %
8 ☐ Military %
0 ☐ Other %

K NFDRS Fuel Model at Origin

Enter the code and the descriptor corresponding to the NFDRS Fuel Model at Origin

L1 Person Responsible for Fire

1 ☐ Identified person caused fire
2 ☐ Unidentified person caused fire
3 ☐ Fire not caused by person

If person identified, complete the rest of Section L

L2 Gender of Person Involved

1 ☐ Male
2 ☐ Female

L3 Age or Date of Birth

Age in Years

OR

Date of Birth: Month | Day | Year

L4 Activity of Person Involved

Activity of Person Involved

M Type of Right-of-Way

☐ None

Required if less than 100 feet

Feet — Horizontal distance from right-of-way | Type of right-of-way

N Fire Behavior

These optional descriptors refer to observations made at the point of initial attack

Feet — Elevation

Relative position on slope

Aspect

Feet — Flame length

Chains per Hour — Rate of spread

NFIRS–8 Revision 01/01/04

CHAPTER 10

WILDLAND FIRE MODULE (NFIRS–8)

Historically, NFIRS data have not proven useful in understanding the nature and magnitude of the wildland fire problem. The optional Wildland Fire Module, in conjunction with the Basic Module and other optional modules, attempts to rectify this problem by capturing data about the number of acres burned, the type of materials involved, the conditions that contributed to the ignition and spread of wildland fires, and the resources needed to control or extinguish them.

The purpose of the Wildland Fire Module is to document reportable wildland fires:

> *Reportable Wildland Fire:* Any fire involving vegetative fuels, including a prescribed fire, that occurs in the wildland or urban-wildland interface areas, including those fires that threaten or consume structures.

Prescribed fires are included in this definition of reportable fires to better understand the role of fire in the wildland ecosystem.

In accordance with your state or local policy, the Wildland Fire Module may be used in place of the Fire Module (NFIRS–2) for the following Incident Type recorded on the Basic Module (Section C).

140 – Natural Vegetation Fire, Other
141 – Forest, Woods, or Wildland Fire
142 – Brush, or Brush-and-Grass Mixture Fire
143 – Grass Fire
160 – Special Outside Fire, Other
170 – Cultivated Vegetation, Crop Fire, Other
171 – Cultivated Grain or Crop Fire
172 – Cultivated Orchard or Vineyard Fire
173 – Cultivated Trees or Nursery Stock Fire
561 – Unauthorized Burning
631 – Authorized Controlled Burning
632 – Prescribed Fire

☞ A prescribed fire that escapes management is a hostile fire (Incident Type 141). A hostile fire cannot become a prescribed fire, but the management strategy (actions taken) may change.

Definitions

For the purpose of wildland fire reporting, the following definitions are used:

> *Prescribed Fire:* Any fire ignited by management actions to meet specific objectives. A written, approved prescribed fire plan must exist prior to ignition.

Urban-Wildland Interface Area: The geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels.

Urban-Wildland Interface Fire: Any fire, other than a prescribed fire, where fire suppression tactics were influenced by a geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels.

Wildland Fire: Any fire involving vegetative fuels, other than a prescribed fire, that occurs in the wildland. A wildland fire may expose and possibly consume structures (Incident Type 141).

Wildland: An area where development is essentially nonexistent, except for roads, railroads, power lines, and similar facilities.

The Wildland Fire Module permits wildland fires to be profiled in detail for resource allocation, incident management, and fire impact analysis.

SECTION A

The guidance and directions for completing Section A of the Wildland Fire Module are the same as for Section A in the Basic Module. It is stressed that the entries in Section A of the Wildland Fire Module must be identical with the entries on the corresponding Basic Module. An example of a completed Section A can be found on page 3–8.

A

Fire Department Identification (FDID) ☆

Entry
Enter the same FDID number found in Section A of the Basic Module.

State ☆

Entry
Enter the same state abbreviation found in Section A of the Basic Module.

Incident Date ☆

Entry
Enter the same incident date found in Section A of the Basic Module.

Station Number

Entry
Enter the same station number found in Section A of the Basic Module.

Incident Number ☆

Entry
Enter the same incident number found in Section A of the Basic Module.

Exposure Number ☆

Entry
If this report is for an exposure fire, enter the same exposure number that was entered in Section A of the Basic Module for that exposure.

Delete/Change

Definition
Indicates a change to information submitted on a previous Wildland Fire Module or a deletion of all information regarding the incident.

Purpose
To delete or change previously reported information.

Entry
Delete. Check or mark this box when you have previously submitted data on this wildland incident and now want to have the data on this incident deleted from the database. If this box is marked, complete Section A and leave the rest of the report blank. Forward the report according to your normally established procedures.

Change. Check or mark this box only if you previously submitted this fire incident to your state reporting authority and now want to update or change the information in the state database. Complete Section A and any other sections or blocks that need to be updated or corrected. If you need to blank a field that contains data, you must resubmit the original module containing the newly blanked field along with all the other original information in the module for that incident. This action is required only when sending an updated module to your state reporting authority. Forward the report according to your normally established procedures.

SECTION B

B

Alternate Location Specification

☞ Enter either latitude/longitude or section/township/range/subsection/meridian location information. Do not enter both.

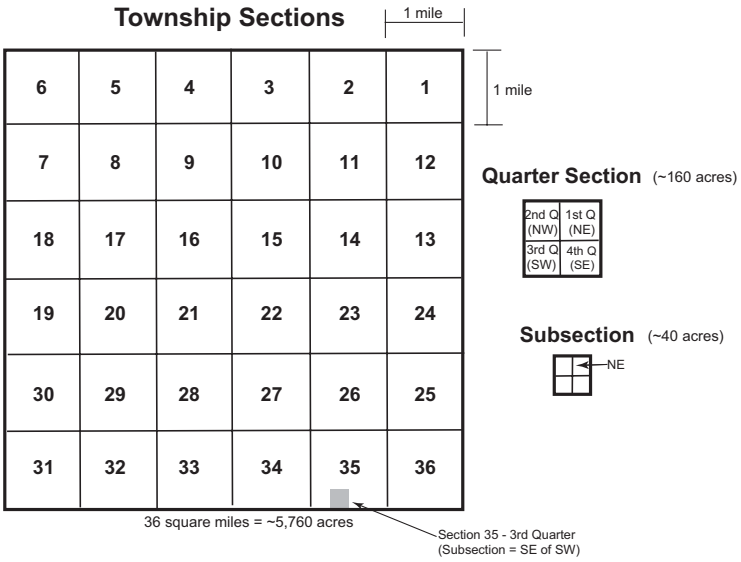
☞ To use this addressing feature, the alternate address box on the Basic Module (Section B) must be checked or marked.

Definition

The location of the wildland fire. This block documents the geographical location of the wildland fire and is used in place of Section B of the Basic Module when traditional addressing methods are not suitable.

Latitude and Longitude: Angular coordinates measured with respect to the center of the Earth. The value is expressed in degrees and minutes. Valid inputs for Latitude are in the range –90 to 90 (north is positive). Valid inputs for Longitude are in the range –180 to 180 (east is positive).

Township: Consists of 36 sections arranged in a six-by-six array, measuring 6 miles by 6 miles. Sections are numbered beginning with the northeast-most section, proceeding west to 6, then south along the west edge of the township and to the east. This array is depicted below:



The last digit (decimal point) in this field denotes quarter Townships represented by the following coding:

3	1st Quarter	7	3rd Quarter
5	2nd Quarter	0	4th Quarter

Range: Assigned to a township by measuring east or west of a principal meridian.

Section: Basic unit of the system, a square tract of line 1 mile by 1 mile containing 640 acres.

Subsection: Within each section, the land is referred to as half and quarter sections. A one-sixteenth division is called a subsection (sometimes referred to as a quarter of a quarter). A valid entry is one of the following 16 possibilities:

SUBSECTION CODES

NENE	Northeast of northeast	NWNE	Northwest of northeast
NENW	Northeast of northwest	NWNW	Northwest of northwest
NESE	Northeast of southeast	NWSE	Northwest of southeast
NESW	Northeast of southwest	NWSW	Northwest of southwest
SENE	Southeast of northeast	SWNE	Southwest of northeast
SENW	Southeast of northwest	SWNW	Southwest of northwest
SESE	Southeast of southeast	SWSE	Southwest of southeast
SESW	Southeast of southwest	SWSW	Southwest of southwest

☞ In some regions, the term *subsection* is not used. Thus, it is permissible to leave this field blank.

Principal Meridian: Reference or beginning point for measuring east or west ranges.

MERIDIAN CODES

01	First Principal	17	Indian	33	Willamette
02	Second Principal	18	Louisiana	34	Wind River
03	Third Principal	19	Michigan	35	Ohio
04	Fourth Principal	20	Principal	36	Great Miami River
05	Fifth Principal	21	Mt. Diablo	37	Muskingum River
06	Sixth Principal	22	Navajo	38	Ohio River
07	Black Hills	23	New Mexico	39	First Scioto River
08	Boise	24	St. Helena	40	Second Scioto River
09	Chickasaw	25	St. Stephens	41	Third Scioto River
10	Choctaw	26	Salt Lake	42	Ellicotts Line
11	Cimarron	27	San Bernardino	43	12 Mile Square
12	Copper River	28	Seward	44	Kateel River
13	Fairbanks	29	Tallahassee	45	Umiat
14	Gila and Salt River	30	Uintah	UU	Undetermined
15	Humboldt	31	Ute		
16	Huntsville	32	Washington		

Purpose

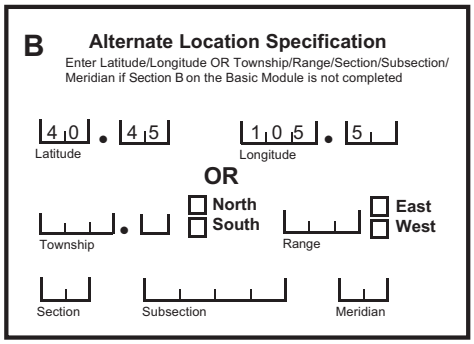
This information may be of value to local authorities for contacting the owner in connection with the fire and in making a long-term analysis of wildland fires in similar areas or on property under the same ownership.

Entry

Enter the alternate location information using the specific Latitude and Longitude where the fire started or, alternatively, enter the Section, Township, Range, and Meridian.

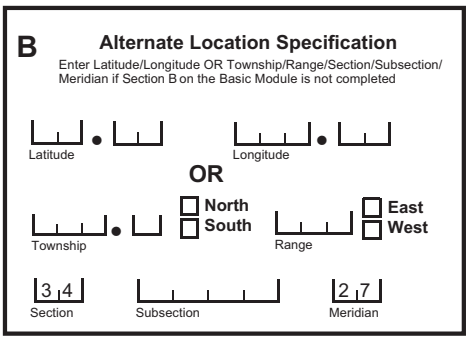
Example

The wildland fire (1) occurred in Fort Collins, Colorado, at a latitude of 40°45' N and longitude of 105°5' W; or (2) was located on John Wayne's boyhood family farm in California located at Section 34, Township 7N, Range 12W, San Bernardino (27) Meridian:



(1)

OR



(2)

SECTION C

C Area Type ☆

Definition

A general description of the area where the wildland fire occurred.

Purpose

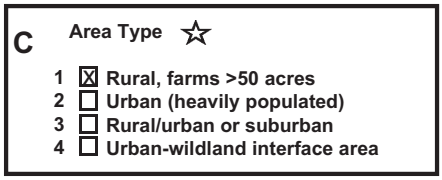
Aggregate information on the areas where wildland fires occur helps determine the level of risk from fires in densely populated areas versus those in rural areas. This field also documents fires occurring in urban-wildland interface areas.

Entry

Check or mark the box that best describes the area type where the wildland fire occurred.

Example

The wildland fire occurred on a 100-acre farm in a rural area (1):



AREA TYPE CODES

1	Rural, open fields, forests, or cultivated land greater than 50 acres that is located away from any concentrated housing areas.
2	Urban, cities, or heavily populated areas.
3	Rural/urban or suburban. Includes a predominantly residential area outlying an urban area. May include small open fields, forests, and cultivated land.
4	Urban-wildland interface area. Includes geographical area where structures and other human development meets or intermingles with wildland/vegetative fuels.

SECTION D

This section collects information on the factors and causes of the fire's ignition, and what conditions may have affected fire suppression efforts.

D1 Wildland Fire Cause ☆

Definition

This block provides for the broadest classification of ignition causes consistent with the "General Fire Causes" adopted by the National Wildfire Coordinating Group (NWCG).

Purpose

The primary use of this information is to distinguish between human- and nature-caused wildland fires.

Entry

Check or mark the box that best describes the cause of the wildland fire.

☞ Wildland Fire Cause is a critical data element, and it is important to complete the additional blocks in this module to provide a better understanding of how and why the fire started.

Example

A discarded cigarette (3) started the wildland fire:

D1 Wildland Fire Cause ☆

1	☐ Natural source	8	☐ Misuse of fire
2	☐ Equipment	0	☐ Other
3	☒ Smoking	U	☐ Undetermined
4	☐ Open/outdoor fire		
5	☐ Debris/vegetation burn		
6	☐ Structure (exposure)		
7	☐ Incendiary		

WILDLAND FIRE CAUSE CODES

1	Natural source.
2	Equipment.
3	Smoking.
4	Open/outdoor fire.
5	Debris, vegetation burn.
6	Structure (exposure).
7	Incendiary.
8	Misuse of fire.
0	Wildland fire cause, other.
U	Undetermined.

D2 Human Factors Contributing to Ignition

Definition

The *human* condition or situation that allowed the heat source and combustible material to combine to ignite the fire.

Purpose

Combined with Wildland Fire Cause and Factors Contributing to Ignition, this element explains how and why the fire started. The data element Age Was a Factor is particularly useful in tracking juvenile firesetter trends when used in combination with Gender of Person Involved (Block L2) and Age or Date of Birth (Block L3). It can also indicate whether a fire is potentially preventable through public education or other strategies.

Entry

Check or mark the boxes that best describe any human factors that contributed to the ignition of the wildland fire. Multiple factors can be selected. If human factors were not involved or cannot be determined, check or mark the None box only.

Example

The camper fell asleep (1) after starting a campfire that went out of control:

D2 Human Factors Contributing to Ignition ☐ None

Check as many boxes as are applicable

1 ☒ Asleep
2 ☐ Possibly impaired by alcohol or drugs
3 ☐ Unattended person
4 ☐ Possibly mentally disabled
5 ☐ Physically disabled
6 ☐ Multiple persons involved
7 ☐ Age was a factor

HUMAN FACTORS CONTRIBUTING TO IGNITION CODES

1	Asleep. Includes fires that result from a person falling asleep while smoking.
2	Possibly impaired by alcohol or drugs. Includes people who fall asleep or act recklessly or carelessly as a result of drugs or alcohol. Excludes people who simply fall asleep (1).
3	Unattended or unsupervised person. Includes “latch key” situations whether the person involved is young or old and situations where the person involved lacked supervision or care.
4	Possibly mentally disabled. Excludes impairments of a temporary nature such as those caused by drugs or alcohol (2).
5	Physically disabled.
6	Multiple persons involved. Includes gang activity.
7	Age was a factor.
N	None.

D3 Factors Contributing to Ignition

☞ *Factors Contributing to Ignition* was known as *Ignition Factors in NFIRS 4.1.*

Definition

The contributing factors that allowed the heat source and combustible material to combine to ignite the fire.

Purpose

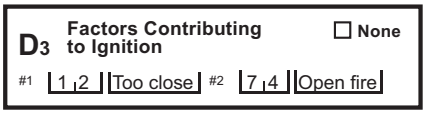
When used in conjunction with other elements such as Wildland Fire Cause, Equipment Involved in Ignition, Heat Source, and Human Factors, this element explains how and why the fire started. The analysis of how these elements interact provides valuable information to guide and direct fire prevention and fire safety education programs.

Entry

Enter the two-digit code and description for up to two factors that contributed to the ignition of the wildland fire. The primary factor should be entered first. If it is known that no factors contributed to ignition, check or mark the None box only; if uncertain, leave the block blank.

Example

The campers placed their trash bag too close to the cooking fire (12 and 74):



FACTORS CONTRIBUTING TO IGNITION CODES

Misuse of Material or Product

11	Abandoned or discarded materials or products. Includes discarded cigarettes, cigars, tobacco embers, hot ashes, or other burning matter. Excludes outside fires left unattended.
12	Heat source too close to combustibles.
13	Cutting, welding too close to combustibles.
14	Flammable liquid or gas spilled. Excludes improper fueling technique (15) and release due to improper container (18).
15	Improper fueling technique. Includes overfueling, failure to ground. Excludes fuel spills (14) and using the improper fuel (27).
16	Flammable liquid used to kindle fire.
17	Washing part or material, painting with flammable liquid.
18	Improper container or storage procedure. Includes gasoline in unimproved containers, gas containers stored at excessive temperature, and storage conditions that lead to spontaneous ignition.
19	Playing with heat source. Includes playing with matches, candles, and lighters and bringing combustibles into a heat source.
10	Misuse of material or product, other.

Mechanical Failure, Malfunction

21	Automatic control failure.
22	Manual control failure.
23	Leak or break. Includes leaks or breaks of containers or pipes. Excludes operational deficiencies and spill mishaps.

25 Worn out.
26 Backfire. Excludes fires originating as a result of hot catalytic converters (41).
27 Improper fuel used. Includes the use of gasoline in a kerosene heater and the like.
20 Mechanical failure, malfunction, other.

Electrical Failure, Malfunction

31 Water-caused short-circuit arc.
32 Short-circuit arc from mechanical damage.
33 Short-circuit arc from defective, worn insulation.
34 Unspecified short-circuit arc.
35 Arc from faulty contact, broken conductor. Includes broken power lines and loose connections.
36 Arc, spark from operating equipment, switch, or electric fence.
37 Fluorescent light ballast.
30 Electrical failure, malfunction, other.

Design, Manufacturing, Installation Deficiency

41 Design deficiency.
42 Construction deficiency.
43 Installation deficiency.
44 Manufacturing deficiency.
40 Design, manufacturing, installation deficiency, other.

Operational Deficiency

51 Collision, knock down, run over, turn over. Includes automobiles and other vehicles.
52 Accidentally turned on, not turned off.
53 Equipment unattended.
54 Equipment overloaded.
55 Failure to clean. Includes lint and grease buildups in chimneys, stove pipes.
56 Improper startup/shutdown procedure.
57 Equipment not used for purpose intended. Excludes overloaded equipment (54).
58 Equipment not operated properly.
50 Operational deficiency, other.

Natural Condition

61 High wind.
62 Storm.
63 High water, including floods.
64 Earthquake.
65 Volcanic action.
66 Animal.
60 Natural condition, other.

Fire Spread or Control

71 Exposure fire.
72 Rekindle.
73 Outside/open fire for debris or waste disposal.
74 Outside/open fire for warming or cooking.
75 Agriculture or land management burns. Includes prescribed burns.
70 Fire spread or control, other.

Other Human Factors Contributing to Ignition

00 Human factors contributing to ignition, other.
NN None.
UU Undetermined.

D4 Fire Suppression Factors

Definition

Factors that contributed to the growth, spread, or suppression of the fire. This is used to report incident information that directly impacted the ignition, spread of fire, incident complexity, or presence of hazardous conditions.

Purpose

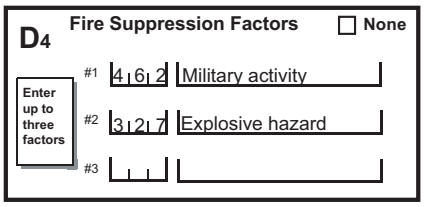
Fire suppression factors provide essential guides for planning strategic and tactical procedures for future incidents, as well as for identifying fire training and equipment needs.

Entry

Enter the three-digit code and description for up to three fire suppression factors or conditions that constituted a significant fire suppression problem or affected how the fire was managed. If no factors were involved in the fire suppression effort, check or mark the None box.

Example

A large brush fire was burning on a military installation (462) in an area where unexploded munitions (327) could be encountered. The incident commander decided the best course of action was to allow the fire to burn but to establish a control line outside the perimeter of the installation:



FIRE SUPPRESSION FACTORS CODES

Building Construction or Design

112 Roof collapse.
113 Roof assembly combustible.
121 Ceiling collapse.
125 Holes or openings in walls or ceilings.
131 Wall collapse.
132 Difficult to ventilate.
134 Combustible interior finish.
137 Balloon construction.
138 Internal arrangement of partitions.
139 Internal arrangement of stock or contents.
141 Floor collapse.
151 Lack of fire barrier walls or doors.
153 Transoms.
161 Attic undivided.
166 Insulation combustible.
173 Stairwell not enclosed.
174 Elevator shaft.
175 Dumbwaiter.
176 Duct, vertical.

177 Chute: rubbish, garbage, laundry.
181 Supports unprotected.
182 Composite plywood I-beam construction.
183 Composite roof/floor sheathing construction.
185 Wood truss construction.
186 Metal truss construction.
187 Fixed burglar protection assemblies (bars, grills on windows or doors).
188 Quick release failure of bars on windows or doors.
192 Previously damaged by fire.
100 Building construction or design, other.

Act or Omission

213 Doors left open or outside door unsecured.
214 Fire doors blocked or did not close properly.
218 Violation of applicable or locally adopted fire, building, or life safety code.
222 Illegal and clandestine drug operation.
232 Intoxication, drugs or alcohol.
253 Riot or civil disturbance. Includes hostile acts.
254 Person(s) interfered with operations.
283 Accelerant used.
200 Act or omission, other.

On-Site Materials

311 Aisles blocked or improper width.
312 Significant and unusual fuel load from structure components.
313 Significant and unusual fuel load from contents of structure.
314 Significant and unusual fuel load outside from natural environment conditions.
315 Significant and unusual fuel load from man-made condition.
316 Storage, improper.
321 Radiological hazard onsite.
322 Biological hazard onsite.
323 Cryogenic hazard onsite.
324 Hazardous chemical, corrosive material, or oxidizer.
325 Flammable/combustible liquid hazard.
327 Explosives hazard present.
331 Decorations. Includes crepe paper, garland.
341 Natural or other lighter-than-air gas present.
342 Liquefied petroleum (LPG) or other heavier-than-air gas present.
361 Combustible storage >12 feet to top of storage. Excludes rack storage (362).
362 High rack storage.
300 On-site materials, other.

Delays

411 Delayed detection of fire.
412 Delayed reporting of fire. Includes occupants investigating the source of the alarm or smoke before calling the fire department.
413 Alarm system malfunction.
414 Alarm system shut off for valid reason. Includes systems being maintained or repaired.
415 Alarm system inappropriately shut off.
421 Unable to contact fire department. Includes use of wrong phone number and cellular mobile phone problems.
424 Information incomplete or incorrect.
425 Communications problem; system failure of local, public, or other telephone network.

431 Blocked or obstructed roadway. Includes blockages due to construction or illegal parking.
434 Poor or no access for fire department apparatus.
435 Traffic delay.
436 Trouble finding location.
437 Size, height, or other building characteristic delayed access to fire.
438 Power lines down/arcing.
443 Poor access for firefighters.
444 Secured area.
445 Guard dogs.
446 Aggressive animals. Excludes guard dogs (445).
447 Suppression delayed due to evaluation of hazardous or unknown materials at incident scene.
448 Locked or jammed doors.
451 Apparatus failure before arrival at incident.
452 Hydrants inoperative.
461 Airspace restriction.
462 Military activity.
481 Closest apparatus unavailable.
400 Delays, other.

Protective Equipment

510 Automatic fire suppression system problem. Includes system failures, shutoffs, inadequate protection to cover hazard, and the like.
520 Automatic sprinkler or standpipe/fire department connection problem. Includes damage, blockage, failure, improper installation.
531 Water supply inadequate: private.
532 Water supply inadequate: public.
543 Electrical power outage.
561 Failure of rated fire protection assembly. Includes fire doors, fire walls, floor/ceiling assemblies, and the like.
562 Protective equipment negated illegally or irresponsibly. Includes fire doors, dampers, sprinklers, and the like.
500 Protective equipment, other.

Egress/Exit Problems

611 Occupancy load above legal limit.
612 Evacuation activity impeded fire department access.
613 Window type impeded egress. Includes windows too small.
614 Windowless wall.
621 Young occupants.
622 Elderly occupants
623 Physically disabled occupants.
624 Mentally disabled occupants.
625 Physically restrained/confined occupants.
626 Medically disabled occupants.
641 Special event.
642 Public gathering.
600 Egress/exit problems, other.

Natural Conditions

711 Drought or low fuel moisture.
712 Humidity, low.
713 Humidity, high.
714 Temperature, low.
715 Temperature, high.

721 Fog.
722 Flooding.
723 Ice.
724 Rain.
725 Snow.
732 Wind. Includes hurricanes and tornados.
741 Earthquake.
760 Unusual vegetation fuel loading.
771 Threatened or endangered species.
772 Timber sale activity.
773 Fire restriction.
774 Historic disturbance (past fire history can dictate fire behavior).
775 Urban-wildland interface area.
700 Natural conditions, other.

Other Fire Suppression Factors

000 Fire suppression factors, other.
NNN None.

SECTION E

E

Heat Source

☞ *Heat Source* was known as *Form of Heat of Ignition* in NFIRS 4.1.

Definition

The specific source of the heat energy that started the fire.

Purpose

This information, combined with other factors in the ignition sequence, permits analysis of how fires start. Also, some heat sources (e.g., cigarettes, lighters) are objects whose frequency of involvement in fires is of direct interest for fire prevention efforts.

Entry

Enter the two-digit code and description that best describes the heat source that ignited the fire.

Example

A discarded cigarette (61) ignited the brush, resulting in a wildland fire:

E **Heat Source**
6 1 Cigarette

HEAT SOURCE CODES

Operating Equipment

11 Spark, ember, or flame from operating equipment.
12 Radiated or conducted heat from operating equipment.
13 Electrical arcing.
10 Heat from operating equipment, other.

Hot or Smoldering Object

41 Heat, spark from friction. Includes overheated tires.
42 Molten, hot material. Includes molten metal, hot forging, hot glass, hot metal fragment, brake shoe, hot box, and slag from arc welding operations.
43 Hot ember or ash. Includes hot coals, coke, and charcoal; and sparks or embers from a chimney that ignite the roof of the same structure. Excludes flying brand, embers, and sparks (83); and embers accidentally escaping from operating equipment (11).
40 Hot or smoldering object, other.

Explosives, Fireworks

51 Munitions. Includes bombs, ammunition, and military rockets.
53 Blasting agent, primer cord, black powder fuse. Includes fertilizing agents, ammonium nitrate, and sodium, potassium, or other chemical agents.
54 Fireworks. Includes sparklers, paper caps, party poppers, and firecrackers.
55 Model and amateur rockets.
56 Incendiary device. Includes Molotov cocktails and arson sets.
50 Explosive, fireworks, other.

Other Open Flame or Smoking Materials

61 Cigarette.
62 Pipe or cigar.
63 Heat from undetermined smoking material.
64 Match.
65 Lighter: cigarette lighter, cigar lighter.
66 Candle.
67 Warning or road flare; fusee.
68 Backfire from internal combustion engine. Excludes flames and sparks from an exhaust system (11).
69 Flame/torch used for lighting. Includes gas light and gas-/liquid-fueled lantern.
60 Heat from open flame or smoking materials, other.

Chemical, Natural Heat Sources

71 Sunlight. Usually magnified through glass, bottles, etc.
72 Spontaneous combustion, chemical reaction.
73 Lightning discharge.
74 Other static discharge. Excludes electrical arcs (13) or sparks (11).
70 Chemical, natural heat sources, other.

Heat Spread From Another Fire. Excludes operating equipment.

81 Heat from direct flame, convection currents spreading from another fire.
82 Radiated heat from another fire. Excludes heat from exhaust systems of fuel-fired, fuel-powered equipment (12).
83 Flying brand, ember, spark. Excludes embers, sparks from a chimney igniting the roof of the same structure (43).
84 Conducted heat from another fire.
80 Heat spread from another fire, other.

Other Heat Sources

97 Multiple heat sources, including multiple ignitions. If one type of heat source was primarily involved, use that classification.

00 Heat sources, other.

UU Undetermined.

SECTION F

F

Mobile Property Type

Definition

Property that is designed and constructed to be mobile, movable under its own power, or towed, such as an airplane, automobile, boat, cargo trailer, farm vehicle, motorcycle, or recreation vehicle.

Purpose

This data element provides detailed information to identify the specific types of mobile property involved in an incident. The data also can be used to see if the public needs to be alerted to special hazards.

Entry

If the mobile property type started the fire, but did not burn itself, enter the two-digit code and description that best describes the mobile property type. If no mobile property started the fire, check or mark the None box.

Example

A camping trailer (16) caught fire and spread to the surrounding brush:

F **Mobile Property Type** ☐ None

1 6 Camping trailer

MOBILE PROPERTY TYPE CODES

Passenger Road Vehicles

11 Automobile, passenger car, ambulance, limousine, race car, taxicab.

12 Bus, school bus. Includes “trackless” trolley buses.

13 Off-road recreational vehicle. Includes dune buggies, golf carts, go-carts, snowmobiles. Excludes sport utility vehicles (11) and motorcycles (18).

14 Motor home (has own engine), camper mounted on pickup, bookmobile.

15 Trailer, travel; designed to be towed.

16 Trailer, camping; collapsible, designed to be towed.

17 Mobile home, bank, classroom, or office (all designed to be towed), whether mounted on a chassis or on blocks for semipermanent use.

18 Motorcycle, trail bike. Includes motor scooters and mopeds.

10 Passenger road vehicles, other.

Freight Road Vehicles

21 General use truck, dump truck, fire apparatus.

22 Hauling rig (non-motorized), pickup truck.

23 Trailer, semi; designed for freight (with or without tractor).
24 Tank truck, nonflammable cargo. Includes milk and water tankers, liquid nitrogen tankers.
25 Tank truck, flammable or combustible liquid, chemical cargo.
26 Tank truck, compressed gas or LP gas.
27 Garbage, waste, refuse truck. Includes recyclable material collection trucks. Excludes roll-on-type trash containers (73).
20 Freight road transport vehicles, other.

Rail Transport Vehicles

31 Diner car, passenger car.
32 Box, freight, or hopper car.
33 Tank car.
34 Container or piggyback car (see 73 for container).
35 Engine/locomotive.
36 Rapid transit car, trolley (self-powered for use on track). Includes self-powered rail passenger vehicles.
37 Maintenance equipment car. Includes cabooses and cranes.
30 Rail transport vehicles, other.

Water Vessels

41 Boat less than 65 ft (20 m) in length overall. Excludes commercial fishing vessels (48).
42 Boat or ship equal to or greater than 65 ft (20 m) in length but less than 1,000 tons.
43 Cruise liner or passenger ship equal to or greater than 1,000 tons.
44 Tank ship.
45 Personal water craft. Includes one- or two-person recreational water craft.
46 Cargo or military ship equal to or greater than 1,000 tons. Includes vessels not classified in 44 and 47.
47 Non-self-propelled vessel. Includes all vessels without their own motive power, such as towed petroleum balloons, barges, and other towed or towable vessels. Excludes sailboats (49).
48 Commercial fishing or processing vessel. Includes shell fishing vessels.
49 Sailboats. Includes those with auxiliary power.
40 Water transport vessels, other.

Aircraft

51 Personal, business, utility aircraft less than 12,500 lb (5,670 kg) gross weight. Includes gliders.
52 Personal, business, utility aircraft equal to or greater than 12,500 lb (5,670 kg) gross weight.
53 Commercial aircraft: propeller-driven, fixed-wing. Includes turbo props.
54 Commercial aircraft: jet and other turbine-powered, fixed-wing.
55 Helicopters, nonmilitary. Includes gyrocopters.
56 Military fixed-wing aircraft. Includes bomber, fighter, patrol, vertical takeoff and landing (fixed-wing vertical stall) aircraft.
57 Military non-fixed-wing aircraft. Includes helicopters.
58 Balloon vehicles. Includes hot air balloons and blimps.
50 Air transport vehicles, other.

Industrial, Agricultural, Construction Vehicles

61 Construction vehicle. Includes bulldozers, shovels, graders, scrapers, trenchers, plows, tunneling equipment, and road pavers.
63 Loader, industrial. Includes fork lifts, industrial tow motors, loaders, and stackers.
64 Crane.
65 Agricultural vehicle, baler, chopper (farm use).

67 Timber harvest vehicle. Includes skycars, loaders.
60 Industrial, construction, or agricultural vehicles, other.

Mobile Property, Miscellaneous

71 Home, garden vehicle. Includes riding lawnmowers, snow removal vehicles, riding tractors. Excludes equipment where operator does not ride. See Equipment Involved in Ignition.
73 Shipping container, mechanically moved. Includes haulable trash containers, intermodal shipping containers.
74 Armored vehicle. Includes armored cars and military vehicles. Excludes armored aircraft and ships.
75 Missile, rocket, and space vehicles.
76 Aerial tramway vehicle.
00 Mobile property, other.
NN No mobile property.

Aircraft

50 Air transport vehicles, other.
51 Personal, business, utility aircraft less than 12,500 lb (5,670 kg) gross weight. Includes gliders.
52 Personal, business, utility aircraft equal to or greater than 12,500 lb (5,670 kg) gross weight.
53 Commercial transport aircraft: propeller-driven, fixed-wing. Includes turbo props.
54 Commercial transport aircraft: jet and other turbine-powered, fixed-wing.
55 Helicopters, nonmilitary. Includes gyrocopters.
56 Military fixed-wing aircraft. Includes bomber, fighter, patrol, vertical takeoff and landing (fixed-wing vertical stall) aircraft.
57 Military non-fixed-wing aircraft. Includes helicopters.
58 Balloon vehicles. Includes hot air balloons and blimps.

Industrial, Agricultural, Construction Vehicles

60 Industrial, construction, or agricultural vehicles, other.
61 Construction vehicle. Includes bulldozers, shovels, graders, scrapers, trenchers, plows, tunneling equipment, and road pavers.
63 Loader, industrial. Includes fork lifts, industrial tow motors, loaders, and stackers.
64 Crane.
65 Agricultural vehicle, baler, chopper (farm use).
67 Timber harvest vehicle. Includes skycars, loaders.

Mobile Property, Miscellaneous

71 Home, garden vehicle. Includes riding lawnmowers, snow removal vehicles, riding tractors. Excludes equipment where operator does not ride. See Equipment Involved in Ignition.
73 Shipping container, mechanically moved. Includes haulable trash containers, intermodal shipping containers.
74 Armored vehicle. Includes armored cars and military vehicles. Excludes armored aircraft and ships.
75 Manned, unmanned space vehicles. Includes rockets and missiles.
76 Aerial tramway vehicle.
00 Mobile property, other.
NN No mobile property.

SECTION G

G Equipment Involved in Ignition

Definition

The piece of equipment that provided the principal heat source to cause the ignition if the equipment malfunctioned or was used improperly.

Purpose

Analysis of the equipment involved in ignition is useful for improving product safety and preventive maintenance. It is just as important to know the kind of equipment that was used improperly as it is to know the kind of equipment that malfunctioned. Misuse can be the direct result of the way the equipment is designed and constructed. When involved in ignition, equipment information provides an important part of the causal data. Equipment involved in ignition can be compared to other casual data to determine if the equipment was (or was not) operating properly.

Entry

Enter the three-digit code and description that best describes the equipment involved in ignition. If no equipment was involved in ignition, check or mark the None box.

Example

The fire was started by an overturned hibachi grill (643):

☞ An alphabetized synonym list for the following Equipment Involved in Ignition codes is presented in Appendix B.

EQUIPMENT INVOLVED IN IGNITION CODES

Heating, Ventilation, and Air Conditioning

111 Air conditioner.
112 Heat pump.
113 Fan.
114 Humidifier, non-heat producing. Excludes heaters with built-in humidifiers (131, 132).
115 Ionizer.
116 Dehumidifier, portable.
117 Evaporative cooler, cooling tower.
121 Fireplace, masonry.
122 Fireplace, factory-built.
123 Fireplace, insert/stove.
124 Stove, heating.
125 Chimney connector, vent connector.
126 Chimney: brick, stone, masonry.

127 Chimney: metal. Includes stovepipes and flues.
120 Fireplace, chimney, other.
131 Furnace, local heating unit, built-in. Includes built-in humidifiers. Excludes process furnaces, kilns (353).
132 Furnace, central heating unit. Includes built-in humidifiers. Excludes process furnaces, kilns. (353)
133 Boiler (power, process, heating).
141 Heater. Includes floor furnaces, wall heaters, and baseboard heaters. Excludes catalytic heaters (142), oil-filled heaters (143), hot water heaters (152).
142 Heater, catalytic.
143 Heater, oil-filled. Excludes kerosene heaters (141).
144 Heat lamp.
145 Heat tape.
151 Water heater. Includes sink-mounted instant hot water heaters and waterbed heaters.
152 Steam line, heat pipe, hot air duct. Includes radiators and hot water baseboard heaters.
100 Heating, ventilation, and air conditioning, other.

Electrical Distribution, Lighting, and Power Transfer

211 Electrical power (utility) line. Excludes wires from the utility pole to the structure.
212 Electrical service supply wires; wires from utility pole to meter box.
213 Electric meter, meter box.
214 Electrical wiring from meter box to circuit breaker board, fuse box, or panel board.
215 Panel board (fuse); switchboard, circuit breaker board with or without ground-fault interrupter
216 Electrical branch circuit. Includes armored (metallic) cable, nonmetallic sheathing, or wire in conduit.
217 Outlet, receptacle. Includes wall-type receptacles, electric dryer and stove receptacles.
218 Wall-type switch. Includes light switches.
219 Ground-fault interrupter (GFI), portable, plug-in.
210 Electrical wiring, other.
221 Transformer, distribution-type.
222 Overcurrent, disconnect equipment. Excludes panel boards.
223 Transformer, low-voltage (not more than 50 volts).
224 Generator.
225 Inverter.
226 Uninterrupted power supply (UPS).
227 Surge protector.
228 Battery charger, rectifier.
229 Battery. Includes all battery types.
231 Lamp: tabletop, floor, desk. Excludes halogen fixtures (235) and light bulbs (238).
232 Lantern, flashlight.
233 Incandescent lighting fixture.
234 Fluorescent lighting fixture, ballast.
235 Halogen lighting fixture or lamp.
236 Sodium, mercury vapor lighting fixture or lamp.
237 Portable or movable work light, trouble light.
238 Light bulb.
230 Lamp, lighting, other.
241 Night light.
242 Decorative lights, line voltage. Includes holiday lighting, Christmas lights.
243 Decorative or landscape lighting, low voltage.
244 Sign. Includes neon signs.

251 Fence, electric.
252 Traffic control device
253 Lightning rod, arrester/grounding device.
261 Power cord, plug; detachable from appliance.
262 Power cord, plug; permanently attached to appliance.
263 Extension cord.
260 Cord, plug, other.
200 Electrical distribution, lighting, and power transfer, other.

Shop Tools and Industrial Equipment

311 Power saw.
312 Power lathe.
313 Power shaper, router, jointer, planer.
314 Power cutting tool.
315 Power drill, screwdriver.
316 Power sander, grinder, buffer, polisher.
317 Power hammer, jackhammer.
318 Power nail gun, stud driver, stapler.
310 Power tools, other.
321 Paint dipper.
322 Paint flow coating machine.
323 Paint mixing machine.
324 Paint sprayer.
325 Coating machine. Includes asphalt-saturating and rubber-spreading machines.
320 Painting tools, other.
331 Welding torch. Excludes cutting torches (332).
332 Cutting torch. Excludes welding torches (331).
333 Burners. Includes Bunsen burners, plumber furnaces, and blowtorches. Excludes weed burners (523).
334 Soldering equipment.
341 Air compressor.
342 Gas compressor.
343 Atomizing equipment. Excludes paint spraying equipment (324).
344 Pump. Excludes pumps integrated with other types of equipment.
345 Wet/dry vacuum (shop vacuum).
346 Hoist, lift, crane.
347 Powered jacking equipment. Includes hydraulic rescue tools.
348 Drilling machinery or equipment. Includes water or gas drilling equipment.
340 Hydraulic equipment, other.
351 Heat-treating equipment.
352 Incinerator.
353 Industrial furnace, oven, kiln. Excludes ovens for cooking (646).
354 Tarpot, tar kettle.
355 Casting, molding, forging equipment.
356 Distilling equipment.
357 Digester, reactor.
358 Extractor, waste recovery machine. Includes solvent extractors such as used in dry-cleaning operations and garnetting equipment.
361 Conveyor. Excludes agricultural conveyors (513).
362 Power transfer equipment: ropes, cables, blocks, belts.
363 Power takeoff.
364 Powered valves.
365 Bearing or brake.
371 Picking, carding, weaving machine. Includes cotton gins.

372 Testing equipment.
373 Gas regulator. Includes propane, butane, LP, or natural gas regulators and flexible hose connectors to gas appliances.
374 Motor, separate. Includes bench motors. Excludes internal combustion motors (375).
375 Internal combustion engine (nonvehicular).
376 Printing press.
377 Car washing equipment.
300 Shop tools and industrial equipment, other.

Commercial and Medical Equipment

411 Dental, medical, or other powered bed or chair. Includes powered wheelchairs.
412 Dental equipment, other.
413 Dialysis equipment.
414 Medical imaging equipment. Includes MRI, CAT scan, and ultrasound.
415 Medical monitoring equipment.
416 Oxygen administration equipment.
417 Radiological equipment, x-ray, radiation therapy.
418 Sterilizer, medical.
419 Therapeutic equipment.
410 Medical equipment, other.
421 Transmitter.
422 Telephone switching gear, including PBX.
423 TV monitor array. Includes control panels with multiple TV monitors and security monitoring stations. Excludes single TV monitor configurations (753).
424 Studio-type TV camera. Includes professional studio television cameras. Excludes home camcorders and video equipment (756).
425 Studio-type sound recording/modulating equipment.
426 Radar equipment.
431 Amusement ride equipment.
432 Ski lift.
433 Elevator or lift.
434 Escalator.
441 Microfilm, microfiche viewing equipment.
442 Photo processing equipment. Includes microfilm processing equipment.
443 Vending machine.
444 Nonvideo arcade game. Includes pinball machines and the like. Excludes electronic video games (755).
445 Water fountain, water cooler.
446 Telescope. Includes radio telescopes.
451 Electron microscope.
450 Laboratory equipment, other.
400 Commercial and medical equipment, other.

Garden Tools and Agricultural Equipment

511 Combine, threshing machine.
512 Hay processing equipment.
513 Farm elevator or conveyor.
514 Silo loader, unloader, screw/sweep auger.
515 Feed grinder, mixer, blender.
516 Milking machine.
517 Pasteurizer. Includes milk pasteurizers.
518 Cream separator.
521 Sprayer, farm or garden.
522 Chain saw.

523 Weed burner.
524 Lawn mower.
525 Lawn, landscape trimmer, edger.
531 Lawn vacuum.
532 Leaf blower.
533 Mulcher, grinder, chipper. Includes leaf mulchers.
534 Snow blower, thrower.
535 Log splitter.
536 Post hole auger.
537 Post driver, pile driver.
538 Tiller, cultivator.
500 Garden tools and agricultural equipment, other.

Kitchen and Cooking Equipment

611 Blender, juicer, food processor, mixer.
612 Coffee grinder.
621 Can opener.
622 Knife.
623 Knife sharpener.
631 Coffee maker or teapot.
632 Food warmer, hot plate.
633 Kettle.
634 Popcorn popper.
635 Pressure cooker or canner.
636 Slow cooker.
637 Toaster, toaster oven, countertop broiler.
638 Waffle iron, griddle.
639 Wok, frying pan, skillet.
641 Bread-making machine.
642 Deep fryer.
643 Grill, hibachi, barbecue.
644 Microwave oven.
645 Oven, rotisserie.
646 Range with or without an oven or cooking surface. Includes counter-mounted stoves.
647 Steam table, warming drawer/table.
651 Dishwasher.
652 Freezer when separate from refrigerator.
653 Garbage disposer.
654 Grease hood/duct exhaust fan.
655 Ice maker (separate from refrigerator).
656 Refrigerator, refrigerator/freezer.
600 Kitchen and cooking equipment, other.

Electronic and Other Electrical Equipment

711 Computer. Includes devices such as hard drives and modems installed inside the computer casing. Excludes external storage devices (712).
712 Computer storage device, external. Includes CD-ROM devices, tape drives, and disk drives. Excludes such devices when they are installed within a computer (711).
713 Computer modem, external. Includes digital, ISDN modems, cable modems, and modem racks. Excludes modems installed within a computer (711).
714 Computer monitor. Includes LCD or flat-screen monitors.
715 Computer printer. Includes multifunctional devices such as copier, fax, and scanner.
716 Computer projection device, LCD panel, projector.
710 Computer device, other.

721 Adding machine, calculator.
722 Telephone or answering machine.
723 Cash register.
724 Copier. Includes large standalone copiers. Excludes small copiers and multifunctional devices (715).
725 Fax machine.
726 Paper shredder.
727 Postage, shipping meter equipment.
728 Typewriter.
720 Office equipment, other.
731 Guitar.
732 Piano, organ. Includes player pianos. Excludes synthesizers and musical keyboards (733).
733 Musical synthesizer or keyboard. Excludes pianos, organs (732).
730 Musical instrument, other.
741 CD player (audio). Excludes computer CD, DVD players (712).
742 Laser disk player. Includes DVD players and recorders.
743 Radio. Excludes two-way radios (744).
744 Radio, two-way.
745 Record player, phonograph, turntable.
747 Speakers, audio; separate components.
748 Stereo equipment. Includes receivers, amplifiers, equalizers. Excludes speakers (747).
749 Tape recorder or player.
740 Sound recording or receiving equipment, other.
751 Cable converter box.
752 Projector: film, slide, overhead.
753 Television.
754 VCR or VCR–TV combination.
755 Video game, electronic.
756 Camcorder, video camera.
757 Photographic camera and equipment. Includes digital cameras.
750 Video equipment, other.
700 Electronic equipment, other.

Personal and Household Equipment

811 Clothes dryer.
812 Trash compactor.
813 Washer/dryer combination (within one frame).
814 Washing machine, clothes.
821 Hot tub, whirlpool, spa.
822 Swimming pool equipment.
830 Floor care equipment, other.
831 Broom, electric.
832 Carpet cleaning equipment. Includes rug shampooers.
833 Floor buffer, waxer, cleaner.
834 Vacuum cleaner.
841 Comb, hair brush.
842 Curling iron.
843 Electrolysis equipment.
844 Hair curler warmer.
845 Hair dryer.
846 Makeup mirror, lighted.
847 Razor, shaver (electric).

848 Suntan equipment, sunlamp.
849 Toothbrush (electric).
850 Portable appliance designed to produce heat, other.
851 Baby bottle warmer.
852 Blanket, electric.
853 Heating pad.
854 Clothes steamer.
855 Clothes iron.
861 Automatic door opener. Excludes garage door openers (863).
862 Burglar alarm.
863 Garage door opener.
864 Gas detector.
865 Intercom.
866 Smoke or heat detector, fire alarm. Includes control equipment.
868 Thermostat.
871 Ashtray.
872 Charcoal lighter, utility lighter.
873 Cigarette lighter, pipe lighter.
874 Fire-extinguishing equipment. Includes electronic controls.
875 Insect trap. Includes bug zappers.
876 Timer.
881 Model vehicles. Includes model airplanes, boats, rockets, and powered vehicles used for hobby and recreational purposes.
882 Toy, powered.
883 Woodburning kit.
891 Clock.
892 Gun.
893 Jewelry-cleaning machine.
894 Scissors.
895 Sewing machine.
896 Shoe polisher.
897 Sterilizer, non-medical.
800 Personal and household equipment, other.

Other Equipment Involved in Ignition

000 Equipment involved in ignition, other.
NNN None.
UUU Undetermined

SECTION H

H Weather Information

Descriptive information regarding weather conditions that existed at the time and location of the fire origin helps identify conditions that may have contributed to the fire cause or spread.

NFDRS Weather Station ID

Definition

Space is provided to record the six-character identification number for the National Fire Danger Rating System (NFDRS) Weather Station that monitors weather conditions at the location of fire origin.

Purpose

Researchers can obtain specific weather data for the time and location of the fire origin. Specific weather data permits analysis of those conditions that may have contributed to the fire cause or spread.

Entry

Enter the six-digit NFDRS Weather Station ID number. See the completed example at the end of Section H.

☞ If the descriptive weather information is not provided, it will be necessary for the local fire department to access the NFDRS database to perform later analysis of wildland fires using weather data. Because this may not always be feasible, fire departments should *always* complete this section themselves whenever possible.

Weather Type

Definition

The general description of weather conditions at the time and location of fire origin.

Purpose

A description of weather conditions at the time and location of fire origin helps to understand the conditions that may have contributed to the fire cause or spread.

Entry

Enter the two-digit code and description for the weather conditions at the time and location of fire origin. See the completed example at the end of Section H.

WEATHER TYPE CODES

10	Clear (less than 1/10 cloud cover).
11	Scattered clouds (1/10 to 5/10 cloud cover).
12	Broken clouds (6/10 to 9/10 cloud cover).
13	Overcast (more than 9/10 cloud cover).
14	Foggy.
15	Drizzle or mist.
16	Rain.
17	Snow or sleet.
18	Shower.
19	Thunderstorm in progress.
00	Weather type, other.

Wind Direction

Definition

The direction that the wind was blowing from at ground level. For instance, a north wind blows out of the north and would push a fire to the south.

Purpose

This information helps determine fire causes, rate of spread, and direction of a fire.

Entry

Enter the code and description for the direction that the ground-level wind is coming from. If Wind Speed (next) is zero, enter “N” for Wind Direction. See the completed example at the end of Section H.

WIND DIRECTION CODES

1	North.
2	Northeast.
3	East.
4	Southeast.
5	South.
6	Southwest.
7	West.
8	Northwest.
9	Shifting winds.
N	None/calm.
U	Undetermined.

Wind Speed

Definition

The speed of the wind at the fire origin upon arrival of the fire suppression forces.

Purpose

Wind speed is possibly the most important factor affecting the rate of fire spread at an incident. This information is used to understand and predict fire behavior as well as to evaluate fire protection strategies.

Entry

Enter the average wind speed, to the nearest mile per hour, at the origin of the fire. Wind speed may be measured using an anemometer. Calm conditions are recorded as “0.” See the completed example at the end of Section H.

Temperature and Relative Humidity

Definitions

Air temperature is measured in degrees Fahrenheit at the location of the fire origin when the fire started. Relative humidity is the ratio expressed as a percent of the amount of water vapor to the greatest amount possible at the same temperature.

Purpose
Temperature and humidity information is used to access the potential for ignition in various weather conditions and to understand problems associated with suppressing fires in different ambient temperatures and humidity levels.

Entries
Enter the actual or estimated air temperature in degrees Fahrenheit at the time the incident started. If the temperature is below zero, check or mark the box that indicates a negative temperature.

Enter the percent humidity at the time the incident started. See the completed example at the end of Section H.

Fuel Moisture

Definition
The 10-hour reading of the moisture content of a fuel stick taken in the general area of fire origin. Fuel moisture is expressed as a percentage of the weight (generally ranging from 0 to 25 percent).

Purpose
Information about fuel moisture is used in fire modeling to assess the potential for ignition and rate of spread for different fuels under various weather conditions.

Entry
Enter the fuel moisture percentage level. See the completed example at the end of Section H.

Fire Danger Rating

Definition
Fire danger rating refers to one method of describing the wildfire threat in a particular area, based on the National Fire Danger Rating System. It is derived from both constant and variable fire danger factors that affect the ignition, spread, and difficulty of control of fires and the damage they cause. Factors considered when estimating the fire danger are temperature, relative humidity, wind speed, fuel type, and fuel moisture.

Purpose
This information is used in fire prevention activities to determine when fires are most likely to occur and their severity. Burning bans and park or forest closures or restrictions may be invoked based on the fire danger rating. It is also useful in pre-suppression planning to determine staffing levels and critical initial attack times.

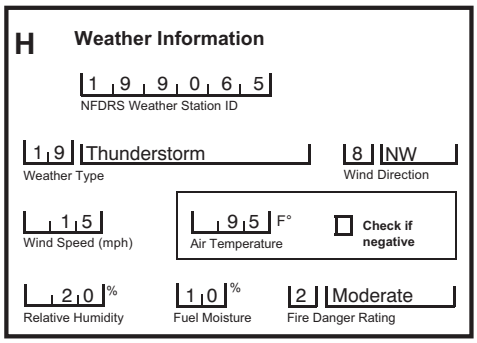
Entry
Enter the code and description that best describes the fire danger.

FIRE DANGER RATING CODES

1	Low fire danger.
2	Moderate fire danger.
3	High fire danger.
4	Very high fire danger.
5	Extreme fire danger.
U	Undetermined.

Example

NFDRS number: BLM's Storm King Station, ID number 199065.
The fire started during a thunderstorm (19).
The winds came from the northwest (8).
The Weather Service reported that the local weather station registered winds of 15–20 miles per hour with occasional gusts up to 25 miles per hour.
95°F, humidity at 20 percent, fuel moisture level at 10 percent.
The danger rating in the fire area was moderate (2).



SECTION I

This section collects information on the types of properties threatened or destroyed in a wildland fire and the magnitude of the loss.

I1 Number of Buildings Ignited

Definition

The number of buildings, if any, that were ignited by the wildland fire.

Purpose

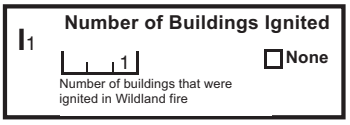
This information provides important information to resource planners and policy makers developing zoning ordinances and regulations regarding wildland and rural areas. This information may also help direct future training and incident management efforts.

Entry

Enter the number of buildings ignited by the wildland fire. If no buildings were ignited, check or mark the None box.

☞ A separate exposure report should be filled out for each building ignited.

Example
One building was ignited in a wildland fire:



I2 Number of Buildings Threatened

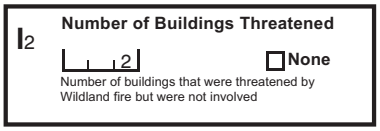
Definition
The number of buildings, if any, that were threatened, but not ignited by the wildland fire. This field implies that these buildings were “saved” by the efforts of fire suppression resources.

☞ This field is completed only when the fire management tactics employed were for the specific purpose of protecting threatened structures.

Purpose
The number of buildings threatened provides important information to resource planners and policy makers developing zoning ordinances and regulations regarding wildland and rural areas. This information may also help direct future training and incident management efforts.

Entry
Enter the number of buildings threatened but not ignited by the wildland fire. Check or mark the None box if no buildings were threatened.

Example
Two farm buildings were threatened in the wildland fire:



I3 Total Acres Burned ☆

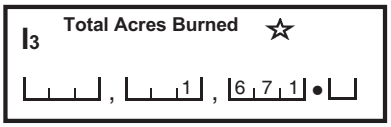
Definition
This data element captures the total acres burned by a wildland fire.

Purpose
Recording the estimated number of acres burned indicates the magnitude of each fire and of the wildland fire problem overall. This can be used to evaluate progress in wildland fire prevention. This information can also help determine the magnitude of resources that should be devoted to fire protection and the cost effectiveness of various programs. An estimate of the number of acres burned represents a vital component of the overall fire loss picture.

Entry
Enter the total number of acres burned. If less than one acre was burned, the decimal point field should be used to denote tenths of an acre.

☞ This entry should be the most accurate estimate of acres burned that is practical to obtain (one acre equals 43,560 square feet). Estimates based on the use of accurately scaled maps, dot grids, planimeters, or other accurate measuring methods are preferred.

Example
A fire destroys 1,671 acres:



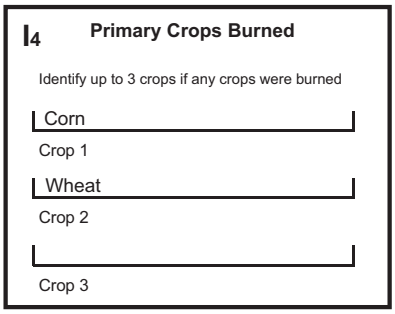
I4 Primary Crops Burned

Definition
This data element identifies up to three types of crops that burned.

Purpose
Information about what type of crops burned is useful as a measure of loss and in tracking trends and patterns in wildland fires as well as planning prevention strategies.

Entry
Enter up to three primary crops that burned in the fire. Enter the crop with the most burned acres first. If no crops were burned, leave this block blank.

Example
The fire burned 100 acres of wheat and 150 acres of corn:



SECTION J

J Property Management

Definition

The name of the principle entity having responsibility for the maintenance or control of the property where the fire originated. It also allows for the reporting of the percent of the total acres burned for each type of ownership involved.

Purpose

The number of acres burned by property ownership is of significant value to local fire departments as well as to state and federal wildland agencies. It provides a means to determine the frequency and impact of fire on property managers, especially major holders of land, such as ranchers, lumber and paper companies, agricultural producers, and federal and state governments. This information also can help target fire protection programs at entities having the greatest risk or loss potential.

Entry

Indicate the percent of the total acres burned for each type of ownership involved, then check or mark the box that best describes the principle entity responsible for the property where the fire originated. If responsibility cannot be determined or is unknown, check or mark the Undetermined box.

☞ Check or mark only one owner/management entity.

☞ If the Federal (6) box was checked or marked, enter the Federal Agency Code.

Example

The fire started on a privately owned and operated farm (private tax paying) (1) and spread to Montana's Big Horn Canyon (Federal Agency Code MTBIP). Thirty percent of the total acres burned was on the farm and 70 percent was owned by the federal government:

J Property Management

Indicate the percent of the total acres burned for *each* ownership type then check the ONE box to identify the property ownership at the origin of the fire. If the ownership at origin is Federal, enter the Federal Agency Code.

Ownership		% Total Acres Burned
U	☐ Undetermined	%
Private		
1	☒ Tax paying	30 %
2	☐ Non-tax paying	%
Public		
3	☐ City, town, village, local	%
4	☐ County or parish	70 %
5	☐ State or province	%
6	☐ Federal (Federal Agency Code)	%
7	☐ Foreign	%
8	☐ Military	%
0	☐ Other	%

PROPERTY MANAGEMENT CODES

Private

1 Tax paying.
2 Non-tax paying.

Public

3 City, town, village, or other locality.
4 County or parish.
5 State or province.
6 Federal.
7 Foreign.
8 Military.
0 Other.
U Undetermined.

WILDLAND FEDERAL AGENCY CODES
(Wildland NIFC Standard Codeset)

Department of Agriculture, Forest Service

PAALF	Allegheny National Forest
CAANF	Angeles National Forest
AZASF	Apache-Sitgreaves National Forest
COARF	Arapaho & Roosevelt National Forests/ Pawnee National Grassland
UTASF	Ashley National Forest
MTBDF	Beaverhead/Deerlodge National Forest
WYBHF	Bighorn National Forest
MTBRF	Bitterroot National Forest
SDBKF	Black Hills National Forest
IDBOF	Boise National Forest
WYBTF	Bridger–Teton National Forest
PRCAF	Caribbean National Forest
IDCTF	Caribou–Targhee National Forest
NMCAF	Carson National Forest
NMCHP	Chaco Culture National Monument
GACHF	Chattahoochee-Oconee National Forest
WICNF	Chequamegon–Nicolet National Forest
TNCNF	Cherokee National Forest
MNCPF	Chippewa National Forest
AKCGF	Chugach National Forest
NMCIF	Cibola National Forest
IDCWF	Clearwater National Forest
CACNF	Cleveland National Forest
AZCOF	Coconino National Forest
ORCGF	Columbia River Gorge National Scenic Area
WACOF	Colville National Forest
AZCNF	Coronado National Forest
MTCNF	Custer National Forest
NDDPF	Dakota Prairie National Grasslands
KYDBF	Daniel Boone National Forest
ORDEF	Deschutes National Forest
UTDIF	Dixie National Forest
CAENF	Eldorado National Forest
UTFIF	Fishlake National Forest
MTFNF	Flathead National Forest
SCFMF	Francis Marion & Sumter National Forests
ORFRF	Fremont National Forest
MTGNF	Gallatin National Forest
VAVAF	George Washington & Jefferson National Forests
WAGPF	Gifford Pinchot National Forest
NMGNF	Gila National Forest
COGMF	Grand Mesa/Uncompahgre/Gunnison National Forest
VTGMF	Green Mountain National Forest
MTHNF	Helena National Forest
MIHIF	Hiawatha National Forest
INHOF	Hoosier National Forest
NVHTF	Humboldt–Toiyabe National Forest
MIHMF	Huron–Manistee National Forest
IDIPF	Idaho Panhandle National Forest
CAINF	Inyo National Forest
AZKNF	Kaibab National Forest
LAKIF	Kisatchie National Forest
CAKNF	Klamath National Forest
MTKNF	Kootenai National Forest
KYLBF	Land Between the Lakes National Recreation Area
CALNF	Lassen National Forest
MTLCF	Lewis & Clark National Forest
NMLNF	Lincoln National Forest
MTLNF	Lolo National Forest
CALPF	Los Padres National Forest
ORMAF	Malheur National Forest
UTMLF	Manti–Lasal National Forest
MOMTF	Mark Twain National Forest
WYMBF	Medicine Bow National Forest
CAMNF	Mendocino National Forest
ILMPF	Midewin National Tall Grass Prairie
CAMDF	Modoc National Forest
WVMOF	Monongahela National Forest
WAMSF	Mt. Baker-Snoqualmie National Forest
ORMHF	Mt. Hood National Forest
TXTXF	National Forests and Grasslands In Texas
ALALF	National Forests in Alabama
FLFNF	National Forests in Florida
MSMNF	National Forests in Mississippi
NCNCF	National Forests in North Carolina
NENBF	Nebraska National Forest
IDNPF	Nez Perce National Forest
OROCF	Ochoco National Forest
WAOWF	Okanogan/Wenatchee National Forest
WAOLF	Olympic National Forest
MIOTF	Ottawa National Forest
AROUF	Ouachita National Forest
AROZF	Ozark & St. Francis National Forests
IDPAF	Payette National Forest

COPSF	Pike & San Isabel National Forest
CAPNF	Plumas National Forest
AZPNF	Prescott National Forest
CORGF	Rio Grande National Forest
ORRRF	Rogue River National Forest
CORTF	Routt National Forest
IDSCF	Salmon–Challis National Forest
CABDF	San Bernardino National Forest
COSJF	San Juan National Forest
NMSNF	Santa Fe National Forest
SCSRF	Savannah River Forest
IDSTF	Sawtooth National Forest
CASQF	Sequoia National Forest
CASHF	Shasta–Trinity National Forest
ILSHF	Shawnee National Forest
WYSHF	Shoshone National Forest
CASNF	Sierra National Forest
ORSIF	Siskiyou National Forest
ORSUF	Siuslaw National Forest
CASRF	Six Rivers National Forest
CASTF	Stanislaus National Forest
MNSUF	Superior National Forest
CATNF	Tahoe National Forest
AKTNF	Tongass National Forest
AZTNF	Tonto National Forest
UTUIF	Uinta National Forest
ORUMF	Umatilla National Forest
ORUPF	Umpqua National Forest
ORWWF	Wallowa–Whitman National Forest
UTWCF	Wasatch–Cache National Forest
OHWAF	Wayne National Forest
NHWMF	White Mountain National Forest
COWRF	White River National Forest
ORWIF	Willamette National Forest
ORWNF	Winema National Forest

Department of Commerce, National Weather Service

MTBLW	Billings Weather Service
NDBMW	Bismark Weather Service
MTGGW	Glasgow Weather Service
NDGFW	Grand Forks Weather Service
MTGFW	Great Falls Weather Service
MTMSW	Missoula Weather Service
CANWS	National Weather Service

Department of Defense

MDABQ	Aberdeen Proving Grounds
KYBGQ	Blue Grass Army Depot
NCCLQ	Camp LeJeune
CAMCP	Camp Pendleton Marine Corps Base
NCCPQ	Cherry Point
FLEAQ	Eglin Air Force Base
NVFNA	Fallon Naval Air Station
NCFBQ	Fort Bragg
KYFCQ	Fort Campbell
NYFDQ	Fort Drum Military Reservation
SCFJQ	Fort Jackson Army Training Center
KYFKQ	Fort Knox
GAFSQ	Fort Stewart
CAFHL	Hunter Liggett Military Reservation
NVNAF	Nellis Air Force Base
NVNTE	Nevada Test Site
NHNBQ	New Boston Air Force Station
SCSHQ	Shaw Air Force Base
CASAD	Sierra Army Depot
CAAFV	Vandenburg Air Force Base
NYWPQ	West Point Military Reservation
CTWEQ	Westover Air Force Base

Department of Energy

WAHNE	Hanford Site

Department of Interior, Bureau of Indian Affairs

OKACA	Alabama-Coushatta Agency
AKANA	Anchorage Agency
AKBEA	Bethel Agency
MTBFA	Blackfeet Agency
CACCA	Central Calif Agency
SDCRA	Cheyenne River Reservation
OKCHA	Chickasaw Agency
MSCHA	Choctaw Agency
AKCIA	Chugachmiut Agency
AZCRA	Colorado River Agency

WACOA	Colville Agency
MTCRA	Crow Agency
SDCCA	Crow Creek Reservation
NCECA	Eastern Cherokee Agency
NVENA	Eastern Nevada Agency
AKFAA	Fairbanks Agency
MTFHA	Flathead Agency
AZFTA	Fort Apache Agency
MTFBA	Fort Belknap Agency
NDFBA	Fort Berthold Agency
CAFBA	Fort Bidwell Agency
IDFHA	Fort Hall Agency
MTFPA	Fort Peck Agency
NDFTA	Fort Totten Agency
AZFYA	Fort Yuma Agency
WIGLA	Great Lakes Agency
CAHIA	Hoopa Agency
AZHOA	Hopi Agency
KSHTA	Horton Reservation
NMJIA	Jicarilla Agency
NMLAA	Laguna Agency
SDLBA	Lower Brule Reservation
WIMEA	Menominee Agency
NMMEA	Mescalero Agency
AKMEA	Metlakatla Agency
OKMIA	Miami Agency
MIMIA	Michigan Agency
MNMNA	Minnesota Agency
AKNOA	Nome Agency
IDNIA	North Idaho Agency
CANCA	Northern California Agency
MTNCA	Northern Cheyenne Agency
NMNPA	Northern Pueblos Agency
WAOPA	Olympic Peninsula Agency
OKOSA	Osage Agency
AZPPA	Papago Agency
MEPAA	Passamaquoddy Agency
OKPAA	Pawnee Agency
MEPEA	Penobscot Agency
AZPMA	Pima Agency
SDPRA	Pine Ridge Reservation
WAPSA	Puget Sound Agency
NMRNA	Ramah Navajo Agency
MNRLA	Red Lake Agency
MTRBA	Rocky Boys Agency
MTRNA	Ronan Agency
SDRBA	Rosebud Reservation
IASFA	Sac & Fox Agency
AZSCA	San Carlos Agency
FLSEA	Seminole Agency
ORSIA	Siletz Agency
SDSWA	Sisseton–Wahpeton Reservation
CASCA	Southern California Agency
UTPIA	Southern Piute Agency
SCAAA	Southern Plains Agency
OKAAA	Southern Plains Agency
NMSPA	Southern Pueblos Agency
COSUA	Southern Ute Reservation
WASPA	Spokane Agency
NDSRA	Standing Rock Reservation
CASYC	Sycuan Agency
NMTAA	Taos NPA Agency
AZTCA	Truxton Canon Agency
CATIA	Tule River Agency
NDTMA	Turtle Mountain Agency
UTUOA	Uintah and Ouray Agency
ORUMA	Umatilla Agency
COUMA	Ute Mountain Reservation
ORWSA	Warm Springs Agency
NVWNA	Western Nevada Agency
OKWEA	Wewoka Agency
UTUMA	White Mesa/Ute Mountain Agency
WYWRA	Wind River Reservation
NEWBA	Winnebago Reservation
WAYAA	Yakima Agency
SDYAA	Yankton Reservation
NMZUA	Zuni Agency

Department of Interior, Bureau of Land Management

CABBD	Bakersfield District
NVBAC	Battle Mountain Airtanker Base
CACDD	California Desert District
CANOD	Northern California District

Department of Interior, Bureau of Reclaimation

NDAWR	Arrowwood National Wildlife Refuge
NDADR	Audubon National Wildlife Refuge
MTBLR	Benton Lake National Wildlife Refuge
MTBWR	Bowdoin National Wildlife Refuge
MTCMR	Charles M. Russell National Wildlife Refuge
NDCLR	Chase Lake National Wildlife Refuge
NDCRR	Crosby Wetland Management District
NDDLR	Des Lacs National Wildlife Refuge
NDJCR	J. Clark Salyer National Wildlife Refuge
IDKOR	Kootenai National Wildlife Refuge
NDKMR	Kulm Wetland Management District
NDLIR	Lake Ilo National Wildlife Refuge
MTLMR	Lee Metcalf National Wildlife Refuge
NDLLR	Long Lake National Wildlife Refuge
NDLWR	Lostwood Lake National Wildlife Refuge
MTMLR	Medicine Lake National Wildlife Refuge
CABRL	Mid-Pacific Region
MTNBR	National Bison Range
MTRLR	Red Rock Lakes National Wildlife Refuge
NDSLR	Spirit Lake Wetland Management District
NDSHR	Sullys Hill National Game Preserve
NDTWR	Tewaukon National Wildlife Refuge
NDUSR	Upper Souris National Wildlife Refuge
NDVCR	Valley City Wetland Management District

Department of Interior, Fish and Wildlife Service

SCACR	Ace Basin National Wildlife Refuge
MNAGR	Agassiz National Wildlife Refuge
COALR	Alamosa National Wildlife Refuge
AKAMR	Alaska Maritime National Wildlife Refuge
AKAPR	Alaska Peninsula National Wildlife Refuge
NCALR	Alligator River National Wildlife Refuge
NVAIR	Anaho Island National Wildlife Refuge
TXAHR	Anahuac National Wildlife Refuge
ORAKR	Ankeny National Wildlife Refuge
CAADR	Antioch Dunes National Wildlife Refuge
TXARR	Aransas National Wildlife Refuge
COARR	Arapaho National Wildlife Refuge
FLACR	Archie Carr National Wildlife Refuge
AKARR	Arctic National Wildlife Refuge
MEARR	Arrostook National Wildlife Refuge
FLLXR	Arthur R. Marshall/Loxahatchee National Wildlife Refuge
NVAMR	Ash Meadows National Wildlife Refuge
LAATR	Atchafalaya National Wildlife Refuge
TXATR	Attwater Prairie Chicken National Wildlife Refuge
COBAR	Baca National Wildlife Refuge
VABBR	Back Bay National Wildlife Refuge
TXBAR	Balcones Canyon National Wildlife Refuge
ORBMR	Bandon Marsh National Wildlife Refuge
GABNR	Banks Lake National Wildlife Refuge
ORBKR	Baskett Slough National Wildlife Refuge
LABAR	Bayou Cocodrie National Wildlife Refuge
LABSR	Bayou Sauvage National Wildlife Refuge
IDBLR	Bear Lake National Wildlife Refuge
UTBBR	Bear River Migratory Bird Refuge
ORBVR	Bear Valley National Wildlife Refuge
AKBCR	Becharof National Wildlife Refuge
TXBBR	Big Boggy National Wildlife Refuge
LABBR	Big Branch Marsh National Wildlife Refuge
ARBGR	Big Lake National Wildlife Refuge
MOBMR	Big Muddy National Wildlife Refuge
INBOR	Big Oaks National Wildlife Refuge
MNBGR	Big Stone National Wildlife Refuge
AZBWR	Bill Williams National Wildlife Refuge
NMBTR	Bitter Lake National Wildlife Refuge
GABLR	Blackbeard Island National Wildlife Refuge
ALBWR	Blowing Wind Cave National Wildlife Refuge
DEBHR	Bombay Hook National Wildlife Refuge
ALBOR	Bon Secour National Wildlife Refuge
GABSR	Bond Swamp National Wildlife Refuge
NMBDR	Bosque del Apache National Wildlife Refuge
LABCR	Bouge Chitto National Wildlife Refuge
TXBRR	Brazoria National Wildlife Refuge
LABTR	Breton National Wildlife Refuge
COBPR	Brown's Park National Wildlife Refuge
VIBIR	Buck Island National Wildlife Refuge
AZBAR	Buenos Aires National Wildlife Refuge
TXBFR	Buffalo Lake National Wildlife Refuge
AZCPR	Cabeza National Wildlife Refuge
PRCBR	Cabo Rojo National Wildlife Refuge
ARCRR	Cache River National Wildlife Refuge
TXCLR	Caddo Lake National Wildlife Refuge
FLCAR	Caloosahatchee National Wildlife Refuge
IDCSR	Camas National Wildlife Refuge
LACPR	Cameron Prairie National Wildlife Refuge
WVCVR	Canaan Valley National Wildlife Refuge
NJCMR	Cape May National Wildlife Refuge
ORCPR	Cape Meares National Wildlife Refuge

SCCMR	Cape Romain National Wildlife Refuge
SCCRR	Carolina Sandhills National Wildlife Refuge
CACAR	Castle Rock National Wildlife Refuge
LACTR	Catahoula National Wildlife Refuge
NCCDR	Cedar Island National Wildlife Refuge
FLCKR	Cedar Keys National Wildlife Refuge
FLCHR	Chassahowitzka National Wildlife Refuge
ILCTR	Chautauqua National Wildlife Refuge
MDBWR	Chesapeake Marshlands National Wildlife Refuge Complex
TNCHR	Chicksaw National Wildlife Refuge
VACHR	Chincoteague National Wildlife Refuge
ALCHR	Choctaw National Wildlife Refuge
CACBR	Cibola National Wildlife Refuge
AZCBR	Cibola National Wildlife Refuge
KYCLR	Clark's River National Wildlife Refuge
CACLR	Clear Lake National Wildlife Refuge
ORCOR	Cold Springs National Wildlife Refuge
WACBR	Columbia National Wildlife Refuge
TXCOR	Columbia Lakes National Wildlife Refuge
CACUR	Colusa National Wildlife Refuge
WACNR	Conboy Lake National Wildlife Refuge
WACOR	Copalis National Wildlife Refuge
ILCOR	Crab Orchard National Wildlife Refuge
MNCMR	Crane Meadows National Wildlife Refuge
NECLR	Crescent Lake National Wildlife Refuge
FLCLR	Crocodile Lake National Wildlife Refuge
TNCRR	Cross Creeks National Wildlife Refuge
FLCRR	Crystal River National Wildlife Refuge
PRCUR	Culebra National Wildlife Refuge
NCCRR	Currituck National Wildlife Refuge
ILCYR	Cypress Creek National Wildlife Refuge
MSDAR	Dahomey National Wildlife Refuge
LADRR	D'Arbonne National Wildlife Refuge
IDDFR	Deer Flat National Wildlife Refuge
CADLR	Delevan National Wildlife Refuge
LADLR	Delta National Wildlife Refuge
PRDER	Desecheo National Wildlife Refuge
NVDSR	Desert National Wildlife Refuge
IADSR	DeSoto National Wildlife Refuge
MNDLR	Detroit Lakes Wetland Management District
MIDRR	Detroit River International Wildlife Refuge
NDDVR	Devil’s Lake Wetland Management District
OKDXR	Dexter National Fish Hatchery
NMDXR	Dexter National Fish Hatchery & Technology Center
IADAR	Driftless National Wildlife Refuge
WADNR	Dungeness National Wildlife Refuge
MAEMR	Eastern Massachusetts National Wildlife Refuge Complex
MDENR	Eastern Neck National Wildlife Refuge
VAESR	Eastern Shore of Virginia
VAEVR	Eastern Virginia Rivers Refuges
NJERR	Edwin B. Forsythe National Wildlife Refuge
FLEGR	Egmont Key National Wildlife Refuge
PAERR	Erie National Wildlife Refuge
ALEFR	Eufaula National Wildlife Refuge
NVFLR	Fallon National Wildlife Refuge
ARFSR	Felsenthal National Wildlife Refuge
MNFFR	Fergus Falls Wetland Management District
ALFER	Fern Cave National Wildlife Refuge
UTFSR	Fish Springs National Wildlife Refuge
WAFLR	Flattery Rocks National Wildlife Refuge
KSFLR	Flint Hills National Wildlife Refuge
FLFPR	Florida Panther National Wildlife Refuge
NEFNR	Fort Niobrara
WIGNR	Genoa National Fish Hatchery
MSGBR	Grand Bay National Wildlife Refuge
LAGCR	Grand Cote National Wildlife Refuge
WAGHR	Gray's Harbor National Wildlife Refuge
IDGLR	Grays Lake National Wildlife Refuge
NHGBR	Great Bay National Wildlife Refuge
VAGDR	Great Dismal Swamp National Wildlife Refuge
MOGRR	Great Rivers National Wildlife Refuge
NJGSR	Great Swamp National Wildlife Refuge
FLGWR	Great White Heron National Wildlife Refuge
VIGCR	Green Cay National Wildlife Refuge
NMGRR	Grula National Wildlife Refuge
TXHGR	Hagerman National Wildlife Refuge
IDHFR	Hagerman National Fish Hatchery
HIHAR	Hakalau Forest National Wildlife Refuge
MNHSR	Hamden Slough National Wildlife Refuge
HIHNR	Hanalei National Wildlife Refuge
LAHAR	Handy Brake National Wildlife Refuge
WAHFR	Hanford Reach National Monument
MIHAR	Harbor Island National Wildlife Refuge
GAHSR	Harris Neck National Wildlife Refuge
ORHMR	Hart Mountain National Antelope Refuge
TNHTR	Hatchie National Wildlife Refuge
AZHVR	Havasu National Wildlife Refuge
HIPCR	Hawaii Pacific Islands National Wildlife Refuge Complex
HIHIR	Hawaiian Islands National Wildlife Refuge
MIHFR	Hiawatha Forest National Fish Hatchery
MSHLR	Hillside National Wildlife Refuge
FLHBR	Hobe Sound National Wildlife Refuge
ARHLR	Holla Bend National Wildlife Refuge
WIHRR	Horicon National Wildlife Refuge
HIHLR	Huleia National Wildlife Refuge

CAHBR	Humboldt Bay
MIHUR	Huron National Wildlife Refuge
SDHUR	Huron Wetland Management District
ILILR	Illinois River National Wildlife Refuge
WIIRR	Illinois River National Wildlife Refuge
AZIMR	Imperial National Wildlife Refuge
AKINR	Innoko National Wildlife Refuge
NYIRR	Iroquois National Wildlife Refuge
FLISR	Island Bay National Wildlife Refuge
AKIZR	Izembek National Wildlife Refuge
FLJNR	J.N. “Ding” Darling National Wildlife Refuge
HIJCR	James C. Campbell National Wildlife Refuge
VAJRR	James River National Wildlife Refuge
PATNR	John Heinz at Tinicum National Wildlife Refuge
WIJRR	Jordan River National Fish Hatchery
WAJHR	Julia Bulter Hansen National Wildlife Refuge for the Columbia White Tailed Deer
HIKKR	Kakahaia National Wildlife Refuge
AKKAR	Kanuti National Wildlife Refuge
AKKNR	Kenai National Wildlife Refuge
CAKRR	Kern National Wildlife Refuge
FLKER	Key West National Wildlife Refuge
HIKIR	Kilaeu Point National Wildlife Refuge
MIKWR	Kirtlands Warbler National Wildlife Refuge
KSKIR	Kirwin National Wildlife Refuge
CAKLR	Klamath Basin National Wildlife Refuge
ORKLR	Klamath Forest National Wildlife Refuge
AKKDR	Kodiak National Wildlife Refuge
AZKGR	Kofa National Wildlife Refuge
AKKUR	Koyukuk National Wildlife Refuge
LALCR	Lacassine National Wildlife Refuge
SDLCR	Lacreek National Wildlife Refuge
WILCR	LaCrosse District, Upper Mississippi National Wildlife Refuge
TXLGR	Laguna Atascosa National Wildlife Refuge
PRLCR	Laguna Cartagena National Wildlife Refuge
SDLAR	Lake Andes National Wildlife Refuge
TNLIR	Lake Isom National Wildlife Refuge
LALOR	Lake Ophelia National Wildlife Refuge
NHUBR	Lake Umbagog National Wildlife Refuge
FLLRR	Lake Wales Ridge National Wildlife Refuge
FLLWR	Lake Woodruff National Wildlife Refuge
NMLVR	Las Vegas National Wildlife Refuge
WALWR	Leavenworth National Fish Hatchery
WILPR	Leopold Wetland Management
ORLAR	Lewis & Clark National Wildlife Refuge
MNLFR	Litchfield Wetland Management District
WALPR	Little Pend Oreille National Wildlife Refuge
OKLRR	Little River National Wildlife Refuge
OKLSR	Little Sandy National Wildlife Refuge
ARLOR	Logan Cave National Wildlife Refuge
NYLIR	Long Island National Wildlife Refuge Complex
LALWR	Louisiana Wetlands
TNLHR	Lower Hatchie National Wildlife Refuge
CALKR	Lower Klamath National Wildlife Refuge
ORLOR	Lower Klamath National Wildlife Refuge
TXRGR	Lower Rio Grande Valley National Wildlife Refuge
FLLSR	Lower Suwannee National Wildlife Refuge
NCMCR	Mackay Island National Wildlife Refuge
SDMDR	Madison Wetland Management District
MECMR	Maine Coastal Islands National Wildlife Refuge Complex
ORMAR	Malheur National Wildlife Refuge
LAMYR	Mandalay National Wildlife Refuge
KSMCR	Maris des Cygnes National Wildlife Refuge
ILMTR	Mark Twain National Wildlife Refuge
VAMNR	Mason Neck National Wildlife Refuge
TXMAR	Matagorda National Wildlife Refuge
MSMBR	Mathews Brake National Wildlife Refuge
FLMAR	Matlacha Pass National Wildlife Refuge
NCMTR	Mattamuskeet National Wildlife Refuge
NMMXR	Maxwell National Wildlife Refuge
TXMCR	McFaddin National Wildlife Refuge
MNMGR	McGregor District, Upper Mississippi National Wildlife Refuge
ORMKR	McKay Creek National Wildlife Refuge
WAMNR	McNary National Wildlife Refuge
FLMIR	Merritt Island National Wildlife Refuge
NMMSR	Mescalero Refuge Hatchery
MIMWR	Michigan Wetland Management District
MIMIR	Michigan Island National Wildlife Refuge
WAMCR	Mid Columbia National Wildlife Refuge Complex
MOMOR	Mingo National Wildlife Refuge
IDMNR	Minidoka National Wildlife Refuge
MNMVR	Minnesota Valley National Wildlife Refuge
VTMQR	Missisquoi National Wildlife Refuge
MSMSR	Mississippi Sandhill Crane National Wildlife Refuge
MSMWR	Mississippi Wetlands Authority
NVMVR	Moapa Valley National Wildlife Refuge
CAMDR	Modoc National Wildlife Refuge
COMVR	Monte Vista National Wildlife Refuge
NYMZR	Montezuma National Wildlife Refuge
TXMDR	Moody National Wildlife Refuge
MEMHR	Moosehorn National Wildlife Refuge

NMMRR	Mora National Wildlife Refuge
MSMKR	Morgan Brake National Wildlife Refuge
MNBNR	Morris National Wildlife Refuge
TXMLR	Mule Shoe National Wildlife Refuge
INMSR	Muscatatuck National Wildlife Refuge
WYNER	National Elk Refuge
FLNKR	National Key Deer Refuge
IANSR	Neal Smith National Wildlife Refuge
WINCR	Necedah National Wildlife Refuge
ORNTR	Nestucca Bay National Wildlife Refuge
WANQR	Nisqually National Wildlife Refuge
NENPR	North Platte National Wildlife Refuge
ARNAR	Northeast Arkansas Refuges
AKNOR	Nowitna National Wildlife Refuge
MSNXR	Noxubee National Wildlife Refuge
VAOQR	Occoquan Bay National Wildlife Refuge
WVOHR	Ohio River Islands National Wildlife Refuge
GAOKR	Okefenokee National Wildlife Refuge
OKOBR	Oklahoma Bat Caves National Wildlife Refuge
OKOPR	Optima National Wildlife Refuge
ORORR	Oregon Islands National Wildlife Refuge
OHOTR	Ottawa National Wildlife Refuge
UTOWR	Ouray National Wildlife Refuge
AROVR	Overflow National Wildlife Refuge
NVPRR	Pahranagat National Wildlife Refuge
VAPBX	Paint Bank National Fish Hatchery
MSPNR	Panther Swamp National Wildlife Refuge
MAPRR	Parker River National Wildlife Refuge
FLPAR	Passage Key National Wildlife Refuge
INPKR	Patoka River National Wildlife Refuge
MDPWR	Patuxent National Wildlife Refuge
NCPLR	Pea Island National Wildlife Refuge
HIPHR	Pearl Harbor National Wildlife Refuge
NCPER	Pee Dee National Wildlife Refuge
FLPLR	Pelican Island National Wildlife Refuge
MIPCR	Pendills Creek National Fish Hatchery
GAPDR	Piedmont National Wildlife Refuge
WAPIR	Pierce National Wildlife Refuge
SCPKR	Pinckney Island National Wildlife Refuge
FLPIR	Pine Island National Wildlife Refuge
FLPNR	Pinellas National Wildlife Refuge
NCPOR	Pocosin Lakes National Wildlife Refuge
ARPCR	Pond Creek National Wildlife Refuge
IAPLR	Port Louisa National Wildlife Refuge
VAPRR	Potomac River Refuges
VAPQR	Presquile National Wildlife Refuge
DEPHR	Prime Hook National Wildlife Refuge
WAPRR	Protection Island National Wildlife Refuge
NCMUR	Pungo National Wildlife Refuge
WAQLR	Quillayute Needles National Wildlife Refuge
KSQUR	Quivira National Wildlife Refuge
MERCR	Rachel Carson National Wildlife Refuge
NERBR	Rainwater Basin Wetland Management District
VARVR	Rappahannock River Valley
LARRR	Red River National Wildlife Refuge
TNRLR	Reelfoot National Wildlife Refuge
RIRIR	Rhode Island National Wildlife Refuge Complex
MNRLR	Rice Lake National Wildlife Refuge
WARFR	Ridgefield National Wildlife Refuge
NCRRR	Roanoke River National Wildlife Refuge
CORMR	Rocky Mountain Arsenal National Wildlife Refuge
NVRLR	Ruby Lake National Wildlife Refuge
MNRYR	Rydell National Wildlife Refuge
LASBR	Sabine National Wildlife Refuge
CASWR	Sacramento National Wildlife Refuge
CASAR	Sacramento River National Wildlife Refuge
WASAR	Saddle Mountain National Wildlife Refuge
OKSLR	Salt Plains National Wildlife Refuge
CASSR	Salton Sea National Wildlife Refuge
NMSNR	San Andreas National Wildlife Refuge
TXSNR	San Bernard National Wildlife Refuge
AZSBR	San Bernardino National Wildlife Refuge
CAFW	San Francisco Bay National Wildlife Refuge
WASNR	San Juan Islands National Wildlife Refuge
CALUR	San Luis National Wildlife Refuge
CASPR	San Pablo National Wildlife Refuge
SDSLR	Sand Lake National Wildlife Refuge
VISPR	Sandy Point National Wildlife Refuge
TXSTR	Santa Ana National Wildlife Refuge
SCSNR	Santee National Wildlife Refuge
ILSVR	Savanna District, Upper Mississippi National Wildlife Refuge
GASAR	Savannah Coastal Refuges
WYSER	Seedskadee National Wildlife Refuge
AKSWR	Selawik National Wildlife Refuge
MISNR	Seney National Wildlife Refuge
OKSQR	Sequoyah National Wildlife Refuge
NMSER	Sevilleta National Wildlife Refuge
NVSAR	Sheldon Antelope National Wildlife Refuge
ORSHR	Sheldon–Hart Mountain National Wildlife Refuge Complex
LASHR	Shell Keys National Wildlife Refuge
MNSBR	Sherburne National Wildlife Refuge
MISSR	Shiawassee National Wildlife Refuge
ORSIR	Siletz Bay National Wildlife Refuge
TXSRR	South Texas Refuge Complex

FLSWR	Southwest Florida Gulf Coast Refuges
MOSQR	Squaw Creek National Wildlife Refuge
MSSCR	St. Catherine Creek National Wildlife Refuge
WISCR	St. Croix Wetland Management District
FLSJR	St. Johns National Wildlife Refuge
FLSMR	St. Marks National Wildlife Refuge
FLSVR	St. Vincent National Wildlife Refuge
WASGR	Steigerwald Lake National Wildlife Refuge
CTSMR	Stewart B. McKinney National Wildlife Refuge
NVSWR	Stillwater National Wildlife Refuge
MESHR	Sunkhaze Meadows National Wildlife Refuge
NJSPR	Supawna Meadows National Wildlife Refuge
CASTR	Sutter National Wildlife Refuge
MOSWR	Swan Lake National Wildlife Refuge
NCSWR	Swanquarter National Wildlife Refuge
MASCR	Sylvio O. Conte National Wildlife Refuge
MSTAR	Tallehatchie National Wildlife Refuge
MNTMR	Tamarac National Wildlife Refuge
FLTBR	Tampa Bay Refuges
FLTTR	Ten Thousand Islands National Wildlife Refuge
TNTNR	Tennessee National Wildlife Refuge
LATNR	Tensas River National Wildlife Refuge
AKTER	Tetlin National Wildlife Refuge
TXTCR	Texas Chenier Plain Complex
TXTMR	Texas Mid Coast Refuge Complex
TXTPR	Texas Point National Wildlife Refuge
ORTAR	Three Arch Rocks National Wildlife Refuge
CATNR	Tijuana Slough National Wildlife Refuge
OKTSR	Tishomingo National Wildlife Refuge
AKTGR	Togiak National Wildlife Refuge
WATPR	Toppenish National Wildlife Refuge
WITPR	Trempeleau National Wildlife Refuge
TXTRR	Trinity River National Wildlife Refuge
ORTUR	Tualatin River National Wildlife Refuge
CATLR	Tule Lake National Wildlife Refuge
WATBR	Turnbull National Wildlife Refuge
ILTWR	Two Rivers National Wildlife Refuge
GATYR	Tybee National Wildlife Refuge
ORUMR	Umatilla National Wildlife Refuge
IAUSR	Union Slough National Wildlife Refuge
ORUKR	Upper Klamath National Wildlife Refuge
LAUOR	Upper Ouachita National Wildlife Refuge
NEVAR	Valentine National Wildlife Refuge
SCWAR	Waccamaw National Wildlife Refuge
NJWKR	Walkill River National Wildlife Refuge
ARWPR	Wapanocca National Wildlife Refuge
ORWTR	Wapato National Wildlife Refuge
ORWSR	Warm Springs National Fish Hatchery
WAWIR	Washington Islands National Wildlife Refuge
OKWSR	Washita National Wildlife Refuge
GAWSR	Wassaw National Wildlife Refuge
ALWAR	Watercress Darter National Wildlife Refuge
SDWAR	Waubay National Wildlife Refuge
ALWLR	Wheeler National Wildlife Refuge
ARWHR	White River National Wildlife Refuge
WIWCR	Whittlesey Creek National Wildlife Refuge
OKWMR	Wichita Mountains National Wildlife Refuge
WAWLR	Willapa National Wildlife Refuge
ORWMR	William L. Finley National Wildlife Refuge
AZWCR	William's Creek National Wildlife Refuge
MNWWR	Windom Wetland Management District
WIWNR	Winona District, Upper Mississippi National Wildlife Refuge
GAWLR	Wolf Island National Wildlife Refuge
MSYZR	Yazoo National Wildlife Refuge
AKYDR	Yukon Delta National Wildlife Refuge
AKYFR	Yukon Flats National Wildlife Refuge

Department of Interior, National Park Service

KYALP	Abraham Lincoln Birthplace National Historic Site
MEACP	Acadia National Park
MAADP	Adams National Historic Site
NEAFP	Agate Fossil Beds National Monument
AKROP	AKRO Default Park Group
TXAFP	Alibates Flint Quarries National Monument
PAAPP	Allegheny Portage Railroad National Historic Site
GUAMP	American Memorial Park
TXAMP	Amistad National Recreation Area
GAANP	Andersonville National Historic Site
TNASP	Andrew Johnson National Historic Site
AKANP	Aniakchak National Park & Preserve
DCANP	Antietam National Battlefield
WIAIP	Apostle Islands National Lakeshore
DCAPP	Appalachian National Scenic Trail
VAACP	Appomattox Court House National Historic Park
UTARP	Arches National Park
ARARP	Arkansas Post National Monument
MDAIP	Assateague Island National Seashore

MIAUP	Automobile National Heritage Area
NMAZP	Aztec Ruins National Monument
SDBDP	Badlands National Park
NMBAP	Bandelier National Monument
COBFP	Bents Old Fort National Historic Site
AKBLP	Bering Land Bridge National Preserve
TXBBP	Big Bend National Park
FLBCP	Big Cypress National Park
MTBHP	Big Hole National Battlefield
MTBIP	Big Horn Canyon National Recreation Area
TNBSP	Big South Fork National Recreation Area
TXBTP	Big Thicket National Preserve
WYBHP	Bighorn Canyon National Recreation Area
FLBIP	Biscayne National Preserve
COBCP	Black Canyon of the Gunnison National Preserve
NCBRP	Blueridge Parkway
VABWP	Booker T. Washington National Monument
MABOP	Boston National Historic Park
MSBCP	Brices Cross Roads National Battlefield Site
UTBRP	Bryce Canyon National Park
VIBIP	Buck Island Reef National Monument
ARBUP	Buffalo National River
CACAP	Cabrillio National Monument
FLCAP	Canaveral National Seashore
LACAP	Cane River Creole National Historic Park
AZCAP	Canyon De Chelly National Monument
UTCAP	Canyonlands National Park
MACCP	Cape Cod National Seashore
NCCHP	Cape Hatteras National Seashore
AKKRP	Cape Krusenstern National Monument
NCCLP	Cape Lookout National Seashore
UTCRP	Capitol Reef National Park
NMCAP	Capulin Volcano National Monument
NCCSP	Carl Sandburg Home National Historic Site
NMCCP	Carlsbad Caverns National Park
AZCGP	Casa Grande National Monument
FLCDP	Castillo De San Marcos National Monument
DCCAP	Catoctin Mountain Park
UTCBP	Cedar Breaks National Monument
TXCHP	Chamizal National Monument
CACNP	Channel Islands National Park
SCCPP	Charles Pinckney National Historic Site
GACRP	Chattahoochee River National Recreation Area
DCCOP	Chesapeake & Ohio Canal National Historic Park
ILCPP	Chicago Portage National Historic Site
GACHP	Chickamauga & Chattanooga National Memorial Park
OKCHP	Chickasaw National Recreation Area
AZCHP	Chiricahua National Monument
VICHP	Christiansted National Historic Site
IDCRP	City of Rocks National Reserve
DCCDP	Clara Barton Park
VACOP	Colonial National Historic Park
COCNP	Colorado National Monument
SCCSP	Congaree Swamp National Monument
AZCOP	Coronado National Monument
SCCWP	Cowpens National Monument
ORCLP	Crater Lake National Park
IDCMP	Craters of the Moon National Monument
KYCGP	Cumberland Gap National Historic Park
GACIP	Cumberland Island National Seashore
COCCP	Curecanti National Recreation Area
OHCVP	Cuyahoga Valley National Park
OHDBP	David Berger National Monument
OHDAP	Dayton Aviation Heritage National Historic Park
CADVP	Death Valley National Park
PADWP	Delaware Water Gap National Recreation Area
AKDEP	Denali National Park & Preserve
FLDNP	DeSoto National Monument
CADPP	Devils Postpile National Monument
WYDTP	Devils Tower National Monument
UTDSP	Dinosaur National Monument
CODSP	Dinosaur National Park
FLDTP	Dry Tortugas National Park
AKEAP	Eastern Alaska Park Group
WAELP	Ebey's Landing National Historical Reserve
NJEDP	Edison National Historic Site
IAEMP	Effigy Mounds National Monument
NMEMP	El Malpais National Monument
NMELP	El Morrow National Monument
CAEOP	Eugene O'Neill National Historic Site
FLEVP	Everglades National Park
MIFMP	Father Marquette National Monument
NYFIP	Fire Island National Seashore
OHFLP	First Ladies National Historic Site
COFFP	Florissant Fossil Beds National Park
TXFDP	Fort Davis National Historic Site
KSFLP	Fort Larned National Historic Site
CAFPP	Fort Point National Historic Site
KSFSP	Fort Scott National Historic Site
SCFSP	Fort Sumter National Monument
NMFUP	Fort Union National Monument

NDFUP	Fort Union Trading Post National Historic Site
DCFWP	Fort Washington Park
WYFBP	Fossil Butte National Monument
MAFRP	Frederick Law Olmsted National Historic Site
VAFSP	Fredricksburg/Spotsylvania National Memorial Park
PAFHP	Friendship Hill National Historic Site
FLFCP	Fort Caroline National Monument
ORFCP	Fort Clatsop National Monument
TNFDP	Fort Donelson National Memorial Park
GAFFP	Fort Frederica National Monument
FLFJP	Fort Jefferson National Monument
WYFLP	Fort Laramie National Historic Site
FLFMP	Fort Matanzas National Monument
MDFMP	Fort McHenry National Monument
PAFNP	Fort Necessity National Battlefield
GAFPP	Fort Pulaski National Monument
NCFRP	Fort Raleigh National Historic Site
NYFOP	Ft. Sanwix National Monument
ARFSP	Fort Smith National Historic Site
WAFVP	Fort Vancouver National Historic Site
AKGAP	Gates of the Arctic National Park & Preserve
NYGAP	Gateway National Recreation Area
INGRP	George Rogers Clark National Historic Park
VAGWP	George Washington Birthplace National Monument
MOGWP	George Washington Carver National Monument
VAGMP	George Washington Memorial Parkway
PAGEP	Gettysburg National Memorial Park
NMGIP	Gila Cliff Dwellings National Monument
AKGBP	Glacier Bay National Park & Preserve
MTGNP	Glacier National Park
UTGLP	Glen Canyon National Recreation Area
CAGNP	Golden Gate National Recreation Area
UTGSP	Golden Spike National Historic Site
AZGCP	Grand Canyon National Park
MNGPP	Grand Portage National Monument
WYGTP	Grand Teton National Park
MTGKP	Grant–Kohrs Ranch National Historic Site
NVGBP	Great Basin National Park
COGSP	Great Sand Dunes National Monument
TNGSP	Great Smoky Mountains National Park
DCGRP	Greenbelt Park
TXGUP	Guadalupe Mountains National Park
NCGIP	Guilford Courthouse National Memorial Park
FLGIP	Gulf Island National Seashore
IDHFP	Hagerman Fossil Beds National Monument
HIHKP	Haleakala National Park
MDHAP	Hampton National Historic Site
DCHFP	Harpers Ferry National Historic Park
MOHTP	Harry S. Truman National Historic Site
HIHVP	Hawaii Volcanoes National Park
IAHHP	Herbert Hoover National Historic Site
NYFDP	Home of Franklin D. Roosevelt National Historic Site
NEHOP	Homestead National Monument
OHHCP	Hopewell Culture National Historic Park
PAHEP	Hopwell Furnace National Historic Site
ALHBP	Horseshoe Bend National Monument
ARHOP	Hot Springs National Park
UTHOP	Hovenweep National Monument
AZHUP	Hubbell Trading Post National Historic Park
WIIAP	Ice Age National Park
ILIMP	Illinois and Michigan Canal National Heritage Corridor
PAINP	Independence National Historic Park
INIDP	Indiana Dunes National Lakeshore
NDIPP	International Peace Gardens
MIIRP	Isle Royale National Park
OHJGP	James A. Garfield National Historic Site
LAJEP	Jean Lafitte National Historic Park & Preserve
MOJEP	Jefferson National Expansion Memorial
SDJCP	Jewel Cave National Monument
GAJCP	Jimmy Carter National Historic Site
ORJDP	John Day Fossil Beds National Monument
MAJFP	John Fitzgerald Kennedy National Historic Site
CAJMP	John Muir National Historic Site
PAJFP	Johnstown Flood National Monument
CAJTP	Joshua Tree National Monument
HIKAP	Kalaupapa National Historic Park
HIKHP	Kaloko–Hokohau National Historic Park
AKKAP	Katmai National Park & Preserve
AKKEP	Kenai Fjords National Park
GAKEP	Kennesaw Mountain National Battlefield Park
MIKWP	Keweenaw National Historic Park
SCKMP	Kings Mountain National Memorial Park
AKKLP	Klondike Gold Rush National Historic Park
WAKGP	Klondike Gold Rush National Historic Park–Seattle Unit
NDKRP	Knife River Indian Villages National Historic Site
AKKOP	Kobuk Valley National Park
WALCP	Lake Chelan National Recreation Area
AKLCP	Lake Clark National Park & Preserve

NVLAP	Lake Mead National Recreation Area
TXLAP	Lake Meredith National Recreation Area
WALRP	Lake Roosevelt National Recreation Area
CALNP	Lassen Volcanic National Park
CABNP	Lava Beds National Monument
INLBP	Lincoln Boyhood National Monument
ILLHP	Lincoln Home National Historic Site
MTLBP	Little Bighorn Battlefield National Historic District
ALLRP	Little River Canyon National Park
MALOP	Longfellow National Historic Site
MALWP	Lowell National Historic Park
TXLYP	Lyndon B. Johnson National Historic Park
KYMCP	Mammoth Cave National Park
VAMAP	Manassas National Battlefield Park
NYMAP	Manhattan Sites
VTMBP	Marsh–Billings–Rockefeller National Historic Park
GAMLP	Martin Luther King Junior National Historic Site
NYMVP	Martin Van Buren National Historic Site
COMVP	Mesa Verde National Park
MAMIP	Minute Man National Historic Park
MNMSP	Mississippi National Recreation Area
CAMNP	Mojave National Park
DCMOP	Monocacy National Battlefield
AZMCP	Montezuma Castle National Monument
NCMOP	Moores Creek National Battlefield Park
NJMOP	Morristown National Historic Park
SDMRP	Mount Rushmore National Monument
WAMRP	Mt. Rainier National Park
MSNHP	Natchez National Historical Park
MSNSP	Natchez Trace National Scenic Trail
MSNAP	Natchez Trace Parkway
DCNPP	National Capitol Parks–Central
DCNEP	National Capitol Parks–East
UTNBP	Natural Bridges National Monument
AZNAP	Navajo National Monument
LANOP	New Orleans Jazz National Historic Park
WVNRP	New River Gorge NR
IDNPP	Nez Perce National Historic Park
SCNIP	Ninety Six National Historic Site
AKNOP	Noatak Preserve
WANCP	North Cascades National Park
WINCP	North Country National Scenic Trail
TNOWP	Obed Wild & Scenic River
GAOCP	Ocmulgee National Monument
WAOLP	Olympic National Park
OROCP	Oregon Caves National Monument
AZORP	Organ Pipe Cactus National Monument
MOOZP	Ozark National Scenic River
TXPAP	Padre Island National Seashore
TXPBP	Palo Alto Battlefield National Historic Site
ARPEP	Pea Ridge National Memorial Park
NMPEP	Pecos National Historic Park
OHPVP	Perry's Victory & International Peace Memorial
VAPEP	Petersburg National Battlefield
AZPFP	Petrified Forest National Park
NMPGP	Petroglyphs National Monument
MIPRP	Pictured Rocks National Lakeshore
CAPIP	Pinnacles National Monument
MNPSP	Pipestone National Monument
DCPIP	Piscataway Park
CARNP	Point Reyes National Seashore
LAPOP	Poverty Point National Monument
CAPRP	Presidio of San Francisco
VAPWP	Prince William Forest Park
HIPHP	Puukohola Heiau National Historic Site
HIPUP	Puuohonua O Honaunau National Historic Park
UTRAP	Rainbow Bridge National Monument
CARWP	Redwood National Park
VARIP	Richmond National Battlefield Park
DCRCP	Rock Creek Park
CORMP	Rocky Mountain National Park
RIROP	Roger Williams National Monument
MERCP	Roosevelt–Campabello International Park
NYRVP	Roosevelt/Vanderbilt National Historic Site
WARLP	Ross Lake National Recreation Area
ALRUP	Russell Cave National Monument
NYSHP	Sagamore Hill National Historic Site
AZSAP	Saguaro National Park
WISCP	Saint Croix National Scenic River
NYSPP	Saint Paul's Church National Historic Site
NHSGP	Saint–Gaudens National Historic Site
MASAP	Salem Maritime National Historic Site
NMSAP	Salinas Pueblo Missions National Monument
VISRP	Salt River National Historic Park & Ecological Preserve
TXSAP	San Antonio Missions National Historic Park
WASJP	San Juan Island National Historic Park
PRSAP	San Juan National Historic Site
CASMP	Santa Monica Mountains National Recreation Area
NYSRP	Saratoga National Historic Park
MASIP	Saugus Iron Works National Historic Site
NESBP	Scotts Bluff National Monument
CAKNP	Sequoia & Kings Canyon National Park

VASHP	Shenandoah National Park
TNSHP	Shiloh National Memorial Park
AKSIP	Sitka National Historic Park
MISDP	Sleeping Bear Dunes National Lakeshore
MASPP	Springfield Armory National Historic Site
NYSTP	Statue of Liberty National Monument
PASTP	Steamtown National Historic Site
TNSTP	Stones River National Battlefield
AZSUP	Sunset Crater Volcano
KSTGP	Tall Grass Prairie National Park
NDTRP	Theodore Roosevelt National Park
MDTSP	Thomas Stone National Historic Site
UTTIP	Timpanogos Cave National Monument
FLTIP	Timucuan Ecological & Historic Preserve
AZTOP	Tonto National Monument
AZTUP	Tumacacori National Monument
MSTBP	Tupelo National Battlefield
ALTAP	Tuskegee Airmen National Historic Site
ALTUP	Tuskegee Institute National Historic Site
AZTZP	Tuzigoot National Monument
HIUSP	U.S.S. Arizona Memorial
MOUGP	Ulysses S. Grant National Historic Site
NYUDP	Upper Delaware National Scenic & Recreational River
PAVFP	Valley Forge National Historic Park
MSVIP	Vicksburg National Memorial Park
VIVIP	Virgin Islands National Park
MNVOP	Voyageurs National Park
AZWAP	Walnut National Monument
GUWPP	War in Pacific National Historic Park
OKWBP	Washita Battlefield National Historic Site
CTWFP	Weir Farm National Historic Site
AKWEP	Western Alaska Park Group
CAWNP	Whiskeytown National Recreation Area
DCWHP	White House
NMWHP	White Sands National Monument
WAWMP	Whitman Mission National Historic Site
OHWHP	William Howard Taft National Historic Site
MOWCP	Wilson's Creek National Battlefield
SDWCP	Wind Cave National Park
VAWTP	Wolf Trap Farm Park
NYWOP	Woman's Rights National Historic Park
AKWSP	Wrangel–St. Elias National Park & Preserve
NCWRP	Wright Brothers National Monument
AZWUP	Wupatki National Monument
WYYNP	Yellowstone National Park
CAYNP	Yosemite National Park
COYHP	Yucca House National Monument
AKYCP	Yukon–Charlie Rivers National Preserve
UTZIP	Zion National Park

SECTION K

K

NFDRS Fuel Model at Origin

Definition

This data element identifies the type of wildland fuel involved in a wildland fire at the point of origin. The Fuel Model is a simulated fuel complex or description of various vegetative fuels and combinations of vegetative fuels. Fuel models were devised as a means of organizing information about vegetative fuels for use in the National Fire Danger Rating System (NFDRS) to predict fire danger. The local forester should be able to assist in identifying the fuel models in your area.

Purpose

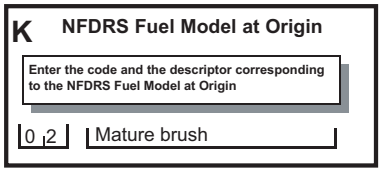
Fuel models were devised as a means for organizing the required wildland fuels information that is used in the NFDRS to predict the behavior of a potential wildfire.

Entry

Enter the two-digit NFDRS Fuel Model code and description that best identifies the type of wildland vegetation burned at the point of origin.

Example

The fire area consisted of mostly mature brush (02):



NFDRS FUEL MODEL AT ORIGIN CODES

01 Fuel Model A—Annual grasses. This fuel model represents grasslands vegetated by annual grasses and forbs. Brush or trees may be present but are very sparse, occupying less than one-third of the area. Examples of types where Fuel Model A should be used are cheatgrass and medusahead. Open pinyon-juniper, sagebrush-grass, and desert shrub association may appropriately be assigned this fuel model if the woody plants meet the density criteria The quantity and continuity of the ground fuels vary greatly with rainfall from year to year.

02 Fuel Model B—Mature brush (6 feet or higher). Mature, dense fields of brush 6 ft (2 m) or more in height are represented by this fuel model. One-fourth or more of the aerial fuel in such stands is dead. Foliage burns readily. Model B fuels are potentially very dangerous, fostering intense, fast- spreading fires. This model is for California mixed chaparral generally 30 years or older. The B model is more appropriate for pure chamise stands. The B model may also be used for the New Jersey pine barrens.

03 Fuel Model C—Open pine with grass. Open pine stands typify Model C fuels. Perennial grasses and forbs are the primary ground fuel, but there is enough needle litter and branchwood present to contribute significantly to the fuel loading. Some brush and shrubs may be present, but they are of little consequence. Situations covered by Fuel Model C are open, longleaf, slash, ponderosa, Jeffrey, and sugar pine stands. Some pinyon-juniper stands may qualify.

04 Fuel Model D—Southern rough. This fuel model is specifically for the palmetto-gallberry understory–pine overstory association of the southeast coastal plains. It can also be used for the so-called “low pocosins” where Fuel Model O might be too severe. This model should only be used in the Southeast because of a high moisture of extinction.

05 Fuel Model E—Hardwood litter (fall). Use this model after leaf fall for hardwood and mixed hardwood–conifer types where the hardwoods dominate. The fuel is primarily hardwood leaf litter. The oak–hickory types are best represented by Fuel Model E, but E is an acceptable choice for northern hardwoods and mixed forests of the Southeast. In high winds, the fire danger may be underrated because rolling and blowing leaves are not accounted for. In the summer after the trees have leafed out, Fuel Model E should be replaced by Fuel Model R.

06 Fuel Model F—Intermountain West brush. Model F represents mature closed chamise stands and oakbrush fields of Arizona, Utah, and Colorado. It also applies to young, closed stands and mature, open stands of California mixed chaparral. Open stands of pinyon-juniper are represented; however, fire activity will be overrated when windspeeds are low and where ground fuels are sparse.

07 Fuel Model G—West Coast conifers; close, heavy down materials. Fuel Model G is used for dense conifer stands where there is a heavy accumulation of litter and downed woody material. Such stands are typically overmature and may also be suffering insect, disease, wind, or ice damage—natural events that create a very heavy buildup of dead material on the forest floor. The duff and litter are deep, and much of the woody material is more than 3 in (7.5 cm) in diameter. The undergrowth

is variable, but shrubs are usually restricted to openings. Types meant to be represented by Fuel Model G are hemlock–Sitka spruce, coast Douglas fir, and wind-thrown or bug-killed stands of lodgepole pine and spruce.

08 Fuel Model H—Short-needle conifers; normal down woody materials. The short-needled conifers (white pines, spruces, larches, and firs) are represented by Fuel Model H. In contrast to Model G fuels, Fuel Model H describes a healthy stand with sparse undergrowth and a thin layer of ground fuels. Fires in H fuels are typically slow spreading and are dangerous only in scattered areas where the downed woody material is concentrated.

09 Fuel Model I— Heavy slash, clear-cut conifers greater than 25 tons per acre. Fuel Model I was designed for clearcut conifer slash where the total loading of materials less than 6 in (15 cm) in diameter exceeds 25 tons per acre. After settling and the fines (needles and twigs) fall from the branches, Fuel Model I will overrate the fire potential. For lighter loadings of clearcut conifer slash, Fuel Model J should be used, and for light thinnings and partial cuts where the slash is scattered under a residual overstory, Fuel Model K should be used.

10 Fuel Model J—Medium slash, heavily thinned conifers (less than 25 tons per acre). This model complements Fuel Model I. It is for clearcuts and heavily thinned conifer stands where the total loading of materials less than 6 in (15 cm) in diameter is less than 25 tons per acre. Again, as the slash ages, the fire potential will be overrated.

11 Fuel Model K—Light slash (less than 15 tons per acre). Slash fuels from light thinnings and partial cuts in conifer stands are represented by Fuel Model K. Typically, the slash is scattered about under an open overstory. This model applies to hardwood slash and to southern pine clearcuts where the loading of all fuels is less than 15 tons per acre.

12 Fuel Model L—Perennial grasses. This fuel model is meant to represent grasslands vegetated by perennial grasses. The principal species are coarser and the loading heavier than those in Model A fuels. Otherwise the situations are very similar; shrubs and trees occupy less than one-third of the area. The quantity of fuel in these areas is more stable from year to year. In sagebrush areas, Fuel Model T may be more appropriate.

14 Fuel Model N—Sawgrass, marsh needle-like grass. This fuel model was constructed specifically for the sawgrass prairies of south Florida. It may be useful in other marsh situations where the fuel is coarse and reedlike. The model assumes that one-third of the aerial portion of the plants is dead. Fast-spreading, intense fires can occur even over standing water.

15 Fuel Model O—High pocosin. Fuel Model O applies to dense, brushlike fuels of the Southeast. O fuels, except for a deep litter layer, are almost entirely living, in contrast to B fuels. The foliage burns readily except during the active growing season. The plants are typically over 6 ft (2 m) tall and are often found under an open stand of pine. The high pocosins of the Virginia, North Carolina, and South Carolina coasts are the ideal of Fuel Model O. If the plants do not meet the 6-ft (2-m) criteria in those areas, Fuel Model D should be used.

16 Fuel Model P—Southern long-needle pine. Closed, thrifty stands of long-needled southern pines are characteristic of P fuels. A 2- to 4-in (5- to 10-cm) layer of lightly compacted needle litter is the primary fuel. Some small-diameter branchwood is present, but the density of the canopy precludes more than a scattering of shrubs and grass. Fuel Model P has the high moisture of extinction characteristic of the Southeast. The corresponding model for other long-needled pines is U.

17 Fuel Model Q—Alaska black spruce. Upland Alaskan black spruce is represented by Fuel Model Q. The stands are dense but have frequent openings filled with usually flammable shrub species. The forest floor is a deep layer of moss and lichens, but there is some needle litter and small-diameter branchwood. The branches persist on the trees, and ground fires easily reach into the tree crowns.

This fuel model may be useful for jack pine stands in the Lake States. Ground fires are typically slow spreading, but a dangerous crowning potential exists.

18 Fuel Model R—Hardwood litter (summer). This fuel model represents the hardwood areas after the canopies leaf out in the spring. It is provided as the off-season substitute for Fuel Model F. It should be used during the summer in all hardwood and mixed conifer–hardwood stands where more than half of the overstory is deciduous.

19 Fuel Model S—Tundra. Alaskan or alpine tundra on relatively well-drained sites is the S fuel. Grass and low shrubs are often present, but the principal fuel is a deep layer of lichens and moss. Fires in these fuels are not fast spreading or intense, but are difficult to extinguish.

20 Fuel Model T—Sagebrush with grass. The bothersome sagebrush-grass types of the Great Basin and the Intermountain West are characteristic of T fuels. The shrubs burn easily and are not dense enough to shade out grass and other herbaceous plants. The shrubs must occupy at least one-third of the site, or the A or L fuel models should be used. Fuel Model I might be used for immature scrub oak and desert shrub associations in the West and the scrub oak–wire grass type in the Southeast.

21 Fuel Model U—Western long-needled pine. Closed stands of western long-needled pines are covered by this model. The ground fuels are primarily litter and small branchwood. Grass and shrubs are precluded by the dense canopy, but occur in the occasional natural opening. Fuel Model U should be used for ponderosa, Jeffrey, sugar, and red pine stands of the Lake States. Fuel Model P is the corresponding model for southern pine plantations.

UU Undetermined.

SECTION L

This section collects demographic information on the person(s) who were responsible for the fire, whether it was intentionally set or started by an act of carelessness.

L1 Person Responsible for Fire

Definition

The identification of whether or not a person (known or unknown) was responsible for the fire (either by carelessness or intent).

Purpose

This information can be used with other demographic information to identify and target fire prevention education or enforcement programs for specific audiences.

Entry

Check or mark the box that best describes the involvement of a person in causing the fire. If the person responsible for causing the fire is known, identifying information about the person can be entered in Block K1 of the Basic Module or the Supplemental Form (NFIRS–1S).

☞ If a person was identified as having caused the fire, complete Blocks L2–L4.

Example
A wildland fire resulted from the ignition of a pan full of grease that had been left unattended on a camping stove by a man (1) who was subsequently questioned by investigators:

L1 Person Responsible for Fire

1 ☒ **Identified person caused fire**
2 ☐ **Unidentified person caused fire**
3 ☐ **Fire not caused by person**
If person identified, complete the rest of Section L

PERSON RESPONSIBLE FOR FIRE CODES

1 Identified person caused fire.
2 Unidentified person caused fire.
3 Fire not caused by person.

L2 Gender of Person Involved

Definition
The gender of the person responsible for the fire (either by carelessness or intent).

Purpose
Information on the gender of persons involved can be used with other demographic information to identify fire problems in certain segments of the population and to target fire prevention and fire safety programs for certain audiences.

Entry
Check or mark the box that describes the gender of the person responsible for the fire.

Example
The wildland fire was started when a young boy (1) set a fire in the woods:

L2 Gender of Person Involved

1 ☒ **Male**
2 ☐ **Female**

GENDER CODES

1 Male.
2 Female.

L3 Age or Date of Birth

Enter either the age or date of birth of the person identified as being responsible for the fire (either by carelessness or intent). Do not enter both.

Age

Definition

The age of the person identified as being responsible for the fire.

Purpose

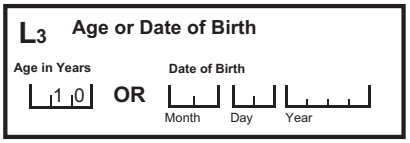
This information can be used with other demographic information to identify fire problems in certain segments of the population and to target fire prevention and fire safety programs for certain audiences. This data element is particularly useful in tracking juvenile firesetter trends, when used in combination with Age Was a Factor (Block D2) and Gender of Person Involved (Block L2).

Entry

Enter the age of the person responsible for the fire. Estimate the age if it cannot be determined.

Example

The boy who started the fire was 10 years old:



Date of Birth

Definition

The month, day, and year of the birth of the person responsible for the fire.

Purpose

This information is an alternative to Age, which can be used with other demographic information to identify fire problems in certain segments of the population and to target fire prevention and fire safety programs for certain audiences. This data element is particularly useful in tracking juvenile firesetter trends, when used in combination with Age Was a Factor (Block D2) and Gender of Person Involved (Block L2).

☞ This data element is used as an alternate method for calculating the casualty's age. Age is collected in NFIRS but Date of Birth is not.

Entry

Enter the date of birth of the person responsible for the fire showing month, day, and year (mm/dd/yyyy).

Example

The person responsible for the fire was born on November 18, 1993:

L3 Age or Date of Birth

Age in Years | OR | Date of Birth: 1 1 (Month) 1 8 (Day) 1 9 9 3 (Year)

L4 Activity of Person Involved

Definition

Describes the primary activity of the person who was responsible for the fire.

Purpose

Prevention programs and strategy development on wildland areas are of utmost importance in continuing education on fire behavior. Collecting information on the primary activity of the person involved will assist in developing programs that will better address the needs of each activity.

Entry

Enter the two-digit code and description of the activity of the person involved. This entry should report the primary activity of the person who caused the fire.

Example

The fisherman's (6) discarded match ignited the dry brush:

L4 Activity of Person Involved

0 6 | Fishing

Activity of Person Involved

ACTIVITY OF PERSON INVOLVED CODES

01	Logging/timber harvest.
02	Management activities.
03	Construction/maintenance.
04	Social gathering.
05	Hunting.
06	Fishing.
07	Other recreation.
08	Camping.
09	Other permitted harvest.
10	Picnicking.
11	Non-permitted harvest.
12	Harvest of Illegal material.
13	Religious or ceremonial activity.
14	Oil/gas production.
15	Military operations.
16	Subsistence.
17	Mining.
18	Livestock grazing.
19	Target practice.
20	Blasting.
21	Fireworks use.
00	Activity of person involved, other.

SECTION M

M Type of Right-of-Way

This data field is completed only for fires starting on or near (within 99 feet) roads, railroads, or power line rights-of-way.

Definition

This refers to the horizontal distance between the point of fire origin from the edge of the traveled surface of a road or the nearest outside rail of a railroad right-of-way, or from the nearest power line or power transmission equipment of a utility right-of-way.

This section contains two data elements: (1) the actual measured or estimated horizontal distance (to the nearest foot, up to 99 feet) of the point of fire origin from the right-of-way; and (2) a description of the type of right-of-way on or near where the fire started.

Purpose

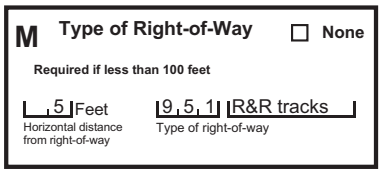
Aggregate data about horizontal distances from rights-of-way provide information necessary to assess the risks of certain hazards and to develop hazard reduction strategies such as regulations for controlling combustible fuels along roads and other rights-of-way.

Entry

Enter the actual measured or estimated horizontal distance (to the nearest foot, up to 99 feet) of the point of fire origin from the right-of-way and the three-digit code and description of the right-of-way. If there is no right-of-way 100 or more feet from the fire origin, check or mark the None box.

Example

A fire starts in brush located 5 feet from railroad tracks (951):



TYPE OF RIGHT-OF-WAY CODES

919	Dump, sanitary landfill.
921	Bridge, trestle.
922	Tunnel.
926	Outbuilding. Excludes garage.
931	Open land, field.
935	Campsite with utilities.
936	Vacant lot.
938	Graded and cared-for plots of land.
940	Water area.
951	Railroad right-of-way.

952 Railroad yard.
960 Street, other.
961 Highway or divided highway.
962 Residential street, road, or residential driveway.
963 Street or road in commercial area.
965 Vehicle parking area.
972 Aircraft runway.
973 Aircraft taxiway.
974 Aircraft loading area.
981 Construction site.
982 Oil, gas field.
983 Pipeline, power line, or other utility right-of-way.
984 Industrial plant yard, area.
000 Type of right-of-way, other.
UUU Undetermined.
NNN None.

SECTION N

N Fire Behavior

These optional descriptors refer to observations made at the point of initial attack. Use of these descriptors will most likely be limited to local, state, and federal wildland management agencies that are trained in making such observations.

This section describes the topographical features and fire characteristics that contributed to the fire behavior. Information about fire behavior is used in fire modeling to assess the potential for ignition and rate of spread for different fuels under various conditions.

Elevation

Definition
Elevation refers to the numeric representation of the distance from mean sea level to the wildland fire, measured in feet.

Purpose
Aggregate data on the distance from sea level may provide information necessary to assess the risks and hazards of wildland fires at different elevations.

Entry
Enter the distance from mean sea level measured in feet. See completed example at the end of Section N.

Relative Position on Slope

Definition
This observation indicates a point location's relative position on a slope.

Purpose
Aggregate data on the relative position on a slope, combined with wind and weather information, may provide information necessary to assess the risks and hazards of wildland fires at different positions.

Entry
Enter the appropriate code and description of the relative position on the slope. See completed example at the end of Section N.

RELATIVE POSITION ON SLOPE CODES

0	Valley bottom.
1	Lower slope.
2	Mid slope.
3	Upper slope.
4	Ridge top.

Aspect

Definition
Aspect is the general direction that a given slope faces.

Purpose
Aggregate data on the general direction a given slope faces, combined with wind and weather information, may provide information necessary to assess the risks and hazards of wildland fires at different aspects.

Entry
Enter the appropriate code and description of the general direction that a given slope faces. See completed example at the end of Section N.

ASPECT CODES

0	Flat/none.
1	Northeast.
2	East.
3	Southeast.
4	South.
5	Southwest.
6	West.
7	Northwest.
8	North.

Flame Length

Definition
This observation refers to the distance between the flame tip and midpoint of the flame depth at the base of the flame (generally the ground surface), measured in feet.

Entry

Enter the flame length in feet. See completed example at the end of Section N.

Rate of Spread

Definition

This is a measurement of the approximate rate of forward spread of a fire front, expressed in chains per hour.

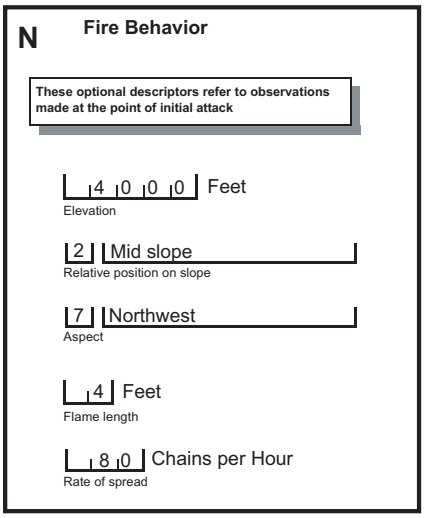
☞ The length of a chain is 66 feet (20.1 meters). The term is derived from a surveying instrument consisting of 100 links of metal.

Entry

Enter the approximate rate of spread in chains per hour.

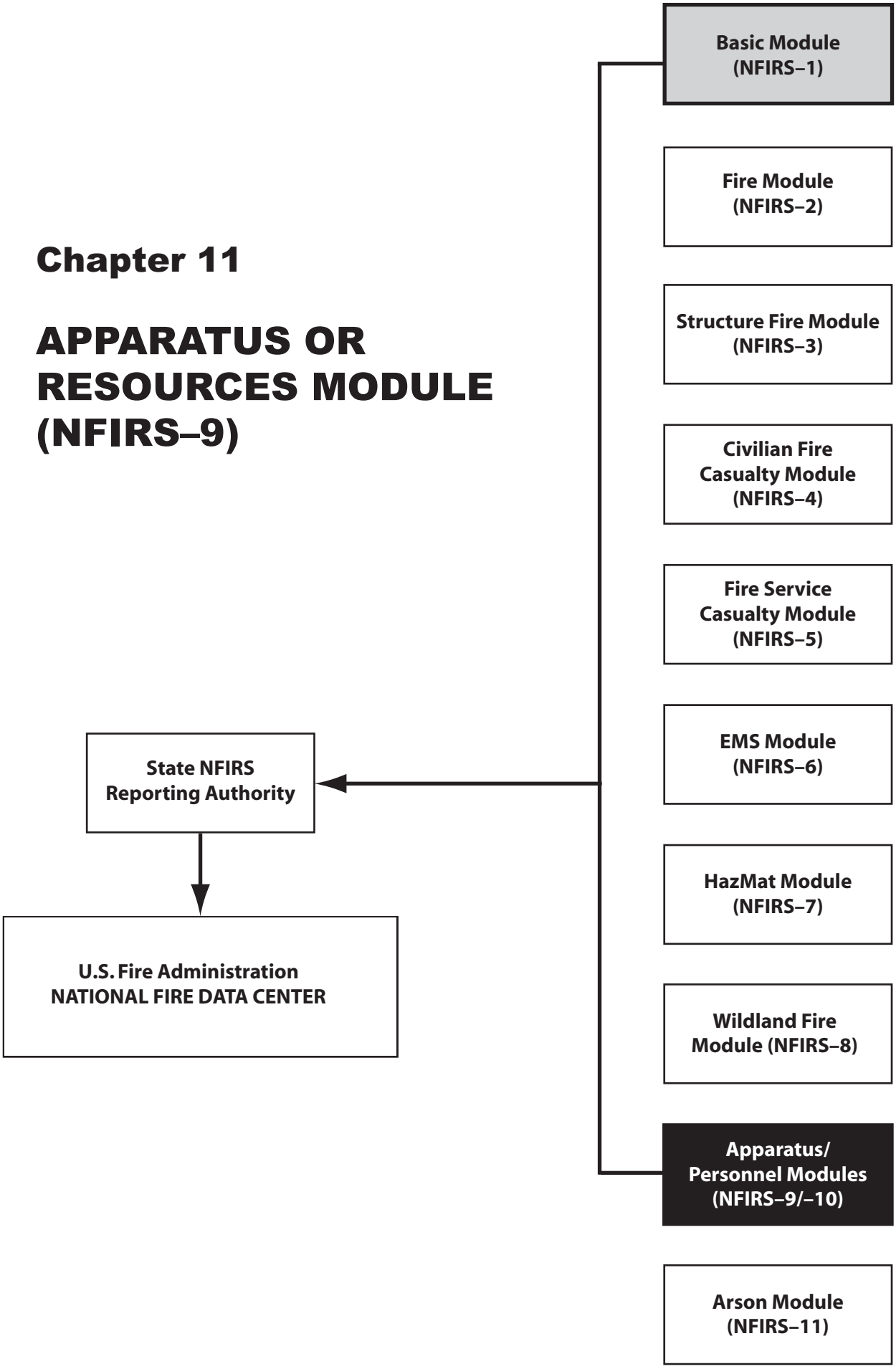
Example

Elevation of 4,000 feet above sea level.
At the time of observation, the fire was mid slope (2).
The slope faced the northwest (7).
The flame was 4 feet in length.
Extreme fire behavior: spotting and crowing with a rate of spread of 80 chains per hour.



Chapter 11

APPARATUS OR RESOURCES MODULE (NFIRS–9)



A

FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆

☐ Delete
☐ Change

NFIRS–9 Apparatus or Resources

B Apparatus or Resources (Use codes listed below)	Dates and Times (Midnight is 0000; Check if same date as Alarm date on the Basic Module (Block E1))	Sent [X]	Number of People ☆	Apparatus Use ☆ (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken (List up to 4 actions for each apparatus.)
1 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
2 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
3 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
4 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
5 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
6 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
7 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
8 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
9 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	

Apparatus or Resource Type

Ground Fire Suppression

11 Engine
12 Truck or aerial
13 Quint
14 Tanker and pumper combination
16 Brush truck
17 ARFF (aircraft rescue and firefighting)
10 Ground fire suppression, other

Heavy Ground Equipment

21 Dozer or plow
22 Tractor
24 Tanker or tender
20 Heavy ground equipment, other

Aircraft

41 Aircraft: fixed-wing tanker
42 Helitanker
43 Helicopter
40 Aircraft, other

Marine Equipment

51 Fire boat with pump
52 Boat, no pump
50 Marine equipment, other

Support Equipment

61 Breathing apparatus support
62 Light and air unit
60 Support apparatus, other

Medical and Rescue

71 Rescue unit
72 Urban search and rescue unit
73 High-angle rescue unit
75 BLS unit
76 ALS unit
70 Medical and rescue unit, other

Other

91 Mobile command post
92 Chief officer car
93 HazMat unit
94 Type I hand crew
95 Type II hand crew
99 Privately owned vehicle
00 Other apparatus/resources

More apparatus? Use additional sheets.

NN None
UU Undetermined

NFIRS–9 Revision 01/01/04

CHAPTER 11

APPARATUS OR RESOURCES MODULE (NFIRS–9)

The Apparatus or Resources Module (NFIRS–9) is an optional module that is used to help manage and track apparatus and resources used on incidents.

☞ If both apparatus *and* personnel need to be reported, use the Personnel Module (NFIRS–10) instead of this module.

SECTION A

The guidance and directions for completing Section A of the Apparatus or Resources Module are the same as for Section A in the Basic Module. It is stressed that the entries in Section A of the Apparatus or Resources Module must be identical with the entries on the corresponding Basic Module. An example of a completed Section A can be found on page 3–8.

A

Fire Department Identification (FDID) ☆

Entry
Enter the same FDID number found in Section A of the Basic Module.

State ☆

Entry
Enter the same state abbreviation found in Section A of the Basic Module.

Incident Date ☆

Entry
Enter the same incident date found in Section A of the Basic Module.

Station Number

Entry
Enter the same station number found in Section A of the Basic Module.

Incident Number ☆

Entry
Enter the same incident number found in Section A of the Basic Module.

Exposure Number ✰

Entry
If this report is for an exposure fire, enter the same exposure number that was entered in Section A of the Basic Module for that exposure.

Delete/Change

Definition
Indicates a change to information submitted on a previous Apparatus or Resources Module or a deletion of all information regarding the incident.

Purpose
To delete or change previously reported information.

Entry
Delete. Check or mark this box when you have previously submitted data on this Apparatus or Resources Module and now want to have the data on this report deleted from the database. If this box is marked, complete Section A and the ID Number from Section B and leave the rest of the report blank. Forward the report according to your normally established procedures.

Change. Check or mark this box only if you previously submitted this fire incident to your state reporting authority and now want to update or change the information in the state database. Complete Section A and any other sections or blocks that need to be updated or corrected. If you need to blank a field that contains data, you must resubmit the original module containing the newly blanked field along with all the other original information in the module for that incident. This action is required only when sending an updated module to your state reporting authority. Forward the report according to your normally established procedures.

SECTION B

B

Apparatus or Resources Type ✰

Definition
The type and identification number for the apparatus or resources used at the incident.

☞ The apparatus Type field is a required field; complete the ID number of the resource or apparatus if appropriate.

Purpose
This information is useful in determining actual apparatus or resource requirements for different types of incidents and for different levels of incident severity as well as for tracking times and actions taken by apparatus or resource type.

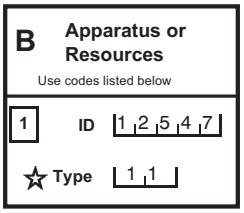
Entry

Enter the identification number for each apparatus or resource used at the incident and the two-digit code for the type of apparatus or resource. If more than nine apparatus or resources were used, complete an additional NFIRS–9 module.

☞ Individual fire departments often assign a unique number to each piece of apparatus in the department.

Example

An engine (11) responded to the incident. Its assigned identification number is 12547:



APPARATUS OR RESOURCE TYPE CODES

Ground Fire Suppression

10 Ground fire suppression, other.
11 Engine.
12 Truck or aerial.
13 Quint.
14 Tanker and pumper combination.
16 Brush truck.
17 ARFF (aircraft rescue and firefighting).

Heavy Ground Equipment

20 Heavy ground equipment, other.
21 Dozer or plow.
22 Tractor.
24 Tanker or tender.

Aircraft

40 Aircraft, other.
41 Aircraft, fixed-wing tanker.
42 Helitanker.
43 Helicopter.

Marine Equipment

50 Marine equipment, other.
51 Fire boat with pump.
52 Boat, no pump.

Support Equipment

60 Support apparatus, other.
61 Breathing apparatus support.
62 Light and air unit.

Medical and Rescue Unit

70	Medical and rescue unit, other.
71	Rescue unit.
72	Urban search and rescue unit.
73	High-angle rescue unit.
75	BLS unit.
76	ALS unit.

Other

91	Mobile command post.
92	Chief officer car.
93	HazMat unit.
94	Type I hand crew.
95	Type II hand crew.
99	Privately owned vehicle.
00	Other apparatus or resources.
NN	None.
UU	Undetermined.

Dates and Times

All dates and time are entered as numerals. For time of day, the 24-hour clock is used. (Midnight is 0000.)

Dispatch Time

Definition

The actual month, day, year, and time of day when this unit was dispatched by the communications center. This is not an elapsed time.

Purpose

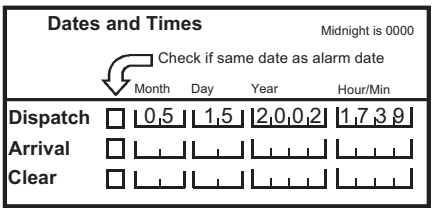
The time when a unit is dispatched is valuable because it allows fire department management to calculate the time it took from dispatch to arrival of the apparatus or resource on the incident scene. This information is useful in determining response times for specific apparatus, stations, or districts.

Entry

Enter the month, day, year (mm/dd/yyyy), and time that the unit was dispatched. If the Dispatch date is the same as the Alarm date on the Basic Module (Block E1), check or mark the corresponding box and enter the time the unit was dispatched.

Example:

The call was dispatched at 5:39 p.m. on May 15, 2002, which was the same date as the Alarm date. The respondent elected to enter the date rather than check the box:



Arrival Time

Definition

The actual month, day, year, and time of day when this unit arrived at the incident scene. This is not an elapsed time.

Purpose

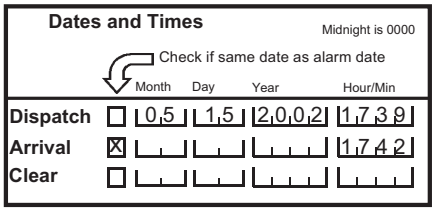
The time when a specific unit arrives at the scene is valuable to fire department management because it reflects the actual time spent traveling to the scene of the incident for that type of apparatus or resource. This information is useful in determining response times for specific apparatus, stations, or districts.

Entry

Enter the month, day, year (mm/dd/yyyy), and time that the fire department unit arrived on the scene. If the Arrival date is the same as the Alarm date on the Basic Module (Block E1), check or mark the corresponding box and enter the time the unit arrived.

Example

Engine 13 arrived at the scene at 5:42 p.m. on May 15, 2002:



Clear Time

Definition

The actual month, day, year, and time of day when this unit is cleared from the incident and is available for new duty.

☞ Usually, the Clear time represents when the apparatus or resources are cleared from the scene. In the case of transport of a casualty, however, the Clear time is when the apparatus completes the transport and is available for new duty.

Purpose

The time when the resources or apparatus are cleared is valuable to fire department management because it reflects the time spent stabilizing the incident. This assists in determining service demand and costs for resource allocation.

Entry

Enter the month, day, year (mm/dd/yyyy), and time that the units cleared the incident and are available for reassignment. If the Clear date is the same as the Alarm date on the Basic Module (Block E1), check or mark the corresponding box and enter the time that the unit is cleared from the incident.

Example:
Engine 13 cleared the scene and was available for reassignment at 1:12 a.m. on May 16, 2002:

Dates and Times		Month	Day	Year	Hour/Min
		Check if same date as alarm date			Midnight is 0000
Dispatch	☐	0,5	1,5	2,0,0,2	1,7,3,9
Arrival	☒				1,7,4,2
Clear	☐	0,5	1,6	2,0,0,2	0,1,1,2

Sent

Definition
Indicates which apparatus was sent on the incident. Fire departments can pre-print or pre-enter apparatus in this module. When an incident occurs, the firefighter completing the module can check or mark the Sent box to indicate which apparatus in the module actually responded.

Purpose
Fire departments can pre-print or pre-enter apparatus in the module.

Entry
Check or mark the Sent box if the apparatus responded to the incident.

Example
The apparatus was sent on the call:

Sent
X
☒

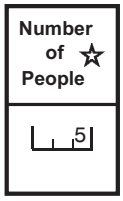
Number of People ✰

Definition
The number of emergency personnel on the apparatus.

Purpose
This assists in determining personnel demands for different types of incidents and staffing requirements for apparatus.

Entry
Enter the number of personnel on the apparatus.

Example
Five personnel rode the squad:



Apparatus or Resources Use ☆

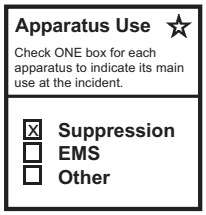
Definition
The main use of the apparatus or resource at the incident.

Purpose
This information is useful in determining actual personnel and apparatus requirements for different types of incidents and for different levels of incident severity.

Entry
Check or mark the box that best describes the primary use of the apparatus or resource at the incident.

☞ Chief officer vehicles and privately owned vehicles should be classified as Other.

Example
The engine and its personnel were responsible for suppression activities:



APPARATUS USE CODES

1 Suppression.
2 EMS.
3. Other.

Actions Taken

Definition
The duties performed at the incident scene by the apparatus or resource personnel.

Purpose
This data element, together with Incident Type on the Basic Module (Section C), enables a fire department to document the breadth of activities and the resources required by the responding fire department to effectively handle the range of emergency situations. This

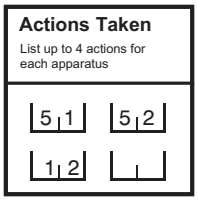
information also provides some indication on the specific types of service required of the fire department.

Entry

Enter the two-digit code(s) for up to four actions taken by the specific piece of apparatus or resource at the scene of the incident. Always report the most significant actions taken before less significant actions taken. Specific actions may include extinguishing fires, forcible entry, providing first aid, identifying and analyzing hazardous materials, and transporting the injured. The action may involve simply standing by at an incident for possible service. Be as specific as possible in stating the actions taken.

Example

The truck company ventilated the roof (51), forced entry (52), and overhauled the fire scene (12):



ACTIONS TAKEN CODES

Fire Control or Extinguishment

10 Fire control or extinguishment, other.
11 Extinguishment by fire service personnel.
12 Salvage and overhaul.
13 Establish fire lines around wildfire perimeter. Includes clearing firebreaks using direct, indirect, and burnout tactics as appropriate.
14 Contain fire (wildland). Includes taking suppression action that can reasonably be expected to check the fire spread under prevailing and predicted conditions.
15 Confine fire (wildland). Includes when fire crews or resources stop the forward progress of a fire but have not put in all control lines.
16 Control fire (wildland). Includes when fire crews or resources completely surround the fire perimeter with control lines; extinguish any spot fires; burn any area adjacent to the fire side of the control lines; and cool down all hot spots that are immediate threats to the control line, until the lines can reasonably be expected to hold under foreseeable conditions.
17 Manage prescribed fire (wildland).

Search and Rescue

20 Search and rescue, other.
21 Search for lost or missing person. Includes animals.
22 Rescue, remove from harm. Excludes vehicle extrication (23).
23 Extrication or disentangling of a person. Excludes body recovery (24).
24 Recover body or body parts.

EMS and Transport

30 Emergency medical services, other.
31 Provide first aid and check for injuries. Medical evaluation of patient.
32 Provide basic life support (BLS).

33 Provide advanced life support (ALS).

34 Transport of person from scene in fire service ambulance or apparatus.

Hazardous Condition

40 Hazardous condition, other.

41 Identification, analysis of hazardous materials.

42 Hazardous materials detection, monitoring, sampling, and analyzing using a variety of detection instruments including combustible gas indicators (CGIs) or explosimeter, oxygen monitors, colorimetric tubes, specific chemical monitors, and others. Results from these devices must be analyzed to provide information about the hazardous nature of the material or environment.

43 Hazardous materials spill control and confinement. Includes confining or diking hazardous materials. These are actions taken to confine the product released to a limited area including the use of absorbents, damming/diking, diversion of liquid runoff, dispersion, retention, or vapor suppression.

44 Hazardous materials leak control and containment. Includes actions taken to keep a material within its container, such as plugging/patching operations, neutralization, pressure isolation/reduction, solidification, and vacuuming.

45 Remove hazard. Includes neutralizing a hazardous condition.

46 Decontaminate persons or equipment. Includes actions taken to prevent the spread of contaminants from the “hot zone” to the “cold zone.” This includes gross, technical, or advanced personal decontamination of victims, emergency responders, and equipment.

47 Decontamination of occupancy or area exposed to hazardous materials.

48 Remove hazardous materials. Includes a broad range of actions taken to remove hazardous materials from a damaged container or contaminated area. Examples of actions to remove hazards include product offload/transfer, controlled burning or product flaring, venting, and overpacking.

Fires, Rescues, and Hazardous Conditions

50 Fires, rescues, and hazardous conditions, other.

51 Ventilate. Includes nonhazardous odor removal and removal of smoke from nonhazardous materials-related fires.

52 Forcible entry, performed by fire service. Includes support to law enforcement.

53 Evacuate area. Removal of civilians from an area determined to be hazardous. Includes actions taken to isolate the contaminated area and/or evacuate those persons affected by a hazardous materials release or potential release.

54 Determine if the materials released are nonhazardous through product identification and environmental monitoring.

55 Establish safe area. Includes isolating the area affected by denying entry to unprotected persons and establishing hazard control zones (hot, warm, cold).

56 Provide air supply.

57 Provide light or electrical power.

58 Operate apparatus or vehicle.

Systems and Services

60 Systems and services, other.

61 Restore municipal services. Includes turning water back on and notifying the gas company to turn the gas on.

62 Restore sprinkler or fire protection system.

63 Restore fire alarm system. Includes restoring fire alarm systems monitored by the fire service.

64 Shut down system. Includes shutting down water, gas, and fire alarm systems.

65 Secure property. Includes property conservation activities such as covering broken windows or holes in roofs.

66 Remove water or control flooding condition.

Assistance

70 Assistance, other.
71 Assist physically disabled. Includes providing nonmedical assistance to physically disabled, handicapped, or elderly citizens.
72 Assist animal. Includes animal rescue, extrication, removal, or transport.
73 Provide manpower. Includes providing manpower to assist rescue/ambulance units lift patients or providing manpower to assist police.
74 Provide apparatus.
75 Provide equipment, where equipment is used by another agency.
76 Provide water. Includes tanker shuttle operations and pumping in a relay or from a water source. Excludes normal fire suppression operations.
77 Control crowd. Includes restricting pedestrian access to an area. Excludes control of vehicles (78).
78 Control traffic. Includes setting up barricades and directing traffic.
79 Assess damage from severe weather or the results of a natural disaster.

Information, Investigation, and Enforcement

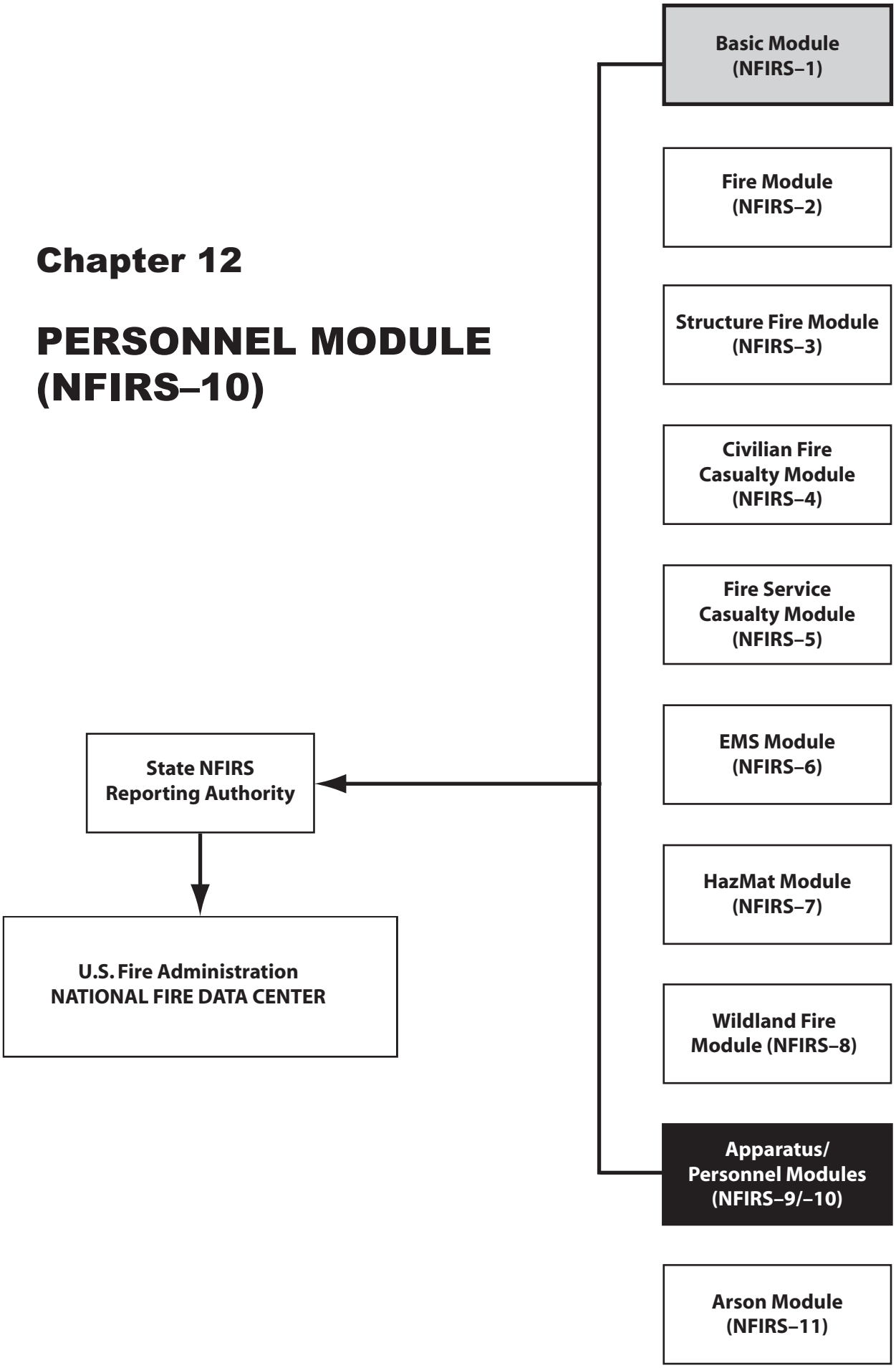
80 Information, investigation, and enforcement, other.
81 Incident command. Includes providing support to incident command activities.
82 Notify other agencies. Includes notifications of utility companies, property owners, and the like.
83 Provide information to the public or media.
84 Refer to proper authority. Includes turnover of incidents to other authorities or agencies such as the police.
85 Enforce fire code and other codes. Includes response to public complaints and abatement of code violations.
86 Investigate. Includes investigations done on arrival to determine the situation and post-incident investigations; and collecting incident information for incident reporting purposes.

Fill-in, Standby

90 Fill-in, standby, other.
91 Fill in, move up to another fire station.
92 Standby.
93 Canceled en route.
00 Action taken, other.

Chapter 12

PERSONNEL MODULE (NFIRS–10)



A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | ☐ Delete ☐ Change | **NFIRS–10 Personnel**

B Apparatus or Resources	Dates and Times (Midnight is 0000; Check if same date as Alarm date on the Basic Module (Block E1)) Month Day Year Hour/Min	Sent [X]	Number of People ☆	Apparatus Use ☆ (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken (List up to 4 actions for each apparatus and each personnel.)
1 ID ☆Type	Dispatch ☐ / Arrival ☐ / Clear ☐	Sent ☐		☐ Suppression ☐ EMS ☐ Other	

Personnel ID ☆	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
			☐				
			☐				
			☐				
			☐				
			☐				
			☐				

2 ID ☆Type	Dispatch ☐ / Arrival ☐ / Clear ☐	Sent ☐		☐ Suppression ☐ EMS ☐ Other	

Personnel ID ☆	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
			☐				
			☐				
			☐				
			☐				
			☐				
			☐				

3 ID ☆Type	Dispatch ☐ / Arrival ☐ / Clear ☐	Sent ☐		☐ Suppression ☐ EMS ☐ Other	

Personnel ID ☆	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
			☐				
			☐				
			☐				
			☐				
			☐				
			☐				

NFIRS–10 Revision 01/01/04

CHAPTER 12

PERSONNEL MODULE (NFIRS–10)

The Personnel Module (NFIRS–10) is an optional module that is used to help manage and track personnel and resources used on incidents.

☞ If only apparatus or resources need to be reported, use the Apparatus or Resources Module (NFIRS–9) instead of this module.

SECTION A

The guidance and directions for completing Section A of the Personnel Module are the same as for Section A in the Basic Module. It is stressed that the entries in Section A of the Personnel Module must be identical with the entries on the corresponding Basic Module. An example of a completed Section A can be found on page 3–8.

A

Fire Department Identification (FDID) ☆

Entry
Enter the same FDID number found in Section A of the Basic Module.

State ☆

Entry
Enter the same state abbreviation found in Section A of the Basic Module.

Incident Date ☆

Entry
Enter the same incident date found in Section A of the Basic Module.

Station Number

Entry
Enter the same station number found in Section A of the Basic Module.

Incident Number ☆

Entry
Enter the same incident number found in Section A of the Basic Module.

Exposure Number ☆

Entry
If this report is for an exposure fire, enter the same exposure number that was entered in Section A of the Basic Module for that exposure.

Delete/Change

Definition
Indicates a change to information submitted on a previous Personnel Module or a deletion of all information regarding the incident.

Purpose
To delete or change previously reported information.

Entry
Delete. Check or mark this box when you have previously submitted data on this Personnel Module and now want to have the data on this report deleted from the database. If this box is marked, complete Section A and the ID Number from Section B and leave the rest of the report blank. Forward the report according to your normally established procedures.

Change. Check or mark this box only if you previously submitted this fire incident to your state reporting authority and now want to update or change the information in the state database. Complete Section A and any other sections or blocks that need to be updated or corrected. If you need to blank a field that contains data, you must resubmit the original module containing the newly blanked field along with all the other original information in the module for that incident. This action is required only when sending an updated module to your state reporting authority. Forward the report according to your normally established procedures.

SECTION B

B

Apparatus or Resources Type ☆

Definition
The type and identification number for the apparatus or resources used at the incident.

☞ The apparatus Type field is a required field; complete the ID number of the resource or apparatus if appropriate.

Purpose
This information is useful in determining actual apparatus and personnel requirements for different types of incidents and for different levels of incident severity as well as for tracking times and actions taken by apparatus type and personnel.

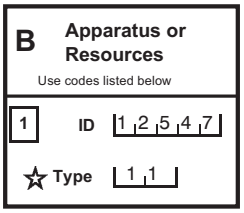
Entry

Enter the identification number for each apparatus or resource used at the incident and the two-digit code for the type of apparatus or resource. If more than three apparatus or resources were used, complete an additional NFIRS–10 module.

☞ Individual fire departments often assign a unique number to each piece of apparatus in the department.

Example

An engine (11) responded to the incident. Its assigned identification number is 12547:



APPARATUS OR RESOURCE TYPE CODES

Ground Fire Suppression

10 Ground fire suppression, other.
11 Engine.
12 Truck or aerial.
13 Quint.
14 Tanker and pumper combination.
16 Brush truck.
17 ARFF (aircraft rescue and firefighting).

Heavy Ground Equipment

20 Heavy ground equipment, other.
21 Dozer or plow.
22 Tractor.
24 Tanker or tender.

Aircraft

40 Aircraft, other.
41 Aircraft, fixed-wing tanker.
42 Helitanker.
43 Helicopter.

Marine Equipment

50 Marine equipment, other.
51 Fire boat with pump.
52 Boat, no pump.

Support Equipment

60 Support apparatus, other.
61 Breathing apparatus support.
62 Light and air unit.

Medical and Rescue Unit

70	Medical and rescue unit, other.
71	Rescue unit.
72	Urban search and rescue unit.
73	High-angle rescue unit.
75	BLS unit.
76	ALS unit.

Other

91	Mobile command post.
92	Chief officer car.
93	HazMat unit.
94	Type I hand crew.
95	Type II hand crew.
99	Privately owned vehicle.
00	Other apparatus or resources.
NN	None.
UU	Undetermined.

Dates and Times

All dates and time are entered as numerals. For time of day, the 24-hour clock is used. (Midnight is 0000.)

Dispatch Time

Definition

The actual month, day, year, and time of day when this unit was dispatched by the communications center. This is not an elapsed time.

Purpose

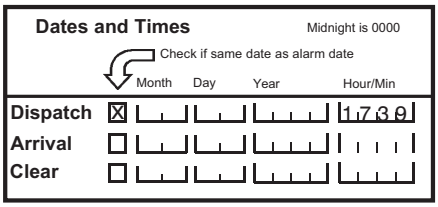
The time when a unit is dispatched is valuable because it allows fire department management to calculate the time it took from dispatch to arrival of the apparatus or resource on the incident scene. This information is useful in determining response times for specific apparatus, stations, or districts.

Entry

Enter the month, day, year (mm/dd/yyyy), and time that the unit was dispatched. If the Dispatch date is the same as the Alarm date on the Basic Module (Block E1), check or mark the corresponding box.

Example:

The call was dispatched at 5:39 p.m. on May 15, 2002, the same date as the Alarm date:



Arrival Time

Definition

The actual month, day, year, and time of day when this unit arrived at the incident scene. This is not an elapsed time.

Purpose

The time when a specific unit arrives at the scene is valuable to fire department management because it reflects the actual time spent traveling to the scene of the incident for that type of apparatus or resource. This information is useful in determining response times for specific apparatus, stations, or districts.

Entry

Enter the month, day, year (mm/dd/yyyy), and time that the fire department unit arrived on the scene. If the Arrival date is the same as the Alarm date on the Basic Module (Block E1), check or mark the corresponding box and enter the time the unit arrived.

Example

Engine 13 arrived at the scene at 5:42 p.m. on May 15, 2002:

Dates and Times		Month	Day	Year	Hour/Min
		Check if same date as alarm date			Midnight is 0000
Dispatch	☒				1,7,3,9
Arrival	☒				1,7,4,2
Clear	☐				

Clear Time

Definition

The actual month, day, year, and time of day when this unit is cleared from the incident and is available for new duty.

☞ Usually, the Clear time represents when the apparatus or resources are cleared from the scene. In the case of transport of a casualty, however, the Clear time is when the apparatus completes the transport and is available for new duty.

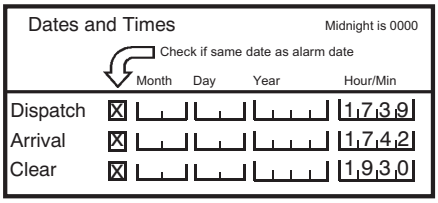
Purpose

The time when the resources or apparatus are cleared is valuable to fire department management because it reflects the time spent stabilizing the incident. This assists in determining service demand and costs for resource allocation.

Entry

Enter the month, day, year (mm/dd/yyyy), and time that the units cleared the incident and are available for reassignment. If the Clear date is the same as the Alarm date on the Basic Module (Block E1), check or mark the corresponding box and enter the time that the unit is cleared from the incident.

Example:
Engine 13 cleared the scene and was available for reassignment at 7:30 p.m. on May 15, 2002:



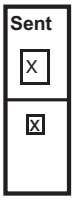
Sent

Definition
Indicates which apparatus was sent on the incident. Fire departments can pre-print or pre-enter apparatus in this module. When an incident occurs, the firefighter completing the module can check or mark the Sent box to indicate which apparatus in the module actually responded.

Purpose
Fire departments can pre-print or pre-enter apparatus in the module.

Entry
Check or mark the Sent box if the apparatus responded to the incident.

Example
The apparatus was sent on the call:



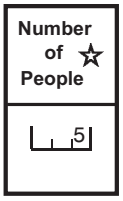
Number of People ☆

Definition
The number of emergency personnel on the apparatus.

Purpose
This assists in determining personnel demands for different types of incidents and staffing requirements for apparatus.

Entry
Enter the number of personnel on the apparatus.

Example
Five personnel rode the squad:



Apparatus or Resource Use ☆

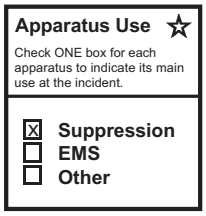
Definition
The main use of the apparatus or resource at the incident.

Purpose
This information is useful in determining actual personnel and apparatus requirements for different types of incidents and for different levels of incident severity.

Entry
Check or mark the box that best describes the primary use of the apparatus or resource at the incident.

☞ Chief officer vehicles and privately owned vehicles should be classified as Other.

Example
The engine and its personnel were responsible for suppression activities:



APPARATUS USE CODES

1 Suppression.
2 EMS.
3. Other.

Actions Taken

Definition
The duties performed at the incident scene by the apparatus or resource personnel.

Purpose
This data element, together with Incident Type on the Basic Module (Section C), enables a fire department to document the breadth of activities and the resources required by the responding fire department to effectively handle the range of emergency situations. This

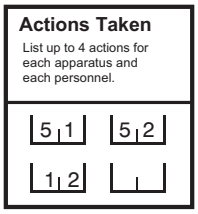
information also provides some indication on the specific types of service required of the fire department.

Entry

Enter the two-digit code(s) for up to four actions taken by the specific piece of apparatus or resource at the scene of the incident. Always report the most significant actions taken before less significant actions taken. Specific actions may include extinguishing fires, forcible entry, providing first aid, identifying and analyzing hazardous materials, and transporting the injured. The action may involve simply standing by at an incident for possible service. Be as specific as possible in stating the actions taken.

Example

The truck company ventilated the roof (51), forced entry (52), and overhauled the fire scene (12):



ACTIONS TAKEN CODES

Fire Control or Extinguishment

10 Fire control or extinguishment, other.
11 Extinguishment by fire service personnel.
12 Salvage and overhaul.
13 Establish fire lines around wildfire perimeter. Includes clearing firebreaks using direct, indirect, and burnout tactics as appropriate.
14 Contain fire (wildland). Includes taking suppression action that can reasonably be expected to check the fire spread under prevailing and predicted conditions.
15 Confine fire (wildland). Includes when fire crews or resources stop the forward progress of a fire but have not put in all control lines.
16 Control fire (wildland). Includes when fire crews or resources completely surround the fire perimeter with control lines; extinguish any spot fires; burn any area adjacent to the fire side of the control lines; and cool down all hot spots that are immediate threats to the control line, until the lines can reasonably be expected to hold under foreseeable conditions.
17 Manage prescribed fire (wildland).

Search and Rescue

20 Search and rescue, other.
21 Search for lost or missing person. Includes animals.
22 Rescue, remove from harm. Excludes vehicle extrication (23).
23 Extrication or disentangling of a person. Excludes body recovery (24).
24 Recover body or body parts.

EMS and Transport

30 Emergency medical services, other.
31 Provide first aid and check for injuries. Medical evaluation of patient.
32 Provide basic life support (BLS).

33 Provide advanced life support (ALS).

34 Transport of person from scene in fire service ambulance or apparatus.

Hazardous Condition

40 Hazardous condition, other.

41 Identification, analysis of hazardous materials.

42 Hazardous materials detection, monitoring, sampling, and analyzing using a variety of detection instruments including combustible gas indicators (CGIs) or explosimeter, oxygen monitors, colorimetric tubes, specific chemical monitors, and others. Results from these devices must be analyzed to provide information about the hazardous nature of the material or environment.

43 Hazardous materials spill control and confinement. Includes confining or diking hazardous materials. These are actions taken to confine the product released to a limited area including the use of absorbents, damming/diking, diversion of liquid runoff, dispersion, retention, or vapor suppression.

44 Hazardous materials leak control and containment. Includes actions taken to keep a material within its container, such as plugging/patching operations, neutralization, pressure isolation/reduction, solidification, and vacuuming.

45 Remove hazard. Includes neutralizing a hazardous condition.

46 Decontaminate persons or equipment. Includes actions taken to prevent the spread of contaminants from the “hot zone” to the “cold zone.” This includes gross, technical, or advanced personal decontamination of victims, emergency responders, and equipment.

47 Decontamination of occupancy or area exposed to hazardous materials.

48 Remove hazardous materials. Includes a broad range of actions taken to remove hazardous materials from a damaged container or contaminated area. Examples of actions to remove hazards include product offload/transfer, controlled burning or product flaring, venting, and overpacking.

Fires, Rescues, and Hazardous Conditions

50 Fires, rescues, and hazardous conditions, other.

51 Ventilate. Includes nonhazardous odor removal and removal of smoke from nonhazardous materials-related fires.

52 Forcible entry, performed by fire service. Includes support to law enforcement.

53 Evacuate area. Removal of civilians from an area determined to be hazardous. Includes actions taken to isolate the contaminated area and/or evacuate those persons affected by a hazardous materials release or potential release.

54 Determine if the materials released are nonhazardous through product identification and environmental monitoring.

55 Establish safe area. Includes isolating the area affected by denying entry to unprotected persons and establishing hazard control zones (hot, warm, cold).

56 Provide air supply.

57 Provide light or electrical power.

58 Operate apparatus or vehicle.

Systems and Services

60 Systems and services, other.

61 Restore municipal services. Includes turning water back on and notifying the gas company to turn the gas on.

62 Restore sprinkler or fire protection system.

63 Restore fire alarm system. Includes restoring fire alarm systems monitored by the fire service.

64 Shut down system. Includes shutting down water, gas, and fire alarm systems.

65 Secure property. Includes property conservation activities such as covering broken windows or holes in roofs.

66 Remove water or control flooding condition.

Assistance

70 Assistance, other.
71 Assist physically disabled. Includes providing nonmedical assistance to physically disabled, handicapped, or elderly citizens.
72 Assist animal. Includes animal rescue, extrication, removal, or transport.
73 Provide manpower. Includes providing manpower to assist rescue/ambulance units lift patients or providing manpower to assist police.
74 Provide apparatus.
75 Provide equipment, where equipment is used by another agency.
76 Provide water. Includes tanker shuttle operations and pumping in a relay or from a water source. Excludes normal fire suppression operations.
77 Control crowd. Includes restricting pedestrian access to an area. Excludes control of vehicles (78).
78 Control traffic. Includes setting up barricades and directing traffic.
79 Assess damage from severe weather or the results of a natural disaster.

Information, Investigation, and Enforcement

80 Information, investigation, and enforcement, other.
81 Incident command. Includes providing support to incident command activities.
82 Notify other agencies. Includes notifications of utility companies, property owners, and the like.
83 Provide information to the public or media.
84 Refer to proper authority. Includes turnover of incidents to other authorities or agencies such as the police.
85 Enforce fire code and other codes. Includes response to public complaints and abatement of code violations.
86 Investigate. Includes investigations done on arrival to determine the situation and post-incident investigations; and collecting incident information for incident reporting purposes.

Fill-in, Standby

90 Fill-in, standby, other.
91 Fill in, move up to another fire station.
92 Standby.
93 Canceled en route.
00 Action taken, other.

Personnel ID ☆, Name, and Rank

Definition

The personnel identification number assigned to each emergency responder and name and rank. The ID number is often the social security number, but it may be any combination of letters and numbers up to nine characters.

Purpose

This information is useful for identifying personnel on specific pieces of apparatus, their level of responsibility, and the actions that they took at the incident.

Entry

Enter the responder's ID number, name, and rank (left-justify).

☞ Individual fire departments often assign a unique number to each employee in the department.

Example
Firefighter Doug Kane, ID A23–4567 responded to the incident:

Personnel ID ☆	Name	Rank or Grade
A 2 3 4 5 6 7	Doug Kane	Firefighter

Attend

Definition
Indicates which personnel were on the apparatus sent to the incident. Fire departments can pre-print or pre-enter the names of personnel in this module. When an incident occurs, the firefighter completing the module can check or mark the Attend box to indicate which personnel on the apparatus actually responded.

Purpose
Fire departments can pre-print or pre-enter personnel in the module.

Entry
Check or mark the Attend box if the person responded to the incident.

Example
Firefighter Doug Kane responded to the incident:

Attend
x
X

Actions Taken

Definition
The duties performed at the incident scene by the individual responder.

Purpose
This data element documents the range of activities required by the responding emergency personnel to effectively handle the range of emergency situations.

Entry
Enter the two-digit code(s) for up to four actions taken by the individual responder at the scene of the incident. Always report the most significant actions taken before less significant actions taken. Specific actions may include extinguishing fires, forcible entry, providing first aid, identifying and analyzing hazardous materials, and transporting the injured. The action may involve simply standing by at an incident for possible service. Be as specific as possible in stating the actions taken.

☞ Actions Taken codes are listed on page 12–10 of this chapter.

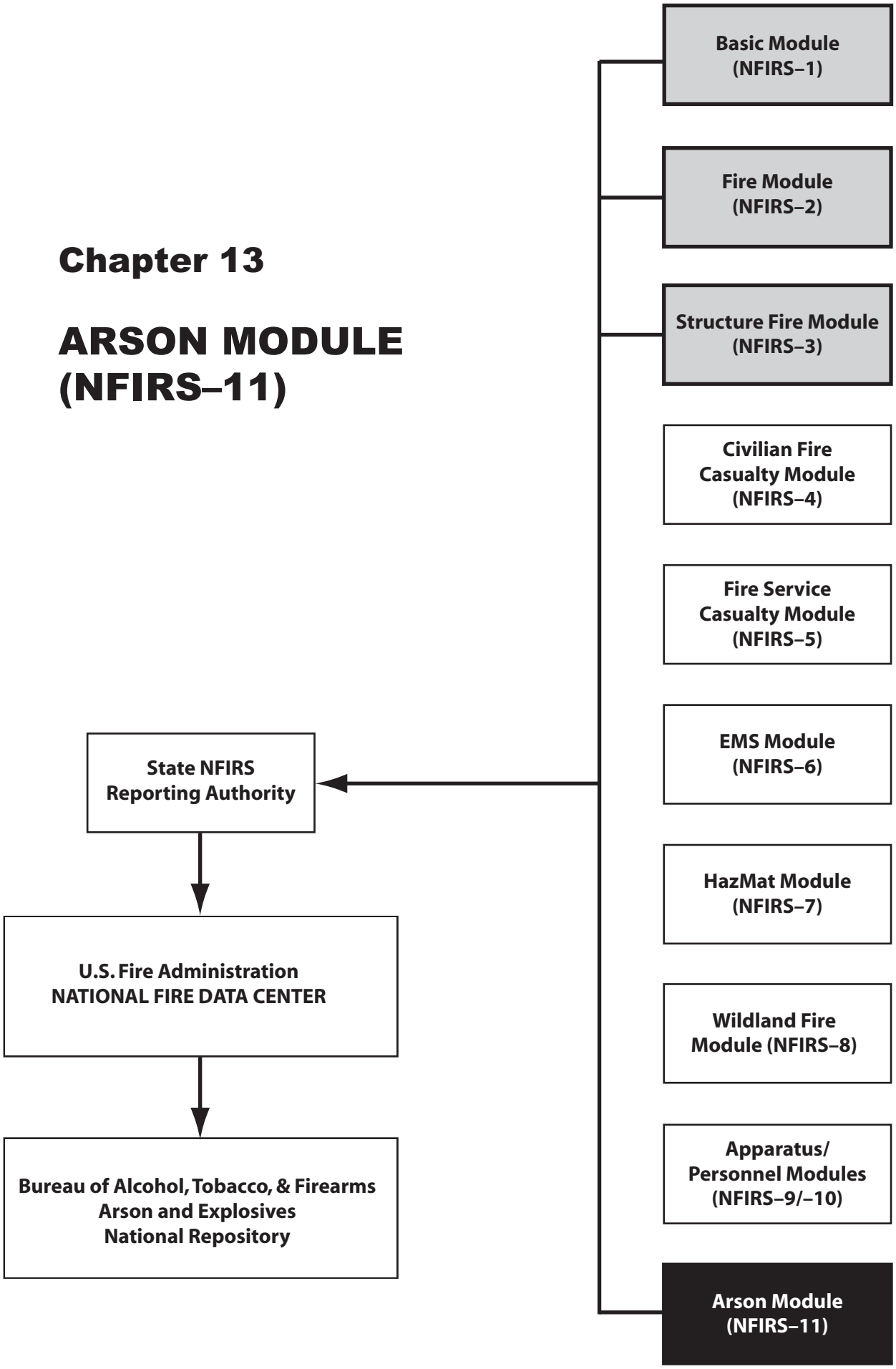
Example

Firefighter Doug Kane assisted with ventilating the roof (51) and overhauling the fire scene (12):

Action Taken	Action Taken	Action Taken	Action Taken
51	12		

Chapter 13

ARSON MODULE (NFIRS–11)



A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | ☐ Delete ☐ Change

NFIRS–11 Arson

B Agency Referred To ☐ None

Street address | Their case number

Agency name | City | Their ORI

Agency phone number – – | State | ZIP code – | Their Federal Identifier (FID) | Their FDID

C Case Status

1 ☐ Investigation open
2 ☐ Investigation closed
3 ☐ Investigation inactive
4 ☐ Closed with arrest
5 ☐ Closed with exceptional clearance

D Availability of Material First Ignited

1 ☐ Transported to scene
2 ☐ Available at scene
U ☐ Unknown

E Suspected Motivation Factors Check up to three factors

11 ☐ Extortion
12 ☐ Labor unrest
13 ☐ Insurance fraud
14 ☐ Intimidation
15 ☐ Void contract/lease
21 ☐ Personal
22 ☐ Hate crime
23 ☐ Institutional
24 ☐ Societal
31 ☐ Protest
32 ☐ Civil unrest
41 ☐ Fireplay/curiosity
42 ☐ Vanity/recognition
43 ☐ Thrills
44 ☐ Attention/sympathy
45 ☐ Sexual excitement
51 ☐ Homicide
52 ☐ Suicide
53 ☐ Domestic violence
54 ☐ Burglary
61 ☐ Homicide concealment
62 ☐ Burglary concealment
63 ☐ Auto theft concealment
64 ☐ Destroy records/evidence
00 ☐ Other suspected motivation
UU ☐ Unknown motivation

F Apparent Group Involvement Check up to three factors ☐ None

1 ☐ Terrorist group
2 ☐ Gang
3 ☐ Anti-government group
4 ☐ Outlaw motorcycle organization
5 ☐ Organized crime
6 ☐ Racial/ethnic hate group
7 ☐ Religious hate group
8 ☐ Sexual preference hate group
0 ☐ Other group
U ☐ Unknown

G1 Entry Method

Entry Method

G2 Extent of Fire Involvement on Arrival

Extent of Fire Involvement

H Incendiary Devices Select one from each category

CONTAINER ☐ No container

11 ☐ Bottle (glass)
12 ☐ Bottle (plastic)
13 ☐ Jug
14 ☐ Pressurized container
15 ☐ Can (not gas or fuel)
16 ☐ Gasoline or fuel can
17 ☐ Box
00 ☐ Other Container
UU ☐ Unknown

IGNITION/DELAY DEVICE ☐ No device

11 ☐ Wick or fuse
12 ☐ Candle
13 ☐ Cigarette and matchbook
14 ☐ Electronic component
15 ☐ Mechanical device
16 ☐ Remote control
17 ☐ Road flare/fuse
18 ☐ Chemical component
19 ☐ Trailer/streamer
20 ☐ Open flame source
00 ☐ Other delay device
UU ☐ Unknown

FUEL ☐ None

11 ☐ Ordinary combustibles
12 ☐ Flammable gas
14 ☐ Ignitable liquid
15 ☐ Ignitable solid
16 ☐ Pyrotechnic material
17 ☐ Explosive material
00 ☐ Other material
UU ☐ Unknown

I Other Investigative Information Check all that apply

1 ☐ Code violations
2 ☐ Structure for sale
3 ☐ Structure vacant
4 ☐ Other crimes involved
5 ☐ Illicit drug activity
6 ☐ Change in insurance
7 ☐ Financial problem
8 ☐ Criminal/civil actions pending

J Property Ownership

1 ☐ Private
2 ☐ City, town, village, local
3 ☐ County or parish
4 ☐ State or province
5 ☐ Federal
6 ☐ Foreign
7 ☐ Military
0 ☐ Other

K Initial Observations Check all that apply

1 ☐ Windows ajar
2 ☐ Doors ajar
3 ☐ Doors locked
4 ☐ Doors unlocked
5 ☐ Fire department forced entry
6 ☐ Entry forced prior to FD arrival
7 ☐ Security system activated
8 ☐ Security system present (not activated)

L Laboratory Used Check all that apply ☐ None

1 ☐ Local
2 ☐ State
3 ☐ ATF
4 ☐ FBI
5 ☐ Other Federal
6 ☐ Private

NFIRS–11 Revision 01/01/04

The ☆ denotes a required field.

A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | ☐ Delete ☐ Change

NFIRS–11 Juvenile Firesetter

Complete this section if the person involved in the ignition of the fire was a child or Juvenile under the age of 18

M1 Subject Number
Complete a separate Section M form for each juvenile
Subject Number

M2 Age or Date of Birth
Age (in years)
OR
Month | Day | Year

M3 Gender
1 ☐ Male 2 ☐ Female

M4 Race
1 ☐ White
2 ☐ Black, African American
3 ☐ American Indian, Alaska Native
4 ☐ Asian
5 ☐ Native Hawaiian, Other Pacific Islander
0 ☐ Other, multiracial
U ☐ Undetermined

M5 Ethnicity
1 ☐ Hispanic or Latino
0 ☐ Non Hispanic or Latino

M6 Family Type
1 ☐ Single parent
2 ☐ Foster parent(s)
3 ☐ Two-parent family
4 ☐ Extended family
N ☐ No family unit
0 ☐ Other family type
U ☐ Unknown

M7 Motivation/Risk Factors
Check only one of codes 1–3 and then all others (4–9) that apply

1 ☐ Mild curiosity about fire
2 ☐ Moderate curiosity about fire
3 ☐ Extreme curiosity about fire
4 ☐ Diagnosed (or suspected) ADD/ADHD
5 ☐ History of trouble outside school
6 ☐ History of stealing or shoplifting
7 ☐ History of physically assaulting others
8 ☐ History of fireplay or firesetting
9 ☐ Transiency
0 ☐ Other
U ☐ Unknown

M8 Disposition of Person Under 18
1 ☐ Handled within department
2 ☐ Released to parent/guardian
3 ☐ Referred to other authority
4 ☐ Referred to treatment/counseling program
5 ☐ Arrested, charged as adult
6 ☐ Referred to firesetter intervention program
0 ☐ Other
U ☐ Unknown

N Remarks (local use)

CHAPTER 13

ARSON MODULE (NFIRS–11)

An indispensable tool in the war against arson is the ability to identify with precision when and where the crime takes place, what form it takes, and the characteristics of its targets and perpetrators. Armed with such information, fire service and law enforcement agencies can develop and implement arson prevention initiatives that will allow them to use their resources in the most efficient and effective manner. The NFIRS 5.0 Arson Module (NFIRS–11) was developed with this goal in mind.

> *Arson:* To unlawfully and intentionally damage, or attempt to damage, any real or personal property by fire or incendiary device.

This optional Arson Module may be used whenever the Cause of Ignition (Fire Module, Block E1) is coded as Intentional or as Cause Under Investigation without any distinction made as to whether or not a crime has occurred or a determination of criminal intent. The Arson Module may also be used when the fire is coded as Cause Undetermined After Investigation.

The Arson Module may also be used to document juvenile-set fires, whether determined to be intentional, unintentional, or under investigation. This information will permit analysis of juvenile firesetting trends, including intervention strategies and recidivism.

☞ Juvenile-set fires are defined to be those fires where the person involved in the ignition is under the age of 18.

The Arson Module consists of two parts: a local investigation module that permits a fire department or arson investigation unit to document certain details concerning the incident; and a juvenile firesetter section that identifies key items of information that could be used for local, state, and national intervention programs.

Many arson investigation units use an arson information management system to collect and compile information on arson incidents. This module is not intended to replace such systems; instead, it identifies those data elements that could be exported to NFIRS and included as an integral part of the U.S. Fire Administration National Fire Database and the Bureau of Alcohol, Tobacco and Firearms (BATF), Arson and Explosives National Repository.

SECTION A

The guidance and directions for completing Section A of the Arson Module are the same as for Section A in the Basic Module. It is stressed that the entries in Section A of the Arson Module must be identical with the entries on the corresponding Basic Module. An example of a completed Section A can be found on page 3–8.

A

Fire Department Identification (FDID) ☆

Entry
Enter the same FDID number found in Section A of the Basic Module.

State ☆

Entry
Enter the same state abbreviation found in Section A of the Basic Module.

Incident Date ☆

Entry
Enter the same incident date found in Section A of the Basic Module.

Station Number

Entry
Enter the same station number found in Section A of the Basic Module.

Incident Number ☆

Entry
Enter the same incident number found in Section A of the Basic Module.

Exposure Number ☆

Entry
Enter the same exposure number found in Section A of the Basic Module.

Delete/Change

Definition
Indicates a change to information submitted on a previous Arson Module or a deletion of all information regarding the incident.

Purpose
To delete or change previously reported information.

Entry

Delete. Check or mark this box when you have previously submitted data on this arson incident and now want to have the data on this report deleted from the database. If this box is marked, complete Section A and leave the rest of the report blank. Forward the report according to your normally established procedures.

Change. Check or mark this box only if you previously submitted this fire incident to your state reporting authority and now want to update or change the information in the state database. Complete Section A and any other sections or blocks that need to be updated or corrected. If you need to blank a field that contains data, you must resubmit the original module containing the newly blanked field along with all the other original information in the module for that incident. This action is required only when sending an updated module to your state reporting authority. Forward the report according to your normally established procedures.

SECTION B

B Agency Referred To

Definition

Identifies the agency, if any, the incident was referred to for follow-up investigation. This might be a law enforcement agency that has jurisdiction for a criminal investigation or another fire department that may have been requested to conduct the investigation.

Purpose

This element provides the details necessary to contact the agency that conducted any follow-up of the incident. It also allows for the collection, compilation, and analysis of all data associated with a specific incident.

Entry

Enter the referred agency's name, telephone number, address, case number, Originating Agency Identifier (ORI) number, Federal Identifier (FID) code, and FDID (if applicable). Check or mark the None box if the case was not referred to another agency.

> *ORI*: A unique identification number assigned to law enforcement agencies (towns, cities, counties, state police agencies, and some colleges and universities) participating in the FBI's Uniform Crime Reporting (UCR) system or the National Incident-Based Reporting System (NIBRS).
>
> *FID:* A two-character identification number used by federal departments to submit crime data to UCR/NIBRS gathered by its dependent bureau/agencies.

Collectively, the ORI, FID, and Incident numbers provide the necessary uniqueness to avoid duplication of reported incidents.

☞ "00" is used for state and local agencies as the FID codes. Federal departments such as the FBI use an assigned FID code. This list is not provided in this guide.

Example

The case was referred to the BATF – 703–555–8976, 11234 Lee Highway, Fairfax, VA 20145, Case Number 19002021997, ORI 234568, FID 26:

B **Agency Referred To** ☐ None

	11234 Lee Highway Street address	1 9 0 0 2 0 2 1 9 9 7 Their case number
ATF Agency name	Fairfax City	2 3 4 5 6 8 Their ORI
7 0 3 – 5 5 5 – 8 9 7 6 Agency phone number	V A State 2 0 1 4 5 – ZIP code	2 6 Their Federal Identifier (FID) Their FDID

SECTION C

C Case Status

Definition

The current status of the investigation.

Purpose

This data element identifies the status of the investigation at the time the report was filed. This information is useful in tracking the closure rate of an investigation as well as providing information to other agencies concerning the status of cases that may be linked to cases they are investigating.

Entry

Check or mark the box that best describes the status of the investigation at this time.

Example

The case is closed with an arrest (4):

C **Case Status**

1	☐ Investigation open	4	☒ Closed with arrest
2	☐ Investigation closed	5	☐ Closed with exceptional clearance
3	☐ Investigation inactive		

CASE STATUS CODES

1 Investigation open.
2 Investigation closed.
3 Investigation inactive.
4 Investigation closed with arrest.
5 Closed with exceptional clearance.

SECTION D

D Availability of Material First Ignited

Definition
Identifies the availability of an ignition source (including matches and lighters) to the subject.

Purpose
Understanding firesetting methods and trends can assist in the development of prevention and intervention strategies.

Entry
Check or mark the box that best describes the availability of the material first ignited.

Example
Matches were brought to the scene (1) by the subject:

D Availability of Material First Ignited
- 1 ☒ Transported to scene
- 2 ☐ Available at scene
- U ☐ Unknown

AVAILABILITY OF MATERIAL FIRST IGNITED CODES

1	Transported to scene.
2	Available at scene.
U	Unknown.

SECTION E

E Suspected Motivation Factors

Definition
Indicates the suspected stimulus that caused the subject(s) to burn any real or personal property.

Purpose
An analysis of arson trends may be based on the possible motivation for the crime.

Entry
Check or mark up to three boxes that best indicate the factors or conditions that constituted possible motivations for the subject.

Example

The suspect burned down the home of his former employer who had fired him (21):

E **Suspected Motivation Factors** Check up to three factors

11	☐ Extortion	22	☐ Hate crime	42	☐ Vanity/recognition	54	☐ Burglary
12	☐ Labor unrest	23	☐ Institutional	43	☐ Thrills	61	☐ Homicide concealment
13	☐ Insurance fraud	24	☐ Societal	44	☐ Attention/sympathy	62	☐ Burglary concealment
14	☐ Intimidation	31	☐ Protest	45	☐ Sexual excitement	63	☐ Auto theft concealment
15	☐ Void contract/lease	32	☐ Civil unrest	51	☐ Homicide	64	☐ Destroy records/evidence
21	☒ Personal	41	☐ Fireplay/curiosity	52	☐ Suicide	00	☐ Other suspected motivation
				53	☐ Domestic violence	UU	☐ Unknown

SUSPECTED MOTIVATION FACTORS CODES

11	Extortion.
12	Labor unrest.
13	Insurance fraud.
14	Intimidation.
15	Void contract/lease.
21	Personal.
22	Hate crime.
23	Institutional.
24	Societal.
31	Protest.
32	Civil unrest.
41	Fireplay/curiosity.
42	Vanity/recognition.
43	Thrills.
44	Attention/sympathy.
45	Sexual excitement.
51	Homicide.
52	Suicide.
53	Domestic violence.
54	Burglary.
61	Homicide concealment.
62	Burglary concealment.
63	Auto theft concealment.
64	Destroy records/evidence.
00	Other suspected motivation.
UU	Unknown.

SECTION F

F Apparent Group Involvement

Definition

Indicates whether the subject was motivated to commit the arson act because of involvement in a larger group or organization or as a means to promote the cause of a larger group or organization.

Purpose

This information permits analysis of arson trends based on participation in criminal groups or organizations, and it provides possible links to other similar arson cases.

Entry

Check or mark up to three boxes that best indicate the subject's involvement in a larger group or organization. If no group or organization was involved, check or mark the None box.

Example

The suspect committed the crime as initiation into a gang (2):

F **Apparent Group Involvement** ☐ None
Check up to three factors

1 ☐ Terrorist group
2 ☒ Gang
3 ☐ Anti-government group
4 ☐ Outlaw motorcycle organization
5 ☐ Organized crime
6 ☐ Racial/ethnic hate group
7 ☐ Religious hate group
8 ☐ Sexual preference hate group
0 ☐ Other criminal group
U ☐ Unknown

APPARENT GROUP INVOLVEMENT CODES

1	Terrorist group.
2	Gang.
3	Anti-government group.
4	Outlaw motorcycle organization.
5	Organized crime.
6	Racial/ethnic hate group.
7	Religious hate group.
8	Sexual preference hate group.
0	Other criminal group.
N	None. Acted alone.
U	Unknown.

SECTION G

This sections collects data on how entry was gained to the property and what conditions the fire department found on arrival at the scene.

G1 Entry Method

Definition

Indicates how the subject gained access to the property.

Purpose
This data item can be used to track common methods of entry for later analysis and to link other cases.

Entry
Enter the two-digit code and description of the subject's method of entry to the property.

Example
The subject broke the window in the back of the warehouse (14):

G1 Entry Method

1 4	Broken window
Entry Method	

ENTRY METHOD CODES

11	Door, open or unlocked.
12	Door, forced or broken.
13	Window, open or unlocked.
14	Window, forced or broken.
15	Gate, open or unlocked.
16	Gate, forced or broken.
17	Locks, pried.
18	Locks, cut.
19	Floor entry.
21	Vent.
22	Attic/roof.
23	Key.
24	Help from inside.
25	Wall.
26	Crawl space.
27	Hid in/on premises.
00	Other entry method.
UU	Unknown.

G2 Extent of Fire Involvement on Arrival

Definition
Indicates the fire department's observation of the extent of the fire's involvement when they arrived at the incident scene.

Purpose
Case investigators can use this information to determine if arson is potentially involved in the fire and to measure the speed and the pattern of flame spread.

Entry
Enter the code and description for the extent of fire involvement on arrival at the incident scene.

Example
Flame and smoke were showing when the fire department arrived at the fire (3):

G2	Extent of Fire Involvement on Arrival	
	3	Smoke showing
	Extent of Fire Involvement	

EXTENT OF FIRE INVOLVEMENT ON ARRIVAL CODES

1 No flame or smoke showing.
2 Smoke only showing.
3 Flame and smoke showing.
4 Fire through roof.
5 Fully involved.

SECTION H

H Incendiary Devices

Definition
Identifies the methods, devices, and fuel that were used to burn or attempt to burn any real or personal property.

Purpose
This information is used to track common methods and devices for later analysis and linking of cases.

Entry
Check or mark one box only from each of the three categories as applicable. If no container, device, or fuel source was used, check the appropriate box(es).

Example
The suspect threw a molotov cocktail into the abandoned building (bottle (11) filled with gasoline (14) with a rag for an ignition device (11)):

H **Incendiary Devices**
Select one from each category

CONTAINER

☐ No container

11	☒ Bottle (glass)	14	☐ Pressurized container	17	☐ Box
12	☐ Bottle (plastic)	15	☐ Can (not gas or fuel)	00	☐ Other container
13	☐ Jug	16	☐ Gasoline or fuel can	UU	☐ Unknown

IGNITION/DELAY DEVICE

☐ No device

11	☒ Wick or fuse	17	☐ Road flare/fuse
12	☐ Candle	18	☐ Chemical component
13	☐ Cigarette and matchbook	19	☐ Trailer/streamer
14	☐ Electronic component	20	☐ Open flame source
15	☐ Mechanical device	00	☐ Other delay device
16	☐ Remote control	UU	☐ Unknown

FUEL

☐ None

11	☐ Ordinary combustibles	16	☐ Pyrotechnic material
12	☐ Flammable gas	17	☐ Explosive material
14	☒ Ignitable liquid	00	☐ Other material
15	☐ Ignitable solid	UU	☐ Unknown

INCENDIARY DEVICES CODES

Container

11 Bottle, glass.
12 Bottle, plastic.
13 Jug.
14 Pressurized container.
15 Can. Excludes gas and fuel cans (16).
16 Gasoline or fuel can.
17 Box.
00 Other container.
NN No container.
UU Unknown.

Ignition/Delay Device

11 Wick or fuse.
12 Candle.
13 Cigarette and matchbook.
14 Electronic component.
15 Mechanical device.
16 Remote control.
17 Road flare/fuse.
18 Chemical component.
19 Trailer/streamer.
20 Open flame source.
00 Other delay device.
NN No device.
UU Unknown.

Fuel

11 Ordinary combustibles.
12 Flammable gas.
14 Ignitable liquid.
15 Ignitable solid.
16 Pyrotechnic material.

17 Explosive material.
00 Other material.
NN None.
UU Unknown.

SECTION I

I

Other Investigative Information

Definition
Identifies other investigative information pertinent to the case.

Purpose
Additional information on the case defines the circumstances surrounding the investigation.

Entry
Check or mark all the boxes that apply to the case.

Example
The structure was vacant (3):

I Other Investigative Information
Check all that apply

1 ☐ **Code violations**
2 ☐ **Structure for sale**
3 ☒ **Structure vacant**
4 ☐ **Other crimes involved**
5 ☐ **Illicit drug activity**
6 ☐ **Change in insurance**
7 ☐ **Financial problem**
8 ☐ **Criminal/civil actions pending**

OTHER INVESTIGATIVE INFORMATION CODES

1 Code violations.
2 Structure for sale.
3 Structure vacant.
4 Other crimes involved.
5 Illicit drug activity.
6 Change in insurance.
7 Financial problem.
8 Criminal/civil actions pending.

SECTION J

J Property Ownership

Definition

Identifies the ownership of the property involved in the arson.

☞ This field identifies the general owner of the property and differs from the specific ownership identified in Block K2 of the Basic Module.

Purpose

The general ownership of the property may provide useful information, such as motive, to case investigators.

Entry

Check or mark the box that best describes the ownership of the property.

Example

The storage company was owned and operated by a private citizen (1):

J Property Ownership

- 1 ☒ Private
- 2 ☐ City, town, village, local
- 3 ☐ County or parish
- 4 ☐ State or province
- 5 ☐ Federal
- 6 ☐ Foreign
- 7 ☐ Military
- 0 ☐ Other

PROPERTY OWNERSHIP CODES

1	Private.
2	City, town, village, local.
3	County or parish.
4	State or province.
5	Federal.
6	Foreign.
7	Military.
0	Other.

SECTION K

K Initial Observations

Definition
Identifies important initial observations made at the incident scene relating to the property's secure status or circumvention of security systems if present.

Purpose
A description of what the fire department found at the scene may be of use to arson investigators.

Entry
Check or mark all the boxes that apply.

Example
Windows were ajar (1) and the security system activated (7):

K Initial Observations
Check all that apply

1	☒ Windows ajar	5	☐ Fire department forced entry
2	☐ Doors ajar	6	☐ Entry forced prior to FD arrival
3	☐ Doors locked	7	☒ Security system activated
4	☐ Doors unlocked	8	☐ Security system present (not activated)

INITIAL OBSERVATIONS CODES

1 Windows ajar.
2 Doors ajar.
3 Doors locked.
4 Doors unlocked.
5 Fire department forced entry.
6 Entry forced prior to fire department arrival.
7 Security system was activated.
8 Security system was present but not activated.

SECTION L

L Laboratory Used

Definition
Identifies the laboratory, if any, that analyzed evidence.

Purpose
Provides the means for the collection and analysis of all data associated with a specific incident.

Entry
Case investigators can use this information to locate all the evidence associated with a specific incident.

Example
Local (1) and FBI (4) laboratories were used:

L **Laboratory Used** Check all that apply ☐ **None**

1 ☒ **Local** 3 ☐ **ATF** 5 ☐ **Other Federal** 6 ☐ **Private**
2 ☐ **State** 4 ☒ **FBI**

LABORATORY USED CODES

1	Local.
2	State.
3	ATF.
4	FBI.
5	Other federal laboratory.
6	Private.
N	None.

SECTION M

Section M is a submodule of the Arson Module that is completed for each juvenile (under age 18) who was involved in the fire's ignition. If this portion of the module is used, the guidance and directions for completing Section A are the same as for Section A in the Basic Module. It is stressed that the entries in Section A of the Arson Module must be identical with the entries on the corresponding Basic Module. An example of a completed Section A can be found on page 3–8.

M1 Subject Number

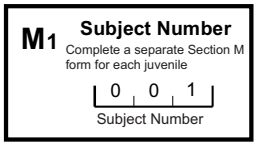
Definition
A unique number is assigned to each juvenile subject involved in the fire's ignition.

☞ A separate submodule (Section M) may be completed for each juvenile involved. The front side of paper forms (Sections A–L) does not need to completed for the second, third, etc., juveniles.

Purpose
This data element allows tracking of any subject under 18 years of age; it permits analysis and tracking of juvenile firesetter trends.

Entry
Enter the subject's number assigned to this juvenile. A separate Subject Number is assigned to each juvenile. The first juvenile is always coded "001," and each succeeding juvenile is numbered sequentially and incremented by 1 beginning with "002." The three-character numeric field is zero filled, not right justified.

Example
This report is for the first subject:



M2 Age or Date of Birth

Enter either the subject's age or the subject's date of birth. Do not enter both.

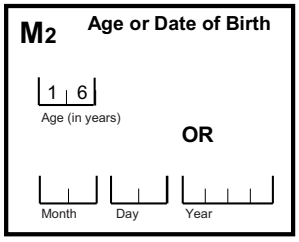
Age

Definition
The subject's age in years.

Purpose
This information can be used with other demographic information to identify arson problems in certain segments of the population and to target arson prevention programs for certain audiences. This data element is particularly useful in tracking juvenile firesetter trends.

Entry
Enter the age of the subject involved in the fire's ignition. Estimate the age if it cannot be determined.

Example
The subject was 16 years old:



Date of Birth

Definition
The month, day, and year of birth of the subject.

Purpose

This data element is an alternative to Age, which can be used with other demographic information to identify arson problems in certain segments of the population and to target arson prevention programs for certain audiences. This data element is particularly useful in tracking juvenile firesetter trends.

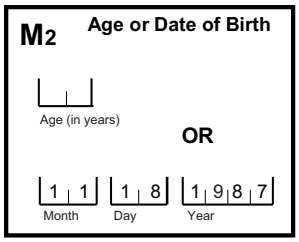
☞ This data element is used as an alternate method for calculating the subject's age. Age is collected in NFIRS but Date of Birth is not.

Entry

Enter the date of birth of the subject showing the month, day, and year (mm/dd/yyyy).

Example

The subject was born on November 18, 1987:



M3 Gender

Definition

The identification of the subject as male or female.

Purpose

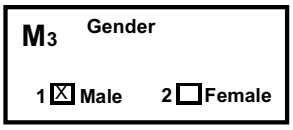
This information can be used with other demographic information to identify arson problems in certain segments of the population and to target arson prevention programs for certain audiences.

Entry

Check or mark the box that indicates the subject's gender.

Example

The subject was male (1):



GENDER CODES

1 Male.
2 Female.

M4 Race

Definition
The identification of the race of the subject, based on U.S. Office of Management and Budget (OMB) designations.

Purpose
This information can be used with other demographic information to identify arson problems in certain segments of the population and to target arson prevention programs for certain audiences.

Entry
Check or mark the appropriate box. If race cannot be determined, check or mark the Undetermined box.

☞ Hispanic is not considered a race, because a person can be black *and* Hispanic, white *and* Hispanic, etc.

Example
The subject was multiracial (0):

M4 Race

1	☐	White
2	☐	Black, African American
3	☐	American Indian, Alaska Native
4	☐	Asian
5	☐	Native Hawaiian, Other Pacific Islander
0	☒	Other, multiracial
U	☐	Undetermined

RACE CODES

1	White.
2	Black or African American.
3	American Indian or Alaska Native.
4	Asian.
5	Native Hawaiian or other Pacific Islander.
0	Other. Includes multiracial.
U	Undetermined.

M5 Ethnicity

Definition
Identifies the ethnicity of the subject. Ethnicity is an ethnic classification or affiliation. Ethnicity designates a population subgroup having a common cultural heritage, as distinguished by customs, characteristics, language, common history, etc. Currently, Hispanic/Latino is the only OMB designation for ethnicity.

Purpose
This information can be used with other demographic information to identify arson problems in certain segments of the population and to target arson prevention programs.

Entry
Check or mark the appropriate box.

Example
The subject was an Hispanic (1):

M5 Ethnicity

- 1 [X] Hispanic or Latino
- 0 [ ] Non Hispanic or Latino

ETHNICITY CODES

1	Hispanic or Latino.
0	Non Hispanic or Latino.

M6 Family Type

Definition
The nature of the family structure at the time of the incident.

Purpose
Information on family type can assist researchers in determining those risk factors that may be a predictor of juvenile firesetting, delinquency, and adult arson.

Entry
Check or mark the box that best describes the subject's family type.

Example
The subject lived with a foster family (2):

M6 Family Type

- 1 [ ] Single parent
- 2 [X] Foster parent(s)
- 3 [ ] Two-parent family
- 4 [ ] Extended family
- N [ ] No family unit
- 0 [ ] Other
- U [ ] Unknown

FAMILY TYPE CODES

1	Single-parent family.
2	Foster parent(s).
3	Two-parent family.
4	Extended family. Includes multigenerational.
N	No family unit.
0	Other family type.
U	Unknown.

M7 Motivation/Risk Factors

Definition

The stimulus or risk factors that were present and constituted a possible motivation for the subject(s) to burn, or attempt to burn, any real or personal property.

Purpose

This information is particularly useful in tracking juvenile firesetting trends and in developing prevention and intervention strategies.

Entry

Check or mark only one box for codes 1–3; then check or mark all other boxes (4–9) that apply. If the motivation is not listed or is unknown, check or mark the Other or Unknown box, respectively.

Example

The subject had a history of firesetting:

M7 Motivation/Risk Factors — Check only one of codes 1–3 and then all others (4–9) that apply

- 1 ☐ **Mild curiosity about fire**
- 2 ☐ **Moderate curiosity about fire**
- 3 ☒ **Extreme curiosity about fire**

- 4 ☐ **Diagnosed (or suspected) ADD/ADHD**
- 5 ☐ **History of trouble outside school**
- 6 ☐ **History of stealing or shoplifting**
- 7 ☐ **History of physically assaulting others**
- 8 ☒ **History of fireplay or firesetting**
- 9 ☐ **Transiency**
- 0 ☐ **Other**
- U ☐ **Unknown**

MOTIVATION/RISK FACTORS CODES

1	Mild curiosity about fire.
2	Moderate curiosity about fire.
3	Extreme curiosity about fire.
4	Diagnosed (or suspected) ADD/ADHD.
5	History of trouble outside school.
6	History of stealing or shoplifting.
7	History of physically assaulting others.

8 History of fireplay or firesetting.
9 Transiency.
0 Other.
U Unknown.

M8 Disposition of Person Under 18

Definition

Describes how the juvenile firesetter was handled at the end of the incident.

Purpose

The data element tracks the disposition of any subject under 18 years of age. It permits analysis of how juvenile offenders are handled and is particularly useful in tracking juvenile firesetter trends. At the local level, this field is also useful in determining where repeat offenders have been sent in the past.

Entry

Check or mark the box that best describes the disposition of the subject.

Example

The fire department released the subject to social services (3):

M8 Disposition of Person Under 18

- 1 ☐ Handled within department
- 2 ☐ Released to parent/guardian
- 3 ☒ Referred to other authority
- 4 ☐ Referred to treatment/counseling program
- 5 ☐ Arrested, charged as adult
- 6 ☐ Referred to firesetter intervention program
- 0 ☐ Other
- U ☐ Unknown

DISPOSITION OF PERSON UNDER 18 CODES

1 Handled within department (e.g., released with warning).
2 Released to parent or guardian.
3 Referred to other authority (e.g., social services, prosecuting attorney, juvenile court, probation).
4 Referred to treatment/counseling program (e.g., diversion program, in-patient or outpatient treatment program).
5 Arrested, charged as adult.
6 Referred to firesetter intervention program.
0 Other.
U Unknown.

Chapter 14

SUPPLEMENTAL FORM (NFIRS–1S)

A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | ☐ Delete ☐ Change

NFIRS–1S Supplemental

K1 Person/Entity Involved (Local Option)

Business Name (if applicable) | Area Code – Phone Number

☐ Check this box if same address as incident location. Then skip these three duplicate address lines.

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | ZIP Code –

K1 Person/Entity Involved (Local Option)

Business Name (if applicable) | Area Code – Phone Number

☐ Check this box if same address as incident location. Then skip these these duplicate address lines.

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | ZIP Code –

K1 Person/Entity Involved (Local Option)

Business Name (if applicable) | Area Code – Phone Number

☐ Check this box if same address as incident location. Then skip these three duplicate address lines.

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | ZIP Code –

K1 Person/Entity Involved (Local Option)

Business Name (if applicable) | Area Code – Phone Number

☐ Check this box if same address as incident location. Then skip these three duplicate address lines.

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | ZIP Code –

K1 Person/Entity Involved (Local Option)

Business Name (if applicable) | Area Code – Phone Number

☐ Check this box if same address as incident location. Then skip these three duplicate address lines.

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | ZIP Code –

NFIRS–1S Revision 01/01/04

E3 **Supplemental Special Studies**

Local Option

NFIRS–1S Supplemental

1	Special Study ID#	Special Study Value	**2**	Special Study ID#	Special Study Value	**3**	Special Study ID#	Special Study Value	**4**	Special Study ID#	Special Study Value
5	Special Study ID#	Special Study Value	**6**	Special Study ID#	Special Study Value	**7**	Special Study ID#	Special Study Value	**8**	Special Study ID#	Special Study Value

L **Remarks:**

Local Option

NFIRS-1S Revision 01/01/04

CHAPTER 14

SUPPLEMENTAL FORM (NFIRS–1S)

The Supplemental Form is a local option for recording additional persons or entities involved in the incident for those departments that use paper-based incident reporting. It adds flexibility to any incident report by expanding the ability to collect additional Basic Module (Block K1) data.

This form also provides (1) fields for recording additional Supplemental Special Studies beyond the one field provided on the Basic Module (Block E3), and (2) additional space for recording Remarks concerning an incident beyond the space available on the Basic Module (Section L).

SECTION A

The guidance and directions for completing Section A of the Supplemental Form are the same as for Section A in the Basic Module. It is stressed that the entries in Section A of the Supplemental Form must be identical with the entries on the corresponding Basic Module. An example of a completed Section A can be found on page 3–8.

A

Fire Department Identification (FDID) ☆

Entry
Enter the same FDID number found in Section A of the Basic Module.

State ☆

Entry
Enter the same state abbreviation found in Section A of the Basic Module.

Incident Date ☆

Entry
Enter the same incident date found in Section A of the Basic Module.

Station Number

Entry
Enter the same station number found in Section A of the Basic Module.

Incident Number ☆

Entry
Enter the same incident number found in Section A of the Basic Module.

Exposure Number ☆

Entry
Enter the same exposure number found in Section A of the Basic Module.

Delete/Change

Definition
Indicates a change to information submitted on a previous Supplemental Form or a deletion of an incorrect report.

Purpose
To delete or change previously reported information.

Entry
Delete. Check or mark this box when you have previously submitted a Supplemental Form and now want to have this report deleted from the database. If this box is marked, complete Section K and leave the rest of the report blank. Forward the report according to your normally established procedures.

Change. Check or mark this box only if you previously submitted a Supplemental Form to your state reporting authority and now want to update or change the information in the state database. Complete Section K and any other sections or blocks that need to be updated or corrected. If you need to blank a field that contains data, you must resubmit the original module containing the newly blanked field along with all the other original information in the module for that incident. This action is required only when sending an updated module to your state reporting authority. Forward the report according to your normally established procedures.

SECTION K

K1

Person/Entity Involved

Business Name

Definition
The full name of the company or agency occupying, managing, or leasing the property where the incident occurred.

Purpose
This element provides a basis for long-term analysis in recognizing patterns of repeated fires in the same or different locations over a period of time. The business name is required at the local government level to establish an official document of record.

Entry
Enter the full name of the company or agency occupying the property where the incident occurred. This may or may not be the same as the owner.

Telephone

Definition
The telephone number of the person or entity involved in the incident.

Purpose
This field collects additional information on the person or entity involved, which may be required at a later date.

Entry
Enter the area code and telephone number in the spaces provided.

Person Involved

Definition
The full name of the person involved in the incident. If an entity, enter the name under Business Name at the top of Block K1.

Purpose
This information provides a basis for long-term analysis in recognizing patterns of repeated incidents in the same or different locations over a period of time. The name of the person involved is required at the local government level to establish an official document of record.

Entry
Enter the full name of the person as normally written. Enter the name using the format: prefix, first name, middle initial, last name, and suffix. If the name is unknown, several available resources may be checked for this information, such as street directory publications, utility company records, or other public agencies. Leave blank if unknown. Name prefixes and suffixes are as follows:

Prefix		Suffix	
MR	Mr.	JR	Junior
MRS	Mrs.	SR	Senior
MS	Ms.	I	The First
DR	Doctor	II	The Second
REV	Reverend	III	The Third
		IV	The Fourth
		MD	Medical Doctor
		DDS	Doctor of Dental Science

Address

Definition
The address of the person or entity involved in the incident.

Purpose
The complete address provides local authorities with the location of the person or entity involved in the incident. The incident address is required at the local government level to establish an official document of record.

Entry
Enter the address where the person or entity involved in the incident can be contacted. The full address includes the street number, prefix, street or highway name, street type, and suffix. (For a more detailed explanation of the address components, see Section B of the Basic Module.)

Post Office Box (P.O. Box)

Definition
The number of a rented compartment in a post office for the storage of mail that is picked up by the business occupant.

Purpose
The complete address provides local authorities with the location of the person or entity involved in the incident. The incident address is required at the local government level to establish an official document of record.

Entry
Enter the post office box number in the spaces provided. Leave blank if not applicable.

Apartment, Suite, or Room

Definition
The number of the specific apartment, suite, or room where the incident occurred.

Purpose
The complete address provides local authorities with the location of the person or entity involved in the incident. The incident address is required at the local government level to establish an official document of record.

Entry
Enter the apartment, suite, or room number in the block. Leave blank if not applicable.

City

Definition
The city where the person or entity involved in the incident lives.

Purpose
The complete address provides local authorities with the location of the person or entity involved in the incident. The incident address is required at the local government level to establish an official document of record.

Entry
Enter the city associated with the person's or entity's address.

State

Definition
The state where the person or entity involved in the incident lives.

Purpose
The complete address provides local authorities with the location of the person or entity involved in the incident, and provides a means of linking fire incident data to other geographic and population factors for comparative analysis at the local or state level.

Entry
Enter the abbreviation for the state associated with the person's or entity's address.

☞ A list of state abbreviations is on page 3–5.

ZIP Code

Definition
A numerical code assigned by the U.S. Postal Service to all jurisdictions within the United States and U.S. Territories.

Purpose
The complete address provides local authorities with the location of the person or entity involved in the incident, and provides a means of linking fire incident data to other geographic and population factors for comparative analysis at the local or state level.

Entry
Enter the postal ZIP code for the address of the person or entity involved in the incident. Include the Plus Four digits of the ZIP code if known.

☞ A completed example of the information in this block is shown a on page 3–56.

SECTION E

E3 Supplemental Special Studies

Definition

These fields should be used when you are using the paper forms and need space for more than one special study.

Temporary data elements that can be used for collection of information that is of special interest for a defined period. Special studies are typically required to capture information on emerging trends, problem areas, or a specific issue being studied. When the answer becomes known through the special study, the collection of that field is no longer required. If the data will always be needed for permanent collection, a state- or department-defined permanent user field should be created and used instead of the Special Studies field. A state, a fire department, or the National Fire Data Center can define special studies.

Special Study ID Number: This number uniquely identifies each special study that is being run by the fire department, state, or National Fire Data Center.

Special Study Value: The value in the field being collected. Responses for special studies can be defined as codes or as alphanumeric entries of numeric values or dates. States, fire departments, and the National Fire Data Center can define Special Studies fields.

Purpose

The use of special studies allows departments, states, and the National Fire Data Center to quickly collect information on an issue or problem and answer a specific question through the temporary use of a special study field over a defined period of time. *This is a state or local option.*

Entry

If you are participating in a Special Study, your entry will depend on the type of data being collected. Use the codeset defined for the particular Special Study field if it is a coded entry. The data entered may also be a date or a numeric entry if the field has been so defined.

SECTION L

L Remarks

This supplemental Remarks block is an additional area for comments concerning the incident if you run out of room on the Basic Module (Section L).

Appendix A

PAPER FORMS FOR NFIRS 5.0 MODULES

A

FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆

☐ Delete
☐ Change
☐ No Activity

NFIRS–1 Basic

B Location Type ☆

☐ Check this box to indicate that the address for this incident is provided on the Wildland Fire Module in Section B, "Alternative Location Specification." Use only for wildland fires.

Census Tract ___ - ___

☐ Street address
☐ Intersection
☐ In front of
☐ Rear of
☐ Adjacent to
☐ Directions

Number/Milepost | Prefix | Street or Highway | Street Type | Suffix

Apt./Suite/Room | City | State | ZIP Code ___ - ___

Cross Street or Directions, as applicable

C Incident Type ☆

Incident Type

D Aid Given or Received ☆ ☐ None

1 ☐ Mutual aid received
2 ☐ Auto. aid received
3 ☐ Mutual aid given
4 ☐ Auto. aid given
5 ☐ Other aid given

Their FDID | Their State | Their Incident Number

E1 Dates and Times

Midnight is 0000

Check boxes if dates are the same as Alarm Date.

	Month	Day	Year	Hour	Min
Alarm ☆ (ALARM always required)					
☐ Arrival ☆ (ARRIVAL required, unless canceled or did not arrive)					
☐ Controlled (CONTROLLED optional, except for wildland fires)					
☐ Last Unit Cleared (LAST UNIT CLEARED, required except for wildland fires)					

E2 Shifts and Alarms

Local Option

Shift or Platoon | Alarms | District

E3 Special Studies

Local Option

Special Study ID# | Special Study Value

F Actions Taken ☆

Primary Action Taken (1)

Additional Action Taken (2)

Additional Action Taken (3)

G1 Resources ☆

☐ Check this box and skip this block if an Apparatus or Personnel Module is used.

	Apparatus	Personnel
Suppression		
EMS		
Other		

☐ Check box if resource counts include aid received resources.

G2 Estimated Dollar Losses and Values

LOSSES: Required for all fires if known. Optional for non-fires.

		None
Property	$ ___ , ___ , ___	☐
Contents	$ ___ , ___ , ___	☐

PRE-INCIDENT VALUE: Optional

Property	$ ___ , ___ , ___	☐
Contents	$ ___ , ___ , ___	☐

Completed Modules

☐ Fire–2
☐ Structure Fire–3
☐ Civilian Fire Cas.–4
☐ Fire Service Cas.–5
☐ EMS–6
☐ HazMat–7
☐ Wildland Fire–8
☐ Apparatus–9
☐ Personnel–10
☐ Arson–11

H1 ☆ Casualties ☐ None

	Deaths	Injuries
Fire Service		
Civilian		

H2 Detector

Required for confined fires.

1 ☐ Detector alerted occupants
2 ☐ Detector did not alert them
U ☐ Unknown

H3 Hazardous Materials Release ☐ None

1 ☐ **Natural gas:** slow leak, no evacuation or HazMat actions
2 ☐ **Propane gas:** <21-lb tank (as in home BBQ grill)
3 ☐ **Gasoline:** vehicle fuel tank or portable container
4 ☐ **Kerosene:** fuel burning equipment or portable storage
5 ☐ **Diesel fuel/fuel oil:** vehicle fuel tank or portable storage
6 ☐ **Household solvents:** home/office spill, cleanup only
7 ☐ **Motor oil:** from engine or portable container
8 ☐ **Paint:** from paint cans totaling <55 gallons
0 ☐ **Other:** special HazMat actions required or spill > 55 gal (Please complete the HazMat form.)

I Mixed Use Property ☐ Not mixed

10 ☐ Assembly use
20 ☐ Education use
33 ☐ Medical use
40 ☐ Residential use
51 ☐ Row of stores
53 ☐ Enclosed mall
58 ☐ Business & residential
59 ☐ Office use
60 ☐ Industrial use
63 ☐ Military use
65 ☐ Farm use
00 ☐ Other mixed use

J Property Use ☆ ☐ None

Structures

131 ☐ Church, place of worship
161 ☐ Restaurant or cafeteria
162 ☐ Bar/tavern or nightclub
213 ☐ Elementary school, kindergarten
215 ☐ High school, junior high
241 ☐ College, adult education
311 ☐ Nursing home
331 ☐ Hospital
341 ☐ Clinic, clinic-type infirmary
342 ☐ Doctor/dentist office
361 ☐ Prison or jail, not juvenile
419 ☐ 1- or 2-family dwelling
429 ☐ Multifamily dwelling
439 ☐ Rooming/boarding house
449 ☐ Commercial hotel or motel
459 ☐ Residential, board and care
464 ☐ Dormitory/barracks
519 ☐ Food and beverage sales
539 ☐ Household goods, sales, repairs
571 ☐ Gas or service station
579 ☐ Motor vehicle/boat sales/repairs
599 ☐ Business office
615 ☐ Electric-generating plant
629 ☐ Laboratory/science laboratory
700 ☐ Manufacturing plant
819 ☐ Livestock/poultry storage (barn)
882 ☐ Non-residential parking garage
891 ☐ Warehouse

Outside

124 ☐ Playground or park
655 ☐ Crops or orchard
669 ☐ Forest (timberland)
807 ☐ Outdoor storage area
919 ☐ Dump or sanitary landfill
931 ☐ Open land or field
936 ☐ Vacant lot
938 ☐ Graded/cared for plot of land
946 ☐ Lake, river, stream
951 ☐ Railroad right-of-way
960 ☐ Other street
961 ☐ Highway/divided highway
962 ☐ Residential street/driveway
981 ☐ Construction site
984 ☐ Industrial plant yard

Look up and enter a Property Use code and description only if you have NOT checked a Property Use box.

Property Use ___ Code

Property Use Description

K1 Person/Entity Involved

Local Option

Business Name (if applicable) | Area Code – Phone Number

☐ Check this box if same address as incident Location (Section B). Then skip the three duplicate address lines.

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | ZIP Code –

☐ **More people involved? Check this box and attach Supplemental Forms (NFIRS–1S) as necessary.**

K2 Owner

Local Option

☐ Same as person involved? Then check this box and skip the rest of this block.

Business Name (if applicable) | Area Code – Phone Number

☐ Check this box if same address as incident Location (Section B). Then skip the three duplicate address lines.

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | ZIP Code –

L Remarks:

Local Option

Fire Module Required?

Check the box that applies and then complete the Fire Module based on Incident Type, as follows:

☐ **Buildings 111**	**Complete Fire & Structure Modules**
☐ **Special structure 112**	**Complete Fire Module & Section I, Structure Module**
☐ **Confined 113–118**	**Basic Module Only**
☐ **Mobile property 120–123**	**Complete Fire & Structure Modules**
☐ **Vehicle 130–138**	**Complete Fire Module**
☐ **Vegetation 140–143**	**Complete Fire or Wildland Module**
☐ **Outside rubbish fire 150–155**	**Basic Module Only**
☐ **Special outside fire 160**	**Complete Fire or Wildland Module**
☐ **Special outside fire 161–163**	**Complete Fire Module**
☐ **Crop fire 170–173**	**Complete Fire or Wildland Module**

ITEMS WITH A ☆ MUST **ALWAYS** BE COMPLETED!

☐ **More remarks? Check this box and attach Supplemental Forms (NFIRS–1S) as necessary.**

M Authorization

Officer in charge ID | Signature | Position or rank | Assignment | Month | Day | Year

Check box if same as Officer in charge. ☐

Member making report ID | Signature | Position or rank | Assignment | Month | Day | Year

A

FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆

☐ Delete
☐ Change

NFIRS–2 Fire

B Property Details

B1 ☐ **Not Residential**
Estimated number of residential living units in building of origin *whether or not all units became involved*

B2 ☐ **Buildings not involved**
Number of buildings involved

B3 ☐ **None** ☐ **Less than one acre**
Acres burned (outside fires)

C On-Site Materials or Products

☐ **None**

Complete if there were any significant amounts of commercial, industrial, energy, or agricultural products or or materials on the property, *whether or not they became involved*

Enter up to three codes. Check one box for each code entered.

On-Site Materials Storage Use

On-site material (1)
1 ☐ Bulk storage or warehousing
2 ☐ Processing or manufacturing
3 ☐ Packaged goods for sale
4 ☐ Repair or service
U ☐ Undetermined

On-site material (2)
1 ☐ Bulk storage or warehousing
2 ☐ Processing or manufacturing
3 ☐ Packaged goods for sale
4 ☐ Repair or service
U ☐ Undetermined

On-site material (3)
1 ☐ Bulk storage or warehousing
2 ☐ Processing or manufacturing
3 ☐ Packaged goods for sale
4 ☐ Repair or service
U ☐ Undetermined

D Ignition

D1 Area of fire origin ☆

D2 Heat source ☆

D3 Item first ignited ☆ 1 ☐ Check box if fire spread was confined to object of origin.

D4 Type of material first ignited — Required only if item first ignited code is 00 or <70

E1 Cause of Ignition ☆

☐ Check box if this is an exposure report. ⇨ Skip to Section G

1 ☐ **Intentional**
2 ☐ **Unintentional**
3 ☐ **Failure of equipment or heat source**
4 ☐ **Act of nature**
5 ☐ **Cause under investigation**
U ☐ **Cause undetermined after investigation**

E2 Factors Contributing to Ignition

☐ **None**

Factor contributing to ignition (1)

Factor contributing to ignition (2)

E3 Human Factors Contributing to Ignition

Check all applicable boxes ☐ **None**

1 ☐ **Asleep**
2 ☐ **Possibly impaired by alcohol or drugs**
3 ☐ **Unattended person**
4 ☐ **Possibly mentally disabled**
5 ☐ **Physically disabled**
6 ☐ **Multiple persons involved**
7 ☐ **Age was a factor**

Estimated age of person involved

1 ☐ **Male** 2 ☐ **Female**

F1 Equipment Involved in Ignition

☐ **None** ⇨ If equipment was not involved, skip to Section G

Equipment Involved

Brand

Model

Serial #

Year

F2 Equipment Power Source

Equipment Power Source

F3 Equipment Portability

1 ☐ **Portable**
2 ☐ **Stationary**

Portable equipment normally can be moved by one or two persons, is designed to be used in multiple locations, and requires no tools to install.

G Fire Suppression Factors

☐ **None**

Enter up to three codes.

Fire suppression factor (1)

Fire suppression factor (2)

Fire suppression factor (3)

H1 Mobile Property Involved

☐ **None**

1 ☐ **Not involved in ignition, but burned**
2 ☐ **Involved in ignition, but did not burn**
3 ☐ **Involved in ignition and burned**

H2 Mobile Property Type and Make

Mobile property type

Mobile property make

Mobile property model

Year

License Plate Number

State

VIN

Structure fire? Please be sure to complete the Structure Fire form (NFIRS–3).

Local Use

☐ **Pre-Fire Plan Available**

Some of the information presented in this report may be based upon reports from other agencies:

☐ **Arson report attached**
☐ **Police report attached**
☐ **Coroner report attached**
☐ **Other reports attached**

I1 Structure Type ☆

If fire was in an enclosed building or a portable/mobile structure, complete the rest of this form.

- 1 ☐ Enclosed building
- 2 ☐ Portable/mobile structure
- 3 ☐ Open structure
- 4 ☐ Air-supported structure
- 5 ☐ Tent
- 6 ☐ Open platform (e.g., piers)
- 7 ☐ Underground structure (work areas)
- 8 ☐ Connective structure (e.g., fences)
- 0 ☐ Other type of structure

I2 Building Status ☆

- 1 ☐ Under construction
- 2 ☐ Occupied & operating
- 3 ☐ Idle, not routinely used
- 4 ☐ Under major renovation
- 5 ☐ Vacant and secured
- 6 ☐ Vacant and unsecured
- 7 ☐ Being demolished
- 0 ☐ Other
- U ☐ Undetermined

I3 Building Height ☆

Count the **roof** as part of the highest story.

Total number of stories at or above grade

Total number of stories below grade

I4 Main Floor Size ☆

NFIRS–3 Structure Fire

Total square feet

OR

Length in feet BY Width in feet

J1 Fire Origin ☆

Story of fire origin

☐ Below grade

J2 Fire Spread ☆

If fire spread was confined to object of origin, do not check a box (Ref. Block D3, Fire Module).

- 2 ☐ Confined to room of origin
- 3 ☐ Confined to floor of origin
- 4 ☐ Confined to building of origin
- 5 ☐ Beyond building of origin

J3 Number of Stories Damaged by Flame

Count the **roof** as part of the highest story.

Number of stories w/minor damage (1 to 24% flame damage)

Number of stories w/significant damage (25 to 49% flame damage)

Number of stories w/heavy damage (50 to 74% flame damage)

Number of stories w/extreme damage (75 to 100% flame damage)

K Type of Material Contributing Most to Flame Spread

☐ Check if no flame spread **OR** if same as Material First Ignited (Block D4, Fire Module) **OR** if unable to determine. → Skip to Section L

K1

Item contributing most to flame spread

K2

Type of material contributing most to flame spread

Required only if item contributing code is 00 or <70.

L1 Presence of Detectors ☆

(In area of the fire)

- N ☐ None Present → Skip to Section M
- 1 ☐ Present
- U ☐ Undetermined

L2 Detector Type

- 1 ☐ Smoke
- 2 ☐ Heat
- 3 ☐ Combination smoke and heat
- 4 ☐ Sprinkler, water flow detection
- 5 ☐ More than one type present
- 0 ☐ Other
- U ☐ Undetermined

L3 Detector Power Supply

- 1 ☐ Battery only
- 2 ☐ Hardwire only
- 3 ☐ Plug-in
- 4 ☐ Hardwire with battery
- 5 ☐ Plug-in with battery
- 6 ☐ Mechanical
- 7 ☐ Multiple detectors & power supplies
- 0 ☐ Other
- U ☐ Undetermined

L4 Detector Operation

- 1 ☐ Fire too small to activate
- 2 ☐ Operated → Complete Block L5
- 3 ☐ Failed to operate → Complete Block L6
- U ☐ Undetermined

L5 Detector Effectiveness

Required if detector operated.

- 1 ☐ Alerted occupants, occupants responded
- 2 ☐ Alerted occupants, occupants failed to respond
- 3 ☐ There were no occupants
- 4 ☐ Failed to alert occupants
- U ☐ Undetermined

L6 Detector Failure Reason

Required if detector failed to operate

- 1 ☐ Power failure, shutoff, or disconnect
- 2 ☐ Improper installation or placement
- 3 ☐ Defective
- 4 ☐ Lack of maintenance, includes not cleaning
- 5 ☐ Battery missing or disconnected
- 6 ☐ Battery discharged or dead
- 0 ☐ Other
- U ☐ Undetermined

M1 Presence of Automatic Extinguishing System ☆

- N ☐ None Present
- 1 ☐ Present → Complete rest of Section M
- U ☐ Undetermined

M2 Type of Automatic Extinguishing System

Required if fire was within designed range of AES

- 1 ☐ Wet-pipe sprinkler
- 2 ☐ Dry-pipe sprinkler
- 3 ☐ Other sprinkler system
- 4 ☐ Dry chemical system
- 5 ☐ Foam system
- 6 ☐ Halogen-type system
- 7 ☐ Carbon dioxide (CO_2) system
- 0 ☐ Other special hazard system
- U ☐ Undetermined

M3 Operation of Automatic Extinguishing System

Required if fire was within designed range

- 1 ☐ Operated/effective (go to M4)
- 2 ☐ Operated/not effective (go to M4)
- 3 ☐ Fire too small to activate
- 4 ☐ Failed to operate (go to M5)
- 0 ☐ Other
- U ☐ Undetermined

M4 Number of Sprinkler Heads Operating

Required if system operated

Number of sprinkler heads operating

M5 Reason for Automatic Extinguishing System Failure

Required if system failed or not effective

- 1 ☐ System shut off
- 2 ☐ Not enough agent discharged
- 3 ☐ Agent discharged but did not reach fire
- 4 ☐ Wrong type of system
- 5 ☐ Fire not in area protected
- 6 ☐ System components damaged
- 7 ☐ Lack of maintenance
- 8 ☐ Manual intervention
- 0 ☐ Other
- U ☐ Undetermined

A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | ☐ Delete ☐ Change

NFIRS–4 Civilian Fire Casualty

B Injured Person ☆ **Gender** 1 ☐ Male 2 ☐ Female

First Name | MI | Last Name | Suffix

C Casualty Number ☆

Casualty Number

D Age or Date of Birth ☆

Age ☐ Months (for infants)

OR

Date of Birth

Month | Day | Year

E1 Race

1 ☐ White
2 ☐ Black, African American
3 ☐ Am. Indian, Alaska Native
4 ☐ Asian
5 ☐ Native Hawaiian, Other Pacific Islander
0 ☐ Other, multiracial
U ☐ Undetermined

E2 Ethnicity

1 ☐ Hispanic or Latino
0 ☐ Non Hispanic or Latino

F Affiliation

1 ☐ Civilian
2 ☐ EMS, not fire department
3 ☐ Police
0 ☐ Other

G Date and Time of Injury Midnight is 0000.

Date of Injury: Month | Day | Year

Time of Injury: Hour | Minute

H Severity ☆

1 ☐ Minor
2 ☐ Moderate
3 ☐ Severe
4 ☐ Life threatening
5 ☐ Death
U ☐ Undetermined

I Cause of Injury

1 ☐ Exposed to fire products including flame heat, smoke, and gas
2 ☐ Exposed to toxic fumes other than smoke
3 ☐ Jumped in escape attempt
4 ☐ Fell, slipped, or tripped
5 ☐ Caught or trapped
6 ☐ Structural collapse
7 ☐ Struck by or contact with object
8 ☐ Overexertion or strain
9 ☐ Multiple causes
0 ☐ Other
U ☐ Undetermined

J Human Factors Contributing to Injury ☐ None

Check all applicable boxes

1 ☐ Asleep
2 ☐ Unconscious
3 ☐ Possibly impaired by alcohol
4 ☐ Possibly impaired by other drug
5 ☐ Possibly mentally disabled
6 ☐ Physically disabled
7 ☐ Physically restrained
8 ☐ Unattended person

K Factors Contributing to Injury ☐ None

Enter up to three contributing factors

Contributing factor (1)

Contributing factor (2)

Contributing factor (3)

L Activity When Injured

1 ☐ Escaping
2 ☐ Rescue attempt
3 ☐ Fire control
4 ☐ Return to fire before control
5 ☐ Return to fire after control
6 ☐ Sleeping
7 ☐ Unable to act
8 ☐ Irrational act
0 ☐ Other
U ☐ Undetermined

M1 Location at Time of Incident

1 ☐ In area of origin and not involved
2 ☐ Not in area of origin and not involved
3 ☐ Not in area of origin, but involved
4 ☐ In area of origin and involved
0 ☐ Other location
U ☐ Undetermined

M2 General Location at Time of Injury

1 ☐ In area of fire origin → Skip to Section N
2 ☐ In building, but not in area
3 ☐ Outside, but not in area → Skip to Block M5
U ☐ Undetermined

M3 Story at Start of Incident

Complete ONLY if injury occurred INSIDE

Story at start of incident ☐ Below grade

M4 Story Where Injury Occurred

Story where injury occurred, if different from M3 ☐ Below grade

M5 Specific Location at Time of Injury

Complete ONLY if casualty NOT in area of origin

Specific location at time of injury

N Primary Apparent Symptom

01 ☐ Smoke only, asphyxiation
11 ☐ Burns and smoke inhalation
12 ☐ Burns only
21 ☐ Cut, laceration
33 ☐ Strain or sprain
96 ☐ Shock
98 ☐ Pain only

Look up a code only if the symptom is NOT found above

Primary apparent symptom

O Primary Area of Body Injured

1 ☐ Head
2 ☐ Neck and shoulder
3 ☐ Thorax
4 ☐ Abdomen
5 ☐ Spine
6 ☐ Upper extremities
7 ☐ Lower extremities
8 ☐ Internal
9 ☐ Multiple body parts

P Disposition

☐ Transported to emergency care facility

Remarks Local option

NFIRS–5 Fire Service Casualty

A

FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆

☐ Delete
☐ Change

B Injured Person

Identification Number

1 ☐ Male ☆
2 ☐ Female

1 ☐ Career
2 ☐ Volunteer

First Name | MI | Last Name | Suffix

C Casualty Number ☆

Casualty Number

D Age or Date of Birth ☆

Age: In years

OR

Date of Birth: Month | Day | Year

E Date and Time of Injury ☆

Midnight is 0000.

Date of Injury: Month | Day | Year

Time of Injury: Hour | Minute

F Responses

Number of prior responses during past 24 hours

G1 Usual Assignment

1 ☐ Suppression
2 ☐ EMS
3 ☐ Prevention
4 ☐ Training
5 ☐ Maintenance
6 ☐ Communications
7 ☐ Administration
8 ☐ Fire investigation
0 ☐ Other

G2 Physical Condition Just Prior to Injury

1 ☐ Rested
2 ☐ Fatigued
4 ☐ Ill or injured
0 ☐ Other
U ☐ Undetermined

G3 Severity

1 ☐ Report only, including exposure
2 ☐ First aid only
3 ☐ Treated by physician (no lost time)
4 ☐ Moderate (lost time)
5 ☐ Severe (lost time)
6 ☐ Life threatening (lost time)
7 ☐ Death

G4 Taken To

☐ Not transported

1 ☐ Hospital
4 ☐ Doctor's office
5 ☐ Morgue/funeral home
6 ☐ Residence
7 ☐ Station or quarters
0 ☐ Other

G5 Activity at Time of Injury

Activity at time of injury

H1 Primary Apparent Symptom

Primary apparent symptom

H2 Primary Part of Body Injured

☐ None

Primary injured body part

I1 Cause of Firefighter Injury

Cause of injury

I2 Factor Contributing to Injury

☐ None

Contributing factor

I3 Object Involved in Injury

☐ None

Object involved in injury

J1 Where Injury Occurred

1 ☐ En route to FD location
2 ☐ At FD location
3 ☐ En route to incident scene
4 ☐ En route to medical facility
5 ☐ At scene in structure
6 ☐ At scene outside
7 ☐ At medical facility
8 ☐ Returning from incident
9 ☐ Returning from med facility
0 ☐ Other
U ☐ Undetermined

J2 Story Where Injury Occurred

1 ☐ Check this box and enter the story if the injury occurred inside or on a structure

Story of injury | ☐ Below grade

2 ☐ Injury occurred outside

J3 Specific Location Where Injury Occurred

65 ☐ In aircraft
64 ☐ In boat, ship, or barge
63 ☐ In rail vehicle
61 ☐ In motor vehicle
54 ☐ In sewer
53 ☐ In tunnel
49 ☐ In structure
45 ☐ In attic
36 ☐ In water
35 ☐ In well
34 ☐ In ravine
33 ☐ In quarry or mine
32 ☐ In ditch or trench
31 ☐ In open pit
28 ☐ On steep grade
27 ☐ On fire escape/outside stairs
26 ☐ On vertical surface or ledge
25 ☐ On ground ladder
24 ☐ On aerial ladder or in basket
23 ☐ On roof
22 ☐ Outside at grade
00 ☐ Other
UU ☐ Undetermined

Complete Block J4

J4 Vehicle Type

Complete ONLY if Specific Location code is >60

1 ☐ Suppression vehicle
2 ☐ EMS vehicle
3 ☐ Other FD vehicle
4 ☐ Non-FD vehicle

Remarks

If protective equipment failed and was a factor in this injury, please complete the other side of this form.

K1 Did protective equipment fail and contribute to the injury?

Please complete the remainder of this form ONLY if you answer YES.

Yes Y ☐
No N ☐

Equipment Sequence Number ____

NFIRS–5 Fire Service Casualty

K2 Protective Equipment Item

Head or Face Protection

- 11 ☐ Helmet
- 12 ☐ Full face protector
- 13 ☐ Partial face protector
- 14 ☐ Goggles/eye protection
- 15 ☐ Hood
- 16 ☐ Ear protector
- 17 ☐ Neck protector
- 10 ☐ Other

Coat, Shirt, or Trousers

- 21 ☐ Protective coat
- 22 ☐ Protective trousers
- 23 ☐ Uniform shirt
- 24 ☐ Uniform T-shirt
- 25 ☐ Uniform trousers
- 26 ☐ Uniform coat or jacket
- 27 ☐ Coveralls
- 28 ☐ Apron or gown
- 20 ☐ Other

Boots or Shoes

- 31 ☐ Knee length boots with steel baseplate and steel toes
- 32 ☐ Knee length boots with steel toes only
- 33 ☐ 3/4 length boots with steel baseplate and steel toes
- 34 ☐ 3/4 length boots with steel toes only
- 35 ☐ Boots without steel baseplate and steel toes
- 36 ☐ Safety shoes with steel baseplate and steel toes
- 37 ☐ Safety shoes with steel toes only
- 38 ☐ Non-safety shoes
- 30 ☐ Other

Respiratory Protection

- 41 ☐ SCBA (demand) open circuit
- 42 ☐ SCBA (positive pressure) open circuit
- 43 ☐ SCBA closed circuit
- 44 ☐ Not self-contained
- 45 ☐ Cartridge respirator
- 46 ☐ Dust or particle mask
- 40 ☐ Other

Hand Protection

- 51 ☐ Firefighter gloves with wristlets
- 52 ☐ Firefighter gloves without wristlets
- 53 ☐ Work gloves
- 54 ☐ HazMat gloves
- 55 ☐ Medical gloves
- 50 ☐ Other

Special Equipment

- 61 ☐ Proximity suit for entry
- 62 ☐ Proximity suit for non-entry
- 63 ☐ Totally encapsulated, reusable chemical suit
- 64 ☐ Totally encapsulated, disposable chemical suit
- 65 ☐ Partially encapsulated, reusable chemical suit
- 66 ☐ Partially encapsulated, disposable chemical suit
- 67 ☐ Flash protection suit
- 68 ☐ Flight or jump suit
- 69 ☐ Brush suit
- 71 ☐ Exposure suit
- 72 ☐ Self-contained underwater breathing apparatus (SCUBA)
- 73 ☐ Life preserver
- 74 ☐ Life belt or ladder belt
- 75 ☐ Personal alert safety system (PASS)
- 76 ☐ Radio distress device
- 77 ☐ Personal lighting
- 78 ☐ Fire shelter or tent
- 79 ☐ Vehicle safety belt
- 70 ☐ Special equipment, other
- 00 ☐ Protective equipment, other

Was the failure of more than one item of protective equipment a factor in the injury? If so, complete an additional page of this form for each piece of failed equipment.

K3 Protective Equipment Problem

Check one box to indicate the main problem that occurred.

- 11 ☐ Burned
- 12 ☐ Melted
- 21 ☐ Fractured, cracked or broken
- 22 ☐ Punctured
- 23 ☐ Scratched
- 24 ☐ Knocked off
- 25 ☐ Cut or ripped
- 31 ☐ Trapped steam or hazardous gas
- 32 ☐ Insufficient insulation
- 33 ☐ Object fell in or onto equipment item
- 41 ☐ Failed under impact
- 42 ☐ Face piece or hose detached
- 43 ☐ Exhalation valve inoperative or damaged
- 44 ☐ Harness detached or separated
- 45 ☐ Regulator failed to operate
- 46 ☐ Regulator damaged by contact
- 47 ☐ Problem with admissions valve
- 48 ☐ Alarm failed to operate
- 49 ☐ Alarm damaged by contact
- 51 ☐ Supply cylinder or valve failed to operate
- 52 ☐ Supply cylinder/valve damaged by contact
- 53 ☐ Supply cylinder—insufficient air/oxygen
- 94 ☐ Did not fit properly
- 95 ☐ Not properly serviced or stored prior to use
- 96 ☐ Not used for designed purpose
- 97 ☐ Not used as recommended by manufacturer
- 00 ☐ Other equipment problem
- UU ☐ Undetermined

K4 Equipment Manufacturer, Model and Serial Number

Manufacturer _____

Model _____

Serial Number _____

A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | ☐ Delete ☐ Change

NFIRS–6 EMS

B Number of Patients | Patient Number ☆

Use a separate form for each patient

C Date/Time

Check if same date as Alarm date ⇨

	Month	Day	Year	Hour/Min
☐ Time Arrived at Patient				
☐ Time of Patient Transfer				

D Provider Impression/Assessment ☆ Check one box only ☐ None/no patient or refused treatment

- 10 ☐ Abdominal pain
- 11 ☐ Airway obstruction
- 12 ☐ Allergic reaction
- 13 ☐ Altered LOC
- 14 ☐ Behavioral/psych
- 15 ☐ Burns
- 16 ☐ Cardiac arrest
- 17 ☐ Cardiac dysrhythmia
- 18 ☐ Chest pain
- 19 ☐ Diabetic symptom
- 20 ☐ Do not resuscitate
- 21 ☐ Electrocution
- 22 ☐ General illness
- 23 ☐ Hemorrhaging/bleeding
- 24 ☐ Hyperthermia
- 25 ☐ Hypothermia
- 26 ☐ Hypovolemia
- 27 ☐ Inhalation injury
- 28 ☐ Obvious death
- 29 ☐ OD/poisoning
- 30 ☐ Pregnancy/OB
- 31 ☐ Respiratory arrest
- 32 ☐ Respiratory distress
- 33 ☐ Seizure
- 34 ☐ Sexual assault
- 35 ☐ Sting/bite
- 36 ☐ Stroke/CVA
- 37 ☐ Syncope
- 38 ☐ Trauma
- 00 ☐ Other

E1 Age or Date of Birth

Age ☐ Months (for infants)

OR

Month Day Year

E2 Gender

1 ☐ Male 2 ☐ Female

F1 Race

- 1 ☐ White
- 2 ☐ Black, African American
- 3 ☐ Am. Indian, Alaska Native
- 4 ☐ Asian
- 5 ☐ Native Hawaiian, Other Pacific Islander
- 0 ☐ Other, multiracial
- U ☐ Undetermined

F2 Ethnicity

- 1 ☐ Hispanic or Latino
- 2 ☐ Non Hispanic or Latino

G1 Human Factors Contributing to Injury ☐ None

Check all applicable boxes

- 1 ☐ Asleep
- 2 ☐ Unconscious
- 3 ☐ Possibly impaired by alcohol
- 4 ☐ Possibly impaired by drug
- 5 ☐ Possibly mentally disabled
- 6 ☐ Physically disabled
- 7 ☐ Physically restrained
- 8 ☐ Unattended person

G2 Other Factors ☐ None

If an illness, not an injury, skip G2 and go to H3

- 1 ☐ Accidental
- 2 ☐ Self-inflicted
- 3 ☐ Inflicted, not self

H1 Body Site of Injury

List up to five body sites

H2 Injury Type

List one injury type for each body site listed under H1

H3 Cause of Illness/Injury

Cause of illness/injury

I Procedures Used Check all applicable boxes ☐ No treatment

- 01 ☐ Airway insertion
- 02 ☐ Anti-shock trousers
- 03 ☐ Assist ventilation
- 04 ☐ Bleeding control
- 05 ☐ Burn care
- 06 ☐ Cardiac pacing
- 07 ☐ Cardioversion (defib) manual
- 08 ☐ Chest/abdominal thrust
- 09 ☐ CPR
- 10 ☐ Cricothyroidotomy
- 11 ☐ Defibrillation by AED
- 12 ☐ EKG monitoring
- 13 ☐ Extrication
- 14 ☐ Intubation (EGTA)
- 15 ☐ Intubation (ET)
- 16 ☐ IO/IV therapy
- 17 ☐ Medications therapy
- 18 ☐ Oxygen therapy
- 19 ☐ OB care/delivery
- 20 ☐ Prearrival instructions
- 21 ☐ Restrain patient
- 22 ☐ Spinal immobilization
- 23 ☐ Splinted extremities
- 24 ☐ Suction/aspirate
- 00 ☐ Other

J Safety Equipment ☐ None

Used or deployed by patient. Check all applicable boxes.

- 1 ☐ Safety/seat belts
- 2 ☐ Child safety seat
- 3 ☐ Airbag
- 4 ☐ Helmet
- 5 ☐ Protective clothing
- 6 ☐ Flotation device
- 0 ☐ Other
- U ☐ Undetermined

K Cardiac Arrest

Check all applicable boxes

1 ☐ Pre-arrival arrest?

If pre-arrival arrest, was it:

- 1 ☐ Witnessed?
- 2 ☐ Bystander CPR?

2 ☐ Post-arrival arrest?

Initial Arrest Rhythm

- 1 ☐ V-Fib/V-Tach
- 0 ☐ Other
- U ☐ Undetermined

L1 Initial Level of Provider ☆

- 1 ☐ First Responder
- 2 ☐ EMT-B (Basic)
- 3 ☐ EMT-I (Intermediate)
- 4 ☐ EMT-P (Paramedic)
- 0 ☐ Other provider
- N ☐ No Training

L2 Highest Level of Care Provided On Scene ☐ None

- 1 ☐ First Responder
- 2 ☐ EMT-B (Basic)
- 3 ☐ EMT-I (Intermediate)
- 4 ☐ EMT-P (Paramedic)
- 0 ☐ Other provider

M Patient Status

- 1 ☐ Improved
- 2 ☐ Remained same
- 3 ☐ Worsened

Check if:

- 1 ☐ Pulse on transfer
- 2 ☐ No pulse on transfer

N EMS Disposition ☐ Not transported

- 1 ☐ FD transport to ECF
- 2 ☐ Non-FD transport
- 3 ☐ Non-FD trans/FD attend
- 4 ☐ Non-emergency transfer
- 0 ☐ Other

NFIRS–7 HazMat

A

FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | Haz No. ☆

☐ Delete
☐ Change

B HazMat ID

UN Number | DOT Hazard Classification | CAS Registration Number | Chemical Name ☆

C1 Container Type

☐ None

Container Type

More hazardous materials? Use additional sheets.

C2 Estimated Container Capacity

Capacity: by volume or weight

C3 Units: Capacity

Check one box

VOLUME		WEIGHT	
11	☐ Ounces	21	☐ Ounces
12	☐ Gallons	22	☐ Pounds
13	☐ Barrels: 42 gal.	23	☐ Grams
14	☐ Liters	24	☐ Kilograms
15	☐ Cubic feet		
16	☐ Cubic meters		

D1 Estimated Amount Released ☆

Amount released: by volume or weight

D2 Units: Released

Check one box

VOLUME		WEIGHT	
11	☐ Ounces	21	☐ Ounces
12	☐ Gallons	22	☐ Pounds
13	☐ Barrels: 42 gal.	23	☐ Grams
14	☐ Liters	24	☐ Kilograms
15	☐ Cubic feet		
16	☐ Cubic meters		

E1 Physical State When Released

1 ☐ Solid
2 ☐ Liquid
3 ☐ Gas
U ☐ Undetermined

E2 Released Into

Released into

Complete the remainder of this form only for the first hazardous material involved in this incident.

F1 Released From

Check all applicable boxes

☐ Below grade
1 ☐ Inside/on structure
Story of release
2 ☐ Outside of structure

F2 Population Density

1 ☐ Urban
2 ☐ Suburban
3 ☐ Rural

G1 Area Affected

1 ☐ Square feet
2 ☐ Blocks
3 ☐ Square miles

Enter measurement

G2 Area Evacuated

☐ None

1 ☐ Square feet
2 ☐ Blocks
3 ☐ Square miles

Enter measurement

G3 Estimated Number of People Evacuated

G4 Estimated Number of Buildings Evacuated

☐ None

H HazMat Actions Taken

Enter up to three actions taken

Primary action taken (1)

Additional action taken (2)

Additional action taken (3)

I If fire or explosion is involved with a release, which occurred first?

1 ☐ Ignition
2 ☐ Release
U ☐ Undetermined

J Cause of Release ☆

1 ☐ Intentional
2 ☐ Unintentional release
3 ☐ Container/containment failure
4 ☐ Act of nature
5 ☐ Cause under investigation
U ☐ Cause undetermined after investigation

K Factors Contributing to Release

Enter up to three contributing factors

Factor contributing to release (1)

Factor contributing to release (2)

Factor contributing to release (3)

L Factors Affecting Mitigation

☐ None

Enter up to three factors or impediments that affected the mitigation of the incident

Factor or impediment (1)

Factor or impediment (2)

Factor or impediment (3)

M Equipment Involved in Release

☐ None

Equipment involved in release

Brand

Model

Serial #

Year

N Mobile Property Involved in Release

☐ None

Mobile property type

Mobile property make

Model | Year

License plate number | State

DOT number/ ICC number

O HazMat Disposition ☆

1 ☐ Completed by fire service only
2 ☐ Completed w/fire service present
3 ☐ Released to local agency
4 ☐ Released to county agency
5 ☐ Released to state agency
6 ☐ Released to federal agency
7 ☐ Released to private agency
8 ☐ Released to property owner or manager

P HazMat Civilian Casualties

Deaths | Injuries

A

FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆

☐ Delete
☐ Change

NFIRS–8 Wildland Fire

B Alternate Location Specification

Enter Latitude/Longitude OR Township/Range/Section/Subsection Meridian if Section B on the Basic Module is not completed

Latitude • Longitude

OR

Township • ☐ North ☐ South | Range ☐ East ☐ West

Section | Subsection | Meridian

C Area Type ☆

1 ☐ Rural, farms >50 acres
2 ☐ Urban (heavily populated)
3 ☐ Rural/urban or suburban
4 ☐ Urban-wildland interface area

D1 Wildland Fire Cause ☆

1 ☐ Natural source
2 ☐ Equipment
3 ☐ Smoking
4 ☐ Open/outdoor fire
5 ☐ Debris/vegetation burn
6 ☐ Structure (exposure)
7 ☐ Incendiary
8 ☐ Misuse of fire
0 ☐ Other
U ☐ Undetermined

D2 Human Factors Contributing to Ignition

☐ None

Check as many boxes as are applicable.

1 ☐ Asleep
2 ☐ Possibly impaired by alcohol or drugs
3 ☐ Unattended person
4 ☐ Possibly mentally disabled
5 ☐ Physically disabled
6 ☐ Multiple persons involved
7 ☐ Age was a factor

D3 Factors Contributing to Ignition

☐ None

#1 | #2

D4 Fire Suppression Factors

☐ None

Enter up to three factors

#1
#2
#3

E Heat Source

F Mobile Property Type

☐ None

G Equipment Involved in Ignition

☐ None

H Weather Information

NFDRS Weather Station ID

Weather Type | Wind Direction

Wind Speed (mph) | Air Temperature F° ☐ Check if negative

Relative Humidity % | Fuel Moisture % | Fire Danger Rating

I1 Number of Buildings Ignited

☐ None

Number of buildings that were ignited in Wildland fire

I2 Number of Buildings Threatened

☐ None

Number of buildings that were threatened by Wildland fire but were not involved

I3 Total Acres Burned ☆

, , •

I4 Primary Crops Burned

Identify up to 3 crops if any crops were burned

Crop 1
Crop 2
Crop 3

J Property Management

Indicate the percent of the total acres burned for *each* ownership type then check the ONE box to identify the property ownership at the origin of the fire. If the ownership at origin is Federal, enter the Federal Agency Code.

Ownership ⇩ | % Total Acres Burned ⇩

U ☐ Undetermined %

Private

1 ☐ Tax paying %
2 ☐ Non-tax paying %

Public

3 ☐ City, town, village, local %
4 ☐ County or parish %
5 ☐ State or province %
6 ☐ Federal % (Federal Agency Code)
7 ☐ Foreign %
8 ☐ Military %
0 ☐ Other %

K NFDRS Fuel Model at Origin

Enter the code and the descriptor corresponding to the NFDRS Fuel Model at Origin

L1 Person Responsible for Fire

1 ☐ Identified person caused fire
2 ☐ Unidentified person caused fire
3 ☐ Fire not caused by person

If person identified, complete the rest of Section L

L2 Gender of Person Involved

1 ☐ Male
2 ☐ Female

L3 Age or Date of Birth

Age in Years **OR** Date of Birth (Month Day Year)

L4 Activity of Person Involved

Activity of Person Involved

M Type of Right-of-Way

☐ None

Required if less than 100 feet

Feet — Horizontal distance from right-of-way | Type of right-of-way

N Fire Behavior

These optional descriptors refer to observations made at the point of initial attack

Feet — Elevation

Relative position on slope

Aspect

Feet — Flame length

Chains per Hour — Rate of spread

A

FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆

☐ Delete
☐ Change

NFIRS–9 Apparatus or Resources

B Apparatus or Resources Use codes listed below	Dates and Times Midnight is 0000 Check if same date as Alarm date on the Basic Module (Block E1) Month Day Year Hour/Min	Sent X	Number of People ☆	Apparatus Use ☆ Check ONE box for each apparatus to indicate its main use at the incident.	Actions Taken List up to 4 actions for each apparatus.
1 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
2 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
3 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
4 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
5 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
6 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
7 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
8 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
9 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	

Apparatus or Resource Type

Ground Fire Suppression

11 Engine
12 Truck or aerial
13 Quint
14 Tanker and pumper combination
16 Brush truck
17 ARFF (aircraft rescue and firefighting)
10 Ground fire suppression, other

Heavy Ground Equipment

21 Dozer or plow
22 Tractor
24 Tanker or tender
20 Heavy ground equipment, other

Aircraft

41 Aircraft: fixed-wing tanker
42 Helitanker
43 Helicopter
40 Aircraft, other

Marine Equipment

51 Fire boat with pump
52 Boat, no pump
50 Marine equipment, other

Support Equipment

61 Breathing apparatus support
62 Light and air unit
60 Support apparatus, other

Medical and Rescue

71 Rescue unit
72 Urban search and rescue unit
73 High-angle rescue unit
75 BLS unit
76 ALS unit
70 Medical and rescue unit, other

Other

91 Mobile command post
92 Chief officer car
93 HazMat unit
94 Type I hand crew
95 Type II hand crew
99 Privately owned vehicle
00 Other apparatus/resources

More apparatus? Use additional sheets.

NN None
UU Undetermined

A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | ☐ Delete ☐ Change

NFIRS–10 Personnel

B Apparatus or Resources	Dates and Times (Midnight is 0000; Check if same date as Alarm date on the Basic Module (Block E1))	Sent [X]	Number of People ☆	Apparatus Use ☆ (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken (List up to 4 actions for each apparatus and each personnel.)
1 ID ☆Type	Dispatch ☐ Arrival ☐ Clear ☐	Sent ☐		☐ Suppression ☐ EMS ☐ Other	

Personnel ID ☆	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
			☐				
			☐				
			☐				
			☐				
			☐				
			☐				

2 ID ☆Type	Dispatch ☐ Arrival ☐ Clear ☐	Sent ☐		☐ Suppression ☐ EMS ☐ Other	

Personnel ID ☆	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
			☐				
			☐				
			☐				
			☐				
			☐				
			☐				

3 ID ☆Type	Dispatch ☐ Arrival ☐ Clear ☐	Sent ☐		☐ Suppression ☐ EMS ☐ Other	

Personnel ID ☆	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
			☐				
			☐				
			☐				
			☐				
			☐				
			☐				

A

FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆

☐ Delete
☐ Change

NFIRS–11 Arson

B Agency Referred To

☐ None

Agency name | Their case number

Number | Prefix | Street or Highway | Street Type | Suffix | Their ORI

Post Office Box | Apt./Suite/Room | City | Their Federal Identifier (FID)

State | ZIP Code – | Agency phone number – – | Their FDID

C Case Status

1 ☐ Investigation open
2 ☐ Investigation closed
3 ☐ Investigation inactive
4 ☐ Closed with arrest
5 ☐ Closed with exceptional clearance

D Availability of Material First Ignited

1 ☐ Transported to scene
2 ☐ Available at scene
U ☐ Unknown

E Suspected Motivation Factors

Check up to three factors

11 ☐ Extortion
12 ☐ Labor unrest
13 ☐ Insurance fraud
14 ☐ Intimidation
15 ☐ Void contract/lease
21 ☐ Personal
22 ☐ Hate crime
23 ☐ Institutional
24 ☐ Societal
31 ☐ Protest
32 ☐ Civil unrest
41 ☐ Fireplay/curiosity
42 ☐ Vanity/recognition
43 ☐ Thrills
44 ☐ Attention/sympathy
45 ☐ Sexual excitement
51 ☐ Homicide
52 ☐ Suicide
53 ☐ Domestic violence
54 ☐ Burglary
61 ☐ Homicide concealment
62 ☐ Burglary concealment
63 ☐ Auto theft concealment
64 ☐ Destroy records/evidence
00 ☐ Other suspected motivation
UU ☐ Unknown motivation

F Apparent Group Involvement

Check up to three factors

☐ None

1 ☐ Terrorist group
2 ☐ Gang
3 ☐ Anti-government group
4 ☐ Outlaw motorcycle organization
5 ☐ Organized crime
6 ☐ Racial/ethnic hate group
7 ☐ Religious hate group
8 ☐ Sexual preference hate group
0 ☐ Other group
U ☐ Unknown

G1 Entry Method

Entry Method

G2 Extent of Fire Involvement on Arrival

Extent of Fire Involvement

H Incendiary Devices

Select one from each category

CONTAINER

☐ No container

11 ☐ Bottle (glass)
12 ☐ Bottle (plastic)
13 ☐ Jug
14 ☐ Pressurized container
15 ☐ Can (not gas or fuel)
16 ☐ Gasoline or fuel can
17 ☐ Box
00 ☐ Other Container
UU ☐ Unknown

IGNITION/DELAY DEVICE

☐ No device

11 ☐ Wick or fuse
12 ☐ Candle
13 ☐ Cigarette and matchbook
14 ☐ Electronic component
15 ☐ Mechanical device
16 ☐ Remote control
17 ☐ Road flare/fuse
18 ☐ Chemical component
19 ☐ Trailer/streamer
20 ☐ Open flame source
00 ☐ Other delay device
UU ☐ Unknown

FUEL

☐ None

11 ☐ Ordinary combustibles
12 ☐ Flammable gas
14 ☐ Ignitable liquid
15 ☐ Ignitable solid
16 ☐ Pyrotechnic material
17 ☐ Explosive material
00 ☐ Other material
UU ☐ Unknown

I Other Investigative Information

Check all that apply

1 ☐ Code violations
2 ☐ Structure for sale
3 ☐ Structure vacant
4 ☐ Other crimes involved
5 ☐ Illicit drug activity
6 ☐ Change in insurance
7 ☐ Financial problem
8 ☐ Criminal/civil actions pending

J Property Ownership

1 ☐ Private
2 ☐ City, town, village, local
3 ☐ County or parish
4 ☐ State or province
5 ☐ Federal
6 ☐ Foreign
7 ☐ Military
0 ☐ Other

K Initial Observations

Check all that apply

1 ☐ Windows ajar
2 ☐ Doors ajar
3 ☐ Doors locked
4 ☐ Doors unlocked
5 ☐ Fire department forced entry
6 ☐ Entry forced prior to FD arrival
7 ☐ Security system activated
8 ☐ Security system present (not activated)

L Laboratory Used

Check all that apply

☐ None

1 ☐ Local
2 ☐ State
3 ☐ ATF
4 ☐ FBI
5 ☐ Other Federal
6 ☐ Private

A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | ☐ Delete ☐ Change

NFIRS–11 Juvenile Firesetter

Complete this section if the person involved in the ignition of the fire was a child or Juvenile under the age of 18

M1 Subject Number
Complete a separate Section M form for each juvenile
Subject Number

M2 Age or Date of Birth
Age (in years)
OR
Month Day Year

M3 Gender
1 ☐ Male 2 ☐ Female

M4 Race
1 ☐ White
2 ☐ Black, African American
3 ☐ American Indian, Alaska Native
4 ☐ Asian
5 ☐ Native Hawaiian, Other Pacific Islander
0 ☐ Other, multiracial
U ☐ Undetermined

M5 Ethnicity
1 ☐ Hispanic or Latino
0 ☐ Non Hispanic or Latino

M6 Family Type
1 ☐ Single parent
2 ☐ Foster parent(s)
3 ☐ Two-parent family
4 ☐ Extended family
N ☐ No family unit
0 ☐ Other family type
U ☐ Unknown

M7 Motivation/Risk Factors
Check only one of codes 1–3 and then all others (4–9) that apply

1 ☐ Mild curiosity about fire
2 ☐ Moderate curiosity about fire
3 ☐ Extreme curiosity about fire

4 ☐ Diagnosed (or suspected) ADD/ADHD
5 ☐ History of trouble outside school
6 ☐ History of stealing or shoplifting
7 ☐ History of physically assaulting others
8 ☐ History of fireplay or firesetting
9 ☐ Transiency
0 ☐ Other
U ☐ Unknown

M8 Disposition of Person Under 18
1 ☐ Handled within department
2 ☐ Released to parent/guardian
3 ☐ Referred to other authority
4 ☐ Referred to treatment/counseling program
5 ☐ Arrested, charged as adult
6 ☐ Referred to firesetter intervention program
0 ☐ Other
U ☐ Unknown

N Remarks (local use)

A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | ☐ Delete ☐ Change

NFIRS–1S Supplemental

K1 Person/Entity Involved

Local Option

Business Name (if applicable) | Area Code – Phone Number

☐ Check this box if same address as incident location. Then skip these three duplicate address lines.

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | ZIP Code –

K1 Person/Entity Involved

Local Option

Business Name (if applicable) | Area Code – Phone Number

☐ Check this box if same address as incident location. Then skip these these duplicate address lines.

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | ZIP Code –

K1 Person/Entity Involved

Local Option

Business Name (if applicable) | Area Code – Phone Number

☐ Check this box if same address as incident location. Then skip these three duplicate address lines.

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | ZIP Code –

K1 Person/Entity Involved

Local Option

Business Name (if applicable) | Area Code – Phone Number

☐ Check this box if same address as incident location. Then skip these three duplicate address lines.

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | ZIP Code –

K1 Person/Entity Involved

Local Option

Business Name (if applicable) | Area Code – Phone Number

☐ Check this box if same address as incident location. Then skip these three duplicate address lines.

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | ZIP Code –

E3 **Supplemental Special Studies**

Local Option

NFIRS–1S Supplemental

1	Special Study ID#	Special Study Value	**2**	Special Study ID#	Special Study Value	**3**	Special Study ID#	Special Study Value	**4**	Special Study ID#	Special Study Value
5	Special Study ID#	Special Study Value	**6**	Special Study ID#	Special Study Value	**7**	Special Study ID#	Special Study Value	**8**	Special Study ID#	Special Study Value

L

Remarks:

Local Option

Appendix B

ALPHABETIZED SYNONYMS OF SELECTED CODE LISTS

APPENDIX B

ALPHABETIZED SYNONYMS OF SELECTED CODE LISTS

This appendix presents synonyms of several code lists presented in the chapters to this guide. These alphabetical lists are based on the logic and definitions of their respective code lists. They are designed to assist a user in selecting proper classifications. A person using this list, however, should compare the classification found here with those in the chapter to ensure that there are no qualifications on the definition of a term.

The six synonym lists of this appendix apply to eleven code lists in the chapters, as follows:

Property Use – Page B–3:
Chapter 3, Basic Module, Section J, *Property Use*

Materials/Products – Page B–9:
Chapter 4, Fire Module, Section C, *On-Site Materials or Products*

Area/Location – Page B–14:
Chapter 4, Fire Module, Block D,: *Area of Fire Origin*
Chapter 6, Civilian Fire Casualty Module, Block M5, *Specific Location at Time of Injury*

Items Ignited – Page B–18:
Chapter 4, Fire Module, Block D3: *Item First Ignited*
Chapter 5, Structure Fire Module, Block K1: *Item Contributing Most to Flame Spread*

Type of Material – Page B–22:
Chapter 4, Fire Module, Block D4: *Type of Material First Ignited*
Chapter 5, Structure Fire Module, Block K2, *Type of Material Contributing Most to Flame Spread*

Equipment Involved – Page B–25:
Chapter 4, Fire Module, Block F1, *Equipment Involved in Ignition*
Chapter 9, HazMat Module, Section M, *Equipment Involved in Release*
Chapter 10, Wildland Fire Module, Section G, *Equipment Involved in Ignition*

Property Use Codes

A

599 Administrative office
241 Adult art school
241 Adult dance school
241 Adult education center
655 Agriculture: farm, crops, orchard (incl. processing and packaging on property)
974 Aircraft loading area
972 Aircraft runway
973 Aircraft taxiway
171 Airport terminal
322 Alcohol abuse recovery center
549 Ammunition sales
123 Amphitheater
113 Amusement center, electronic
129 Amusement center, indoor or outdoor
300 Animal hospital
819 Animal pen, shelter
539 Antique shop
429 Apartment
700 Appliance manufacturing
539 Appliance store
152 Aquarium
113 Arcade, video
123 Arena
123 Armory, with fixed seating
122 Armory, without fixed seating
152 Art gallery
241 Art school, adult
569 Art supplies
323 Asylum
141 Athletic club
592 ATM kiosk
599 Attorney's office
182 Auditorium
579 Automobile sales, service, repair

B

519 Bakery sales
123 Ballpark
121 Ballroom
592 Bank
162 Bar
557 Barber shop
819 Barn
464 Barracks
110 Baseball batting range
121 Basketball court
116 Bathhouse
937 Beach
142 Beach club
557 Beauty shop
700 Beverage manufacturing
112 Billiard center
700 Bindery, book
144 Bingo parlor (gambling)
700 Blacksmith shop
439 Boarding house
898 Boat launching facility
571 Boat refueling facility
579 Boat sales, service, repair
143 Boating club
700 Book bindery
549 Book store
111 Bowling alley
141 Boys' club
921 Bridge
931 Brushland
464 Bunk house
173 Bus station
599 Business office

C

116 Cabana
161 Cafe, cafeteria
935 Campsite with utilities
519 Candy store
579 Car sales, service, repair
129 Carnival
144 Casino
581 Catalog store
131 Cathedral
938 Cemetery
322 Center, alcohol/drug/substance abuse
131 Chapel
700 Chemical manufacturing
254 Child care, in commercial property
255 Child care, in residence, licensed
256 Child care, in residence, unlicensed
569 Chimney cleaning service
549 China shop
340 Chiropractor office
131 Church
129 Circus
241 Classroom, college
341 Clinic
529 Clothing store
141 Club: athletic, health
142 Club: country, golf, equestrian, tennis, hunting, fishing
144 Club, gambling
143 Club, yacht
142 Clubhouse
679 Coal mine
926 Collection box, charity
241 College building, classroom
464 College dormitory
963 Commercial street, road

Property Use Codes (Cont'd)

639 Communications center
635 Computer center, laboratory
182 Concert hall
429 Condo
981 Construction site (not buildings)
311 Convalescent home
511 Convenience store
464 Convent dormitory
122 Convention center, without fixed seating
142 Country club
155 Courthouse, courtroom
946 Creek
134 Crematorium
323 Criminally insane facility
655 Crops

D

519 Dairy store
121 Dance hall
241 Dance school, adult
254 Day care, in commercial property
255 Day care, in residence, licensed
256 Day care, in residence, unlicensed
631 Defense installation
519 Delicatessen
342 Dentist's office
581 Department store
419 Detached home
361 Detention camp, adult
363 Detention home, juvenile
161 Diner
161 Dining hall
162 Dinner theater
960 Dirt Road
321 Disability development facility
162 Disco club
581 Discount store
961 Divided highway
898 Dock
342 Doctor's office
464 Dormitory
183 Drive-in theater
962 Driveway, residential
322 Drug abuse recovery center
581 Drug store
564 Dry cleaning shop
529 Dry goods shop
919 Dump
419 Duplex
419 Dwelling, one- and two-family

E

241 Education center, adult
659 Egg production
642 Electrical distribution system
700 Electrical equipment manufacturing
642 Electrical substation
615 Electric-generating plant
113 Electronic amusement center
213 Elementary school (incl. kindergarten)
921 Elevated roadway, railway
816 Elevator, grain
341 Emergency medical facility
142 Equestrian club, lodge
122 Exhibit hall, without fixed seating
800 Explosives storage
569 Exterminating service
549 Eyeglass store

F

700 Factory
129 Fair (carnival)
655 Farm
122 Field house, without fixed seating
931 Field, open
123 Field, sports
982 Field: gas, oil
186 Film production studio
888 Fire station
559 Fireworks sales
659 Fish hatchery
142 Fishing lodge
645 Flammable liquid distribution
569 Floor cleaning service
549 Florist shop
519 Food and beverage sales
700 Food industry processing
700 Footwear manufacturing
669 Forest
462 Fraternity house
134 Funeral parlor
700 Furniture manufacturing
539 Furniture store

G

144 Gambling club
882 Garage, commercial parking, general vehicle
881 Garage, parking (detached from residence)
648 Garbage disposal (not landfill)
559 Garden supply store
644 Gas distribution system
982 Gas field
571 Gas station
142 Golf club
938 Golf course, public or private
110 Golf driving range
599 Government office (not defense)
816 Grain elevator

Property Use Codes (Cont'd)

123 Grandstand
931 Grassland
679 Gravel pit
655 Greenhouse
519 Grocery store
121 Gymnasium

H

557 Hair salon
459 Halfway house
880 Hangar: airplane, boat
539 Hardware store
659 Hatchery, fish
141 Health club
614 Heat-generating plant
974 Helipad, helistop
171 Heliport
343 Hemodialysis unit (not part of hospital)
215 High school
961 Highway: divided, limited access
559 Hobby shop
123 Hockey rink (in arena)
419 Home: detached, manufactured, mobile
569 Home maintenance service
439 Homeless shelter
332 Hospice
331 Hospital: medical, pediatric, psychiatric
449 Hostel
449 Hotel, commercial
439 Hotel, residential
439 House: boarding, rooming
462 House: fraternity, sorority
539 Household goods, repairs, sales
142 Hunting lodge

I

114 Ice skating rink, indoor or outdoor
648 Incinerator
984 Industrial plant yard area (not outdoor storage)
700 Industry
331 Infirmary, hospital-type
341 Infirmary, clinic-type
449 Inn
599 Insurance carrier's office

J

361 Jail, not part of police station or other facility
549 Jewelry store
215 Junior high school
363 Juvenile detention center

K

162 Karaoke bar
819 Kennel
162 Key club
213 Kindergarten

L

599 Labor organization office
635 Laboratory, computer
629 Laboratory, science
946 Lake
938 Land plot, graded or cared-for
931 Land, open
919 Landfill, sanitary
898 Launching facility for boats
564 Laundry
599 Lawyer's office
151 Library
569 Linen supply house
519 Liquor store
659 Livestock production
819 Livestock storage
974 Loading area, aircraft
839 Locker, storage
449 Lodge
141 Lodge: athletic, health
142 Lodge: fishing, hunting
439 Lodging house
311 Long-term care facility, medical
459 Long-term care facility, nonmedical (not nursing home)
936 Lot, vacant
571 LP-gas bottle filling station, public
849 LP-gas storage
559 Lumber sales

M

926 Mailbox
596 Mailing firm
581 Mall, common areas
419 Manufactured home
700 Manufacturing
898 Marina
898 Marine passenger terminal
571 Marine refueling facility
579 Marine sales, service, repair
519 Market
511 Market, convenience
952 Marshalling yard
174 Mass transit station
134 Mausoleum
931 Meadow
331 Medical hospital
154 Memorial structure
323 Mental institution
321 Mental retardation facility
700 Metal manufacturing

Property Use Codes (Cont'd)

174 Metro
215 Middle school
464 Military barracks
631 Military installation
659 Milking facility
679 Mine
899 Mini-storage unit
110 Miniature golf course
131 Mission
419 Mobile home
464 Monastery dormitory
154 Monument
134 Morgue
134 Mortuary
131 Mosque
449 Motel, commercial
579 Motor vehicle sales, service, repair
186 Movie production studio
183 Movie theater
181 Movie theater with stage
429 Multifamily dwelling
152 Museum
539 Music store

N

557 Nail salon
679 Natural gas well
700 Newspaper publishing
549 Newspaper stand, shop
162 Nightclub
615 Nuclear powerplant
211 Nursery school
464 Nurses' quarters
311 Nursing home

O

941 Ocean
599 Office, business (incl. administrative, attorney's, insurance carrier, labor organization, real estate, trade association)
342 Office: dentist, doctor, oral surgeon
629 Office incidental to laboratory facility
300 Office, veterinary, research (not a laboratory)
982 Oil field
679 Oil well
419 One-family dwelling
181 Opera house
549 Optical goods sales
342 Oral surgeon's office
655 Orchard
926 Outbuilding (not garage or shed)
808 Outbuilding, storage
124 Outdoor area with recreational equipment
926 Outhouse
341 Outpatient clinic
807 Outside material storage area
849 Outside storage tank
921 Overpass

P

539 Paint store
700 Papermill
938 Park
935 Park, camping trailer/recreational vehicle, with utilities
965 Parking area, uncovered
881 Parking garage, detached from residence
882 Parking garage, commercial, general vehicle
171 Passenger terminal, airport
173 Passenger terminal, bus
898 Passenger terminal, marine
174 Passenger terminal: rail, rapid transit, subway
931 Pasture
549 Pawn shop
331 Pediatric hospital
361 Penitentiary
557 Personal service
559 Pet store
700 Petroleum refinery
700 Pharmaceutical manufacturing
549 Pharmacy
559 Photographic equipment store
898 Pier
983 Pipeline (not gas, flammable liquid, or water)
645 Pipeline, flammable liquid
644 Pipeline, gas
647 Pipeline, water
152 Planetarium
984 Plant yard, industrial (not outdoor storage)
615 Plant, electric-generating
614 Plant, heat-/steam-generating
700 Plastic manufacturing
124 Playground
926 Playhouse, children's
365 Police station
946 Pond
112 Pool hall
116 Pool, swimmin,: indoor or outdoor
941 Port (not piers or wharves)
596 Post office
659 Poultry production
819 Poultry storage
819 Pound
983 Power line right-of-way
211 Preschool
700 Printing facilities
361 Prison, adult
926 Privy
186 Production studio, film or movie

Property Use Codes (Cont'd)

569 Professional supplies or services
926 Protective shelter
331 Psychiatric hospital
162 Pub
700 Publishing
110 Putt-putt miniature golf

Q

679 Quarry

R

123 Race track
639 Radio facility
185 Radio studio
951 Railroad right-of-way
952 Railroad yard
174 Rapid transit station
679 Raw materials mine, quarry
599 Real estate office
110 Recreation site, fixed-use
559 Recreational store
919 Recycling collection point
363 Reformatory
839 Refrigerated storage
539 Repair shop, household goods
593 Research office (not a laboratory)
459 Residential board and care
881 Residential garage, detached from residence
439 Residential hotel
899 Residential storage unit
962 Residential street, road, driveway
938 Residential yard
161 Restaurant (incl. carryout, drive-through, fast food)
983 Right-of-way: power line, other utility
951 Right-of-way, railroad
123 Rink: ice, hockey, and roller skating (in arena)
114 Rink, ice skating, indoor or outdoor
115 Rink, roller skating, indoor or outdoor
946 River
937 Riverfront area (not piers or docks)
963 Road, commercial
962 Road, residential
115 Roller skating rink, indoor or outdoor
439 Rooming house
429 Row house
648 Rubbish burner, industrial
121 Running track, indoor
972 Runway, aircraft

S

557 Salon: nail, tanning, hair
162 Saloon
679 Salt mine
919 Sanitary landfill
648 Sanitation utility
700 Sawmill
241 School: art, dancing
213 School, elementary (including kindergarten)
215 School: high, middle, junior
241 School, vocational
629 Science laboratory
941 Sea
564 Self-service laundromat
571 Service station
648 Sewage disposal
808 Shed
439 Shelter, homeless
926 Shelter, protective
529 Shoe store
557 Shop: barber, beauty
549 Shop, specialty
816 Silo
419 Single-family dwelling
115 Skateboard park
114 Skating rink, ice
115 Skating rink, roller
700 Slaughterhouse
161 Snack bar
141 Social club
462 Sorority house
549 Specialty shop
123 Sports arena, field, stadium
559 Sporting goods store
819 Stable
123 Stadium
174 Station, transit
549 Stationery shop
154 Statue
614 Steam-generating plant
819 Stockyard
882 Storage, commercial vehicle
800 Storage, explosives
819 Storage, livestock
807 Storage, outside material
849 Storage, outside tank
880 Storage, vehicle (incl. aircraft, boat; not parking garage)
891 Storage, warehouse (not refrigerated storage)
839 Storage: locker, refrigerated
899 Storage unit: self-, mini-
539 Store: antique, appliance, furniture, hardware, music, paint, wallpaper, video
519 Store: bakery, candy, dairy, grocery, liquor
529 Store: clothing, shoe, wearing apparel
511 Store, convenience
581 Store: department, discount, catalog, drug

Property Use Codes (Cont'd)

559 Store, recreational (incl. hobby, toy, pet, sporting goods, photographic supply, garden supply, lumber supply, fireworks)
549 Store, specialty (incl. ammunition, book, china, florist, jewelry, optical, pharmacy, stationery, newspaper, tobacco)
946 Stream
963 Street, commercial
962 Street, residential
186 Studio, film or movie production
185 Studio, radio and television
322 Substance abuse recovery center
174 Subway station
519 Supermarket
162 Supper club
116 Swimming pool, indoor or outdoor
952 Switchyard
131 Synagogue

T

849 Tank storage, gas
557 Tanning salon
162 Tavern
973 Taxiway, aircraft
926 Telephone booth
639 Television facility
185 Television studio
131 Temple
429 Tenement
142 Tennis club
171 Terminal, airport
173 Terminal, bus
898 Terminal, marine
174 Terminal: rail, rapid transit, subway
700 Textile processing, manufacturing
529 Textile, wearing apparel sales
162 Theater, dinner
183 Theater, drive-in
181 Theater, live performance
183 Theater, movie
669 Timberland
579 Tire store
700 Tobacco processing
549 Tobacco sales
926 Toll booth
808 Tool shed
429 Townhouse
559 Toy store
121 Track, running, indoor
599 Trade association office
926 Tramway, aerial
642 Transformer, electrical
921 Trestle
922 Tunnel
419 Two-family dwelling

U

922 Underground passage
926 Underground shelter
241 University building, classroom
642 Utility pole
983 Utility right-of-way

V

936 Vacant lot
700 Vehicle assembly, manufacturing
571 Vehicle fueling station
965 Vehicle parking area, uncovered
882 Vehicle parking, commercial, general vehicle
880 Vehicle storage: aircraft, boat (not parking garage)
593 Veterinary office
113 Video arcade
539 Video store
241 Vocational school

W

549 Wallpaper store
891 Warehouse
647 Water utility (incl. collection, distribution, storage, and treatment)
700 Wearing apparel manufacturing
529 Wearing apparel store
898 Wharf
669 Wildland preserve
569 Window washing service
669 Woodland

Y

143 Yacht club
938 Yard, residential
449 YMCA, YWCA, with sleeping facilities
141 YMCA, YWCA, without sleeping facilities

Z

938 Zoo

On-Site Materials or Products Codes

A

628 Abrasives
233 Accessories: backpacks, belts, briefcases, purses, satchels, wallets
231 Accessories: jewelry, watches
232 Accessories: luggage, suitcases
517 Adhesives
134 Agriculture, crops (not grain)
132 Agriculture: feed, grain, seed
138 Agriculture, fertilizer
133 Agriculture, hay, straw
135 Agriculture, livestock
137 Agriculture, pesticides
136 Agriculture, pets
131 Agriculture: trees, plants, flowers
831 Aircraft: airplanes
832 Aircraft: helicopters
831 Airplanes
121 Alcoholic beverages
811 All terrain vehicles (ATVs)
642 Aluminum products
932 Ammunition
118 Animal fat
332 Animal skins, fur
331 Animal skins, leather
712 Answering machines
921 Antiques
711 Appliances, electronics: appliances
713 Appliances, electronics: electronic media
712 Appliances, electronics: electronic supplies
714 Appliances, electronics: photographic supplies
943 Art supplies
943 Artwork
516 Asphalt
813 Automobile parts (not tires)
811 Automobiles

B

233 Backpacks
111 Baked goods
911 Barrels
225 Beauty supply
213 Bedding
242 Beds
112 Beef, meat products
121 Beer
233 Belts
121 Beverages, alcoholic
122 Beverages, nonalcoholic
851 Bicycles (incl. tandum)
811 Bikes, mini
821 Boats
412 Books
911 Bottles
911 Boxes
622 Building supplies
233 Briefcases
811 Buses
522 Butane
113 Butter

C

714 Cameras
811 Camper trailers
945 Camping products
821 Canoes
415 Cardboard
413 Cards, greeting
613 Carpentry tools
631 Carpets
811 Carts, golf
713 Cassette tapes
136 Cats
622 Cement mix
633 Ceramic tile
245 Ceramics
117 Cereals, packaged
531 Charcoal
113 Cheese
543 Chemicals, drugs: cleaning supplies
541 Chemicals, drugs: hazardous chemicals
545 Chemicals, drugs: illegal drugs
542 Chemicals, drugs: nonhazardous chemicals
544 Chemicals, drugs: pharmaceuticals
245 China
952 China, restaurant supplies
712 Circuit boards
543 Cleaning supplies
243 Clocks
214 Cloth
221 Clothes, wearable products
532 Coal
534 Coke
922 Collectibles
225 Cologne
513 Combustible liquid, including heating oil
643 Combustible metal products (magnesium, titanium)
712 Communications equipment
713 Compact disks (CD-ROMs)
712 Computers
622 Construction and home improvement products
628 Construction supplies, abrasives
622 Construction supplies, construction and home improvement
626 Construction supplies, electrical parts
629 Construction supplies, fencing
621 Construction supplies, hardware products

On-Site Materials or Products Codes (Cont'd)

627 Construction supplies, insulation
625 Construction supplies: lighting fixtures, lamps
623 Construction supplies: pipes, fittings
624 Construction supplies, stone-working materials
812 Construction vehicles
911 Containers, packing materials: bottles, barrels, boxes
912 Containers, packing materials: packing material
913 Containers, packing materials: pallets
118 Cooking grease
416 Copier paper
421 Cordage
313 Cork
225 Cosmetics
321 Cotton
942 Crafts
134 Crops (not grain)
211 Curtains

D

113 Dairy products
116 Delicatessen products: meat, poultry, fish
721 Dental supplies
511 Diesel fuel
952 Dinnerware, restaurant supplies
961 Discarded material, junkyard materials
962 Discarded material, recyclables
963 Discarded material, trash (not recyclable)
711 Dishwashers
713 Disks, computer
136 Dogs
211 Drapes
545 Drugs, illegal
544 Drugs, legal

E

245 Earthenware
713 Electronic media
712 Electronic supplies
933 Explosives
223 Eyeglasses

F

213 Fabrics, bedding
214 Fabrics: cloth, yarn, dry goods
211 Fabrics: curtains, drapes
212 Fabrics, linens
811 Farm vehicles
118 Fat, cooking
132 Feed
629 Fencing, fence supplies
138 Fertilizer
344 Fiberglass
321 Fibers, cotton
323 Fibers, silk
322 Fibers, wool
714 Film, photographic
934 Fireworks
116 Fish, deli products
112 Fish, meat products
623 Fittings
831 Fixed-wing aircraft
523 Flammable gases, hydrogen
522 Flammable gases: LP gas, butane, propane
521 Flammable gases, natural gas
512 Flammable liquid (not gasoline)
517 Flammables, combustible liquids: adhesive, resin, tar
516 Flammables, combustible liquids: asphalt
511 Flammables, combustible liquids: diesel fuel, gasoline
512 Flammables, combustible liquids: flammable liquids (not gasoline)
515 Flammables, combustible liquids: grease (noncooking), heavy oils
513 Flammables, combustible liquids: heating oil
514 Flammables, combustible liquids: motor oil
923 Flea market goods
631 Floor and wall coverings: carpets, rugs
633 Floor and wall coverings, ceramic tile
632 Floor and wall coverings: linoleum, tile
635 Floor and wall coverings, paint
634 Floor and wall coverings, wallpaper
131 Flowers
111 Food, baked goods
113 Food, dairy products
116 Food, deli products
118 Food, fat/cooking grease
112 Food: fish, meat, poultry products
117 Food: packaged cereals, grains
114 Food: produce:fruit, vegetables
115 Food: sugar, spices
222 Footwear
114 Fruit
511 Fuel, diesel
332 Fur
242 Furnishings: beds, mattresses
243 Furnishings, clocks
241 Furnishings, furniture
245 Furnishings: glass, ceramics, china, pottery
244 Furnishings, housewares
246 Furnishings, silverware
241 Furniture

G

942 Games
963 Garbage
523 Gas, hydrogen
522 Gas, LP

On-Site Materials or Products Codes (Cont'd)

521 Gas, natural
511 Gasoline
245 Glass
223 Glasses, optical
811 Go-karts
811 Golf carts
923 Goods, flea market
132 Grain
117 Grain, packaged
515 Grease-based material (noncooking)
118 Grease, cooking
413 Greeting cards
628 Grinding material
931 Gun

H

613 Hand tools
621 Hardware products
133 Hay
541 Hazardous chemicals
513 Heating oil
515 Heavy oil
832 Helicopters
945 Hiking products
942 Hobby materials, supplies
622 Home improvement products
136 Household pets
244 Housewares
523 Hydrogen gas

I

545 Illegal drugs
612 Industrial machine parts
611 Industrial machinery
627 Insulation
641 Iron products, metal
711 Irons, appliance

J

821 Jet skis
231 Jewelry
963 Junk (not recyclable)
961 Junkyard materials

L

725 Laboratory supplies
625 Lamps
118 Lard
811 Lawn mower, riding
331 Leather
625 Light fixtures
841 Light rail
625 Lighting
212 Linens
632 Linoleum
121 Liquor
135 Livestock
522 LP gas
232 Luggage
311 Lumber

M

612 Machine parts
611 Machinery, tools: industrial machinery
612 Machinery, tools: machine parts
613 Machinery, tools: tools (power and hand)
411 Magazines
643 Magnesium products
225 Makeup (cosmetics)
242 Mattress
112 Meat products
116 Meat, deli products
722 Medical supplies
721 Medical, laboratory products: dental supplies
725 Medical, laboratory products: laboratory supplies
722 Medical, laboratory products: medical supplies
723 Medical, laboratory products: optical products
724 Medical, laboratory products: veterinary supplies
923 Merchandise, used
643 Metal products, combustible (incl. magnesium, titanium)
641 Metal products: iron, steel
642 Metal products, nonferrous metal (incl. aluminum)
811 Minibikes
935 Missiles
951 Mixed sales products, office supplies
952 Mixed sales products, restaurant supplies
841 Monorails
811 Motor homes
514 Motor oil
811 Motor vehicles: automobiles, trucks, buses, recreational vehicles, riding mowers, farm vehicles
812 Motor vehicles, construction
813 Motor vehicles, parts (not tires)
814 Motor vehicles, tires
811 Motorcycles
811 Mowers, lawn (riding)
932 Munitions
941 Musical instruments

N

416 Napkins
521 Natural gas
411 Newspapers
122 Nonalcoholic beverages

On-Site Materials or Products Codes (Cont'd)

642 Nonferrous metal products (incl. aluminum)
542 Nonhazardous chemicals
851 Nonmotorized vehicles
132 Nuts

O

951 Office supplies
513 Oil, heating
515 Oil, heavy
514 Oil, motor
723 Optical products
932 Ordnance
932 Ordnance, explosives, fireworks: ammunition
933 Ordnance, explosives, fireworks: explosives
934 Ordnance, explosives, fireworks: fireworks
931 Ordnance, explosives, fireworks: guns
935 Ordnance, explosives, fireworks: rockets, missiles
341 Ore
945 Outdoor products

P

416 Packaged paper products: stationery, copier paper, napkins, toilet paper.
912 Packing materials
635 Paint
913 Pallets
412 Paper products, books
415 Paper products, cardboard
413 Paper products, greeting cards
411 Paper products: newspapers, magazines
416 Paper products: packaged paper, stationery
414 Paper products, rolled paper
416 Paper towels
533 Peat
225 Perfume
821 Personal watercraft
137 Pesticides
136 Pets
544 Pharmaceuticals
714 Photographic film, supplies
623 Pipes
131 Plants
343 Plastics
623 Plumbing supplies
112 Pork, meat products
245 Pottery
116 Poultry, deli products
112 Poultry, meat products
613 Power tools
921 Previously owned products, antiques
922 Previously owned products, collectibles
923 Previously owned products, used merchandise (e.g., flea market goods)
114 Produce
522 Propane
314 Pulp
233 Purses

R

551 Radioactive materials
712 Radios
842 Rail equipment
841 Rail: trains, light rail, raid transit
841 Rapid transit
344 Raw materials, other: fiberglass
341 Raw materials, other: ore
343 Raw materials, other: plastics
342 Raw materials, other: rubber
345 Raw materials, other: salt
712 Receivers
713 Records, vinyl
943 Recreation, arts products: art supplies, artwork
945 Recreation, arts products: camping, hiking, outdoor products
942 Recreation, arts products: hobby, crafts
941 Recreation, arts products: musical instruments
944 Recreation, arts products: sporting goods
811 Recreational vehicles
962 Recyclable materials
711 Refrigerators
517 Resin
952 Restaurant supplies (not food)
935 Rockets
414 Rolled paper
421 Rope
342 Rubber
963 Rubbish
631 Rugs

S

821 Sailboats
345 Salt
628 Sandpaper
233 Satchels
315 Sawdust
311 Sawn wood
963 Scrap (not recyclable)
132 Seed
821 Ships
222 Shoes, wearable products
323 Silk
246 Silverware
952 Silverware, restaurant supplies
811 Snowmobiles
531 Solid fuel, coal type: charcoal
532 Solid fuel, coal type: coal
534 Solid fuel, coal type: coke

On-Site Materials or Products Codes (Cont'd)

533 Solid fuel, coal type: peat
115 Spices (not salt)
944 Sporting goods
416 Stationery
641 Steel products
712 Stereos
245 Stoneware
624 Stone-working materials
711 Stoves
133 Straw
841 Subway
115 Sugar
232 Suitcase

T

713 Tapes: cassette, video
517 Tar
712 Telephones
712 Televisions
633 Tile, ceramic
632 Tile, linoleum
312 Timber
814 Tires
643 Titanium products
134 Tobacco crops
416 Toilet paper
226 Toiletries
613 Tools, power and hand
942 Toys
811 Trailers, camper
841 Trains
626 Transformers
963 Trash (not recyclable)
131 Trees
813 Truck parts (not tires)
811 Trucks
851 Tricycles
421 Twine

U

851 Unicycles
923 Used merchandise
952 Utensils, restaurant supplies

V

711 Vacuum cleaners
114 Vegetables
813 Vehicle parts (not tires)
814 Vehicle tires
812 Vehicles, construction
811 Vehicles, farm
851 Vehicles, nonmotorized
811 Vehicles, recreational
724 Veterinary supplies
712 Video cassette recorders
713 Video tapes

W

233 Wallets
634 Wallpaper
231 Watches
821 Watercraft
221 Wearable products, clothes
223 Wearable products, eyeglasses
222 Wearable products, footwear
225 Wearable products: perfumes, colognes, cosmetics
226 Wearable products, toiletries
121 Wine (incl. wine coolers)
626 Wire, electrical
315 Wood chips
313 Wood products, cork
311 Wood products: lumber, sawn wood
314 Wood products, pulp
315 Wood products: sawdust, wood chips
312 Wood products, timber
322 Wool

Y

214 Yarn

Area of Fire Origin *and* Specific Location at Time of Injury Codes

A

55 Air conditioning duct
67 Air enclosure, pressurized
53 Air shaft
85 Aircraft cockpit
11 Arena, assembly area with fixed seats, >100 persons
16 Art gallery
46 Ash pit
11 Assembly area with fixed seats, >100 persons
13 Assembly area without fixed seats, <100 persons
12 Assembly area without fixed seats, >100 persons
38 Assembly area, manufacturing
73 Assembly, ceiling and floor
21 Attic, sleeping
43 Attic, storage
74 Attic, vacant
11 Auditorium, assembly area with fixed seats, >100 persons
92 Avenue, on or near
78 Awning

B

36 Backstage
72 Balcony, exterior
12 Ballroom, assembly area without fixed seats, >100 persons
44 Bank vault
23 Bar area
28 Barber shop
22 Barracks, >5 persons
43 Basement, storage
36 Basketball court, stage area
25 Bathroom
45 Bay, loading
28 Beauty salon
21 Bedroom, <5 persons
22 Bedroom, >5 persons
23 Beverage service area
41 Bin, storage
62 Boiler room
92 Boulevard, on or near
12 Bowling alley, assembly area without fixed seats, >100 persons
36 Boxing ring, stage area
85 Bridge, ship

C

81 Cab of truck
55 Cable duct
23 Cafeteria
23 Canteen area
82 Cargo area, vehicle
47 Carport
73 Ceiling and floor assembly
74 Ceiling and roof assembly
66 Cell
11 Chapel, assembly area with fixed seats, >100 persons
25 Checkroom
38 Chemical reactor
74 Church steeple
11 Church, assembly area with fixed seats, >100 persons
54 Chute: laundry, mail
46 Chute: rubbish, trash, waste (incl. compactor and garbage areas)
11 Classroom, assembly area with fixed seats, >100 persons
13 Classroom, assembly area without fixed seats, <100 persons
25 Cloak room
42 Closet
38 Coating, painting area: production
85 Cockpit
41 Cold storage room
14 Common room
46 Compactor
35 Computer room
73 Concealed floor/ceiling space
74 Concealed roof/ceiling space
75 Concealed wall space
52 Conduit
96 Construction area
41 Container, storage
46 Container: rubbish, trash, waste (incl. compactor and garbage areas)
85 Control area (separate) of transportation equipment
35 Control room or center
58 Conveyor
24 Cooking area
01 Corridor
93 Courtyard
71 Crawl space
74 Crawl space above top story
73 Crawl space between stories
74 Cupola

D

12 Dance hall, assembly area without fixed seats, >100 persons
32 Dark room
35 Data processing center
43 Dead storage
93 Deck
14 Den

Area/Location Codes (Cont'd)

33 Dentist's treatment room
23 Dining room
56 Display window
45 Dock, loading
33 Doctor's treatment room
22 Dormitory, >5 persons
36 Dressing room, stage area
92 Driveway
55 Duct: cable, heating, exhaust, air conditioning, ventilation
51 Dumbwaiter shaft

E

01 Egress, means of: corridor, hallway, mall
05 Egress, means of: entranceway, lobby
02 Egress, means of: exterior stairway, fire escape
04 Egress, means of: interior/exterior escalator
03 Egress, means of: interior stairway
63 Electrical panel area
35 Electronic equipment area
61 Elevator machinery room
51 Elevator shaft
93 Enclosed porch
67 Enclosure with pressurized air
83 Engine area
61 Engine room
05 Entranceway
04 Escalator, exterior and interior
28 Exercise area
55 Exhaust duct
16 Exhibit hall
86 Exposed vehicle surface
72 Exterior balcony
04 Exterior escalator
02 Exterior ramp, stairway
77 Exterior roof surface
76 Exterior trim
86 Exterior vehicle surface
76 Exterior wall surface

F

14 Family room
94 Farmland
94 Field
02 Fire escape
33 First aid area (minor procedures)
73 Floor and ceiling assembly
05 Foyer
84 Fuel line, tank
62 Furnace room

G

16 Gallery, art
47 Garage
46 Garbage chute
83 Gear, running
14 Great room
12 Gymnasium, assembly area without fixed seats, >100 persons

H

01 Hallway
61 Head house
28 Health club workout area
55 Heating duct
62 Heating room or area
92 Highway, on or near
41 Holding area, storage
34 Hospital (major procedures)
33 Hospital (minor procedures)
55 HVAC duct

I

12 Ice skating rink, assembly area without fixed seats, >100 persons
36 Ice skating rink, stage area
64 Incinerator area
46 Industrial waste container
04 Interior escalator
03 Interior ramp, stairway

J

21 Jail cell, <5 persons

K

24 Kitchen

L

35 Laboratory, computer
31 Laboratory, technical
26 Laundry area
54 Laundry chute
25 Lavatory
94 Lawn
11 Lecture hall, assembly area with fixed seats, >100 persons
16 Library
53 Light shaft
84 Line, fuel
14 Living room
82 Load-carrying area, vehicle
45 Loading area, bay, dock
05 Lobby
25 Locker room
21 Lockup, <5 persons
14 Lounge
23 Lunchroom

Area/Location Codes (Cont'd)

M

38 Machine or processing area
61 Machinery room or area
54 Mail chute
45 Mail room
65 Maintenance shop or area
43 Maintenance supply room, storage
01 Mall
38 Manufacturing area
28 Massage area
13 Meeting room, assembly area without fixed seats, <100 persons
23 Mess hall
11 Mosque, assembly area with fixed seats, >100 persons
97 Multiple areas
13 Multiuse area, assembly area without fixed seats, <100 persons
12 Multiuse area, assembly area without fixed seats, >100 persons
16 Museum
14 Music room

N

33 Nurse's office at school

O

27 Office
94 Open area, outside: farmland, field, lawn, park, vacant lot
34 Operating room or theater, surgery area
85 Operator area (separate) of transportation equipment
81 Operator area of transportation equipment
25 Outhouse
94 Outside, open area

P

45 Packing area
65 Paint shop or area
38 Painting, coating area: production
43 Pantry
94 Park
92 Parking lot, on or near
81 Passenger area of transportation equipment
94 Pasture
21 Patient room, <5 persons
22 Patient room, >5 persons
93 Patio
36 Performance area, stage
28 Personal service area
32 Photography area
52 Pipe shaft
93 Porch, enclosed
72 Porch, unenclosed
25 Portable toilet
25 Powder room
67 Pressurized air enclosure
32 Printing area
21 Prison cell, <5 persons
25 Privy
38 Processing or machine area
37 Projection room
92 Public way, on or near
61 Pump room

R

35 Radar room
91 Railroad right-of-way, on or near
02 Ramp, exterior
03 Ramp, interior
94 Range land
45 Receiving area
44 Records storage room
34 Recovery room, surgery area
14 Recreation room
61 Refrigeration room
96 Renovation area
65 Repair shop or area
25 Restroom
91 Right-of-way, on or near railroad
12 Roller skating rink, assembly area without fixed seats, >100 persons
74 Roof and ceiling assembly
74 Roof member
77 Roof surface, exterior
46 Rubbish chute, container (incl. compactor and garbage areas)
83 Running gear

S

15 Sales area
25 Sauna area
53 Shaft: air, light
51 Shaft: dumbwaiter, elevator
52 Shaft: pipe, ventilation
85 Ship bridge
45 Shipping area
65 Shop: maintenance, paint, repair, work
25 Shower room
15 Showroom
14 Sitting room
21 Sleeping area, <5 persons
22 Sleeping area, >5 persons
75 Space, concealed wall
73 Space, crawl, between stories
71 Space, crawl, substructure
37 Spotlight area

Area/Location Codes (Cont'd)

65 Spray painting shop or area
38 Spray painting, production
36 Stage
37 Stage light area
02 Stairway, exterior
03 Stairway, interior
74 Steeple
41 Storage (bin, tank)
43 Storage area (basement, tool room, supply room)
47 Storage area, vehicle (carport, garage)
82 Storage area, vehicle (trunk)
44 Storage vault
15 Store
92 Street, on or near
98 Structural area, vacant
71 Substructure area or space
43 Supplies or tools: storage
34 Surgery area (major procedures)
33 Surgery area (minor procedures)
17 Swimming pool
63 Switchgear area
11 Synagogue, assembly area with fixed seats, >100 persons

T

84 Tank, fuel
41 Tank, storage
35 Telephone booth, equipment
14 Television room
11 Temple, assembly area with fixed seats, >100 persons
93 Terrace
66 Test cell
11 Theater, assembly area with fixed seats, >100 persons
92 Thoroughfare, on or near
25 Toilet, portable
43 Tool room, storage
63 Transformer vault
85 Transportation equipment control area
84 Transportation equipment fuel area
46 Trash chute, container (incl. compactor and garbage areas)
33 Treatment: first aid area, surgery area (minor procedures)
82 Trunk area, vehicle

U

96 Under construction and renovation areas
72 Unenclosed porch
52 Utility conduit

V

94 Vacant lot
98 Vacant structural area
44 Vault: records, storage
63 Vault, transformer
85 Vehicle control area, non-passenger
83 Vehicle engine area
86 Vehicle exterior/exposed surface
84 Vehicle fuel tank, line
81 Vehicle passenger area
83 Vehicle running gear, wheel area
47 Vehicle storage area (carport, garage)
82 Vehicle, cargo/trunk area
55 Ventilation duct
52 Ventilation shaft

W

14 Waiting room
75 Wall assembly
76 Wall surface, exterior
22 Ward, >5 persons
26 Wash room
46 Waste chute, container (incl. compactor and garbage areas)
62 Water heater area
65 Welding area for maintenance
38 Welding with production
83 Wheel area
95 Wildland
56 Window, display
95 Woods
38 Workroom, production
65 Workshop or area

Item First Ignited *and* Item Contributing Most to Flame Spread Codes

A

65 Accelerant
18 Acoustical insulation within structural area
16 Acoustical tile, ceiling
93 Adhesive
61 Aerosol
71 Agricultural crop
74 Animal
34 Apparel not on person
35 Apparel on person
25 Appliance housing, casing
61 Atomized liquid
46 Awning

B

51 Bag
56 Baled goods, material
86 Barbed wire fence
51 Barrel
51 Basket
18 Batts, acoustical/thermal insulation within structural area
32 Bedding
83 Belt: conveyor, drive
22 Bench, not upholstered
23 Bench, work
43 Billboard
32 Blanket
36 Blind
13 Blinds, external
18 Boards,acoustical/ thermal insulation within structural area
91 Book
23 Bookcase
51 Box
26 Broom
73 Brush, heavy vegetation
26 Brush: paint, dusting
57 Bulk storage

C

23 Cabinet, cabinetry
81 Cable insulation
46 Canopy
14 Carpet
51 Carton, case
25 Casing, appliance
16 Ceiling covering, lining
72 Chaff
22 Chair, not upholstered
21 Chair, upholstered
23 Chest of drawers
86 Chicken wire fence
95 Chimney film or residue
44 Chips, wood
41 Christmas tree
26 Cleaning cloth, fluids, supplies
26 Cleaning utensils
34 Clothing not on person
35 Clothing on person
32 Comforter
72 Compost
66 Conduit
67 Conduit covering (incl. insulating materials whether for acoustical or thermal purposes, and whether inside or outside the conduit)
51 Container
83 Conveyor belt
76 Cooking materials (incl. edible materials for man or animal) (not cooking utensils)
54 Cord
21 Couch
51 Crate
71 Crops
23 Cupboard
36 Curtain

D

21 Davenport
42 Decoration
23 Desk
21 Divan
13 Door, external
23 Drainboard
36 Drapery
23 Dresser
83 Drive belt
66 Duct
67 Duct covering (incl. insulating materials whether for acoustical or thermal purposes, and whether inside or outside the duct)
94 Dust
26 Duster
88 Dynamite

E

12 Eave
32 Electric blanket
81 Electrical insulation, wire
25 Equipment housing
68 Evaporative cooler pads
94 Excelsior
88 Explosives
11 Exterior roof covering, surface, finish
13 Exterior trim (incl. doors, porches, platforms)
12 Exterior wall covering, surface, finish

Items Ignited Codes (Cont'd)

F

37 Fabric goods
59 Fabric, rolled
77 Feathers, not on bird or animal
86 Fence
87 Fertilizer
94 Fiber
18 Fibers, acoustical/thermal insulation within structural area
92 Files, paper
23 Filing cabinet
95 Film: paint, resin, chimney residue
68 Filter
88 Firecracker, fireworks
74 Fish
65 Flammable gas/liquid, fuels (not contained)
64 Flammable gas/liquid, in or escaping from container or pipe
62 Flammable gas/liquid, in or escaping from engine or burner
63 Flammable gas/liquid, in or escaping from final container or pipe before engine or burner
14 Floor covering
14 Flooring
26 Fluids, cleaning
73 Forest
74 Fowl
17 Framing: building, structural
71 Fruit crop
62 Fuel, flammable, from engine or burner
65 Fuel, uncontained/spilled
77 Fur, not on bird or animal
21 Furniture, upholstered

G

45 Game
63 Gas, flammable liquid from container or pipe before engine or burner
64 Gas, flammable, from container or pipe (not engines, burners, or their fuel systems)
62 Gas, flammable liquid from engine or burner
65 Gas, flammable liquid, uncontained/spilled
37 Goods not made up
72 Grass

H

77 Hair, not on bird or animal
72 Hay
32 Heating pad
73 Heavy vegetation
66 Hose
67 Hose covering (incl. insulating materials whether for acoustical or thermal purposes, and whether inside or outside the hose)
26 Household utensils
75 Human

I

81 Insulation: electrical, cable
18 Insulation, acoustical/thermal within structural area
16 Interior ceiling covering
15 Interior wall covering (not curtains, drapes)
24 Ironing board

K

26 Kitchen utensils

L

33 Laundry
72 Leaves
72 Light vegetation (not a crop)
33 Linen (not bedding)
16 Lining, ceiling
94 Lint
63 Liquid fuel, gas (flammable, from container or pipe before engine or burner)
64 Liquid fuel, gas (flammable, from container or pipe) (not engines, burners, or their fuel systems)
62 Liquid fuel, gas (flammable, from engine or burner)
65 Liquid fuel, gas (flammable, uncontained/spilled)
61 Liquid, atomized, vaporized
18 Loose fills, thermal acoustical insulation within structural area
38 Luggage
17 Lumber in place

M

92 Magazine
15 Mantle
87 Manure
14 Mat
58 Material stored on pallets
52 Material used to make a product (incl. raw materials used as input to a manufacturing or construction process)
59 Material, rolled or wound
31 Mattress
26 Mops, cleaning utensils
72 Mulch

N

72 Needles, light vegetation
92 Newspaper
92 Newsprint, not rolled
59 Newsprint, rolled

Items Ignited Codes (Cont'd)

O

82 Oil, transformer
97 Oily rags
71 Orchard crop
25 Organ case
43 Outdoor sign

P

55 Packing material
68 Pads, evaporative
95 Paint film or residue
53 Pallet, empty
58 Palletized material
15 Paneling, wood
92 Paper
59 Paper, rolled
23 Piano
31 Pillow
66 Pipe
67 Pipe covering (incl. insulating materials whether for acoustical or thermal purposes, and whether inside or outside the pipe)
13 Platform
86 Pole
13 Porch
88 Pyrotechnics

R

26 Rags, cleaning utensils
97 Rags, oily
85 Railroad ties
95 Residue: paint, resin, chimney film
59 Rolled material (paper, fabric)
11 Roof covering, exterior
54 Rope
96 Rubbish
14 Rug

S

55 Sacking
94 Sawdust
21 Seat cushion, automobile
32 Sheet
23 Shelf
12 Siding
43 Sign
53 Skid, empty
21 Sofa
26 Sponges, cleaning utensils
14 Stair covering
17 Stair supports
52 Stock for making products
56 Storage, baled material
57 Storage, bulk
58 Stored material, palletized
17 Structural framing, member
11 Surface, exterior roof
12 Surface, exterior sidewall
14 Surface, floor
16 Surface, interior ceiling
15 Surface, interior wall

T

23 Table
33 Tablecloth
36 Tapestry
47 Tarpaulin
47 Tent
18 Thermal insulation within structural area
14 Tile, floor
73 Timber, standing
84 Tire
33 Towel
45 Toy
82 Transformer (incl. transformer fluids)
96 Trash
73 Trees
13 Trim, exterior
54 Twine

U

21 Upholstered furniture
26 Utensil: kitchen, cleaning

V

61 Vaporized liquid
83 V-belt
71 Vegetable crop
73 Vegetation, heavy
72 Vegetation, light
21 Vehicle seat

W

12 Wall covering, exterior
15 Wall covering, interior (not curtains, drapes)
96 Waste
51 Wastebasket
34 Wearing apparel not on person
35 Wearing apparel on person
72 Weeds
73 Wildland product
13 Window sash
26 Wiping cloth
81 Wire, electrical
44 Wood chips
15 Wood paneling
11 Wood shingle roof

Items Ignited Codes (Cont'd)

17	Woodwork, structural
23	Work bench
59	Wound material (paper, fabric)
55	Wrapping material
92	Writing paper

Y

37	Yard goods
54	Yarn

Type of Material First Ignited *and* Type of Material Contributing Most to Flame Spread Codes

A

22 Acetic acid: glacial
22 Acetone
14 Acetylene gas
22 Acrylic acid
34 Adhesive
22 Alcohol, ethyl
24 Alcohol, propyl
37 Ammonium nitrate
13 Anesthetic gas
53 Animal skin
34 Asphalt
86 Asphalt-treated material (siding)

B

55 Barley
65 Beaverboard
10 Benzene
10 Benzol
34 Bitumen
71 Blends: fiber, fabrics
56 Briquettes
22 Butadiene
12 Butane
31 Butter
24 Butyl alcohol

C

27 Canola oil
71 Canvas, non-waterproof
34 Carbon
56 Carbon black briquettes
10 Carbon disulfide
10 Carbon monoxide
68 Cardboard
67 Cellulose
34 Cement, contact
56 Charcoal briquettes
65 Chipboard
61 Chips, wood
21 Class IA flammable liquid
22 Class IB flammable liquid (not gasoline)
24 Class IC flammable liquid
25 Class II combustible liquid
26 Class IIIA combustible liquid
27 Class IIIB combustible liquid
71 Cloth
56 Coal
25 Coal oil
67 Coated paper
55 Cocofilm
55 Coconut fiber
56 Coke
36 Combustible metal: magnesium, potassium, sodium, titanium, zirconium
34 Contact cement
27 Cooking oil
52 Cork
55 Corn
27 Corn oil
55 Cotton
71 Cotton yarn, fabric, finished goods
26 Cottonseed oil
34 Creosote
26 Creosote oil
20 Crude petroleum

D

25 Diesel fuel

E

34 Elemi
21 Ether
21 Ethyl ether
10 Ethylene
10 Ethylene oxide
61 Excelsior
37 Explosives

F

71 Fabric, finished goods
77 Fabric: plastic coated, vinyl
31 Fat
55 Feathers
55 Felt
71 Fiber
55 Fiber: natural, silk, vegetable
65 Fiber, wood
65 Fiberboard
71 Finished goods: fabric, fiber
27 Fish oil
55 Flax
57 Flour
57 Food (not fat or grease)
25 Fuel oil No. 1 and No. 2
26 Fuel oil No. 4, No. 5, and No. 6
74 Fur fabric, finished goods
26 Furfural

G

14 Gas, acetylene
13 Gas, anesthetic
12 Gas, LP
11 Gas, natural
23 Gasoline

Type of Material Codes (Cont'd)

34 Gelatin
34 Glue
55 Grain
31 Grease, food
32 Grease, non-food
67 Ground-up processed paper used as thermal insulation

H

76 Hair, human
75 Hairpiece
65 Hardboard
54 Hay
55 Hemp
55 Hessian
55 Hops
76 Human hair
27 Hydraulic fluid
22 Hydrazine
15 Hydrogen

I

67 Insulation, newsprint
61 Insulation, processed wood

J

22 Jet fuel, JP–4
25 Jet fuel, JP–5 and –6
55 Jute

K

55 Kapok
34 Kauri
25 Kerosene

L

22 Lacquer
35 Lacquer, applied
31 Lard
53 Leather
81 Linoleum
27 Linseed oil
25 Liquid, combustible: Class II
26 Liquid, combustible: Class IIIA
27 Liquid, combustible: Class IIIB
21 Liquid, flammable: Class IA
22 Liquid, flammable: Class IB
24 Liquid, flammable: Class IC
23 Liquid, flammable: gasoline
12 LP gas
32 Lubricant grease
27 Lubricating oil
63 Lumber, finished

M

36 Magnesium
71 Man-made fabric, fiber (not fur and silk)
50 Manure
31 Margarine
11 Marsh grass
36 Metal, combustible: magnesium, potassium, sodium, titanium, zirconium
11 Methane
22 Methyl ethyl keytone
27 Mineral oil

N

22 Naphtha: V.M. & P., regular
55 Natural fiber
11 Natural gas
51 Natural rubber
67 Newsprint used as thermal insulation
71 Nylon fabric

O

55 Oats
27 Oil: canola, cooking, corn, fish, linseed, lubricating, mineral, tallow, transformer, vegetable
25 Oil: coal, range
26 Oil: creosote, No. 6 fuel
82 Oilcloth

P

22 Paint
35 Paint, applied
67 Paper
33 Paraffin
65 Particleboard
34 Paste
56 Peat
21 Pentane
32 Petroleum jelly
20 Petroleum, crude
26 Phenol
37 Phosphorus
67 Photographic paper
62 Pile, wood: round
34 Pitch
41 Plastic
77 Plastic-coated fabric
64 Plywood
62 Pole, wood: round
33 Polish
62 Post, wood: round
36 Potassium
65 Presswood
12 Propane

Type of Material Codes (Cont'd)

24 Propyl alcohol
66 Pulp, wood

R

38 Radioactive material
55 Ramie
25 Range oil
71 Rayon
67 Records, paper
61 Residue, wood
34 Resin
86 Roofing, asphalt
63 Roofing, wood shingles
34 Rosin
62 Round timber: piles, poles, posts
51 Rubber, natural
41 Rubber, synthetic

S

61 Sawdust
63 Sawn wood (incl. all finished lumber)
67 Sensitized paper
61 Shavings, wood
22 Shellac
63 Shingles, wood
53 Shoe leather
86 Siding, asphalt
74 Silk fabric, finished goods
55 Sisal
53 Skin, animal
36 Sodium
37 Solid chemical (incl. explosives)
34 Soot
55 Soy bean
57 Starch
54 Straw
63 Structural material, wood
24 Styrene
34 Sulfur
71 Synthetic fiber
41 Synthetic rubber

T

31 Tallow
27 Tallow oil
34 Tar
71 Textile products
67 Thermal insulation, newsprint
62 Timber, round: piles, poles, posts
51 Tire rubber
36 Titanium
58 Tobacco
22 Toluol, toluene
75 Toupee
27 Transformer oil
67 Treated paper
24 Turpentine

V

22 Varnish
35 Varnish, applied
55 Vegetable fiber
27 Vegetable oil
10 Vinyl chloride
77 Vinyl fabric

W

67 Waste paper
33 Wax
67 Waxed paper
55 Wheat
75 Wig
61 Wood chips, flour, sawdust, shavings, residue, processed (insulation), structural material
62 Wood pile, pole, post: round
66 Wood pulp, fiber
65 Wood, low-density pressed
63 Wood, roofing shingles, sawn, finished, split, structural
71 Wool

Y

71 Yarn

Z

36 Zirconium

Equipment Involved in Ignition *and* Equipment Involved in Release Codes

A

223 Adapter, electrical
721 Adding machine
513 Agricultural elevator, conveyor
341 Air compressor
111 Air conditioner
881 Airplane, model
862 Alarm, burglar
748 Amplifier, stereo
431 Amusement ride equipment
722 Answering machine
444 Arcade game (not electronic)
253 Arrester, grounding device
871 Ashtray
325 Asphalt-saturating coating machine
343 Atomizing equipment (not paint spraying equipment)
747 Audio speakers
536 Auger, post hole
514 Auger, screw/sweep

B

851 Baby bottle warmer
234 Ballast, fluorescent lighting
643 Barbecue grill
152 Baseboard heater (electric/hot water)
731 Bass
229 Battery (all types)
228 Battery charger, rectifier
365 Bearing
411 Bed, powered
362 Belt, power transfer equipment
374 Bench motor
852 Blanket, electric
515 Blender, feed
611 Blender, food
362 Block, power transfer equipment
532 Blower, leaf
534 Blower, snow
333 Blowtorch
881 Boat, model
133 Boiler: power, process, heating
365 Brake
216 Branch circuit, electrical
641 Bread-making machine
126 Brick chimney
637 Broiler, countertop
831 Broom, electric
533 Brush grinder
841 Brush, hair
316 Buffer
833 Buffer, floor
875 Bug zapper
238 Bulb, electric
333 Bunsen burner
862 Burglar alarm
333 Burner, Bunsen
523 Burner, weed
373 Butane regulator

C

751 Cable converter box
362 Cable power transfer equipment
721 Calculator
756 Camcorder
757 Camera (incl. digital)
621 Can opener
443 Candy vending machine
635 Canner, pressure
377 Car washing equipment
371 Carding machine
832 Carpet cleaner
723 Cash register
355 Casting equipment
414 CAT scan imaging equipment
142 Catalytic heater
741 CD player, audio
712 CD-ROM device, external
113 Ceiling fan
132 Central heating unit
522 Chain saw
411 Chair, powered (incl. dental and medical chairs)
872 Charcoal lighter
228 Charger, battery
126 Chimney: brick, concrete block, concrete block modules, masonry, stone
125 Chimney connector
127 Chimney, metal (incl. gas vent flue and stovepipe)
533 Chipper
242 Christmas lights
873 Cigarette lighter
215 Circuit breaker board
833 Cleaner, floor
834 Cleaner, vacuum
891 Clock
811 Clothes dryer
855 Clothes iron
854 Clothes steamer
814 Clothes washing machine
325 Coating machine
612 Coffee grinder
631 Coffee maker
841 Comb
511 Combine

Equipment Involved Codes (Cont'd)

812 Compactor, trash
341 Compressor, air
342 Compressor, gas
711 Computer
712 Computer CD-ROM device, tape drive
713 Computer modem, external
711 Computer modem, internal
714 Computer monitor
715 Computer printer
716 Computer projection device
125 Connector, chimney or vent
252 Control device, traffic
423 Control panel with multiple TV monitors
210 Converter
751 Converter, cable
361 Conveyor (not farm)
513 Conveyor, farm
635 Cooker, pressure
646 Cooktop
117 Cooler, evaporative
117 Cooling tower
724 Copier, large standalone
715 Copier, multifunctional (fax, scanner)
371 Cotton gin
637 Countertop broiler
346 Crane
518 Cream separator
538 Cultivator
842 Curling iron
314 Cutting tool, power
332 Cutting torch

D

622 Dagger
242 Decorative lights, line voltage (incl. Christmas lights)
243 Decorative lights, low voltage
642 Deep fryer
116 Dehumidifier, portable
412 Dental equipment, other
411 Dental powered chair, bed
231 Desk lamp
864 Detector, gas
866 Detector: heat, smoke
413 Dialysis equipment
357 Digester
757 Digital camera
321 Dipper, paint
651 Dishwasher
712 Disk drive, external
356 Distilling equipment
215 Distribution panel
861 Door opener, automatic (not garage)
863 Door opener, automatic garage
315 Drill, power
348 Drilling machinery
537 Driver: post, pile
217 Dryer receptacle
811 Dryer, clothes
845 Dryer, hair
813 Dryer/washer combination
654 Duct: exhaust fan, grease hood
152 Duct, hot air
433 Dumbwaiter
742 DVD device, external

E

525 Edger, lawn
251 Electric fence
213 Electric meter
244 Electric sign
223 Electrical adapter
216 Electrical branch circuit
217 Electrical outlet, receptacle (incl. dryer and stove receptacles)
211 Electrical power (utility) line (not wire from utility pole to structure)
212 Electrical service supply wire; wire from utility pole to meter box
218 Electrical switch, wall-type
214 Electrical wiring from meter box to circuit breaker board, fuse box, or panelboard
843 Electrolysis equipment
451 Electron microscope
732 Electronic piano
433 Elevator
513 Elevator, farm
375 Engine, internal combustion engine
748 Equalizer, stereo
434 Escalator
117 Evaporative cooler
654 Exhaust fan
263 Extension cord
358 Extractor

F

113 Fan
113 Fan, ceiling
654 Fan, grease duct/hood exhaust
513 Farm elevator, conveyor
521 Farm sprayer
725 Fax machine
515 Feed blender, grinder, mixer
251 Fence, electric
752 Film projector
866 Fire alarm
874 Fire extinguishing equipment
122 Fireplace, factory-built

Equipment Involved Codes (Cont'd)

123 Fireplace, insert/stove
121 Fireplace, masonry
232 Flashlight
714 Flat-screen computer monitor
833 Floor buffer, cleaner, waxer
141 Floor furnace
231 Floor lamp
234 Fluorescent lighting fixture
611 Food mixer, processor
632 Food warmer
355 Forging equipment
652 Freezer (separate from refrigerator)
656 Freezer/refrigerator
433 Freight elevator
639 Frying pan
132 Furnace, central heating unit
141 Furnace, floor
353 Furnace, industrial
131 Furnace, local heating unit, built-in
333 Furnace, plumber's
215 Fuse panel board

G

444 Game, arcade (not electronic)
755 Game, video (electronic)
863 Garage door opener
653 Garbage disposer
521 Garden sprayer
358 Garnetting equipment (waste recovery machine)
342 Gas compressor
864 Gas detector
348 Gas drilling equipment
373 Gas regulator
127 Gas vent flue (metal chimney)
224 Generator
513 Grain elevator
654 Grease duct/hood exhaust fan
638 Griddle
643 Grill
316 Grinder
612 Grinder, coffee
515 Grinder, feed
533 Grinder: leaf, brush, wood, stump
219 Ground-fault interrupter
253 Grounding device
731 Guitar
892 Gun

H

841 Hair brush
844 Hair curler warmer
845 Hair dryer
235 Halogen lamp, lighting fixture
317 Hammer, power
711 Hard drive, internal
512 Hay processing equipment
866 Heat detector
144 Heat lamp
152 Heat pipe
112 Heat pump
145 Heat tape
141 Heater (not catalytic, oil-filled, or baseboard heater)
152 Heater, baseboard (electric/hot water)
142 Heater, catalytic
132 Heater, central unit
151 Heater: hot water, waterbed
143 Heater, oil-filled
133 Heating boiler
853 Heating pad
124 Heating stove
351 Heat-treating equipment
643 Hibachi
346 Hoist
242 Holiday lighting, line voltage
373 Hose connectior to gas appliance
152 Hot air duct
632 Hot plate
821 Hot tub
152 Hot water baseboard heater
151 Hot water heater
132 Humidifier (built in to central heating system)
131 Humidifier (built in to local heating system)
114 Humidifier (not built in to heating system)
347 Hydraulic rescue tools

I

655 Ice maker (separate from refrigerator)
233 Incandescent lighting fixture
352 Incinerator
361 Industrial conveyor
353 Industrial furnace, oven, kiln
875 Insect trap
151 Instant hot water heater
865 Intercom
375 Internal combustion engine (nonvehicular)
225 Inverter
115 Ionizer
855 Iron, clothes
842 Iron, curling

J

317 Jackhammer
347 Jacking equipment, powered
893 Jewelry-cleaning machine
313 Jointer
611 Juicer

Equipment Involved Codes (Cont'd)

K

633 Kettle
733 Keyboard, musical
353 Kiln
622 Knife
623 Knife sharpener

L

231 Lamp: desk, floor, oil, portable, tabletop
235 Lamp, halogen
144 Lamp, heat
236 Lamp: sodium, mercury vapor
243 Landscape lighting, low voltage
525 Landscape trimmer, edger
232 Lantern
742 Laser disk player
312 Lathe
524 Lawn mower, powered
525 Lawn trimmer, edger
531 Lawn vacuum
714 LCD monitor
716 LCD panel
532 Leaf blower
533 Leaf chipper, grinder, mulcher
433 Lift (elevator): passenger, freight
346 Lift for equipment/materials
432 Lift, ski
238 Light bulb
218 Light switch
241 Light, night
237 Light: trouble, work
872 Lighter: charcoal, utility
873 Lighter: cigarette, pipe
234 Lighting fixture, fluorescent
235 Lighting fixture, halogen
233 Lighting fixture, incandescent
236 Lighting fixture: sodium, mercury vapor
253 Lightning rod
242 Lights, decorative, line voltage (incl. Christmas lights)
243 Lights, decorative/landscape, low voltage
514 Loader, silo
535 Log splitter
223 Low-voltage transformer (<51 volts)
373 LP-gas regulator

M

846 Makeup mirror, lighted
126 Masonry chimney
410 Medical equipment, other
414 Medical imaging equipment
415 Medical monitoring equipment
411 Medical powered bed, chair
236 Mercury vapor fixture/lamp (incl. street lights)
214 Meter box wire to circuit breaker board, fuse box, or panel board
213 Meter, meter box (electric)
727 Meter: postage, shipping
442 Microfiche/microfilm processing equipment
441 Microfiche/microfilm viewing equipment
451 Microscope, electron
644 Microwave oven
517 Milk pasteurizer
516 Milking machine
846 Mirror, lighted
515 Mixer, feed
611 Mixer, food
323 Mixing machine, paint
881 Model vehicles
713 Modem, external
711 Modem, internal
355 Molding equipment
714 Monitor, computer
423 Monitoring station, security
374 Motor (not internal combustion engine)
375 Motor, internal combustion engine
524 Mower, lawn (powered)
414 MRI equipment
533 Mulcher
733 Musical keyboard, synthesizer

N

318 Nail gun
373 Natural gas regulator
244 Neon lighting
241 Night light

O

143 Oil-filled heater
732 Organ
217 Outlet, electrical
645 Oven, cooking
353 Oven, industrial
644 Oven, microwave
222 Overcurrent, disconnect equipment associated with a transformer
752 Overhead projector
416 Oxygen administration equipment

P

321 Paint dipper
322 Paint flow coating machine
323 Paint mixing machine
324 Paint sprayer
215 Panel board (fuse)
726 Paper shredder
433 Passenger elevator
517 Pasteurizer

Equipment Involved Codes (Cont'd)

422 PBX telephone equipment
745 Phonograph
442 Photo processing equipment
757 Photographic camera and equipment
732 Piano
371 Picking machine
537 Pile driver
444 Pinball machine
873 Pipe lighter
152 Pipe, heat
313 Planer
732 Player piano
741 Player, CD (audio)
742 Player, laser disk
745 Player, record
749 Player, tape
261 Plug, detachable from appliance
262 Plug, permanently attached to appliance
333 Plumber furnace
316 Polisher
822 Pool equipment (swimming)
634 Popcorn popper
237 Portable work light, trouble light
537 Post driver
727 Postage meter equipment
536 Post-hole auger
636 Pot, warming
133 Power boiler
316 Power buffer, grinder, polisher, sander
261 Power cord, detachable from appliance
262 Power cord, permanently attached to appliance
314 Power cutting tool
315 Power drill, screwdriver
317 Power hammer
313 Power jointer, planer, router, shaper
312 Power lathe
318 Power nail gun, stapler, stud driver
311 Power saw
226 Power supply, uninterruptible
363 Power takeoff
362 Power transfer equipment: belts, blocks, cables, ropes
881 Powered model vehicle
364 Powered valve
411 Powered wheelchair
635 Pressure canner, cooker
715 Printer, computer
376 Printing press
133 Process boiler
611 Processor, food
716 Projector, computer
752 Projector: film, overhead, slide
373 Propane regulator
344 Pump
112 Pump, heat

R

426 Radar equipment
417 Radiation therapy equipment
152 Radiator, heating system
446 Radio telescope
743 Radio, AM/FM (not two-way radio)
744 Radio, two-way
417 Radiological equipment
646 Range with or without an oven or cooking surface
847 Razor, electric
357 Reactor
748 Receiver, stereo
217 Receptacle, electrical
229 Rechargeable battery
745 Record player
749 Recorder, tape
656 Refrigeration equipment
656 Refrigerator, refrigerator/freezer
373 Regulator, gas: butane, LP, natural gas
347 Rescue tools, hydraulic
881 Rocket, model
362 Rope, power transfer equipment
645 Rotisserie
313 Router
325 Rubber-spreading coating machine
832 Rug shampooer

S

316 Sander
821 Sauna
522 Saw, chain
311 Saw, power
715 Scanner, computer
894 Scissors
514 Screw/sweep auger
315 Screwdriver, power
423 Security monitoring station
518 Separator, cream
895 Sewing machine
313 Shaper
623 Sharpener, knife
847 Shaver, electric
727 Shipping meter equipment
896 Shoe polisher
345 Shop vacuum (wet/dry)
726 Shredder, paper
533 Shredder, wood
244 Sign, electric
514 Silo loader, unloader
432 Ski lift
639 Skillet
752 Slide projector
636 Slow cooker

Equipment Involved Codes (Cont'd)

866 Smoke alarm
534 Snow blower, thrower
443 Soda vending machine
236 Sodium vapor fixture/light (incl. street lights)
334 Soldering equipment
359 Solvent recovery equipment
425 Sound recording/modulating equipment, studio-type
821 Spa
141 Space heater, baseboard
142 Space heater, catalytic
143 Space heater, oil-filled
747 Speakers, audio (separate components)
535 Splitter, log
519 Sprayer: farm, garden
324 Sprayer, paint
318 Stapler, power
152 Steam line
647 Steam table
748 Stereo equipment (not speakers)
418 Sterilizer, medical
897 Sterilizer, nonmedical
126 Stone chimney
127 Stovepipe
124 Stove, heating
217 Stove receptacle
318 Stud driver
425 Studio-type sound recording/modulating equipment
424 Studio-type TV camera
848 Suntan equipment, sunlamp
227 Surge protector
822 Swimming pool equipment
218 Switch: light, wall
215 Switchboard
733 Synthesizer, musical

T

231 Table lamp
647 Table, steam
712 Tape drive, external
749 Tape player, recorder
145 Tape, heat
354 Tar kettle
354 Tarpot
631 Teapot
722 Telephone
422 Telephone switching gear
446 Telescope
753 Television
372 Testing equipment
419 Therapeutic equipment
868 Thermostat
511 Threshing machine
538 Tiller
876 Timer
637 Toaster
637 Toaster oven
849 Toothbrush, electric
333 Torch: blow, Bunsen burner, plumber furnace
332 Torch, cutting
331 Torch, welding
882 Toy, powered
252 Traffic control device
221 Transformer, distribution-type
223 Transformer, low-voltage (<51 volts) (incl. adapters for electronic equipment)
421 Transmitter
812 Trash compactor
525 Trimmer, lawn
237 Trouble light
745 Turntable
424 TV camera, studio-type
423 TV monitor array, studio-type
744 Two-way radio
728 Typewriter

U

414 Ultrasound equipment
226 Uninterrupted power supply
514 Unloader, silo
872 Utility lighter
211 Utility line, electric

V

834 Vacuum cleaner
531 Vacuum, lawn
345 Vacuum, wet/dry (shop vacuum)
754 VCR, VCR–TV combination
443 Vending machine
125 Vent connector
756 Video camera
755 Video game

W

638 Waffle iron
141 Wall heater
218 Wall switch
632 Warmer, food
647 Warming drawer/table
636 Warming pot
813 Washer/dryer combination
814 Washing machine, clothes
359 Waste recovery machine
445 Water cooler, fountain
348 Water drilling equipment
151 Water heater (incl. sink-mounted instant hot water heater)

Equipment Involved Codes (Cont'd)

151 Waterbed heater
833 Waxer, floor
371 Weaving machine
523 Weed burner
331 Welding torch
345 Wet/dry vacuum (shop vacuum)
411 Wheelchair, powered
821 Whirlpool
214 Wire, meter box to fuse panel/circuit board
211 Wire, utility line
212 Wire, utility pole to meter box
639 Wok
883 Wood burning kit
237 Work light

X

417 X-ray equipment

APPENDIX C

GLOSSARY OF TERMS AND ABBREVIATIONS

Terms

The terminology used in this document provides a common language for recording fire service data. The following terms are used as defined and discussed below.

Alarm. Any notification made to the fire department that a situation exists or may exist that requires a response.

Area of Origin. The use of the room or area within the property where the fire originated.

Automatic. As applied to fire protection devices, a device or system providing an emergency function without the necessity of human intervention.

Backfire. A fire set along the inner edge of a fire control line to consume the fuel in the path of a wildland fire or change the direction of force of the fire's convection column. Doing this on a small scale and with closer control, in order to consume patches of unburned fuel and aid control line construction, is known as "burning out."

Building. A structure enclosed with walls and a roof and having a defined height.

Building Fire. *See Structure Fire.*

Burning. The process of self-perpetuating combustion, with or without an open flame. Smoldering is burning.

Casualty (Fire). A person who is injured or killed at the scene of a fire. (Includes injuries or deaths from natural or accidental causes sustained while involved in the activities of fire control, rescue attempt, or escaping from the dangers of the fire.)

Census Data. Demographic population data available by statistical areas from a governmental agency.

Civilian Fire Casualty. Any non-fire service casualty who is injured or killed at the scene of a fire.

Char. Material that has been partially burned on the exterior of the object and has a blackened carbonized appearance.

Combustible. A material or structure that will release heat energy on burning.

Combustible Liquid. Any liquid having a flash point at or above 100°F (37.8°C) (closed cup).

Confine a Fire. To restrict the fire within determined boundaries established either prior to the fire or during the fire. Wildland suppression action may be minimal and limited to surveillance under appropriate conditions.

Contain a Fire. To take suppression action as needed that can reasonably be expected to check the fire's spread under prevailing conditions.

Emergency Scene. The area encompassed by the incident and the surrounding area needed by the emergency forces to stage apparatus and mitigate the incident.

EMT–Basic: Technician has the knowledge and skills of the first responder, but is also qualified to function as minimum staff for an ambulance (*see Table of Care*). For example, at the scene of a cardiac arrest, the EMT–Basic would be expected to defibrillate and ventilate the patient with a manually operated device and supplemental oxygen.

EMT–Intermediate: Technician has the knowledge and skills of the preceding levels, but also can perform essential advanced techniques and administer a limited number of medications (see *Table of Care*). For example, at the scene of a cardiac arrest, the EMT–Intermediate would be expected to intubate and administer first-line ACLS medications.

EMT–Paramedic: Technician has demonstrated the competencies expected of an EMT–Intermediate provider, but also can administer additional interventions and medications (see *Table of Care*). For example, at the scene of a cardiac arrest, the EMT–Paramedic might administer second-line ACLS medications and use an external pacemaker.

Explosion. Violent bursting caused by either a combustion process or an overpressure condition. Typical combustion processes include ignition and burning of combustible gas, dust, or flammable vapor mixture. These are technically “fires.” Typical overpressure conditions include steam pressure, chemical reactions, and compressed gas container rupture. These are technically not “fires.”

Exposure Fire. A fire in a building, structure, vehicle, or outside property resulting from a fire outside that building, structure, vehicle, or outside property.

Exposure (Human). Potential for injury or death to humans.

Fatality. An injury that is fatal or becomes fatal within 1 year of the incident.

Fire. Any instance of destructive and uncontrolled burning, including explosion, of combustible solids, liquids, or gases. Fire does not include the following, except where they cause fire or occur as a consequence of fire:

- Lightning or electrical discharge.
- Rupture of a steam boiler, hot water tank, or other pressure vessel due to internal pressure and not to internal combustion.
- Explosion of munitions or other detonating material.
- Accident involving ship, aircraft, or other vehicle.
- Overheat condition.

Fire Area (Structure). The space within a structure bounded by fire division assemblies (2-hour fire rating or greater).

Fire Area (Wildland). The area within wildfire perimeter control lines.

Fire Blackout. That point in time when there is no longer any evidence of open flame or glow of burned material.

Fire Contained. That point in time when fire spread is stopped, but the fire is not necessarily under control.

Fire Control Line. Comprehensive term for all constructed or natural barriers and treated fire edges used to control a fire.

Fire Damage. The total damage to a building, structure, vehicle, natural vegetation cover, or outside property resulting from a fire and the act of controlling that fire. Included are smoke, water, backfires, firebreaks, and fire control damage.

Fire Extinguished. That point in time when there is no longer any abnormal heat or smoke being generated in material that was previously burning.

Fire Ground. *See Emergency Scene*.

Fire Service Personnel. All employees, whether career or volunteer, of a fire department who are assigned or may be assigned to perform duties at emergency incidents.

Fire Under Control. (1) That point in time when a fire is sufficiently surrounded and quenched so that in the judgment of the commanding officer it no longer threatens destruction of additional property. (2) In wildfire, that point in time when a control line is around a fire, any spot fires therefrom, and any interior islands to be saved. Any unburned area adjacent to the fire side of the control lines are burned out, and all hot spots that are immediate threats to the control line are cooled down, until the lines can reasonably be expected to hold under foreseeable conditions.

First Responder. Uses a limited amount of equipment with various knowledge and skill in each of the core elements (see EMS levels above). For example, at the scene of a cardiac arrest, the first responder would be expected to notify EMS (if not already notified) and initiate CPR with an oral airway and a barrier device.

Fixed Object. An object, device, or appliance that is fastened or secured at a specific location (e.g., a steam radiator).

Flames. Products of combustion that are illuminated by the heat of combustion and accompany the burning of most materials in normal atmospheres.

Flammable Liquid. Any liquid having a flash point below 100°F (37.8°C) (closed cup) and having a vapor pressure not exceeding 40 psia (2068 mm Hg) at 100°F (37.8°C).

Gas. A material that has a vapor pressure exceeding 40 psia (2068.6 mm) at 100°F (37.8°C). (Gasoline is a liquid, not a gas.)

General Property Use. The actual general (overall) use of land or space under the same management or ownership or within the same legal boundaries, including any structures, vehicles, or other appurtenances thereon.

Grade. Reference plane representing the elevation of finished ground level adjoining the building at the main entrance.

Hazardous Material. Any material that is an air-reactive material, flammable or combustible liquid, flammable gas, corrosive material, explosive material, organic peroxide, oxidizing material, radioactive material, toxic material, unstable material, or water-reactive material; and any substance or mixture of substances that is an irritant or a strong sensitizer or that generates pressure through exposure to heat, decomposition, or other means.

Heat of Ignition. The heat energy that brings about ignition. Heat energy comes in various forms and usually from a specific object or source. Therefore, the heat of ignition is divided into two parts: “equipment involved in ignition” and “form of heat of ignition.”

Ignition. The physical and chemical processes involved in reaching a point of self-perpetuation of fire whether or not there is an open flame.

Ignition Factor. The condition or situation that allowed a heat source and a combustible material to combine to initiate a fire.

Incident. An event to which the reporting agency responds or should have responded. Included are "walk-ins" treated at the station. An incident may have more than one response. A rekindle is a separate incident.

Incident Record. The official file on an incident.

Incident Report. A document prepared by fire department personnel about a particular incident. For understanding and legal purposes, this report should be in their own words. For summarization purposes, the information on this report can be classified into broad categories. The incident report is always part of the incident record or file.

Injury. Physical damage to a person suffered as the result of an incident that requires (or should require) treatment by a practitioner of medicine, a registered EMT, or a paramedic within 1 year of the incident (regardless of whether treatment was actually received) or that results in at least 1 day of restricted activity immediately following the incident.

Latitude. Latitude lines run east/west parallel to the equator. Values range from 0 degrees at the equator to 90 degrees at the North and South poles. The United States and Canada are in the Northern Hemisphere. Minutes and seconds range from 0 to 59.

Longitude. Longitude lines run north/south, are parallel at the equator, and converge at the North and South Poles. Values ranges from 0 degrees at Greenwich, England (near London at the Royal Naval Observatory) to 180 degrees at the International Date Line west of Hawaii. Most of the United States and all of Canada are in the Western Hemisphere. Minutes and seconds range from 0 to 59.

Liquid. A material that has a vapor pressure not exceeding 40 psia (2068.6 mm) at 100°F (37.8°C).

Material First Ignited. The combustible that is first set on fire by the heat of ignition.

Mobile Property Type. Property that was designed to be movable whether or not it still is (e.g., vehicles, ships, and airplanes).

Mop-Up. The act of making a fire scene safer after the fire has been controlled, such as extinguishing or removing burning material along or near the control line, felling snags, and trenching logs to prevent rolling. For structure fires, see *Overhaul*.

Non-Fire Service Personnel. All persons involved with an incident who are not fire service personnel. Included are police, utility company employees, non-fire service medical personnel, and civilians.

Not Occupied. An area with no persons present; contents or equipment present indicates the structure is not vacant.

Occupancy. The purpose for which a building or portion thereof is intended to be used. The specific property use as it pertains to a building is the occupancy.

Occupied. An area with persons present. A hotel (general property use) could be occupied, but the restaurant (specific property use) not occupied; likewise, the restaurant could be occupied, but its storeroom (area of origin) not occupied.

Overhaul. The act of making a fire scene safe after it is controlled, such as extinguishing or removing burned material, checking inside walls and hidden spaces, etc. For wildland fires, see *Mop-Up*.

Overheat. Destruction of material by heat without self-sustained combustion. Removal of the heat source will stop the destruction. Overheat is the stage before ignition.

Overpressure. A transient air pressure, such as the shock wave from an explosion, that is greater than the surrounding atmospheric pressure.

Portable. An object, device, or appliance that can normally be moved by one person, is designed to be used in multiple locations, and requires no tools to install.

Prescribed Fire. Any fire ignited by management actions to meet specific objectives. A written, approved prescribed fire plan must exist prior to ignition. The controlled application of fire to wildland fuels in either their natural or their modified state under specified environmental conditions that allow the fire to be confined to a predetermined area and, at the same time, to produce the intensity of heat and rate of spread required to attain planned resource management objectives.

Principal Meridian. There are 45 principal meridians defined in the United States. They are identified at the end of this appendix.

Property. A thing of value. Specific (fixed) property refers to those things that make up the Earth's surface (e.g., water, land, roadways, structures, buildings). Mobile property refers to those things that normally move in relation to the Earth's surface (e.g., ships, airplanes, trains, trucks, automobiles).

Property Inventory. Information known about a property before an emergency occurs. This knowledge is in two parts: that which is general in character and has to do with external features (such as location, water supply, and construction), and that which is specific in character relating to internal features (such as interior finish, vertical openings, or suppression systems).

Property Use. The use to which a property is put. A building, for example, could serve as a garage or a hospital or a department store. The use of property does not define any of the other important fire-related details of a property such as access, ownership, size, internal weaknesses in fire defense, or construction.

Public Land Survey System. The Land Ordinance of 1785 established the Public Land Survey System in the United States. The surveys cover 30 states; other survey systems are used by the founding 13 states, Kentucky, Tennessee, Maine, Vermont, West Virginia, Texas, and Hawaii.

Range. Ranges are numbered east and west of the principal meridian. The first three digits are the range number and the fourth digit indicates a full or partial range (0 = full, 1 = 1/4, 2 = 1/2, and 3 = 3/4). The fifth character (E or W) indicates direction from the principal meridian.

Rekindle. The redevelopment of a fire after it was thought to have been extinguished by the original fire service response. Fire service response to a rekindle should be treated as a separate incident.

Reportable Fire. Any unfriendly, hostile fire that comes to the attention of an agency keeping fire records. Included are fires that may be discovered in progress or discovered after extinguishment.

Response. The deployment of an emergency service resource to an incident.

Room. The space or area bounded by walls. The walls may be fire rated and impede fire spread or not fire rated (e.g., mesh screen), which may impede exiting of personnel.

Scorch. Discoloring (browning or blackening) of a material, a characteristic of the overheat condition. Removal of the heat source will stop the destruction.

Section. Sections are numbered 1–36 beginning in the northeast corner for all but the very earliest principal meridians. Sections 1–6 are the northern most tier and are numbered east to west. Sections 7–12 are the next tier south of the first tier and are numbered west to east. The remaining sections follow the same pattern. Each section is nominally 640 acres, although some sections vary from the standard.

Smoldering. Self-sustaining combustion of a material without any flame evident.

Stationary Object. Any object, device, or appliance that is not fastened but that is not readily moved from one place to another in normal use (e.g., a refrigerator).

Story. That portion of a building between the upper surface of any floor and the upper surface of the floor next above, except that the topmost story is that portion of a building between the upper surface of the topmost floor and the upper surface of the roof deck above.

Structure. An assembly of materials forming a construction for occupancy or use to serve a specific purpose. This includes, but is not limited to, buildings, open platforms, bridges, roof assemblies over open storage or process areas, tents, air-supported structures, and grandstands.

Structure Fire. Any fire inside a structure whether it involves the structure or not, or any fire under or touching a structure that involves the structure.

Subsection. Sections can be subdivided into successive quarters and described as the NE quarter, NW quarter, SE quarter, and SW quarter (each approximately 160 acres). Each quarter can be quartered again to describe 40-acre parcels. For example, the SE/4 of the NW/4 would be the 40-acre parcel NW of the section center (read small parcel to large parcel).

Toxic Material. Any material that may constitute a hazard to life or health, either temporary or permanent, from exposure by contact, inhalation, or ingestion.

Township. Townships are numbered north and south of the principal base line. The first three digits are the township number, and the fourth digit indicates a full or partial township (0 = full, 1 = 1/4, 2 = 1/2, and 3 = 3/4). The fifth character (N or S) indicates direction from the base line.

Urban–Wildland Interface Area. The geographical area where structures and other human development meet or intermingle with wildland or vegetative fuels.

Urban–Wildland Interface Fire. Any fire, other than prescribed fire, where fire suppression tactics were influenced by a geographical area where structures and other human development meet or intermingle with wildland or vegetative fuels (Incident Type 632).

Vacant. No furnishings or equipment are present.

Wildland Fire. Any fire involving vegetative fuels, other than prescribed fire, that occurs in the wildland. A wildland fire may expose and possibly consume structures (Incident Type 141).

Wildland. Land in an uncultivated, more or less natural state and covered by timber, woodland, brush, or grass. An area in which development is essentially nonexistent except for roads, railroads, power lines, and similar facilities.

Abbreviations for States and Provinces

The following state and province abbreviations are consistent with the Federal Information Processing Standard (FIPS).

U.S. States

AK	Alaska	02	MT	Montana	30
AL	Alabama	01	NC	North Carolina	37
AR	Arkansas	05	ND	North Dakota	38
AZ	Arizona	04	NE	Nebraska	31
CA	California	06	NH	New Hampshire	33
CO	Colorado	08	NJ	New Jersey	34
CT	Connecticut	09	NM	New Mexico	35
DC	District of Columbia	11	NV	Nevada	32
DE	Delaware	10	NY	New York	36
FL	Florida	12	OH	Ohio	39
GA	Georgia	13	OK	Oklahoma	40
HI	Hawaii	15	OR	Oregon	41
IA	Iowa	19	PA	Pennsylvania	42
ID	Idaho	16	RI	Rhode Island	44
IL	Illinois	17	SC	South Carolina	45
IN	Indiana	18	SD	South Dakota	46
KS	Kansas	20	TN	Tennessee	47
KY	Kentucky	21	TX	Texas	48
LA	Louisiana	22	UT	Utah	49
MA	Massachusetts	25	VA	Virginia	51
MD	Maryland	24	VT	Vermont	50
ME	Maine	23	WA	Washington	52
MI	Michigan	26	WI	Wisconsin	55
MN	Minnesota	27	WV	West Virginia	54
MO	Missouri	29	WY	Wyoming	56
MS	Mississippi	28			

U.S. Territories and Possessions

AS	American Samoa	60	MP	Northern Mariana Islands	69
CZ	Canal Zone	67	PR	Puerto Rico	72
DD	Department of Defense		PW	Palau	70
FM	Federated States of Micronesia	64	UM	U.S. Minor Outlying Islands	74
GU	Guam	66	VI	Virgin Islands	78
MH	Marshall Islands	68	OO	Other	00

Canadian Provinces (from *Canada Post)*

AB	Alberta	NT	Northwest Territory
BC	British Columbia	ON	Ontario
MB	Manitoba	PE	Prince Edward Island
NB	New Brunswick	PQ	Quebec
NF	Newfoundland	SK	Saskatchewan
NS	Nova Scotia	YU	Yukon

Mexico (MX)

Abbreviations for Street Types

The following street type abbreviations are from the U.S. Postal Service:

ALY	Alley	CRST	Crest	FRK	Fork
ANX	Annex	CSWY	Causeway	FRKS	Forks
ARC	Arcade	CT	Court	FRST	Forest
AVE	Avenue	CTR	Center	FRY	Ferry
BCH	Beach	CTRS	Centers	FT	Fort
BG	Burg	CTS	Courts	FWY	Freeway
BGS	Burgs	CURV	Curve	GDN	Garden
BLF	Bluff	CV	Cove	GDNS	Gardens
BLFS	Bluffs	CVS	Coves	GLN	Glen
BLVD	Boulevard	CYN	Canyon	GLNS	Glens
BND	Bend	DL	Dale	GRN	Green
BR	Branch	DM	Dam	GRNS	Greens
BRG	Bridge	DR	Drive	GRV	Grove
BRK	Brook	DRS	Drives	GRVS	Groves
BRKS	Brooks	DV	Divide	GTWY	Gateway
BTM	Bottom	EST	Estate	HBR	Harbor
BYP	Bypass	ESTS	Estates	HBRS	Harbors
CIR	Circle	EXPY	Expressway	HL	Hill
CIRS	Circles	EXT	Extension	HLS	Hills
CLF	Cliff	EXTS	Extensions	HOLW	Hollow
CLFS	Cliffs	FALL	Fall	HTS	Heights
CLB	Club	FLD	Field	HWY	Highway
CMN	Common	FLDS	Fields	HVN	Haven
CMNS	Commons	FLS	Falls	INLT	Inlet
COR	Corner	FLT	Flat	IS	Island
CORS	Corners	FLTS	Flats	ISLE	Isle
CP	Camp	FRD	Ford	ISS	Islands
CPE	Cape	FRDS	Fords	JCT	Junction
CRES	Crescent	FRG	Forge	JCTS	Junctions
CRK	Creek	FRGS	Forges		

KNL	Knoll	PKYS	Parkways	SQ	Square
KNLS	Knolls	PL	Place	SQS	Squares
KY	Key	PLZ	Plaza	ST	Street
KYS	Keys	PNE	Pine	STA	Station
LCK	Lock	PNES	Pines	STRA	Stravenue
LCKS	Locks	PR	Prairie	STRM	Stream
LDG	Lodge	PRT	Port	STS	Streets
LF	Loaf	PRTS	Ports	TER	Terrace
LGT	Light	PSGE	Passage	TPKE	Turnpike
LGTS	Lights	PT	Point	TRAK	Track
LK	Lake	PTS	Points	TRCE	Trace
LKS	Lakes	RADL	Radial	TRFY	Trafficway
LN	Lane	RAMP	Ramp	TRL	Trail
LNDG	Landing	RD	Road	TRLR	Trailer
LOOP	Loop	RDG	Ridge	TRWY	Throughway
MALL	Mall	RDGS	Ridges	TUNL	Tunnel
MDW	Meadow	RDS	Roads	UN	Union
MDWS	Meadows	RIV	River	UNS	Unions
MEWS	Mews	RNCH	Ranch	UPAS	Underpass
ML	Mill	ROW	Row	VIA	Viaduct
MLS	Mills	RPD	Rapid	VIS	Vista
MNR	Manor	RPDS	Rapids	VL	Ville
MNRS	Manors	RST	Rest	VLG	Village
MSN	Mission	RT	Route	VLGS	Villages
MT	Mount	RUE	Rue	VLY	Valley
MTN	Mountain	RUN	Run	VLYS	Valleys
MTNS	Mountains	SHL	Shoal	VW	View
MTWY	Motorway	SHLS	Shoals	VWS	Views
NCK	Neck	SHR	Shore	WALK	Walk
ORCH	Orchard	SHRS	Shores	WALK	Walks
OVAL	Oval	SKWY	Skyway	WALL	Wall
PARK	Park	SMT	Summit	WAY	Way
PASS	Pass	SPG	Spring	WL	Well
PATH	Path	SPGS	Springs	WLS	Wells
PIKE	Pike	SPRS	Spurs	XING	Crossing
PKY	Parkway	SPUR	Spur	XRD	Crossroad

Principal Meridians

This table defines the code, meridian name, abbreviation, and states included for the principal meridians in the United States. The Land Ordinance of 1785 established the Public Land Survey System (PLSS). The survey covers 30 states. The Bureau of Land Management and U.S. Department of Interior defined these codes.

Abbreviation	Meridian Name	Code	States
1	First Principal	01	IN, OH
2	Second Principal	02	IL, IN
3	Third Principal	03	IL
4	Fourth Principal	04	IL, MN, WI
5	Fifth Principal	05	AR, MN, MO, ND, SD
6	Sixth Principal	06	CO, KS, NE, SD, WY
BH	Black Hills	07	SD
BO	Boise	08	ID
CHI	Chickasaw	09	MS
CHO	Choctaw	10	MS
CIM	Cimarron	11	OK
CR	Copper River	12	AK
FB	Fairbanks	13	AK
GSR	Gila and Salt River	14	AZ
HUM	Humboldt	15	CA
HUN	Huntsville	16	AL
IN	Indian	17	OK
LOU	Louisiana	18	LA
MI	Michigan	19	MI, OH
MT	Principal	20	MT
MD	Mt. Diablo	21	CA, NV
NAV	Navajo	22	AZ
NM	New Mexico	23	CO, NM
SH	St. Helena	24	LA
SS	St. Stephens	25	AL, MS
SL	Salt Lake	26	UT
SB	San Bernardino	27	CA
SEW	Seward	28	AK
TAL	Tallahassee	29	AL
UIN	Uintah	30	UT
UTE	Ute	31	CO

Abbreviation	Meridian Name	Code	States
WA	Washington	32	MS
WIL	Willamette	33	OR, WA
WR	Wind River	34	WY
OHI	Ohio	35	OH
GMR	Great Miami River	36	OH
MUS	Muskingum River	37	OH
OR	Ohio River	38	OH
SC1	First Scioto River	39	OH
SC2	Second Scioto River	40	OH
SC3	Third Scioto River	41	OH
ELL	Ellicotts Line	42	OH
12M	12 Mile Square	43	OH
KR	Kateel River	44	AK
UMI	Umiat	45	AK

Abbreviations Used in Manual

ADD attention deficit disorder
ADHD attention deficit hyperactive disorder
AED automatic external defibrillator
AES automatic extinguishing system
ALS advanced life support
ARFF Aircraft Rescue and Firefighting
ATF Alcohol, Tobacco, and Firearms
ATM automatic teller machine
ATV all-terrain vehicle
BATF Bureau of Alcohol, Tobacco, and Firearms
BLS basic life support
CAS Chemical Abstract Service
CAT computerized axial tomography
CGI combustible gas indicators
CPR cardio-pulmonary resuscitation
CVA cerebrovascular accident
DOT Department of Transportation
ECF emergency care facility
EGTA esophageal gastric tube airway
EKG electrocardiogram
EMS emergency medical service
EMT emergency medical technician
ET endotracheal tube
FBI Federal Bureau of Investigation
FD fire department
FDID fire department identification
FIBC flexible intermediate bulk containers
FID federal identifier
FIPS Federal Information Processing Standard
GFI ground fault interrupter
HazMat hazardous material
HVAC heating, ventilation, and air conditioning
ICC Interstate Commerce Commission
LCD liquid crystal display
LOC level of consciousness
LP liquid propane
LPG liquefied petroleum gas
MRI magnetic resonance imaging
MSDS Material Safety Data Sheets
NAERG North American Emergency Response Guidebook
NFDC National Fire Data Center
NFDRS National Fire Danger Rating System
NFIRS National Fire Incident Reporting System
NIBRS National Incident-Based Reporting System

OB	obstetrics
OD	overdose
OMB	Office of Management and Budget
ORI	Originating Agency Identifier
PASS	Personal Alert Safety System
PLSS	Public Land Survey System
psi	pounds per square inch
RIBC	rigid intermediate bulk container
SCBA	self-contained breathing apparatus
SCUBA	self-contained underwater breathing apparatus
TIA	transient isocheim attack
UCR	Uniform Crime Reporting
UPS	uninterrupted power supply
USFA	United States Fire Administration
V-Fib	ventricular fibrillation
V-Tach	ventricular tachycardia
VIN	vehicle identification number

Appendix D

IDENTIFICATION OF CHEMICALS AND HAZARDOUS MATERIALS

Chemical Name	Chemical ID No.	UN No.	CAS No.
1-(Chloromethyl)-4-nitrobenzene	0702000		
1-(2-Tolyl) thiourea	0292001		614-78-8
1,1,1-Trichloroethane	0389000	2831	71-55-6
1,1,2,2-Tetrachloroethane	0374005	1702	79-34-5
1,1,2-Trichloro-1,2,2-trifluoroethane	1715000		
1,1-DCE	1834000		
1,1-Di(tert-butylperoxy) cyclohexane	0859000	2179	
1,1-Dichloroethane	0130000	2362	75-34-3
1,1-Dichloroethylene	0408002	1303	75-35-4
1,1-Diethoxyethane	0001003	1088	105-57-7
1,1-Difluoroethane	0147001	1030	75-37-6
1,1-Difluoroethylene	0908000	1959	
1,1-Dimethylethane	0238001	1969	75-28-5
1,1-Dimethylethyl hydroperoxide	0068002		75-91-2
1,1-Dimethylethylamine	0065003	2734	75-64-9
1,1-Dimethylhydrazine	0159000	1163	57-14-7
1,1-Oxy-bis-(2-chloroethane)	0129006	1916	111-44-4
1,2,3,4-Diepoxybutane	0138004		1464-53-5
1,2,3,5-Tetramethyl benzene	1662000		
1,2,3,7,8-Pentachlorodibenzo-furans	1453000		
1,2,3-Trichloropropane	1712000		
1,2,4-Trichlorobenzene	1701000	2321	
1,2-Butylene oxide	0067000	3022	106-88-7
1,2-DCE	0131002	1150	540-59-0
1,2-Diaminoethane	0191002	1604	107-15-3
1,2-Dibromo-3-chloropropane	0853000	2872	
1,2-Dibromoethane	0192002	1605	106-93-4
1,2-Dichloroethane	0193001	1184	107-06-2
1,2-Dichloroethylene	0131000	1150	540-59-0
1,2-Dichloropropane	0351001	1279	78-87-5
1,2'-Dichlorotriethylamine	0180001	2734	538-07-8
1,2-Diethoxyethane	0195001	1153	629-14-1
1,2-Diethylhydrazine	0145000		1615-80-1
1,2-Dimethoxyethane	0150000	2252	110-71-4
1,2-Dimethylbenzene	0412001	1307	
1,2-Dinitrobenzene	0166001	1597	
1,2-Epoxybutane	0067003	3022	106-88-7
1,2-Epoxyethane	0199004	1040	75-21-8
1,2-Epoxypropane	0353002	1280	75-56-9
1,2-Ethylene dichloride	0193005	1184	107-06-2
1,2-Propanediol-1-methacrylate	0236001		27813-02-1
1,2-Propylenediamine	1537000	2258	
1,3-Butadiene	0059004	1010	106-99-0
1,3-CPD	0137002	2048	77-73-6
1,3-Cyclopentadiene dimer	0137003	2048	77-73-6
1,3-D	0135001	2047	542-75-6
1,3-Dichloro-2-propanone	0127002	2649	534-07-6
1,3-Dichloroacetone	0127000	2649	534-07-6
1,3-Dichloropropene	0135002	2047	542-75-6
1,3-Dimethylbenzene	0412002	1307	
1,3-Dinitrobenzene	0166002	1597	
1,3-Pentadiene	0319000		504-60-9
1,4- Butenediol	0607000		
1,4-Benzoquinone	0041001	2587	106-51-4
1,4-Butynediol	0072000	2716	110-65-6
1,4-Cyclohexadiene dioxide	0041003	2587	106-51-4
1,4-Dichloro-2-butene	1839003		
1,4-Dichlorobenzene	0128001	1592	106-46-7
1,4-Dichlorobutene	1839002		
1,4-Dicyanobutane	0015002	2205	111-69-3
1,4-Diethylenedioxide	0169001	1165	123-91-1
1,4-Dihydroxy-2-butyne	0072004	2716	110-65-6
1,4-Dimethylbenzene	0412003	1307	
1,4-Dinitrobenzene	0166003	1597	
1,4-Dioxane	0169000	1165	123-91-1
1,4-Epoxybutane	0379001	2056	109-99-9
1-Acetoxyethylene	0403003	1301	108-05-4
1-Acetoxypropane	0347002	1276	109-60-4
1-Amino-2,4-dinitrobenzene	0165001	1596	97-02-9
1-Amino-2-propanol	0243001		78-96-6
1-Aminobutane	0064001	1125	109-73-9
1-Bromo-3-methylbutane	0595000	2341	
1-Bromobutane	0056000	1126	109-65-9
1-Bromopropane	0598000		
1-Butanethiol	0070001	2347	109-79-5
1-Butene oxide	0067001	3022	106-88-7
1-Butyl acetate	0061002	1123	123-86-4
1-Butylene oxide	0067002	3022	106-88-7
1-Chloro-1-propene	0710000		
1-Chloro-2,3-epoxypropane	0172001	2023	106-89-8
1-Chloro-2-cyanoethane	0102001	3276	542-76-7
1-Chloro-2-nitrobenzene	0097001	1578	
1-Chloro-4-methylbenzene	0104001	2238	106-43-4
1-Chlorobutane	0094003	1127	109-69-3
1-Chloropropane	0708000	1278	
1-Chloropropylene	0713000		
1-Decene	0816000		
1-Fluoroethene	0407002	1860	75-02-5
1-Heptene	0220001	2278	592-76-7
1-Hexanol	1152000	2282	
1-Hexene	0222002	2370	592-41-6
1-Isocyanobutane	0069003	2485	111-36-4
1-Methoxyethylene	0409002	1087	107-25-5
1-Methyl ethyl alcohol	0242004	1219	67-63-0
1-Methyl naphthalene	1310000		
1-Methyl pyrrolidone	1327000		
1-Methyl-1-phenylethene	0244003	2303	98-83-9
1-Methyl-2-aminoethanol	0243003		78-96-6
1-Methylbutadiene	0319001		504-60-9
1-Methylethylamine	0245002	1221	75-31-0
1-Methylhydrazine	0282002	1244	60-34-4
1-Nitropropane	0308001	2608	108-03-2
1-Octene	0313002		111-66-0
1-Pentanol	0032005	1105	71-41-0
1-Pentene	1461000	1108	
1-Pentyl alcohol	0032006	1105	71-41-0
1-Phenyl-2-thiourea	0328003	2767	103-85-5
1-Phenylpropane	0348002	2364	103-65-1

Chemical Name	Chemical ID No.	UN No.	CAS No.
1-Propanethiol	0342001	2402	107-03-9
1-Propene	0350004	1077	115-07-1
1-Propyl acetate	0347003	1276	109-60-4
1-Propylene	0350005	1077	115-07-1
1-Tetradecene	1653000		
1-Tridecene	1720000		
1-Undecene	1761000		
2- Chloronaphthalene	0703000		
2-(2,4,5-Trichlorophenoxy) propanoic acid	1709000	2765	
2-(2,4,5-Trichlorophenoxy) propanoic acid,	1835000		
2-(2-Aminoethoxy)ethanol	0441000	3055	
2,2',2"-Trichlorotriethylamine	0399001		555-77-1
2,2'-Diaminodiethylamine	0143004	2079	111-40-0
2,2'-Dichlorodiethyl ether	0129000	1916	111-44-4
2,2-Dichloroisopropyl ether	0872000	2490	
2,2'-Dichlorotriethylamine	0880000		
2,2-Dimethyl octanoic acid	0938000		
2,2-Dimethylbutane	0300001	1208	75-83-2
2,2-Dimethylpropane	0942000	2044	
2,2-Dimethylpropane-1,3-diol	0943000		
2,3,7,8-Tetrachlorodibenzofurans	1649000		
2,3,7,8-Tetrachlorodibenzo-p-dioxin(TCDD)	1650000	2378	
2,3-Butylene oxide	0618000		
2,3-Dichloropropene	0877000	2047	
2,3-Dihydropyran	0912000	2376	
2,4,5-TP (or Silvex)	1691000	2765	
2,4,5-Trichlorophenoxyacetic acid	1707000	2765	
2,4,5-Trichlorophenoxyacetic acid, sodium salt	1708000		
2,4,6-Trichlorophenol	1706000	2020	
2,4,6-Trichloro-s-triazine	0113001	2670	108-77-0
2,4,6-Trimethyl aniline	1737000		
2,4-D	0122000	2765	94-75-7
2,4-Diaminotoluene	0385002	1709	95-80-7
2,4-Dichlorophenol	0875000		
2,4-Dichlorophenoxyacetic acid	0122002	2765	94-75-7
2,4-Dimethyl phenol	0939000	2261	
2,4-Dinitro-1-aminobenzamine	0165002	1596	97-02-9
2,4-Dinitroaniline	0165000	1596	97-02-9
2,4-Dinitrobenzamine	0165003	1596	97-02-9
2,4-Dinitro-o-cresol	0167002	1598	534-52-1
2,4-Dinitrophenol	0168004		51-28-5
2,4-Dinitrotoluene	0951000	2038	
2,4-DNP	0168005		51-28-5
2,4-Pentadione	0320005	2310	123-54-6
2,4-TDI	0386002	2078	584-84-9
2,4-Toluenediamine	0385000	1709	95-80-7
2,5-Dioxahexane	0150003	2252	110-71-4
2,6-Diethyl aniline	0889000		
2,6-Xylidine	1784000	1711	
2-Acetylaminofluorene	0417000		
2-Amino-2-methyl-1-propanol	0444000		
2-Aminoethanol	0174001	2491	141-43-5
2-Aminoisobutane	0065001	2734	75-64-9
2-Aminopentane	0140001	1154	109-89-7
2-Aminopropane	0245001	1221	75-31-0
2-Aminopyridine	0023001	2671	
2-Bromobutane	0591000	2339	
2-Bromoethyl ethyl ether	0593000	2340	
2-Bromopentane	0596000		
2-Bromopropane	0057000	2344	75-26-3
2-Butanone	0280001	1193	78-93-3
2-Butenal	0106001	1143	4170-30-3
2-Butyne-1,4-diol	0072001	2716	110-65-6
2-Butynediol	0072002	2716	110-65-6
2-Chloro-1,3-butadiene	0100003	1991	126-99-8
2-Chloro-1-ethanol	0189002	1135	107-07-3
2-Chloroacetaldehyde	0090001	2232	107-20-0
2-Chloroacrylic acid, methyl ester	0275001		80-63-7
2-Chlorobuta -1,3-diene	0100004	1991	126-99-8
2-Chlorobutane	0693000	1127	
2-Chloroethane sulfonyl chloride	0697000		
2-Chloroethanol	0189001	1135	107-07-3
2-Chloroethyl chlorocarbonate	0095001	2742	627-11-2
2-Chloroethyl vinyl ether	0698000		
2-Chlorophenylthiourea	0098000		5344-82-1
2-Chloropropane	0709000	2356	
2-Chloropropene	0711000	2456	
2-Chloropropionic acid	0101001	2511	598-78-7
2-Cyano-2-propanol	0005001	1541	75-86-5
2-Cyanoethyl alcohol	0190001		109-78-4
2-Cyanohydrin	0190002		109-78-4
2-Cyanopropane	0240001	2284	78-82-0
2-Cyanpropene	0264001	3079	126-98-7
2-Diethylaminoethanol	0141002	2686	100-37-8
2-Dimethylaminoethanol	0930000	2051	
2-Ethoxyethanol	0196001	1171	110-80-5
2-Ethoxyethyl ethyl ether	0195004	1153	629-14-1
2-Ethyl hexanoic acid	1052000		
2-Ethyl hexanol	1053000		
2-Ethyl hexylamine	1054000	2276	
2-Ethyl toluene	1071000		
2-Ethyl-3-propyl acrolein	1065000		
2-Fluoroacetic acid	0208002	2642	144-49-0
2-Fluoroaniline	1096000	2941	
2-Fluoroethanol	0194001		371-62-0
2-Formylfuran	0216001	1199	98-01-1
2-Furaldehyde	0216003	1199	98-01-1
2-Furfural	0216004	1199	98-01-1
2-H-1,4-oxazine	0298003	2054	110-91-8
2-Heptanone	0267003	1110	110-43-0
2-Hexanone	0271001	1224	591-78-6
2-Hexene	1153000		
2-Hydroperoxy-2-methylpropene	0068003		75-91-2
2-Hydroxyethyl acrylate	1160000		
2-Hydroxyisobutyronitrile	0005002	1541	75-86-5
2-Hydroxypropinonitrile	0250003	3275	78-97-7
2-Hydroxypropylamine	0243002		78-96-6

Chemical Name	Chemical ID No.	UN No.	CAS No.
2-Hydroxytriethylamine	0141004	2686	100-37-8
2-Isopropylcyanohydrin	0005004	1541	75-86-5
2-Methoxy-2-methylpropane	0270002	2398	1634-04-4
2-Methoxyethanol	0197005	1188	109-86-4
2-Methyl lactonitrile	0005005	1541	75-86-5
2-Methyl-1,3-butadiene	0241002	1218	78-79-5
2-Methyl-1-butene	1281000	2459	
2-Methyl-1-butenone	0287003	1246	814-78-8
2-Methyl-1-nitroanthraquinone	1312000		
2-Methyl-1-pentene	1317000		
2-Methyl-2-butene	1282000	2460	
2-Methyl-2-hydroxy-3-butyne	1305000		
2-Methyl-2-pentene	1318000		
2-Methyl-2-propenoic acid	0255003	2531	79-41-4
2-Methyl-4-pentanone	0285003	1245	108-10-1
2-Methyl-5-vinyl pyridine (MVP)	1331000	3073	
2-Methyl-6-ethyl aniline	1298000		
2-Methylacrylic acid, methyl ester	0290002	1247	80-62-6
2-Methylbutadiene	0241003	1218	78-79-5
2-Methylpropane	0238002	1969	75-28-5
2-Methylpropene	0239001	1055	115-11-7
2-Methylpropenenitrile	0264003	3079	126-98-7
2-Nitrophenol	1399000	1663	
2-Nitropropane	0308002	2608	79-46-9
2-Nitrotoluene	0310002	1664	
2-Oxetanone	0344002	1993	57-57-8
2-Pentene	1462000		
2-Phenyloxirane	0363002		96-09-3
2-Phenylpropane	0246003	1918	98-82-8
2-Phenylpropylene	0244004	2303	98-83-9
2-Propanol	0242005	1219	67-63-0
2-Propanone	0004003	1090	67-64-1
2-Propen-1-amine	0018005	2334	107-11-9
2-Propenal	0010004	1092	79-06-1
2-Propenamine	0018004	2334	107-11-9
2-Propenenitrile	0013004	1093	107-13-1
2-Propenoic acid	0012007	2218	79-10-7
2-Propenol	0017006	1098	107-18-6
2-Propenyl bromide	0019004	1099	106-95-6
2-Propenyl chloroformate	0021002	1722	2937-50-0
2-Propyl chloroformate	0247003	2407	108-23-6
2-Propylamine	0245003	1221	75-31-0
2-Propynol	0343003	1986	107-19-7
2-Pyrrolidone	1551000		
2-Thiopropane	0163004	1164	75-18-3
2-Thiourea	0382003		62-56-6
3-(1-Methyl ethyl) phenyl methyl carbamate	1299000		
3,3'-Dichlorobenzidine	0869000		
3,3'-Diethylthiadicarbocyanine iodide	0171002		514-73-8
3-Aminopropene	0018001	2334	107-11-9
3-Aminopropylene	0018002	2334	107-11-9
3-Aminopyridine	0023002	2671	
3-Bromo-1-propene	0019002	1099	106-95-6
3-Bromopropylene	0019003	1099	106-95-6
3-Bromopropyne	0058000	2345	106-96-7
3-Buten-2-one	0297001	1251	78-94-4
3-Buteno-beta-lactone	0149002	2521	674-82-8
3-Chloropropanenitrile	0102002	3276	542-76-7
3-Chloropropene	0020003	1100	107-05-1
3-Chloropropionitrile	0102000	3276	542-76-7
3-Chloropropyl octyl sulfoxide	0714000		
3-Chlorotoluene	0716000	2238	
3-Hexene	1154000		
3-Hydroxy-1-propyne	0343002	1986	107-19-7
3-Hydroxypropionitrile	0190005		109-78-4
3-Methoxybutyl acetate	1267000		
3-Methyl nitrosoaminopropionitrile	1313000		
3-Methyl-1-butene	1283000	2561	
3-Methyl-2-butanone	0269000	2397	563-80-4
3-Methyl-3-butene-2-one	0287002	1246	814-78-8
3-Methylbut-2-one	0269002	2397	563-80-4
3-MIC	0284006	2053	108-11-2
3-Nitrophenol	1400000	1663	
3-Nitrotoluene	0310003	1664	
3-Nitrotoluol	0310007	1664	
3-Pentanone	0146005	1156	96-22-0
3-Propanolide	0344003	1993	57-57-8
3-Trifluoromethylaniline	1731000	2948	
4,4'-DDT	0811000	2761	
4,4'-Diaminodiphenyl ether	0832000		
4,4'-Isopropylidenediphenol	1186000		
4,4'-Methylene bis-(2-chloroaniline)	1292000		
4,4'-Methylene bis-(2-methyaniline)	1293000		
4,4'-Methylene dianiline	1295000		
4,4'-Thiodianiline	1679000		
4,6-Dinitro-o-cyclohexyl phenol	0950000	9026	
4-Aminoazobenzene	0439000		
4-Aminobutyl diethoxymethyl silane	0440000		
4-Amino-N,N-dimethylaniline	0160001		99-98-9
4-Aminopropiophenone	0445000		
4-Aminopyridine	0023003	2671	
4-Bromophenyl phenyl ether	0597000		
4-Chloro-1-methylbenzene	0104002	2238	106-43-4
4-Chlorophenyl phenyl ether	0705000		
4-Chlorotoluene	0104003	2238	106-43-4
4-Dimethyl aminoazobenzene	0929000		
4-Fluoroaniline	1097000	2941	
4-Fluorotoluene	1098000	2388	
4-Methyl-1-pentene	0291000	2288	691-37-2
4-Methyl-2-pentanol	0284004	2053	108-11-2
4-Methyl-2-pentene	1319000		
4-Methyl-3-penten-2-one	1841004	1229	141-79-7
4-Methylene	0149004	2521	674-82-8
4-Nitroaniline	1380000	1661	
4-Nitrobiphenyl	1382000		

Chemical Name	Chemical ID No.	UN No.	CAS No.
4-Nitrophenol	1401000	1663	
4-Nitropyridine-1-oxide	1402000		
4-Nitrotoluene	0310004	1664	
4-Pyridinamine	0023009	2671	
4-Pyridylamine	0023010	2671	
4-Thiapentanal	1674000	2785	
5-Nitroacenaphthene	1379000		
5-Nitro-o-anisidine	1381000		
7H- Dibenzo (C,G) carbazole	0850000		
A-150	0411001	1305	75-94-5
AA	0017002	1098	107-18-6
Acetal	0001000	1088	105-57-7
Acetaldehyde	0002000	1089	75-07-0
Acetaldehyde cyanohydrin	0250001	3275	78-97-7
Acetaldehyde ethylacetal	0001001	1088	105-57-7
Acetamide	0414000		
Acetene	0188001	1038	74-85-1
Acetic acid (more than 80%)	1840001	2789	64-19-7
Acetic acid (solution in water 1-80%)	1840000	2790	64-19-7
Acetic acid anhydride	0003001	1715	108-24-7
Acetic acid bromide	0007001	1716	506-96-7
Acetic acid chloride	0008001	1717	75-36-5
Acetic acid, dimethylamide	0151001		127-19-5
Acetic acid, ethinyl ester	0403001	1301	108-05-4
Acetic acid, methyl ester	0261001	1231	79-20-9
Acetic acid, n-butyl ester	0061001	1123	123-86-4
Acetic acid, n-propyl ester	0347001	1276	109-60-4
Acetic acid, vinyl ester	0403002	1301	108-05-4
Acetic aldehyde	0002001	1089	75-07-0
Acetic anhydride	0003000	1715	108-24-7
Acetic chloride	0008002	1717	75-36-5
Acetic ester	0175001	1173	141-78-6
Acetic ether	0175002	1173	141-78-6
Acetoacetone	0320001	2310	123-54-6
Acetocyanohydrin	1819000		
Acetol	0001002	1088	105-57-7
Acetone	0004000	1090	67-64-1
Acetone cyanohydrin	0005000	1541	67-64-1
Acetone thiosemicarbazide	0415000		
Acetonitrile	0006000	1648	75-05-8
Acetophenone	0416000		
Acetyl acetone	0320002	2310	123-54-6
Acetyl anhydride	0003002	1715	108-24-7
Acetyl bromide	0007000	1716	506-96-7
Acetyl chloride	0008000	1717	75-36-5
Acetyl ether	0003003	1715	108-24-7
Acetyl ketene	0149001	2521	674-82-8
Acetyl oxide	0003004	1715	108-24-7
Acetyl peroxide solution	0418000	2084	
Acetylene	0009000	1001	74-86-2
Acetylene dichloride	0131001	1150	540-59-0
Acetylene tetrachloride	0374001	1702	79-34-5
Acetylene trichloride	0390001	1710	79-01-6
Acetylenogen	0076001	1402	75-20-7
Acetylsilicon trichloride	0022001	1724	107-37-9
Acridine	0419000	2713	
Acroleic acid	0012001	2218	79-10-7
Acrolein	0010000	1092	79-06-1
Acryladehyde	0010001	1092	79-06-1
Acrylamide	0011000	2074	79-06-1
Acrylic acid	0012000	2218	79-10-7
Acrylic acid, butyl ester	0062001	2348	141-32-2
Acrylic acid, chloride	0014001	9188	814-68-6
Acrylic acid, ethyl ester	0176001	1917	140-88-5
Acrylic acid, methyl ester	0263001	1919	96-33-3
Acrylic amide	0011001	2074	79-06-1
Acrylonitrile	0013000	1093	107-13-1
Acryloyl chloride	0014000	9188	814-68-6
Acrylyl chloride	0014002	9188	814-68-6
Actidione	0117001		66-81-9
Actidone	0117002		66-81-9
Adipic acid	0420000		
Adipic acid dinitrile	0015001	2205	111-69-3
Adiponitrile	0015000	2205	111-69-3
Alachlor	0421000		
Alcide	0088001	9191	10049-04-4
Aldicarb	0016000	2757	116-06-3
Aldifen	0168003		51-28-5
Aldrin	0422000	2761	
Algrain	0177001	1170	64-17-5
Alkyl benzene sulfonic acids	0423000		
Allene	0424000	2200	
Allene-methyl acetylene mixture	0262001	1060	
Allethrin	0425000	2902	
Allyl acetate	0426000	2333	
Allyl alcohol	0017000	1098	107-18-6
Allyl aldehyde	0010002	1092	79-06-1
Allyl bromide	0019000	1099	106-95-6
Allyl chloride	0020000	1100	107-05-1
Allyl chlorocarbonate	0021001	1722	2937-50-0
Allyl chloroformate	0021000	1722	2937-50-0
Allyl ether	0427000		
Allyl ethyl ether	0428000	2335	
Allyl iodide	0429000	1723	
Allyl isothiocyanate	0430000	1545	
Allylal	0017001	1098	107-18-6
Allylamine	0018000	2334	107-11-9
Allylic alcohol	0017003	1098	107-18-6
Allyltrichlorosilane	0022000	1724	107-37-9
alpha-Bromotoluene	0044001	1737	100-39-0
alpha-Chlorobenzaldehyde	0043002	1736	98-88-4
alpha-Chloropropionic acid	0101000	2511	598-78-7
alpha-Chlorotoluene	0045001	1738	100-44-7
alpha-Cumene hydroperoxide	0107001	2116	80-15-9
alpha-Endosulfan	0992000		
alpha-Methacrylic acid	0255002	2531	79-41-4
alpha-Methyalcrylic acid	0255001	2531	79-41-4

Chemical Name	Chemical ID No.	UN No.	CAS No.
alpha-Methyl benzyl alcohol	1280000	2937	
alpha-Methyl styrene	0244002	2303	98-83-9
alpha-Naphthyl amine	1355000	2077	
alpha-Pinene	0337000	2368	80-56-8
alpha-Tolunitrile	0324001	2470	140-29-4
Aluminum (dust)	0431000	1396	
Aluminum borohydride	0432000	2870	
Aluminum chloride	0433000	1726	
Aluminum fluoride	0434000		
Aluminum nitrate	0435000	1438	
Aluminum oxide	0436000		
Aluminum phosphide	0437000	1397	
Aluminum sulfate	0438000		
Aluminum, triisobutyl	0395001		100-99-2
AMFO	0034001	0331	
AM-FOL	0024001	1005	7664-41-7
Aminic acid	0214001	1779	64-18-6
Aminobenzene	0035002	1547	62-53-3
Aminocyclohexane	0118001	2357	108-91-8
Aminoethane	0178001	1036	75-04-7
Aminoethyl ethanol amine	0442000		
Aminoethylethandiamine	0143001	2079	111-40-0
Aminohexahydrobenzene	0118002	2357	108-91-8
Aminomethane	1831000		
Aminophen	0035001	1547	62-53-3
Aminopyridine	0023000	2671	
Aminotoluene	0387001	1708	
Amiton	0446000	3017	
Amiton oxalate	0447000		
Amitrole	0448000		
Ammonia	0024000	1005	7664-41-7
Ammonia monohydrate	0027001		1336-21-6
Ammonia solution	0027002		1336-21-6
Ammonia water	0027003		1336-21-6
Ammonia, anhydrous	0024002	1005	7664-41-7
Ammonium acetate	0449000		
Ammonium aminoformate	0026001	9083	1111-78-0
Ammonium benzoate	0025000	9080	1863-63-4
Ammonium bicarbonate	0452000		
Ammonium bifluoride	0453000	1727	
Ammonium bisulfite	0454000	2693	
Ammonium bromide	0455000		
Ammonium carbamate	0026000	9083	1111-78-0
Ammonium carbonate	0456000	9084	
Ammonium chloride	0457000	9085	
Ammonium chromate	0458000	9086	
Ammonium citrate	0459000	9087	
Ammonium dichromate	0460000	1439	
Ammonium fluoborate	0461000	9088	
Ammonium fluoride	0462000	2505	
Ammonium formate	0463000		
Ammonium gluconate	0464000		
Ammonium hydroxide	0027000	2672	1336-21-6
Ammonium hydroxide (10-35% in water)	0027004	2672	1336-21-6
Ammonium hydroxide (35-50% in water)	0027005	2073	1336-21-6
Ammonium hypophosphite	0465000		
Ammonium iodide	0466000		
Ammonium lactate	0467000		
Ammonium lauryl sulfate	0468000		
Ammonium molybdate	0469000		
Ammonium monosulfide	0029001	2683	12135-76-1
Ammonium nitrate	0470000	1942	
Ammonium nitrate fertilizers	0471000	2072	
Ammonium nitrate:fuel oil	0034002	0331	
Ammonium nitrate-phosphate mixture	0472000	2070	
Ammonium nitrate-sulfate mixture	0473000	2069	
Ammonium nitrate-urea solution	0474000		
Ammonium oleate	0475000		
Ammonium oxalate	0476000	2449	
Ammonium pentaborate	0477000		
Ammonium perchlorate	0028000	1442	7790-98-9
Ammonium perchlorate high explosive	0028001	1442	7790-98-9
Ammonium perchlorate oxidizer	0028002	1442	7790-98-9
Ammonium permanganate	0478000	9190	
Ammonium persulfate	0479000	1444	
Ammonium phosphate	0480000		
Ammonium picrate(wet)	0481000	1310	
Ammonium rhodanate	0031000	9092	1762-95-4
Ammonium silicofluoride	0482000	2854	
Ammonium stearate	0483000		
Ammonium sulfamate	0484000	9089	
Ammonium sulfate	0485000		
Ammonium sulfide	0029000	2683	12135-76-1
Ammonium sulfite	0030000	9090	10196-04-0
Ammonium sulfocyanide	0031001	9092	1762-95-4
Ammonium tartrate	0486000	9091	
Ammonium thiocyanate	0031002	9092	1762-95-4
Ammonium thiosulfate	0487000	9093	
AMS	0244001	2303	98-83-9
Amthio	0031003	9092	1762-95-4
Amyl alcohol	0032000	1105	71-41-0
Amyl methyl ketone	0267001	1110	110-43-0
Amyl phthalate	0494000		
Amylol	0032002	1105	71-41-0
Amyltrichlorosilane	0033000	1728	107-72-2
AN/FO	0034000	0331	
Anhydrol	0177002	1170	64-17-5
Anhydrous ammonia	0024003	1005	7664-41-7
Anhydrous ethanol	0177003	1170	64-17-5
Anhydrous hydrobromic acid	0228001	1048	10035-10-6
Anhydrous hydrofluoric acid	0231001	1052	7664-39-3
Aniline	0035000	1547	62-53-3
Aniline oil	0035003	1547	62-53-3
Anisole	0498000	2222	
Anisoyl chloride	0499000	1729	
Anone	0116001	1915	108-94-1
Ansul ether 121	0150001	2252	110-71-4

Chemical Name	Chemical ID No.	UN No.	CAS No.
Anthion	0340001	1492	7727-21-1
Anthracene	0500000		
Antimony pentachloride	0502000	1730	
Antimony pentafluoride	0503000	1732	
Antimony potassium tartrate	0504000	1551	
Antimony tribromide	0505000	1549	
Antimony trichloride	0506000	1733	
Antimony trifluoride	0507000	1549	
Antimony trioxide	0508000		
Antimony(powder)	0501000	2871	
ANTU	0509000	1651	
Aqua fortis	0302002		7697-37-2
Aqueous ammonia	0027006		1336-21-6
Aramite	0510000		
Arctic	0273001	1063	74-87-3
Argon	0511000	1006	
Arsenic	0512000	1558	
Arsenic acid	0513000	1561	
Arsenic butter	0036001	1560	7784-34-1
Arsenic chloride	0036002	1560	7784-34-1
Arsenic dichloroethane	0186001	1892	598-14-1
Arsenic disulfide	0514000	1557	
Arsenic hydride	0037001	2188	7784-42-1
Arsenic pentoxide	0515000	1559	
Arsenic trichloride	0036000	1560	7784-34-1
Arsenic trihydride	0037002	2188	7784-42-1
Arsenic trioxide	0516000	1561	
Arsenic trisulfide	0517000	1557	
Arsenous chloride	0036003	1560	7784-34-1
Arsenous trichloride	0036004	1560	7784-34-1
Arsine	0037000	2188	7784-42-1
Asbestos	0518000	2212	
Asphalt	0519000	1999	
Asphalt blending stocks: roofers flux	0520000	1999	
Asphalt blending stocks: straight run residue	0521000	1999	
asym-Dimethylhydrazine	0159001	1163	57-14-7
Atrazine	0522000		
Auramine	0523000		
Avitrol	0023007	2671	
Azabenzene	0354001	1282	110-86-1
Azacyclohexane	0338001	2401	110-89-4
Azacyclopropane	0198001	1185	151-56-4
Azide	0357001	1687	26628-22-8
Azine	0354002	1282	110-86-1
Azirane	0198002	1185	151-56-4
Aziridine	0198003	1185	151-56-4
Barium	0524000	1400	
Barium carbonate	0525000	1564	
Barium chlorate	0533000	1445	
Barium cyanide	0534000	1565	
Barium nitrate	0535000	1446	
Barium perchlorate	0536000	1447	
Barium permanganate	0537000	1448	

Chemical Name	Chemical ID No.	UN No.	CAS No.
Barium peroxide	0538000	1449	
BCME	0133001	2249	542-88-1
BD	0059001	1010	106-99-0
Benomyl	0539000		
Bentazon	0540000		
Benzal chloride	0047001	1886	98-87-3
Benzaldehyde	1838000	1989	100-52-7
Benzaldehyde	1838001	1990	100-52-7
Benzamide	0038000		
Benzenamine	0035004	1547	62-53-3
Benzene	0039000	1114	71-43-2
Benzene arsonic acid	0541000		
Benzene chloride	0093001	1134	108-90-7
(Chloromethyl) benzene	0045002	1738	100-44-7
Benzene fluoride	0209001	2387	462-06-6
Benzene hexachloride	0542000	2729	
Benzene methylal	1838003		100-52-7
Benzene nitro	1842001	1662	98-95-3
Benzene phosphorous dichloride	0327001	2798	644-97-3
Benzene sulfonyl chloride	0543000	2225	
Benzeneacetonitrile	0324002	2470	140-29-4
Benzenecarbonal	1838002		100-52-7
Benzenecarbonyl chloride	0043001	1736	98-88-4
Benzenehexahydride	0115001	1145	108-94-1
Benzenenitrile	0040001	2224	100-47-0
Benzenethiol	0326001	2337	108-98-5
Benzenol	0323003		108-95-2
Benzidine	0544000	1885	
Benzin	0299001		8030-30-6
Benzo (A) anthracene	0545000		
Benzo (A) pyrene	0546000		
Benzo (B) fluoranthene	0547000		
Benzo (GHI) perylene	0548000		
Benzoic acid	0549000		
Benzoic acid amide	0038001		
Benzoic aldehyde	1838004		100-52-7
Benzoic trichloride	0042001	2226	98-07-7
Benzol	0039001	1114	71-43-2
Benzonitrile	0040000	2224	100-47-0
Benzophenone	0550000		
Benzoquinone	0041000	2587	106-51-4
Benzotrichloride	0042000	2226	98-07-7
Benzoyl chloride	0043000	1736	98-88-4
Benzoyl peroxide	0551000	2085	
Benzoylamide	0038002		
Benzyl acetate	0552000		
Benzyl alcohol	0553000		
Benzyl amine	0554000		
Benzyl bromide	0044000	1737	100-39-0
Benzyl carbonyl chloride	0046001	1739	501-53-1
Benzyl chloride	0045000	1738	100-44-7
Benzyl chlorocarbonate	0046002	1739	501-53-1
Benzyl chloroformate	0046000	1739	501-53-1
Benzyl cyanide	0324003	2470	140-29-4
Benzyl dichloride	0047002	1886	98-87-3

Chemical Name	Chemical ID No.	UN No.	CAS No.
Benzyl dimethyl amine	0555000	2619	
Benzyl dimethyl octadecyl ammonium chloride	0556000		
Benzyl ether	0124001		103-50-4
Benzyl iodide	0557000	2653	
Benzyl nitrile	0324004	2470	140-29-4
Benzyl oxide	0124002		103-50-4
Benzyl trichloride	0042003	2226	98-07-7
Benzyl trimethyl ammonium chloride	0558000		
Benzyl violet	0559000		
Benzylene chloride	0047003	1886	98-87-3
Benzylidene chloride	0047000	1886	98-87-3
Beryllium	0560000	1567	
Beryllium chloride	0561000	1566	
Beryllium fluoride	0562000	1566	
Beryllium nitrate	0563000	2464	
Beryllium oxide	0564000	1566	
Beryllium sulfate	0565000	1566	
beta-Butyrolactone	0606000		
beta-Chloroprene	0100001	1991	126-99-8
beta-Endosulfan	0993000		
beta-Methyl acrolein	0106006	1143	4170-30-3
beta-Propiolactone	0344004	1993	57-57-8
BHA	0566000		
BHC, alpha-	0567000		
BHC, beta-	0568000		
BHC, delta-	0569000		
BHC, gamma-	0570000		
BIC	0069001	2485	111-36-4
Bicylcopentadiene	0137001	2048	77-73-6
Biethylene	0059002	1010	106-99-0
Bimethyl	0173002		74-84-0
Biocide	0010003	1092	79-06-1
Biogas	0257002		74-82-8
Bioxirane	0138001		1464-53-5
Biphenyl	0571000		
Bis(2-aminoethyl)amine	0143002	2079	111-40-0
Bis-(2-chloro-1-methyl ethyl) ether	0574000	2490	
Bis-(2-chloroethoxy) methane	0572000		
Bis-(2-chloroethyl) ether	0129001	1916	111-44-4
Bis-(2-chloroisopropyl) ether	0573000	2490	
Bis-(2-ethyl hexyl) adipate	0575000		
Bis-(2-ethyl hexyl) phthalate	0576000		
Bis(chloromethyl) ether	0133002	2249	542-88-1
Bis-(chloromethyl)ketone	0127001	2649	534-07-6
Bismuth oxychloride	0577000		
Bis-O,O-diethylpyrophosphoric anhydride	0377002		107-49-3
Bisphenol A	0578000		
Bisphenol A diglycidyl ether	0579000		
Bisulfite	0367001	1079	7446-09-5
Bithionol	0580000		
Bitoscanate	0581000		
Bivinyl	0059003	1010	106-99-0
B-K Liquid	0360001	1791	7681-52-9

Chemical Name	Chemical ID No.	UN No.	CAS No.
Blasting oil	0306002	0143	55-63-0
Bleach	0360002	1791	7681-52-9
Blue oil	0035005	1547	62-53-3
Bolero	0582000		
Bondolane A	0364001		126-33-0
Bonoform	0374002	1702	79-34-5
Boric acid	0583000		
Borneol	0584000	1312	
Boroethane	0125001	1911	19287-45-7
Boron bromide	0048001	2692	10294-33-4
Boron chloride	0049001	1741	10294-34-5
Boron fluoride	0050001	1008	7637-07-2
Boron hydride	1820000		
Boron tribromide	0048000	2692	10294-33-4
Boron trichloride	0049000	1741	10294-34-5
Boron trifluoride	0050000	1008	7637-07-2
Boron trifluoride; dimethyl etherate	0585000	2965	
Bottled gas	0252001	1075	68476-85-7
BPL	0344001	1993	57-57-8
Brimstone	0365002	1350	7704-34-9
Brom	0051001	1744	7726-95-6
Bromacil	0586000		
Bromadiolone	0587000		
Bromide fluoride	0052001	1745	7789-30-2
Bromine	0051000	1744	7726-95-6
Bromine chloride	0588000	2901	
Bromine cyanide	0110000	1889	506-68-3
Bromine fluoride	0053001	1746	7787-71-5
Bromine pentafluoride	0052000	1745	7789-30-2
Bromine trifluoride	0053000	1746	7787-71-5
Bromoacetic acid	0589000	1938	
Bromoacetone	0590000	1569	
Bromoacetyl bromide	0054000	2513	598-21-0
Bromoallylene	0019001	1099	106-95-6
Bromobenzene	0055000	2514	108-86-1
Bromochloromethane	0592000	1887	
Bromocyan	0110001	1889	506-68-3
Bromoethanoyl bromide	0054001	2513	598-21-0
Bromoethene	0404001	1085	593-60-2
Bromoethylene	0404002	1085	593-60-2
Bromoform	0594000	2515	
Bromofume	0192001	1605	106-93-4
Brom-o-gas	0268001	1062	74-83-9
Bromomethane	0268002	1062	74-83-9
Bromophenylmethane	0044002	1737	100-39-0
Bromopropyne	0058001	2345	106-96-7
Bromotrifluoroethylene	0599000	2419	
Bromotrifluoromethane	0600000	1009	
Brucine	0601000	1570	
Butadiene	0059000	1010	106-99-0
Butadiene diepoxide	0138002		1464-53-5
Butadiene dioxide	0138003		1464-53-5
Butal	0073001	1129	123-72-8
Butaldehyde	0073000	1129	123-72-8
Butanal	0073003	1129	123-72-8

Chemical Name	Chemical ID No.	UN No.	CAS No.
Butane	0060000	1011	106-97-8
Butane nitrile	0074001	2411	109-74-0
Butanedione	0602000	2346	
Butanethiol	0070002	2347	109-79-5
Butanoyl chloride	0075001	2353	141-75-3
Butene	0066001	1012	25167-67-3
Butyl acetic acid	0077001	2829	142-62-1
Butyl acid phosphate	0608000	1718	
Butyl acrylate	0062000	2348	141-32-2
Butyl alcohol	0063002	1120	75-65-0
Butyl aldehyde	0073004	1129	123-72-8
Butyl benzyl phthalate	0614000		
Butyl bromide	0056001	1126	109-65-9
Butyl butyrate	0615000		
Butyl chloride	0094001	1127	109-69-3
Butyl ethanoate	0061003	1123	123-86-4
Butyl ether	0619000	1149	
Butyl ethylene	0222001	2370	592-41-6
Butyl isocyanate	0069002	2485	111-36-4
Butyl isovalerate	0621000		
Butyl mercaptan	0070000	2347	109-79-5
Butyl methyl ether	0623000	2350	
Butyl nitrite	0624000	2351	
Butyl toluene	0629000	2667	
Butyl, decyl, cetyl-eicosyl methacrylate	0617000		
Butyl-2-propenoate	0062003	2348	141-32-2
Butylacetone	0267002	1110	110-43-0
Butylamine	0064002	1125	109-73-9
Butylated hydroxyanisole	0613000		
Butylene	0066000	1012	25167-67-3
Butylethylamine	0181001	2734	13360-63-9
Butylsilicon trichloride	0071001	1747	7521-80-4
Butyltrichlorosilane	0071000	1747	7521-80-4
Butynediol	0072003	2716	110-65-6
Butyral	0073005	1129	123-72-8
Butyraldehyde	0073002	1129	123-72-8
Butyric acid	0630000		
Butyric acid chloride	0075002	2353	141-75-3
Butyric acid nitrile	0074002	2411	109-74-0
Butyric acid, ethyl ester	0182001	1180	105-54-4
Butyric acid, methyl ester	0272001	1237	623-42-7
Butyric chloride	0075003	2353	141-75-3
Butyronitrile	0074000	2411	109-74-0
Butyryl chloride	0075000	2353	141-75-3
BZCF	0046003	1739	501-53-1
C.I. acid blue 9, diammonium salt	0734000		
C.I. acid blue 9, disodium salt	0735000		
C.I. acid green 3	0736000		
C.I. basic green 4	0737000		
C.I. basic red 1	0738000		
C.I. disperse yellow 3	0739000		
C.I. food red 15	0741000		
C.I. food red 5	0740000		
C.I. solvent orange 7	0742000		
C.I. solvent yellow 14	0744000		
C.I. solvent yellow 3	0743000		
C.I. vat yellow 4	0747000		
Cacodylic acid	0633000	1572	
Cadmium acetate	0635000		
Cadmium bromide	0636000		
Cadmium chloride	0637000		
Cadmium fluoroborate	0638000		
Cadmium nitrate	0639000		
Cadmium oxide	0640000		
Cadmium stearate	0641000		
Cadmium sulfate	0642000		
Cadmium(powder)	0634000		
CADOXTBH	0068001		75-91-2
Calcium	0643000	1401	
Calcium acetylide	0076002	1402	75-20-7
Calcium arsenite	0644000	1574	
Calcium carbide	0076000	1402	75-20-7
Calcium chlorate	0645000	1452	
Calcium chloride	0646000		
Calcium chromate	0657000	9096	
Calcium cyanide	0658000	1575	
Calcium fluoride	0659000		
Calcium hydride	0660000	1404	
Calcium hydroxide	0661000		
Calcium hypochlorite	0662000	1748	
Calcium nitrate	0663000	1454	
Calcium oxide	0664000	1910	
Calcium peroxide	0665000	1457	
Calcium phosphate	0666000		
Calcium phosphide	0667000	1360	
Calcium resinate	0668000		
Camphene	0669000	9011	
Camphor oil	0670000	1130	
Cantharidin	0671000		
Caproic acid	0077000	2829	142-62-1
Caprolactam	0672000		
Capronic acid	0077002	2829	142-62-1
Caprylene	0313001		111-66-0
Capsine	0167001	1598	534-52-1
Captan	0673000	9099	
Carbachol	0078001		51-83-2
Carbachol chloride	0078000		51-83-2
Carbacholin	0078002		51-83-2
Carbacholine dichloride	0078003		51-83-2
Carbacryl	0013001	1093	107-13-1
Carbamic acid, ammonium salt	0026002	9083	1111-78-0
Carbamide peroxide	0401001	1511	124-43-6
Carbamiotin	0078004		51-83-2
Carbamoyl dimethyl chloride	0154001	2262	79-44-7
Carbamyl	0016001	2757	116-06-3
Carbaryl(solid)	0674000	2757	
Carbide	0076003	1402	75-20-7
Carbinol	0260001	1230	67-56-1
Carbofuran	0079000	2757	1563-66-2

Chemical Name	Chemical ID No.	UN No.	CAS No.
Carbolic acid	0323004		108-95-2
Carbolic oil	0675000	2821	
Carbon bisulfide	0081001	1131	75-15-0
Carbon bisulphide	0081002	1131	75-15-0
Carbon chloride	0083002	1846	56-23-5
Carbon dichloride oxide	0329001	1076	75-44-5
Carbon difluoride oxide	0084002	2414	353-50-4
Carbon dioxide	0080000	1013	124-38-9
Carbon disulfide	0081000	1131	75-15-0
Carbon monoxide	0082000	1016	630-08-0
Carbon nitride	0109001	1026	460-19-5
Carbon oxide	0082002	1016	630-08-0
Carbon oxide sulfide	0085001	2204	463-58-1
Carbon oxychloride	0329002	1076	75-44-5
Carbon oxyfluoride	0084003	2414	353-50-4
Carbon oxysulfide	0085002	2204	463-58-1
Carbon sulfide	0081003	1131	75-15-0
Carbon tet	0083003	1846	56-23-5
Carbon tetrachloride	0083000	1846	56-23-5
Carbona	0083001	1846	56-23-5
Carbonic acid anhydride	0080001	1013	124-38-9
Carbonic acid gas	0080002	1013	124-38-9
Carbonic acid, diethyl ester	0142001	2366	105-58-8
Carbonic anhydride	0080003	1013	124-38-9
Carbonic difluoride	0084001	2414	353-50-4
Carbonic ether	0142002	2366	105-58-8
Carbonic oxide	0082001	1016	630-08-0
Carbonochloride acid, ethyl ester	0185001	1182	541-41-3
Carbonyl chloride	0329003	1076	75-44-5
Carbonyl fluoride	0084000	2414	353-50-4
Carbonyl sulfide	0085000	2204	463-58-1
Carene	0676000		
Casing head gasoline	0217001	1203	8006-61-9
Caswell No.805	0361001	1692	57-24-9
Catechol	0677000		
Caustic potash solution	0647000	1814	
Caustic soda	0359002		1310-73-2
Caustic soda, solution	0359003		1310-73-2
Cellon	0374003	1702	79-34-5
Certox	0361002	1692	57-24-9
Cesium	0678000	1407	
CHA	0118003	2357	108-91-8
Chloral	0086000	2075	75-87-6
Chloramben	0679000		
Chlorbisan	0680000		
Chlordane, flammable liquid	0681000	2762	
Chlordecone	0682000		
Chlorex	0129002	1916	111-44-4
Chlorfenvinfos	0683000		
Chloride of phosphorous	0335001	1809	7719-12-2
Chlorine	0087000	1017	7782-50-5
Chlorine cyanide	0111001	1589	506-78-5
Chlorine dioxide	0088002	9191	10049-04-4
Chlorine dioxide hydrate	0088000	9191	10049-04-4
Chlorine dioxide hydrate (frozen)	0088003	9191	10049-04-4
Chlorine fluoride	0089001	1749	7790-91-2
Chlorine monoxide	0684000		
Chlorine pentafluoride	0685000	2548	
Chlorine peroxide	0088004	9191	10049-04-4
Chlorine sulfide	0366001	1828	10545-99-0
Chlorine trifluoride	0089000	1749	7790-91-2
Chlormephos	0686000		
Chlormequat chloride	0687000		
Chloro methyl sulfane	0258001	3246	124-63-0
Chloro(chloromethoxy)methane	0133003	2249	542-88-1
Chloroacetaldehyde	0090000	2232	107-20-0
Chloroacetaldehyde monomer	0090002	2232	107-20-0
Chloroacetic acid	0688000	1751	
Chloroacetic acid chloride	0092001	1752	79-04-9
Chloroacetic acid, ethyl ester	0184001	1181	105-39-5
Chloroacetic acid, methyl ester	0274001	2295	96-34-4
Chloroacetic chloride	0092002	1752	79-04-9
Chloroacetone	0689000	1695	
Chloroacetonitrile	0091000	2668	107-14-2
Chloroacetophenone	0690000	1697	
Chloroacetyl chloride	0092000	1752	79-04-9
Chloroaldehyde	0090003	2232	107-20-0
Chloroallylene	0020001	1100	107-05-1
Chlorobenzene	0093000	1134	108-90-7
Chlorobenzilate	0692000		
Chlorobutadiene	0100002	1991	126-99-8
Chlorobutane	0094000	1127	109-69-3
Chlorocarbonic acid, ethyl ester	0185002	1182	541-41-3
Chlorocyan	0111002	1589	506-78-5
Chlorocyanogen	0111003	1589	506-78-5
Chlorodibromomethane	0695000		
Chlorodifluoromethane	0696000	1018	
Chloroethanal	0090004	2232	107-20-0
Chloroethane	1825000		
Chloroethanenitrile	0091001	2668	107-14-2
Chloroethanol	0189003	1135	107-07-3
Chloroethene	0405001	1086	75-01-4
Chloroethyl chloroformate	0095000	2742	627-11-2
Chloroethylene	0405002	1086	75-01-4
Chloroform	0096000	1888	67-66-3
Chloroformic acid, isopropyl ester	0247001	2407	108-23-6
Chloroformyl chloride	0329004	1076	75-44-5
Chlorohydrins	0699000		
Chloromethane	0273002	1063	74-87-3
Chloromethyl cyanide	0091002	2668	107-14-2
Chloromethyl ether	0133004	2249	542-88-1
Chloromethyl ethyl ether	0700000	2354	
Chloromethyl methyl ether	0701000	1239	
Chloromethyloxirane	0172002	2023	106-89-8
Chloronitrobenzene	0097000	1578	
Chlorophenyl methane	0045003	1738	100-44-7
Chloropicrin	0099000	1580	76-06-2
Chloropicrin: methyl chloride	0706000	1582	
Chloropivaloyl chloride	0707000	9263	
Chloroprene	0100000	1991	126-99-8

Chemical Name	Chemical ID No.	UN No.	CAS No.
Chloropropene	0020002	1100	107-05-1
Chloropropham	0712000		
Chloropropylene	0020004	1100	107-05-1
Chloropropylene oxide	0172003	2023	106-89-8
Chlorosulfane	0369001	1828	10025-67-9
Chlorosulfonic acid	0103000	1454	7790-94-5
Chlorosulfuric acid	0103001	1454	7790-94-5
Chlorothalonil	0715000		
Chlorotoluene	0104000	2238	106-43-4
Chlorotrifluoride	0089002	1749	7790-91-2
Chlorotrifluoroethane	0718000	1983	
Chlorotrifluoroethylene	0394001	1082	79-38-9
Chlorotrifluoromethane	0719000	1022	
Chlorotrimethylsilane	0398001	1298	75-77-4
Chloroxuron	0720000		
Chlorpyrifos	0105000	2783	2921-88-2
Chlorthiophos	0721000		
Chlorylen	0389001	2831	71-55-6
Choline chloride carbamate	0078005		51-83-2
CHP	0107002	2116	80-15-9
Chromic acetate	0722000	9101	
Chromic acid	0723000	1755	
Chromic anhydride	0724000	1463	
Chromic sulfate	0729000	9100	
Chromium (dust)	0730000		
Chromium oxychloride	0731000	1758	
Chromous chloride	0732000	9102	
Chrysene	0733000		
Cinnamenol	0362001	2055	100-42-5
cis-Butene	0066002	1012	25167-67-3
Citric acid	0745000		
Citrus red No.2	0746000		
Clorox	0360003	1791	7681-52-9
CO	0082003	1016	630-08-0
Coal gas	0748000	1023	
Coal naptha	0039002	1114	71-43-2
Coal oil	0249001	1223	8008-20-6
Cobalt	0749000		
Cobalt acetate	0750000		
Cobalt bromide	0751000		
Cobalt carbonyl	0752000		
Cobalt chloride	0753000		
Cobalt fluoride	0754000		
Cobalt formate	0755000	9104	
Cobalt nitrate	0756000		
Cobalt sulfamate	0757000		
Cobalt sulfate	0758000		
Cocculus	0759000	1584	
Coconut oil:edible	0760000		
Colchicine	0761000		
Collodion	0762000	2059	
Copper	0763000		
Copper acetate	0764000	9106	
Copper acetoarsenite	0765000	1585	
Copper arsenite	0766000	1586	
Copper bromide	0767000		
Copper chloride	0768000	2802	
Copper cyanide	0769000	1587	
Copper fluoroborate	0770000		
Copper formate	0771000		
Copper glycinate	0772000		
Copper iodide	0773000		
Copper lactate	0774000		
Copper naphthenate	0775000		
Copper nitrate	0776000		
Copper oxalate	0777000		
Copper subacetate	0778000		
Copper sulfate	0779000		
Copper sulfate, ammoniated	0780000	9110	
Copper tartrate	0781000	9111	
Coumaphos	0782000	2783	
Coumatetralyl	0783000		
Creosote, coal tar	0784000	1993	
Cresols	0786000	2076	
Cresyl glycidyl ether	0787000		
Cresylate spent caustic solution	0788000		
Crimidine	0789000	2588	
Croton oil	0790000		
Crotonal	0106003	1143	4170-30-3
Crotonaldehyde (E)	0106004	1143	4170-30-3
Crotonaldehyde (Stabilized)	0106000	1143	4170-30-3
Crude oil	0791000		
CTFE	0394002	1082	79-38-9
Cumene	0246001	1918	98-82-8
Cumene hydroperoxide	0107000	2116	80-15-9
Cumyl hydroperoxide	0107003	2116	80-15-9
Cupferron	0792000		
Cupriethylene diamine solution	0793000	1761	
Curmol	0246002	1918	98-82-8
Cyanazine	0794000		
Cyanoacetic acid	0108000		372-09-8
Cyanoacetonitrile	0254001	2647	109-77-3
Cyanobenzene	0040002	2224	100-47-0
Cyanobromide	0110002	1889	506-68-3
Cyanoethane	0346001	2404	107-12-0
Cyanoethylene	0013002	1093	107-13-1
Cyanogen	0109000	1026	460-19-5
Cyanogen bromide	0110003	1889	506-68-3
Cyanogen chloride	0111000	1589	506-78-5
Cyanogen iodide	0112000		506-78-5
Cyanogen monoiodide	0112001		506-78-5
Cyanomethane	0006001	1648	75-05-8
Cyanomethanol	0213001		107-16-4
Cyanotoluene	0324005	2470	140-29-4
Cyanuric chloride	0113000	2670	108-77-0
Cycasin	0795000		
Cyclobutane	0796000	2601	
Cycloheptane	0114000	2241	291-64-5
Cycloheptatriene	0797000	2603	
Cycloheptene	0798000	2242	

Chemical Name	Chemical ID No.	UN No.	CAS No.
Cyclohexane	0115000	1145	108-94-1
Cyclohexanol	0799000		
Cyclohexanone	0116000	1915	108-94-1
Cyclohexanone peroxide	0800000	2119	
Cyclohexatriene	0039003	1114	71-43-2
Cyclohexene	0801000	2256	
Cyclohexenyl trichlorosilane	0802000	1762	
Cycloheximide	0117000		66-81-9
Cyclohexyl acetate	0804000	2243	
Cyclohexyl isocyanate	0805000	2488	
Cyclohexylamine	0118000	2357	108-91-8
Cyclohexylketone	0116002	1915	108-94-1
Cyclohexylmethane	0276001	2296	108-87-2
Cyclopentane	0119000	1146	142-29-0
Cyclopentanol	0806000	2244	
Cyclopentanone	0807000	2245	
Cyclopentene	0120000	2246	142-29-0
Cyclopentimine	0338002	2401	110-89-4
Cyclopropane	0121000	1027	95-75-7
Dakins solution	0360004	1791	7681-52-9
Dalapon	0809000	1760	
DCE	0408001	1303	75-35-4
DCEE	0129003	1916	111-44-4
DCP	0137004	2048	77-73-6
DDC	0154002	2262	79-44-7
DDD	0810000	2761	
DEA	0140002	1154	109-89-7
DEAE	0141001	2686	100-37-8
Decaborane	0123000	1868	17702-41-9
Decaborane tetrahydride	0123002	1868	17702-41-9
Decaborane(14)	0123001	1868	17702-41-9
Decabromodiphenyl oxide	0812000		
Decahydronaphthalene	0813000	1147	
Decaldehyde	0814000		
Decanoic acid	0815000		
DEK	0146001	1156	96-22-0
Demeton	0820000		
Demeton-s-methyl	0821000		
DEN	0140003	1154	109-89-7
Denatured alcohol	0177004	1170	64-17-5
DETA	0143003	2079	111-40-0
Deuterium	0822000	1957	
Dextrose solution	0823000		
Diacetone alcohol	0824000	1148	
Diacetone alcohol peroxide	0825000	2163	
Diacetyl	0826000	2346	
Diacetylmethane	0320003	2310	123-54-6
Diaflan	0394003	1082	79-38-9
Diakon	0290001	1247	80-62-6
Dialifos	0828000	3018	
Diallate	0829000		
Diallyl ether	0831000	2360	
Diallylamine	0830000	2359	
Diamide	0223002		302-02-2

Chemical Name	Chemical ID No.	UN No.	CAS No.
Diamine	0223004		302-02-2
Diamine hydrate	0223003		302-02-2
Diamine sulfate	0224001		10034-93-2
Diaminotoluene	0385001	1709	95-80-7
Diammonium sulfate	0833000		
Diammonium sulfide	0029002	2683	12135-76-1
Diammonium sulfite	0030001	9090	10196-04-0
Diatol	0142003	2366	105-58-8
Diazan	0171001		514-73-8
Diazinon	0836000	2783	
Diazomethane	0837000		
Dibenzo (A,E) pyrene	0838000		
Dibenzo (A,H) anthracene	0845000		
Dibenzo (A,H) pyrene	0846000		
Dibenzo (A,I) pyrene	0847000		
Dibenzo (A,J) acridine	0848000		
Dibenzo (A,L) pyrene	0849000		
Dibenzofuran	0851000		
Dibenzoyl peroxide	0852000	2087	
Dibenzyl ether	0124000		103-50-4
Diborane	0125000	1911	19287-45-7
Diborane hexahydride	0125002	1911	19287-45-7
Dibromoethane	0192003	1605	106-93-4
Dibromomethane	0126000	2664	74-95-3
Dibutyl phenol	0860000		
Dibutyl phthalate	0861000		
Dicamba	0863000		
Dichlobenil	0864000		
Dichlone	0865000		
Dichloricide	0128002	1592	106-46-7
Dichloro-1,2-propane	0351002	1279	78-87-5
Dichloroacetic acid	0866000	1764	
Dichloroacetic acid, methyl ester	0278001	2299	116-54-1
Dichloroacetyl chloride	0867000	1765	
Dichloroacetylene	0868000		
Dichlorobromomethane	0870000		
Dichlorobutene	1839001	2920	
Dichlorodifluoromethane	0871000	1028	
Dichlorodimethylsilane	0155001	1162	75-78-5
Dichlorodimethylsilicon	0155002	1162	75-78-5
Dichloroethane	0193002	1184	107-06-2
Dichloroether	0129004	1916	111-44-4
Dichloroethyl ether	0129005	1916	111-44-4
Dichloroethylarsine	0186002	1892	598-14-1
Dichloroethylphenylsilane	0204001	2435	1125-27-5
Dichloroethylsilane	0187001	1183	1789-58-8
Dichloromethane	0132000	1593	75-09-2
Dichloromethyl benzene	0047004	1886	98-87-3
Dichloromethyl ether	0133000	2249	542-88-1
Dichloromethylphenylsilane	0873000		
Dichloromethylsilane	0279001	1242	75-54-7
Dichloromonofluoromethane	0874000	1029	
Dichlorophenoxyacetic acid	0122001	2765	94-75-7
Dichlorophenoxyacetic esters	0876000		
Dichlorophenyl phosphine	0327002	2798	644-97-3

Chemical Name	Chemical ID No.	UN No.	CAS No.
Dichlorophenylarsine	0325001	1556	696-28-6
Dichlorophenyltrichlorosilane	0134000	1766	27137-85-5
Dichloropropene	0135000	2047	542-75-6
Dichloropropionic acid	0878000	1760	
Dichloropropylene	0135003	2047	542-75-6
Dichlorosilane	0136000	2189	4109-96-0
Dichlorosilicone	0136001	2189	4109-96-0
Dichlorosulfane	0366002	1828	10545-99-0
Dichlorotetrafluoroethane	0879000	1958	
Dichlorvos	0882000	2783	
Dicofol	0883000		
Dicrotophos	0884000		
Dicyan	0109002	1026	460-19-5
Dicyanogen	0109003	1026	460-19-5
Dicyanomethane	0254002	2647	109-77-3
Dicyclopentadiene	0137000	2048	77-73-6
Dieldrin	0885000	2761	
Diepoxybutane	0138000		1464-53-5
Diesel	0139001		
Diesel fuel	0139000	1202	
Diethanol amine	0886000		
Diethyl	0060002	1011	106-97-8
Diethyl benzene	0891000	2049	
Diethyl carbamazine citrate	0892000		
Diethyl carbonate	0142000	2366	105-58-8
Diethyl cellosolve	0195002	1153	629-14-1
Diethyl chlorophosphate	0893000		
Diethyl ether	0144000	1155	60-29-7
Diethyl glycol	0195003	1153	629-14-1
Diethyl oxide	0144001	1155	60-29-7
Diethyl phthalate	0901000		
Diethyl stilbestrol	0902000		
Diethyl sulfate	0903000	1594	
Diethyl sulfide	0904000	2375	
Diethyl zinc	0905000	1366	
Diethylaluminum chloride	0887000		
Diethylaluminum hydride	0888000		
Diethylamine	0140000	1154	109-89-7
Diethylaminoethanol	0141000	2686	100-37-8
Diethylene ether	0169002	1165	123-91-1
Diethylene glycol	0894000		
Diethylene glycol dibutyl ether	0895000		
Diethylene glycol dimethyl ether	0896000		
Diethylene glycol monobutyl ether	0897000		
Diethylene glycol monobutyl ether acetate	0898000		
Diethylene glycol monoethyl ether	0899000		
Diethylene glycol monomethyl ether	0900000		
Diethylene oxide	1823000		
Diethylene oximide	0298001	2054	110-91-8
Diethylenetriamine	0143000	2079	111-40-0
Diethylenimide oxide	0298002	2054	110-91-8
Diethylethanolamine	0141003	2686	100-37-8
Diethylketone	0146000	1156	96-22-0

Chemical Name	Chemical ID No.	UN No.	CAS No.
Difluorine	0207002		7782-41-4
Difluorine monoxide	0316001	2190	7783-41-7
Difluorochloromethane	0906000	1018	
Difluorodichloromethane	0907000	1028	
Difluoroethane	0147000	1030	75-37-6
Difluorophosphoric acid	0909000	1768	
Diglycidyl ether	0910000		
Diheptyl phthalate	0911000		
Dihydrogen dioxide	0232001	2015	7722-84-1
Dihydrogen selenide	0233001	2202	7783-07-5
Dihydrooxirene	0199001	1040	75-21-8
Diisobutyl amine	0913000	2361	
Diisobutyl carbinol	0914000		
Diisobutyl ketone	0916000	1157	
Diisobutyl phthalate	0917000		
Diisobutylene	0915000	2050	
Diisodecyl phthalate	0918000		
Diisononyl phthalate	0919000		
Diisooctyl phthalate	0920000		
Diisopropanol amine	0921000		
Diisopropyl benzene (all isomers)	0922000		
Diisopropyl benzene hydro-peroxide	0923000	2171	
Diisopropyl ether	0924000	1159	
Diisopropylamine	0148000	1158	108-18-9
Diketene	0149000	2521	674-82-8
Dimefox	0925000	3018	
Dimethoate	0926000		
Dimethyamine, anhydrous	0152000	1032	124-40-3
Dimethyl	0173003		74-84-0
Dimethyl adipate	0927000		
Dimethyl carbonate	0931000	1161	
Dimethyl cellosolve	0150002	2252	110-71-4
Dimethyl disulfide	0156000	2381	624-92-0
Dimethyl ether	0157000	1033	115-10-6
Dimethyl formamide	0158000	2265	68-12-2
Dimethyl glutarate	0934000		
Dimethyl hexane dihydro-peroxide	0935000	2174	
Dimethyl hydrogen phosphite	0936000		
Dimethyl ketone	0004001	1090	67-64-1
Dimethyl mercury	0937000		
Dimethyl monosulfide	0163001	1164	75-18-3
Dimethyl phenylamine	0153003	2253	121-69-7
Dimethyl phosphorochlorido-thioate	0161000	2267	2524-03-0
Dimethyl phthalate	0940000		
Dimethyl polysiloxane	0941000		
Dimethyl succinate	0944000		
Dimethyl sulfate	0162000	1595	77-78-1
Dimethyl sulfide	0163000	1164	75-18-3
Dimethyl sulfoxide	0945000		
Dimethyl terephthalate	0946000		
Dimethyl tetracholorterephthalate	0947000		
Dimethyl thiophosphoryl chloride	0161001	2267	2524-03-0
Dimethyl zinc	0164000	1370	544-97-8

Chemical Name	Chemical ID No.	UN No.	CAS No.
Dimethylacetamide	0151000		127-19-5
Dimethylacetone	0146002	1156	96-22-0
Dimethylamide acetate	0151002		127-19-5
Dimethylamine solution	0928000	1160	
Dimethylaminobenzene	0153001	2253	121-69-7
Dimethylanaline	0153002	2253	121-69-7
Dimethylbenzyl hydroperoxide	0107004	2116	80-15-9
Dimethylcarbamic chloride	0154003	2262	79-44-7
Dimethylcarbamoyl chloride	0154000	2262	79-44-7
Dimethylcarbinol	0242001	1219	67-63-0
Dimethyldichlorosilane	0155000	1162	75-78-5
Dimethylene diamine	0191001	1604	107-15-3
Dimethylene oxide	0199002	1040	75-21-8
Dimethylenimine	0198004	1185	151-56-4
Dimethylethanolamine	0933000	2051	
Dimethylmethane	0341001	1978	74-98-6
Dimetilan	0948000		
Di-n-amyl phthalate	0835000		
Di-n-amylamine	0834000	2841	
Di-n-butyl amine	0854000	2248	
Di-n-butyl ether	0855000	1149	
Di-n-butyl ketone	0857000		
Di-n-butyl phthalate	0862000		
Dinitrobenzene	0166000	1597	
Dinitrochlorobenzene	0949000	1577	
Dinitrocresol	0167003	1598	534-52-1
Dinitrogen monoxide	0311002		10024-97-2
Dinitrogen tetroxide	0305001	1067	10102-44-0
Dinitro-o-cresol	0167000	1598	534-52-1
Dinitrophenol(dry)	0168000		51-28-5
Dinitrophenol(solution)	0168001		51-28-5
Dinitrophenol(wetted with >15% water)	0168002		51-28-5
Di-n-octyl phthalate	0956000		
Dinofan	0168006		51-28-5
Dinonyl phthalate	0952000		
Dinoterb	0953000		
Di-n-propylamine	0170001	2383	142-84-7
Dioctyl adipate	0954000		
Dioctyl phthalate	0955000		
Dioctyl sodium sulfosuccinate	0957000		
Dioform	0131003	1150	540-59-0
Dioxathion	0958000		
Dioxygen	0315002		7782-44-7
DIPA	0148001	1158	108-18-9
Dipentene	0959000	2052	
Diphacinone	0960000		
Diphenamide	0961000		
Diphenyl	0962000		
Diphenyl amine	0963000		
Diphenyl amine chloroarsine	0964000	1698	
Diphenyl ether	0966000		
Diphenyl methane diisocyanate	0967000	2489	
Diphenyldichlorosilane	0965000	1769	
Diphosgene	0329005	1076	75-44-5
Diphosphorus pentasulfide	0333001	1340	1314-80-3

Chemical Name	Chemical ID No.	UN No.	CAS No.
Dipotassium persulfate	0340002	1492	7727-21-1
Diproanoate	0106005	1143	4170-30-3
Dipropylamine	0170000	2383	142-84-7
Dipropylene dlycol methyl ether	0970000		
Dipropylene glycol	0968000		
Dipropylene glycol dibenzoate	0969000		
Diquat	0971000	2781	
Direct black 38	0972000		
Direct blue 6	0973000		
Direct brown 95	0974000		
Disulfoton	0975000	2783	
Disulfur dichloride	0369002	1828	10025-67-9
Disulfuric acid	0314001	1831	8014-95-7
Di-tert-butyl peroxide	0858000	2102	
Dithane A-4	0166007	1597	
Dithiabutane	0156001	2381	624-92-0
Dithiazanine iodide	0171000		514-73-8
Dithiobiuret	0976000		
Ditridecyl phthalate	0977000		
Diundecyl phthalate	0978000		
Diuron	0979000		
Divinyl	0059005	1010	106-99-0
Divinylene oxide	0215001	2389	110-00-9
DMA	1822000		
DMAC	0151004		127-19-5
DMCC	0154004	2262	79-44-7
DMF	0158001	2265	68-12-2
DMFA	0158002	2265	68-12-2
DMH	0159002	1163	57-14-7
DMPD	0160002		99-98-9
DMS	0163002	1164	75-18-3
DMSO	0980000		
DNA	0165004	1596	97-02-9
DNBP	0981000		
Dodecanol	0982000		
Dodecene	0983000		
Dodecyl benzene	0984000		
Dodecyl benzene sulfonic acid	0985000	2584	
Dodecyl benzene sulfonic acid, calcium	0986000		
Dodecyl benzene sulfonic acid, isopropyl amine	0987000		
Dodecyl benzene sulfonic acid, sodium salt	0988000		
Dodecyl benzene sulfonic acid, triethanolamine	0989000		
Dodecyl diphenyl ether disulfonate	0990000		
Dodecyl methacrylate	0994000		
Dodecyl sulfate, diethanolamine salt	0996000		
Dodecyl sulfate, magnesium salt	0997000		
Dodecyl sulfate, sodium salt	0998000		
Dodecyl sulfate, triethanolamine salt	0999000		
Dodecyl/pentadecyl methacrylate	0995000		
Dodecyltrichlorosilane	1000000	1771	

Chemical Name	Chemical ID No.	UN No.	CAS No.
Dorlone	0135004	2047	542-75-6
Doryl	0078006		51-83-2
Dowcide 7	0318001	3155	87-86-5
Dowclene LS	0389002	2831	71-55-6
Dowfume	1826000		
Dowtherm	0991000		
Dry ice	0080004	1013	124-38-9
Dursban	0105001	2783	2921-88-2
Dutch oil	0193003	1184	107-06-2
EB	0179001	1175	100-41-4
ECH	0172004	2023	106-89-8
ED	0186003	1892	598-14-1
EDB	0192004	1605	106-93-4
EGM	0197001	1188	109-86-4
EGME	0197002	1188	109-86-4
Elemental phosphorous	0331002		7723-14-0
Endosulfan	1001000	2761	
Endosulfan sulfate	1004000		
Endothion	1005000		
Endrin	1006000	2761	
Endrin aldehyde	1007000		
EPI	0172005	2023	106-89-8
Epichlorohydrin	0172000	2023	106-89-8
EPN	1008000		
Epoxy propane	0353001	1280	75-56-9
Epoxyethane	0199003	1040	75-21-8
Epoxyethylbenzene	0363001		96-09-3
Erythrene	0059006	1010	106-99-0
Estradiol 17 b	1009000		
Estrone	1010000		
Ethanal	0002002	1089	75-07-0
Ethanamine	0178002	1036	75-04-7
Ethane dinitrate	0109004	1026	460-19-5
Ethane(compressed gas)	0173000		74-84-0
(Diethylamino) ethane	0392001	1296	121-44-8
Ethane(refrigerated liquid)	0173001		74-84-0
Ethanediol dimethyl ether	0150004	2252	110-71-4
Ethanenitrile	0006002	1648	75-05-8
Ethanethiol	0202001	2363	75-08-1
Ethanoic acid	1840002		64-19-7
Ethanoic anhydride	0003005	1715	108-24-7
Ethanol	0177005	1170	64-17-5
Ethanolamine	0174000	2491	141-43-5
Ethanoyl bromide	0007002	1716	506-96-7
Ethanoyl chloride	0008003	1717	75-36-5
Ethene	0188002	1038	74-85-1
Ethenoxide	0199005	1040	75-21-8
Ethenylbenzene	0362002	2055	100-42-5
Ether	0144002	1155	60-29-7
Etherin	0188003	1038	74-85-1
Ethienocarb	1011000		
Ethine	0009001	1001	74-86-2
Ethinylcarbinol	0343001	1986	107-19-7
Ethinylestradiol	1012000		

Chemical Name	Chemical ID No.	UN No.	CAS No.
Ethion	1013000	2783	
Ethoprophos	1014000		
Ethoxy triglycol	1022000		
Ethoxydihydropyran	1015000		
Ethoxyethylbenzene	1016000		
Ethoxylated dodecanol	1017000		
Ethoxylated nonylphenol	1018000		
Ethoxylated pentadecanol	1019000		
Ethoxylated tetradecanol	1020000		
Ethoxylated tridecanol	1021000		
Ethyl acetate	0175000	1173	141-78-6
Ethyl acetoacetate	1023000		
Ethyl acetylene	1024000	2452	
Ethyl acrylate	0176000	1917	140-88-5
Ethyl alcohol	0177000	1170	64-17-5
Ethyl aluminum dichloride	1025000		
Ethyl aluminum sesquichloride	1026000		
Ethyl amyl ketone	1027000	2271	
Ethyl azinphos	1029000		
Ethyl bromide	1031000	1891	
Ethyl bromoacetate	1032000	1603	
Ethyl butanoate	0182002	1180	105-54-4
Ethyl butanol	1033000	2275	
Ethyl butyl ether	1034000	1179	
Ethyl butyrate	0182000	1180	105-54-4
Ethyl carbamate	1036000		
Ethyl carbonate	0142004	2366	105-58-8
Ethyl cellosolve	0196002	1171	110-80-5
Ethyl chloride	0183000	1037	75-00-3
Ethyl chloroacetate	0184000	1181	105-39-5
Ethyl chlorocarbonate	0185003	1182	541-41-3
Ethyl chloroformate	0185000	1182	541-41-3
Ethyl chloromethanoate	0185004	1182	541-41-3
Ethyl chlorothioformate	1037000	2826	
Ethyl cyanide	0346002	2404	107-12-0
Ethyl cyclohexane	1038000		
Ethyl ethanoate	0175003	1173	141-78-6
Ethyl ether	0144003	1155	60-29-7
Ethyl formate	0200000	1190	109-94-4
Ethyl glycol	0196004	1171	110-80-5
Ethyl glyme	0195005	1153	629-14-1
Ethyl hexaldehyde	1051000	1191	
Ethyl hexyl tallate	1055000		
Ethyl hydrosulfide	0202002	2363	75-08-1
Ethyl isocyanate	0201000	2481	109-90-0
Ethyl ketone	0146003	1156	96-22-0
Ethyl lactate	1057000	1192	
Ethyl mercaptan	0202000	2363	75-08-1
Ethyl methacrylate	1058000	2277	
Ethyl methane sulfonate	1059000		
Ethyl methanoate	0200001	1190	109-94-4
Ethyl methyl ether	1060000	1039	
Ethyl methyl ketone	0280002	1193	78-93-3
Ethyl monochloroacetate	0184002	1181	105-39-5
Ethyl nitrate	1061000	1993	

Chemical Name	Chemical ID No.	UN No.	CAS No.
Ethyl nitrile	0006003	1648	75-05-8
Ethyl nitrite	0203000	1194	109-95-5
Ethyl oxide	1821000		
Ethyl phenol	1836000		
Ethyl phosphonothioic dichloride	1062000	2927	
Ethyl phosphorodichloridate	1063000	2927	
Ethyl pirimifos	1064000		
Ethyl propenoate	0176002	1917	140-88-5
Ethyl rhodanate	0205001		542-90-5
Ethyl S	0180002	2734	538-07-8
Ethyl silicate	1066000	1292	
Ethyl sulfate	1067000	1594	
Ethyl sulfhydrate	0202003	2363	75-08-1
Ethyl sulfocyanate	0205002		542-90-5
Ethyl t-butyl ether	1035000		
Ethyl t-butyl ether	1070000		
Ethyl thiocyanate	0205000		542-90-5
Ethyl vinyl ether	0406001	1302	109-92-2
Ethyl-2-propenoate	0176003	1917	140-88-5
Ethyl-3-ethoxypropionate	1050000		
Ethylaldehyde	0002003	1089	75-07-0
Ethylamine	0178000	1036	75-04-7
Ethylbenzene	0179000	1175	100-41-4
Ethyl-bis-(2-chloroethyl) amine	0180000	2734	538-07-8
Ethylbutylamine	0181000	2734	13360-63-9
Ethyldichloroarsine	0186000	1892	598-14-1
Ethyldichlorosilane	0187000	1183	1789-58-8
Ethylene	0188000	1038	74-85-1
Ethylene bromide	0192005	1605	106-93-4
Ethylene carboxylic acid	0012002	2218	79-10-7
Ethylene chloride	0193004	1184	107-06-2
Ethylene chlorohydrin	0189000	1135	107-07-3
Ethylene cyanohydrin	0190000		109-78-4
Ethylene dibromide	0192000	1605	106-93-4
Ethylene dichloride	0193000	1184	107-06-2
Ethylene fluoride	0147002	1030	75-37-6
Ethylene fluorohydrin	0194000		371-62-0
Ethylene glycol	1041000		
Ethylene glycol acetate	1042000		
Ethylene glycol diacetate	1043000		
Ethylene glycol diethyl ether	0195000	1153	629-14-1
Ethylene glycol dimethyl ether	0150005	2252	110-71-4
Ethylene glycol ethyl ether	0196003	1171	110-80-5
Ethylene glycol isopropyl ether	1044000		
Ethylene glycol methyl ether	0197003	1188	109-86-4
Ethylene glycol monobutyl ether	1045000	2369	
Ethylene glycol monobutyl ether acetate	1046000		
Ethylene glycol monoethyl ether	0196000	1171	110-80-5
Ethylene glycol monoethyl ether acetate	1047000	1172	
Ethylene glycol monomethyl ether	0197000	1188	109-86-4
Ethylene glycol phenyl ether	1048000		
Ethylene oxide	0199000	1040	75-21-8
Ethylene tetrachloride	0375001	1897	127-18-4

Chemical Name	Chemical ID No.	UN No.	CAS No.
Ethylene thiourea	1049000		
Ethylene trichloride	0390002	1710	79-01-6
Ethylenediamine	0191000	1604	107-15-3
Ethylenediamine tetracetic acid	1040000	9117	
Ethyleneimine	0198000	1185	151-56-4
Ethylformic acid	0345001	1848	79-09-4
Ethylic acid	1840003		64-19-7
Ethylidene norbornene	1056000		
Ethylidine chloride	0130001	2362	75-34-3
Ethylidine dichloride	0130002	2362	75-34-3
Ethylimine	0198005	1185	151-56-4
Ethylphenyldichlorosilane	0204000	2435	1125-27-5
Ethyltrichlorosilane	0206000	1196	115-21-9
Ethyne	0009002	1001	74-86-2
ETN	0178003	1036	75-04-7
ETOH	0177006	1170	64-17-5
Eufin	0142005	2366	105-58-8
F-12	1072000	1028	
F-22	1073000	1018	
FAA	0208001	2642	144-49-0
Fenamiphos	1074000		
Fenitrothion	1075000		
Fensulfothion	1076000	2783	
Ferric ammonium citrate	1077000	9118	
Ferric ammonium oxalate	1078000	9119	
Ferric chloride	1079000	1773	
Ferric fluoride	1080000	9120	
Ferric glycerophosphate	1081000		
Ferric nitrate	1082000	1466	
Ferric sulfate	1083000	9121	
Ferrous ammonium sulfate	1084000	9122	
Ferrous chloride	1085000	1759	
Ferrous fluoroborate	1086000		
Ferrous oxalate	1087000		
Ferrous sulfate	1088000	9125	
Firedamp	0257003		74-82-8
FKS	0210001	1778	16961-83-4
Flue gas	0082004	1016	630-08-0
Fluenetil	1089000		
Fluoboric acid	1090000	1775	
Fluometuron	1091000		
Fluoranthene	1092000		
Fluorene	1093000		
Fluoric acid	0231002	1052	7664-39-3
Fluorine monoxide	0316002	2190	7783-41-7
Fluorine oxide	0316003	2190	7783-41-7
Fluorine(compressed gas)	0207000	1045	7782-41-4
Fluorine(cryogenic liquid)	0207001	9192	7782-41-4
Fluoroacetamide	1094000		
Fluoroacetic acid	0208000	2642	144-49-0
Fluoroacetyl chloride	1095000		
Fluorobenzene	0209000	2387	462-06-6
Fluoroethanoic acid	0208003	2642	144-49-0
Fluoroethene	0407001	1860	75-02-5

Chemical Name	Chemical ID No.	UN No.	CAS No.
Fluoroethylene	0407003	1860	75-02-5
Fluorophosgene	0084004	2414	353-50-4
Fluorosilicic acid	0210000	1778	16961-83-4
Fluorosulfonic acid	0211000	1777	7789-21-1
Fluorosulfuric acid	0211001	1777	7789-21-1
Fluosilicic acid	0210002	1778	16961-83-4
Fonofos	1099000	2783	
Forane 22B	1100000		
Formaldehyde cyanohydrin	0213000		107-16-4
Formaldehyde(solution)	0212001	2209	50-00-0
Formaldehyde(solution, flammable)	0212000	1198	50-00-0
Formalin	0212002		50-00-0
Formamide	1101000		
Formetanate hydrochloride	1102000		
Formic acid	0214000	1779	64-18-6
Formic acid, ethyl ester	0200002	1190	109-94-4
Formic acid, isopropyl ester	0248001	2408	625-55-8
Formic acid, methy lester	0281001	1243	107-31-3
Formic ether	0200003	1190	109-94-4
Formothion	1103000		
Formparanate	1104000		
Formyl hydrazino-4-(5-nitro-2-furyl)thiazole	1105000		
Formyl trichloride	0096001	1888	67-66-3
Formylic acid	0214002	1779	64-18-6
Fosthietan	1106000		
Fosvex	0377003		107-49-3
Freon 10	0083004	1846	56-23-5
Freon 12	1107000	1028	
Freon 150	0193006	1184	107-06-2
Freon 152	0147003	1030	75-37-6
Freon 20	0096002	1888	67-66-3
Freon 22	1108000	1018	
Freon 40	0273003	1063	74-87-3
Freon F12	1109000		
Fuberidazole	1110000		
Fuel oil #1	1828000		
Fuel oil #2	0139002		
Fuel oil #4	0139003		
Fumaric acid	1111000		
Fumette	0259001		558-25-8
Fuming sulfuric acid	0314002	1831	8014-95-7
Furadan	0079001	2757	1563-66-2
Furadan 3G	0079002	2757	1563-66-2
Furaldehyde	0216002	1199	98-01-1
Furan	0215000	2389	110-00-9
Furfural	0216000	1199	98-01-1
Furfuryl alcohol	1112000	2874	
Furodan	0079003	2757	1563-66-2
Fusel oil	1113000	1201	
GAA	0012003	2218	79-10-7
Gallic acid	1114000		
Gallium trichloride	1116000		
Gallium, metal	1115000	2803	
Gasoline	0217000	1203	8006-61-9
GDME	0150006	2252	110-71-4
Germane	1117000	2192	
Gettysolve B	0221001	1208	110-54-3
Glacial acetic acid	1840004		64-19-7
Glacial acrylic acid	0012004	2218	79-10-7
Glutaraldehyde solution	1118000		
Glycerine	1119000		
Glycerol trinitrate	0306003	0143	55-63-0
Glycidaldehyde	1120000	2622	
Glycidyl methacrylate	1121000		
Glycinol	0174002	2491	141-43-5
Glycol cyanohydrin	0190003		109-78-4
Glycol dimethyl ether	0150007	2252	110-71-4
Glycol methyl ether	0197004	1188	109-86-4
Glycolonitrile	0213002		107-16-4
Glyconitrile	0213003		107-16-4
Glyme	0150008	2252	110-71-4
Glyme-1	0195006	1153	629-14-1
Glyoxal	1122000		
Gly-oxide	0401002	1511	124-43-6
Glyphosate	0218000		1071-83-6
Grain alcohol	0177007	1170	64-17-5
Grasex	0086001	2075	75-87-6
Halon 10001	0283001	2644	74-88-4
Halon 1001	0268003	1062	74-83-9
HCl	0229002		7647-01-0
HCN	0230001	1051	74-90-8
Hendecane	1123000	2330	
Heptachlor	1124000		
Heptachlor epoxide	1125000		
Heptachlorodibenzofurans	1126000		
Heptachlorodibenzo-p-dioxins	1127000		
Heptamethylene	0114001	2241	291-64-5
Heptane	0219000	1206	142-82-5
Heptanoic acid	1128000		
Heptanol	1129000		
Heptyl acetate	1130000		
Heptylene	0220002	2278	592-76-7
Hexachloroacetone	1131000	2661	
Hexachlorobenzene	1132000	2729	
Hexachlorobutadiene	1133000	2279	
Hexachlorocyclohexanes	1134000		
Hexachlorocyclopentadiene	1135000	2646	
Hexachlorodibenzofurans	1136000		
Hexachlorodibenzo-p-dioxins	1137000		
Hexachloroethane	1138000	9037	
Hexachloronaphthalene	1139000		
Hexachlorophene	1140000	2875	
Hexadecyl sulfate, sodium salt	1141000		
Hexadecyl trimethyl ammonium chloride	1142000		
Hexaethyl tetraphosphate and compressed gas	1143000	1612	
Hexafluoroacetone	1144000	2420	

Chemical Name	Chemical ID No.	UN No.	CAS No.
Hexafluoroethane	1145000	2193	
Hexafluosilicic acid	0210003	1778	16961-83-4
Hexahydroanaline	0118004	2357	108-91-8
Hexahydrobenzene	0115002	1145	108-94-1
Hexahydropyridine	0338003	2401	110-89-4
Hexahydrotoluene	0276002	2296	108-87-2
Hexamethyl phosphoramide	1147000		
Hexamethylene	0115003	1145	108-94-1
Hexamethylene diamine	1148000	2280	
Hexamethylene diisocyanate	1149000	2281	
Hexamethylene tetramine	1151000	1328	
Hexamethyleneimine	1150000	2493	
Hexane	0221000	1208	110-54-3
Hexanedinitrile	0015003	2205	111-69-3
Hexanoic acid	0077003	2829	142-62-1
Hexanon	0116003	1915	108-94-1
Hexene	0222000	2370	592-41-6
Hexone	0285001	1245	108-10-1
Hexyl acetate	1155000		
Hexylene	0222003	2370	592-41-6
Hexylene glycol	1156000		
HF	0231003	1052	7664-39-3
HN1	0180003	2734	538-07-8
Hydracrylonitrile	0190004		109-78-4
Hydrazine hydrate	0223005		302-02-2
Hydrazine hydrogen sulfate	0224002		10034-93-2
Hydrazine monosulfate	0224003		10034-93-2
Hydrazine sulfate	0224000		10034-93-2
Hydrazine(<64%)	0223000	2030	302-02-2
Hydrazine(anhydrous or >64%)	0223001	2029	302-02-2
Hydrazinium sulfate	0224004		10034-93-2
Hydrazoic acid, sodium salt	0357002	1687	26628-22-8
Hydrazomethane	0282001	1244	60-34-4
Hydrochloric acid	0225000	1789	7647-01-0
Hydrochloric ether	0183001	1037	75-00-3
Hydrocyanic acid	0230003	1051	74-90-8
Hydrocyanic acid, sodium salt	0358001	1689	143-33-9
Hydrocyanic acid, solution	0230002	1051	74-90-8
Hydrofluoric acid	0226000	1790	7664-39-3
Hydrofuran	0379002	2056	109-99-9
Hydrogen arsenic	0037003	2188	7784-42-1
Hydrogen bromide	0228000	1048	10035-10-6
Hydrogen bromide, anhydrous	0228002	1048	10035-10-6
Hydrogen carboxylic acid	0214003	1779	64-18-6
Hydrogen chloride(gas)	0229000	1050	7647-01-0
Hydrogen chloride(refrigerated liquid)	0229001	2186	7647-01-0
Hydrogen chloride(solution)	0225001	1789	7647-01-0
Hydrogen cyanide	0230000	1051	74-90-8
Hydrogen dioxide	0232002	2015	7722-84-1
Hydrogen fluoride	0231000	1052	7664-39-3
Hydrogen fluoride, solution	0226001	1790	7664-39-3
Hydrogen hexafluorosilicate	0210004	1778	16961-83-4
Hydrogen iodide, anhydrous	1157000	2197	
Hydrogen nitrate	0302003		7697-37-2
Hydrogen oxide	0232003	2015	7722-84-1
Hydrogen peroxide (>60%)	0232000	2015	7722-84-1
Hydrogen peroxide (35% solution)	1158000	2014	
Hydrogen phosphide	0330001	2199	7803-51-2
Hydrogen selenide	0233000	2202	7783-07-5
Hydrogen sulfate	0368001	1830	7664-93-9
Hydrogen sulfide	0234000	1053	7783-06-4
Hydrogen(compressed gas)	0227000	1049	1333-74-0
Hydrogen(cryogenic liquid)	0227001	1966	1333-74-0
Hydroquinone	1159000	2662	
Hydrosulfuric acid	0234001	1053	7783-06-4
Hydroxyacetonitrile	0213004		107-16-4
Hydroxybenzene	0323005		108-95-2
Hydroxylamine	0235000		7803-49-8
Hydroxylamine sulfate	1161000	2865	
Hydroxypropinonitrile	0250002	3275	78-97-7
Hydroxypropyl acrylate	1162000		
Hydroxypropyl methacrylate	0236000		27813-02-1
Hypochlorite	0360005	1791	7681-52-9
Hyponitrous ether	0203001	1194	109-95-5
Indeno(1,2,3-CD)pyrene	1163000		
Inerton- DW-DMC	0155003	1162	75-78-5
Inerton-DMCS	0155004	1162	75-78-5
Iodine cyanide	0112002		506-78-5
Iodomethane	0283002	2644	74-88-4
Iron (powder)	1164000		
Iron carbonyl	0237001	1994	13463-40-6
Iron pentacarbonyl	0237000	1994	13463-40-6
Isobenzan	1165000		
Isobutane	0238000	1969	75-28-5
Isobutanol	1166000	1212	
Isobutenyl methyl ketone	1841001	1229	141-79-7
Isobutyl aldehyde	1167000	2045	
Isobutyl formate	1169000	2393	
Isobutyl methyl carbinol	0284001	2053	108-11-2
Isobutyl methyl ketone	0285002	1245	108-10-1
Isobutylamine	1168000	1214	
Isobutylene	0239000	1055	115-11-7
Isobutylene	0291001	2288	691-37-2
Isobutyric acid	1170000	2529	
Isobutyronitrile	0240000	2284	78-82-0
Isocumene	0348001	2364	103-65-1
Isocyanatoethane	0201002	2481	109-90-0
Isocyanic acid, ethyl ester	0201001	2481	109-90-0
Isocyanic acid, methyl ester	0286001	2480	624-83-9
Isodecaldehyde	1171000		
Isodrin	1172000		
Isofluorophate	1173000		
Isohexene	0291002	2288	691-37-2
Isooctaldehyde	1174000	1191	
Isooctane	1175000	1262	
Isooctyl alcohol	1176000		
isooctyl ester	1710000		
Isopentadiene	0241001	1218	78-79-5
Isopentane	1177000	1265	

Chemical Name	Chemical ID No.	UN No.	CAS No.
Isophorone	1178000		
Isophorone diamine	1179000	2289	
Isophorone diisocyanate (IPDI)	1180000	2290	
Isophthalic acid	1181000		
Isoprene	0241000	1218	78-79-5
Isopropanol	0242000	1219	67-63-0
Isopropanolamine	0243000		78-96-6
Isopropene cyanide	0264002	3079	126-98-7
Isopropenyl acetate	1182000	2403	
Isopropenyl benzene	0244000	2303	98-83-9
Isopropenyl methyl ketone	0287001	1246	814-78-8
Isopropyl alcohol	0242003	1219	67-63-0
Isopropyl bromide	0057001	2344	75-26-3
Isopropyl chloride	1183000	2356	
Isopropyl chlorocarbonate	0247002	2407	108-23-6
Isopropyl chloroformate	0247000	2407	108-23-6
Isopropyl cyanide	0240002	2284	78-82-0
Isopropyl cyclohexane	1184000		
Isopropyl ether	1185000		
Isopropyl formate	0248000	2408	625-55-8
Isopropyl methyl ketone	0269001	2397	563-80-4
Isopropyl nitrate	1188000	1222	
Isopropyl nitrile	0240003	2284	78-82-0
Isopropyl percarbonate,	1189000		
Isopropyl peroxydicarbonate	1190000	2133	
Isopropyl propionate	1191000	2409	
Isopropyl-3-methylpyrazolyl dimethylcarbamate	1187000		
Isopropylamine	0245000	1221	75-31-0
Isopropylbenzene	0246000	1918	98-82-8
Isopropylcyanohydrin	0005003	1541	75-86-5
Isopropylidene acetone	1841002	1229	141-79-7
Isothiocyanic acid, methyl ester	0288001	2477	556-61-6
Isothiourea	0382001		62-56-6
JP-1	0249002	1223	8008-20-6
Kepone	1192000		
Kerosene	0249000	1223	8008-20-6
Kerosine	0249003	1223	8008-20-6
Ketene	1193000		
Ketene dimer	0149003	2521	674-82-8
Kwik-Kil	0361003	1692	57-24-9
Lacquer	1194000	1263	
Lacquer thinner	1195000	1263	
Lactic acid	1196000		
Lactonitrile	0250000	3275	78-97-7
Lasiocarpine	1197000		
Laughing gas	0311003		10024-97-2
Lauric acid	1198000		
Lauroyl peroxide	1199000	2124	
Lauroyl peroxide(<42%)	1200000	2893	
Lauryl mercaptan	1201000		
Lead	1202000		
Lead acetate	1203000	1616	
Lead arsenate	1204000	1617	
Lead chloride	1205000	2291	
Lead fluoride	1206000	2811	
Lead fluoroborate	1207000	2291	
Lead iodide	1208000		
Lead nitrate	1209000	1469	
Lead phosphate	1210000		
Lead stearate	1211000		
Lead sulfate	1212000	1794	
Lead sulfide	1213000		
Lead tetraacetate	1214000		
Lead thiocyanate	1215000		
Lead thiosulfate	1216000		
Lead tungstate	1217000		
Lentin	0078007		51-83-2
Leptophos	1218000		
Lewisite	1219000		
Li	0253001	1415	7439-93-2
Lindane	1220000	2761	
Linseed oil	1221000		
Liquefied natural gas	0251000	1972	74-82-8
Liquefied petroleum gas	0252000	1075	68476-85-7
Liquid chlorine	0087001	1017	7782-50-5
Liquid oxygen	0315003		7782-44-7
Litharge	1222000		
Lithium	0253000	1415	7439-93-2
Lithium aluminum hydride	1223000	1410	
Lithium bichromate	1224000		
Lithium borohydride	1225000	1413	
Lithium chromate	1226000		
Lithium hydride	1227000	1414	
Lithium metal	0253002	1415	7439-93-2
LNG	0251001	1972	74-82-8
Lorsban	0105002	2783	2921-88-2
LOX	0315004		7782-44-7
LPG	0252002	1075	68476-85-7
Luprisol	0345002	1848	79-09-4
Lye	0359004		1310-73-2
Madone	0116004	1915	108-94-1
Magnesium perchlorate	1229000	1475	
Magnesium phosphide	1230000	2011	
Magnesium(powder)	1228000	1418	
Malathion	1231000	2783	
Maleic acid	1232000	2215	
Maleic anhydride	1233000	2215	
Maleic hydrazide	1234000		
Malonic acid dinitrile	0254003	2647	109-77-3
Malonic dinitrile	0254004	2647	109-77-3
Malonic mononitrile	0108001		372-09-8
Malononitrile	0254000	2647	109-77-3
m-Aminopyridine	0023004	2671	
Maneb	1235000	2968	
Manganese(dust)	1236000		
MAOH	0284002	2053	108-11-2

Chemical Name	Chemical ID No.	UN No.	CAS No.
MAPP gas	0262002	1060	
Marsh gas	0257004		74-82-8
MB	0268004	1062	74-83-9
MBK	0271002	1224	591-78-6
MCB	0093002	1134	108-90-7
m-Chloronitrobenzene	0097002	1578	
m-Dinitrobenzene	0166004	1597	
MEA	1824000		
MEK	0280003	1193	78-93-3
Melamine	1237000		
Melinite	0336002		88-89-1
Mephosfolan	1238000		
Mercaptobenzene	0326002	2337	108-98-5
Mercaptodimethur	1239000	2784	
Mercaptomethane	0289001	1064	74-93-1
Mercuric acetate	1240000	1629	
Mercuric ammonium chloride	1241000	1630	
Mercuric chloride	1242000	1624	
Mercuric cyanide	1243000	1636	
Mercuric iodide	1244000	1638	
Mercuric nitrate	1245000	1625	
Mercuric oxide	1246000	1641	
Mercuric sulfate	1248000	1645	
Mercuric sulfide	1249000		
Mercuric thiocyanate	1250000	1646	
Mercurous acetate	1251000	1629	
Mercurous chloride	1252000		
Mercurous nitrate	1253000	1627	
Mercury	1254000	2809	
Mercury oxide	1255000	1641	
Mesityl oxide	1841000	1229	141-79-7
Mestranol	1256000		
Mesyl chloride	0258002	3246	124-63-0
Metaldehyde	1257000	1332	
meta-Xylene	0412005	1307	
Methacetone	0146004	1156	96-22-0
Methacrolein diacetate	1258000		
Methacrylaldehyde	1259000	2396	
Methacrylic acid	0255000	2531	79-41-4
Methacrylic acid chloride	0256001		920-46-7
Methacrylic anhydride	1260000		
Methacryloyl chloride	0256000		920-46-7
Methacryloyloxyethyl isocyanate	1261000		
Methaldehyde	0212003		50-00-0
Methallyl chloride	1262000		
Methamidophos	1263000		
Methanal	0212004		50-00-0
Methane carboxylic acid	1840005		64-19-7
Methane sulfonyl chloride	0258000	3246	124-63-0
Methane sulfonyl fluoride	0259000		558-25-8
Methane sulfuryl chloride	0258004	3246	124-63-0
Methane trichloride	0096003	1888	67-66-3
Methane(compressed gas)	0257000	1971	74-82-8
Methane(cryogenic liquid)	0257001	1972	74-82-8
Methanearsonic acid, sodium salt	1264000		
Methanecarbonitrile	0006004	1648	75-05-8
Methanephosphonyl chloride	0293001	9602	676-97-1
Methanesulfonic acid chloride	0258003	3246	124-63-0
Methanethiol	0289002	1064	74-93-1
Methanoic acid	0214004	1779	64-18-6
Methanol	0260000	1230	67-56-1
Methiocarb	1265000		
Methomyl	1266000		
Methoxycarbonylethylene	0263003	1919	96-33-3
Methoxychlor	1268000		
Methoxyethyl mercuric acetate	1269000		
Methoxyethylene	0409001	1087	107-25-5
Methoxymethyl isocyanate	1270000	2605	
Methyl 2-benzimidazole carbamate	1278000		
Methyl 2-chloroacrylate	0275000		80-63-7
Methyl 2-chloropropenoate	0275002		80-63-7
Methyl 2-methyl-2-propenoate	0290003	1247	80-62-6
Methyl acetate	0261000	1231	79-20-9
Methyl acetic acid	0345003	1848	79-09-4
Methyl acetic ester	0261002	1231	79-20-9
Methyl acetoacetate	1271000		
Methyl acetone	1272000	1232	
Methyl acetylene	1273000		
Methyl acetylene-allene mixture	0262003	1060	
Methyl acetylene-propadiene mixture	0262000	1060	
Methyl acrylate	0263000	1919	96-33-3
Methyl acrylonitrile	0264000	3079	126-98-7
Methyl alcohol	0260002	1230	67-56-1
Methyl amyl acetate	1274000	1233	
Methyl amyl alcohol	0284003	2053	108-11-2
Methyl amyl ketone	0267000	1110	110-43-0
Methyl azinphos	1276000	2783	
Methyl azoxymethanol acetate	1277000		
Methyl benzoate	1279000	2938	
Methyl bromide	0268000	1062	74-83-9
Methyl butenol	1284000		
Methyl butyl ketone	0271000	1224	591-78-6
Methyl butyrate	0272000	1237	623-42-7
Methyl carbinol	0177008	1170	64-17-5
Methyl carbylamine	0286002	2480	624-83-9
Methyl cellosolve	0197006	1188	109-86-4
Methyl chloride	0273000	1063	74-87-3
Methyl chloroacetate	0274000	2295	96-34-4
Methyl chloroformate	1286000	1238	
Methyl chloromethyl ether	1287000	1239	
Methyl cyanide	0006005	1648	75-05-8
Methyl cyclohexanone	1288000	2297	
Methyl cyclopentadiene dimer	1289000		
Methyl cyclopentadienyl manganese tricarbonyl	1290000		
Methyl dichloroacetate	0278000	2299	116-54-1
Methyl dichloroarsine	1291000	1556	
Methyl dichloroethanoate	0278002	2299	116-54-1
Methyl disulfide	0156002	2381	624-92-0

Chemical Name	Chemical ID No.	UN No.	CAS No.
Methyl ether	0157001	1033	115-10-6
Methyl ethyl ketone	0280000	1193	78-93-3
Methyl ethyl pyridine	1300000	2300	
Methyl fluoroacetate	1301000		
Methyl fluorosulfate	1302000		
Methyl formal	1303000	1234	
Methyl formate	0281000	1243	107-31-3
Methyl heptyl ketone	1304000		
Methyl hydride	0257005		74-82-8
Methyl hydroxide	0260003	1230	67-56-1
Methyl iodide	0283000	2644	74-88-4
Methyl isobutenyl ketone	1841003	1229	141-79-7
Methyl isobutyl carbinol	0284000	2053	108-11-2
Methyl isobutyl ketone	0285000	1245	108-10-1
Methyl isocyanate	0286000	2480	624-83-9
Methyl isopropenyl ketone	0287000	1246	814-78-8
Methyl isopropyl ketone	0269003	2397	563-80-4
Methyl isothiocyanate	0288000	2477	556-61-6
Methyl ketone	0004002	1090	67-64-1
Methyl mercaptan	0289000	1064	74-93-1
Methyl mercaptopropionaldehyde	1306000		
Methyl mercuric dicyanamide	1307000		
Methyl mercury	1308000		
Methyl methacrylate	0290000	1247	80-62-6
Methyl methane sulfonate	1309000		
Methyl methanoate	0281002	1243	107-31-3
Methyl monochloroacetate	0274002	2295	96-34-4
Methyl mustard	0288002	2477	556-61-6
Methyl n-butyrate	0272003	1237	623-42-7
Methyl nitrite	1311000	2455	
Methyl orthosilicate	1314000	2606	
Methyl oxide	0157002	1033	115-10-6
Methyl parathion	1315000	2783	
Methyl PCT	0161002	2267	2524-03-0
Methyl pentyl ketone	0267004	1110	110-43-0
Methyl phenkapton	1320000		
Methyl phosphonic dichloride	0293000	9602	676-97-1
Methyl phosphonothioic dichloride	0294000	1760	676-98-2
Methyl phosphonous dichloride	1321000	2845	
Methyl phosphorous dichloride	0294001	1760	676-98-2
Methyl propenoate	0263002	1919	96-33-3
Methyl propionate	1324000	1248	
Methyl propyl ether	1325000	2612	
Methyl propyl ketone	1326000	1249	
Methyl rhodanate	0295001		556-64-9
Methyl salicylate	1328000		
Methyl styrene	0410001	2618	25013-15-4
Methyl sulfate	0162001	1595	77-78-1
Methyl sulfhydrate	0289003	1064	74-93-1
Methyl sulfide	0163003	1164	75-18-3
Methyl sulfocyanate	0295002		556-64-9
Methyl tert-butyl ether	0270000	2398	1634-04-4
Methyl thiocyanate	0295000		556-64-9
Methyl vinyl ether	0409003	1087	107-25-5
Methyl vinyl ketone	0297000	1251	78-94-4

Chemical Name	Chemical ID No.	UN No.	CAS No.
Methyl zinc	0164001	1370	544-97-8
Methylacryl chloride	0256002		920-46-7
Methylaldehyde	0212005		50-00-0
Methylamine(anhydrous)	0265000	1061	74-89-5
Methylamine(solution)	0266000	1235	74-89-5
Methylaziridine	0352001	1921	75-55-8
Methylbenzene	0384001	1294	108-88-3
Methylbenzol	0384002	1294	108-88-3
Methylchloroform	0389003	2831	71-55-6
Methylcyclohexane	0276000	2296	108-87-2
Methylcyclopentane	0277001	2298	96-37-7
Methyldichlorosilane	0279000	1242	75-54-7
Methylene	0350001	1077	115-07-1
Methylene acetone	0297002	1251	78-94-4
Methylene bichloride	0132001	1593	75-09-2
Methylene bis-(phenyl isocyanate) (or MBI)	1294000	2489	
Methylene bromide	0126001	2664	74-95-3
Methylene chloride	0132002	1593	75-09-2
Methylene cyanide	0254005	2647	109-77-3
Methylene cyanohydrin	0213005		107-16-4
Methylene dibromide	0126002	2664	74-95-3
Methylene dichloride	0132003	1593	75-09-2
Methylene diisocyanate	1296000		
Methylene oxide	0212006		50-00-0
Methylethylamine	1297000		
Methylethylene	0350002	1077	115-07-1
Methylhydrazine	0282000	1244	60-34-4
Methylmethane	0173004		74-84-0
Methyl-n-butanoate	0272002	1237	623-42-7
Methylol	0260004	1230	67-56-1
Methyloxirane	0353003	1280	75-56-9
Methylpentamethylene	0277002	2298	96-37-7
Methylpentane	1316000	2462	
Methylpiperidine	1322000	2399	
Methyltetrahydrofuran	1329000	2536	
Methyltrichloroacetate	1330000	2533	
Methyltrichloromethane	0389004	2831	71-55-6
Methyltrichlorosilane	0296000	1250	75-79-6
Metolachlor	1332000		
Metolcarb	1333000		
Mevinphos	1334000	2783	
Mexacarbate	1335000	2757	
MFA	0208004	2642	144-49-0
MFB	0209002	2387	462-06-6
MIBC	0284005	2053	108-11-2
MIBK	1830000		
MIC	0286003	2480	624-83-9
Michler's ketone	1336000		
MIK	0285004	1245	108-10-1
Mineral naphtha	0039004	1114	71-43-2
Mineral oil	1337000		
Mineral spirits	0299002		8030-30-6
Miostat	0078008		51-83-2
MIPK	0269004	2397	563-80-4
Mirbane oil	1842004	1662	98-95-3

Chemical Name	Chemical ID No.	UN No.	CAS No.
Mirex	1338000		
MIT	0288003	2477	556-61-6
MITC	0288004	2477	556-61-6
MMA	1832000		
MME	0290004	1247	80-62-6
MMH	0282003	1244	60-34-4
MNBK	0271003	1224	591-78-6
m-Nitrophenol	1394000	1663	
m-Nitrotoluene	0310001	1664	
Molecular oxygen	0315005		7782-44-7
Molten phosphorous	0331003		7723-14-0
Molybdinum trioxide	1340000		
Monoallylamine	0018003	2334	107-11-9
Monobutylamine	0064003	1125	109-73-9
Monochlorethane	0183002	1037	75-00-3
Monochlorobenzene	0093003	1134	108-90-7
Monochloroethylene	0405003	1086	75-01-4
Monochloromethane	0273004	1063	74-87-3
Monochlorotetrafluoroethane	1341000		
Monochlorotrifluoromethane	1342000		
Monocrotaline	1343000		
Monocrotophos	1344000		
Monoethanolamine	0174003	2491	141-43-5
Monoethylamine	0178004	1036	75-04-7
Monoethyldichlorosilane	0187002	1183	1789-58-8
Monofluoroacetate	0208005	2642	144-49-0
Monofluorobenzene	0209003	2387	462-06-6
Monofluoroethene	0407004	1860	75-02-5
Monoisopropanolamine	0243004		78-96-6
Monomethylamine	0265001	1061	74-89-5
Monomethylhydrazine	0282004	1244	60-34-4
Morpholine	0298000	2054	110-91-8
Motor fuel	0217002	1203	8006-61-9
Motor spirit	0217003	1203	8006-61-9
Mous-con	0413001	1714	
Mouse-Rid	0361004	1692	57-24-9
MPTD	0294002	1760	676-98-2
MSF	0259002		558-25-8
MTBE	0270003	2398	1634-04-4
m-Toluidine	0387002	1708	
Muriatic acid	1827000		
Muriatic ether	0183003	1037	75-00-3
Mustard gas	1345000		
Muster	0218001		1071-83-6
MVK	0297003	1251	78-94-4
MVP (2-Methyl-5-vinyl pyridine)	1346000	3073	
m-Xylene	0412004	1307	
m-Xylene	0412009	1307	
Myrcene	1347000		
N-(2-chlorophenylthiourea)	0098001		5344-82-1
N-(2-methylphenyl) thiourea	0292000		614-78-8
N,N'-bis(2-aminoethyl)-1,2-ethanediamine	0393001	2259	112-24-3
N,N'-Diacetyl benzidine	0827000		
N,N'-diacetyl benzidine	0843000		
N,N'-Dibutyl hexamethylene diamine	0856000		
N,N'-dibutyl hexamethylene diamine	0881000		
N,N-diethyl aniline	0890000	2432	
N,N'-diethylaniline	1069000		
N,N-diethylethanamine	0392002	1296	121-44-8
N,N-dimethyl carbamoyl chloride	0154005	2262	79-44-7
N,N-dimethyl cyclohexylamine	1837000		
N,N-dimethyl formamide	0158003	2265	68-12-2
N,N-dimethylacetamide	0151003		127-19-5
N,N-dimethylaniline	0153000	2253	121-69-7
N,N-dimethyl-p-phenylenediamine	0160000		99-98-9
Nabam	1348000		
Nafenopin	1349000		
Naled	1350000		
N-aminoethyl piperazine	0443000	2815	
N-aminoethyl piperazine	0450000		
n-Amyl acetate	0488000	1104	
n-Amyl alcohol	0032001	1105	71-41-0
n-Amyl chloride	0490000	1111	
n-Amyl mercaptan	0491000	1112	
n-Amyl nitrate	0492000	1113	
n-Amyl nitrite	0493000		
Naphtha	0299000		8030-30-6
Naphtha: coal tar	1351000	2553	
Naphtha: stoddard solvent	1352000	1271	
Naphtha: VM & P	1353000		
Naphthalene	1354000	1334	
Napthylthiourea	1356000	1651	
Napthylurea	1357000	1652	
Naramycin	0117003		66-81-9
Natural gas	1829000		
Naturium	0356000	1428	7440-23-5
n-Butane	0060001	1011	106-97-8
n-Butanol	0603000	1120	
n-Butene	0066003	1012	25167-67-3
n-Butyl acetate	0061000	1123	123-86-4
n-Butyl acrylate	0062002	2348	141-32-2
n-Butyl alcohol	0609000	1120	
n-Butyl bromide	0056002	1126	109-65-9
n-Butyl carbinol	0032004	1105	71-41-0
n-Butyl chloroformate	0616000	2743	
n-Butyl isocyanate	0069000	2485	111-36-4
n-Butyl mercaptan	0070003	2347	109-79-5
n-Butyl methacrylate	0622000	2227	
n-Butylamine	0064000	1125	109-73-9
n-Butylaniline	0612000	2738	
n-Butylchloride	0094002	1127	109-69-3
n-Butylene	0066005	1012	25167-67-3
n-Butyric acid	0631000	2820	
n-Decyl acrylate	0817000		
n-Decyl alcohol	0818000		
n-Decyl benzene	0819000		
n-Dipropylamine	0170002	2383	142-84-7
Nemex	0135005	2047	542-75-6

Chemical Name	Chemical ID No.	UN No.	CAS No.
Neodecanoic acid	1358000		
Neohexane	0300000	1208	75-83-2
Neon	1359000	1065	
Neoprene	0100005	1991	126-99-8
N-ethyl butylamine	0181002	2734	13360-63-9
N-ethyl cyclohexylamine	1039000		
N-ethylaniline	1028000	2272	
N-ethylbutylamine	0181003	2734	13360-63-9
N-formyldimethylamine	0158004	2265	68-12-2
n-Heptane	0219001	1206	142-82-5
n-Heptene	0220000	2278	592-76-7
n-Hexaldehyde	1146000	1207	
n-Hexane	0221002	1208	110-54-3
Nickel	1360000	2881	
Nickel acetate	1361000		
Nickel ammonium sulfate	1362000	9138	
Nickel bromide	1363000		
Nickel carbonyl	0301000	1259	13463-39-3
Nickel chloride	1364000		
Nickel cyanide	1365000	1653	
Nickel fluoroborate	1366000		
Nickel formate	1367000		
Nickel hydroxide	1368000	9140	
Nickel nitrate	1369000	2725	
Nickel subsulfide	1370000		
Nickel sulfate	1371000		
Nickel tetracarbonyl	0301001	1259	13463-39-3
Nicotine	1372000	1654	
Nicotine sulfate	1373000	1658	
Nitrador	0167004	1598	534-52-1
Nitralin	1374000		
Nitric acid (fuming)	0302000	2032	7697-37-2
Nitric acid(nonfuming, >40%)	0302001	2031	7697-37-2
Nitric oxide	0303000	1660	10102-43-9
Nitric oxide(mixture with nitrogen tetroxide)	0303001	1975	10102-43-9
Nitrilotriacetic acid	1375000		
Nitrilotriacetic acid, disodium salt	1376000		
Nitrilotriacetic acid, sodium salt	1377000		
Nitrilotriacetic acid, trisodium salt	1378000		
Nitrobenzene	1842000	1662	98-95-3
Nitrobenzol	1842002	1662	98-95-3
Nitrocarbol	0307001	1261	75-52-5
Nitrocellulose (with >25% Water)	1383000	2555	
Nitrocellulose (with plasticizer >18%)	1384000	0343	
Nitrochlorobenzene	0097005	1578	
Nitrochloroform	0099001	1580	76-06-2
Nitrocresols	1385000	2446	
Nitrocyclohexane	1386000		
Nitroethane	1387000	2842	
Nitrofan	0167005	1598	534-52-1
Nitrofen	1388000		
Nitrogen chloride oxide	0309001	1069	2696-92-6
Nitrogen dioxide	0305000	1067	10102-44-0
Nitrogen gas	0304002		7727-37-9
Nitrogen liquid	0304003		7727-37-9
Nitrogen monoxide	0303002	1660	10102-43-9
Nitrogen mustard	1389000		
Nitrogen mustard hydrochloride	1390000		
Nitrogen mustard N-oxide	1391000		
Nitrogen mustard N-oxide hydrochloride	1392000		
Nitrogen oxide	0303004		
Nitrogen oxychloride	0309002	1069	2696-92-6
Nitrogen tetroxide	0305002	1067	10102-44-0
Nitrogen trifluoride	1393000	2451	
Nitrogen(compressed gas)	0304000	1066	7727-37-9
Nitrogen(refrigerated liquid)	0304001	1977	7727-37-9
Nitroglycerin	0306000	0143	55-63-0
Nitroglycerin(1-10% solution in alcohol)	0306001	0144	55-63-0
Nitromethane	0307000	1261	75-52-5
Nitrophen	0168007		51-28-5
Nitropropane	0308000	2608	
Nitro-Sil	0024004	1005	7664-41-7
Nitrostarch (dry or wetted with <20% water)	1403000	0146	
Nitrostarch (wetted with >20% water)	1404000	1337	
Nitrosyl chloride	0309000	1069	2696-92-6
Nitrosylsulfuric acid	1405000	2308	
Nitrotoluene	0310000	1664	
Nitrous acid, ethyl ester	0203002	1194	109-95-5
Nitrous oxide(compressed gas)	0311000	1070	10024-97-2
Nitrous oxide(cryogenic liquid)	0311001	2201	10024-97-2
N-methylaniline	1275000	2294	
N-methylaniline	1285000		
N-methyl-methanamine	0152001	1032	124-40-3
N-nitrosodiethanolamine	1406000		
N-nitrosodiethylamine	1407000		
N-nitrosodimethylamine	1408000		
N-nitrosodi-n-butylamine	1409000		
N-nitrosodi-n-propylamine	1410000		
N-nitrosodiphenylamine	1411000		
N-nitrosomethylethylamine	1412000		
N-nitrosomethylvinylamine	1413000		
N-nitrosomorpholine	1414000		
N-nitroso-N-ethyl urea	1415000		
N-nitroso-N-methyl urea	1416000		
N-nitroso-N-methyl urethane	1417000		
N-nitrosonornicotine	1418000		
N-nitrosopiperidine	1419000		
N-nitrosopyrrolidine	1420000		
N-nitrososarcosine	1421000		
NO	0303003	1660	10102-43-9
n-Octane	0312001	1262	111-65-9
Nonane	1422000	1920	
Nonanol	1423000		
Nonene	1424000	2057	
Nonylphenol	1425000		
Norbormide	1426000		
Norethisterone	0037004	2188	7784-42-1

Chemical Name	Chemical ID No.	UN No.	CAS No.
n-Pentane	0321001	1265	109-66-0
N-phenylthiourea	0328001	2767	103-85-5
N-phosphonomethylglycine	0218002		1071-83-6
N-propanolamine	1509000		
N-propanolamine	1529000		
n-Propyl acetate	0347000	1276	109-60-4
n-Propyl benzene	0348000	2364	103-65-1
n-Propyl chloroformate	0349000	2740	109-61-5
n-Propyl mercaptan	0342003	2402	107-03-9
n-Propyl nitrate	1543000	1865	
n-Undecylbenzene	1757000		
n-Undecylbenzene	1762000		
o-Aminopyridine	0023005	2671	
o-Anisidine	0495000	2431	
o-Anisidine hydrochloride	0496000		
o-Chloronitrobenzene	0097003	1578	
o-Chloronitrobenzene	0097006	1578	
o-Chlorophenol	0704000	2021	
Octachloronaphthalene	1427000		
Octamethyl diphosphoramide	1428000		
Octane	0312000	1262	111-65-9
Octanoic acid	1429000		
Octanol	1430000		
Octene	0313000		111-66-0
Octyl epoxy tallate	1431000		
Octylene	0313003		111-66-0
o-Dinitrobenzene	0166005	1597	
Oil of bitter almonds	1842006	1662	98-95-3
Oil of turpentine	0400001	1299	8006-64-2
Oil of vitrol	0368002	1830	7664-93-9
Olamine	0174004	2491	141-43-5
Oleic acid	1434000		
Oleic acid, potassium salt	1435000		
Oleic acid, sodium salt	1436000		
Oleum	0314000	1831	8014-95-7
o-Nitrobenzene	1842005	1662	98-95-3
o-Nitrophenol	1395000	1663	
o-Nitrophenol	1433000		
o-Nitrotoluene	0310005	1664	
o-Phenyl phenate, sodium	1470000		
o-Phenyl phenate, sodium	1476000		
o-Phenyl phenol	1471000		
o-Phenyl phenol	1477000		
Orange oil SS	1437000		
Ordram (or molinate)	1438000		
ortho-Xylene	0412006	1307	
Orvinylecarbinol	0017004	1098	107-18-6
Osmium tetroxide	1439000	2471	
o-Toluidine	0387003	1708	
o-Tolyl thiourea	0292002		614-78-8
Oxacyclopentadiene	0215002	2389	110-00-9
Oxacyclopentane	0379003	2056	109-99-9
Oxalic acid	1440000		
Oxalonitrile	0109005	1026	460-19-5

Chemical Name	Chemical ID No.	UN No.	CAS No.
Oxalyl cyanide	0109006	1026	460-19-5
Oxammonium	0235001		7803-49-8
Oxamyl	1441000		
Oxane	0199006	1040	75-21-8
Oxetanone	0149005	2521	674-82-8
Oxide of nitrogen	0305003	1067	10102-44-0
Oxidoethane	0199007	1040	75-21-8
Oxirane	0199008	1040	75-21-8
Oxyacyclopropane	0199009	1040	75-21-8
Oxybenzene	0323006		108-95-2
Oxydisulfoton	1397000		
Oxygen difluoride	0316000	2190	7783-41-7
Oxygen(compressed gas)	0315000	1072	7782-44-7
Oxygen(refrigerated liquid)	0315001	1073	7782-44-7
o-Xylene	0412007	1307	
Oxymethylene	0212007		50-00-0
Ozone	1442000		
Paint thinner	1445000	1263	
Paint, latex	1443000		
Paint, oil base	1444000	1263	
p-Aminopyridine	0023006	2671	
p-Aminopyridine	0023008	2671	
Panfuran S	1446000		
p-Anisidine	0497000	2431	
Paraformaldehyde	1447000	2213	
Paraldehyde	1448000	1264	
Paramoth	0128003	1592	106-46-7
Paraquat	1449000	2781	
Paraquat methosulfate	1450000		
Parathion	1451000	2783	
para-Xylene	0412008	1307	
Parazene	0128004	1592	106-46-7
Paris green	1452000	1585	
p-Benzoquinone	0041002	2587	106-51-4
PCE	0375002	1897	127-18-4
p-Chloro -m-cresol	0727000		
p-Chloroaniline	0691000	2018	
p-Chloro-m-cresol	0694000		
p-Chloronitrobenzene	0097004	1578	
p-Chloronitrobenzene	0097007	1578	
p-Chloro-o-toluidine	0717000		
p-Chlorotoluene	0104004	2238	106-43-4
PCP	0318002	3155	87-86-5
p-Cresidine	0785000		
p-Cymene	0808000	2046	
PDB	0128005	1592	106-46-7
p-Dichlorobenzene	0128000	1592	106-46-7
Penta-2,4-dione	0320000	2310	123-54-6
Pentaborane	0317000	1380	19642-22-7
Pentaborane monohydride	0317001	1380	19642-22-7
Pentacarbonyliron	0237002	1994	13463-40-6
Pentachlorodibenzo-p-dioxins	1454000		
Pentachloroethane	1455000	1669	
Pentachlorophenate, sodium	1456000	2567	

Chemical Name	Chemical ID No.	UN No.	CAS No.
Pentachlorophenol	0318000	3155	87-86-5
Pentadecanol	1457000		
Pentadecylamine	1458000		
Pentadione	0320004	2310	123-54-6
Pentaerythritol	1459000		
Pentamethylene	0119001	1146	142-29-0
Pentane	0321000	1265	109-66-0
Pentanoic acid	1460000	1760	
Pentyltrichlorosilane	0033001	1728	107-72-2
Peracetic acid	1463000	2131	
PERC	0375003	1897	127-18-4
Percarbamide	0401003	1511	124-43-6
Perchlor	0375004	1897	127-18-4
Perchloric acid	0322000	1873	7601-90-3
Perchloroethylene	0375005	1897	127-18-4
Perchloromethyl mercaptan	1464000	1670	
Perchloryl fluoride	1465000	3083	
Perclene	0375006	1897	127-18-4
Perfluoroethylene	0378001	1081	116-14-3
Petrol	0217004	1203	8006-61-9
Petrolatum	1466000		
Petroleum	0299003		8030-30-6
Petroleum distillate	0299004		8030-30-6
Petroleum ether	0299005		8030-30-6
Petroleum gas, liquified	0252003	1075	68476-85-7
Petroleum naphtha	1467000	1255	
Petroleum solvent	0299006		8030-30-6
Phenanthrene	1468000		
Phenic acid	0323007		108-95-2
Phenol trinitrate	0336003		88-89-1
Phenol(molten)	0323000	2312	108-95-2
Phenol(solid)	0323001	1671	108-95-2
Phenol(solution)	0323002	2821	108-95-2
Phenyl alcohol	0323008		108-95-2
Phenyl bromide	0055001	2514	108-86-1
Phenyl chloride	0093004	1134	108-90-7
Phenyl ethylene	0362003	2055	100-42-5
Phenyl fluoride	0209004	2387	462-06-6
Phenyl isocyanate	1474000	2487	
Phenyl mercaptan	0326000	2337	108-98-5
Phenyl phosphorous dichloride	0327000	2798	644-97-3
Phenyl phosphorous thiodichloride	1478000	2799	
Phenyl silatrane	1479000		
Phenyl trichloromethane	0042004	2226	98-07-7
Phenylacetonitrile	0324000	2470	140-29-4
Phenylamine	0035006	1547	62-53-3
Phenylarsinedichloride	0325002	1556	696-28-6
Phenylcarboxyamide	0038003		
Phenylcarbylamine chloride	1469000	1672	
Phenylcyanide	0040003	2224	100-47-0
Phenyldichloroarsine	0325000	1556	696-28-6
Phenylenediamine	1472000	1673	
Phenylethane	0179002	1175	100-41-4
Phenylhydrazine hydrochloride	1473000		
Phenylic acid	0323009		108-95-2
Phenylmercuric acetate	1475000	1674	
Phenylmethane	0384003	1294	108-88-3
Phenylphosphine dichloride	0327003	2798	644-97-3
Phenylthiocarbamide	0328002	2767	103-85-5
Phenylthiourea	0328000	2767	103-85-5
Phorate	1480000	3018	
Phosacetim	1481000		
Phosfolan	1482000	2783	
Phosgen	0329006	1076	75-44-5
Phosgene	0329000	1076	75-44-5
Phosmet	1483000		
Phosphamidon	1484000		
Phosphine	0330000	2199	7803-51-2
Phosphoric acid	1485000	1805	
Phosphoric sulfide	0333002	1340	1314-80-3
Phosphorochloridothioic acid, 0,0-dimethyl ester	0161003	2267	2524-03-0
Phosphorus (black)	1487000		
Phosphorus bromide	0334001	1808	7789-60-8
Phosphorus chloride	0335002	1809	7719-12-2
Phosphorus chloride oxide	0332001	1810	10025-87-3
Phosphorus hydride	0330002	2199	7803-51-2
Phosphorus oxide trichloride	0332002	1810	10025-87-3
Phosphorus oxychloride	0332000	1810	10025-87-3
Phosphorus oxytrichloride	0332003	1810	10025-87-3
Phosphorus pentachloride	1488000	1806	
Phosphorus pentafluoride	1489000	2198	
Phosphorus pentasulfide	0333000	1340	1314-80-3
Phosphorus pentoxide	1490000	1807	
Phosphorus persulfide	0333003	1340	1314-80-3
Phosphorus tribromide	0334000	1808	7789-60-8
Phosphorus trichloride	0335000	1809	7719-12-2
Phosphorus trihydride	0330003	2199	7803-51-2
Phosphorus trioxide	1491000	2578	
Phosphorus(amorphous, red)	1486000	1338	
Phosphorus(dry or under water)	0331000	1381	7723-14-0
Phosphorus(white molten)	0331001	2447	7723-14-0
Phosphoryl chloride	0332004	1810	10025-87-3
Phosvin	0413002	1714	
Phthalic anhydride	1492000	2214	
Pic-chlor	0099002	1580	76-06-2
Picfume	0099003	1580	76-06-2
Picoline	1493000	2313	
Picral	0336004		88-89-1
Picric acid(>10% water)	0336000	1344	88-89-1
Picric acid(dry or <30% water)	0336001	0154	88-89-1
Picride	0099004	1580	76-06-2
Picrotoxin	1494000	1584	
Pimelic ketone	0116005	1915	108-94-1
Pine oil	1495000		
Pinene	0337001	2368	80-56-8
Piperazine	1496000	2579	
Piperidine	0338000	2401	110-89-4
Piperylene	0319002		504-60-9
Piprotal	1497000		
Platinum tetrachloride	1498000		

Chemical Name	Chemical ID No.	UN No.	CAS No.
p-Nitrobenzene	0166006	1597	
p-Nitrobenzene	1842003	1662	98-95-3
p-Nitrophenol	1396000	1663	
p-Nitrotoluene	0310006	1664	
Polybrominated biphenyls	1499000	3152	
Polybutene	1500000		
Polychlorinated biphenyls	1501000	2315	
Polyethylene polyamines	1502000		
Polyphosphoric acid	1503000		
Polypropylene	1504000		
Polypropylene glycol	1505000		
Polypropylene glycol methyl ether	1506000		
Ponceau 3R	1507000		
Potassium	0339000	2257	7440-09-7
Potassium arsenite	1508000	1678	
Potassium binoxalate	1510000		
Potassium bromate	1511000	1484	
Potassium chlorate	1512000	1485	
Potassium chromate	1513000		
Potassium cyanide	1514000	1680	
Potassium dichloro-s-triazinetrione	1515000	2465	
Potassium dichromate	1516000	1479	
Potassium hydroxide	1517000	1813	
Potassium hydroxide solution	1518000	1814	
Potassium iodide	1519000		
Potassium oxalate	1520000		
Potassium permanganate	1521000	1490	
Potassium peroxide	1522000	1491	
Potassium peroxysulfate	0340003	1492	7727-21-1
Potassium persulfate	0340000	1492	7727-21-1
Potassium silver cyanide	1523000		
Progesterone	1524000		
Promecarb	1525000		
Prometryne	1526000		
Propadiene	1527000	2200	
Propane	0341000	1978	74-98-6
Propane sultone	1528000		
Propanethiol	0342000	2402	107-03-9
Propanoic acid	0345004	1848	79-09-4
Propargite	1530000		
Propargyl alcohol	0343000	1986	107-19-7
Propargyl bromide	0058002	2345	106-96-7
Propellant 12	1531000	1028	
Propenamide	0011002	2074	79-06-1
Propene	0350003	1077	115-07-1
Propene acid	0012005	2218	79-10-7
Propene oxide	0353004	1280	75-56-9
Propene-3-yl trichlorosilane	0022002	1724	107-37-9
Propenenitrile	0013003	1093	107-13-1
Propenoic acid	0012006	2218	79-10-7
Propenoic acid, ethyl ester	0176004	1917	140-88-5
Propenoic acid, methyl ester	0263004	1919	96-33-3
Propenol	0017005	1098	107-18-6
Propenoyl chloride	0014003	9188	814-68-6
Propenyl alcohol	0017007	1098	107-18-6
Propenyl chloride	0020005	1100	107-05-1
Propiolactone	0344000	1993	57-57-8
Propionaldehyde	1532000	1275	
Propionic acid	0345000	1848	79-09-4
Propionic anhydride	1533000	2496	
Propionic nitrile	0346003	2404	107-12-0
Propionitrile	0346000	2404	107-12-0
Propoxur	1534000		
Propyl bromide	0057002	2344	75-26-3
Propyl chlorocarbonate	0349001	2740	109-61-5
Propyl chloroformate	0349002	2740	109-61-5
Propyl cyanide	0074003	2411	109-74-0
Propyl mercaptan	0342002	2402	107-03-9
Propylacetone	0271004	1224	591-78-6
Propylamine	1535000	1277	
Propylene	0350000	1077	115-07-1
Propylene butylene polymer	1536000		
Propylene dichloride	0351000	1279	78-87-5
Propylene glycol	1538000		
Propylene glycol ethyl ether	1539000		
Propylene glycol methyl ether	1540000		
Propylene glycol monometha crylate	0236002		27813-02-1
Propylene oxide	0353000	1280	75-56-9
Propylene tetramer	1541000	2850	
Propylene trimer	1542000	2057	
Propyleneimine	0352000	1921	75-55-8
Propylnitrile	0346004	2404	107-12-0
Propynyl alcohol	0343004	1986	107-19-7
Prothoate	1544000	2783	
Prozoin	0345005	1848	79-09-4
Prussic acid	0230004	1051	74-90-8
Prussite	0109007	1026	460-19-5
p-tert-Butyl phenol	0628000	2229	
p-Toluene sulfonic acid	1689000	2585	
p-Toluidine	0387004	1708	
p-Tolyl chloride	0104005	2238	106-43-4
p-Tricresyl phosphate	1717000		
PTU	0328004	2767	103-85-5
p-Xylene	0412010	1307	
Pyrene	1545000		
Pyrethrins	1546000	9184	
Pyridine	0354000	1282	110-86-1
Pyriminil	1547000		
Pyrogallic acid	1548000		
Pyrophosphoric acid, tetraethyl ester	0377004		107-49-3
Pyrosulfuryl chloride	1549000	1817	
Pyrrolidone	1550000		
Quinoline	1552000	2656	
Quinone	0041004	2587	106-51-4
R12	1555001	1028	
R20	0096004	1888	67-66-3
R22	1556001	1018	

Chemical Name	Chemical ID No.	UN No.	CAS No.
R40	0273005	1063	74-87-3
R50	0257006		74-82-8
Range oil	0249004	1223	8008-20-6
Ratal	0413003	1714	
Refrigerant 12	1555000	1028	
Refrigerant 22	1556000	1018	
Refrigerant R717	0024005	1005	7664-41-7
Resorcinol	1557000	2876	
Rodeo	0218003		1071-83-6
Ro-Dex	0361005	1692	57-24-9
Roundup	0218004		1071-83-6
Rubbing alcohol	0242007	1219	67-63-0
Rubidium	1558000	1423	
Saccharin	1559000		
Safrole	1560000		
Salicylaldehyde	1561000		
Salicylic acid	1562000		
Saltpeter	1563000	1942	
Sand acid	0210005	1778	16961-83-4
Sarin	1564000		
sec-Butanol	0604000	1120	
sec-Butyl alcohol	0610000	1120	
sec-Butylamine	0611000		
sec-Propyl alcohol	0242006	1219	67-63-0
Selenic acid	1565000	1905	
Selenium (powder)	1566000	2658	
Selenium dihydride	0233002	2202	7783-07-5
Selenium dioxide	1567000	2811	
Selenium hexafluoride	1568000	2194	
Selenium oxychloride	1569000	2879	
Selenium trioxide	1570000		
Semicarbazide hydrochloride	1571000		
Sewer gas	0234002	1053	7783-06-4
Sextone	0116006	1915	108-94-1
Silane	1572000	2203	
Silica gel	1574000		
Silica, crystalline	1573000		
Silicochloroform	0391001	1295	10025-78-2
Silicofluoric acid	0210006	1778	16961-83-4
Silicon chloride	0355000	1818	10026-04-7
Silicon tetrachloride	0355001	1818	10026-04-7
Silicon(powder)	1575000	1346	
Silver	1576000		
Silver acetate	1577000		
Silver carbonate	1578000		
Silver iodate	1579000		
Silver nitrate	1580000	1493	
Silver oxide	1581000		
Silver sulfate	1582000		
Silvex	1583000	2765	
Simazine	1584000		
Sinox	0167006	1598	534-52-1
Skellysolve A	0321002	1265	109-66-0
Soda lye	0359005		1310-73-2
Sodium	0356001	1428	7440-23-5
Sodium 2-mercaptobenzothiazol solution	1607000		
Sodium alkyl sulfates	1586000		
Sodium alkylbenzene sulfonates	1585000		
Sodium amide	1587000		
Sodium arsenate	1588000	1685	
Sodium arsenite	1589000	2027	
Sodium azide	0357000	1687	26628-22-8
Sodium bifluoride	1590000	2439	
Sodium bisulfite	1591000	2693	
Sodium borate	1592000		
Sodium borohydride	1593000	1426	
Sodium borohydride (15% or less)	1594000		
Sodium cacodylate	1595000	1688	
Sodium chlorate	1596000	1495	
Sodium chlorate solution	1597000	2428	
Sodium chromate	1598000		
Sodium cyanide	0358000	1689	143-33-9
Sodium dichloro-s-triazinetrione	1599000	2465	
Sodium dichromate	1600000	1479	
Sodium ferrocyanide	1601000		
Sodium fluoride	1602000	1690	
Sodium fluoroacetate	1603000	2629	
Sodium fluorosilicate	1604000	2674	
Sodium hydrate	0359006		1310-73-2
Sodium hydride	1605000	1427	
Sodium hydrosulfide solution	1606000	2922	
Sodium hydroxide(dry)	0359000	1823	1310-73-2
Sodium hydroxide(solution)	0359001	1824	1310-73-2
Sodium hypochlorite	0360000	1791	7681-52-9
Sodium hypochlorite solution	0360006	1791	7681-52-9
Sodium methylate	1608000	1431	
Sodium nitrate	1609000	1498	
Sodium nitrite	1610000	1500	
Sodium oxalate	1611000		
Sodium perchlorate	1612000	1502	
Sodium persulfate	1613000		
Sodium phosphate	1614000	9147	
Sodium phosphate tribasic	1615000		
Sodium phosphide	1616000	1432	
Sodium saccharin	1617000		
Sodium selenate	1618000	2630	
Sodium selenite	1619000	2630	
Sodium silicate	1620000		
Sodium sulfate	1621000		
Sodium sulfide	1622000	1385	
Sodium sulfite	1623000		
Sodium tellurite	1624000		
Sodium thiocyanate	1625000		
Solvent 111	0389005	2831	71-55-6
Sorbitol	1626000		
Spirits of turpentine	0400002	1299	8006-64-2
Stannous fluoride	1627000		
Stearic acid	1628000		
Sterigmatocystin	1629000		

Chemical Name	Chemical ID No.	UN No.	CAS No.
s-Tetrachloroethane	0374004	1702	79-34-5
Stibine	1630000	2676	
Stoddard solvent	0299007		8030-30-6
Strontium chromate	1631000		
Strychnine	0361000	1692	57-24-9
Strychnine sulfate	1632000	1692	
Styrene	0362000	2055	100-42-5
Styrene monomer	0362004	2055	100-42-5
Styrene oxide	0363000		96-09-3
Styrene-7,8-oxide	0363003		96-09-3
Styrol	0362005	2055	100-42-5
Styrolene	0362006	2055	100-42-5
Suberane	0114002	2241	291-64-5
Sucrose	1633000		
Sulfallate	1634000		
Sulfan	0371001	1829	7446-11-9
Sulfinyl chloride	0381001	1836	7719-09-7
Sulfolane	0364000		126-33-0
Sulfolane W	0364002		126-33-0
Sulfonyl chloride	0372001	1834	7791-25-5
Sulfotep	1635000	1704	
Sulfur	0365000	1350	7704-34-9
Sulfur anhydride	0371002	1829	7446-11-9
Sulfur chloride	0369003	1828	10025-67-9
Sulfur chloride oxide	0381002	1836	7719-09-7
Sulfur dichloride	0366000	1828	10545-99-0
Sulfur dioxide	0367000	1079	7446-09-5
Sulfur hydride	0234004	1053	7783-06-4
Sulfur monochloride	0369000	1828	10025-67-9
Sulfur oxide	0367005	1079	7446-09-5
Sulfur oxychloride	0372003	1834	7791-25-5
Sulfur pentafluoride	1637000		
Sulfur phosphide	0333004	1340	1314-80-3
Sulfur subchloride	0369004	1828	10025-67-9
Sulfur tetrafluoride	0370000	2418	7783-60-0
Sulfur trioxide	0371000	1829	7446-11-9
Sulfur(molten)	0365001	2448	7704-34-9
Sulfureted hydrogen	0234003	1053	7783-06-4
Sulfuric acid	0368000	1830	7664-93-9
Sulfuric acid, dimethyl ester	0162002	1595	77-78-1
Sulfuric acid, fuming	0314003	1831	8014-95-7
Sulfuric anhydride	0371003	1829	7446-11-9
Sulfuric chlorohydrin	0103002	1454	7790-94-5
Sulfuric oxide	0371004	1829	7446-11-9
Sulfuric oxychloride	0372002	1834	7791-25-5
Sulfurous acid	1636000	1833	
Sulfurous acid anhydride	0367002	1079	7446-09-5
Sulfurous acid, diammonium salt	0030002	9090	10196-04-0
Sulfurous anhydride	0367003	1079	7446-09-5
Sulfurous oxide	0367004	1079	7446-09-5
Sulfurous oxychloride	0381003	1836	7719-09-7
Sulfuryl chloride	0372000	1834	7791-25-5
Supracide	1638000		
Sweet spirit of nitre	0203003	1194	109-95-5
sym-Allene	0451000		

Chemical Name	Chemical ID No.	UN No.	CAS No.
Tabun	1639000		
Tannic acid	1640000		
Tar	1641000	1999	
t-Butanol	0063001	1120	75-65-0
t-Butyl alcohol	0063000	1120	75-65-0
t-Butyl methyl ether	0270001	2398	1634-04-4
t-Butylamine	0065000	2734	75-64-9
TCE	0390003	1710	79-01-6
TCM	0096005	1888	67-66-3
TDI	0386001	2078	584-84-9
TEA	0392003	1296	121-44-8
TEL	0376001	1649	78-00-2
Tellurium fluoride	0373001	2195	7783-80-4
Tellurium hexafluoride	0373000	2195	7783-80-4
Tellurium(powder)	1642000		
Telmicid	0171003		514-73-8
Telmid	0171004		514-73-8
Telone 2	0135006	2047	542-75-6
Telone C	0135007	2047	542-75-6
Temik	0016003	2757	116-06-3
TEN	0392004	1296	121-44-8
TEP	0377005		107-49-3
TEPP	0377006		107-49-3
Terbufos	1643000		
Terephthalic acid	1644000		
Terphenyl	1645000		
Terpinoline	1646000	2541	
tert-Butyl ether	0620000	1149	
tert-Butyl hydroperoxide	0068000		75-91-2
tert-Butyl peroxybenzoate	0625000	2097	
tert-Butylamine	0065002	2734	75-64-9
tert-Octyl mercaptan	1432000	3023	
Testosterone and its esters	1647000		
TETA	0393002	2259	112-24-3
Tetrabutyl titanate	1648000		
Tetracarbonyl nickel	0301002	1259	13463-39-3
Tetrachloroethane	0374000	1702	79-34-5
Tetrachloroethylene	0375000	1897	127-18-4
Tetrachloromethane	0083005	1846	56-23-5
Tetrachlorosilane	0355002	1818	10026-04-7
Tetrachlorotitanium	0383001	1838	7550-45-0
Tetrachlorvinphos	1651000		
Tetradecanol	1652000		
Tetradecyl benzene	1654000		
Tetraethyl dithiopyrophosphate	1655000	1704	
Tetraethyl lead	0376000	1649	78-00-2
Tetraethyl pyrophosphate(liquid)	0377001	3018	107-49-3
Tetraethyl pyrophosphate(solid)	0377000	2783	107-49-3
Tetraethyl tin	1658000		
Tetraethylene glycol	1656000		
Tetraethylene pentamine	1657000	2320	
Tetraethylplumbane	0376002	1649	78-00-2
Tetrafluoroethylene	0378000	1081	116-14-3
Tetrafluorohydrazine	1659000	1955	
Tetrafluoromethane	1660000	1982	

Chemical Name	Chemical ID No.	UN No.	CAS No.
Tetrafluorosulfurane	0370001	2419	7783-60-0
Tetrahydro-1,4-oxazine	0298004	2054	110-91-8
Tetrahydrofuran	0379000	2056	109-99-9
Tetrahydronaphthalene	1661000		
Tetrahydrothiophene-1	0364003		126-33-0
Tetramethyl lead	1663000		
Tetramethyl silane	1664000	2749	
Tetramethylene cyanide	0015004	2205	111-69-3
Tetramethylene oxide	0379004	2056	109-99-9
Tetramethylene sulfone	0364004		126-33-0
Tetran	0380001	1510	509-14-8
Tetranitromethane	0380000	1510	509-14-8
Tetrasol	0083006	1846	56-23-5
Thallium	1665000		
Thallium acetate	1666000		
Thallium carbonate	1667000		
Thallium nitrate	1668000	2727	
Thallium sulfate	1669000	1707	
Thallous carbonate	1670000		
Thallous chloride	1671000		
Thallous malonate	1672000		
Thallous sulfate	1673000		
THF	0379005	2056	109-99-9
Thioacetamide	1675000		
Thioacetic acid	1676000	2436	
Thiobencarb	1677000		
Thiobutyl alcohol	0070004	2347	109-79-5
Thiocarbamide	0382002		62-56-6
Thiocarbazide	1678000		
Thiocyanic acid, ethyl ester	0205003		542-90-5
Thiocyanomethane	0295003		556-64-9
Thioethanol	0202004	2363	75-08-1
Thioethyl alcohol	0202005	2363	75-08-1
Thiofanox	1680000		
Thiolane-1,1-dioxide	0364005		126-33-0
Thiomethyl alcohol	0289004	1064	74-93-1
Thionazin	1681000	3018	
Thionyl chloride	0381000	1836	7719-09-7
Thiophan sulfone	0364006		126-33-0
Thiophenol	0326003	2337	108-98-5
Thiophosgene	1682000	2474	
Thiophosphoric anhydride	0333005	1340	1314-80-3
Thiosemicarbazide	1683000		
Thiourea	0382000		62-56-6
Thiourea(2-chlorophenyl)	0098002		5344-82-1
Thiram	1684000	2771	
Thorium dioxide	1685000		
Thorium nitrate	1686000	2976	
TIBAL	0395002		100-99-2
Titanium chloride	0383002	1838	7550-45-0
Titanium dioxide	1687000		
Titanium tetrachloride	0383000	1838	7550-45-0
Titanium(IV) chloride	0383003	1838	7550-45-0
TL 214	0186004	1892	598-14-1
TL 69	0325003	1556	696-28-6

Chemical Name	Chemical ID No.	UN No.	CAS No.
TMA	0397001	1083	75-50-3
TNM	0380002	1510	509-14-8
TNT (dry or wetted with<30% water)	1688000	0209	
Toluene	0384000	1294	108-88-3
Toluene 2,4-diisocyanate	0386003	2078	584-84-9
Toluene diamine	0385003	1709	95-80-7
Toluene diisocyanate	0386000	2078	584-84-9
Toluene-2,4-diamine	0385004	1709	95-80-7
Toluidine	0387000	1708	
Toluol	0384005	1294	108-88-3
Tolu-sol	0384004	1294	108-88-3
Toxaphene	1690000	2761	
trans-2-Butenal	0106002	1143	4170-30-3
trans-Butene	0066004	1012	25167-67-3
Tri	0389006	2831	71-55-6
TRI	0390004	1710	79-01-6
Triamiphos	1692000		
Triaziquone	1693000		
Triazofos	1694000		
Tribromoborane	0048002	2692	10294-33-4
Tribromophosphine	0334002	1808	7789-60-8
Tributyl phosphate	1696000		
Tributylamine	1695000	2542	
Tricarbonyl methyl cyclopentadienyl manganese	1697000		
Trichlor	0390005	1710	79-01-6
Trichlorfon	1698000	2783	
Trichloro-(chloromethyl) silane	1703000		
Trichloroacetaldehyde	0086002	2075	75-87-6
Trichloroacetic acid	1699000	1839	
Trichloroacetic acid chloride	0388001	2442	76-02-8
Trichloroacetyl chloride	0388000	2442	76-02-8
Trichloroallylsilane	0022003	1724	107-37-9
Trichloroamylsilane	0033002	1728	107-72-2
Trichlorobenzene	1700000	2321	
Trichloroborane	0049002	1741	10294-34-5
Trichloroboron	0049003	1741	10294-34-5
Trichlorobutene	1702000	2322	
Trichlorobutylsilane	0071002	1747	7521-80-4
Trichloroethanal	0086003	2075	75-87-6
Trichloroethene	0390006	1710	79-01-6
Trichloroethyenylsilane	0411002	1305	75-94-5
Trichloroethyl silicon	0206002	1196	115-21-9
Trichloroethylene	0390000	1710	79-01-6
Trichloroethylsilane	0206001	1196	115-21-9
Trichlorofluoromethane	1704000		
Trichloroform	0096006	1888	67-66-3
Trichloromethane	0096007	1888	67-66-3
Trichloromethyl benzene	0042005	2226	98-07-7
Trichloromethylsilane	0296001	1250	75-79-6
Trichloromethylsilicon	0296002	1250	75-79-6
Trichloromonosilane	0391002	1295	10025-78-2
Trichloronate	1705000		
Trichloronitromethane	0099005	1580	76-06-2
Trichlorophenyl silane	1711000		

Chemical Name	Chemical ID No.	UN No.	CAS No.
Trichlorophosphine	0335003	1809	7719-12-2
Trichlorosilane	0391000	1295	10025-78-2
Trichloro-s-triazinetrione	1713000	2468	
Trichlorotoluene	0042006	2226	98-07-7
Trichlorotrifluoroethane	1714000		
Trichlorovinylsilicon	0411003	1305	75-94-5
Tri-clor	0099006	1580	76-06-2
Tridecane	1718000		
Tridecanol	1719000		
Tridecyl benzene	1721000		
Trien	0393003	2259	112-24-3
Triethane	0389007	2831	71-55-6
Triethanol amine	1722000		
Triethoxysilane	1723000		
Triethyl aluminum	1724000		
Triethyl benzene	1725000		
Triethyl phosphate	1728000		
Triethyl phosphite	1729000	2323	
Triethylamine	0392000	1296	121-44-8
Triethylene glycol	1726000		
Triethylene thiophosphoramide	1727000		
Triethylenetetramine	0393000	2259	112-24-3
Trifluoroacetic acid	1730000	2699	
Trifluoroboron	0050002	1008	7637-07-2
Trifluorochlorine	0089003	1749	7790-91-2
Trifluorochloroethylene	0394000	1082	79-38-9
Trifluorovinyl chloride	0394004	1082	79-38-9
Trifluralin	1732000		
Triisobutyl aluminum	0395000		100-99-2
Triisobutylalane	0395003		100-99-2
Triisobutylene	1733000	2324	
Triisopropanol amine	1734000		
Trimethoxysilane	0396000	9269	2487-90-3
Trimethyl benzene	1738000	2325	
Trimethyl hexamethylene diamine	1739000	2327	
Trimethyl hexamethylene diisocyanate	1740000	2328	
Trimethyl phosphite	1741000	2329	
Trimethyl tin chloride	1742000		
Trimethylacetic acid	1735000		
Trimethylacetyl chloride	1736000	2438	
Trimethylamine(anhydrous)	0397000	1083	75-50-3
Trimethylchlorosilane	0398000	1298	75-77-4
Trimethylene	0121001	1027	95-75-7
Trimethylmethane	0238003	1969	75-28-5
Trinitrobenzene(dry or wetted with <30% water)	1743000	0213	
Trinitrobenzene(wetted with >30% water)	1744000	1354	
Trinitrobenzoic acid(dry or wetted with <30% water)	1746000	1355	
Trinitrobenzoic acid(wetted with >30% water)	1745000	0215	
Trinitroglycerin	0306004	0143	55-63-0
Trinitrophenol	0336005		88-89-1
Trinitrotoluene(dry or wetted with <30% water)	1747000	0209	
Trinitrotoluene(wetted with >30% water)	1748000	1356	
Tri-p-cresyl phosphate	1716000	2574	
Triphenyl tin chloride	1749000		
Tripropylene glycol	1750000		
Tripropylene glycol methyl ether	1751000		
Tris-(2,3-dibromopropyl) phosphate	1753000		
Tris-(2-chloroethyl)amine	0399000		555-77-1
Tris-(aziridinyl)phosphine oxide	1752000	2501	
Trithene	0394005	1082	79-38-9
Trithion	1754000		
Trixylenyl phosphate	1755000		
Trona	0048003	2692	10294-33-4
Trypan blue	1756000		
TS160	0399002		555-77-1
Turpentine	0400000	1299	8006-64-2
Turpentine oil	0400003	1299	8006-64-2
Turpentine spirits	0400004	1299	8006-64-2
UDMH	0159003	1163	57-14-7
Undecane	1758000	2330	
Undecanoic acid	1759000		
Undecanol	1760000		
Unifume	0192006	1605	106-93-4
unsym-Dimethylhydrazine	0159004	1163	57-14-7
Uracil mustard	1763000		
Uranium hexafluoride	1765000	2978	
Uranium metal (pyrophoric)	1764000	2979	
Uranium peroxide	1766000		
Uranyl acetate	1767000	9180	
Uranyl nitrate	1768000	2981	
Uranyl sulfate	1769000		
Urea	1770000		
Urea hydrogen peroxide	0401004	1511	124-43-6
Urea peroxide	0401000	1511	124-43-6
Urea, ammonium nitrate soln (w/aqua ammonia)	1771000		
Urethane	1772000		
USAFST-40	0264004	3079	126-98-7
VAC	0403004	1301	108-05-4
Valeraldehyde	1773000	2058	
Valeric acid	1774000	1760	
VAM	0403005	1301	108-05-4
Vanadium	1775000	3285	
Vanadium oxychloride	0402001	2243	7727-18-6
Vanadium oxytrichloride	0402000	2243	7727-18-6
Vanadium pentoxide	1776000	2862	
Vanadium trichloride oxide	0402002	2243	7727-18-6
Vanadyl sulfate	1777000	2931	
Vanadyl trichloride	0402003	2243	7727-18-6
Vapotone	0377007		107-49-3
VC	0405004	1086	75-01-4
VCM	0405005	1086	75-01-4
VDC	0408003	1303	75-35-4

Chemical Name	Chemical ID No.	UN No.	CAS No.
Vidden D	0135008	2047	542-75-6
Vinyl A monomer	0403006	1301	108-05-4
Vinyl acetate	0403000	1301	108-05-4
Vinyl acetylene	1778000		
Vinyl allyl ether	1779000		
Vinyl amide	0011003	2074	79-06-1
Vinyl benzene	0362007	2055	100-42-5
Vinyl bromide	0404000	1085	593-60-2
Vinyl carbinol	0017008	1098	107-18-6
Vinyl chloride	0405000	1086	75-01-4
Vinyl chloride monomer	0405006	1086	75-01-4
Vinyl cyanide	0013005	1093	107-13-1
Vinyl ethyl ether	0406000	1302	109-92-2
Vinyl fluoride	0407000	1860	75-02-5
Vinyl formic acid	0012008	2218	79-10-7
Vinyl isobutyl ether	1780000	1304	
Vinyl methyl ether	0409000	1087	107-25-5
Vinyl methyl ketone	0297004	1251	78-94-4
Vinyl neodecanoate	1781000		
Vinyl toluene	0410000	2618	25013-15-4
Vinyl trichlorosilane	0411000	1305	75-94-5
Vinylethylene	0059007	1010	106-99-0
Vinylidene chloride	0408000	1303	75-35-4
Vinylsilicon trichloride	0411004	1305	75-94-5
Vorlex	0288005	2477	556-61-6
Vulnoc AB	0025001	9080	1863-63-4
Weedone	0122003	2765	94-75-7
White caustic	0359007		1310-73-2
White phosphorus	0331004		7723-14-0
Wood alcohol	0260005	1230	67-56-1
Wood ether	0157003	1033	115-10-6
Woodtreat	0318003	3155	87-86-5
Xenon	1782000	2036	
Xylene	0412000	1307	
Xylenol	1783000	2261	
Xylol	0412011	1307	

Chemical Name	Chemical ID No.	UN No.	CAS No.
Yellow phosphorus	0331005		7723-14-0
Zectran	1785000		
Zinc	1786000	1436	
Zinc acetate	1787000	9153	
Zinc ammonium chloride	1788000	9154	
Zinc arsenate	1789000	1712	
Zinc bichromate	1790000		
Zinc borate	1791000		
Zinc bromide	1792000	9156	
Zinc carbonate	1793000	9157	
Zinc chloride	1794000	2331	
Zinc chromate	1795000		
Zinc dialkyldithiophosphate	1797000		
Zinc dithionite	1798000	1931	
Zinc fluoride	1799000	9158	
Zinc fluoroborate	1800000		
Zinc fluorosilicate	1801000	2855	
Zinc formate	1802000	9159	
Zinc methyl	0164002	1370	544-97-8
Zinc nitrate	1803000	1514	
Zinc oxide	1804000		
Zinc phenolsulfonate	1805000	9160	
Zinc phosphide	0413000	1714	
Zinc potassium chromate	1806000		
Zinc sulfate	1807000	9161	
Zinccyanide	1796000	1713	
Zineb	1808000		
Ziram	1809000		
Zirconium	1810000	2008	
Zirconium acetate	1811000		
Zirconium nitrate	1812000	2728	
Zirconium oxychloride	1813000		
Zirconium potassium fluoride	1814000	9162	
Zirconium sulfate	1815000	9163	
Zirconium tetrachloride	1816000	2503	
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