

*U.S. Fire Administration*

**NFIRS 5.0**

# **Self-Study Program**

National Fire Incident Reporting System

October 2006



**FEMA**

**National Fire Incident Reporting System (NFIRS) 5.0**

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# Self-Study Program



**FEMA**

Department of Homeland Security  
United States Fire Administration  
National Fire Data Center



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## NFIRS 5.0 Self-Study Program

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# Introduction & Overview

### **Objectives**

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After completing the Introduction & Overview, the student will be able to:

1. Describe the benefits of using version 5.0 of the National Fire Incident Reporting System (NFIRS).
2. Explain how the need to collect fire data led to the organization and development of NFIRS.
3. Identify the modules that are included in NFIRS.
4. State the purpose of the Complete Reference Guide.

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## Pretest Introduction

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1. NFIRS is an all-incident reporting system.
  - (a) True.
  - (b) False.
  
2. *America Burning* is the publication that realized and identified the need to collect data.
  - (a) True.
  - (b) False.
  
3. NFIRS is an abbreviation for the National Fire Incident Record Standard.
  - (a) True.
  - (b) False.
  
4. The first step in the data-reporting process is for fire personnel to record the circumstances of all incidents accurately, using a reliable and consistent coding methodology.
  - (a) True.
  - (b) False.
  
5. One of the reasons to complete an incident report is to create a legal record of the fact that a fire or other incident occurred.
  - (a) True.
  - (b) False.

## Incident Data Collection and Reporting

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An incident report is the written or electronic documentation that a fire or other incident occurred. It may be as brief as a basic fact statement or as lengthy as an extensive discussion of the incident, supported by photographs, witness statements, and laboratory test results. The length and complexity of the report will depend upon the nature and magnitude of the incident, State and local policies concerning data collection, the need for specific data, and the resources available for obtaining information and completing reports. They also depend on the training and motivation of the person filling out the report.

The incident should include a description of the circumstances related to the situation that was encountered, including the cause, factors contributing to the magnitude of the incident, actions taken by the fire department to mitigate the incident, and a description of the casualties or the damage resulting from the incident.

## Purpose of the Incident Report

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There are three basic purposes for completing incident reports at the local level. First, it is a legal record of the fact that a fire or other incident occurred. The report provides official notification to people who may be required legally to know of the incident, such as the State Fire Marshal. Essentially, it reports the facts concerning an incident. In the case of a fire, it describes the particular property affected, why the fire occurred, how building components and fire protection devices performed, casualties or damage that resulted, and fire department actions taken.

Second, the report provides information to senior officials and fire department managers so they are kept informed about what is happening within areas of responsibility. This allows them to evaluate the performance of their units at an incident and to talk intelligently about the incident to the media and others. Furthermore, good information about a fire can motivate change in fire protection approaches in a community. Information about what is happening at the local level even can help motivate National changes. One example is a local requirement to provide automatic fire protection sprinkler systems in residential dwellings. Without information that is obtained by keeping statistics about the problem of residential fires, it would be difficult to get legislation passed to require residential sprinkler protection.

The first two purposes of the incident report can be served by any reporting method that provides an accurate description of local incidents. However, the third purpose involves the need to collect data that is usable at the State and National level. Local fire departments needs, such as training and additional resources, can often be met by State and National sources. These resources are developed and made available based on the information collected on the local level. Therefore, information needs to be collected in a consistent format that will permit a meaningful aggregation of the data from many reports prepared from all types of incidents.

*NOTE: It is important that a single report serve the basic needs of several types of potential users. The data needed at the State and National level must be provided from what is collected locally. However, the locally collected data also must have an actual use at the local fire service level. It is difficult to collect all of the data items routinely that are likely to be needed by all types of potential users of the future. Compromises are needed between the ease of filling out an incident report and the potential uses of it.*

If data are only collected for the benefits of those outside the local area, the motivation and commitment to quality and completeness may diminish, with a resulting reduction in the usefulness of the data. Ease of use also helps to increase quality and commitment, thus increasing reliability. Reliable data increases its usefulness.

## Uniformity of Incident Reporting

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To achieve uniformity in reporting, the U.S. Fire Administration (USFA) has developed the National Fire Incident Reporting System (NFIRS). This system is based primarily on the work of the National Fire Information Council (NFIC) and the National Fire Protection Association (NFPA) Technical Committee on Fire Reporting.

The NFPA Technical Committee on Fire Reporting is responsible for developing and maintaining NFPA 901, *Standard Classifications for Incident Reporting and Fire Protection Data*. This standard establishes basic definitions and terminology for use in incident reporting and serves as a means of classifying data so that the information can be aggregated.

## Benefits of NFIRS

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At the local level, a fire department can derive many benefits from a good incident reporting system, particularly if it is based on NFIRS. Some of the following uses involve no more than totaling data from the system. Others require more extensive analysis. Many of these benefits can be derived at the State and National levels when a database is used that combines the fire experience of many local fire departments. It is important to note that, while fire is the focus of this examination, similar benefits can be derived for all the other types of incidents that fire departments respond to, including emergency medical calls and hazardous materials incidents.

All the benefits of using NFIRS can be discovered only through use of the system over time. As issues come to the surface and events occur, new opportunities to use the data appear.

**Describing a community's fire problem:** It is possible to pinpoint where fires are occurring, what factors are most responsible for ignitions, and what casualties and damage are occurring as a result of fires. With the problem placed in proper perspective, the most serious and solvable aspects of the fire problem can be tackled first.

**Supporting budget requests:** Concerns about unnecessary taxes lead municipal officials to cut public agency budgets and add only those new programs that are shown to be particularly needed. Fire department managers need to be able to support budget requests and requests for new funding with a statistical foundation. Accurate and complete statistics put the fire problem in perspective with other municipal concerns and help community officials realize the consequences of budget cuts and the value of new fire department programs. New programs can involve the delivery of better emergency services, such as advanced emergency medical services and higher levels of hazardous materials mitigation response.



**Supporting code refinements:** A good database permits fire departments to identify and describe fire incidents that might have developed differently, or might not have occurred at all if certain code changes had been in place. Loss statistics from other areas with more stringent codes also can involve complex analysis. However, no incident database can address all the subtleties of code impact.

**Evaluating code enforcement programs:** It is not sufficient to have codes on the books if they are not properly implemented and enforced. NFIRS data can be useful when evaluating a fire loss experience. Data can provide information that makes it possible to see what types of losses are occurring in occupancies that have characteristics that do not meet existing code regulations. It also is possible to document whether or not occupancies have desired features such as exit signs, alarm systems, and sprinkler systems.

**Evaluating public fire education programs:** Not all problems can be solved by establishing and enforcing codes and standards. There are certain aspects of the fire problem that can be controlled only by public education programs that provide people with information about the danger of fires and other hazards, how to prevent emergencies, and how to respond properly when emergency situations occur. It is important to know as much as possible about the exact problem to be addressed. Appropriate evaluation criteria must be in place to measure whether an education program is in fact helping to solve the problem.

**Planning for future fire protection needs:** Many communities and fire departments are becoming very active in planning for emergencies and are developing master plans. It is essential that the fire service continue these efforts and increase involvement in planning efforts. A good NFIRS database will allow a fire department to compute fire rates relative to particulars such as a population type or a building type. Monitoring response times to incidents is another important planning function. Proper planning, based on the characteristics of a community's fire problem, will support better fire protection in the future. Planning supports better fire protection based on changing demography and planned community growth. NFIRS data provide input on decisions about the type and level of fire protection that a community will provide. Requirements can be established for developers who construct buildings that may exceed present fire department capabilities.

**Improving allocation of resources:** Proper analysis of fire incident data can show where a redeployment of existing resources can provide an improved level of fire protection within a community.

**Scheduling nonemergency activities:** Training sessions, inservice inspections, and other nonemergency activities are important aspects of a fire department's function. A fire department can track the times when there is increased need for emergency response. Then the department can plan nonemergency activities during times when they are least likely to be interrupted by calls.

**Regulating product safety:** Particularly at the National and State levels, a fire reporting system can be useful in measuring the size and severity of problems associated with various types of consumer products. Data can identify the most commonly involved products and the ways these products become involved in fire. This reporting system can help manufacturers decide how they can redesign their products to make them safer. The system also can prompt changes in standards and regulations to require safer products. Information compiled through use of the NFIRS data can be incorporated into public fire education programs to advise consumers of the dangers associated with using certain products.

**Support for fire engineering models:** Fire engineering computer models have been developed to assist in many ways with determining whether or not building and fire protection designs meet

the intent of codes and standards. For example, there are models that measure fire growth, given particular types of room contents. There also are models to predict how fast smoke will fill a room and how fast sprinkler systems will operate. Data output from the NFIRS reporting system is used by engineers during computer model design and refinement. Data are also used as input information, which is entered into some types of computer models.

**Support for fire engineering analysis:** Fire protection engineers sometimes perform NFIRS data analysis as part of the development of new engineering methods. In some cases, data are analyzed to determine how well current methods of fire protection and defense are working.

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## NFIRS Overview

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### THE DATA-BASED DECISIONMAKING PROCESS

Fire personnel recording the circumstances of all incidents accurately, and using a reliable and consistent coding methodology are the first steps in the data reporting process, a key for developing profiles that affect a department's decisions. Incident data can be used by fire departments to document their experience; support all types of management decisions; and identify, prepare, and justify budget requests.

Local agencies then can send their incident data to the State, where the information is combined with data from other fire departments into a statewide database. By combining data at the State level, trends in fire problems can be detected that often are too infrequent to be seen at the local level, and a State fire profile can be developed.

Trend information can be used to target fire safety and prevention programs. It also can be used to assist in identifying the safety level of various products, and standard practices. For these reasons, fire incident reporting is mandatory in many States.

State incident data are sent to the National Fire Data Center (NFDC) at the USFA for further analysis. The NFDC can compare and contrast statistics from States and large metropolitan departments to develop National public education programs, make recommendations for National codes and standards, and guide allocation of Federal funds. NFIRS data also are used to identify consumer product failures, identify the focus for research efforts, and support Federal legislation, such as the Hotel/Motel Fire Safety Act (Pub. L. 101-391 – Sept. 25, 1990).

At the National level, data combined from participating States can be used by the information partners. These organizations use National-level fire data to establish policy, allocate funds, and set standards to affect the fire problem. Decisionmaking based on incident patterns identifies common areas for prevention and high-risk products. Differences in data based on geographic areas are carefully compared so partners in various regions can take steps to correct their specific weaknesses.

The purpose of the data reporting system is to provide timely and reliable information to support the decisionmaking process, whether it is a fire captain identifying target hazards and properly deploying resources based on incident information, or the Consumer Product Safety Commission (CPSC) banning unsafe products like flammable sleepwear.

## Development of NFIRS

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The need to collect data was realized and identified in 1972 when *America Burning* was published. *America Burning* recommends, "...that a National fire data system be established to provide a continuing review and analysis of the entire fire problem" (page 9). The USFA, which was created based on this and other recommendations in *America Burning*, is the agency that evaluates the Nation's fire problem.

Among other duties, the USFA is charged with providing for a Nationwide exchange of information pertaining to fire and life safety and with having data collection, storage, retrieval, and dissemination capability.

Early data collection efforts varied throughout the country. The first States to pilot test the NFPA Pamphlet 901 system were California, New York, Ohio, and Oregon. Version 1 NFIRS software, developed by the National Fire Prevention and Control Administration (NFPCA – the predecessor to USFA), was used in Minnesota, Missouri, and South Dakota. The program started in 1975 with a "NFIRS Users Conference." Version 2 software was completed between 1976 and 1978; Version 3 development began in 1979, and Version 4 in 1985. Version 4.1, was implemented in 1990 and includes the Hazardous Materials Module. Version 5, the latest version, was implemented in 2000. It is an all-incident reporting system including emergency medical services, wildland fires, arson, Hazmat, personnel, and apparatus/resources.

## National Fire Information Council

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The USFA's critical need for a National network to collect, analyze, and share fire data led to the formation of the NFIC. By participating in a uniform NFIRS, Council members are dedicated to "fighting fire with facts."

NFIC's unique partnership of Federal, State, and local participants has proved to be one of the most successful programs ever attempted on a National level.

## The All-Incident Reporting System

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The USFA, as well as many States, is mandated by law to collect information on fires, and relies on the Nation's fire service to meet that requirement through the NFIRS. NFIRS (Version 4.1) could not adequately meet today's fire service information needs because it was designed to collect only fire information, which represents a fraction of the tasks performed by the fire service. The present NFIRS (Version 5) addresses the fire service's need for a system that accounts for a much fuller range of fire department responses.

NFIRS program managers have learned many lessons about fire reporting during the past 30 years. With the input of State Fire Marshals, metro fire chiefs, local fire department personnel, and customers such as the International Association of Fire Chiefs (IAFC), the International Association of

Fire Fighters (IAFF), NFPA, CPSC, and the National Highway Transportation Safety Administration (NHTSA), NFIRS 5.0 was developed by the following specific design objectives:

- Create an all-incident reporting system, to keep pace with the rapidly changing activities of the fire service.
- Develop a set of reporting codes that can describe any incident accurately, reliably, and easily with all data readily collectible, reportable, and usable.
- Promote uniformity of incident reporting by establishing the NFIRS 5.0 coding methodology as the accepted National standard.

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## Benefits

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The new system is modular in design and only uses the modules necessary to describe the incidents. Data are collected for all incident types in one basic module. More detailed information can be collected with other modules to further profile fires, structure fires, civilian fire casualties, firefighter casualties, hazardous materials, wildland fires, arson, apparatus, personnel, and EMS incidents as necessary.

The modular design makes the system easier to use because only the data required to profile the extent of the incident are captured. Accuracy and reliability have been improved by modifying the coding system.

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## Ease of Use

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- Provides for abbreviated reporting of self-contained, nonloss fires by using a basic incident form that can be completed with as little as three look-ups. This may represent the majority of all fire incidents in many jurisdictions.
- Documents small spills of common hazardous materials on the basic form. More detailed information can be provided on the optional Hazardous Materials Module if a serious release of hazardous materials occurs.

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## Flexibility

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- Includes a mapping strategy back to Version 4.1 to provide for statistical analysis of historical data.
- Recognizes that there may be a need for additional data elements to meet the local situation.
- Plus one codes allows the creation of “plus one codes” to collect additional detail for all coded fields.
- Allows creation of special studies fields and codes to capture additional information on topics of interest.
- Standard can be incorporated into commercial “records management” software.

- Standard provides for more specific coded field explanation using “code+1.”
- Standard is usable by fire departments of all size and type.

## Comprehensiveness

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- Collects behavioral information on multiple levels, e.g., children playing with fire, age range, what they used to set the fire, and if they were alone at the time of the incident.
- Formats the address to allow computerized queries and street-based address matching for Geographic Information System (GIS) purposes.
- Breaks fire losses into property and contents to better define structure losses. Preincident value now is captured as an optional data element.
- Captures specific property information about multiple onsite materials and their use to allow identification of nonintended or illegal uses, such as residential drug houses/laboratories.
- Notes information on the number of acres burned for all fires. Specific and detailed information about wildland or large, open fires is captured for those fires only.
- Represents missing (not reported) data as blanks systemwide. Missing data no longer will be lumped in with undetermined default code values.
- Allows for incident location information to be captured using U.S. National Grid coordinates where street addressing information is inadequate or not available.

## Usefulness

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- Profiles fire prevention and code issues that affected the fire.
- Captures multiple factors contributing to the causes of the fire for the first time. This allows identification of juvenile firesetters, gang involvement in fires, alcohol and cigarette interaction, as well as drugs and youth involvement by age categories.
- Expands on equipment involved in starting fires. Detailed tracking of specific equipment involved in fire ignitions is possible.
- Highlights factors that affect fireground suppression. Burglar bars, high-rack storage, balloon construction, and unprotected vertical openings are some examples of this information.
- Provides better information on the impact of fire protection features.
- Includes carbon monoxide incidents.
- Groups fire service resources for apparatus and personnel by use at the incident. Specific, detailed information about the use of fire service personnel and apparatus will be collected in a standard way for the first time in optional modules. This will permit staffing studies on several levels of use.

- Outlines detailed information on the impact of fires on buildings. Information on the building's size, number of stories, and status is now available. Specific information on fire origin, damage patterns, flame spread, and materials contributing to flame spread is captured as well.
- Expands information on detectors and automatic suppression systems. Information on the system's presence, range, power supply, effectiveness, operation, and reason for failure is included.
- Extends casualty information to improve understanding of the relationship of the casualty to factors contributing to injury, as well as the nature and cause of injuries.
- Captures make/model of firefighter equipment that failed and contributed to injury.

# NFIRS 5.0 Module Overview

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Version 5.0 uses a modular format to increase the accuracy and applicability of data collection for all incident types. Version 5.0 has 11 modules, described below.

Each module (form) in the system is designed to collect specific data. The modules do, however, have some characteristics in common. Any portion of a module identified by a letter – A, B, etc., – is called a section.

Sections may be subdivided into blocks such as A1, A2, etc. A block can contain one or more lines and each entry within a line is called a field. Codes are used, in some cases, to capture data within a field.

Whenever a data entry point is marked with a star, the information requested is considered essential and the section, block, line, and/or field must be completed.

*NOTE: Some NFIRS software generally uses colored blocks to identify essential elements that must be completed.*

## NFIRS-1 – Basic Module

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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, all types of incidents are reported in the Basic Module, but some fires require additional reporting using the Fire Module (NFIRS-2). Some fires in structures require the completion of the Structure Fire Module (NFIRS-3). Table 1 gives guidance on when the Fire Module should be completed.

The Civilian Fire Casualty Module (NFIRS-4) and the Fire Service Casualty Module (NFIRS-5) are required when there are casualties associated with a fire incident. The Fire Service Casualty Module should be completed when there are fire service casualties at any incident type. Optional modules include the EMS, Hazardous Materials, Wildland Fire, Apparatus, 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 if your fire department is using these options. The amount of information needed in each module varies based on the type of incident, associated casualties, and property losses.

*Note: The use of some optional modules may be required by the local jurisdiction or the State.*

INCIDENT TYPE	FIRE MODULE GUIDANCE
Building 111	Complete Fire and Structure Fire Modules
Special Structure/Not a Building 112	Fire Module and Block "I" on the Structure Module
Confined Fire within a Structure 113-118	Basic Module only; Fire Module not required
Mobile Property used as a Structure 120-123	Fire and Structure Modules
Vehicle 130-138	Fire Module
Vegetation, Not Cultivated 140-143	Fire or Wildland Module
Outside Rubbish 150-155	Basic Module only; Fire Module not required
Special Outside Fire 160-164	Fire Module
Cultivated Vegetation 170-173	Fire Module

### NFIRS-1 includes information on:

- Fire Department Identifier;
- Location;
- Incident Type;
- Dates and Times/Shifts/Special Studies;
- Actions Taken;
- Dollar Losses and Values;
- Casualties;
- Hazmat Releases;
- Property Use; and
- Persons and Entities Involved.

## NFIRS-2 – Fire Module

The Fire Module must be completed for all fires except for those contained fires with incident type codes 113 to 118, or outside rubbish fires 150 to 155, unless the contained fire has associated injuries, deaths or property loss.

The optional Wildland Fire Module can be used instead of the Fire Module for Incident Types 140 to 143, 160, 170 to 173, 561, 631, and 632.



**NFIRS-2 includes information on:**

- Property details;
- Onsite materials;
- Ignition: area of fire origin, source of ignition, material ignited, factors contributing, human issues, equipment involved;
- Human factors involved;
- Mobile property description;
- Fire origin and spread description; and
- Fire suppression factors.

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## **NFIRS-3 – Structure Fire Module**

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The Structure Fire Module must be completed for all structure fires that extend beyond a noncombustible container. 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, open storage or process areas, tents, air-supported structures, and grandstands. Like the other modules, the Structure Fire Module is divided into sections and further subdivided into blocks. The sections and blocks ask for information on different factors or items involved in the structure fire.

**NFIRS-3 includes information on:**

- Structure Type;
- Building Status, Height, Main Floor Size;
- Fire Origin, Fire Spread, Number of Stories Damaged by Flame;
- Material Contributing to Flame Spread;
- Presence of Detectors, Detector Type, Detector Power Supply, Detector Operation, Detector Effectiveness, Detector Failure Reason; and
- Presence of Automatic Extinguishing System, Type of Automatic Extinguishing System, Operation of Automatic Extinguishing System, Number of Sprinkler Heads Operating, Reason for Automatic Extinguishing System Failure.

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## **NFIRS-4 – Civilian Fire Casualty Module**

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The Civilian Fire Casualty Module must be completed only for fire casualties. A civilian fire casualty is a non-fire department individual who is injured or killed as a result of a fire, and includes 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 to 199. An entry in H<sub>1</sub> of the Basic Module will initiate the completion of this module.

The Civilian Fire Casualty Module is designed to provide a better understanding of human reaction to fire. Not just major fires, but those likely to be encountered by the fire department on a more frequent basis. In this way, public safety education programs can be targeted to address these behaviors. Furthermore, building codes can be modified in recognition of how people likely will react in fire conditions.

**NFIRS-4 includes information on:**

- Person's identification;
- Demographic information;
- Injury causes, including human and contributing factors;
- Activity when injured;
- Location when injured;
- Symptoms and portion of body injured; and
- Disposition.

## **NFIRS-5 – Fire Service Casualty Module**

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The Fire Service Casualty Module must be completed when fire service personnel suffer injury, death, or exposure associated with any incident. When the Fire Service Casualty Module is used, at a minimum, the Basic Module also must be completed. Other modules also may be required, depending on the incident type.

An exposure is when fire service personnel are exposed to a toxic substance or harmful physical agent through any route of entry (e.g., inhalation, ingestion, skin absorption, or direct contact). Exposures can be reported regardless of the presence of clinical signs and symptoms. An exposure fire is **not** the same as an exposure of personnel to a harmful substance.

Firefighter casualty information can be used by Health and Safety Officers to reduce risks at incidents.

**NFIRS-5 includes information on:**

- Person's identification and age;
- Injury time;
- Assignment and activity at time of injury;
- Severity and injury and disposition;
- Location of victim when injured;
- Symptoms and portion of body injured;
- Cause of injury, factors contributing, object involved;
- Where injury occurred; and
- Equipment profiles.

## NFIRS-6 – EMS Module

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The EMS Module is an optional module. It may be completed when that option has been chosen by your State or local authorities. The purpose of the EMS Module is to gather basic data related to the provision of emergency medical care to the community. It may be used by both responding EMS unit(s) and fire suppression unit(s) that provide emergency medical services.

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 model be viewed as “core elements” and be included in the design of upgrades or new EMS data collection systems. The desire is that EMS data that contain these core elements would be exported to the NFIRS system and included as an integral part of the National fire database.

The EMS Module may be completed when Incident Type 100-243, 311, 321-323, 351-381, 400-431, 451, or 900 is reported in the Basic Module (NFIRS-1).

*NOTE: The EMS module does not replace the Civilian Fire Casualty Module in cases where a civilian injury or death occurs as a result of fire. Data on fire service injuries or deaths are reported on the Fire Service Casualty Module.*

One EMS Module must be used for each patient and the number of modules submitted for an incident should match the “Number of Patients” entered in block B of the paper form.

### **NFIRS-6 includes information on:**

- Incident location and type;
- Inservice dates and times;
- Provider assessment;
- Victim demographics;
- Injury/Illness description;
- Procedures used;
- Safety equipment involved;
- Care level; and
- Patient status.

## NFIRS-7 – Hazardous Materials Module

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The optional Hazardous Materials Module may be used when the Basic Module (Block H<sub>3</sub> – Hazardous Materials Release) indicates “other” for hazardous material. Its purpose is to document **reportable** Hazmat incidents. Generally speaking, a reportable Hazmat incident is one in which:

- Specialized Hazmat resources were dispatched or used, or should have been dispatched or used, for assessing, mitigating, or managing the situation; or

- Releases or spills of hazardous materials exceed 55 gallons.

Nothing in this definition is meant to alter compliance with State or local Hazmat reporting requirements. In States with mandatory reporting, the State program manager determines which optional modules (EMS, Hazmat, Wildland, etc.) are to be submitted to the State.

The Hazmat Module permits hazardous materials incidents to be profiled in depth for incident-management analysis and response-strategy development.

**NFIRS-7 includes information on:**

- Hazardous materials identification;
- Container information;
- Release amounts and location;
- Actions taken;
- Mitigation factors; and
- Hazmat Casualties.

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## NFIRS-8 – Wildland Fire Module

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The purpose of the Wildland Fire Module is to document **reportable** wildland fires. Generally speaking, a reportable wildland fire is any fire involving vegetative fuels that occurs in the wildland or wildland/urban interface areas, including those fires that threaten or consume structures.

To better understand the role of fire in the wildland ecosystem, prescribed fires and authorized controlled burns also are included in this definition of reportable fires.

The optional Wildland Fire Module may be used when the Incident Type is 140-143, 160, 170-173, 561, 631, and 632. In these cases, the Wildland Fire Module may be used in lieu of the Fire Module.

**NFIRS-8 includes information on:**

- Wildland;
- Fire cause;
- Ignition information;
- Fire suppression and management;
- Mobile property type;
- Equipment involved in ignition;
- Weather data;
- Fuel model at origin;

- Total acres burned;
- Property management;
- Person responsible; and
- Fire behavior.

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## NFIRS-9 – Apparatus or Resources Module

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The optional Apparatus Module may be used to help manage and track apparatus and resources used on incidents. The Personnel Module may be used when details about apparatus **and** personnel are needed.

### **NFIRS-9 includes information on:**

- Apparatus identification and type;
- Dispatch, arrival, clear dates, and times;
- Actions taken by each apparatus; and
- Number of personnel used on each apparatus.

If the Apparatus Module is used, the Basic Module also must be completed.

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## NFIRS-10 – Personnel Module

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The Personnel Module is an optional module used to help manage and track personnel and resources used on incidents. This module can be used in place of the Apparatus/Resource Module (NFIRS-9) if more detail on personnel is needed.

### **NFIRS-10 includes information on:**

- Apparatus identification and type;
- Dispatch, arrival, clear dates, and times;
- Use;
- Actions taken by each apparatus; and
- Personnel ID, rank, actions taken.

*Note: The Personnel Module or the Apparatus/Resources Module may be used, but not both.*

## NFIRS-11 – Arson Module

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The optional Arson Module may be used whenever the Cause of Ignition, (NFIRS-2, E) is coded as “intentional,” or as “under investigation.” There is no need for a distinction made about whether or not a crime has occurred. Additionally, it is not necessary to make a determination of criminal intent.

The Arson Module also may be used when the fire is under investigation or in cases where the cause is “Undetermined after Investigation.”

The Arson Module also may be used to document juvenile-set fires, whether determined to be intentional or not. This information will permit analysis of juvenile firesetting trends including intervention strategies and repeated activity.

Nothing in this definition is meant to alter or affect compliance with State or local incident reporting requirements. In States with mandatory reporting, the State program manager determines which optional modules (EMS, Hazmat, Wildland, Arson, etc.) are to be submitted to the State.

The Arson Module consists of two parts: a local investigation module, which permits a fire department or arson investigation unit to document certain details concerning the incident; and a juvenile firesetter section, which 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, but rather to identify those data elements that could be exported to the NFIRS system and included as an integral part of the USFA National Fire Database and the Bureau of Alcohol, Tobacco and Firearms, Arson and Explosives (BATF) National Repository.

### **NFIRS-11 includes information on:**

- Agency investigating the incident;
- Case status;
- Suspected motivation factors;
- Entry methods, devices, other information;
- Property ownership; and
- Laboratory used.

### **The Juvenile Firesetter section includes information on:**

- Age, gender, race, and ethnicity of each juvenile involved;
- Family type;
- Suspected motivation and risk factors; and
- Disposition.

The juvenile firesetter is not an additional module. It is a continuation of the Arson Module if the firesetter is under 18 years old.

## NFIRS-1S – Supplemental Form

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The Supplemental Form can be used as a local option for recording additional persons or entities involved in the incident for those departments that use paper-based incident reporting. The Supplemental Form is not a module. It adds flexibility to any incident report by expanding the ability to collect an additional amount of this basic module data.

### The Narrative Report

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The incident report serves as an official, legal record of an incident and must describe accurately the incident and the actions taken to mitigate it. While many of these facts may be collected in uniform, coded fields, some information can best be presented in a detailed narrative.

#### Information that should be included in the narrative:

- Observations and actions taken – list them in logical order (usually chronological). Paint a complete picture of the scene; summarize the incident.
- Describe the scene conditions and the condition of the premises when you left.
- Describe property damage and remaining hazards.

### Summary

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This unit has provided a brief overview of the development of NFIRS, including the need to collect data as identified in *America Burning*. The role of the USFA in data collection also was described.

Some advantages of NFIRS 5.0: ease of use, compatibility, comprehensiveness, and preciseness of reporting, were listed and explained.

The 11 modules in the system were identified, and the intended use of each was introduced.

### Activity

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#### Review of Introduction & Overview

This activity will help you to review the important topics covered in the Introduction & Overview. During this activity, you will check your understanding of the issues discussed in the Introduction & Overview. Work from memory as you complete this activity.

1. Describe one benefit of participating in NFIRS.

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2. Name the publication that recommended the establishment of a National fire data system.

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3. Explain how your fire/rescue department benefits from the data collected using NFIRS.

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4. Explain how the public benefits from NFIRS.

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5. How can NFIRS help reduce the number of firefighter casualties?

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6. Describe one new way that you, your department, or your community could benefit from NFIRS.

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## Test for Introduction

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1. Which module is not a required module?
  - (a) Basic.
  - (b) EMS.
  - (c) Structure.
  - (d) Civilian Fire Casualty.
  
2. Which module is a required module?
  - (a) Hazmat.
  - (b) Arson.
  - (c) Fire.
  - (d) Wildland Fire.
  
3. What modules must be completed to document a fire in a bedroom of a single-family dwelling?
  - (a) Structure Fire.
  - (b) Basic.
  - (c) Arson.
  - (d) Fire.