What to Expect During a NIOSH Investigation

At NIOSH, we are notified of a line-of-duty death in a number of ways:

- The United States Fire Administration (USFA)
- A fire department representative
- The International Association of Fire Fighters (IAFF)
- State Fire Marshal Offices
- Media coverage

We conduct investigations of both career and volunteer fire fighter line-of-duty deaths. Once we learn of a fatality, we review the event and determine whether or not to offer an investigation. We then contact the fire department. A fire department's decision to participate in the FFFIPP is voluntary. However, past participants recognize the value of an objective, independent investigation that focuses on developing recommendations to prevent fire fighter injuries and deaths. Fire departments may also request a NIOSH investigation directly.

A NIOSH representative will work with the fire department to schedule a site visit. We visit the incident site to gather information and take pictures and measurements. We review all applicable documents. These may include:

- Department standard operating procedures
- Dispatch records
- Training records for the victim, Incident Commander and officers
- The victim's medical records (where applicable)
- Coroner/medical examiner's reports
- Death certificates
- Blueprints of the structure
- Police reports
- Photographs
- Video

We interview fire department personnel and fire fighters who were on the scene at the time of the incident. The interviews are voluntary and witness statements are not made under oath or reviewed by the witness. Because the interviews are not recorded, we rely on our interview notes and the applicable documents to describe the conditions and circumstances leading to the fatality. We include these descriptions in our reports only to provide context for our recommendations to prevent similar occurrences. We may work closely with other investigating agencies. When we do not have the necessary subject matter expertise, we enlist the help of others, such as experts in motor vehicle incident reconstruction, building construction or fire growth modeling.

In cases that may be due to respirator performance problems, we will offer evaluation of the equipment by the NIOSH National Personal Protective Technology Laboratory.

Once the investigation is complete, we summarize the sequence of events related to the incident and prepare a draft report that summarizes the incident and includes recommendations to prevent similar events. Each department, union (if present), or family (where applicable because some draft reports include personal or medical history) will have the opportunity to review the draft report. This helps ensure it is factually accurate. For traumatic injury incidents, fire service subject matter experts also review the draft report and recommendations. The report is then finalized.

Once the fire department, union (if present), and family (where applicable) have received the final copy of the NIOSH report, it is published on the FFFIPP website. The reports are anonymous and do not name the fire department, victim(s) or other fire fighters involved in the incident.

Contact Us

If you have further questions regarding the NIOSH Fire Fighter Fatality Investigation and Prevention Program call us at (304) 285-5916 or visit our website www.cdc.gov/niosh/fire to:

- Contact the program
- Access all individual investigation reports
- Search for specific topics (e.g., training deaths, heat stroke deaths, etc.)
- Download other related fire fighter publications
- Subscribe to fire fighter safety announcements

To receive NIOSH documents or more information about occupational safety and health topics, contact NIOSH at: 1-800-CDC-INFO (1-800-232-4636)

TTY: 1-888-232-6348

E-mail: cdcinfo@cdc.gov

or visit the NIOSH web site at: www.cdc.gov/niosh

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The NIOSH Fire Fighter Fatality Investigation and Prevention Program

The United States currently depends on approximately 1.1 million fire fighters to save lives and property from losses caused by fire. Of these fire fighters, approximately 300,000 are career and 800,000 are volunteers. The National Fire Protection Association (NFPA) and the U.S. Fire Administration estimate that approximately 80 to 100 fire fighters die in the line-of-duty each year.

In 1998, Congress recognized the need to better address the continuing national problem of fire fighter deaths and funded the National Institute for Occupational Safety and Health to implement a fire fighter safety initiative. With fire service stakeholder input, we developed the Fire Fighter Fatality Investigation and Prevention Program.



Fire Fighter Fatality Investigations

The NIOSH Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) conducts independent investigations of select fire fighter line-of-duty deaths. We do this to provide recommendations to prevent deaths and injuries. The FFFIPP is a public health practice investigation program in keeping with the public health mission of NIOSH. We do not conduct our investigations to enforce compliance with state or federal job safety and health standards. We also do not determine fault or place blame on fire departments or individual fire fighters.

Program Goal

Our program's goal is to learn from these tragic events and prevent similar events. We do not investigate every fire fighter death. We have investigated approximately 40% of fire fighter deaths since the program's start in 1998. We prioritize fatality investigations using a decision flow chart, which is available on the FFFIPP website. Investigation priorities may change based on the ongoing review of fatality data on leading risks to fire fighters and on input from fire service stakeholders.

Program Objectives

- Better identify and define the characteristics of line-of-duty deaths among fire fighters.
- Recommend ways to prevent deaths and injuries.
- Disseminate prevention strategies to the fire service.

Cardiovascular Disease (CVD) Deaths

NFPA data show that sudden cardiac death is the most common type of on-duty death for fire fighters. Our investigations assess personal and workplace factors. Personal factors include identifying individual risk factors for coronary artery disease. Our workplace evaluation:

- Estimates the acute physical demands placed upon the fire fighter.
- Estimates the fire fighter's acute exposure to hazardous chemicals.
- Assesses fire department coronary artery disease screening efforts.
- Assesses fire department efforts to develop fitness and wellness programs.



Traumatic Injury Deaths

Our program investigates select fatalities resulting from a variety of circumstances, such as:

- motor vehicle incidents
- burns
- falls
- structural collapse
- diving incidents
- electrocutions

We may also investigate select fatality events that suggest the potential to identify new or emerging hazards. NIOSH experts in personal protective equipment and respirators also assist with investigations when the function of respiratory protective equipment may have been a factor in the incident and will evaluate the performance of the self-contained breathing apparatus (SCBA) upon request.



Information Dissemination

We post all investigative reports on the NIOSH web site (http://www.cdc.gov/niosh/fire) and notify subscribers to the fire fighter safety announcements of each posting. All NIOSH reports and publications are public domain information and may be freely copied and reproduced for training and educational purposes.

Participation on Standards Setting Organizations

We participate on a number of NFPA and other consensus standard setting committees. This direct participation allows key findings from our investigations to be submitted directly to the organizations and committees that are best positioned to influence change to improve fire fighter safety and health.

