NFPA RESEARCH

Firefighter Fatalities in the US in 2020

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2020 Experience

As could be expected, in 2020, the largest share of firefighter deaths in the US resulted from exposure to COVID-19. NFPA has received notification of the deaths of almost 80 firefighters due to exposure to COVID-19 while on the job in 2020. Many of the cases were tied to specific emergency calls, particularly medical calls, where firefighters were exposed to infected members of the public. Other cases were attributed to exposure at the fire station.

As a result, the total number of on-duty firefighter deaths in 2020 was higher than it has been since the late 1970s (with the exception of 2001). Of the 140 on-duty deaths in 2020, 78 were due to COVID. This report will focus on the 62 non-COVID deaths.

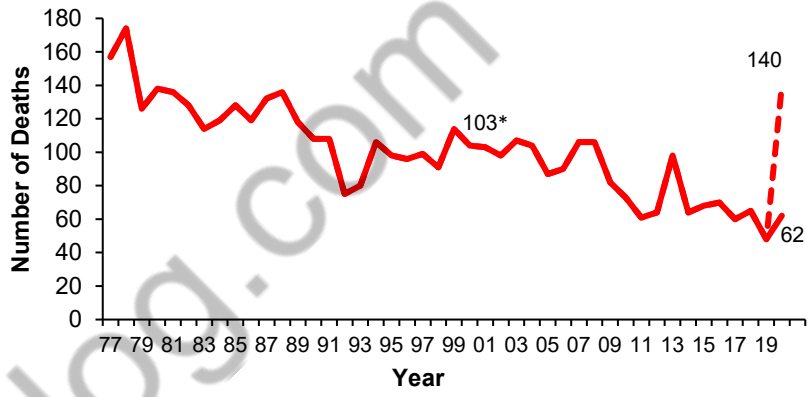
Figure 1 shows the trend over the years, excluding the 340 firefighter deaths on 9/11 and the cancer-related deaths of firefighters who responded to the World Trade Center that have occurred since 2001[1]. The solid line for 2020 shows how the non-COVID deaths compare to deaths in previous years.

Of the 62 firefighters who died in the US while on duty in 2020, 27 were volunteer firefighters, 23 were career firefighters, eight were contractors to state and federal land management agencies, two were employees of a federal land management agency, and two were members of the military[2].

There were two incidents with two fatalities in 2020.

Analyses in this report will examine the types of duty associated with firefighter deaths, the cause and nature of fatal injuries to firefighters, and the ages of the firefighters who died. The report will also highlight deaths on the fireground and in motor vehicle-related incidents.[3] Finally, the report will present summaries of individual incidents that illustrate important concerns for firefighter safety.

Figure 1. On-Duty Firefighter Deaths: 1977–2020



* Does not include the 340 firefighter deaths at the World Trade Center in 2001.

This annual study includes only on-duty firefighter fatalities that occurred in the 50 states and the District of Columbia. In addition, there were two on-duty firefighter fatalities in 2020 in American Samoa and three American firefighters were killed on a wildland fire in Australia.

Introduction

Each year, NFPA collects data on all the firefighter fatalities in the US that resulted from injuries or illnesses that occurred while the victims were on duty. The term *on duty* refers to:

- Being at the scene of an alarm, whether it is a fire or non-fire incident (including EMS calls)
- Responding to or returning from an alarm
- Participating in other fire department duties, such as training, maintenance, public education, inspection, investigation, court testimony, or fundraising
- Being on call or standby for assignment at a location other than the firefighter's home or place of business

On-duty fatalities include any injury sustained in the line of duty that proves fatal, any illness incurred as a result of actions while on duty that proves fatal, and any fatal mishaps involving nonemergency occupational hazards that occur while on duty. The types of injuries included in the first category are mainly those that occurred at a fire or other emergency incident scene, in training, or in crashes while responding to or returning from alarms. Illnesses (including heart attacks) are included when the exposure or onset of symptoms occurred during a specific incident or on-duty activity.

The types of firefighters included in this study are:

- Members of local career and volunteer fire departments
- Seasonal, full-time, and contract employees of state and federal agencies who have fire suppression responsibilities as part of their job description
- Prison inmates serving on firefighting crews
- Military personnel performing assigned fire suppression activities
- Civilian firefighters working at military installations
- Members of facility or industrial fire brigades

Fatal injuries and illnesses are included even in cases where death was considerably delayed. When the injury and death occurred in different years, the incident is counted for the year of the injury.

In the case of COVID deaths, NFPA is following inclusion criteria similar to that used by the US Public Safety Officers' Benefits (PSOB) Program and the International Association of Fire Fighters (IAFF) in counting active on-duty firefighters who were working at the time their illness was diagnosed. The Safeguarding America's First Responders Act allows PSOB to recognize the eligibility of COVID-19 diagnoses for firefighters within 45 days of their last day on duty.

NFPA recognizes that other organizations report the number of duty-related firefighter fatalities using different, more expansive definitions and some include deaths that occurred when the victims were off-duty. (See, for example, the US Fire Administration and National Fallen Firefighters Foundation websites.) Readers comparing reported losses should carefully consider the definitions and inclusion criteria used in any study.

Long-term effects on firefighters' physical and emotional health

This study focuses on the deaths of firefighters that are due to specific events while on-duty, but NFPA recognizes that a comprehensive study of on-duty firefighter fatalities would include chronic illnesses, such as cancer or heart disease, that arise from occupational factors and prove fatal. The number of deaths due to long-term exposure, however, cannot be estimated at this time due to limitations in tracking the exposure of firefighters to toxic environments and substances and the potential long-term effects of such exposures.

Besides the challenges that firefighter illnesses pose for a complete picture of the firefighter fatality problem, we would be remiss if we did not also monitor the increasingly well-publicized problem of firefighter suicide.

Suicide: According to the Firefighter Behavioral Health Alliance (FBHA), 97 firefighters and 26 EMTs and paramedics died by suicide in 2020. (This number may change as new reports are validated by the FBHA.)

Recognition of the importance of behavioral health programs and peer support for firefighters has become widespread in recent years. As with heart disease and cancer, this is a problem that follows firefighters after their careers end, whether in retirement or some other form of separation from the fire service. Many programs exist to address these problems, including Share the Load, an effort by the National Volunteer Fire Council (NVFC) that connects firefighters, EMTs, and their families with resources and support for their mental well-being. In

June 2020, they launched a directory of licensed behavioral health professionals familiar with the fire service culture to help improve access to behavioral health care for firefighters. The directory can be accessed on the Share the Load web page.

The International Association of Fire Fighters (IAFF) has offered advice on establishing a peer support program. In October 2019, the IAFF launched a suicide reporting system for its members and has developed material on coping in the aftermath of a friend or colleague's death by suicide.

In collaboration with the National Fallen Firefighters Foundation (NFFF), the Medical University of South Carolina has developed a training course for counselors who work with firefighters.

Both the US House and Senate have introduced bills to establish a public safety officer suicide reporting system at the Centers for Disease Control and Prevention (CDC) to collect information on the incidence of suicide in this group and to aid in the study of ways to reduce deaths by suicide among firefighters and other first responders by improving detection, prevention, and treatment of behavioral health issues. It would also allow funding for peer support programs. The legislation was introduced in the House in 2019 and in the Senate in January 2020.

NFPA 1500™, *Standard on Fire Department Occupational Safety, Health, and Wellness Program*, requires access to a behavioral health program that provides assessment, counseling, and treatment for such issues as "stress, alcohol and substance abuse, anxiety, depression, traumatic exposure, suicidality, and personal problems." The goal of such programs is to change the culture of the fire service, help people to identify warning signs, eliminate any stigma associated with mental health issues and asking for help, and provide training and assistance with retirement planning. According to FBHA statistics, almost one-fifth of the firefighters and EMTs who died by suicide were retired firefighters and EMTs. Early recognition and treatment of behavioral health issues are key to addressing this problem.

Cancer: Cancer is well-recognized as a significant risk in the fire service. Attention has increasingly focused on cancer risks and cancer prevention in the fire service through research, education, behavioral changes, and a variety of controls to minimize exposure to contaminants. Although we cannot identify the total number of fire service-related cancer deaths that occur each year, the IAFF alone lists on its website 117 firefighter cancer deaths in 2020.

Studies have shown a link between cancer and firefighting. The National Institute for Occupational Safety and Health (NIOSH) undertook two large studies focused on firefighter cancer and concluded that firefighters face a 9 percent increase in cancer diagnoses and a 14 percent increase in cancer-related deaths compared to the general population in the US. The first study was a multiyear project to examine the cancer risk in firefighters using the health records of approximately 30,000 current and retired career firefighters from three large city fire departments to look at mortality and cancer incidents. The second study looked at exposure response among 20,000 firefighters from the same fire departments. Results of the first phase, which showed evidence of a relationship between firefighting and cancer, were published in October 2013. Results of the second study, published in 2015, showed a relationship between firefighting and lung cancer and leukemia.

A 30-year prospective research study on cancer in the fire service is currently underway. This project, unlike previous retrospective studies, will look at changes over time that might result from exposure to carcinogens. The initial phase of the study, funded by the Department of Homeland Security/Federal Emergency Management Agency Assistance to Firefighters Grants Program, created the framework for this long-term project.

In 2018, Congress passed legislation directing the CDC to develop and maintain a voluntary registry of firefighters in the US that can be used to monitor the incidence of cancer in the fire service. This data will be

linked to data in state cancer registries and will be available to researchers. NIOSH will develop and maintain the registry, which will be open to all current and former firefighters.

In efforts to raise awareness in the fire service of the heightened risk of cancer and ways to reduce exposure, valuable video presentations have been produced by organizations including, among others, the Boston Fire Department, which has a dedicated website (takenosmoke.org) and YouTube channel. Other videos are available from the University of Cincinnati and Cincinnati Fire Department and the National Fallen Firefighters Foundation. These videos can help to inform firefighters of the steps they can take to address the hazards they face. The Firefighter Cancer Support Network is another excellent resource for access to information on health-related topics and support and mentorship following a cancer diagnosis.

Other efforts to inform safe practices in the fire service stem from research undertaken by the Fire Protection Research Foundation, including an ongoing four-phase study to enhance the cleaning procedures for PPE that are outlined in NFPA 1851, *Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting*, and an earlier respiratory exposure study completed in 2012.

Each year, the University of Miami conducts a symposium on cancer in the US fire service. The link to the most recent symposium can be found on their website.

Cardiac issues: Heart disease and other cardiac issues have long been recognized as significant health risks in the fire service.[4] Sudden cardiac death has consistently accounted for the largest share of on-duty firefighter deaths since NFPA began this study in 1977.

NFPA has several standards that focus on firefighter health risks. For example, NFPA 1582, *Standard on Comprehensive Occupational Medical Program for Fire Departments*, outlines the medical requirements that must be met by candidate firefighters and incumbent fire department members. NFPA 1500 calls for fire departments to establish a firefighter health and fitness program that meets the requirements of NFPA 1583, *Standard on Health-Related Fitness Programs for Fire Department Members*, and requires that firefighters meet the medical requirements of NFPA 1582.

Information on developing a wellness and fitness program is also available from other organizations, such as the International Association of Fire Chiefs/IAFF Fire Service Joint Labor Management Wellness-Fitness Initiative and the National Volunteer Fire Council's Heart-Healthy Firefighter Program. The Heart-Healthy Firefighter Program was launched in 2003 to address heart attack prevention for all firefighters and EMS personnel through fitness, nutrition, and health awareness.

While this report focuses on deaths that resulted from specific on-duty activities, NFPA is focused on all aspects of health and safety in the fire service and EMS. One example is the Fire Protection Research Foundation's work on cancer prevention behaviors and the health and wellness provisions of NFPA 1500 and NFPA 450, *Guide for Emergency Medical Services and Systems*.

The remainder of this report will cover the non-COVID on-duty fatalities in 2020.

Type of duty

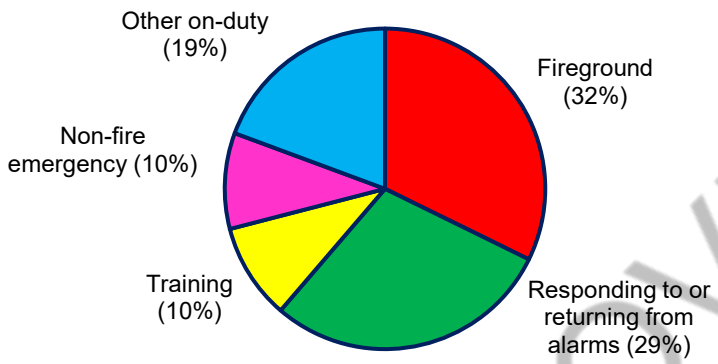
In this report, we look at four major categories of type of duty that firefighters were engaged in when they were fatally injured or suffered fatal medical events — on the fireground, at non-fire emergencies, responding to or returning from fires and emergency calls, and during training. The remaining deaths occurred while firefighters were engaged in other on-duty activities.

Figure 2 shows the distribution of the 62 deaths by the type of duty. The largest share of deaths occurred while firefighters were operating at fires or explosions (20 deaths). This is the fourth time in the past five

years that this total has been at or below 20 deaths. This continues the clear downward trend in deaths since the late 1970s, when the number of fireground deaths annually averaged more than 80 per year.

Ten of the 20 deaths occurred on wildland fires, nine at structure fires, and one at an illegal outside burn. Six of the 20 fireground victims were volunteer firefighters, four were career firefighters, nine were contractors to or employees of state or federal land management agencies, and one was a member of the military. Seven of the 10 deaths on wildland fires occurred in crashes, which are discussed in a separate section in this report.

Figure 2. Firefighter Deaths by Type of Duty: 2020



The deaths at structure fires are discussed in more detail below.

Eighteen firefighters were killed responding to or returning from alarms, the highest number of deaths in this category in the past eight years. Nine of these 18 firefighters suffered fatal cardiac events and three suffered strokes. Five were killed in motor vehicle crashes. One was shot on arrival at the scene. Sixteen of the victims were volunteer firefighters. All the vehicle-related and sudden cardiac deaths are discussed in more detail later in this report.

Six firefighters died at non-fire emergencies. Of those, two were operating at motor vehicle crashes, two were involved in water rescues, one was at a medical call, and one was at the scene of a structural collapse. Three of the six suffered sudden cardiac death, two drowned, and one was struck by a passing vehicle at the scene of a motor vehicle crash.

Six deaths occurred during training activities. Sudden cardiac death claimed the lives of three of the six; all three were engaged in some sort of physical fitness activity. One firefighter drowned during dive training in a quarry. One was involved in a motor vehicle crash on his way back from an out-of-town training class. One firefighter, while participating in a standpipe drill, inadvertently opened a wye valve while standing on a third-story fire escape, was struck by the water stream, and was knocked over the railing to the ground below.

The remaining 12 firefighter fatalities in 2020 involved a variety of normal station, administrative, or maintenance activities. Eight of these fatalities were due to sudden cardiac death. One firefighter died of an unintentional drug overdose and another died by suicide. One firefighter driving a tanker during a weekly maintenance check was killed in a motor vehicle crash. A firefighter conducting surveillance as part of an arson investigation was shot and killed by the suspect.

Cause of fatal injury or illness

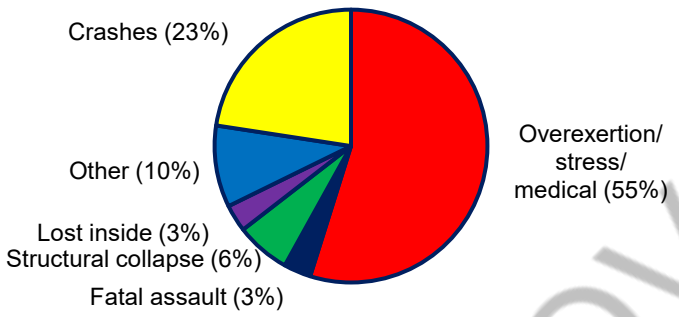
Figure 3 shows the distribution of deaths by the cause of the fatal injury or illness. The term *cause* refers to the action, lack of action, or circumstances that resulted directly in the fatal injury.[5]

Overexertion, stress, and medical issues accounted for more than half of the deaths in 2020. Of the 34 deaths in this category, 29 were classified as sudden cardiac deaths (usually heart attacks) and three were due to stroke. One was a death by suicide and one death resulted in a drowning. See the next page for more details on sudden cardiac deaths.

Fourteen firefighters were killed in vehicle crashes. One other firefighter was struck by a vehicle. These vehicle-related deaths are discussed in detail later in this report.

Four firefighters were killed in structural collapses. In separate incidents, two firefighters fell into basements when floors collapsed. One was asphyxiated when trapped between floor joists. The other died of smoke inhalation. The other two firefighters were killed in roof collapses — one when the collapse pushed out an exterior wall that struck a firefighter operating outside and the other when a porch roof collapsed, trapping a firefighter under the debris.

Figure 3. Firefighter Deaths by Cause of Injury: 2020



Two firefighters were lost inside a structure when they became disoriented while searching for a victim. Both died of smoke inhalation.

One wildland firefighter was overrun by fire during suppression efforts.

A firefighter drowned while attempting to rescue two swimmers in heavy surf under double red flag conditions after a hurricane passed. Another firefighter became trapped underwater and drowned after rescuing three girls from a river.

Two firefighters were murdered. One was shot while investigating a report of smoke. The other was shot while conducting surveillance in a fire investigation.

One firefighter fell from a fire escape during training when struck by the force of water from an open standpipe.

One firefighter died of an unintentional drug overdose at the station.

Nature of fatal injury or illness

The term *nature* refers to the medical process by which death occurred and is often referred to as *cause of death* on death certificates and in autopsy reports.

Figure 4 shows the distribution of deaths by the nature of the fatal injury or illness. As in almost every year since 1977, sudden cardiac death accounted for the largest share of the deaths annually, with 29 deaths. Sudden cardiac deaths will be discussed in more detail in the next section.

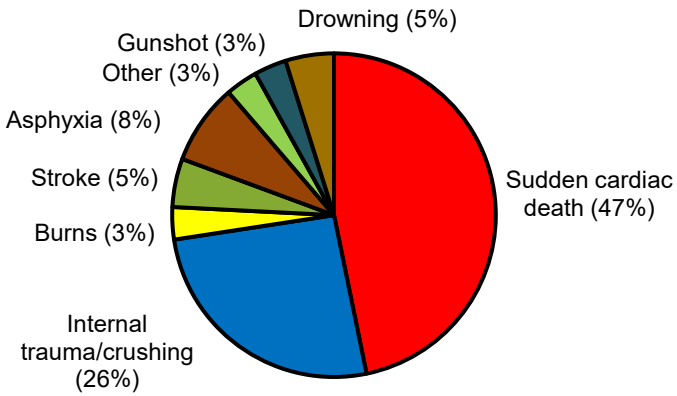
The next leading cause of death was internal trauma and crushing, with 16 deaths.

Five firefighters were asphyxiated (four due to smoke inhalation and one after being trapped in a fall through the floor). Three firefighters drowned. Three died suffered fatal strokes. Two firefighters were shot. Two died of burns. There was one death each due to an unintentional overdose and suicide.

Sudden cardiac deaths

In 2020, there were 29 sudden cardiac deaths with onset while the victim was on duty. This is the fifth consecutive year that the toll has been below 30, but it still accounts for the largest share of the deaths while on duty in 2020. Cardiac-related events have accounted for 43 percent of the on-duty fatalities over the past 10 years.

Figure 4. Firefighter Deaths by Nature of Injury: 2020

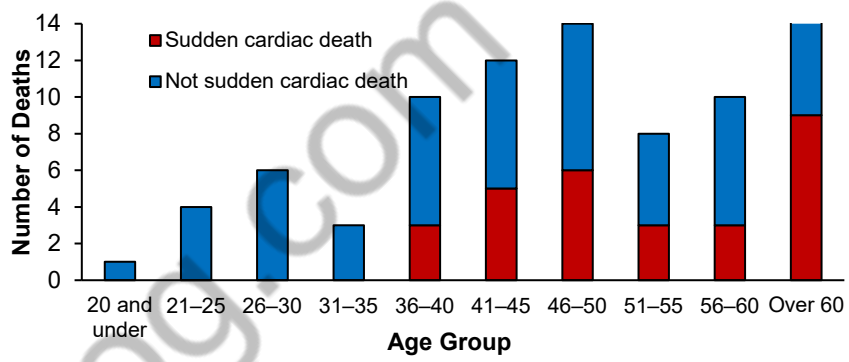


From 1977 through 1986, an average of 60 firefighters a year suffered sudden cardiac deaths while on duty (44.7 percent of the on-duty deaths during that period). These are cases in which the onset of symptoms occurred while the victim was on duty and death occurred immediately or shortly thereafter. The average number of sudden cardiac deaths fell to 44 a year in the 1990s and to 29 a year in the past decade. Despite this reduction, sudden cardiac death continues to be the number one cause of on-duty firefighter fatalities in the US and, in almost every year, it has accounted for the single largest share of deaths in the year. In addition, countless deaths of current and former firefighters whose health was compromised during their years in the fire service occur annually. Each year, the US Fire Administration processes almost a dozen fatalities that could potentially qualify for federal death benefits under the Hometown Heroes Act (deaths within 24 hours of non-routine strenuous or stressful physical activity).

Ages of firefighters

The firefighters who died in 2020 ranged in age from 18 to 72, with a median age of 48 years. Figure 5 shows the distribution of firefighter deaths by age and whether the cause of death was sudden cardiac death or not.

Figure 5. Firefighter Deaths by Age and Cause of Death: 2020



Sudden cardiac death accounts for a higher proportion of the deaths among older firefighters, as might be expected. Almost two-thirds of the firefighters over age 45 who died in 2020 died of heart attacks or other cardiac events.

Figure 6 shows the death rates by age, using combined career and volunteer firefighter fatality data for the five-year period from 2016 through 2020 and the estimated average number of career and volunteer firefighters in each age group from NFPA's 2018 profile of fire departments.[6]

The death rate was lowest for firefighters between the ages of 20 and 29; their death rate was about two-fifths the all-age average. The death rate for firefighters aged 60 and over was almost three times the average. Firefighters aged 50 and over accounted for almost half of all the on-duty firefighter deaths over the five-year period, although they represent only one-quarter of all the career and volunteer firefighters in the US.

Figure 6. On-Duty Death Rates per 10,000 Career and Volunteer Firefighters: 2016–2020

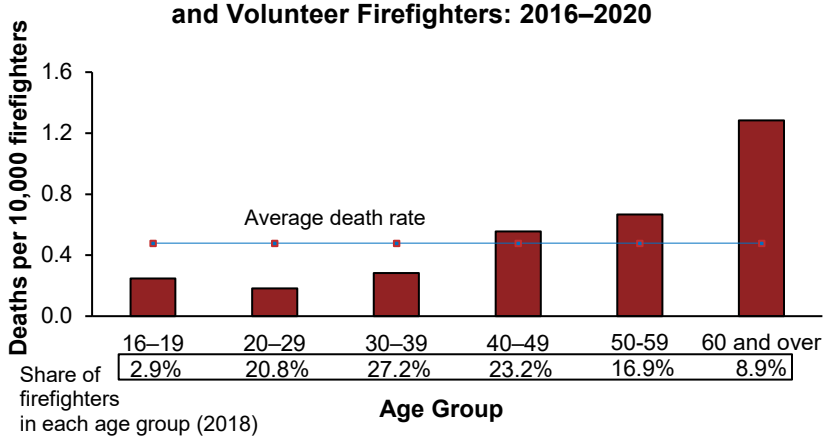
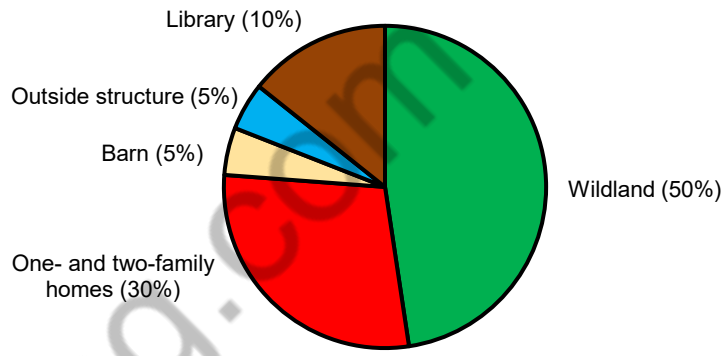


Figure 7. Fireground Deaths by Fixed Property Use*



* There were 20 deaths on the fireground in 2020.

Fireground deaths

Of the 20 fireground fatalities in 2020, seven were due to internal trauma or crushing injuries, six were due to sudden cardiac death, five were due to asphyxia or smoke inhalation (including one due to positional asphyxia) and two were due to burns. Ten of the 20 deaths occurred on wildland fires, nine at structure fires, and one outside a structure.

This is the fourth time in the past five years that the total number of deaths on the fireground has been 20 or fewer. With the exception of 2001, when 340 firefighters were killed at the World Trade Center, and 2013, when an exceptionally high number of firefighters were killed at the scenes of fires (19 firefighters on the Yarnell Hill wildland fire and nine in an explosion at a fertilizer plant), deaths on the fireground have been declining fairly steadily since 1999.

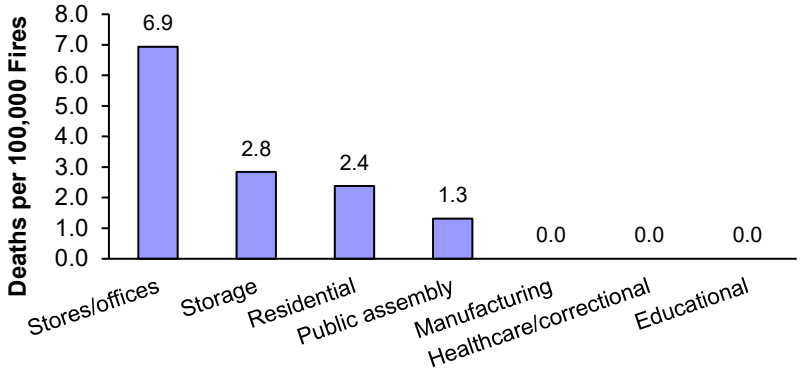
Figure 7 shows the distribution of the 20 fireground deaths by fixed property use. The nine deaths at structure fires include six in fires in one- and two-family homes, two in a library, and one in a barn.

None of the structures in which firefighters died was reported to have had an automatic fire suppression system.

Of the 10 firefighters who died at wildland fire incidents, seven were killed in crashes (six in crashes involving aircraft), three suffered sudden cardiac death, and one died of burns.

To put the hazards of firefighting in various types of structures into perspective, the authors examined the number of fireground deaths per 100,000 structure fires by property use. Estimates of the structure fire experience in each type of property were obtained from NFPA's annual fire loss studies from 2015 through 2019 (the 2020 results are not yet available) and from the updated firefighter fatality data for the corresponding years. The results are shown in Figure 8.

Figure 8. On-Duty Fireground Deaths per 100,000 Structure Fires: 2015–2019



This figure illustrates that, although many more firefighter deaths occur at residential structure fires than at fires in any other type of structure, fires in some nonresidential structures, such as storage and mercantile properties, are as hazardous, if not more so, on average, to firefighters. There were 2.7 fireground deaths per 100,000 nonresidential structure fires from 2015 through 2019, compared to 2.4 deaths per 100,000 residential structure fires. The highest death rates over the five-year period occurred in stores and offices. The low death rate in educational and health care/correctional properties over that five-year period could reflect the fact that these occupancies are among the most regulated, most protected, and most frequently inspected, and that their occupants are among the most likely to call the fire department to report fires while the fires are still in their early stages. There were no deaths in these properties or manufacturing properties over that five-year period.

From 2011 through 2020, there were 15 deaths in 13 fires in vacant buildings and buildings under construction or renovation.

Vehicle-related deaths

In 2020, 15 firefighters died in vehicle-related incidents, including 14 firefighters who died in vehicle crashes and one who was struck by a vehicle.

Seven of the crash victims were killed while involved in wildland fire suppression – six in five aircraft crashes and one in an engine.

- While operating over a wildland fire, two single-engine air tankers collided in mid-air shortly after dropping their loads of fire retardant, killing both contract pilots.
- Another single-engine air tanker crashed in a ravine while fighting a fire in brush and steep terrain, killing the contract pilot.
- A helicopter involved in support of suppression operations on a wildland fire crashed while delivering supplies to a hotshot firefighting crew, killing the contract pilot.
- A helicopter conducting bucket drops while fighting a wildland fire crashed near the dip site on a river, killing the contract pilot.
- After leaving a dip site with a bucket of water, a helicopter pilot reported abnormal noises and vibrations and then the helicopter lost air speed, began spinning and crashed.
- A firefighter operating on a wildland fire was repositioning an engine to avoid intensifying fire conditions, but in backing away from the flames drove over the edge roadway and down a ravine where the apparatus was engulfed in spreading flames before she could escape. (This incident is described in more detail in the Narrative section of this report.)

Seven other firefighters were involved in crashes involving road vehicles – five were responding to or returning from alarms, one was doing weekly maintenance and one was returning from out-of-town training.

- A firefighter driving a tanker to a structure fire went off the road, traveling on the shoulder for approximate 70 feet (21 meters) before striking a boulder, sliding back across the road and overturning. The firefighter was wearing his seatbelt.
- A firefighter driving his personally-owned pickup truck to a grass fire lost control on a curve, skidded into a ditch and overturned. Excessive speed was a factor. He was wearing his seatbelt.
- Another firefighter driving his personally-owned pickup truck to a house fire went off the road on a curve and overcorrected, causing the vehicle to roll. He was not wearing his seatbelt and was ejected.
- A firefighter responding to a barn fire in his personal vehicle lost control on a gravel road, resulting in the vehicle rolling. He was not wearing a seatbelt and was ejected.
- A firefighter returning home after a residential structure fire drove off the road and struck a tree. No other details are available.
- A firefighter was driving a 2000-gallon (7570-liter) water tanker for its weekly maintenance check when he drove off the right side of the road, braked and steered left to get back on the road, but the vehicle skidded across the road and overturned. The driver, who was not wearing a seatbelt was ejected. Driver inattention/distraction was cited as a factor in the crash.
- A firefighter driving his own vehicle back from a training session struck another vehicle head-on when he crossed the centerline on a curve in dark and rainy conditions. He was wearing his seatbelt. Fatigue was reportedly a factor in the crash.

One firefighter was killed when struck by a vehicle while operating at the scene of a crash on an interstate highway. While he was working in the median, a vehicle veered out of its lane and into the median, striking the victim, a police officer and another firefighter. The police officer was also killed, and the other firefighter was critically injured.

NFPA publishes several standards related to road and vehicle safety issues, including the following:

- NFPA 1002, *Standard for Fire Apparatus Driver/Operator Professional Qualifications*, identifies the minimum job performance requirements for firefighters who drive and operate fire apparatus in both emergency and nonemergency situations.
- NFPA 1451, *Standard for a Fire and Emergency Service Vehicle Operations Training Program*, provides for the development of a written vehicle operations training program, including the organizational procedures for training, vehicle maintenance, and identifying equipment deficiencies.
- NFPA 1911, *Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Emergency Vehicles*, details a program for ensuring that fire apparatus are serviced and maintained to keep them in a safe operating condition.
- NFPA 1901, *Standard for Automotive Fire Apparatus*, addresses vehicle stability to prevent rollovers and gives manufacturers options on how to provide such stability. New vehicles must have their maximum speed limited, based on their weight, and must have vehicle data recorders to monitor acceleration and deceleration and seatbelt use, among other things.
- NFPA 1906, *Standard for Wildland Fire Apparatus*, establishes minimum design, performance, and testing requirements for new vehicles over 10,001 lb (4,500 kg) gross vehicle weight rating that are specifically designed for wildland fire suppression.
- NFPA 1917, *Standard for Automotive Ambulances*, defines the minimum requirements for the design, performance, and testing of new automotive ambulances intended for use under emergency conditions to provide medical treatment and transportation of sick or injured people to appropriate medical facilities.

- NFPA 1091, *Standard for Traffic Incident Management Personnel Professional Qualifications*, originally published in 2015, identifies the minimum job performance requirements necessary to conduct temporary traffic control duties at emergency incidents on or near an active roadway.
- NFPA 414, *Standard for Aircraft Rescue and Fire-Fighting Vehicles*, covers the criteria for the design, performance, and acceptance of aircraft rescue and firefighting vehicles that carry personnel and equipment to the scene of an aircraft emergency.

The provisions of NFPA 1500 include requirements that operators successfully complete an approved driver training program, possess a valid driver's license for the class of a vehicle, and operate the vehicle in compliance with applicable traffic laws. All vehicle occupants must be seated in approved riding positions and secured with seatbelts before drivers move the apparatus and drivers must obey all traffic signals and signs and follow all the laws and rules of the road. These rules include coming to a complete stop at red traffic lights, stop signs, stopped school buses with flashing warning lights, blind intersections, and other hazardous intersections, as well as unguarded railroad grade crossings. Passengers are required to remain seated and must not release or loosen their seatbelts for any reason while the vehicle is in motion. In related efforts, the US Fire Administration has a website with resources on emergency vehicle and roadway operations safety.

The focus of vehicle safety programs should not be exclusively on fire department apparatus, as, over the years, private vehicles have been the vehicles most frequently involved in road crashes. NFPA 1500 includes a requirement that when members are authorized to respond to incidents or fire stations in private vehicles, the fire department must establish specific rules, regulations, and procedures relating to the operation of those vehicles in emergency mode. NFPA 1451 also requires training for those using privately-owned vehicles.

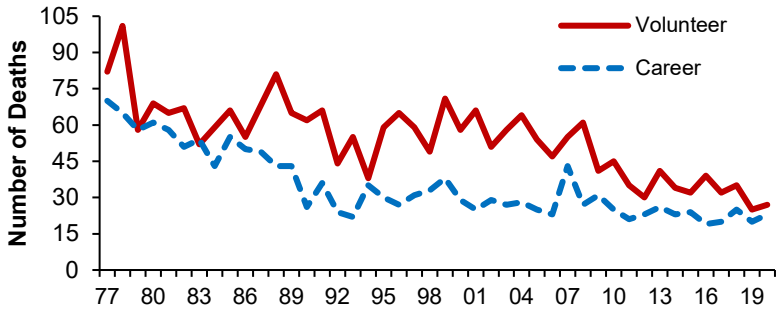
Requirements are also in place for emergency personnel operating on roadways. The 2009 version of the Federal Highway Administration's Manual on Uniform Traffic Control Devices (MUTCD), revised in 2012, requires anyone working on a roadway to wear a visibility vest compliant with ANSI 107, *High-Visibility Safety Apparel*. An exemption was created for firefighters and others engaged on roadways that allows them to wear NFPA-compliant personal protective clothing (turnout gear) when directly exposed to flames, heat, and hazardous material. The 2018 edition of NFPA 1500 has a new chapter on traffic incident management that requires training on safety at incidents on roadways. It also sets requirements for wearing high-visibility garments, using fire apparatus in a blocking position to protect firefighters, and using advance warning devices to caution oncoming drivers about operations on the roadway. The 2009 edition of NFPA 1901 requires that breakaway high-visibility vests compliant with ANSI 207, *High-Visibility Public Safety Vests*, be carried on all new fire apparatus; MUTCD 2009 allows emergency responders to use them in lieu of ANSI 107-compliant apparel. Advice on compliance with the updated Federal rules can be found on the MUTCD website. NFPA 1901 also requires reflective striping for improved visibility on new apparatus and a reflective chevron on the rear of fire apparatus.

Career/volunteer comparison

Figure 9 compares the number of deaths of career firefighters and volunteer firefighters from local fire departments since the study was first done in 1977. The 27 deaths of volunteer firefighters in 2020 is the second lowest reported in all the years of this study, and it is a sharp drop from the annual average for volunteer firefighter fatalities over the previous 10 years (35 deaths per year). It is also far lower than the average of 67 deaths per year in the earliest years of this study.

The 23 deaths of career firefighters while on-duty in 2020 continue the trend over the previous 10 years where the total has been in the 20s or lower. In the earliest years of this study, the annual average number of deaths of career firefighters while on duty was 57.

Figure 9. Career and Volunteer Firefighter Deaths: 1977–2020*



* Excluding the firefighter deaths at the World Trade Center in 2001 and the COVID deaths in 2020.

A breakdown of the fatalities of the 50 career and volunteer firefighters killed in 2020 is shown in Table 1.

Intentional fires and false calls

In 2020, four firefighters died at three fires that were deliberately set. From 2011 through 2020, 35 firefighters (5.3 percent of all on-duty deaths) died in connection with intentionally set fires, either at the fire or while responding to or returning from the fire.

In 2020, one firefighter died after returning to the station after a false call from an automatic system. Over the past 10 years, six firefighter deaths have resulted from false calls, including malicious false alarms and alarm malfunctions.

In summary

The hazardous nature of firefighting cannot be fully captured in a study that focuses only on the deaths that occur while firefighters are on the job. However, it is not possible to accurately assess the total number of deaths and injuries that have resulted annually due to long-term exposure to carcinogens and physical and emotional stress and strain.

This report focuses on the non-COVID deaths of firefighters resulting from specific injuries or exposures while on duty in 2020. A complete picture of duty-related fatalities would also include the cancer, cardiac, stress, and other fatalities that were caused by exposure to toxins or the emotional toll of responses. Other sources can provide some perspective on these aspects of the overall fatality problem. As mentioned above, the IAFF website lists 117 firefighter cancer deaths that were reported to them in 2020 and the FBHA reported that 97 firefighters and 26 EMTs and paramedics died by suicide in 2020. Over the past several years, in their annual report on US firefighter deaths, the US Fire Administration has included an average of 15 firefighters a year who qualified for Hometown Heroes Act benefits, which cover firefighters who suffer a heart attack or stroke within 24 hours of engaging in non-routine stressful or strenuous activity on duty.

In 2019, this study reported historic lows in several areas — the total number of on-duty deaths (48), the number of sudden cardiac deaths (22), crash deaths (4), and deaths of volunteer firefighters (24). It was clear at the time that study was published that the low total would not be repeated in 2020. The spread of COVID-19 across the country had a severe impact on the fire service, as evidenced by the 72 on-duty deaths of firefighters due to exposure in 2020. And the COVID-related death toll has continued to rise through 2021.

Aside from the COVID deaths, the remaining on-duty fatalities show a continuation of positive patterns from recent years; for example, the number of road vehicle crashes, historically the second largest category of deaths, was below 10 for the seventh time in the past 10 years, and the number of deaths while operating at structure fires was below 10 for the third time in five years. On the other hand, two firefighters were murdered in 2020, another died of a drug overdose, and one died by suicide while on duty.

References

[1] NFPA's files for on-duty fatal injuries to firefighters are updated every year.

[2] For this report, the term *volunteer* refers to any firefighter whose principal occupation is not that of a full-time, paid member of a fire department. The term *career* refers to any firefighter whose occupation is that of a full-time, paid fire department member.

[3] For this report, the term *motor vehicle-related incident* refers to motor vehicle collisions (including aircraft and boats) and rollovers, as well as incidents such as falls from vehicles or being struck by vehicles where the involvement of the vehicle played an integral role in the death.

[4] E. S. Soteriades, et al., "Cardiovascular Disease in US Firefighters: A Systematic Review," *Cardiology in Review*, Vol. 19, No. 4, July/August 2011, pp. 202–215.

[5] The categories for cause of injury and nature of injury are based on the 1981 edition of NFPA 901*, Uniform Coding for Fire Protection*.

[6] Averages were calculated from the following 2018 fire department profile report: B. Evarts and G. Stein, "US Fire Department Profile 2018 — Supporting Tables," National Fire Protection Association: Quincy, MA, 2020.

Acknowledgments

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Table 1. Comparison of On-Duty Deaths Between Career and Volunteer Firefighters, 2020*

	Career Firefighters		Volunteer Firefighters	
	Number of Deaths	Percent of Deaths	Number of Deaths	Percent of Deaths
Type of duty				
Operating at fireground	4	17%	6	22%
Responding to or returning from alarms	2	9%	16	59%
Operating at non-fire emergencies	5	22%	1	4%
Training	4	17%	1	4%
Other on-duty activity	8	35%	3	11%
TOTALS	23	100%	27	100%
Cause of fatal injury				
Overexertion/stress/other related medical	13	57%	18	67%
Accidental overdose	1	4%	0	0%
Struck by vehicle	1	4%	0	0%
Motor vehicle crash	2	9%	5	19%
Fell	1	4%	0	0%
Structural collapse	1	4%	2	7%
Lost inside	2	9%	0	0%
Assault	1	4%	1	4%
Caught/trapped underwater	1	4%	1	4%
TOTALS	23	100%	27	100%
Nature of fatal injury				
Sudden cardiac death	11	48%	16	59%
Internal trauma/crushing	4	17%	5	19%
Asphyxia, including smoke inhalation	3	13%	2	7%
Stroke	1	4%	2	7%
Gunshot	1	4%	1	4%
Drowning	2	9%	1	4%
Drug overdose	1	4%	0	0%
TOTALS	23	100%	27	100%

Table 1. Comparison of On-Duty Deaths Between Career and Volunteer Firefighters, 2020*, Continued

	Career Firefighters		Volunteer Firefighters	
	Number of Deaths	Percent of Deaths	Number of Deaths	Percent of Deaths
Rank				
Firefighter	12	52%	17	63%
Fire investigator	1	4%	0	0%
Company officer	7	30%	6	22%
Chief officer	3	13%	4	15%
TOTALS	23	100%	27	100%
Ages of firefighters — All deaths				
20 and under	0	0%	1	4%
21 to 25	2	9%	2	7%
26 to 30	3	13%	1	4%
31 to 35	1	4%	2	7%
36 to 40	3	13%	1	4%
41 to 45	3	13%	3	11%
46 to 50	5	22%	3	11%
51 to 55	2	9%	2	7%
56 to 60	4	17%	2	7%
61 to 65	0	0%	4	15%
Over 65	0	0%	6	22%
TOTALS	23	100%	27	100%
Ages of firefighters — Sudden cardiac deaths only				
36 to 40	2	18%	1	6%
41 to 45	1	9%	3	19%
46 to 50	4	36%	2	13%
51 to 55	2	18%	1	6%
56 to 60	2	18%	1	6%
61 to 65	0	0%	3	19%
Over 65	0	0%	5	31%
TOTALS	11	100%	16	100%

Table 1. Comparison of On-Duty Deaths Between Career and Volunteer Firefighters, 2020*, Continued

	Career Firefighters		Volunteer Firefighters	
	Number of Deaths	Percent of Deaths	Number of Deaths	Percent of Deaths
Fireground deaths by fixed property use				
Dwellings	1	25%	5	83%
Outside a home	1	25%	0	0%
Wildland fire	0	0%	1	17%
Library	2	50%	0	0%
TOTALS	4	100%	6	100%
Years of service				
5 or fewer	4	17%	8	30%
6 to 10	2	9%	3	11%
11 to 15	3	13%	2	7%
16 to 20	4	17%	5	19%
21 to 25	4	17%	2	7%
26 to 30	3	13%	2	7%
Over 30	3	13%	5	19%
TOTALS	23	100%	27	100%
Attributes of fireground deaths**				
Intentionally set fires	2		1	
Search and rescue operations	2		0	
Motor vehicle crashes	2		5	
False alarms	1		0	

*This table does not include the 12 victims who were employees or contractors with federal or state land management agencies or members of the military.

**Because these attributes are not mutually exclusive, totals and percentages are not shown.

2020 Firefighter Fatality Narratives

COVID exposure

In one of the earliest COVID-related on-duty deaths, a 49-year-old firefighter was exposed to the deadly virus at an EMS call for an unresponsive patient at a nursing home. The firefighter, along with the other members of his company, began treating the patient in accordance with their current department policies and protocols until the EMS unit arrived. The patient later died from respiratory failure and was diagnosed as being COVID-19 positive.

Within days, the firefighter began experiencing symptoms that progressively worsened into pneumonia. During this time, other members assigned to the same firehouse tested positive for COVID-19. The firefighter tested positive for COVID and, after his symptoms worsened, he was hospitalized for acute respiratory disease and died nine days later.

This narrative is reflective of the circumstances surrounding the deaths of numerous firefighters throughout the United States due to the COVID-19 pandemic, especially early in the pandemic when testing and PPE were limited. As the fire service adapted to the virus and acquired the necessary PPE and testing abilities, the frequency of the exposures and COVID deaths in the fire service declined.

An Assistant Chief succumbed to the COVID-19 virus after exposure at an incident

A 61-year-old assistant chief responded with apparatus to a service call at a residence during the early stages of the COVID-19 pandemic. On arrival, the crews came in close contact with the homeowner who notified them that one of the occupants had tested positive for the virus and that he himself had just returned from the hospital after being evaluated for symptoms. One day later, the homeowner was transported to the emergency room where he tested positive for the COVID-19 virus.

Some of the responders to that residence and other COVID-positive patients subsequently tested positive for the virus. The assistant chief, after coming in contact with these members, later became symptomatic and was hospitalized with COVID-19. He succumbed to the virus one week later.

Incidents like this occurred all over the country during this unprecedented time when over 100 firefighters and EMS personnel of all ages were exposed and later died after contracting the virus from direct or indirect exposures.

Firefighter killed in fall during training exercise

A 42-year-old firefighter was killed after a fall from a third-floor fire escape during a training exercise. At approximately 9:00 a.m., members of an engine company arrived at the fire department training site to conduct pump operation and standpipe drills. Due to COVID-19 restrictions, the engine company, consisting of three firefighters and an officer, was allowed to conduct this drill alone. One firefighter was assigned to operate the pump and a second was assigned to operate as the water supply company. The officer and third firefighter were to act as the suppression company on the third floor.

The drill began with the pump operator connecting to the standpipe and pressurizing it to 100 psi, per the department's standard operating procedures, and later increasing the pressure to 115 psi to account for elevation. The officer and firefighter were set up to operate a hose line from a third-floor standpipe connection using a gated wye valve. The connection point was located on the exterior of the building on the third-floor fire escape. They stretched a 50-foot (15.2-meter) length of hose line into the training building and flowed water out a third-floor window for long enough to demonstrate a low water level to the pump operator. The officer then made his way

from the third floor to the pump panel to instruct the pump operator on the actions to take in a low water situation while the firefighter remained behind.

At that time, the officer looked up and noticed the firefighter on the third-floor fire escape in the area of the standpipe connection. That firefighter somehow inadvertently opened the second gate on the wye that did not have a hose attached. The pressurized discharge hit the firefighter in the chest, knocking him backward and causing him to tumble over the railing and fall to the ground below. The firefighter was immediately treated for traumatic injuries and transported to the local trauma center where he later succumbed to his injuries.

According to the fire department, the cause of death was blunt force trauma to the head. The firefighter was wearing his Nomex coat, gloves, and helmet at the time, although it is not known if the helmet's chin strap was used.

Volunteer fire chief killed in apparatus rollover

A 71-year-old volunteer fire chief with 25 years in the fire service was killed in an early evening apparatus crash.

The chief was driving a 2000-gallon (7570.8-liter) water tanker eastbound on a state highway when the vehicle suddenly veered off the road. While attempting to correct the situation and return to the roadway, the driver was unable to maintain control of the vehicle and the apparatus went into a counterclockwise skid, causing the vehicle to overturn. The vehicle came to rest in an upright position on the opposite side of the road facing west. The driver, who was not wearing a seatbelt at the time of the crash, was ejected and pronounced dead at the scene. The subsequent investigation showed that a distraction inside the cab of the vehicle may have been a contributing factor.

Three emergency responders struck by vehicle at crash scene

A 39-year-old fire lieutenant and a police officer were killed and a second firefighter was injured when all three responders were struck by a vehicle as they were operating at the scene of a motor vehicle crash.

The lieutenant and firefighter were providing medical care to an injured person involved in the crash as the police officer was investigating the crash. The incident occurred during daylight hours with reports of icy road conditions. A southbound vehicle crossed over the median, striking the police officer, and then continued into the northbound lane, striking the two fire personnel as they were tending to the victim of the original crash. The vehicle subsequently flipped onto its roof and came to rest down a slight embankment. The police officer was pronounced dead at the scene. Both firefighters were transported to the hospital where the lieutenant succumbed to his injuries. Speed and failure to control a vehicle were listed as contributing factors in the fatal crash.

Contract firefighter killed after vehicle drives off ravine into intense fire

A 63-year-old contract firefighter was killed when she reversed the truck she was driving off a road into a ravine already overrun by intense wildfire.

An engine company, staffed with an engine boss, an engine operator, and a firefighter, was operating as part of a task force assigned to hold fire lines along a road. Fire danger was at a high level, with temperatures above 80 degrees Fahrenheit (27 degrees Celsius), winds above 15 mph (24 kph), and humidity at 22 percent. At 1:20 p.m., crews were assigned to the roadway to keep the fire within established control lines.

At approximately 2:10 p.m., members of the crews were operating hose lines when, according to reports from witnesses, fire conditions suddenly intensified and began to overrun the crews operating in the area. Flames were described as intensifying from 8 feet (2.4 meters) to over 70 feet (21.3 meters) in size. The engine boss jumped into the driver's seat with the firefighter entering by the rear door. The engine operator was unable to enter the passenger side due to intense heat on that side of the vehicle and attempted to guide them away from the area by having the apparatus follow him in a forward direction away from the intense heat and flames. Suddenly, the backup alarm on the apparatus was heard and the vehicle began backing toward the edge of the road. Attempts to stop the vehicle via radio and others signaling to stop were not heard by the driver. The vehicle continued backward off the road, sliding approximately 15 feet (4.6 meters) into a ravine already heavily involved in fire.

The firefighter in the rear was able to free himself and attempted to free the driver when conditions in the vehicle rapidly deteriorated, shattering all of the windows in the apparatus. Conditions became life-threatening due to the intense flames and heat, forcing the firefighter from the vehicle. He was able to escape and crawled back up toward the road. He suffered serious burns and was transported by helicopter to a burn unit. Other crews on scene immediately donned structural firefighting gear and SCBA and attempted to search for the driver. The driver was unable to exit the vehicle and suffered fatal injuries and burns.

Floor collapse kills 23-year-old firefighter

Firefighters were sent out to a reported occupied structure fire at approximately 11:30 p.m. The first companies to arrive encountered heavy fire coming from a two-story duplex. An interior attack was immediately initiated. Heavy fire conditions were encountered in the basement and on the second floor. The victim, a 23-year-old firefighter, responded from home and was operating with his partner at the base of the fire on the second level when the floor collapsed under him and he became trapped between the first floor and basement joists. The rapid intervention team was deployed within 45 seconds and was able to extricate him in approximately seven minutes. He was unresponsive when located and all life-saving measures were implemented on scene but were unsuccessful. The firefighter was wearing his full PPE with SCBA. The cause of death was listed as respiratory compression due to entrapment at a fire scene. The subsequent investigation revealed the fire could have been burning for at least an hour before detection.

Firefighter pulled from heavy surf unresponsive after numerous water rescues

A 56-year-old firefighter was killed after responding to a report of two people in distress in the ocean.

When firefighters arrived on the scene, an adult male and a juvenile, along with a sheriff's deputy who had entered the water to attempt a rescue, were spotted struggling in the heavy surf. The firefighter, along with a second arriving sheriff's deputy, immediately entered the surf without floatation devices to try to effect a rescue. The two deputies immediately needed to be rescued from the surf and were brought back to shore. An additional firefighter retrieved a life vest from his vehicle and entered the water with a third deputy who had a rescue can floatation device. A third firefighter obtained a rescue can and entered the water as well.

A jet ski was deployed to assist the firefighters and was able to help rescue the first male victim. The juvenile was able to self-rescue and was treated onshore. The jet ski was redeployed to assist the remaining three firefighters and deputy who were together in the rough surf. The firefighter that had on a floatation vest was able to assist in his own rescue. The other two firefighters were holding

rescue-can floatation devices, one of which had been obtained from the deputy, who was able to make it to shore.

Both firefighters were distressed and visibly exhausted. During the rescue attempts, the firefighters were separated from each other by the heavy surf and, eventually, the victim lost his floatation device. He was subsequently found face down in the water unresponsive. The firefighter on the jet ski and the other firefighter in the water were eventually able to get the victim to the shore where CPR was immediately initiated. He was then transported to the hospital, where he was later pronounced dead. The cause of death was listed as traumatic asphyxia due to saltwater drowning. Many of the responders on scene, including the deceased, had responded from a similar surf rescue in their jurisdiction due to the heavy surf and red flag warnings that day.

Two firefighters killed while searching for victims in a library fire

At 4:16 p.m., the fire department received calls about a possible fire in the public library. Two engines, a ladder, and a battalion chief were dispatched. An administrative battalion chief also responded, as the location was close to his office. On arrival to the 19,000-square-foot (1765-square-meter) structure, the first-due engine company, staffed with a captain, an engineer, and a firefighter, were met with heavy smoke emitting from the front of the building. They immediately received reports of fire in the rear of the building.

As the crew was preparing to initiate an interior attack from the front side of the building with a 1 ¾-inch (4.4-centimeter) attack line, a police officer reported that a female victim was possibly trapped on the second floor. The captain and the firefighter immediately entered the structure to search for her. They chose to enter without the attack line or a tag line to assist with the search. Additional arriving companies began an exterior fire attack on the right side of the building.

On arrival, the shift commander assumed command of the incident and requested a second alarm, bringing off-duty personnel to the scene as well as an additional engine company and a battalion chief from the neighboring community. At some point, a second police officer told the engineer the victim in question had gotten out. It is unclear if that information was relayed to incident command. The incident commander (IC) attempted to contact the captain and firefighter but received no response. Contact with the incident commander was eventually made by the interior captain, who notified the IC that they were clearing the second floor and returning to the first floor. He had also inquired if he could confirm the woman had gotten out.

Shortly after, the decision was made to transition to a defensive strategy to gain control of the fire. The IC attempted to contact the captain and firefighter inside the building and again received no response. The next communication from the captain was a mayday reporting that they were disoriented as to their location and had ended up at the top of the stairway to the second floor. They were also running low on air. During the communication between the captain and the IC, low air alarms could be heard in the background.

The chief of the department arrived on the scene and assumed command. The shift commander was then reassigned to handle the mayday on a separate radio channel. A rapid intervention crew (RIC) was deployed and began to search for the captain and the firefighter on the second floor. They were unable to hear activated personal alert safety system (PASS) devices but eventually found the captain in a second-floor bathroom. Additional crews were requested, and they began to extricate the captain. As they began to run low on air themselves, they handed the rescue effort off to another RIC. The captain was removed from the structure and transported to the hospital where he was pronounced deceased.

Numerous additional RICs entered the building to search for the missing firefighter. As conditions worsened and the risk of collapse became imminent, crews were evacuated from the building. Over the next day, Urban Search and Rescue teams as well as teams from neighboring departments searched for the missing firefighter. He was found the next morning and removed from the building by members of his own department. The cause of death for both firefighters was listed as asphyxiation and smoke inhalation, according to the medical examiner. Upon investigation, it was determined the fire was intentionally set and two juveniles were charged with the crime.

Firefighter killed in apparatus rollover

While responding to a structure fire at approximately 3:30 p.m., a 51-year-old firefighter was killed when the fire apparatus he was driving rolled over off an embankment. With road conditions being reported as dry, the apparatus left the roadway and continued in loose dirt on the shoulder. The rear of the apparatus struck a large boulder, damaging the truck's rear axle. According to reports, the driver then overcorrected back onto the roadway, with the apparatus crossing the double yellow line and subsequently rolling off the opposite embankment, coming to rest on the driver's side. It is unknown what control, if any, the driver would have had of the vehicle after the damage to the rear axle. The driver was wearing his seatbelt. He was pronounced dead at the scene by the medical examiner.

Arson investigator shot and killed

In the course of his duties investigating a string of arson fires, a 44-year-old fire department investigator was shot and killed while conducting surveillance. The investigator was part of a team surveilling individual locations as part of an investigation into a string of arson fires in the area. The investigator reported seeing a vehicle that matched a suspect in the case and stated he was going to follow it until backup could arrive. His next radio transmission was for help. Upon the arrival of another member of the unit, the investigator was found shot numerous times and was immediately transported to the hospital where he succumbed to his injuries. The suspect in the case was later found deceased from an apparent self-inflicted gunshot wound.

US Department of Justice Death, Disability, and Educational Benefits for Public Safety Officers and Survivors

Line of duty deaths: The Public Safety Officers' Benefits (PSOB) Act, signed into law in 1976, provides a federal death benefit to the survivors of the nation's federal, state, local and tribal law enforcement officers, firefighters, and rescue and ambulance squad members, both career and volunteer, whose deaths are the direct and proximate result of a traumatic injury sustained in the line of duty. The Act was amended in 2000 to include FEMA employees performing official, hazardous duties related to a declared major disaster or emergency. Effective December 15, 2003, public safety officers are covered for line-of-duty deaths that are a direct and proximate result of a heart attack or stroke, as defined in the Hometown Heroes Survivors' Benefits Act of 2003. The Dale Long PSOB Improvements Act of 2012 expands the Hometown Heroes Act to include vascular ruptures.

A 1988 amendment increased the amount of the benefit from $50,000 to $100,000 and included an annual cost-of-living escalator. On October 1 of each year, the benefit changes as a result. The enactment of the USA PATRIOT bill in 2001 increased the benefit to $250,000. As of October 1, 2021, the current benefit is $389,825, a lump sum and tax-free benefit.

A decedent's spouse and minor children are the first eligible beneficiaries for PSOB Program purposes. In cases in which the public safety officer had no surviving spouse or eligible children, the death benefit is to be awarded to either the individual most recently designated as beneficiary for PSOB benefits with the officer's public safety agency, organization, or unit, or, if there is no designation of beneficiary of PSOB benefits on file, then to the individual designated as beneficiary under the most recently executed life insurance policy on file with the agency at the time of death. (See 42 U.S.C. § 3796(a)(4) for specific details.) If no individuals qualify under 42 U.S.C. § 3796(a)(4), then the benefit is paid to the public safety officer's surviving parents; if the officer is not survived by a parent, the benefit may be paid to the officer's children who would be eligible to receive it but for their age (i.e., adult children).

The Safeguarding America's First Responders Act (SAFRA) allows PSOB to recognize the eligibility of COVID-19 deaths based on the law's criteria: https://www.congress.gov/bill/116th-congress/senate-bill/3607.

Line of duty disabilities: In 1990, Congress amended the PSOB benefits program to include permanent and total disabilities that occur on or after November 29, 1990. The amendment covers public safety officers who are permanently unable to perform any gainful employment in the future. PSOB is intended for those few, tragic cases where an officer survives a catastrophic, line of duty injury. Only then, in the presence of the program's statutory and regulatory qualifying criteria, will PSOB's disability benefit be awarded. The bill's supporters anticipated that few PSOB disability claims would be eligible annually.

Public Safety Officers' Educational Assistance Program (PSOEA): An additional benefit, signed into law in October 1996 and amended in 1998, provides an educational assistance allowance to the spouse and children of public safety officers whose deaths or permanent and total disabilities qualify under the PSOB Act. This benefit is provided directly to dependents who attend a program of education at an eligible education institution and are the children or spouses of covered public safety officers. It is retroactive to January 1, 1978, for beneficiaries who have received or are eligible to receive the PSOB death benefit. Students may apply for PSOEA funds for up to 45 months of full-time classes. As of October 1, 2021, the maximum benefit a student may receive is $ 1,298 per month of full-time attendance.

Further benefits information: To receive additional information on filing a disability claim or to receive additional information about coverage, call or email the Public Safety Officers' Benefits Office, Bureau of Justice Assistance, Office of Justice Programs, U.S. Department of Justice. The telephone number is (888) 744-6513 and the email address is AskPSOB@usdoj.gov. Please note that the PSOB Customer Resource Center is available to take calls Monday through Friday from 8:00 AM until 4:30 PM ET. PSOB death claims can be filed online at: https://www.psob.bja.ojp.gov/benefits/.