U.S. Fire Administration

Firefighter Fatalities in the United States in 2014

August 2015

FEMA

U.S. Fire Administration

Mission Statement

We provide National leadership to foster a solid foundation for our fire and emergency services stakeholders in prevention, preparedness, and response.

FEMA

Firefighter Fatalities in the United States in 2014

Prepared by

U.S. Department of Homeland Security
Federal Emergency Management Agency
U.S. Fire Administration
National Fire Data Center

and

The National Fallen Firefighters Foundation
www.firehero.org

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Acknowledgments

This study of firefighter fatalities would not have been possible without the cooperation and assistance of many members of the fire service across the United States. Members of individual fire departments; chief fire officers; wildland fire service organizations such as the U.S. Forest Service, the National Park Service, the Bureau of Land Management, the Bureau of Indian Affairs, the U.S. Fish and Wildlife Service; as well as the U.S. Department of Justice, the National Fire Protection Association, and many others contributed important information to this report.

The National Fallen Firefighters Foundation (NFFF) was responsible for compilation of a large portion of the information used in this report. Their cooperation and work toward reducing firefighter deaths is gratefully acknowledged.

The ultimate objective of this effort is to reduce the number of firefighter deaths through an increased awareness and understanding of their causes and how they can be prevented. Firefighting, rescue and other types of emergency operations are essential activities in an inherently dangerous profession, and unfortunate tragedies do occur. These are the risks that all firefighters accept every time they respond to an emergency incident. However, the risks can be greatly reduced through efforts to improve training, emergency scene operations, and firefighter health and safety.

Background

For 38 years, the U.S. Fire Administration (USFA) has tracked the number of firefighter fatalities and conducted an annual analysis. Through the collection of information on the causes of firefighter deaths, USFA is able to focus on specific problems and direct efforts toward finding solutions to reduce the number of firefighter fatalities in the future. This information is also used to measure the effectiveness of current programs directed toward firefighter health and safety.

Several programs have been funded by USFA in response to this annual report. For example, USFA has sponsored significant work in the areas of general emergency vehicle operations safety, fire department tanker/tender operations safety, firefighter incident scene rehabilitation, and roadside incident safety. The data developed for this report are also widely used in other firefighter fatality prevention efforts.

In addition to the analysis, USFA, working in partnership with the NFFF, develops a list of all on-duty firefighter fatalities and associated documentation each year. If certain criteria are met, the fallen firefighter's next of kin, as well as members of the individual's fire department, are invited to the annual National Fallen Firefighters Memorial Service. The service is held at the National Emergency Training Center (NETC) in Emmitsburg, Maryland, during Fire Prevention Week in October of each year. The 2015 Memorial Weekend will be held Oct. 3-4, 2015. Additional information regarding the memorial service can be found at http://www.firehero.org or by calling NFFF at 301-447-1365.

Other resources and information regarding firefighter fatalities, including current fatality notices, the National Fallen Firefighters Memorial database, and links to the Public Safety Officer Benefits (PSOB) program, can be found at http://apps.usfa.fema.gov/firefighter-fatalities/.

Introduction

This report continues a series of annual studies by USFA of on-duty firefighter fatalities in the U.S.

The specific objective of this study is to identify all on-duty firefighter fatalities that occurred in the U.S. and its protectorates in 2014 and to analyze the circumstances surrounding each occurrence. The study is intended to help identify approaches that could reduce the number of firefighter deaths in future years.

Who is a Firefighter?

For the purpose of this study, the term "firefighter" covers all members of organized fire departments with assigned fire suppression duties in all 50 states; the District of Columbia; and the territories of Puerto Rico, the Virgin Islands, American Samoa, the commonwealth of the Northern Mariana Islands, and Guam. It includes career and volunteer firefighters; full-time public safety officers acting as firefighters; fire police; state, territory and federal government fire service personnel, including wildland firefighters; and privately employed firefighters, including employees of contract fire departments and trained members of industrial fire brigades, whether full or part time. It also includes contract personnel working as firefighters or assigned to work in direct support of fire service organizations (i.e., air-tanker crews).

Under this definition, the study includes not only local and municipal firefighters but also seasonal and full-time employees of the U.S. Forest Service (USFS), the National Park Service, the Bureau of Land Management, the Bureau of Indian Affairs, the U.S. Fish and Wildlife Service, and state wildland agencies. The definition also includes prison inmates serving on firefighting crews; firefighters employed by other governmental agencies, such as the U.S. Department of Energy; military personnel performing assigned fire suppression activities; and civilian firefighters working at military installations.

What Constitutes an On-Duty Fatality?

An on-duty fatality includes any injury or illness sustained while on-duty that proves fatal. The term "on-duty" refers to being involved in operations at the scene of an emergency, whether it is a fire or nonfire incident; responding to or returning from an incident; performing other officially assigned duties such as training, maintenance, public education, inspection, investigations, court testimony or fundraising; and being on call, under orders, or on standby duty except at the individual's home or place of business. An individual who experiences a heart attack or other fatal injury at home while he or she prepares to respond to an emergency is considered on-duty when the response begins. A firefighter who becomes ill while performing fire department duties and suffers a heart attack shortly after arriving home or at another location may be considered on-duty since the inception of the heart attack occurred while the firefighter was on-duty.

On Dec. 15, 2003, the president of the U.S. signed into law the Hometown Heroes Survivors Benefit Act of 2003. After being signed by the president, the act became Public Law 108-182. The law presumes that a heart attack or stroke is in the line of duty if the firefighter was engaged in nonroutine stressful or strenuous physical activity while on-duty and the firefighter becomes ill while on-duty or within 24 hours after engaging in such activity. The full text of the law is available at http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=108_cong_public_laws&docid=f:publ182.108.pdf.

The inclusion criteria for this study have been affected by this change in the law. Previous to Dec. 15, 2003, firefighters who became ill as the result of a heart attack or stroke after going off-duty needed to register a complaint of not feeling well while still on-duty in order to be included in this study. For firefighter fatalities after Dec. 15, 2003, firefighters will be included in this report if they became ill as the result of a heart attack or stroke within 24 hours of a training activity or emergency response. Firefighters who became ill after going off-duty where the activities while on-duty were limited to tasks that did not involve physical or mental stress will not be included.

A fatality may be caused directly by an accidental or intentional injury in either emergency or nonemergency circumstances, or it may be attributed to an occupationally related fatal illness. A common example of a fatal illness incurred on-duty is a heart attack. Fatalities attributed to occupational illnesses also include a communicable disease contracted while on-duty that proved fatal when the disease could be attributed to a documented occupational exposure.

Firefighter fatalities are included in this report even when death is considerably delayed after the original incident. When the incident and the death occur in different years, the analysis counts the fatality as having occurred in the year in which the incident took place.

There is no established mechanism for identifying fatalities that result from illnesses such as cancer that develop over long periods of time and which may be related to occupational exposure to hazardous materials or toxic products of combustion. It has proved to be very difficult to provide a complete evaluation of an occupational illness as a causal factor in firefighter deaths due to the following limitations: the exposure of firefighters to toxic hazards is not sufficiently tracked; the often delayed long-term effects of such toxic hazard exposures; and the exposures firefighters may receive while off-duty.

Sources of Initial Notification

As an integral part of its ongoing program to collect and analyze fire data, USFA solicits information on firefighter fatalities directly from the fire service and from a wide range of other sources. These sources include the PSOB program administered by the U.S. Department of Justice (DOJ), the National Institute for Occupational Safety and Health (NIOSH), the Occupational Safety and Health Administration, the U.S. Department of Defense, the National Interagency Fire Center, and other federal agencies.

USFA receives notification of some deaths directly from fire departments, as well as from such fire service organizations as the International Association of Fire Chiefs, the International Association of Fire Fighters, the National Fire Protection Association (NFPA), the National Volunteer Fire Council, state fire marshals, state fire training organizations, other state and local organizations, fire service Internet sites, news services, and fire service publications.

Procedure for Including a Fatality in the Study

In most cases, after notification of a fatal incident, initial telephone contact is made with local authorities by USFA to verify the incident, its location, jurisdiction, and the fire department or agency involved. Further information about the deceased firefighter and the incident may be obtained from the chief of the fire department, designee over the phone, or by other forms of data collection. After basic information is collected, a notice of the firefighter fatality is posted at the National Fallen Firefighters Memorial site in Emmitsburg, Maryland, and the USFA website, and a notice of the fatality is transmitted by email to a large list of fire service organizations and fire service members.

Information that is routinely requested from fire departments that have experienced a fatality includes National Fire Incident Reporting System (NFIRS)-1 (incident) and NFIRS-3 (fire service casualty) reports; the fire department's own incident and internal investigation reports; copies of death certificates and autopsy results; special investigative reports; law enforcement reports; photographs and diagrams; and newspaper or media accounts of the incident. Information on the incident may also be gathered from NFPA or NIOSH reports.

After obtaining this information, a determination is made as to whether the death qualifies as an on-duty firefighter fatality according to the previously described criteria. With the exception of firefighter deaths after Dec. 15, 2003, the same criteria were used for this study as in previous annual studies. Additional information may be requested by USFA, either through follow-up with the fire department directly, from state vital records offices, or other agencies. The final determination as to whether a fatality qualifies as an on-duty death for inclusion in this statistical analysis is made by USFA. The NFFF criteria as a line-of-duty death (LODD) for inclusion in the annual National Fallen Firefighters Memorial Service is made by the NFFF.

2014 Findings

Ninety-one firefighters died while on-duty in 2014, 16 fewer firefighters than the previous year's total. The 2014 total includes 24 firefighters who died under circumstances that were part of inclusion criteria changes resulting from the Hometown Heroes Survivors Benefit Act, the highest total in any year since the act was signed into law. When not including these fatalities for the purposes of a trend analysis, there were 67 non-Hometown Hero firefighter fatalities in 2014, the second lowest annual total since 1977 when USFA began this study.

An analysis of multiyear firefighter fatality trends needs to acknowledge the changes from the December 2003 Hometown Heroes Survivors Benefit Act. Some graphs and charts in this report may not indicate the Hometown Heroes portion of the total. However, this does not diminish the sacrifices made by any firefighter who dies while on-duty or the sacrifices made by his or her family and peers.

In the same light, when conducting multiyear comparisons of firefighter fatalities in this report, the losses that were the result of the attacks on the World Trade Center in New York City on Sept. 11, 2001, are sometimes also set apart for illustrative purposes. This action is by no means a minimization of the supreme sacrifice made by these firefighters.

Figure 1. On-Duty Firefighter Fatalities (1977-2014)

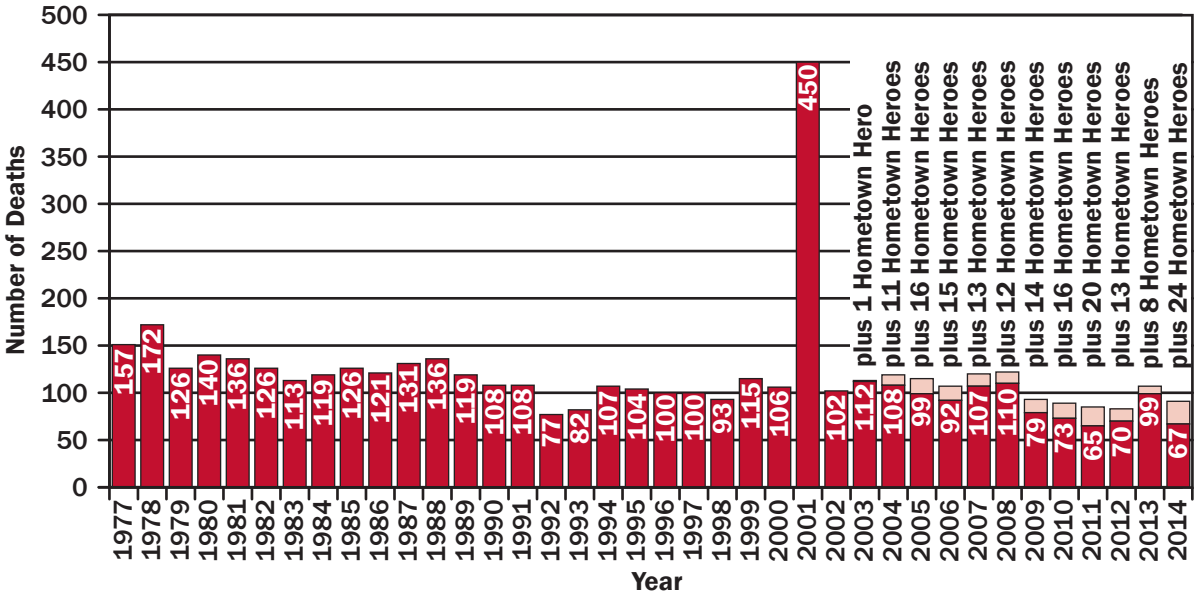
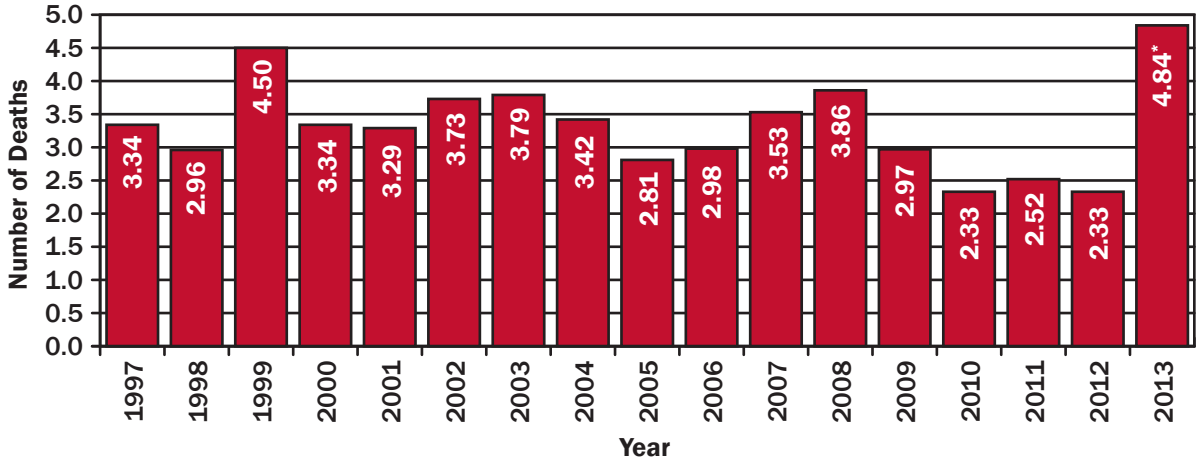


Figure 2. Firefighter Fatalities per 100,000 Fires

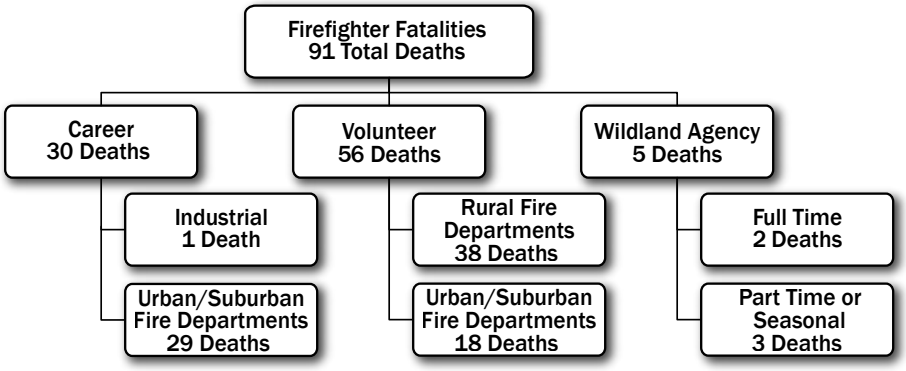


*2014 ratio will be included in the 2015 report.

Career, Volunteer and Wildland Agency Deaths

In 2014, firefighter fatalities included 30 career firefighters, 56 volunteer firefighters, and five part-time or full-time members of wildland or wildland contract fire agencies (Figure 3).

Figure 3. Career, Volunteer and Wildland Agency Deaths (2014)



Gender

Of the 91 firefighters who died while on-duty in 2014, 89 were male and two were female.

Multiple Firefighter Fatality Incidents

The 91 deaths in 2014 resulted from a total of 89 fatal incidents including two multiple firefighter fatality incidents (the fewest in 25 years), taking respectively the lives of two firefighters each.

Table 1. Multiple Firefighter Fatality Incidents

Year	Number of Incidents	Total Number of Deaths
2014	2	4
2013	4	34
2012	4	10
2011	3	6
2010	4	8
2009	6	13
2008	5	18
2007	7	21
2006	6	17
2005	4	10

Wildland Firefighting Deaths

In 2014, 11 firefighters were killed during activities involving brush, grass or wildland firefighting. This total includes part-time and seasonal wildland firefighters, full-time wildland firefighters, and municipal or volunteer firefighters whose deaths are related to a wildland fire (Figure 4).

Figure 4. Firefighter Fatalities Related to Wildland Firefighting (2005-2014)

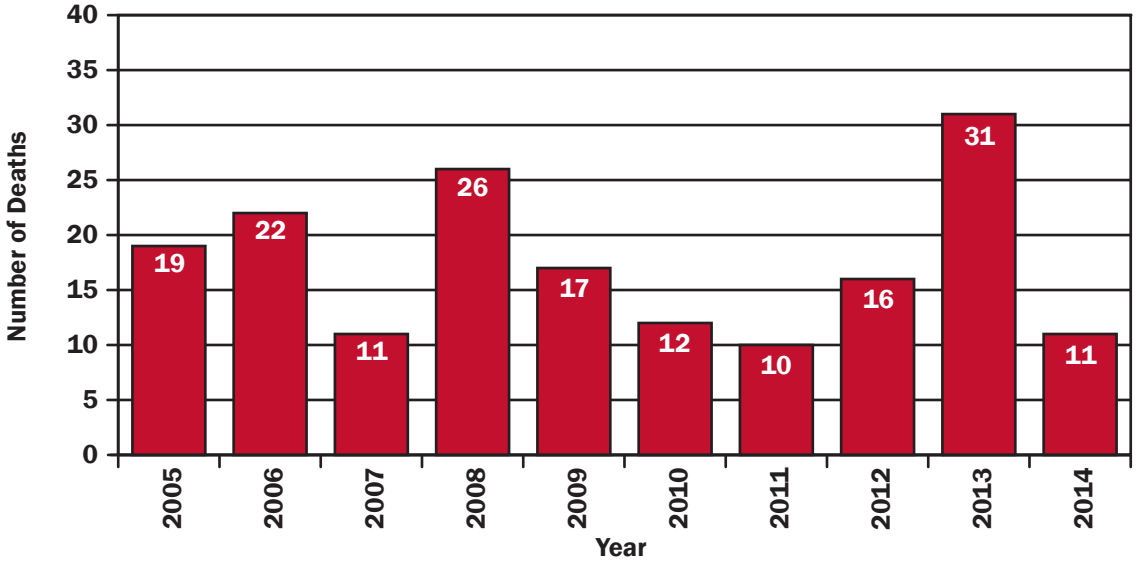


Table 2. Firefighter Deaths Associated With Wildland Firefighting

Year	Total Number of Deaths	Number of Fatal Incidents	Number of Firefighters Killed in Multiple-Death Incidents
2014	11	11	0
2013	31	13	19
2012	16	12	6
2011	10	9	2
2010	12	12	0
2009	17	14	5
2008	26	15	14
2007	11	11	0
2006	22	13	13
2005	19	15	6

Table 3. Wildland Firefighting Aircraft Deaths

Year	Total Number of Deaths	Number of Fatal Incidents
2014	2	2
2013	0	0
2012	6	2
2011	0	0
2010	0	0
2009	5	3
2008	16	4
2007	1	1
2006	8	3
2005	6	2

In 2014, there were two firefighter fatality incidents from aircraft crashes related to wildland firefighting, taking the lives of two firefighter pilots.

Type Of Duty

Activities related to emergency incidents resulted in the deaths of 42 firefighters in 2014 (Figure 5). This includes all firefighters who died responding to an emergency or at an emergency scene, returning from an emergency incident, and during other emergency-related activities. Nonemergency activities accounted for 49 fatalities. Nonemergency duties include training, administrative activities, performing other functions that are not related to an emergency incident, and post-incident fatalities where the firefighter does not experience the illness or injury during the emergency.

A multiyear historical perspective relating to the percentage of firefighter deaths that occurred during emergency duty is presented in Table 4.

Figure 5. Firefighter Deaths by Type of Duty (2014)

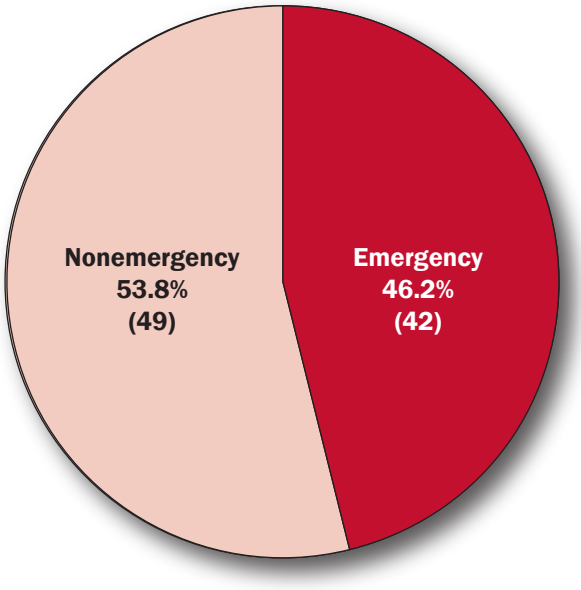


Table 4. Emergency Duty Firefighter Deaths

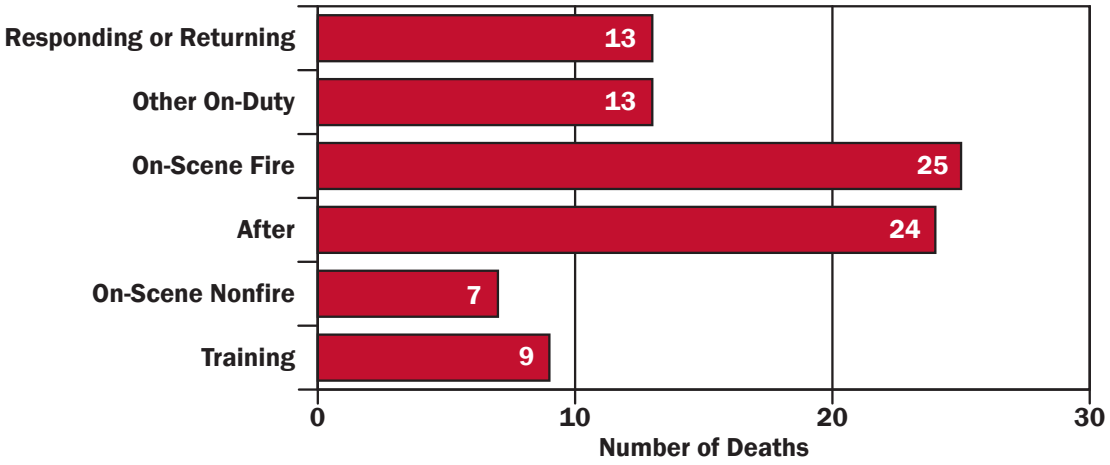
Year	Percentage of All Deaths	Percentage of All Deaths Excluding Hometown Heroes
2014	46.2	62.7
2013	72.6	77.0
2012	55.6	65.2
2011	54.2	70.3
2010	55.2	66.7
2009	63.3	82.2
2008	63.5	70.0
2007	64.4	72.4
2006	57.5	66.3
2005	52.1	60.6

The number of deaths by type of duty being performed in 2014 is shown in Table 5 and presented graphically in Figure 6. As has been the case for most years, fireground duties are the most common type of duty for firefighters killed while on-duty.

Table 5. Firefighter Deaths by Type of Duty (2014)

Type of Duty	Number of Deaths
Responding or returning	13
Other on-duty	13
On-scene fire	25
After	24
On-scene nonfire	7
Training	9
Total	**91**

Figure 6. Firefighter Deaths by Type of Duty (2014)



Fireground Operations

Twenty-five firefighters were killed during fireground operations in 2014. This represents fewer than half the fireground losses of firefighters from the previous year (55). When not including the losses from Sept. 11, 2001, the 2014 fireground losses were also well below the average loss per year since 1990 of 37, and for the past decade of 31 per year. Of the 25 firefighters killed during fireground operations in 2014, 20 were at the scene of a structure fire, one was at the scene of a vehicle fire, and four others were at the scene of a wildland or outside fire. The average age of the firefighters killed during fireground operations was 48, the youngest was 21, and the oldest was 77 years old. Eleven of the deaths were from volunteer fire departments, 12 were career/industrial, and two were wildland (or wildland-related).

Type of Fireground Activity

Table 6 shows the types of fireground activities in which firefighters were engaged at the time that they sustained their fatal injuries or illnesses. This total includes all firefighting duties, such as wildland firefighting and structural firefighting.

Table 6. Type of Activity (2014)

Support	2
Advance Hoselines	15
Ventilation	1
Incident Command	1
Search & Rescue	2
Other	1
Unknown	1
Scene Safety	1
Standby	1

Fixed Property Use for Structural Firefighting Deaths

There were 20 fatalities in 2014 where firefighters became ill or injured while on the scene of a structure fire. Table 7 shows the distribution of these deaths by fixed property use.

Table 7. Structural Firefighting Deaths by Fixed Property Use (2014)

Residential	16
Commercial	4

Responding/Returning

In 2014, 13 firefighters, all volunteers, died or experienced onset of symptoms while responding to or returning from 13 emergency incidents. Eight of the firefighters died while responding to incidents, and five died while returning from an incident.

2014 was the first year since at least 1990 where no firefighters were killed from trauma caused by a vehicle crash while responding to an incident in a privately owned vehicle (POV).

Responding

Three of the eight firefighters killed while responding to an incident died from heart attacks:

- One firefighter suffered a heart attack while responding to an emergency in a fire department vehicle.
- One firefighter was responding to a hay bale fire incident in his POV when he suffered a heart attack and became unconscious. The vehicle left the right side of the roadway, went through a ditch, and collided with a brick barrier and trees. The firefighter was transported to the hospital but succumbed to his injuries three days later.
- One firefighter suffered a heart attack as she and members of her fire department were preparing to respond to a residential structure fire.

Five firefighters died from trauma caused by a vehicle crash while responding to an incident. Of the five deaths, the status of seat belt usage is known in three cases. Two firefighters were wearing proper seat restraints and the third, where the firefighter was fully ejected from the vehicle, was not. All five vehicle crashes involved fire department vehicles.

- One firefighter was responding to a motor vehicle crash in his fire department pickup. He lost control in icy conditions and crashed. Although he was conscious and alert following the crash, he developed medical complications from injuries received in the crash and, after being placed in a medically induced coma, passed away.
- One firefighter was driving a tanker (tender) to a wildland fire. He was involved in a collision with a brush truck responding to the same incident. The tanker rolled on its side as a result of the crash, and the firefighter had to be extricated. He was transported to the hospital and then to a regional care facility specializing in traumatic brain injuries but succumbed to his injuries.
- One firefighter was driving the department's 2,500-gallon tanker (tender) to a fire alarm incident. The apparatus left the roadway to the right and went into a ditch. The apparatus struck a culvert and rolled over. The firefighter, who was wearing a seat belt, was killed in the crash.
- One firefighter was responding in a command vehicle to a report of a fully involved residence. During the response, the firefighter passed traffic on the left. The wheels of his vehicle left the roadway and struck a driveway or culvert. The command vehicle rolled several times, and the firefighter was ejected. He was pronounced dead at the scene.
- One firefighter was driving a 2,000-gallon fire department tanker (tender) in a nonemergency mode to a structure fire incident. The tanker entered a sharp curve and crossed the center line of the roadway into oncoming traffic. The firefighter attempted to correct by steering, but the back end of the tanker came around. The tanker struck or was struck by an oncoming fully loaded log truck. The firefighter and the driver of the log truck were both killed in the crash. A passenger in the log truck received serious injuries. All three vehicle occupants required extrication. The speed at which the tanker was being operated was cited as a factor in the law enforcement report.

Returning

Four of five firefighters killed while returning from an incident suffered fatal heart attacks, and one died from trauma resulting from a motor vehicle crash.

- One firefighter and the members of his fire department responded to an automatic fire alarm in a building. A fire watch was ordered and was in effect for 16 hours. The firefighter participated in the fire watch until it was concluded. As he drove home, the firefighter suffered a heart attack. He was discovered by police, treated, and transported to the hospital, but he could not be revived.
- One firefighter, along with members of his fire company, responded to a report of a gas leak at a multiple-family dwelling. Firefighters found the gas leak at a meter, and the subject firefighter used tools to shut off the flow of gas. When firefighters returned to the fire station and the incident was concluded, the subject firefighter told others that he was not feeling well and that he planned to go home and rest. Soon thereafter, Emergency Medical Services (EMS) and law enforcement officers were sent to the firefighter's home on the report of a man not breathing. The firefighter had suffered a heart attack. He was transported to the hospital but did not recover.
- One firefighter was the driver of a 1999 Freightliner firetruck returning from a structure fire response. As the vehicle entered a curve, the wheels drifted off to the right. The firefighter overcorrected, and the vehicle crossed the center line and entered a ditch. The apparatus rolled over and ejected the firefighter, who was not wearing a seat belt. The firefighter was crushed by the apparatus as it rolled on top of him, and due to the resulting injuries, he was pronounced dead at the scene.
- One firefighter responded to a medical emergency incident with members of his fire department in the early morning hours. Upon completion of the run, the firefighter complained to fellow firefighters of not feeling well, with some pain in one of his shoulders, and then left the station for home. A short time later, the firefighter suffered a heart attack and was transported to a local hospital where he succumbed to his injury. The cause of death was a heart attack.
- One firefighter responded to an EMS incident with other members of his department. He stood by on the scene and drove the department's rescue truck. As they returned to the station at the conclusion of the incident, the firefighter told others that he was not feeling well. The incident concluded, and the firefighter left the fire station for home. When the subject firefighter failed to show up at another firefighter's home later in the day, the firefighter went to the subject firefighter's house to check on him. The firefighter discovered the subject firefighter dead in his house. He had been dead for some time, so there was no chance for resuscitation. The medical examiner concluded that the firefighter's death was from a heart attack that had started earlier in the day.

Table 8. Firefighter Deaths While Responding to or Returning From an Incident

Year	Number of Firefighter Deaths
2014	13
2013	14
2012	17
2011	11
2010	16
2009	15
2008	24
2007	26
2006	15
2005	22

Training

In 2014, nine firefighters died while engaged in training activities. All nine firefighters died from heart attacks.

- One firefighter and the members of his fire department participated in pump operations training, and during the session, the subject firefighter complained of shoulder pain and feeling uncomfortable. The next day, the firefighter called 911 and requested an ambulance. Initially, he was conscious and able to walk to the ambulance under his own power, but his condition rapidly deteriorated. He went into cardiac arrest in the ambulance and could not be revived.

- One firefighter was participating in "rules of air management" training. After an hour of classroom instruction, firefighters donned full structural protective clothing and self-contained breathing apparatus (SCBA). The subject firefighter carried a 50-foot section of rolled 2 1/2-inch hose and climbed the stairs of a training tower to the fifth floor. He descended the stairs and climbed back to the fifth floor of the tower. As he descended a second time, he paused and allowed other firefighters to pass him. The firefighter then exited the tower, walked a short distance, and collapsed. His collapse was witnessed by another firefighter, and treatment immediately began. The injured firefighter was then transported to a nearby hospital, but despite the efforts of other responders and hospital staff, he died from a heart attack.

- At 0730 hours, one firefighter arrived at his fire station to participate in the mandated USFS Arduous Duty Work Capacity Test (WCT), also known as the "Pack Test." Seven other firefighters were also scheduled to take the test at the same time. Successful completion of the Pack Test is required to be eligible to work at state and federal wildland fires. While at the station, the firefighter retrieved equipment necessary for the test, including weighted vests and cases of bottled water. The firefighter and his crew departed the fire station for a local high school track where the test was being administered. Once at the high school, participants were briefed on the components and requirements of the test, drank water, donned weighted vests, and stretched. The training officer began the test at approximately 0800 hours. According to crew members, the subject firefighter had completed approximately six laps (1.5 miles) without obvious difficulty. At 0823 hours, as he began his seventh lap, the firefighter stumbled, appeared dizzy, and collapsed. A crew member caught the firefighter and assisted him to the ground where he was found to be unconscious. Crew members initially thought he might be suffering the effects of heat exhaustion, so they quickly removed his weighted vest, placed him on his back, and elevated his feet. The firefighter was found to be unresponsive and not breathing. CPR was initiated while other firefighters retrieved medical equipment from on-site fire apparatus. Simultaneously, an additional advanced life support engine company and ambulance were requested to respond to the scene. The injured firefighter was placed in the ambulance and transported to a regional hospital. Resuscitation efforts continued on the way to the emergency department, but the firefighter was pronounced dead by the attending physician at 0917 hours.

- One firefighter passed away from a reported heart attack while participating in a WCT for red card certification. The firefighter was transported to the hospital but did not survive.

- One firefighter went into cardiac arrest during an SCBA maze training exercise at a county fire rescue academy. The firefighter was cared for by fellow firefighters and transported to a regional medical center where he was pronounced dead.

- One firefighter was participating in (unspecified) wildland firefighting training when he suffered a heart attack. He was treated at the scene and transported to the hospital but did not recover.

- One firefighter responded as part of an ambulance crew to a medical emergency as a result of a motor vehicle crash. Later in the day, while taking his emergency medical technician (EMT) recertification exam, he became ill and was transported by ambulance to a medical center where he underwent an emergency heart catheterization. At a later date, the firefighter underwent another heart procedure and was then flown to a regional hospital for further heart surgeries. The firefighter remained hospitalized until his death several days later.

- One firefighter was on-duty and completed his annual physical demand screening. The screening included the performance of 10 work-related tasks. As he drove back to the fire station, the firefighter felt ill and called 911. The firefighter told the 911 operator that he did not need assistance. A short time after he completed the discussion with the 911 operator, the subject firefighter received a call from another firefighter. No further calls were answered or placed by the firefighter. When he did not report to the station or home, his family used a telephone application to locate his phone. Family members found him deceased in his vehicle at an abandoned gasoline station. The cause of death was listed as a heart attack.
- One firefighter reported to the fire station for regular weekly training. The start of training was delayed, and the subject firefighter told others that he did not feel well and wanted to go home. He refused a medical evaluation, and firefighters dropped him off at home. A short time later, the firefighter suffered a fatal heart attack.

Table 9. Firefighter Fatalities While Engaged in Training

Year	Number of Firefighter Deaths
2014	9
2013	7
2012	8
2011	8
2010	12
2009	10
2008	12
2007	11
2006	9
2005	14

Nonfire Emergencies

In 2014, nine firefighters were killed where the type of emergency duty was not related to a fire. The response calls included three motor vehicle accidents, one EMS call, three technical rescue calls, one weather-related incident, and one search for a missing person incident.

- A maintenance crew was working on a 343-foot tall radio tower, removing and replacing structural members. A collapse occurred, killing two maintenance workers and injuring two others. The collapse also damaged and partially collapsed a second radio tower. Both injured workers were unable to extricate themselves from the hazard area. Subject firefighter and members of his fire department were dispatched to the scene based on a request from the Incident Commander (IC) for mutual-aid resources. Due to road conditions, the firefighter and his crew staged at the base of a hill upon their arrival. The firefighter, along with other responders, rode a brush truck to the top of the hill and the incident scene. The subject firefighter and three other firefighters were called to assist with the removal of one of the injured workers from the collapse zone. As firefighters assisted with dragging the injured worker, the second tower began to collapse. The subject firefighter attempted to run to safety but was struck by the second tower. He was immediately removed from the scene and transported by ambulance to the hospital where he was pronounced dead. His death was caused by blunt trauma.
- One firefighter was responding to a motor vehicle crash in his fire department pickup. He lost control in icy conditions and crashed. Although he was conscious and alert following the crash, he developed medical complications from injuries received in the crash and, after being placed in a medically induced coma, passed away.

- One firefighter suffered a heart attack while responding to an emergency. He was transported to a local hospital but died as a result of his illness.
- One firefighter suffered a cerebrovascular accident (CVA) while on the scene of an EMS incident with his fire department. He was transported to the hospital but died, as a result of the stroke, the next day.
- One firefighter and his engine company were dispatched along with other responders to reports of vehicle crashes on a bridge. Road conditions were icy due to low temperatures and precipitation. Upon their arrival, the engine was staged approximately 150 feet short of the incident scene to block access to the scene. The officer of the engine company requested sand for the bridge and then requested that the roadway be shut down due to conditions. The officer communicated by radio with subject firefighter as he checked on the condition of drivers in other cars. Fire dispatch contacted the engine officer and asked if he could confirm accountability for his crew because the dispatch center had received a report of a firefighter falling from the bridge. A Personnel Accountability Report was conducted, and the subject firefighter could not be found. After a brief search, the subject firefighter was located on a flyover bridge below the original incident scene. A driver lost control on the bridge and had struck the firefighter, causing him to fall 56 feet to a lower bridge where he sustained fatal injuries.
- One firefighter and his Snozzle company were dispatched along with other fire departments and law enforcement units to the report of a building collapse in a residential building on a local college campus. When they arrived on the scene, firefighters did not see any signs of a collapse and began to search the incident building and nearby buildings. As the subject firefighter walked along an elevated exterior walkway attached to the incident building, a structural failure occurred, and the walkway collapsed. The firefighter fell to the ground and was crushed by debris from the collapse. After about 11 minutes of effort by firefighters using airbags and cribbing, the trapped firefighter was extricated from the debris. He was transported to a hospital but died of compression asphyxia.
- One firefighter was assisting other responders and law enforcement officials in a search for a missing woman. He was searching a narrow area between two railroad tracks under a bridge. A train passed the firefighter on one set of tracks and another train approached from the opposite direction, striking the firefighter from behind and killing him. A railroad representative said that the railroad had not been informed that the search was underway.
- One firefighter received reports of localized flooding caused by a blocked culvert. He drove a fire department tanker (tender) to the scene and was using a hoseline to clear the culvert when he suddenly collapsed. The firefighter suffered a fatal heart attack.
- One firefighter participated in the rescue of a hiker who had broken an ankle on a trail. The hiker was carried to a landing zone and evacuated by helicopter. As the subject firefighter walked to the trailhead after the rescue was completed, he collapsed due to a heart attack. Rescuers treated the firefighter, and he was transported to the hospital but did not survive the heart attack.

After the Incident

In 2014, 24 firefighters died after the conclusion of their on-duty activities. All 24 were classified as Hometown Heroes where no symptom or complaint of illness became evident or was reported during duty. Twenty-two of the deaths were due to heart attacks, one was from an aortic dissection, and one was from a CVA.

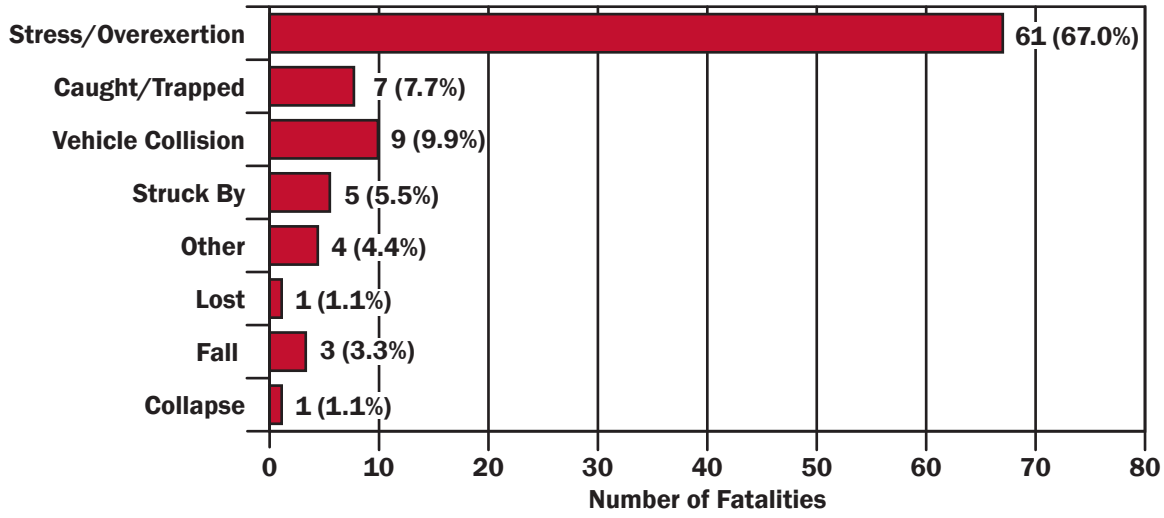
Cause of Fatal Injury

The term "cause of injury" refers to the action, lack of action, or circumstances that directly resulted in the fatal injury. The term "nature of injury" refers to the medical cause of the fatal injury or illness, which is often referred to as the physiological cause of death. A fatal injury is usually the result of a chain of events, the first of which is recorded as the cause.

Figure 7 shows the distribution of deaths by cause of fatal injury or illness in 2014.

Neither drugs nor alcohol were reported to have been a contributing factor to any on-duty firefighter fatalities in 2014.

Figure 7. Fatalities by Cause of Fatal Injury (2014)



Stress or Overexertion

Firefighting is extremely strenuous physical work, and it can be one of the more physically demanding of human activities.

Stress or overexertion is a general category that includes all firefighter deaths that are cardiac or cerebrovascular in nature, such as heart attacks, strokes, and other events such as extreme climatic thermal exposure. Classification of a firefighter fatality in this cause of fatal injury category does not necessarily indicate that a firefighter was in poor physical condition.

In 2014, 61 firefighters died as a result of stress or overexertion:

- Fifty-nine firefighters died due to heart attacks.
- Two firefighters died due to CVAs.

Table 10. Deaths Caused by Stress or Overexertion

Year	Number	Percent of Fatalities	Hometown Heroes
2014	61	67.0	22
2013	37	34.9	7
2012	45	55.5	13
2011	50	60.2	20
2010	55	63.2	16
2009	50	54.9	14
2008	54	45.0	12
2007	55	51.4	13
2006	55	53.9	15
2005	62	53.9	16

Vehicle Crashes

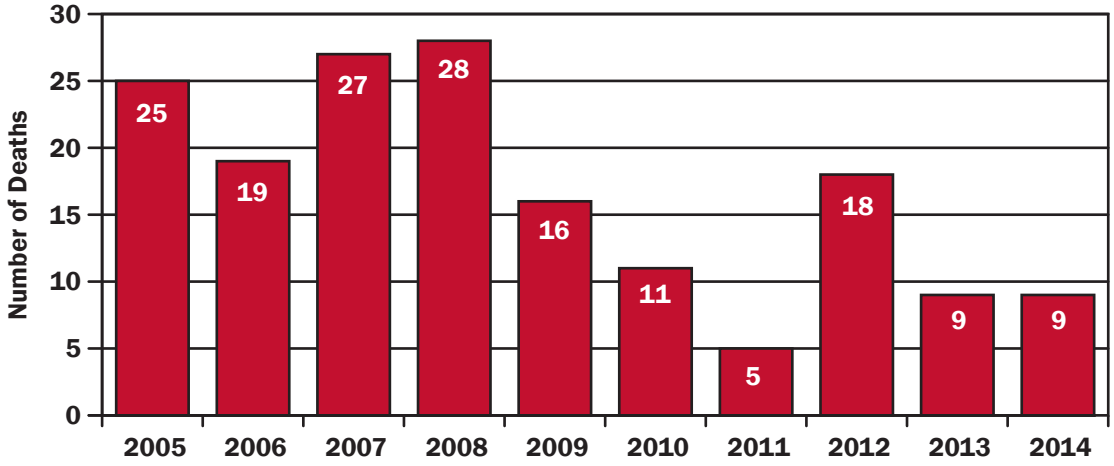
In 2014, nine firefighters died as the result of nine vehicle crashes. Two of the vehicle crashes in 2014 involved aircraft. Seven of the crashes involved fire department vehicles, three tankers (tenders), two command/staff support vehicles (one of which doubled as a police patrol sports utility vehicle), and two engines. None of the crashes involved POVs.

All seven of the nonaircraft vehicles involved in fatal collisions in 2014 were equipped with seat belts. Only two of the seven vehicle operators were known to be wearing them. At least two vehicle operators, who were fully ejected upon impact, were not wearing seat belts. The status of three vehicle operators was either unknown or not reported.

The following three vehicle crash incidents were not delineated in the previous Responding/Returning section of this report:

- One pilot was assigned to perform a fire detection flight as the sole occupant of a Cessna 210E aircraft. The flight departed at 1240 hours, and the pilot reported his progress to a dispatch center. At 1303 hours, the pilot reported that he was returning to base due to reduced visibility. There were no further radio transmissions from the plane. Approximately 20 minutes later, the dispatch center reported that the aircraft was overdue. Search efforts for the aircraft were hampered by bad weather over the next 11 days until the wreckage was discovered having impacted trees, killing the pilot, on a ridgeline at an elevation of 1,473 feet.
- One firefighter was driving a fire apparatus on a 2002 International chassis back from recent repairs at a maintenance facility. He was traveling at approximately 55 mph when the vehicle suffered a mechanical failure. The firefighter was unable to control the vehicle. A pickup truck approaching from the other direction attempted to swerve out of the path of the fire apparatus but was unsuccessful. The fuel tank on the firetruck was pierced, and fuel was released. Both the firetruck and the pickup caught fire. The crash resulted in six deaths, including five in the pickup. A recall was issued by Navistar Inc. for International 4800 trucks built between June 1999 and May 2002 that are equipped with Fabco TC-200 transfer cases.
- One pilot and his aircraft were assigned to the Dog Rock fire. The aircraft had completed one fire retardant drop and was in the process of making a second drop when it crashed, killing the pilot on impact.

Figure 8. Firefighter Fatalities in Vehicle Collisions (Including Aircraft)



Lost or Disoriented

One firefighter died in 2014 by becoming lost or disoriented inside of a burning structure. The firefighter and the members of his company were the first on-scene at a working fire in a vacant two-story residence. The firefighter advanced a handline into the structure and fought fire on the second floor. The Company Officer from the firefighter's engine told the IC that he had lost contact with the firefighter. When calls over the radio were not answered, a Rapid Intervention Team (RIT) was activated to search for the firefighter on the second floor. An engine crew gained access to the second floor through a balcony and reached the firefighter at the same time as the RIT. The firefighter was removed from the structure to the balcony. He was moved to the ground over ladder, treated at the scene, and transported. Despite all efforts, the firefighter was pronounced dead at the hospital. His death was caused by asphyxiation (smoke inhalation).

Caught or Trapped

Seven firefighters were killed in five separate incidents in 2014, two of which were incidents with respectively two firefighter fatalities each, when they became caught or trapped. This classification covers firefighters trapped in wildland and structural fires who were unable to escape due to rapid fire progression and the byproducts of smoke, heat, toxic gas and flame. This classification may also include firefighters who drowned and those who were trapped and crushed.

- Two firefighters were assigned as a part of a four-person crew on an engine, and along with other units, they were dispatched to a report of a structure fire in an apartment building. A responding command officer reported smoke showing during his response. The engine company was the first to arrive, and it reported smoke and fire showing from the second floor of the structure. The two subject firefighters were ordered to advance a handline and attack the fire. They gained access to the second floor over a ground ladder, entered the structure, and were reported applying water to the fire. Shortly thereafter, fire conditions dramatically changed. One of the subject firefighters called a mayday, and the officer of the engine crew also called a mayday. The IC ordered an evacuation of the structure. A RIT was activated to search for the missing firefighters. Both firefighters were found and transported to the hospital, but they died as the result of thermal burns and exposure to carbon monoxide. The cause of the fire was incendiary.

- Two firefighters, along with their engine company, were the first to arrive at a structure fire in a four-story residential occupancy. The subject firefighters advanced a hoseline through the front of the structure and down an interior stairway. Fire conditions worsened and burned through the hoseline. Fire progress trapped the two firefighters in the basement. One of the trapped firefighters called a mayday, but firefighters were not able to reach them in time. Both of the subject firefighters died of smoke inhalation. The fire was caused by welders working at the back of the structure. Fire conditions were exacerbated by a significant wind coming from the rear of the structure.

- One firefighter and members of his ladder company responded to a working fire on the 19th floor of a residential high-rise. The firefighter became trapped while searching a burning apartment and suffered multiple injuries, including burns. He was removed from the structure and transported to the hospital but did not survive.
- One firefighter was at home with his family. He was alerted to a fire in the home. He carried one of his children out and went back in to rescue his wife and another child, not knowing that they had escaped. He was unable to exit the structure and died as the result of asphyxiation.
- One firefighter and members of her fire department were dispatched to a fire in a residential occupancy. The firefighter and her crew were advancing a hoseline into the basement of the structure when fire conditions rapidly changed. The firefighter was trapped in the building. She was rescued by other firefighters but suffered fatal burns.

Collapse

One firefighter died in 2014 as a result of a structural collapse in one incident. The firefighter and members of his fire department responded to the scene of a working fire in a commercial storage building. As firefighters arrived on the scene and began operations, the incident presented water supply, equipment and communications technology issues. The subject firefighter was attempting to set up an unstaffed monitor inside of the building when, approximately 40 minutes after beginning operations, a collapse occurred, trapping him and another firefighter. A RIT was able to remove one of the firefighters but could not locate the subject firefighter. Additional collapses were occurring, so the decision was made to halt rescue attempts and control the fire. The body of the deceased firefighter was then recovered with the cause of death from multiple blunt trauma and burns.

Struck by Object

In five incidents, being struck by an object was the cause of five fatal firefighter injuries in 2014. Four of the five incidents were summarized in the previous Nonfire Emergencies section and included one firefighter who was struck by a 343-foot tall radio tower that collapsed; a driver who lost control on the bridge and struck a firefighter, causing him to fall 56 feet to a lower bridge where he sustained fatal injuries; a structural failure occurred and exterior walkway collapsed, causing a firefighter to fall to the ground and be crushed by debris from the collapse; while searching for a missing woman in a narrow area between two railroad tracks under a bridge, a train passed a firefighter on one set of tracks and another train approached from the opposite direction, striking the firefighter from behind and killing him.

Firefighters were working at the side of a highway, fighting a fire in a 15-passenger van. As the firefighters worked, an 18-wheeler truck passed into the scene and struck two firefighters, killing the subject firefighter. The truck then struck and damaged both of the department's fire apparatus (and left the scene). The injured firefighter in this incident is the mother of the deceased firefighter.

Fall

Three firefighters died in 2014 as the result of a fall.

- One firefighter was assigned to a wildland fire. During a break from firefighting duties, the firefighter experienced an accidental fall. When the firefighter did not appear for a roll call, other firefighters searched for him. He was found, deceased, lying over a log on his back. The firefighter had fallen in such a way that he broke his neck on impact.
- One firefighter was dispatched to a working structure fire in his role as an on-duty safety officer. He operated on the scene of the fire for some time. The fire was extinguished, and firefighters left the scene. The last apparatus departed at approximately 0220 hours. Beginning at 0643 hours, calls were received

reporting a fire department vehicle still parked at the scene of the earlier structure fire. After determining which vehicle was on-scene, a fire company was sent to investigate. At 0845 hours, the firefighter was found in the basement of an exposure building from the earlier fire. He was deceased. At autopsy, the level of carboxyhemoglobin in the firefighter's blood was 73.5 percent. The cause of death was listed as smoke inhalation.

- One firefighter succumbed to injuries sustained several days after being rescued from the basement of a burning residence. He was removed from the basement by fellow responders and transported to the hospital. The firefighter was reported to have been one of the first firefighters on the scene when he became separated from others and fell through the first floor of the home into the basement. He died as a result of his injuries several days later.

Other

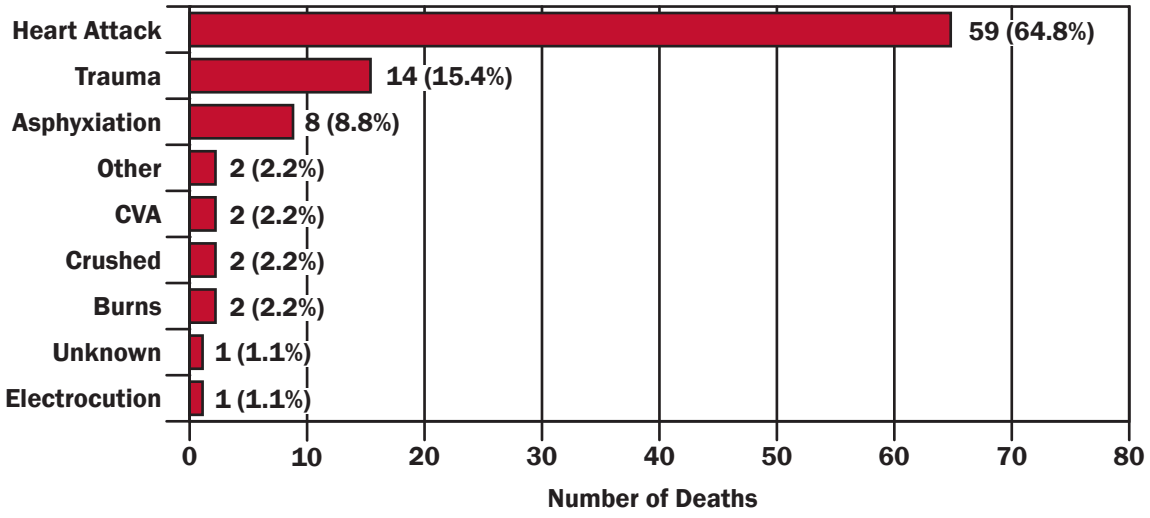
Four firefighters died in 2014 of a cause not previously categorized.

- Two firefighters were in the platform of a ladder truck participating in an ice bucket challenge event with a local marching band. Power from nearby electrical lines arced to the platform. One of the firefighters in the platform was killed, and the other was injured. Two other firefighters nearby were also injured.
- One firefighter suffered an aortic dissection approximately four hours after going off-duty from a shift that included several emergency response calls. The firefighter was treated and transported to a local hospital, then flown to a regional care facility for specialized care. He remained there until his death one week later.
- One firefighter began experiencing chest pains and difficulty breathing while at the scene of a working multifamily dwelling fire. He was transported by EMS to a local hospital for a suspected heart attack. The firefighter was admitted for possible pneumonia and died the following day. The cause of death was listed as acute respiratory failure following exposure to carbon monoxide at a fire scene.
- One firefighter was advancing a hoseline at a working fire in a residential occupancy. An incident occurred that resulted in fatal injuries to the firefighter. The nature and cause of those injuries remains under investigation.

Nature of Fatal Injury

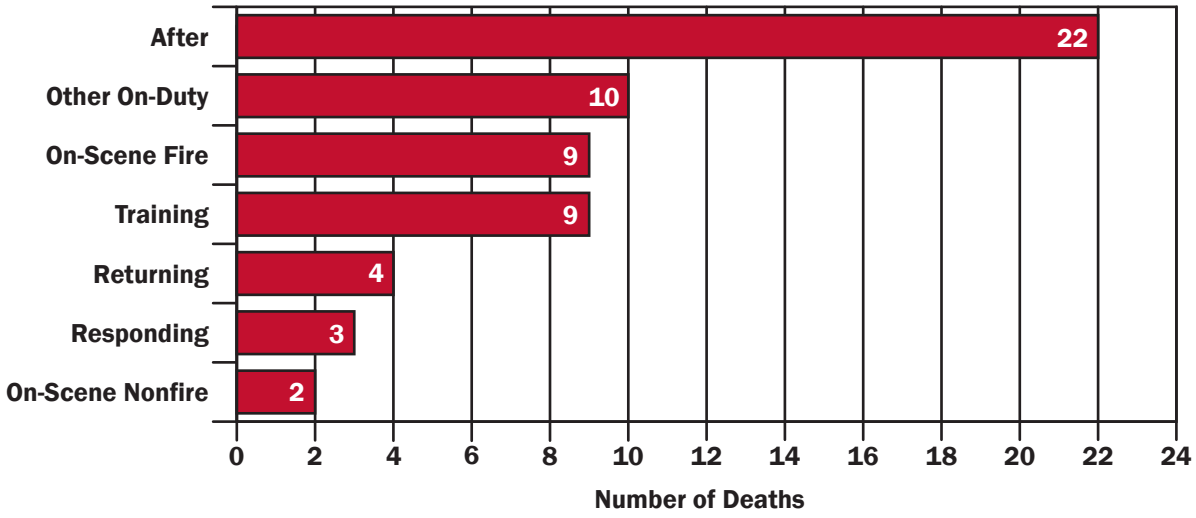
Figure 9 shows the distribution of the 91 firefighter deaths that occurred in 2014 by the medical nature of the fatal injury or illness. For heart attacks, Figure 10 shows the type of duty involved.

Figure 9. Fatalities by Nature of Fatal Injury (2014)



Heart attacks have been the medical nature of fatal illness or injury in 48 percent of all on-duty firefighter fatalities over the past 11 years (2004-2014) since passage of the Hometown Heroes Survivors Benefit Act. When not including those classified under the Hometown Heroes Survivors Benefit Act, heart attacks accounted for 40 percent of on-duty firefighter fatalities.

Figure 10. Heart Attacks by Type of Duty (2014)



Heart attacks after an incident: With 22 fatalities, the year 2014 had the highest total for such fatalities in the 11 full years since the December 2003 passage of the Hometown Heroes Survivors Benefit Act.

Firefighter Ages

Figure 11 shows the percentage distribution of firefighter deaths by age (at the time of injury) and nature of the fatal injury. Table 11 provides a count of firefighter fatalities by age and the nature of the fatal injury.

Younger firefighters were more likely to have died as a result of traumatic injuries, such as injuries from an apparatus accident or becoming caught or trapped during firefighting operations. Stress-related deaths are rare below the 31 to 35 years of age category and, when they occur, often include underlying medical conditions.

The youngest firefighter killed in 2014 was 21 years old. He died while deployed in the field on a wildland fire when, while on a break near camp, he accidently fell and broke his neck. The oldest firefighter was 84 years old and died from a heart attack. The onset of symptoms occurred shortly after he reported for training at the fire station.

Figure 11. Fatalities by Age and Nature (2014)

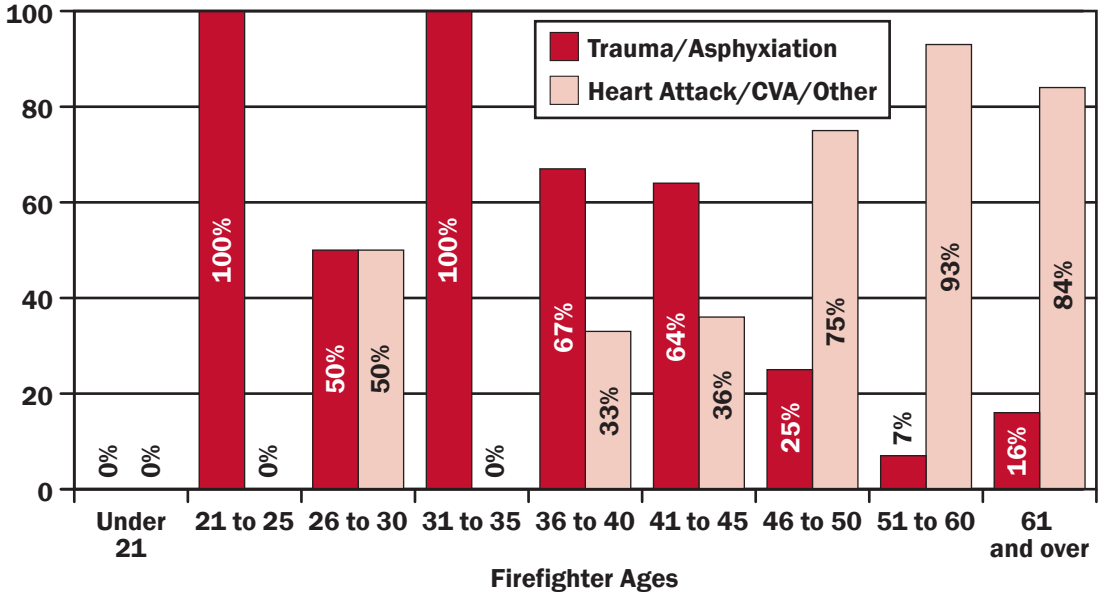


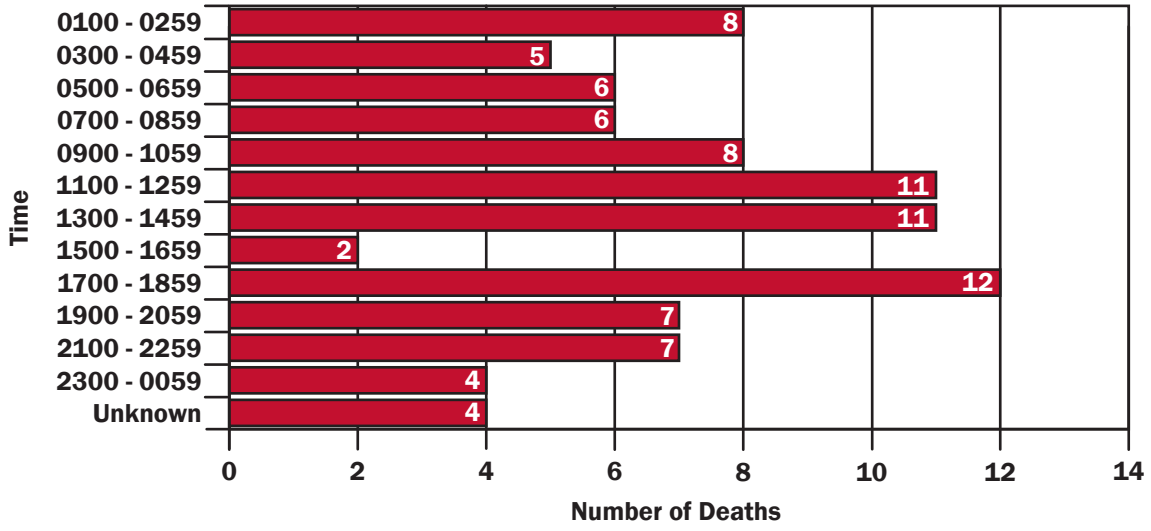
Table 11. Firefighter Ages and Nature of Fatal Injury (2014)

Age Range	Heart Attack/CVA/Other	Trauma/Asphyxiation
under 21	0	0
21 to 25	0	2
26 to 30	2	2
31 to 35	0	3
36 to 40	2	4
41 to 45	4	7
46 to 50	9	3
51 to 60	26	2
61 and over	21	4

Deaths by Time of Injury

For 2014, the distribution of firefighter deaths according to the time of day when the fatal injury occurred is illustrated in Figure 12. The time of fatal injury for four firefighters was either unknown or not reported.

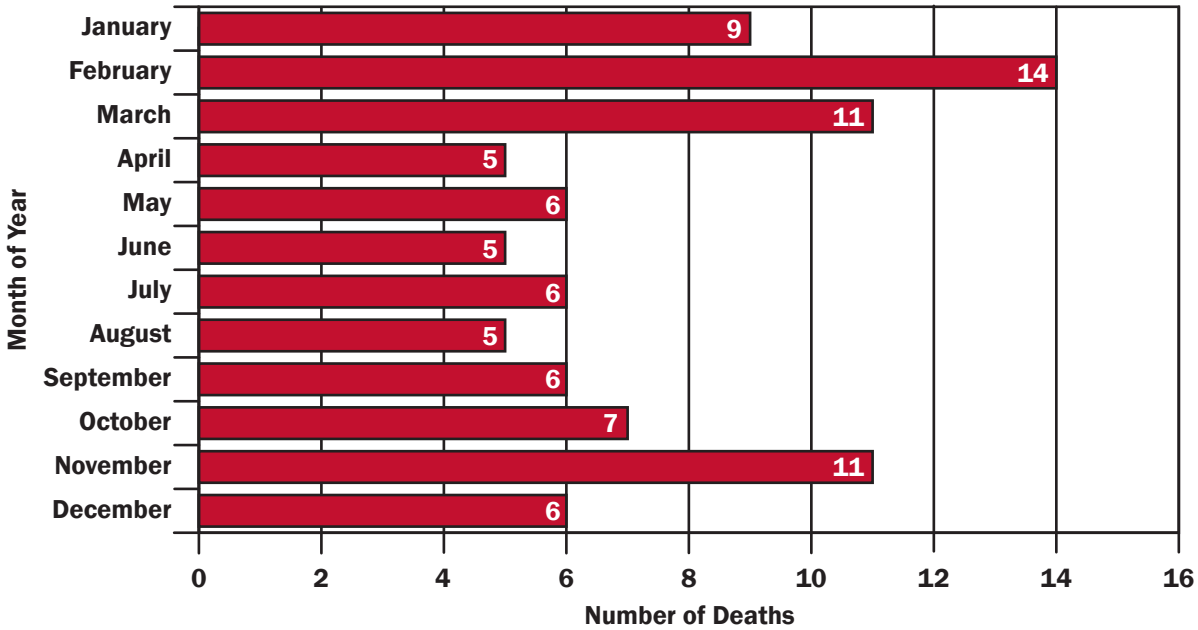
Figure 12. Fatalities by Time of Fatal Injury (2014)



Firefighter Fatality Incidents by Month of Year

Figure 13 illustrates the 2014 firefighter fatalities by month of the year.

Figure 13. Deaths by Month of Year (2014)



State and Region

The distribution of firefighter deaths in 2014 by state is shown in Table 12. Firefighters based in 33 states died in 2014.

The highest number of firefighter deaths based on the location of the fire service organization in 2014 occurred in New York, followed by neighboring New Jersey, with respectively 12 and eight firefighter fatalities each. Ohio, with six deaths, plus Pennsylvania and Arkansas with five firefighter fatalities each, were the only additional states with five or more deaths in 2014.

Table 12. Firefighter Fatalities by State by Location of Fire Service* (2014)

State	Fatalities	Percentage
AK	1	1.1
AL	1	1.1
AR	5	5.5
AZ	1	1.1
CA	2	2.2
CO	1	1.1
CT	2	2.2
DC	1	1.1
FL	2	2.2
GA	1	1.1
IN	3	3.3
KY	4	4.4
LA	2	2.2
MA	2	2.2
MD	3	3.3
ME	2	2.2
MI	2	2.2
MO	2	2.2
MS	1	1.1
MT	3	3.3
NC	4	4.4
NE	1	1.1
NJ	8	8.8
NV	1	1.1
NY	12	13.2
OH	6	6.6
OR	1	1.1
PA	5	5.5
SC	2	2.2
TN	2	2.2
TX	4	4.4
WV	3	3.3
WY	1	1.1

*This list attributes the deaths according to the state in which the fire department or unit is based, as opposed to the state in which the death occurred. They are listed by those states for statistical purposes and for the National Fallen Firefighters Memorial at the NETC.

Figure 14. Firefighter Fatalities by Region (2014)

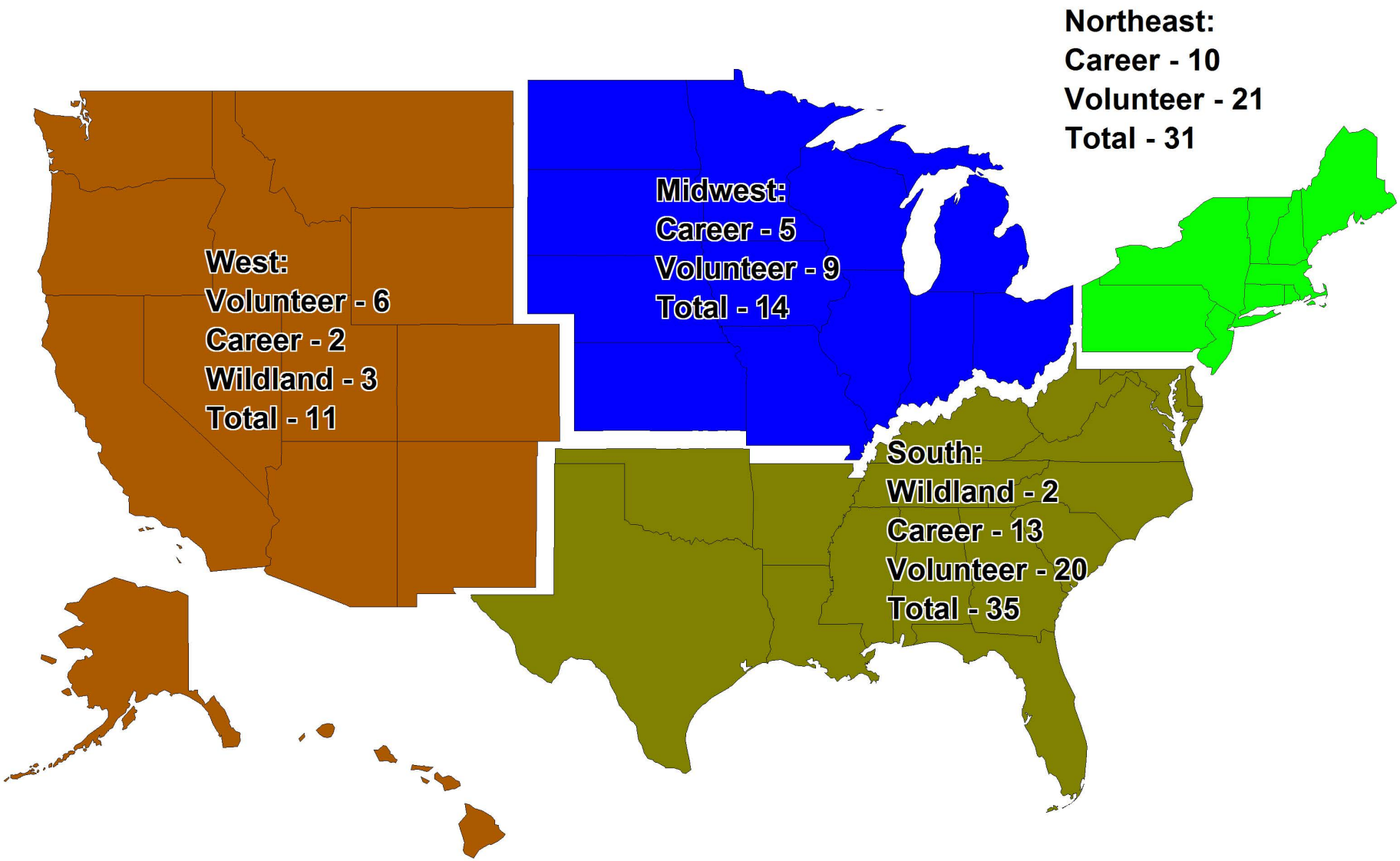


Figure 15. On-Duty Firefighter Fatalities by Fire Department Location (2014)

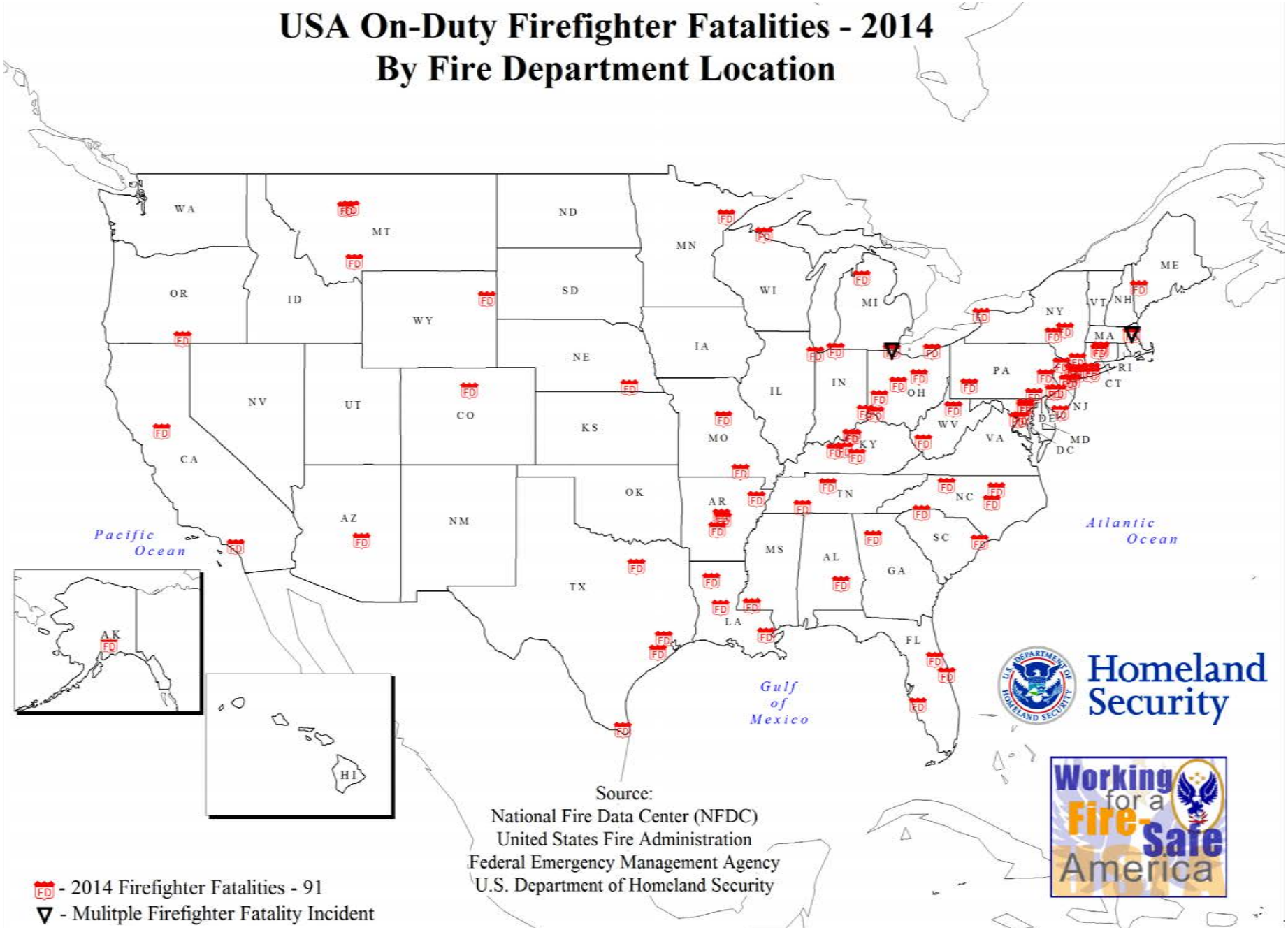
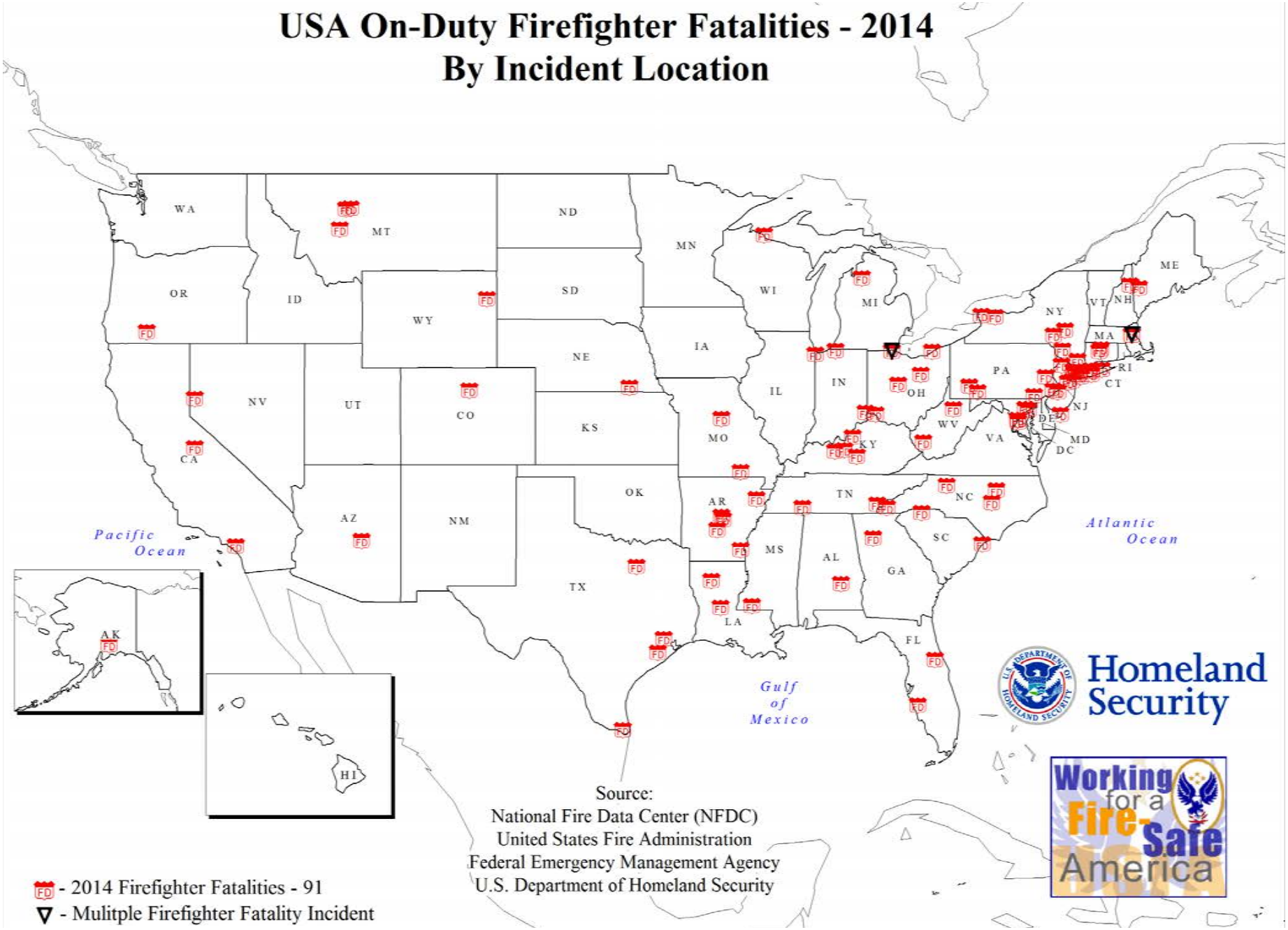


Figure 16. On-Duty Firefighter Fatalities by Incident Location (2014)



Analysis of Urban/Suburban/Rural Patterns in Firefighter Fatalities

The U.S. Census Bureau defines "urban" as a place having a population of at least 2,500 or lying within a designated urban area. "Rural" is defined as any community that is not urban. "Suburban" is not a census term but may be taken to refer to any place, urban or rural, that lies within a metropolitan area defined by the Census Bureau, but not within one of the central cities of that metropolitan area.

Fire department areas of responsibility do not always conform to the boundaries used by the Census Bureau. For example, fire departments organized by counties or special fire protection districts may have both urban and rural coverage areas. In such cases, where it may not be possible to characterize the entire coverage area of the fire department as rural or urban, firefighter deaths were listed as urban or rural based on the particular community or location in which the fatality occurred.

The following patterns were found for 2014 firefighter fatalities. These statistics are based on answers from the fire departments, and when no data from the departments were available, the data were based upon population and area served, as reported by the fire departments.

Table 13. Firefighter Deaths by Coverage Area Type (2014)

Urban/Suburban	Rural	Total
47	44	91

Appendix

Firefighter Fatality Inclusion Criteria — National Fire Service Organizations

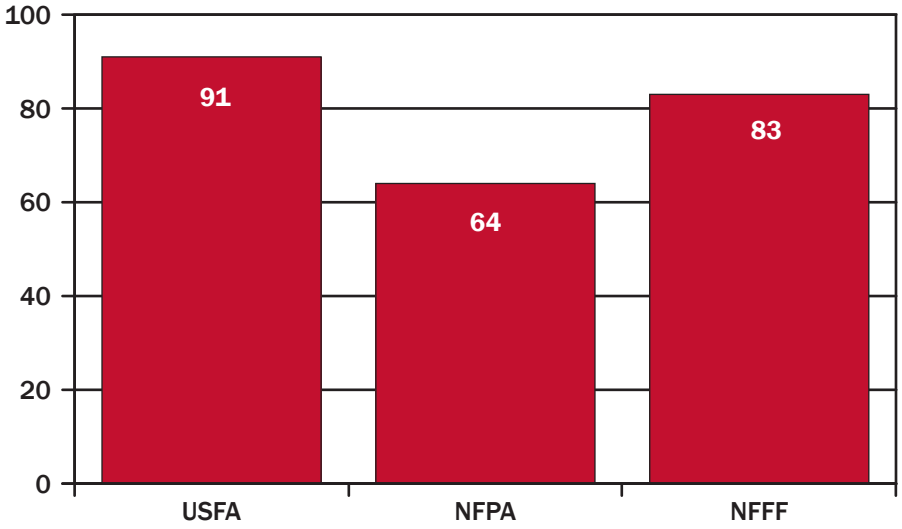
NFPA, NFFF, USFA and other organizations individually collect information on firefighter fatalities in the U.S. Each organization uses a slightly different set of inclusion criteria that are based, at least in part, on the purposes of the information collected for each organization and data consistency.

As a result of these differing inclusion criteria, statistics about firefighter fatalities may be provided by each organization that do not coincide with one another. This section will explain the inclusion criteria for each organization and provide information about these differences.

USFA includes firefighters in this report who died while on-duty, firefighters who became ill while on-duty and later died, and firefighters who died within 24 hours of an emergency response or training, regardless of whether the firefighter complained of illness while on-duty. USFA counts firefighter deaths that occur in the 50 states, the District of Columbia, and U.S. protectorates, such as Puerto Rico and Guam. Detailed inclusion criteria for this report appears below.

For 2014, USFA reported 91 on-duty firefighter fatalities.

Firefighter Fatalities in 2014 for Incidents Occurring in 2014



Inclusion Criteria for National Fire Protection Association's Annual Firefighter Fatality Study

Introduction

Each year, NFPA collects data on all firefighter fatalities in the U.S. that resulted from injuries or illnesses that occurred while the victims were on-duty. The purpose of the study is to analyze trends in the types of illnesses and injuries resulting in deaths that occur while firefighters are on the job. This annual census of firefighter fatalities in its current format dates back to 1977. (Between 1974 and 1976, NFPA published a study of on-duty firefighter fatalities that was not as comprehensive.)

Who is a Firefighter?

For the purpose of the NFPA study, the term firefighter covers all uniformed members of organized fire departments, whether career, volunteer, combination or contract; full-time public service officers acting as firefighters; state and federal government fire service personnel; temporary fire suppression personnel operating under official auspices of one of the above; or privately employed firefighters, including trained members of industrial or institutional fire brigades, whether full- or part-time.

Under this definition, the study includes, besides uniformed members of local career and volunteer fire departments, those seasonal and full-time 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; and members of industrial fire brigades. Impressed civilians would also be included if called on by the officer in charge of the incident to carry out specific duties. The NFPA study includes fatalities that occur in the 50 states and the District of Columbia.

What Does "On-Duty" Mean?

The term "on-duty" refers to being at the scene of an alarm, whether a fire or nonfire incident; being en route while responding to or returning from an alarm; performing other assigned duties such as training, maintenance, public education, inspection, investigations, court testimony and fundraising; and being on-call, under orders or on standby duty other than at home or at the individual's place of business. Fatalities that occur at a firefighter's home may be counted if the actions of the firefighter at the time of injury involved firefighting or rescue.

On-duty fatalities include any injury sustained in the line of duty that proves fatal, any illness that was incurred as a result of actions while on-duty that proves fatal, and fatal mishaps involving nonemergency occupational hazards that occur while on-duty. The types of injuries included in the first category are mainly those that occur at an incident scene, in training, or in accidents while responding to or returning from alarms. Illnesses (including heart attacks) are included when the exposure or onset of symptoms is tied to a specific incident of on-duty activity. Those symptoms must have been in evidence while the victim was on-duty for the fatality to be included in the study.

Fatal injuries and illnesses are included even in cases where death is considerably delayed. When the onset of the condition and the death occur in different years, the incident is counted in the year of the condition's onset. Medical documentation specifically tying the death to the specific injury is required for inclusion of these cases in the study.

Categories not Included in the Study

The NFPA study does not include members of fire department auxiliaries; nonuniformed employees of fire departments; EMTs who are not also firefighters; chaplains; or civilian dispatchers. The study also does not include suicides as on-duty fatalities, even when the suicide occurs on fire department property.

NFPA recognizes that a comprehensive study of firefighter on-duty fatalities would include chronic illnesses (such as cardiovascular disease and certain cancers) that prove fatal and arose from occupational factors. In practice, there is as yet no mechanism for identifying on-duty fatalities that are due to illnesses that develop over long periods of time. This creates an incomplete picture when comparing occupational illnesses to other factors as causes of firefighter deaths. This is recognized as a gap, the size of which cannot be identified at this time because of the limitations in tracking the exposure of firefighters to toxic environments and substances and the potential long-term effects of such exposures.

2014 Experience

In 2014, a total of 64 on-duty firefighter deaths occurred in the U.S., according to the NFPA inclusion criteria.

National Fallen Firefighters Foundation

In 1997, fire service leaders formulated new criteria to determine eligibility for inclusion on the National Fallen Firefighters Memorial. LODDs shall be determined by the following standards:

1. (a) Deaths of firefighters meeting the DOJ's PSOB program guidelines and those cases that appear to meet these guidelines, whether or not PSOB staff has adjudicated the specific case prior to the annual National Fallen Firefighters Memorial Service.

   (b) Deaths of firefighters from injuries, heart attacks or illnesses documented to show a direct link to a specific emergency incident or department-mandated training activity.

2. While PSOB guidelines cover only public safety officers, the foundation's criteria also include contract firefighters and firefighters employed by a private company, such as those in an industrial brigade, provided that the deaths meet the standards listed above.

3. Some specific cases will be excluded from consideration, such as deaths attributable to suicide, alcohol or substance abuse, or other gross abuses as specified in the PSOB guidelines.

The National Fallen Firefighters Memorial was built in 1981 in Emmitsburg, Maryland. The names listed there begin with those firefighters who died in the line of duty that year. The U.S. Congress created the NFFF to lead a nationwide effort to remember America's fallen firefighters. Since 1992, the tax-exempt, nonprofit foundation has developed and expanded programs to honor our fallen fire heroes and assist their families and co-workers by providing them with resources to rebuild their lives. Since 1997, the foundation has managed the National Fallen Firefighters Memorial Service held each October to honor the firefighters who died in the line of duty the previous year.

As of this writing, the foundation will be honoring 87 firefighters who died in the line of duty at the 2015 Memorial Weekend. There are 83 firefighters being honored who are associated with incidents and deaths that occurred in 2014; one who died in 2014 as the result of an incident that occurred prior to 2014; and three others who died as the result of injuries and deaths that occurred in previous years.

Acronyms

CPR	cardiopulmonary resuscitation
CVA	cerebrovascular accident
DOJ	U.S. Department of Justice
EMS	Emergency Medical Services
EMT	emergency medical technician
IC	Incident Commander
LODD	line-of-duty death
mph	miles per hour
NETC	National Emergency Training Center
NFFF	National Fallen Firefighters Foundation
NFIRS	National Fire Incident Reporting System
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
NTSB	National Transportation Safety Board
POV	privately owned vehicle
PSOB	Public Safety Officer Benefits
RIT	Rapid Intervention Team
SCBA	self-contained breathing apparatus
USFA	U.S. Fire Administration
USFS	U.S. Forest Service
WCT	Work Capacity Test