



**RESEARCH  
& REPORTS**

# **Catastrophic Multiple-Death Fires in 2014**

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## **Acknowledgments**

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## Catastrophic Multiple-Death Fires in 2014

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In January 2014, in rural western Kentucky, firefighters responding to a structure fire at 2:01 a.m. arrived to find a 1,000-square-foot (93-square-meter) one-story single-family home totally involved in fire, with a man and one of his daughters, both burned, standing outside. A family of 11 was in the home when the fire broke out. The mother and eight of her children, ranging in age from four to 15, were still in the house. None of them escaped

After extinguishing the fire, firefighters removed the nine victims, five of whom were found in a master bedroom closet located on an enclosed porch that was used as part of the bedroom. Four other victims were found in another bedroom, which was the room of origin. Firefighters believe combustibles were ignited by an electric baseboard heater located 6 to 12 inches (15 to 30 centimeters) from a bed. The fire moved across the room to the master bedroom, then into the ceiling and throughout the home, blocking both means of egress from the home. The father and daughter were in a third bedroom near a door and were able to escape. No smoke alarms were found in the home.

The devastating Kentucky fire was one of an estimated 1,298,000 fires that firefighters in the United States responded to in 2014. An estimated 386,500 of those fires occurred in residential structures, 107,500 in nonresidential structures, and 804,000 outside of structures or involving vehicles. These fires accounted for an estimated 3,275 deaths, 2,795 of which occurred in residential structures, 65 in nonresidential structures, and 415 in vehicle or outside fires.

Twenty-four of these fires were categorized as catastrophic multiple-death fires, defined here as fires or explosions in homes or apartments that result in five or more fire-related deaths, or fires or explosions in all other structures and outside of structures, such as wildfires and vehicle fires, that claim three or more lives.

These 24 fires killed 128 people. This accounted for 0.002 percent of the total estimated fires and 3.9 percent of the total fire deaths in the U.S. in 2014. By comparison, 20 catastrophic multiple-death fires occurred in 2013, resulting in the deaths of 122 people, including 28 children under age six.

Of the 24 fires that occurred in 2014, 15 were in homes, resulting in 88 deaths, with 11 victims under age six. Five were in non-home structures, resulting in 20 deaths, and four were non-structure fires resulting in 20 deaths. None of the victims in the nine non-home fires were children under the age of six.

### **Catastrophic home fires**

There were 15 catastrophic multiple-death fires in homes in 2014 compared to 12 the year before, for an increase of 25 percent. Of these, 10 occurred in single-family homes, of which two were manufactured homes, and one occurred in a duplex. Four fires were in apartment buildings; one in a 16-unit building, two in nine-unit buildings, and one was in a building for which the number of units was not reported. These fires killed 88 people, 21 (or 31 percent)

more than in 2013. Of the 88 victims, 11 were children under the age of six, which was 17 (or 61 percent) fewer than the year before.

Thirteen of the 15 home fires broke out between the hours of 11 p.m. and 7 a.m., killing 75 people, including all of the children under age six.

The largest loss-of-life home fire was the Kentucky blaze that killed nine people: a mother and eight of her children, two of whom were under the age of six.

The second-most-deadly home fire killed eight people in March in New York. At 9:30 a.m., a natural gas leak from a broken pipe was ignited by an unknown source in the basement of a five-story apartment building with businesses on the first level. The building, of ordinary construction, covered 2,000 square feet (186 square meters). The resulting explosion caused the collapse of that building and an adjacent building of similar size and construction. The victims, as well as many injured people, were found in the pile of debris and within the remaining parts of the structure. No information was reported on smoke detection or suppression equipment. The original notification to authorities was a call for a smell of gas in an adjacent building. The explosion occurred 30 minutes later, before the gas company arrived.

The third deadliest occurred in July in Massachusetts and killed seven people. The fire broke out at 3:59 a.m. in a three-story, 6,300-square-foot (585-square-meter), nine-unit apartment building of unprotected wood-frame construction with businesses on the ground level. The fire, caused by an electrical malfunction in a wire chase between the second and third floors, burned undetected for several minutes and then spread throughout the building, hidden in additional void spaces. The victims were located in two different apartments on the second floor. Heat and smoke detection equipment was located in the common areas above the ground floor of the building, but it was not reported if any devices sounded.

Four fires killed six people each. All of these fires broke out in single-family homes, including a manufactured home. Among the 24 victims were two children under age six. One home had no detection equipment, and no information was reported on the other three structures.

The other eight home fires killed five people each. Five of the fires were in single-family homes, two were in apartment buildings, and one was in a duplex. Among the 40 victims were seven children under age six. The two apartment buildings and the two-family duplex had detection equipment, but it was not reported if any operated. Three of the homes had no smoke alarms and no information was reported for the other two fires.

### **Catastrophic non-home structure fires**

Five of the 24 catastrophic multiple-death fires that occurred in 2014 were in non-home structures and resulted in 20 of the 128 fatalities. The number of fires was down one, or 17 percent, and the number of deaths was down 11, or 36 percent, from 2013.

All the properties were operating and two of these five fires broke out between the hours of 11 p.m. and 7 a.m., killing seven people.

In November in Maine, a fire in a three-story rooming house with up to eight boarders began on a porch due to careless use of smoking materials. The fire entered the structure and spread upward to the attic. Smoke alarms were present and operated, alerting the occupants, but the spreading fire blocked egress from the second and third floors. Firefighters reported a lack of fire stops within the roof, allowing the fire to burn horizontally from end to end. Six occupants were killed.

Two non-home structure fires killed four people each. The first occurred in October in Kansas. At 9:50 a.m., a twin-engine aircraft crashed into the flight safety building at an airport. The single-story building covered 60,000 square feet (5,574 square meters) and was constructed of cinder block with brick veneer. The building was occupied at the time. Shortly after takeoff, the plane crashed into the wall and roof of the building. The collision caused the fuel cells to release almost 3,000 gallons (11,356 liters) of aviation fuel that caught fire and ran down into the building, igniting the structure fire. The pilot, the lone occupant of the airplane, was found in part of the aircraft still on the roof, and the three additional victims were located inside a flight simulator in the building. The National Transportation Safety Board (NTSB) is still investigating the cause of the crash.

The other four-fatality fire occurred in March in New Jersey, when a fire broke out at 5:42 a.m. in a two-story motel of unprotected wood-frame construction. No additional information was reported.

Two fires killed three people each. The first occurred in December in Texas. A fire broke out in a 50-story office building of fire-resistive construction at 10:18 a.m. when an undetermined type of gas exploded in the basement. Three workers were in a tank using welding/cutting equipment when the explosion occurred, trapping them.

No details were reported on the second fire, which occurred at an oil drilling site in December in Oklahoma.

### **Catastrophic non-structure fires**

Vehicle crashes are included in this study if a fire in the vehicle caused the crash, or if the local coroner or medical examiner confirmed for NFPA that the victims died of thermal injuries or inhalation of products of combustion rather than impact injuries.

In 2014, four non-structure fires killed 20 people. This is two more non-structure fires than occurred in 2013, and resulted in four fewer deaths.

Among the nonstructural fires, the largest loss of life occurred in a multi-vehicle crash in April in California with a post-crash fire that resulted in 10 deaths. Of the 10 deaths, eight were fire-related and two were due to trauma. A group of 43 high school students and three adult chaperones were on a bus on an interstate highway, returning home from a trip to visit a local university as prospective students. A tractor trailer truck pulling two 28-foot (9-meter) trailers in the southbound lane crossed a 58-foot-wide (19-meter-wide) median into the northbound lane, striking a car and then the bus. The truck and bus went off the highway and a post-crash fire ensued. The truck was consumed by fire and the bus was partially consumed. The drivers of the truck and bus died, along with eight passengers on the bus. The NTSB is investigating the crash.

The second incident occurred in May in Massachusetts and killed six when an aircraft attempting to take off did not obtain the needed elevation, crossed a grassy area into a tree line, and hit a ravine where it broke apart and caught fire. The cause of death of a seventh person was undetermined at the time the information was released.

in January, a fire in a camper trailer at a campground in Alabama resulted in three deaths, and a two-vehicle crash in November on a state highway in Louisiana killed three people.

The role of suppression equipment and smoke detection

Suppression equipment was reported as present in only two of the 20 catastrophic multiple-death structure fires last year. One system operated, but it was not reported if it had any effect on the fire. The other system, located in the basement of the structure, was not in the area affected by the fire and did not operate.

Eight structures had no suppression equipment, and no information was reported for the other five. This is unfortunate, because sprinklers are a proven lifesaving technology across many different kinds of properties, including homes. The risk of dying in a reported fire in a home decreases by about 80 percent when sprinklers are present, and sprinklers reduce the average property loss in home fires by 71 percent per fire. More information about home fire sprinklers is available at [firesprinklerinitiative.org](http://firesprinklerinitiative.org).

Information about automatic smoke detection equipment was available for nine of the 15 catastrophic home fires that occurred in 2014. Four homes were equipped with smoke alarms, but only one system was known to have operated. Fire department reports indicate that five homes had no smoke alarms, and fires in these homes killed 30 people—more than a third of those killed in home fires—including three children under the age of six. No information on detection equipment was reported for the other six home fires.

Information about detection equipment was reported in one of the five non-home structure fires. That system had full coverage and operated.

Smoke alarms have been proven effective in reducing the risk of death in home fires. The most effective arrangement is interconnected, multiple-station smoke alarms supplied by hardwired AC power with a battery backup. These should be located outside each sleeping area, on each level, and in each bedroom. Homeowners should routinely test smoke alarms according to manufacturers' recommendations. NFPA recommends testing home smoke alarms at least monthly.

Batteries should also be replaced according to manufacturers' recommendations; conventional batteries should be replaced at least yearly. If an alarm "chirps," a warning that the battery is low, the battery should be replaced right away. All smoke alarms, including hard-wired alarms and alarms that use 10-year batteries, should be replaced when they are 10 years old or sooner if they do not respond properly when tested.

Smoke alarms are only effective if occupants leave the building when they sound. Children should be familiar with the sound of a properly operating smoke alarm and follow a practiced escape plan that emphasizes two exits from any location, as well as a designated meeting place once they have left the structure. Exit drills in the home are part of many schools' curricula.

Practicing the plan helps families determine whether children and others readily waken to the sound of a smoke alarm if it sounds during the night; that kind of detail, along with assistance for family members who require it, can be factored into the escape plan. Practicing escape plans, as well as basic fire prevention principles, might have prevented many of the fires and deaths included in this report.

### **Where We Get our Data, and Acknowledgments**

NFPA obtains its data by reviewing national and local news media, including fire service publications. A news clipping service notifies the NFPA Fire Analysis and Research Division of catastrophic fires.

Once an incident is identified, we request information from the local fire department or the agency having jurisdiction. NFPA's annual survey of U.S. fire experience and mailings to the state fire marshals are additional data sources, although not principal ones. We also contact federal agencies that have participated in the investigation of such fires.

The diversity and redundancy of these sources enable us to collect the most complete data available on catastrophic fires throughout the U.S. We understand that, in many cases, a fire department cannot release information due to ongoing litigation. In other cases, fire departments have been unable to determine the information we requested.

NFPA wishes to thank the U.S. fire service and the medical examiners for their contributions of data, without which this report would not be possible. The author would like to give a special thanks to Norma Candeloro and to his co-workers for their assistance in the completion of this report.

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## Home Structure Fire Deaths

### Kentucky

#### Date, time of alarm, number of deaths

January, 2:01 a.m., nine (two under age six)

#### Number of stories, occupancy type, construction type

This was a one-story, 1,000-square-foot (93-square-meter), single-family home of unprotected wood-frame construction. The home was occupied by 11 people.

#### Smoke alarm and other protection devices

There were no smoke alarms or automatic suppression equipment present.

#### Fire origin and path

The fire began in a ground-floor front bedroom when a portable electric baseboard heater ignited combustibles near a futon bed. The fire then spread to a master bedroom, into the ceiling attic area, and subsequently throughout the home.

#### Contributing factors and victim locations

On arrival, firefighters found the home totally engulfed in flame with a man and his daughter outside and burned. Five victims were located in a closet in the master bedroom and the other four victims were located in the room of origin. The fire blocked both means of egress.

### New York

#### Date, time of alarm, number of deaths

March, 9:31 a.m., eight

#### Number of stories, occupancy type, construction type, operating status

This incident involved two five-story, mixed-occupancy buildings with businesses on the ground floors, including a church, and apartments on upper floors. Each building covered 2,000 square feet (186 square meters). The apartments were occupied but it was not reported if there was anyone in the church or businesses.

#### Detection systems and suppression systems

No information was reported on detection or suppression equipment.

#### Fire origin and path

A call to the gas company from a neighbor in the next building reported an odor of gas. The explosion occurred about 30 minutes later before the arrival of the gas company and was believed to have originated in the basement of one of the buildings. The explosion demolished the original building and the second similar building.

#### Contributing factors and victim locations

Firefighters from a nearby fire station self-dispatched upon hearing the explosion and seeing smoke. As firefighters arrived, they were met with a chaotic scene, with backed-up vehicle traffic hindering response, many fleeing people in the street and on sidewalks, a large debris field covering the street in some places, and a large active gas fire in the debris and remaining structure. Firefighters searched demolished vehicles parked on the street, searched the structures, and fought the fires that were burning. Several victims found alive were assisted out of the debris or structures. The victims that died were found in many areas throughout the debris pile. In addition to the eight fatalities, 61 people were injured, including 46 civilians, 12 police officers, two firefighters, and one contracted worker.

## **Massachusetts**

### **Date, time of alarm, number of deaths**

July, 3:59 a.m., seven

### **Number of stories, occupancy type, construction type**

This was a three-story, mixed-use, 6,300-square-foot (585-square-meter) structure of unprotected wood-frame construction. The first floor contained commercial property and there were nine apartments on the upper stories. The apartments were occupied but it was not reported if anyone was in the commercial property.

### **Smoke alarm and other protection devices**

There were heat and smoke alarms in the common areas and hallways above the ground floor.

No information was reported on equipment on the ground level. There was no automatic suppression equipment.

### **Fire origin and path**

The fire was caused by an electrical malfunction in a wire chase within a void between the second floor ceiling and third floor flooring. The fire spread undetected through the void space for several minutes. It then spread through additional void spaces through the third floor to the ceiling and roof. The fire then spread across the entire building in the roof area.

### **Contributing factors and victim locations**

The seven victims were located within two apartments on the third story: two in one apartment and a family of five in another apartment at the opposite end of the building.

## **Indiana**

### **Date, time of alarm, number of deaths**

February, 9:10 a.m., six

### **Number of stories, occupancy type, construction type**

This was a one-story, single-family home of unprotected wood-frame construction. The ground floor area was not reported.

### **Smoke alarm and other protection devices**

No information was reported.

### **Fire origin and path**

No information was reported.

### **Contributing factors and victim locations**

No information was reported.

## **New Jersey**

### **Date, time of alarm, number of deaths**

June, 3:51 a.m., six

### **Number of stories, occupancy type, construction type**

This was a two-and-a-half-story, single-family home of unprotected wood-frame construction. The ground floor area was not reported.

### **Smoke alarm and other protection devices**

No information was reported.

### **Fire origin and path**

No information was reported.

### **Contributing factors and victim locations**

No information was reported.

## **North Carolina**

### **Date, time of alarm, number of deaths**

August, 1:07 a.m., six

### **Number of stories, occupancy type, construction type**

This was a one-story, 840-square-foot (78-square-meter) manufactured home of unprotected wood-frame construction.

### **Smoke alarm and other protection devices**

There were no smoke alarms or automatic suppression equipment present.

### **Fire origin and path**

Due to the destruction of the home, no cause or origin could be determined.

### **Contributing factors and victim locations**

No additional information was reported.

## **Pennsylvania**

### **Date, time of alarm, number of deaths**

October, 6:42 a.m., six (two under age 6)

### **Number of stories, occupancy type, construction type**

This was a two-and-a-half-story, single-family home of unprotected wood-frame construction.

The ground floor area was not reported.

### **Smoke alarm and other protection devices**

No information can be released pending an active investigation and legal action.

### **Fire origin and path**

No information can be released pending an active investigation and legal action.

### **Contributing factors and victim locations**

No information can be released pending an active investigation and legal action.

## **Texas**

### **Date, time of alarm, number of deaths**

December, 6:30 a.m., five

### **Number of stories, occupancy type, construction type**

This was an 11-story apartment building of fire-resistive construction. The number of units and ground-floor area was not reported.

### **Smoke alarm and other protection devices**

There was complete smoke detection coverage throughout the building. Detectors on three floors above the fire were taped over due to painting in hallways. It was not reported if the alarms in the room of origin or floor of origin sounded. There was a wet-pipe sprinkler system only in the basement.

### **Fire origin and path**

The fire of undetermined cause broke out in a third-floor apartment and spread to the hallway.

### **Contributing factors and victim locations**

There was heavy smoke throughout the building. The fire doors to the stairwell were taped open on the three floors above the floor of origin. A delay in calling the fire department occurred when a resident attempted to assist a person yelling for help in a third-floor apartment. (It is not known if this was the apartment of origin.) Unable to gain access, the resident went to the lobby for help, then returned to the third floor and called 911.

## **Oklahoma**

### **Date, time of alarm, number of deaths**

January, 4:56 a.m., five

### **Number of stories, occupancy type, construction type**

This was a one-and-a-half-story, 868-square-foot (80-square-meter), single-family home of unprotected wood-frame construction.

### **Smoke alarm and other protection devices**

Neither smoke alarms nor automatic suppression equipment were present.

### **Fire origin and path**

A fire of undetermined cause originated on an enclosed rear porch. Fire and smoke spread into a kitchen through a door and window that failed. The fire then spread into the living room and a bedroom, as well as into the attic. Smoke spread throughout the rest of the home.

### **Contributing factors and victim locations**

Two victims were located in a bedroom. There were indications that one of them might have broken out a window in an attempt to escape. The other three victims were located in a second bedroom. The home was reported to have bars on the windows and a broken door knob on the front door. It was not reported if these contributed to the deaths or not. The fire also blocked egress from the rear door that led to the enclosed rear porch.

## **Iowa**

### **Date, time of alarm, number of deaths**

January, 3:33 a.m., five (two under age 6)

### **Number of stories, occupancy type, construction type**

This was a one-story, 1,048-square-foot (97-square-meter), single-family home.

### **Smoke alarm and other protection devices**

No information was reported on smoke alarm or suppression equipment.

### **Fire origin and path**

The cause and origin were not determined due to the extensive damage done by the fire.

### **Contributing factors and victim locations**

On arrival, firefighters found the home fully engulfed in fire, with the roof already burned away. Firefighters made a defensive attack. After extinguishment of the fire, the five victims were located. A woman and infant were located in a bedroom, two adult males were located in the living room, and a child was located in a separate sitting area.

## **Minnesota**

### **Date, time of alarm, number of deaths**

February, 5 a.m., five (three under age 6)

### **Number of stories, occupancy type, construction type**

This was a two-story, 2,400-square-foot (223-square-meter), two-family dwelling of unprotected wood-frame construction.

### **Smoke alarm and other protection devices**

There were smoke alarms present but it was not reported if they operated. There was no automatic suppression equipment present.

### **Fire origin and path**

A fire of undetermined cause broke out in a second-floor living room.

### Contributing factors and victim locations

The fire burned up from the second floor. Part of the stairway was burned out. Two victims were located on the second floor and three were located on the third floor.

## Louisiana

### Date, time of alarm, number of deaths

November, 12:20 a.m., five

### Number of stories, occupancy type, construction type

This was a two-story, single-family home of unprotected wood-frame construction. The ground floor area was not reported.

### Smoke alarm and other protection devices

There were no smoke alarms or automatic suppression equipment present.

### Fire origin and path

The fire of undetermined cause broke out in a first-floor bedroom.

### Contributing factors and victim locations

No information was reported.

## Texas

### Date, time of alarm, number of deaths

November, 5 a.m., five (one under age 6)

### Number of stories, occupancy type, construction type

This was a one-story, 1,200-square-foot (111-square-meter), single-family manufactured home of unprotected wood-frame construction with metal siding.

### Smoke alarm and other protection devices

There were no smoke alarms or automatic suppression equipment present.

### Fire origin and path

A fire of undetermined cause broke out near a front door and spread to the living room, then to a hallway by the bedrooms.

### Contributing factors and victim locations

The exits were blocked by fire. Air conditioning units in the windows of the bedrooms made those inaccessible to the children. Arriving firefighters reported rescue attempts were impossible due to heavy fire; three-quarters of the home was involved. Three additional people were injured.

## New Jersey

### Date, time of alarm, number of deaths

December, 6:08 a.m., five (one under age 6)

### Number of stories, occupancy type, construction type

This was a two-and-a-half-story, single-family home of unprotected wood-frame construction. The ground floor area was not reported.

### Smoke alarm and other protection devices

No information was reported.

### Fire origin and path

No information was reported.

### Contributing factors and victim locations

No information was reported.

### **South Carolina**

#### **Date, time of alarm, number of deaths**

December, 12:33 a.m., five

#### **Number of stories, occupancy type, construction type**

This was a two-story, 17,000-square-foot (1,579-square-meter) apartment building of unprotected wood-frame construction with 16 units.

#### **Smoke alarm and other protection devices**

There were smoke alarms present. Their operation and coverage were not reported. There was no automatic suppression equipment present.

#### **Fire origin and path**

A fire of undetermined cause broke out in a first-floor apartment. No additional information was reported.

#### **Contributing factors and victim locations**

Upon arrival, firefighters attempted an interior fire attack and rescue attempts. As conditions inside the structure deteriorated, a defensive attack was initiated.

## **Non-Home Fires**

### **Maine**

#### **Date, time of alarm, number of deaths**

November, 7:17 a.m., six

#### **Number of stories, occupancy type, construction type, operating status**

This was a three-story rooming house of unprotected wood-frame construction. The ground floor area was not reported. There were at least eight occupants in the building at the time of the fire.

#### **Detection systems and suppression systems**

There were smoke alarms present and they operated. Their coverage was not reported. No information was reported on automatic suppression equipment.

#### **Fire origin and path**

This fire broke out on a porch due to careless use of smoking materials near a plastic cigarette butt container. The fire spread upward through the structure to the attic where it burned the roof.

#### **Contributing factors and victim locations**

The fire blocked the egress from the second and third floors. There were no fire stops within the roof structure, allowing the fire to spread horizontally from end to end.

### **New Jersey**

#### **Date, time of alarm, number of deaths**

March, 5:42 a.m., four

#### **Number of stories, occupancy type, construction type, operating status**

This was a two-story motel of unprotected wood-frame construction that was operating at the time of the fire. The ground floor area was not reported.

#### **Detection systems and suppression systems**

No information reported.

### Fire origin and path

No information reported.

### Contributing factors and victim locations

No information reported.

## Kansas

Date, time of alarm, number of deaths

October, 9:50 a.m., four

Number of stories, occupancy type, construction type, operating status

This was a one-story, 60,000-square-foot (5,574-square-meter) flight safety building that was operating and occupied.

### Detection systems and suppression systems

It is not reported if there was a detection system or automatic suppression system present. It was reported that detectors would not have made a difference due to the type of incident.

### Fire origin and path

Shortly after takeoff, a twin-engine aircraft crashed into the wall and roof of the flight safety building. The aircraft slid across the roof where the fuel cells leaked jet fuel and caught fire instantaneously. At the same time, burning jet fuel ran down into the building.

### Contributing factors and victim locations

One of the victims was the pilot who was found on the roof within part of the aircraft. The other three were in a flight simulator on the ground level inside the building.

## Texas

Date, time of alarm, number of deaths

December, 10:18 a.m., three

Number of stories, occupancy type, construction type, operating status

This was a 50-story office building of fire-resistant construction. The building was occupied at the time of the incident. No information was reported on the building floor size.

### Detection systems and suppression systems

No information was reported on detection equipment. There was a complete wet-pipe sprinkler system. The system was in the area of the explosion and fire and three sprinkler heads operated. Information on their effectiveness was not reported.

### Fire origin and path

An unknown type gas exploded in the basement where three workers were located.

### Contributing factors and victim locations

The workers were using welding/cutting equipment in a tank in the basement of the high-rise office building. They were trapped and died before they could be rescued.

## Oklahoma

Date, time of alarm, number of deaths

December, 1:00 a.m., three

Number of stories, occupancy type, construction type, operating status

This was an oil drilling site.

### Detection systems and suppression systems

No information reported.

### Fire origin and path

No information reported.

**Contributing factors and victim locations**

No information reported.

## Non Structure Fires

### California

Date, time of alarm, number of deaths

April, 5:45 p.m., eight

Setting

Northbound interstate highway.

#### Climate

Temperature was approximately 70 degrees F (21degrees C), clear/dry, visibility was 10 miles (16 km).

Fire origin and path

As a result of a three-vehicle crash involving a car, a bus, and a truck tractor with two 28-foot (9-meter) trailers, the truck and bus caught fire.

Factors hindering occupant escape

The exact cause of the crash was not reported. The truck was occupied by the driver and the bus was occupied by the driver, 43 high school students, and three adult chaperones. The car had two occupants. The truck crossed the center median from the southbound lane and entered the northbound lane, striking the car. Both the truck and the car then struck the bus, and the truck and bus caught fire.

A total of 10 people died in the incident, eight of whom—the truck driver, the bus driver, and six of the bus passengers—died in the fire. In addition, two people died of multiple blunt-force injuries. Of the people who were killed in the fire, one died of thermal injuries and seven died of inhalation of products of combustion. The incident also injured 41.

For more information, see the National Transportation Safety Board reports at

<http://dms.nts.gov/pubdms/search/hitlist.cfm?docketID=57260&CFID=557379&CFTOKEN=32982921>.

### Massachusetts

Date, time of alarm, number of deaths

May, 9:40 p.m., six

Setting

Airport runway.

#### Climate

Clear, 44 degrees F (6.7 degrees C), winds were calm and visibility was 10 miles (16 km).

#### Fire origin and path

A two-engine passenger jet with a crew of three (including two pilots and a flight attendant) and four passengers aboard attempted to take off. The aircraft used the entire length of the runway without obtaining any elevation. The aircraft then traveled across a grassy area into a tree line, where it hit a ravine, broke up, and caught fire. The seven people aboard the aircraft were trapped and all were killed.

#### Factors hindering occupant escape

Six people died in the crash as a result of fire or smoke inhalation, and the cause of death for the seventh person was undetermined. The cause of the crash is still under investigation. For the preliminary report by the National Transportation Safety Board, visit [http://www.nts.gov/\\_layouts/ntsb.aviation/brief.aspx?ev\\_id=20140531X32035&key=1](http://www.nts.gov/_layouts/ntsb.aviation/brief.aspx?ev_id=20140531X32035&key=1).

### **Alabama**

Date, time of alarm, number of deaths

January, 11:22 a.m., three

Setting

A travel trailer located at a campground.

Climate

No information reported.

Fire origin and path

No information reported.

Factors hindering occupant escape

Upon arrival, firefighters found the travel trailer fully involved with fire with the three victims still trapped inside.

### **Louisiana**

Date, time of alarm, number of deaths

November, 6:30 p.m., three

Setting

The crash involved two pickup trucks on a state highway.

Climate

The temperature was about 60 degrees F (16 degrees C), fair, and just after sunset.

Fire origin and path

The fire was ignited by the hot engine of a vehicle following a two-vehicle crash. The fire engulfed the vehicle occupied by the victims.

Factors hindering occupant escape

The three victims were trapped in the vehicle following the crash.