Selected Published Smoking-Material Fire Incidents

The following incidents were selected from NFPA's Fire Incident Data Organization data base. Anecdotes show what can happen; they are not a source to learn about what typically occurs.

One-Stop Data Shop
Fire Analysis and Research Division
National Fire Protection Association

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www.nfpa.org

This report includes articles from NFPA publications about fires involving smoking-material. Included are short articles from the "Firewatch" or "Bi-monthly" columns in *NFPA Journal* or it predecessor *Fire Journal* and incidents from either the large-loss fires report or catastrophic fires report. If available, investigation reports or NFPA Alert Bulletins are included and provide detailed information about the fires.

It is important to remember that this is anecdotal information. Anecdotes show what can happen; they are not a source to learn about what typically occurs.

NFPA's Fire Incident Data Organization (FIDO) identifies significant fires through a clipping service, the Internet and other sources. Additional information is obtained from the fire service and federal and state agencies. FIDO is the source for articles published in the "Firewatch" column of the *NFPA Journal* and many of the articles in this report.

For more information about the National Fire Protection Association, visit www.nfpa.org or call 617-770-3000. To learn more about the One-Stop Data Shop go to www.nfpa.org/osds or call 617-984-7443.

Copies of this analysis are available from:

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Smoking Materials Ignite Deadly Fire, North Carolina
Although smoke from a fire in a rear bedroom of a manufactured home activated the structure's smoke alarms, two intoxicated 16-year-olds were unable to escape and died in the blaze.

The wood- and steel-frame manufactured home, which was 86 feet (26 meters) long and 26 feet (7 meters) wide, had a wooden roof covered with asphalt shingles. Operational smoke alarms had been installed in the hallways near the bedrooms. There were no sprinklers.

The sleeping occupants first awoke to the sound of a crying and coughing baby, then realized the house was on fire. Everyone but the two teenagers escaped to a neighbor's house and called 911 at 6 a.m.

Investigators found an ashtray on a bedroom chair and noted burn patterns indicating that the fire started in that area. They determined that smoking materials ignited the chair and paper items located nearby.

The home, valued at $100,000, and its contents, valued at $50,000, were completely destroyed.

Kenneth J. Tremblay. 2005. Firewatch. *NFPA Journal*, November/December, 20-21.

Sprinkler Saves Occupant of Senior Housing, Nevada
An elderly woman suffered first-degree burns and smoke exposure during a fire in the bedroom of her apartment in a 236-unit building for older adults.

However, she escaped additional injury when her attempted escape by wheelchair came to a stop under an operating sprinkler, which controlled the blaze and kept most of the heat and smoke away from her.

Constructed of concrete and concrete-block, the four-story apartment building had complete coverage by smoke detection equipment and a wetpipe sprinkler system. At the time of the fire, all but one unit was occupied.

The water-flow alarm system alerted the central station alarm company, which notified the fire department at 3:08 a.m. Arriving six minutes after the alarm, firefighters saw smoke and flames coming from the window of an apartment on the fourth floor. The incident commander ordered a second alarm, bringing a total of 20 units and 50 firefighters to the scene.

Reaching the fourth floor, two companies entered the burning apartment, one with a hose attached to a standpipe. They found the woman just inside the door under the spray of the sprinkler.

She was evacuated and taken to the hospital as additional fire crews ventilated the building and knocked the fire down. The rest of the fourth-floor occupants were evacuated to the lobby, and residents of the first, second, and third floors were evacuated or sheltered in place.

Investigators determined that the woman had been smoking in bed and touched her bed linens with her cigarette, starting the fire. As flames spread, she got into her wheelchair, but couldn't make it out of the unit.

The fire department credits the sprinkler with saving her fife. The smoke alarm did not activate for undetermined reasons. Fire damage was limited to the woman's apartment, with losses estimated at $15,000.

Kenneth J. Tremblay. 2005. Firewatch. *NFPA Journal,* September/October, 32.

Language Barriers Delay Notification, Vermont

A member of a newly arrived Sudanese family fell asleep while smoking and ignited a bedroom futon in their three-story apartment building. The fire spread to other combustibles in the bedroom and from there, to the kitchen and living room before firefighters extinguished it.

The wood-frame apartment building, which was 70 feet (21 meters) long and 30 feet (9 meters) wide, had a slate roof and one apartment per floor. Hardwired, interconnected smoke alarms had been installed in the hallways and bedrooms, but the building was unsprinklered.

When a smoke alarm sounded, the man opened all the windows to let out the smoke. Unfamiliar with the 911 emergency telephone number, he did not use it, but fled the building. Neighbors heard the alarm and called the fire department at about 8 a.m. When firefighters arrived, the man had left the scene before they could obtain from any details about the location of the fire or the building's other residents. Damage to the building, valued at $175,000, came to $50,000. Damage to its contents, valued at $50,000, came to $25,000. A female resident suffered inhalation and second degree burns, and three firefighters sustained sprains and strains.

The way in which the apartment occupant responded to the fire helped fire officials convince local refugee resettlement authorities to support a fire prevention and education program for local immigrants. The program provides in-home inspections and other programs in 12 languages.

Kenneth J. Tremblay, 2005, Firewatch, *NFPA Journal*, September/October, 24-26.

Cigarettes, Oxygen Involved in Fatal Fire, Indiana

A 66-year-old woman died of smoke inhalation and burns in her single-family home when her cigarette ignited her clothing and the chair in which she was sitting. The woman was using medical oxygen at the time of the fire.

The one-story, wood-frame house covered an area of 1,000 square feet (93 square meters). It had a working smoke alarm, but the location and type weren't reported. There were no sprinklers.

The victim called out to her housemate, who found her on fire and tried unsuccessfully to extinguish the flames. He then ran to a neighbor's house to call 911 at 5:18 a.m. Firefighters, who arrived within three minutes, quickly extinguished the fire, but the woman had succumbed to her injuries.

The house, valued at $30,000, and its contents, valued at $10,000, were destroyed.

Kenneth J. Tremblay, 2005, Firewatch, *NFPA Journal*, May/June, 24-26.

Smoking Materials Ignite Club Fire, Massachusetts

A private fraternal club was heavily damaged when smoking materials, disposed of in a plastic waste barrel, ignited. The fire spread undetected until it breached an exterior wall and was seen by a neighbor

The single-story building measured 172 feet (52 meters) by 100 feet (30 meters) and was constructed of steel trusses and concrete block walls with a brick veneer. It contained a function hall, a members' lounge, and several offices. The building, which was unoccupied at the time of the fire, had no fire detection or suppression equipment.

The neighbor called 911 at 1:22 a.m., and firefighters arrived five minutes later to find heavy fire showing from two sides of the building. Their initial attempts to fight the blaze from the interior were unsuccessful, and the incident commander ordered all companies out of the building at 1:35 a.m. A defensive attack by several mutual-aid ladder and engine companies brought the blaze under control two hours later.

Investigators interviewed the members' lounge bartender, who was the last to leave. She told them that she routinely empties the ashtrays into a plastic waste barrel under the bar, which was found to be the point of origin. While doing other chores before leaving, she said, she noticed a "plastic" smell, but couldn't locate its source. She left the club at about 12:45 a.m.

The building was heavily damaged with losses estimated at $1.5 million. There were no injuries.

Kenneth J. Tremblay, 2004, Firewatch, *NFPA Journal*, November/December, 18-19.

Cigarettes Ignite Debris in Void, Connecticut

Employees disposing of cigarette butts in a hole in the exterior brick wall of a nursing home unintentionally ignited construction debris and other cigarette butts that had been dumped in the wall void earlier. Smoke from the burning debris entered the building and activated the automatic fire detection system, calling firefighters to the scene at 7:39 p.m.

The wood-framed nursing home had a brick facade and an asphalt-shingle roof, and it was equipped with automatic fire detection and suppression systems connected to a municipal fire alarm system.

Staff responded to the alarm according to plan and awaited the fire department, which arrived within a minute of the call.

Using forcible entry tools, firefighters opened a section of the wall and quickly extinguished the blaze. The fire was obstructed and was so small the fire sprinklers did not operate.

No one was injured, and damage was estimated at less than $1,000.

Kenneth J. Tremblay, 2004, Firewatch, *NFPA Journal*, March/April, 17-18.

Careless Smoking Ignites Fire That Kills Two, North Carolina

The removal of a hard-wired smoke alarm in an apartment proved fatal when a fire starting by careless smoking went undetected in the early morning hours. The two occupants of the apartment were found unresponsive on the floor. Both died from smoke inhalation.

The fire occurred within a three-story apartment building of wood framing and having a square footage of 7,500 feet (697 meters). Hardwired interconnected smoke alarms were installed in the building, but there were no fire sprinklers.

The fire department initially responded to an odor of natural gas in a first floor unit at 2:06 a.m. Upon entering the structure, firefighters smelled smoke and saw water coming from the ceiling of the first floor. Fire crews went to the second floor to investigate and found one unit with smoke stained windows that were warm to the touch. The door to the two-bedroom apartment was unlocked. They opened the door to encounter heavy smoke. No one answered when they yelled inside, and they could see nothing. The crew retreated until they could stretch a hose line and enter the apartment with full protective gear. They also called for additional resources.

They advanced a line into the apartment, knocking down the fire as they moved further inside. They quickly found two victims. One victim was near the doorway of a bedroom and another just inside the bedroom; both were unconscious and unresponsive. A second back-up crew extinguished the remaining fire and used positive pressure ventilation to clear smoke and heat.

Fire damage was limited to the living room and kitchen with heavy smoke damage throughout the apartment. Investigators determined that some type of smoking material ignited upholstered furniture. The fire spread undetected, as a smoke detector had been removed from the apartment. Smoke did not penetrate the common hallways before the fire departments arrival and the unit directly above the second floor unit of origin was vacant.

The two victims, a 24-year-old man, and an 18-year-old woman died of smoke inhalation. They may have been impaired by alcohol at the time of the fire. The apartment had a value of $40,000 and a contents value of $9,000; losses to the building were $15,000 and contents of $5,000. The cause of the water coming through the ceiling was not reported.

Kenneth J. Tremblay, Firewatch, *NFPA Journal*, January/February, 2004, Special On-Line Edition.

Man Dies Trying to Smoke While Using Oxygen, Florida

A 49-year-old man died of smoke inhalation and an entire wing of an assisted -living facility had to be evacuated after he tried to light a cigarette while using medical oxygen through a nasal canula. In the oxygen-enriched atmosphere, he inadvertently ignited his facial hair and the oxygen tubing.

The two-story, wood-frame facility had 168 beds and measured 257 by 257 feet (78 meters). A smoke and fire detection system had been installed, as had a wet-pipe sprinkler system that provided full coverage. There were also portable fire extinguishers in the hallway. Trying to extinguish the fire, the victim went into the bathroom still hooked up to the oxygen tubing, which began to melt and drop to the carpet. The facility's smoke detection system sounded. Staff members found the victim on the floor, just inside his room. One staff member pulled the victim into the hallway while another used an extinguisher.

The fire department received the fire-alarm activation from a central station alarm company at 6:45 p.m. After a follow-up call from the facility reported smoke in the first-floor hallways, dispatch upgraded the response and sent additional resources to the scene. Firefighters arrived within four minutes to find the occupants evacuating the building.

Fire crews noted minimal smoke in a first-floor hallway where they found an occupant lying unresponsive. As fire crews removed him and put out the remaining fire with a portable fire extinguisher, the incident commander ordered a second alarm. The fire did not get big enough to activate the sprinklers. There was no fire damage to the structure, valued at $3.1 million, and damage to the contents came to just $500. No other residents or firefighters were injured during the incident.

Kenneth J. Tremblay, Firewatch, *NFPA Journal*, January/February, 2004, Special On-Line Edition.

Smoking Leads to Death, South Carolina

A 74-year-old man who lived in a residential care facility died of burns a day after he ignited his clothing while smoking in bed.

The single-story, wood-frame facility had concrete-block walls and an asphalt-shingle roof.

Battery-operated smoke alarms had been installed, but their locations and coverage weren't reported. There were 14 residents and one caregiver in the unsprinklered building at the time of the fire.

The fire department received a 911 call at 2:09 p.m. from an occupant, who reported that a man was on fire. When they arrived at the facility, firefighters found the severely burned man in a chair outside and the other occupants evacuating the building. When the sole staff member told them she couldn't account for all the patients and that the fire might still be burning, fire crews entered the building with a hose line and conducted a primary search. They extinguished the burning bedding and mattress in the victim's room and removed another occupant from the structure.

Investigators determined that the victim, who'd been admitted to the facility a few days earlier, was smoking in bed when he ignited his clothing. The staff had told him that he couldn't smoke, but he'd apparently hidden matches and cigarettes on his person.

The staff member tried to extinguish the fire by putting blankets on the victim, before she went to evacuate other residents. When she returned, however, she discovered the blanket had caught fire. She managed to evacuate the burned man from the building.

The fire department found that the lack of adequate staff during the fire prevented a complete evacuation and accounting of all the residents. The staff member was unable to locate the victim's records before he was taken to the hospital, hindering his treatment by emergency medical crews.

Fire damage was limited to the room of origin, although there was some smoke damage throughout the building. Losses to the structure were estimated at $2,500; damage to its contents was estimated at $1,000.

Kenneth J. Tremblay, 2004, Firewatch, *NFPA Journal*, January/February, 16.

Four Die in House Fire, Kentucky

Firefighters found a smoke alarm with no batteries lying on a bedroom dresser in a two-story, single-family home after a fire that killed four people. The roof of the unsprinklered, wood-and-brick house was covered with asphalt shingles.

The fire burned for at least 45 minutes before a passerby called the fire department at 4 a.m. By the time firefighters arrived eight minutes later, the house was heavily involved in flames, and portions of the roof and walls collapsed within minutes.

Firefighters tried unsuccessfully to resuscitate two victims they found when they entered the house. The coroner removed two more bodies after the fire was extinguished. The dead included two women, ages 75 and 28; a 3-year-old girl; and a 31-year-old man.

Investigators believe that a cigarette ignited carpeting in the first-floor den and that the fire then spread in all directions. The house and everything in it were destroyed.

Kenneth J. Tremblay. 2005. Firewatch. *NFPA Journal*, July/August, 20.

Cigarette Ignites Blaze, Killing Woman, New Jersey
A 72-year-old woman died and a 71-year-old man was injured when smoking materials ignited combustibles in a second-floor bedroom of their apartment. The door to the room was initially closed, confining the fire to the room, but the blaze spread when the man opened the door after smelling smoke. He tried to extinguish it with an old portable fire extinguisher, but the extinguisher didn't work.

The two-family, wood-frame house was 40 feet (12 meters) long and 25 feet (8 meters) wide. The two-and-a-half-story home's hardwired smoke alarms, located in the common areas, the rear hall, and the basement, operated during the fire. There were no sprinklers.

The fire began when a cigarette ignited papers in a plastic wastebasket and spread to wooden molding and a closet. Once the wastebasket melted, the fire also ignited the wooden floor and bedding.

The woman died of smoke inhalation. The man, who used oxygen, suffered smoke inhalation and burns. Property damage was not reported.

Kenneth J. Tremblay. 2005. Firewatch. *NFPA Journal*, March/April, 20,22.

Fire Kills Elderly Smoker, California
An 85-year-old woman died of heat and smoke inhalation injuries after she fell asleep while smoking and dropped her cigarette on the couch, which ignited. Oxygen from an oxygen cylinder that failed during the blaze made the situation worse. The woman lived in a three-story, 6,000-square-foot (557-square-meter), apartment building with wood floors and roof framing, stucco walls, and a shingled roof. The building had no smoke alarms or fire sprinklers.

Investigators believe the woman, who used a walker and medical oxygen, was awakened by the fire and tried to extinguish the blaze herself before calling 911, thus delaying the alarm. Property loss to the building, valued at $3 million, was estimated at $600,000. The contents, valued at $35,000, were destroyed.

Kenneth J. Tremblay. 2004. Firewatch. *NFPA Journal*, January/February, on line at www.nfpa.org.

Cigarette Starts Deadly Fire, Massachusetts
A 45-year-old man, a 23-year-old woman, and a 13-year-old girl died of smoke inhalation when a cigarette fire destroyed their manufactured home.

The wood-framed structure, which was covered by a metal skin and had a metal roof, was 50 feet (15 meters) long and 10 feet (3 meters) wide. It had no sprinklers, and the smoke alarm, which might have alerted the occupants to the slow-burning fire, had no battery.

A passerby who noticed smoke coming from the dwelling drove to a nearby store and called the fire department at 3:44 a.m. Two engines and a ladder company arrived six minutes later. Firefighters, who could see fire through the home's windows, forced their way inside and attacked the blaze with hose lines, as flames vented through the windows.

With the fire quickly under control, another crew conducted a primary search and found the victims in the bedroom.

The home and its contents, valued at $5,000, were total losses.

Kenneth J. Tremblay. 2003. Firewatch. *NFPA Journal,* January/February, 16.

Discarded Cigarette Leads to Motel Death, Maine
A 52-year-old woman died when a fire started by a discarded cigarette ignited grass and leaves under a porch near the only door to her motel room. Investigators believe the fire may have smoldered for as long as 30 minutes before she detected the fire and called 911 at 2 a.m. Emergency operators heard smoke alarms sounding in the background during the call.

The single-story, wood-frame unit, which was 16 feet (5 meters) wide and 30 feet (9 meters) long, had no sprinklers.

The woman succumbed to smoke inhalation. The building and contents had a value of $500,000; however, the dollar loss wasn't reported.

Kenneth J. Tremblay. 2002. Firewatch. *NFPA Journal,* July/August, 20.

Smoking, Disabled Smoke Alarm Contribute to Deaths, Minnesota
A mother and daughter died, but three others were able to use secondary exits to escape the heat and smoke of a fire that began in the first-floor living room. Two of the residents climbed through a first-floor window, while another jumped from a second-floor window.

The multi-story, wood-frame, single-family house had an asphalt-shingled roof. Smoke alarms had been installed, but, based on the survivors' statements, all three had been disabled. There were no sprinklers.

Investigators believe the fire began when discarded smoking materials ignited the living room couch. Flames spread to the kitchen and up the stairwell, trapping three occupants. Although the man jumped from the second-story window, the mother and daughter were reluctant to follow.

A neighbor called 911 to report the fire at 1:33 a.m., and fire fighters arrived within four minutes. Despite aggressive rescue efforts by fire crews, the girl, aged 12, and her mother, aged 40, succumbed to heat and smoke inhalation.

The house, valued at $88,000, and its contents, valued at $60,000, were a total loss.

Kenneth J. Tremblay. 2002. Firewatch. *NFPA Journal,* May/June, 30, 32.

Smoking While Using Oxygen Leads to Fire Fatality, California
The 74-year-old occupant of a studio apartment died in a fire he started while smoking. The blaze was intensified by the failure of the home oxygen system he used for medical purposes.

The property was a converted hotel without kitchen facilities in the single-room apartments for long-term residents. The unsprinklered, seven-story, apartment building contained apartments consisting of a bedroom/living area, a private bath, and closet. The building consisted of protected noncombustible construction.

A smoke alarm in an unidentified area alerted the front desk clerk. At *2:23* a.m., he sent someone to investigate. When they found smoke on the seventh floor, they traced the fire to the room of origin but found the door locked. Arriving firefighters forced the door open and used hose lines to attack the fire as they removed the victim. He was taken to the hospital, where he was pronounced dead at 3:48 a.m. The fire was confined to the room of origin, and smoke damage was confined to the seventh floor.

When firefighters entered the studio apartment, they found that the smoke detector in the unit had been disabled. Investigators also found moderate burn damage to the unit's contents, including clothing, bedding, carpeting, and furniture. In addition, they found an oxygen tank and nearly 20 feet (6 meters) of plastic tubing that showed signs of burn damage at several distinct points. Investigators believe that the victim was smoking and ignited combustibles, and the resulting blaze was enhanced by the oxygen-enriched environment.

Damage to the building was estimated at $10,000 and contents losses at $2,000. There were no injuries or other deaths.

Kenneth J. Tremblay. 2001. Firewatch. *NFPA Journal*, May/June, 32, 34.

Three Die in Smoking Fire, Michigan
Smoking materials ignited a bedroom fire that killed three people after a night of partying to celebrate a birthday. The victims – two men, 27 and 23 years old, and a 20-year-old woman – died of smoke inhalation. All three had elevated blood alcohol levels.

The unsprinklered, former single-family dwelling had been built about 1912 and converted into a two-family home. The fire traveled to upper floors through voids, including a stairway that had been boarded up during the renovation. Measuring approximately 1,200 square feet (111 square meters) per floor, one floor and basement formed the first unit with a second apartment on the second floor. The smoke alarms on the first floor had no batteries, and those on the top floor couldn't be found due to fire damage.

Before the fire, the first-floor occupants were having a party at which many guests drank and smoked. In the early morning hours, two of the occupants retired to a basement

bedroom, while at least two others went to a first-floor bedroom, and others fell asleep on chairs and a sofa in the living room.

Around 5 a.m., the occupants of the basement bedroom heard pounding on the floor and went upstairs to investigate. When they discovered a large amount of smoke, they escaped from the house and called 911 from a cellular phone. The people sleeping in the living room also awoke at nearly the same time and noticed flames coming from the top of the first-floor bedroom door. When they forced open the door, flames shot from the bedroom filling the first floor with heat and smoke. Two of the living room occupants escaped at this point.

The fire department received the alarm at 5:11 a.m. Firefighters discovered two victims in the room of origin and a third in the living room. Five occupants escaped unharmed.

Investigators determined that the fire began under a mattress when smoking materials were carelessly discarded.

Valued at $79,000, the structure suffered a loss of $25,000. The contents, valued at $3,950, suffered $3,500 in damages.

Kenneth J. Tremblay. 2000. Firewatch. *NFPA Journal*, May/June, 34.