



RESEARCH

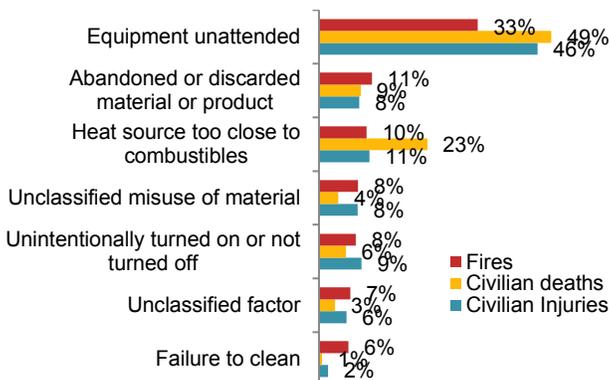
HOME FIRES INVOLVING COOKING EQUIPMENT FACT SHEET

In 2010-2014, U.S. fire departments responded to an average of 166,100 home* structure fires that involved cooking equipment per year. These fires caused an average of 480 civilian fire deaths, 5,540 civilian fire injuries, and \$1.1 billion in direct property damage.

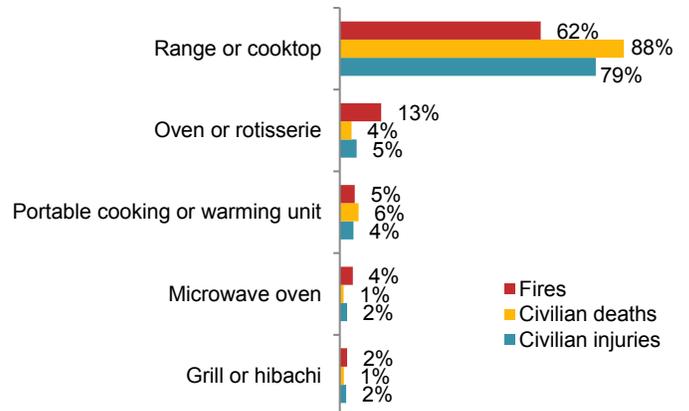
U.S. fire departments responded to an average of 455 home cooking fires per day in 2010-2014.

- Cooking equipment was the leading cause of home structure fires and civilian fire injuries and tied with heating equipment for the second leading cause of home fire deaths.
- Cooking equipment was involved in
 - Almost half (46%) of all reported home fires,
 - One of every five (19%) home fire deaths,
 - More than two of every five (44%) of reported home fire injuries, and
 - 17% of the direct property damage resulting from home fires.
- Unattended cooking was by far the leading contributing factor in these fires and fire deaths.
- Clothing was the item first ignited in less than 1% of these fires, but these incidents accounted for 18% of the cooking fire deaths.
- More than half (55%) of reported non-fatal home cooking fire injuries occurred when the victims tried to fight the fire themselves.
- Households that use electric ranges have a higher risk of fires and associated losses than those using gas ranges.
- Ranges or cooktops, with or without ovens, accounted for the majority (62%) of home cooking fire incidents and even larger shares of civilian deaths (88%).
- Thanksgiving is the peak day for home cooking fires, followed by Christmas Day and Christmas Eve.
- In a 1999 study of range fires by the U.S. Consumer Product Safety Commission, 83% of frying fires began in the first 15 minutes of cooking.

Home cooking equipment fires by factor contributing to ignition: 2010-2014



Home cooking equipment fires by equipment involved in ignition: 2010-2014



To protect yourself from these fires, [see NFPA's Cooking Safety Tips.](#)

* Homes include one- or two-family homes, and apartments or other multi-family housing.

Source: NFPA, Fire Analysis & Research Division, www.nfpa.org



Fact Sheet

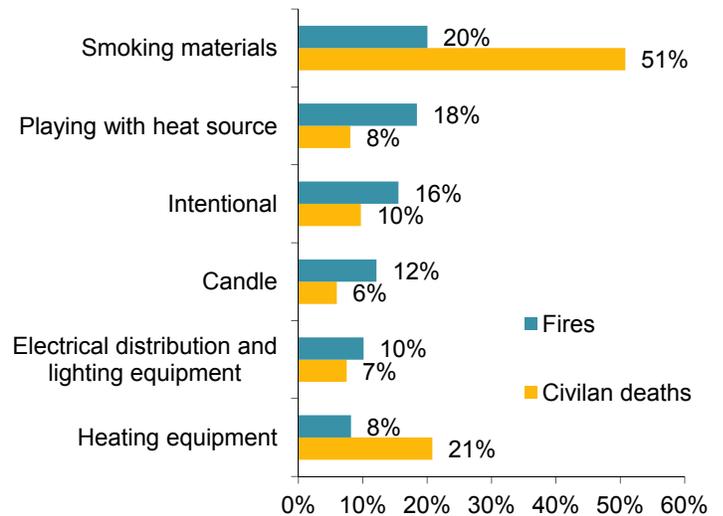
Home Structure Fires That Began With Mattresses and Bedding

Between 2005 and 2009, local fire departments responded to an average of 10,260 home structure fires per year that started with mattresses and bedding. These fires caused annual averages of:

- 371 civilian deaths
- 1,340 civilian injuries
- \$382 million in direct property damage
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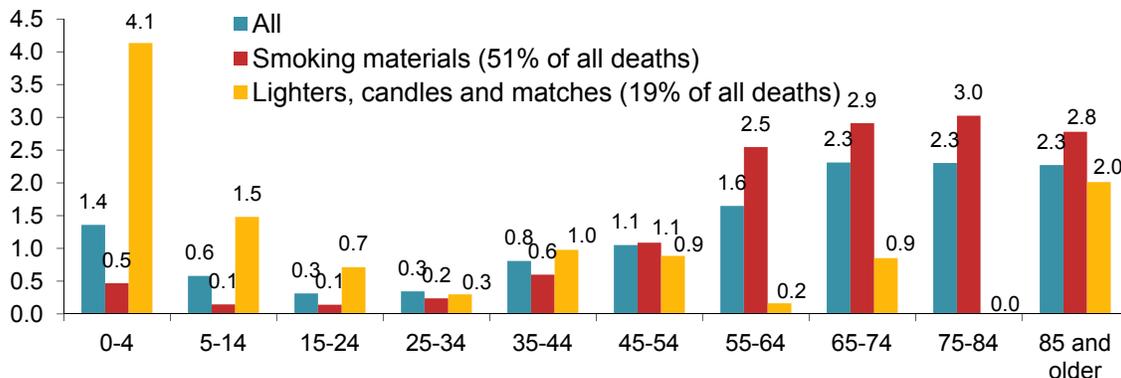
Major Causes of Home Structure Fires That Began With Mattresses And Bedding

- Smoking materials were the cause of 20% of these fires, and half (51%) of the associated civilian deaths
- Playing with a heat source and intentional accounted for 18% and 16% of fires respectively (though there is overlap between these two categories)
- Heating equipment caused 8% of fires but 21% of deaths



Relative Risk of Home Mattress and Bedding Fire Death by Age Group and Smoking Materials vs. Lighters, Candles, and Matches: 2005-2009

Children under 5 years old are at greater risk of fires started by lighters, candles and matches, while older adults are at greater risk from fires started by smoking materials

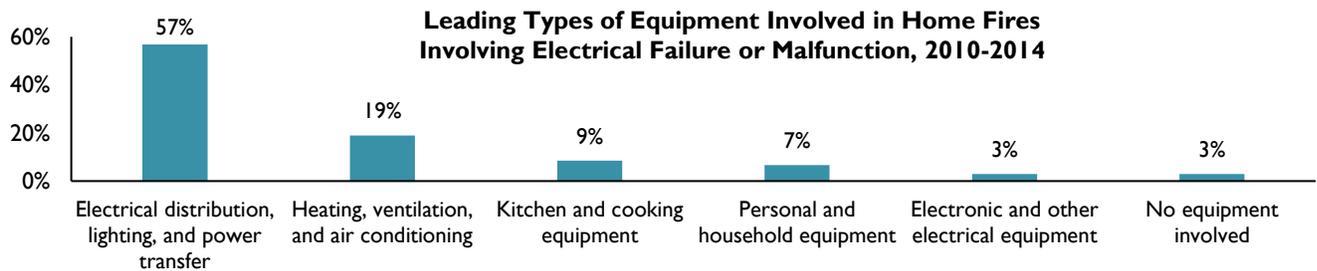


More information is available at www.nfpa.org



ELECTRICAL FIRES FACT SHEET

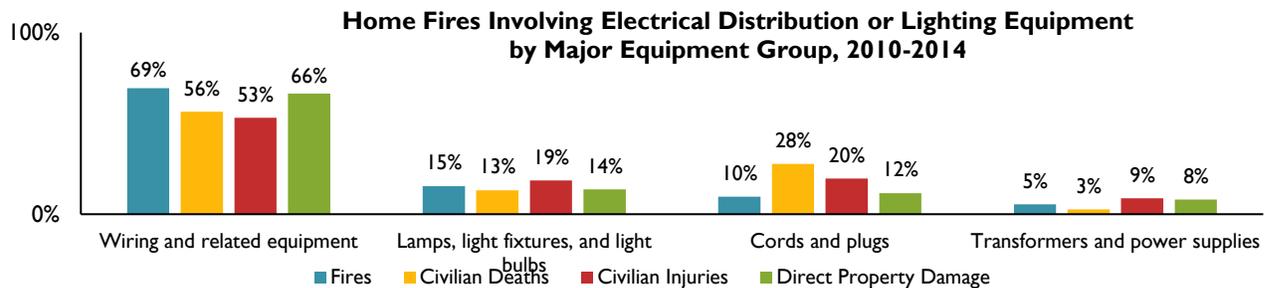
U.S. fire departments responded to an estimated annual average of 45,210 reported U.S. home structure fires involving electrical failure or malfunction in 2010-2014. These fires resulted in 420 civilian deaths, 1,370 civilian injuries and \$1.4 billion in direct property damage each year. Some type of electrical failure or malfunction also contributed to the ignition of 16,070 *non-home* structure fires during this period, resulting in an estimated annual average of 12 civilian deaths, 210 civilian injuries, and \$614 million in direct property damage.



Electrical distribution or lighting equipment was involved in 57% of the home fires involving electrical failure or malfunction. One-fifth (19%) of fires involved heating, ventilation and air conditioning equipment, 9% involved kitchen and cooking equipment, and 7% involved personal and household equipment.

Fires Involving Electrical Distribution or Lighting Equipment

U.S. fire departments responded to an estimated annual average of 31,960 reported non-confined home structure fires involving electrical distribution or lighting equipment in 2010-2014. These fires resulted in 400 civilian fire deaths, 1,180 civilian fire injuries, and \$1.2 billion in direct damage. An estimated annual average of 14,760 non-confined *non-home* fires resulted in 20 civilian deaths, 190 civilian injuries, and \$659 million in direct property damage each year over this period.



Wiring and related equipment accounted for the great majority of home fires and losses involving electrical distribution and lighting equipment (69% of fires, 56% of civilian deaths, 53% of civilian injuries, and 66% of direct property damage). Cords and plugs accounted for 10% of fires, but 28% of civilian deaths and 20% of civilian injuries, as well as 12% of direct property damage.

Source: NFPA, Research, Data & Analytics

NFPA, 1 Batterymarch Park, Quincy, MA 02169, www.nfpa.org

Contact information: 617-984-7451 or research@nfpa.org



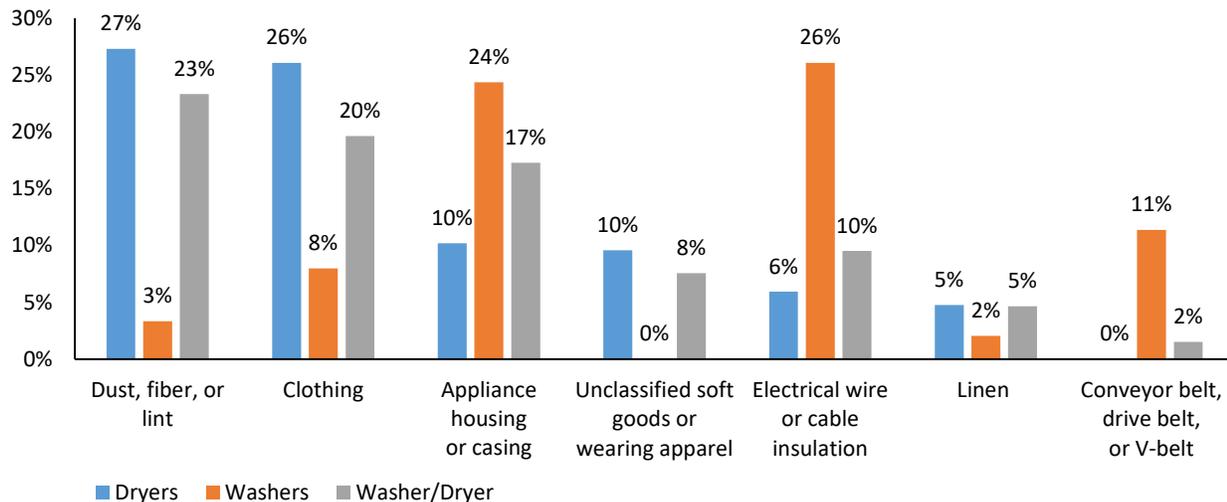
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Home Fires Involving Clothes Dryers and Washing Machines

In 2010–2014, U.S. municipal fire departments responded to an estimated 15,970 home fires involving clothes dryers or washing machines each year.* These fires resulted in annual losses estimated at:

- ▶ 13 civilian deaths
- ▶ 440 civilian injuries
- ▶ and \$238 million in direct property damage

**Home Fires Involving Washers and Dryers, by Factor Contributing to Ignition
2010–2014 Annual Averages**



Source: NFIRS 5.0 and NFPA fire experience survey.

In 2010–2014:

- ▶ The leading items first ignited in clothes dryer fires were dust, fiber, or lint (27%) and clothing (26%). In washing machine fires, the leading items first ignited were electrical wire or cable insulation (26%) and appliance housing or casing (24%).
- ▶ Most of these home fires involved clothes dryers (92%).
- ▶ The leading cause (31%) of home clothes dryer and washer fires was failure to clean.

*Homes are dwellings, duplexes, manufactured homes, apartments, townhouses, rowhouses, and condominiums.

Source: NFPA Research: www.nfpa.org/research
Contact information: 617-984-7451 or research@nfpa.org



NATIONAL FIRE PROTECTION ASSOCIATION
The leading information and knowledge resource on fire, electrical and related hazards

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Office Equipment Fact Sheet

Office equipment includes computers, telephones, and business or office machines

Home* Fires

In 2007-2011, there were an estimated 730 reported U.S. home structure fires involving office equipment per year, resulting in:

- 11 civilian deaths per year,
- 51 civilian injuries per year, and
- \$28 million in direct property damage per year.

The bedroom was the leading area of origin (37%) of home structure fires involving office equipment.

The ignition of wire or cable insulation or appliance housing or casing started one-third (36%) of the office equipment structure fires in homes.

Non-Home Fires

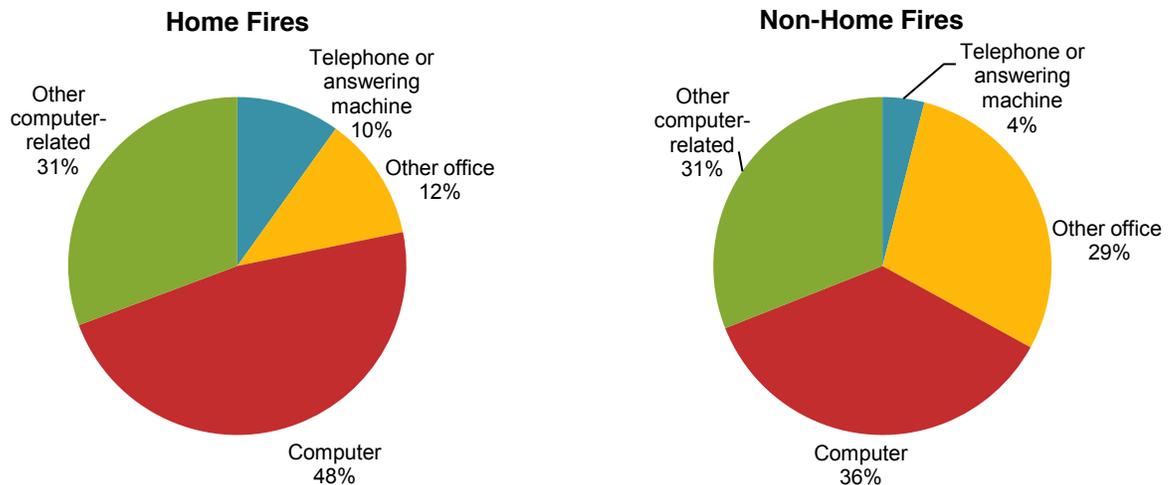
In 2007-2011, there were an estimated 630 reported U.S. non-confined non-home structure fires involving office equipment per year, resulting in:

- no civilian deaths,
- 11 civilian injuries per year, and
- \$42 million in direct property damage per year.

The office was the leading area of origin (39%) for non-home structure fires involving office equipment.

The ignition of wire or cable insulation or appliance housing or casing started half (52%) of the office equipment structure fires in non-homes.

Office Equipment Fires by Type of Equipment 2007-2011 Annual Averages



Source: *Home and Non-Home Fires Involving Office Equipment*, John R. Hall, Jr., September 2013
NFPA, 1 Batterymarch Park, Quincy, MA 02169, www.nfpa.org
Fire Analysis & Research Division, osds@nfpa.org

*Homes are dwellings, duplexes, manufactured homes, apartments, townhouses, rowhouses, and condominiums. Estimates are derived from the U.S. Fire Administration National Fire Incident Reporting System (NFIRS) Version 5.0 and NFPA's annual fire department experience survey.



Smoking-Material Fire Problem Fact Sheet

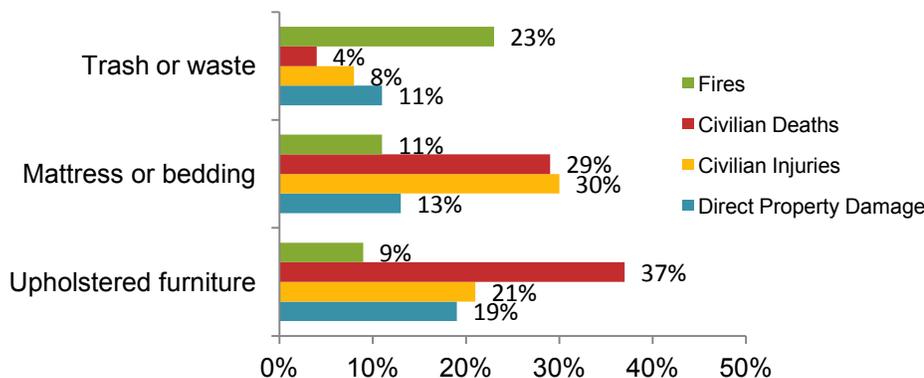
U.S. fire departments responded to an estimated 90,000 smoking-material fires in 2011.

These fires caused:

- 540 civilian deaths
- 1,640 civilian injuries, and
- \$621 million in direct property damage.

These estimates are derived from the U.S. Fire Administration National Fire Incident Reporting System (NFIRS) and NFPA’s annual fire department experience survey.

Smoking-Material Fires in Homes by Leading Item First Ignited in 2007-2011

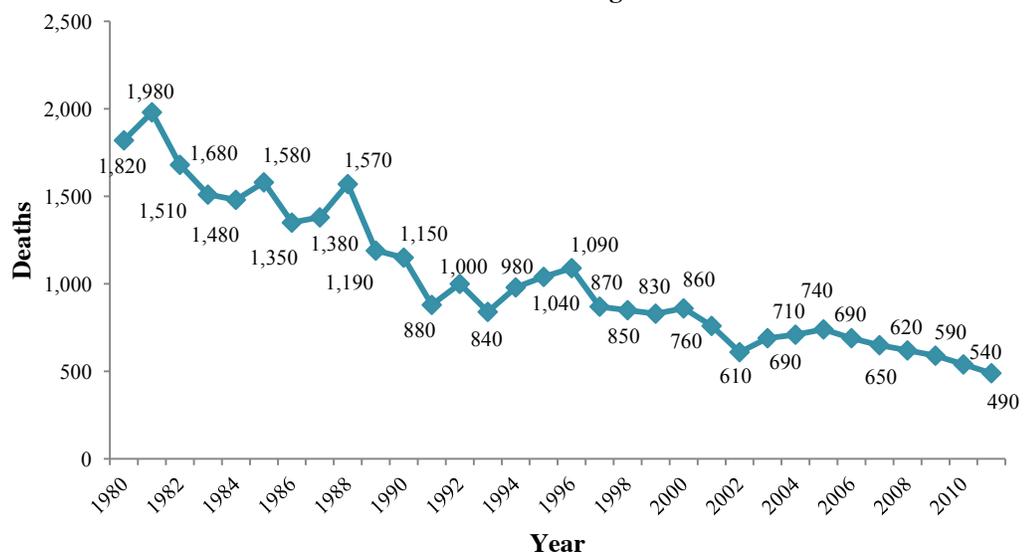


FACT: Most deaths in home smoking-material fires were caused by fires that started in bedrooms (40%) or in living rooms, family rooms or dens (35%).

FACT: The risk of dying in a home structure fire caused by smoking materials rises with age.

Canada and all 50 U.S. states now require cigarettes sold to be “fire safe,” that is, have sharply reduced ignition strength or ability to start fires. The laws were effective everywhere by the end of 2011, and they are considered principally responsible for the 30% decline in smoking-material fire deaths from 2003 to 2011. See www.firesafecigarettes.org for more details.

Trends in Civilian Deaths in U.S. Smoking Material Home Fires



Source: *The Smoking-Material Problem*, John R. Hall, Jr., July 2013