An Overview of the U.S. Fire Problem

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In 2008, U.S. fire departments responded to an estimated 1,451,500 fires. These fires caused 3,320 civilian deaths and 16,705 civilian injuries.[1] In the same year, 104 firefighters were fatally injured while on duty.[2] There were 79,700 firefighter injuries in 2008.[3]

The 2008 fire statistics (except for firefighter fatalities) are projections derived from NFPA's annual fire department survey. The 2,846 departments that did respond to the sample survey protect 117,784,200 people, or 39% of the total U.S. population.

On average, a fire department responded to:

A fire every 22 seconds,
A structure fire every 61 seconds,
An outside fire every 45 seconds,
And a vehicle fire every 134 seconds.

Fire claimed nine lives every day.

Road vehicle fires caused 11% of the civilian fire deaths. In 2008, the 350 deaths caused by car, truck and related vehicle fires was almost three times the 120 deaths resulting from non-residential structure fires.[4]

Three of every five road vehicle fire deaths resulted from fires caused by collisions or overturns.[5]

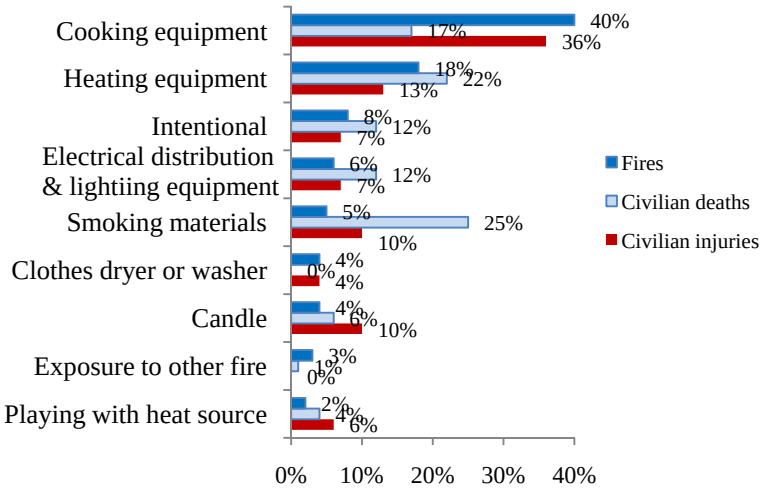
Roughly half of all reported fires were outside or unclassified types of fires.[6]

Home Structure Fires

In 2008, home structure fires caused 83% of the civilian fire deaths and 79% of the civilian fire injuries. Homes include one-and two-family homes, apartments, townhouses, row houses, and manufactured homes.

The graph below shows how the leading causes vary depending on whether the interest is in fires, deaths or injuries.[7]

Major Causes of Home Structure Fires 2003-2007



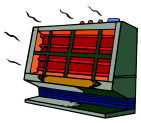
Cooking is the leading cause of home fires and home fire injuries. Unattended cooking is the leading factor contributing to these fires.

Frying is the leading type of activity associated with cooking fires.

More than half of all cooking fire injuries occurred when people tried to fight the fire themselves.[8]

Smoking has been the leading cause of home fire deaths for decades. Seventy percent of the home smoking material fire fatalities resulted from fires originating with a) upholstered furniture, or b) mattresses or bedding.[9] Flammability standards and decreases in smoking have helped reduce these deaths, but the "fire-safe" cigarette will help prevent many more. Canada and all 50 states in the U.S. have passed legislation requiring cigarettes to be "fire-safe."

Seven percent of fatal home smoking fire victims whose smoking materials started the fire were using medical oxygen.[10]



Heating equipment caused 22% of home fire deaths. Heating equipment ranked second in reported home fires and home fire deaths and injuries. Portable and fixed space heaters, including wood stoves, are involved in more fires than central heat. These fires are also more likely than central heating fires to result in death.[11]

Intentional fires are the third leading cause of home fires. According to FBI statistics, roughly half of the people arrested for arson in recent years were under 18.[12]

Electrical distribution or lighting equipment was the fourth leading cause of home fires. A study by the Consumer Product Safety Commission (CPSC) found that homes with older wiring face an increased risk of electrical wiring fire.[13]

Electrical factors can play a role in any fire involving equipment powered by electricity. Electrical failures were factors in 14% of home fires.

Candles were the third leading cause of home fire injuries. These fires nearly tripled from 1990 to 2001 with the increase in candle sales but have since fallen back to the mid 1990's levels. Candles used for light in the absence of electrical power caused 1/3 of fatal candle fires.[14]

Children under 5 are almost 8 times as likely to die in fires caused by playing with heat source than are people of all ages.

Most child-play home structure fires are started by lighters or matches. Almost half of all child-play home structure fires begin in the bedroom.[15]

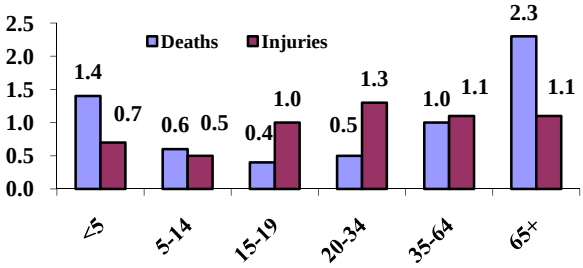
Almost all U.S. homes have at least one smoke alarm, but 63% of home fire deaths resulted from fires in homes without working smoke alarms. People who are under the influence of alcohol, drugs or medications, have disabilities, or are very close to where the fire started, may not be able to act on a smoke alarm's warning.[16]

Nuisance alarms are the leading reason for disabling smoke alarms.[17]

Sprinklers decrease the fire death rate per 1,000 reported home fires by 83% and the average loss per home fire by 74%.[18] NFPA's Fire Sprinkler Initiative: Bringing Safety Home is a nationwide effort to encourage the use of home fire sprinklers and the adoption of fire sprinkler requirements for new construction.
See www.firesprinklerinitiative.org.

Children under 5 and older adults face the highest risk of home fire death, but young adults face a higher risk of home fire injury.[19]

Relative Risk of U.S. Home Fire Deaths and Injuries by Age Group: 2003-2007



States with the highest fire death rates tend to have higher percentages of

- Adults who did not finish high school,
- Black or Native American residents,
- Smokers,
- Households living in poverty, and
- People living in rural areas.[20]

Source: NFPA's Fire Analysis and Research Division. References are available at www.nfpa.org/osds.
April 2010.

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