



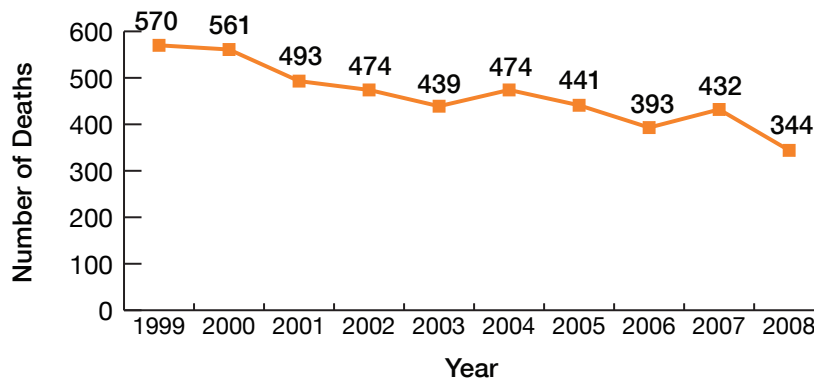
# Fire Safety



## Key Facts

- Since 1999, an average of 462 children ages 14 and under have died from residential fires each year.
- In 2008, 344 children ages 14 and under died from residential fires.

**1999-2008 Unintentional Residential Fire/Flame Deaths Among Children**  
(United States, Ages 14 and Under)



- Since 2001, approximately 107,170 children have been nonfatally injured from an unintentional fire/burn-related incident each year.
- In 2009, almost 90,000 children ages 14 and under were nonfatally injured from an unintentional fire/burn-related incident.
- Fires and burns are the fourth leading cause of unintentional injury-related death among children ages 14 and under.
- In 2008, 70 civilians were killed in fires started by children playing with fire. Approximately 65 percent of victims were children under 5 years of age.
- Home fires account for nearly 90 percent of all fire-related fatalities.
- Forty percent of home fire deaths occur in the 4 percent of U.S. homes without a smoke alarm.
- When a child under 5 years of age dies from a residential fire, a smoke alarm is not working or not present in two-thirds of these occurrences.

## Where, When and How

- Home cooking equipment is the leading cause of residential fires and injuries from residential fires.
- Unattended home cooking is the leading cause of home cooking fires.
- Among children ages 5 and under, scalds or contact burns are responsible for 90 percent of burn injuries.
- During the cold-weather months of November through March, home fires and home fire-related deaths are more likely to occur.
- From 2003 to 2006, more than 40 percent of home fires occurred in homes without smoke alarms or in homes with no working smoke alarms.

- In 2008, approximately 53,000 fires reported to U.S. fire departments were started by children playing, often with matches and lighters.
- The median age of children who start fires while playing is just over 6 years old.
- In 2008, playing with lighters or matches was the cause of 64 percent of child-playing home fires; the items most commonly ignited were mattresses and bedding.
- From 2005 to 2009, smoking materials (e.g., cigarettes) were the leading cause of home fire-related death and the third leading cause of fire-related injury in homes.

## **Who**

- Children under 5 years of age are at the greatest risk from home fire death and injury; their death rate is one and a half times the national average for all children ages 14 and under.
- Male children have a slightly higher risk for fire-related deaths than females, with almost 60 percent of deaths occurring to boys ages 14 and under.
- Children living in rural areas have a dramatically higher risk of dying in a residential fire. Death rates from fire in rural communities are more than twice the national average.
- Black children are more than three times as likely as white children to die in a fire.

## **Proven Interventions**

- Smoke alarms are extremely effective at preventing fire-related death and injury. The chances of dying in a residential fire can be cut in half when a smoke alarm is present.
- Smoke alarms that are interconnected within a home are more likely to operate and alert residents in the case of a fire.
- Smoke alarms and sprinkler systems combined could reduce fire-related deaths by 82 percent.

## **Costs**

- Child-playing fires caused an estimated \$279 million in direct damages in 2008.
- Fire and burn injuries cost a total of \$7.5 billion a year.
- When building a new home, the cost of installing a sprinkler system ranges from approximately \$1 to \$2 per square foot.
- It is estimated that a \$44 smoke alarm generates \$770 in benefits to society.
- Childproof cigarette lighters cost approximately \$0.05 per lighter and lead to \$4 in benefits to society.

## **Laws and Regulations**

- Many states and the District of Columbia have laws requiring the use of smoke alarms in new and existing homes. A few states still have no comprehensive smoke alarm laws. Other states have a variety of laws covering specific situations such as new dwellings or multi-occupancy dwellings only.
- In 1994, the U.S. Consumer Product Safety Commission (CPSC) issued a mandatory safety standard requiring most cigarette lighters to be child-resistant. This standard covers more than 95 percent of lighters purchased in the U.S. annually. Since this standard has been in effect, there has been a 58 percent reduction in fires caused by children under 5 years of age.
- The 1972 CPSC regulation that children's sleepwear be made of nonflammable material has been repealed for older children's sleepwear. Current regulations require that the clothing be snug fitting and difficult to ignite. Regulations for the use of nonflammable materials in sleepwear for children under 9 months of age has been dropped.