

CHILDREN PLAYING WITH FIRE

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Abstract

Between 2005 and 2009, an average of 56,300 child-playing fires were reported to U.S. municipal fire departments per year. These fires caused annual averages of 110 civilian deaths, 880 civilian injuries, and \$286 million in property damage. Structure fires accounted for 22% of fires, but 98% of civilian deaths, and 93% of property damage. Outside or unclassified fires accounted for 76% of the fires, and vehicle fires for 2%. Because most loss of life and damage occur in structure fires, and specifically home fires, the report focuses on home fires. Half of home playing structure fires were started by cigarette lighters, 19% by matches, and 6% by candles. Forty percent of fires began in the bedroom, and mattress or bedding was the item first ignited in 24% of home playing structure fires. Forty-four percent of home playing structure fires were started by a child between the ages of 4 and 6, which is different from outside or unclassified fires, where two out of five of fires were started by someone between the ages of 10 and 12.

These estimates are based on data from the U.S. Fire Administration's (USFA's) National Fire Incident Reporting System (NFIRS) and the National Fire Protection Association's (NFPA's) annual fire department experience survey.

Keywords: fire statistics, child playing, fire-play, fire setting, intentional fires, arson

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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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Executive Summary

Between 2005 and 2009, an average of 56,300 child-playing fires were reported to U.S. municipal fire departments per year. These fires caused annual averages of 110 civilian deaths, 880 civilian injuries, and \$286 million in property damage. Structure fires accounted for 22% of fires, but 98% of civilian deaths, and 93% of property damage. Outside or unclassified fires accounted for three-quarters (76%) of the fires, and vehicle fires for 2%.

Two-thirds (66%) of child-playing structure fires occurred in residential properties, with 62% in homes. Twelve percent began in outside or special properties (these include tunnels, bridges, vacant lots, etc.), and 8% began in educational properties.

Most deaths, injuries, and damage from child playing fires occur in home structure fires. An average of 7,670 home structure fires per year caused by child-playing were reported between 2005 and 2009, causing annual averages of 100 civilian deaths, 750 civilian injuries, and \$192 million in property damage. They are more common during the month of July, and peak between the hours of 3 p.m. and 6 p.m.

Half of home playing structure fires had a lighter as their heat source, and matches were the heat source in 19% of fires. Fires started by lighters or matches caused 92% of civilian deaths.

Forty percent of these fires began in the bedroom, 8% in the kitchen and 6% in a common room, living room, family room or den. A mattress or bedding was the item first ignited in 24% of these fires, 10% began with magazines, newspapers, or

writing paper and 9% began with rubbish, trash, or waste.

The majority of child-playing structure fires in homes (83%) were started by males (when age was coded as a human factor contributing to ignition). Forty-four percent of the fires were started by a child between the ages of 4 and 6. Older children were more likely to start fires outside as two of five outside or unclassified fires were started by a child between the ages of 10 and 12.

Outside or unclassified child-playing fires (excluding trash or rubbish fires) peak during the afternoon hours, between 3 p.m. and 6 p.m. Nearly one-quarter of these fires were started during the month of July, mostly around the July 4th holiday. Fireworks were the heat source in one-third (33%) of all non-trash outside or unclassified fires caused by child playing, lighters were the heat source in 25%, and matches were the heat source in 21%.

Males were even more likely to be responsible for these fires than in home playing structure fires, as 93% of child-playing outside or unclassified (trash or non-trash combined) fires were started by males (when age was coded as a human factor contributing to ignition).

Public educators (and the general public) can use the following safety tips to help prevent fires that involve playing:

- Store matches and lighters out of children's reach and sight, up high, preferably in a locked cabinet.
- Never use lighters or matches as a source of amusement for children; they may imitate you.

- If your child expresses curiosity about fire or has been playing with fire, calmly but firmly explain that matches and lighters are tools for adults only.
- Use only lighters designed with child-resistant features. Remember child-resistant does not mean child proof.
- Teach young children and school-age children to tell an adult if they see matches or lighters.
- Never leave matches or lighters in a bedroom or any place where children may go without supervision.
- If you suspect your child is intentionally setting fires or unduly fascinated with fire, get help. Your local fire department, school, or community counseling agency can put you in touch with trained experts.

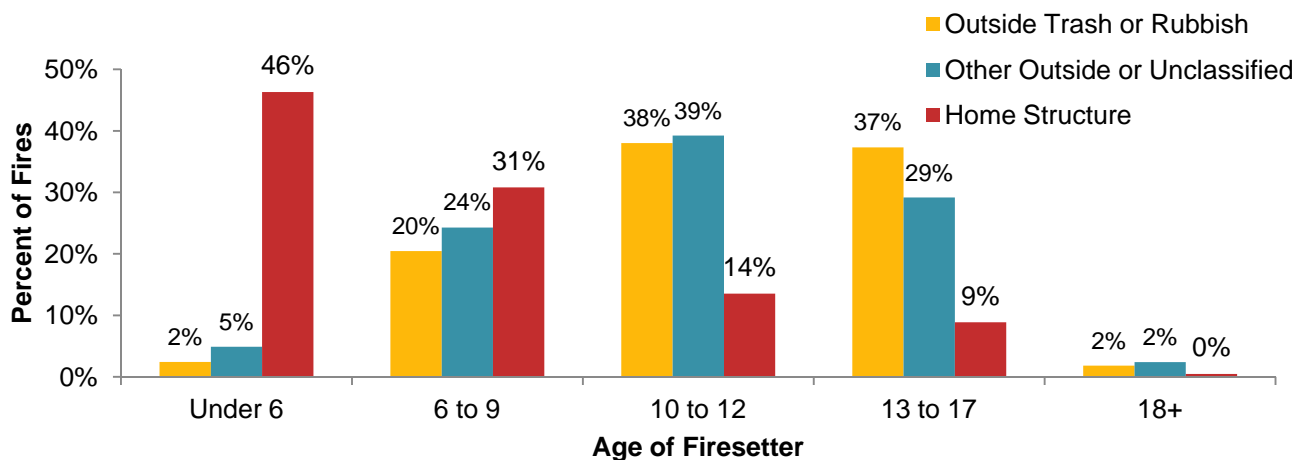


Children Playing With Fire Fact Sheet

Fires started by children playing accounted for an average of 56,300 fires with associated losses of 110 civilian deaths, 880 civilian injuries and \$286 million in direct property damage per year between 2005 -2009. These included:

- 25,100 outside or unclassified fires
- 17,900 outside trash or rubbish fires
- 12,500 structure fires
- 900 vehicle fires

**Structure Fires Caused by Children Playing
 By Age (when Age Cited as a Human Factor Involved in Ignition) 2005-2009**



Younger children were more likely to set fires in homes, while older children and teenagers are more likely to set fires outside

- Males were more likely to engage in fire-play than females, as 83% of home structure fires and 93% of outside or unclassified fires were set by boys when age was coded as a factor
- Lighters were the heat source in half (50%) of child-playing fires in homes
- 40% of child-playing home fires began in a bedroom

PARENTAL INVOLVEMENT COMBINED WITH POSITIVE MESSAGING WORKS FOR CHILDREN:

NFPA recently contracted with the Johns Hopkins Center for Injury Research and Policy to study the best way to communicate safety messages to children 4-9 years old. The study found that videos featuring positively framed messages are more effective than negatively framed messages and that when parents discuss media content with their children, the children learn more. You can learn more at <http://www.nfpa.org/messaging>

Additional resources can be found at www.nfpa.org

