

HOME CANDLE FIRES

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Abstract

Reported home candle fires have tripled since their low in 1990. Two-fifths started in the bedroom, while the living room, family room, or den was the leading area of origin for candle fire deaths. Half of the home candle fires occurred after by some type of combustible was too close to the candle; an unattended or abandoned candle was a factor in 18% of these fires. Falling asleep was a factor in 12% of the incidents.

Key Words: Fire statistics, Fire causes, Candles, Residential fires, Home fires

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Executive Summary

During 2002, candles in U.S. homes caused an estimated 18,000 reported structure fires, 130 civilian deaths, 1,350 civilian injuries, and \$333 million in estimated direct property damage. (Homes include one- and two-family dwellings, apartments and manufactured housing.)

The number of reported home candle fires stabilized from 2001 to 2002, after rising 15% from 2000 to 2001. From 1980, the first year of available data, to 1990, these fires had been falling, but they started climbing in 1991. The year 2002 was the first since 1995 that has not been a new high. The 18,000 reported in 2001 and 2002 is more than three times the 5,500 reported in 1990. The number of home candle fire deaths dropped back to the 2000 level after a sharp spike in 2001.

The share of home fires started by candles has increased over the past decade as the number of reported home fires generally decreased and reported home candle fires increased. In 2001 and 2002, candles caused 5% of reported home fires. Only 1% of home candle fires were caused by candles from 1980 through 1993.

During the four-year period of 1999-2002:

- Two-fifths (40%) of the home candle fires started in the bedroom, resulting in 30% of the associated civilian deaths. The 17% of home candle fires that started in the living room, common room, or den caused 36% of the fatalities.
- Candle fires start with a variety of items. A mattress or bedding was the item first ignited in 12% of the home candle fires and 27% of the home candle fire deaths. Cabinetry was first ignited in 10% of these fires, and 9% started when a curtain, blind or drapery ignited. Only 6% started with interior wall covering, but these fires caused 17% of the deaths. Five percent started with upholstered furniture, but these fires caused 13% of the home candle fire deaths.
- Fourteen percent of the home candle fires occurred in December, almost twice the monthly average of 8%.
- Falling asleep was a factor in 12% percent of the home candle fires and 25% of the associated deaths.

Factors contributing to ignition in 1999-2002:

- Half (50%) of the home candle fires occurred when some form of combustible material was left or came too close to the candle.
- Eighteen percent started after candles were abandoned or left unattended.
- Five percent were started by people (usually children) playing with the candle.

Ninety-one percent of all reported structure fires started by candles occurred in homes.

An NFPA study of news clips and fire service reports about identified fatal home candle fires in 1997 and 1998 revealed that candles used for light in the absence of electrical power caused about one of every three of the studied fatal home candle fires. About one in four (24%) of the fatal home candle fires occurred in homes in which the power had been shut off. Seven percent (7%) of the fatal fires occurred during temporary power outages.

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