

Candle Facts

Candles have become a very popular décor item. They can scent the air with mood enhancing aromas, provide us with a warm, calming, relaxing atmosphere, and be used in worship ceremonies. Despite their appeal and popularity, candles can be a very dangerous item.

The Facts

- Candle fires are a serious part of the fire problem. They are the 7th highest cause of home fires and have generally been increasing over the past 10 years.
- A lit candle is an open flame.
- One tiny candle flame can reach 1,400 °C, 14 times the temperature needed to boil water.
- Candle flames can flare, candle containers can get too hot and melt or crack, hot wax can start objects on fire, and the candle wax itself can start on fire.

Where do candle fires start?

- The majority of candle fires occur in the home (90%).
- In Alberta, between the years 1994 to 2003, there were 851 home candle fires. These fires caused nine fire deaths, 191 fire injuries, and \$23,013,946 in property losses. *Other provinces no doubt have similar statistics.*
- The majority of home candle fires start in the bedroom (39%), followed by the living room (33%).

How do candle fires start?

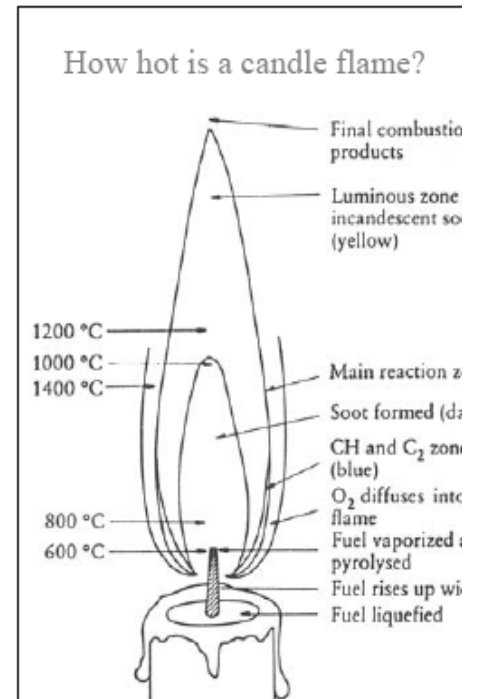
- Leaving candles unattended, falling asleep while candle is lit and using candles for light are the most common causes of candle fires.
- Other common candle fire causes include the candle being located too close to burnable objects, falling or being knocked over by children, pets, or sudden drafts, and the release of hot embers from the flame.

What do candles ignite?

- Candle fires most commonly ignite furniture (18%), followed by bedding/mattress/pillow (11%), plastics (6%) and the candle wax itself (5%).

When do candle fires occur?

- Candle fires are more frequent in the months of November, December, and January, with a peak in December at 20 times the average monthly number of incidents.
- During the Christmas period (December 15-30) candle-related fires go up approximately 140%.



The Law

- There are no legal standards or regulations for candles, including their make, design, safety features, location, or use.
- Candles are not tested by a testing agency for safety before they are put on the market for you to buy.

Safety Tips

- Extinguish candles when leaving the room or going to sleep.
- Keep lit candles away from items that can catch fire such as toys, clothing, books, curtains, Christmas trees and paper decorations.
- Place candles in sturdy, burn-resistant containers that won't tip over and are big enough to collect dripping wax.
- Don't place lit candles in windows where blinds or curtains may close or blow over them, and don't use them in places where children or pets could knock them over.
- Never let candles burn down to the bottom. Extinguish candles when they get within two inches of the holder or decorative material.
- Never leave children or pets alone in a room with lit candles.
- Do not allow older children to light candles in their bedrooms—a forgotten candle or an accident is all it takes to start a fire.
- During power outages exercise caution when using candles as a light source. Many destructive fires start during such times since potential fire hazards can go unnoticed in the relative darkness.
- Never use a candle for light when fuelling equipment such as a camp-fuel heater or lantern.
- Keep candle wicks short at all times. Trim the wick to one-quarter inch (6.4 mm).
- Be wary of buying novelty candles. Avoid candles surrounded by flammable paint, paper, dried flowers, or breakable/meltable containers.
- When buying or using novelty candles, try to determine if they pose a potential fire hazard. If they do, or you suspect they might, inform your local fire department.
- Install at least one smoke alarm on every level of your home. Test them monthly to ensure they are working and replace batteries once a year. Practice a home fire escape drill.

CANDLES - ONE OF THE MAJOR CAUSES OF HOME FIRES DURING THE WINTER SEASON AND ESPECIALLY OVER THE CHRISTMAS HOLIDAYS.

Home Fires From Candles Reach 20-Year Peak. Small flames led to 102 deaths and 1,473 injuries in 1999 - The number of home fires caused by candles has been soaring in recent years, and jumped a startling 20 percent from 1998 to 1999, the most recent year for which statistics are available, according to the NFPA (National Fire Protection Association). Indeed, 1999 marked a 20-year peak. There were an estimated 15,040 home candle fires that caused 102 deaths, 1,473 injuries (a 33 percent increase over the previous year), and \$278 million in damages. In contrast, in 1990, there were 5,460 home fires attributed to candles.

Candle fires are more common around the holidays, because more people use candles, and decorations are often near them. Candle fires peaked on Christmas Day - they accounted for 10 percent of home fires on Christmas Day in 1999, followed by New Year's Day and Christmas Eve. Home candle fires are more common in the winter months. In 1999, there were almost twice as many home candle fires in December as in an average month.

How does a little flame become so dangerous? Four out of 10 times, the candles were left unattended, abandoned or inadequately controlled. One in four times, material that catches fire easily was left too close to the flame. Sometimes children play with the candle. Sometimes someone falls asleep with one or more candles lit.

Four out of 10 home candle fires start in the bedroom, and two out of 10 in common rooms - living rooms, family rooms or dens. The most common item first ignited by a candle is a mattress or bedding, except in December when decorations are the most common first item.

Fire Prevention Canada and the NFPA recommend the following safety tips when using candles:

- Use candles only in rooms where there is a responsible adult awake to control and oversee the flame;
- Keep candles away from items that can catch fire, such as clothing, books, papers, Christmas trees, decorations, window blinds and curtains;
- Keep candles away from high-traffic locations where they can be easily knocked over, especially areas accessible to children or pets;
- Place candles on stable surfaces in sturdy holders that grip the candle securely and won't tip over or allow the candle to fall over;
- Place candles in candle holders that won't catch fire and are big enough to collect dripping wax;
- Extinguish taper and pillar candles when they burn to within two inches of the holder, and container candles before the last half-inch of wax begins to melt;
- Avoid candles with combustible items embedded in them; and
- Use extreme caution if you carry a lit candle, holding it well away from clothing and any combustibles that may be along your path. While carrying a candle, avoid loose, flowing clothing that is not flame-resistant.