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CANDLE SAFETY: PREVENTING CANDLE FIRES



Why are candles dangerous?

• Every candle is a potential fire hazard if care is not used when lighting, burning or extinguishing the flame. When used improperly, a candle can cause significant loss of life, injury and loss of property.

How many fires are started by candles?



• In 2005, U.S. fire departments responded to **15,600** residential fires that were started by candles. The fires caused **150** deaths, **1,270** civilian fire injuries and **\$539** million in property damage (NFPA, 2007).

Between 2002-2005, on average, 1 candle-related house fire was reported every 34 minutes.

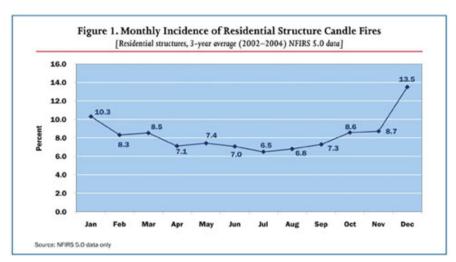


When do candle fires occur?



According to the National Fire Protections Association (NFPA), December is the peak
time of year for candle-related house fires (see Figure 1). The top five days for candle
fire incidents are Christmas, Christmas Eve, New Year's Day, New Year's Eve, and
Halloween.





(Figure Courtesy of the NFPA, 2005)

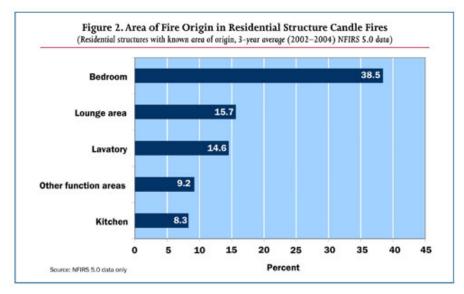






Where do candle fires start?

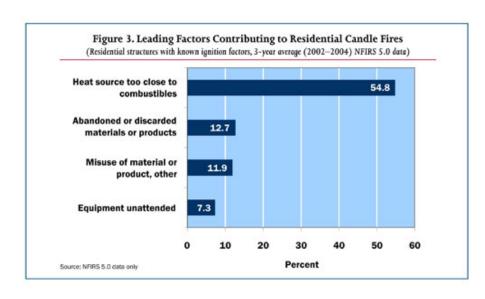
• Candle fire incidents occur most often in the bedroom, followed by the family room, bathroom, and kitchen (see Figure 2). The materials most often ignited by candles are cabinetry, bedding (blankets, sheets, comforters, etc.), curtains and drapery, and mattresses and pillows.



(Figure Courtesy of the NFPA, 2005)

What are the main causes of candle fires?

 Nearly 85% of candle fire incidents are started because of consumer misuse of the product. The following are some of the categories of ignition factors cited by NFPA.





(Figure Courtesy of the NFPA, 2005)

What other factors can start candles fires?

- Candle burned down
- Holder broke
- Landle knocked or tipped over
- Candle flared
- Falling asleep

- Wick was blown off candle
- Child held candle
- Inadequate control of open fire
- Child playing

How can you prevent candle fires?

A study by the U.S. Consumer Product Safety Commission suggests that 85 percent of candle fires could be avoided if consumers followed 3 basic safety rules:



- 1. NEVER LEAVE A BURNING CANDLE UNATTENDED
- 2. NEVER PLACE A BURNING CANDLE NEAR SOMETHING THAT CAN CATCH FIRE
- 3. KEEP BURNING CANDLES OUT OF THE REACH OF CHILDREN OR PETS

Introducing the New Look In Candle Fire Safety

These graphic safety symbols will soon be seen on more and more candle labels worldwide. Learn to recognize these important visual reminders of the candle fire-safety rules.



Burn within sight.









Keep away from children.

Some additional tips that will help you use and enjoy candles safely are:

- ✓ Use sturdy, safe candleholders
- ✓ Trim wicks to ½ inch prior to each use
- ✓ Be careful not to splatter wax when extinguishing a candle
- ✓ Avoid using candles in bedrooms and sleeping areas
- Always use a flashlight, not a candle, for emergency lighting
- ✓ Consider using battery-operated flameless candles





What are some alternatives to candles?



- Battery operated flameless candles can provide the home décor, fragrance, and glow/flicker of real candlelight, without the risk of fire. In addition to protecting your home, flameless candles are more economical, last forever, and can run up to 250 hours on batteries.
- To see a selection of flameless candles click on www.GoFlameless.com

USE BATTERY OPERATED FLAMELESS CANDLES. FLAMELESS CANDLES ARE SAFE.



"I'm going out tonight!"

References and Additional Resources:

Home Candle Fires, Marty Ahrens, National Fire Protection Association, Quincy, MA, September 2007.

http://www.ihs.gov/MedicalPrograms/PortlandInjury/PDFs/HomeCandleFiresSept20 07.pdf

House Fires, Ahrens, Marty. National Fire Protection Association, Quincy, MA, August 2005. http://www.nfpa.org/assets/files/PDF/Candlereport.pdf

National Candle Association. (2008). Candle Safety Rules. http://www.candles.org/safety_rules.html

National Fire Protection Association. (2008). Candles.

http://www.nfpa.org/itemDetail.asp?categoryID=638&itemID=19184&URL=Researc h%20&%20Reports/Fact%20sheets/Safety%20in%20the%20home/Candles&cookie% 5Ftest=1&cookie%5Ftest=1

National Fire Protection Association. (2008). U.S. Home Candle Fires. http://www.nfpa.org/assets/files//PDF/candlefactsheet.pdf