

From the PDF

CHRISTMAS TREE SAFETY

As you deck the halls this holiday season, be fire smart. A small fire that spreads to a Christmas tree can grow large very quickly.

PICKING THE TREE

- Choose a tree with fresh, green needles that do not fall off when touched.

PLACING THE TREE

• Before placing the tree in the stand, cut 2" from the base of the trunk. • Make sure the tree is at least three feet away from any heat source, like fireplaces, radiators, candles, heat vents or lights. • Make sure the tree is not blocking an exit. • Add water to the tree stand. Be sure to add water daily.

LIGHTING THE TREE

• Use lights that have the label of a recognized testing laboratory. Some lights are only for indoor or outdoor use. • Replace any string of lights with worn or broken cords or loose bulb connections. Read manufacturer's instructions for number of light strands to connect. • Never use lit candles to decorate the tree. • Always turn off Christmas tree lights before leaving home or going to bed.

AFTER CHRISTMAS

Get rid of the tree after Christmas or when it is dry. Dried-out trees are a fire danger and should not be left in the home or garage, or placed outside against the home. Check with your local community to find a recycling program. Bring outdoor electrical lights inside after the holidays to prevent hazards and make them last longer.

CHRISTMAS TREE FIRE FACTS

- One of every three home Christmas tree fires is caused by electrical problems.
- Although Christmas tree fires are not common, when they do occur, they are more likely to be serious.
- A heat source too close to the tree causes roughly one in every four of the fires.

RESEARCH STATISTICS

Research and statistics

- Between 2011-2015, U.S. fire departments responded to an average 200 home fires that started with Christmas trees per year. These fires caused an average of 6 deaths, 16 injuries, and \$14.8 million in direct property damage annually.
- On average, one of every 32 reported home fires that began with a Christmas tree resulted in a death, compared to an average of one death per 143 total reported home fires.

- Electrical distribution or lighting equipment was involved in two of every five (40%) of home Christmas tree fires.
- In one-quarter (26%) of the Christmas tree fires and in 80% of the deaths, some type of heat source, such as a candle or equipment, was too close to the tree.
- One quarter (24%) of Christmas tree fires were intentional.
- Forty-two percent of reported home Christmas tree fires occurred in December and 37% were reported in January.
- More than one-third (37%) home Christmas tree fires started in the living room, family room, or den.

YOUTUBE VIDEOS

Christmas tree fires can turn devastating and deadly within seconds

<https://youtu.be/xr6b9b8FYKk>

A live Christmas tree burn conducted by the U.S. Consumer Product Safety Commission (CPSC) shows just how quickly a dried out Christmas tree fire burns, with flashover occurring in less than one minute, as compared to a well-watered tree, which burns at a much slower rate.

Deck the Halls with Fire Safety

<https://youtu.be/-ugeFgJlpi4>

Create a beautifully decorated room for the holidays and keep it fire safe. NFPA's winter holidays tips give you the guidance you need to create the holiday atmosphere you love, and the security of knowing you're keeping yourself and your family and friends safer from fire.

Yule Light Up My Life

<https://www.youtube.com/watch?v=3rkS3FesySU>

The National Fire Protection Association's (NFPA) lovable Dan Doofus shows you how to have a fire-safe holiday with a few simple safety tips. To learn more about what you can do to keep your home safe this holiday season, visit www.nfpa.org/projectholiday.

NFPA.org

Fire Safety for Kids

Play games and download free apps:

<http://www.sparky.org/>

Visit Sparky Schoolhouse for teaching tools:

<http://www.sparkyschoolhouse.org>

<https://youtu.be/l-UsyL18kZw>

“Look. Listen. Learn. Be aware. Fire can happen anywhere,”

NIST

<https://www.nist.gov/topics/fire/why-you-should-water-your-christmas-tree>

<https://www.nist.gov/el/fire-research-division-73300/national-fire-research-laboratory-73306/holiday-fire-safety>

Christmas Tree Fire Safety Tips

Watering your Christmas Tree Reduces Fire Hazard

Every year in the U.S., fire departments respond to an estimated 210 home fires involving Christmas trees[1]. Even though Christmas tree fires are infrequent, when they occur, they can be dangerous and costly. These fires cause an annual average of 6 civilian deaths, 16 civilian injuries, and \$16.2 million in property damage[1]. The good news is that by keeping your Christmas tree watered, you can enjoy the holidays with a beautiful and safer Christmas tree.

The Fire Research Division at NIST conducted a series of fire experiments to demonstrate how a watered Christmas tree may be less of a fire hazard than a dry one. As shown in the video below, the Christmas tree that was maintained in a stand that was kept filled with water prior to testing ('WATERED', left side of Video 1) did not ignite when exposed to the same ignition source as the Christmas tree that was not watered ('DRY', right side of Video 1). While every home is different, a slower growing fire can mean more time to react, escape, and call the fire department; this can reduce the damage done by the fire.

<https://www.youtube.com/watch?v=26A-49Wb2F4>

Video 1.

Well-maintained ('WATERED') and 'DRY' Christmas tree fires. Properly maintaining a cut Christmas tree is important to retaining a high moisture content in the branches and needles of the tree. This can help to limit ignition likelihood, fire growth rate, and peak fire size.

The video above suggests that keeping your Christmas tree watered can reduce its fire risk. The National Fire Protection Association (NFPA) suggests several steps that you can take to reduce the risk of a Christmas tree fire in your home[2].

- Choose a healthy tree with fresh, green needles that do not fall off when touched.
- Immediately before placing a tree in its stand, cut 5 cm (2 in.) from the base of the trunk; this can help the tree to draw up water. If the cut surface is allowed to dry, it will reduce the water uptake to the tree.

- Always keep the tree well-watered. Make sure to check the water level in the stand daily.
- Make sure that the tree is at least three feet away from any heat source (e.g. space heaters, candles, fireplaces, heat vents, or lights).
- Make sure that the tree does not block an exit.
- Only use decorative lights that have the label of a recognized testing laboratory. Make sure light bulbs, strings, and connections are not broken or damaged in any way.
- Always turn off tree lights before leaving home or going to bed.
- Never use lit candles to decorate the tree.
- Get rid of the tree after Christmas or when it is dry and keep it away from your home/garage. Of the ten days with the largest shares of Christmas tree fires, none were before Christmas[3].
- Check with your local community to find a recycling program.

For additional information on Christmas fires and safety from the NFPA please visit, Home Structure Fires Involving Christmas Trees (2016):
http://www.nfpa.org/~//media/files/news-and-research/fire-statistics/major-causes/osc_hristmastrees.pdf?la=en