

HOME CHRISTMAS TREE AND HOLIDAY LIGHT FIRES

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Abstract

During the five-year-period of 2000-2004, NFPA estimates that Christmas trees, both natural and artificial, were the item first ignited in an estimated average of 300 reported home structure fires. These fires caused an estimated average of 14 civilian deaths, 21 civilian injuries, and \$16.8 million in direct property damage per year. 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.

During the same period, holiday lights and other decorative lighting with line voltage were involved in an estimated average of 170 home structure fires per year in this same period. These fires caused an average of 19 civilian injuries, and \$5.5 million in direct property damage per year. The analysis examines the causes of these fires.

Keywords: Christmas tree, holiday lights, fire statistics, decorative lights, home fires

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Executive Summary

The winter holiday season should be a joyous time of year. However, certain types of fires and injuries are associated with holiday decorating. In 2000-2004, U.S. fire departments responded to an estimated average of 300 home structure fires that began with Christmas trees. These fires caused an average of 14 civilian deaths, 21 civilian injuries, and \$16.8 million in direct property damage per year. Two-thirds of these fires were in December and 20% were in January.

Although these fires are not common, when they do occur, they are unusually dangerous. On average, one of every 22 home structure Christmas tree fires resulted in a death.

Electrical failures or malfunctions were involved in 44% of the home Christmas tree fires; 24% occurred because some type of heat source was too close to the tree. Decorative lights with line voltage were involved in 16% of these incidents. Twelve percent were started by candles.

Also during 2000-2004, an annual average of 80 outside and other non-structure, non-vehicle fires on home properties started with Christmas trees. Fifty-four percent of these fires occurred in January. Sixty-six percent were intentionally set. This suggests that discarded Christmas trees may be an attractive target for vandals.

Holiday lights and other decorative lighting with line voltage were involved in an estimated average of 170 home structure fires per year in this same period. These fires caused an average of 19 civilian injuries, and \$5.5 million in direct property damage per year. No deaths were reported from these fires. Forty-three percent occurred in December; 15% were in January. One-fifth of these fires began with Christmas trees.

In a study of fall-related injuries during the holiday season, Stevens and Vajani estimated that an average of roughly 5,800 fall injuries related to holiday decorating were treated at hospital emergency rooms between November 1 and January 31 in 2000-2001, 2001-2002, and 2002-2003.¹ Sixty-two percent of those injured were between 20 and 49 years of age. With 43% of the injuries resulting from falls from ladders and 13% caused by falls from the roof, it appears that the majority of these falls occurred during outdoor decorating. Falls from furniture, typically inside the structure, accounted for 11% of the injuries. Some falls occurred when people tripped over or slipped on tree skirts or other decorations.

¹ J.A. Stevens and M. Vajani. "Fall-Related Injuries During the Holiday Season -- United States, 2000--2003, *MMWR Weekly*, December 10, 2004, 53(48):1127-1129, online at <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5348a1.htm>.

Table of Contents

Executive Summary	i
Table of Contents	ii
List of Figures and Tables	iii
Home Structure Fires Originating with Christmas Trees	1
Home Structure Fires in Which Holiday Lights or Other Decorative Lighting with Line Voltage Were Involved in Ignition	12
Christmas Tree Fires: Selected Published Incidents	21
Appendix A. How National Estimates Statistics Are Calculated	27

List of Figures and Tables

Figure or Table	Page
Figure 1. Home Structure Fires in Which Christmas Trees Were First Ignited, by Month 2000-2004 Annual Averages	2
Table 1. U.S. Non-Confined Home Structures Fires in which Christmas Trees Were the Item First Ignited, by Year: 1980-2004	4
Table 2. U.S. Non-Confined Home Structures Fires in which Christmas Trees Were the Item First Ignited, by Extent of Flame Damage 2000-2004 Annual Averages	5
Table 3. U.S. Non-Confined Home Structures Fires in which Christmas Trees Were the Item First Ignited, by Cause 2000-2004 Annual Averages	6
Table 4. U.S. Non-Confined Home Structures Fires in which Christmas Trees Were the Item First Ignited, by Factor Contributing to Ignition 2000-2004 Annual Averages	7
Table 5. U.S. Non-Confined Home Structures Fires in which Christmas Trees Were the Item First Ignited, by Equipment Involved in Ignition 2000-2004 Annual Averages	8
Table 6. U.S. Non-Confined Home Structures Fires in which Christmas Trees Were the Item First Ignited, by Heat Source 2000-2004 Annual Averages	9
Table 7. U.S. Non-Confined Home Structures Fires in which Christmas Trees Were the Item First Ignited, by Area of Origin 2000-2004 Annual Averages	10
Table 8. U.S. Non-Confined Home Structures Fires in which Christmas Trees Were the Item First Ignited, by Type of Material First Ignited 2000-2004 Annual Averages	11
Figure 2. Home Structure Fires in Which Holiday Lights or Other Decorative Lights with Line Voltage Were Involved in Ignition, by Month 2000-2004 Annual Averages	12
Table 9. U.S. Non-Confined Home Structures Fires Which Holiday Lights or Other Decorative Lighting with Line Voltage Were Involved in Ignition by Extent of Flame Damage 2000-2004 Annual Averages	15
Table 10. U.S. Non-Confined Home Structures Fires Which Holiday Lights or Other Decorative Lighting with Line Voltage Were Involved in Ignition by Cause: 2000-2004 Annual Averages	16
Table 11. U.S. Non-Confined Home Structures Fires Which Holiday Lights or Other Decorative Lighting with Line Voltage Were Involved in Ignition by Factor Contributing to Ignition: 2000-2004 Annual Averages	17
Table 12. U.S. Non-Confined Home Structures Fires Which Holiday Lights or Other Decorative Lighting with Line Voltage Were Involved in Ignition by Item First Ignited 2000-2004 Annual Averages	18
Table 13. U.S. Non-Confined Home Structures Fires Which Holiday Lights or Other Decorative Lighting with Line Voltage Were Involved in Ignition by Type of Material First Ignited 2000-2004 Annual Averages	19
Table 14. U.S. Non-Confined Home Structures Fires Which Holiday Lights or Other Decorative Lighting with Line Voltage Were Involved in Ignition by Area of Origin 2000-2004 Annual Averages	20