

**HOME STRUCTURE FIRES  
INVOLVING KITCHEN EQUIPMENT  
OTHER THAN COOKING EQUIPMENT**

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## **Abstract**

In 2005-2009, an estimated 2,900 reported U.S. home structure fires per year involving equipment normally used in the kitchen for food preparation, storage or disposal but excluding cooking equipment resulted in annual averages of 10 reported civilian deaths, 95 civilian injuries, and \$73 million in direct property damage.

Nearly all home fires involving kitchen equipment excluding cooking equipment specifically involve refrigerators, freezers and ice makers (58%) or dishwashers (39%). Other equipment in this group include garbage disposers, blenders, juicers, food processors, can openers, coffee grinders, and knife sharpeners.

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. This report complements *Home Fires Involving Cooking Equipment* by Marty Ahrens, published in November 2011.

Keywords: Refrigerator, freezer, dishwasher, kitchen, cooking, scald, fire statistics, home fires, residential fires

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## Executive Summary

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In 2005-2009, an estimated 2,900 reported U.S. home structure fires involving kitchen equipment excluding cooking equipment resulted in annual averages of 10 civilian deaths, 95 civilian injuries, and \$73 million in direct property damage.

Nearly all home fires involving kitchen equipment excluding cooking equipment specifically involve refrigerators and freezers or dishwashers.

Refrigerators, separate freezers, and separate ice makers together were involved in 1,690 home structure fires reported to U.S. fire departments per year in 2005-2009. These fires resulted in five civilian deaths, 68 civilian injuries, and \$47 million in direct property damage per year.

Dishwashers were involved in 1,140 home structure fires reported to U.S. fire departments per year in 2005-2009. These fires resulted in three civilian deaths, 23 civilian injuries, and \$24 million in direct property damage per year.

The other equipment types in this group – garbage disposer, blender, juicer, food processor, can opener, coffee grinder, and knife sharpener – collectively were involved in 80 home structure fires reported to U.S. fire departments per year in 2005-2009.

Roughly three out of five 2005-2009 home non-confined structure fires involving refrigerators, separate freezers, or separate ice makers began with ignition of appliance housing or casing (30%) or wire or cable insulation (29%).

Nearly three-fourths of 2005-2009 home non-confined structure fires involving dishwashers also began with ignition of appliance housing or casing (46%) or wire or cable insulation (26%).

One-third (34%) of 2005-2009 home non-confined structure fires involving refrigerators, separate freezers, or separate ice makers began in a room other than the kitchen, starting with the garage (12%). Only 5% of 2005-2009 home non-confined structure fires involving dishwashers began in an area other than the kitchen.

The fire statistics in this report are estimates derived from the U.S. Fire Administration's National Fire Incident Reporting System (NFIRS) and NFPA's annual fire experience survey. Fires coded as confined structure fires (incident type 113-118) are allowed to have limited reporting, which results in a high percentage of blank entries. Confined fires would add 8% to estimated non-confined fires and are not included in the analysis in this report.

Refrigerators, separate freezers, and separate ice makers were involved in an estimated 48,920 injuries reported to hospital emergency rooms in 2010. Most of these injuries did not involve burns or fire but instead involved sprains or strains, contusions or abrasions, lacerations, or fractures. Dishwashers were involved in 9,240 injuries reported to hospital emergency rooms in 2010.

This report complements *Home Fires Involving Cooking Equipment* by Marty Ahrens, published in November 2011.

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