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## National Fire Protection Association

The authority on fire, electrical, and building safety

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### Propane safety

The leading equipment involving in LP-gas home structure fires was a grill, hibachi, or barbecue.

#### Facts & figures

- U.S. fire departments responded to an estimated annual average of 1,390 home structure fires involving LP-gas in 2000-2004. These fires resulted in 23 civilian deaths, 193 civilian injuries and \$49 million in direct property damage.
- Spark, ember or flame from operating equipment was the leading heat source for LP-gas home structure fires.



#### NFPA Safety Tips

- ▶ Handle any propane-powered equipment cautiously and always follow the manufacturer's instructions. Cylinder tanks for equipment such as stoves and ovens must be located outside of the home.
- ▶ Never store or use propane gas cylinders larger than one pound inside the home.
- ▶ Never operate a propane-powered gas grill inside the home.
- ▶ Have propane gas equipment inspected periodically by a professional for possible leaks or malfunctioning parts.
- ▶ Carefully follow the manufacturer's instructions when lighting a pilot.
- ▶ If you smell a strong odor of gas, leave the area immediately and call the fire department from outside the home.
- ▶ For more information, visit the [Propane Education and Research Council Web site](#).

**Source:** NFPA's "Natural Gas and LP-Gas Home Structure Fires" report by Jennifer Flynn, August 2007.

- NFPA members: [Download this report for free](#). (PDF, 150 KB)
- All visitors: [Download a free printable fact sheet on Natural Gas and LP-Gas Home Structure Fires](#). (PDF, 25 KB)
- All visitors: [Download the executive summary and Table of Contents for free](#). (PDF, 14 KB)



#### NFPA's Principal Gases Engineer Ted Lemoff talks about grilling safety:

- ▶ [How a propane gas grill works](#)
- ▶ [How to handle propane gas safely](#)
- ▶ [Safety concerns of charcoal grills](#)
- ▶ [Safety tips when using the grill](#)
- ▶ [Why newer gas grills are safer](#)

#### More information on this topic

- [Overfilling Prevention Devices](#) (OPDs) are safety devices incorporated into the filling valve of a propane cylinder. The device shuts off the flow of gas to a cylinder after 80% capacity has been reached. As of April 1, 2002, OPDs are required on all propane cylinders between 4 and 40 pounds propane capacity.
- NFPA, the National Propane Gas Association (NPGA), and the Propane Education and Research Council (PERC) have issued a free [Fire Safety Analysis Manual](#), which provides forms and a step-by-step method for completing a written Fire Safety Analysis (FSA) as required in NFPA 58, Liquefied Petroleum Gas Code.

Updated 11/07

**In this Section:**

> **Fire Safety Analysis Manual for LP-Gas Storage Facilities**

This free manual includes forms for completing a written Fire Safety Analysis (FSA).

> **Propane cylinder overfilling prevention devices (OPD)**

An OPD shuts off the flow of gas to a cylinder after 80% capacity has been reached.

**URL:** <http://www.nfpa.org/categoryList.asp?categoryID=304&URL=Research%20&%20Reports/Fact%20sheets/Gas,%20propane,%20other%20fuels/Propane%20safety>

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