NFPA says basic safety precautions can minimize risk to associated fires.

As temperatures drop, home heating systems will fast kick into gear. However, some of the heat sources that make residents feel warm and toasty also represent a leading cause of U.S. home fires and fire fatalities.

According to the nonprofit National Fire Protection Association (NFPA)'s latest U.S. home heating fires report, heating equipment–primarily space heaters and fireplaces– caused an estimated 66,100 home structure fires resulting in 480 civilian deaths, 1,660 injuries and $1.1 billion in direct property damage in 2008.

The estimated home heating fire total declined 0.5 percent from 2007.

Lorraine Carli, NFPA's vice president of communications, says the latest home heating fire statistics signal that while there is a downward trend, there's still much room for improvement.

"We've certainly witnessed some declines in home heating fire rates over the short- and long-term, which is encouraging," says Carli. "But in spite of those gains, the actual number of home heating fires and their devastating impact on people and property each year is simply way too high. There's still much more we can do become safer from these types of fires."

Space heaters result in far more fires and losses than central heating devices.

On average, between 2004 and 2008, fixed (stationary) and portable space heaters (excluding fireplaces, chimneys, and chimney connectors, but including wood stoves) annually accounted for one-third (32 percent) of reported U.S. home heating fires, four out of five (82 percent)

associated civilian deaths, nearly two-thirds (64 percent) of associated civilian injuries, and half (51 percent) of associated direct property damage.

In addition, an estimated 15,200 reported creosote fires (23 percent of all home heating fires) resulted in four civilian deaths, 17 civilian injuries, and $33 million in direct property damage, on average, each year from 2004-2008.

Creosote is a sticky, oily, combustible substance created when wood does not burn completely. It rises into the chimney as a liquid and deposits on the chimney wall.

It's suspected that most creosote fires combine "failure-to-clean" fires that were confined to a chimney or flue, or involved solid-fueled space heaters, fireplaces, chimneys and chimney connectors.

Half (49 percent) of all home heating fires occurred in December, January and February, with most heating equipment fires starting due to a failure to clean equipment (25 percent), placing a heat source too close to combustibles (14 percent), and unclassified mechanical failures or malfunctions (13 percent).

The leading cause of home heating fire deaths (52 percent) was heating equipment being placed too close to things that can burn, such as upholstered furniture, clothing, mattress, or bedding.

"By following basic safety precautions and making some simple modifications and adjustments, people can greatly reduce their risk," says Carli.

NFPA offers the following advice to stay warm and fire-safe:

• All heaters need space. Keep things that can burn, such as paper, bedding or furniture, at least three feet away from heating equipment.

• Use heating equipment that has the label of a recognized testing laboratory.

• Install stationary space heating equipment, water heaters or central heating equipment according to the local codes and manufacturer's instruction. Have a qualified professional install the equipment.

• Make sure all fuel-burning equipment is vented to the outside to avoid carbon monoxide (CO) poisoning. CO is created when fuels burn incompletely. CO poisoning can cause illness and even death.

• Make sure the venting for exhaust is kept clear and unobstructed. This includes removal of snow around the outlet to the outside.

• Install and maintain carbon monoxide alarms inside the home to provide early warning of carbon monoxide.

• Maintain heating equipment and chimneys by having them cleaned and inspected annually by a qualified professional.

• Turn space heaters off when leaving a room or going to sleep.