

Smoke Alarms

Alarming Facts

- Nationwide, fires cost almost \$8.6 billion a year in property damage.
- Six out of ten residential fire deaths occur in homes without smoke alarms.
- About 94% of U.S. homes have smoke alarms, but up to one-third of the alarms are not working properly.
- Working smoke alarms cut your chances of dying in a house fire in half.

Wake Up and Live

A house fire moves with deadly speed. In three minutes, the room where a fire starts can be consumed. As a fire grows, it picks up speed.

But the real killer is smoke. A person can die of smoke inhalation in less than a minute. To escape a fire, you need to be warned fast. A working smoke alarm provides the earliest possible warning.

Most deaths in house fires occur when people are sleeping. Smoke numbs the senses and causes deeper sleep. Without an alarm, most people never wake up when smoke fills the house.

Escape in Time

Smoke inhalation causes about 75% of deaths in fires. A well-maintained smoke alarm alerts you of danger while items are smoldering, before flames break out.

When a smoke alarm sounds, you can immediately begin your escape plan. Once your family gathers at your safe meeting place, you can use a neighbor's phone to call the fire department.

Early Warnings Save Lives

The easiest and most effective thing you can do to prevent a fire tragedy in your family is to install and maintain smoke alarms. Invest a few dollars in plenty of alarms and a few minutes each month in testing them. Cut your chances of dying in a fire in half!

All About Alarms

Smoke alarms detect fire by ionization or a photoelectric process. Both processes are reliable.

- Ionization alarms are activated when the electrical current inside them is changed by smoke. Ionization smoke alarms respond most quickly to heat and flame, so they are best at detecting fast spreading fires.
- Photoelectric smoke alarms are triggered when smoke particles redirect a beam of light inside the unit. These alarms can detect the smoke from a smoldering fire before flames appear.

It is a good idea to have some ionization and some photoelectric alarms in your home. Some alarms use both types of sensors in one unit.

Smoke alarms are available in hardware and variety stores. Most are battery-operated. They cost between \$10 and \$25 each and are easy to install. Many fire departments will help you install smoke alarms.

Some homes have "hard-wired" alarms connected to the electrical system. Some of these alarms have battery backup.

Only use a smoke alarm that is approved by a recognized testing laboratory (such as U.L.).

Placement is Critical

Install smoke alarms either on the ceiling, four to twelve inches from the wall, or high on a wall, four to twelve inches from the ceiling. Install them at least three feet from windows or air ducts. Do not install an alarm between an air duct and a door. Make sure you can reach alarms to test them and change batteries.

Place at least one smoke alarm on every level of your home, including the basement. Install a smoke alarm within 15 feet of sleeping areas. For extra safety, install one inside each bedroom.

Do not install alarms in the kitchen, garage, bathroom, or workshop. Cooking fumes, steam, and other air particles can create false alarms and/or damage the alarm's detector.

Care and Cleaning

Dust can cause false alarms. Use a vacuum cleaner attachment to remove dust and cobwebs. Read the manufacturer's instructions for more information.

If painting near a smoke alarm, use a shield to keep paint out of the unit. Be certain to remove the shield when you finish painting.

Keep Them Working

Experts say that one-third of home smoke alarms are not working. If an alarm's battery is dead, or if the alarm is old and worn out, it cannot protect you.

Important steps:

- Test alarms monthly. Push the test button. (Use a broom handle to reach.) If you do not hear the alarm, change the battery and retest. If the alarm still does not sound, replace the unit.
- Replace batteries twice a year or when you hear the low battery "chirp." Daylight Savings Time is an easy-to-remember time to do it. If you move to a new home, put fresh batteries in the alarms.
 - Never "borrow" the battery from the smoke alarm for another use.
 - If fumes or steam cause a false alarm, do not remove the battery. Fan the fumes away from the smoke alarm and open a window.
- Replace smoke alarms every seven to ten years. (Check the manufacturer's instructions for specifics.) Write the installation date inside the alarm's cover to remind you of its age.