

## Early Detection

Smoldering fires are discovered quickly by smoke alarms because fires generate smoke before flames are visible and before heat raises room temperature high enough to make residents feel uncomfortable.

The warning given off by the smoke alarm gives occupants time to escape before being overcome by toxic fumes.



**In 30 seconds, a simple flame can get out of control.**

Studies have shown that from the time a fire breaks out, a person has less than 10 minutes to escape the disabling effects of smoke and poisonous gases.

## Maintenance

Occasional maintenance is necessary to keep your smoke alarm working.

- Replace batteries on two important dates each year (*holiday, birthday, time change*).
- Test smoke alarms once a month.
- Vacuum the alarm to remove any sensor-blocking dust particles or bugs.
- Check outlets on plug-in models.
- Never paint a smoke alarm.
- Replace all smoke alarms every ten years.



**You have nearly a 50% better chance of surviving a fire in your home with working smoke alarms.**

## False Alarms

Nuisance alarms can occur from cooking vapors, steam from showers, etc. To correct this, try:

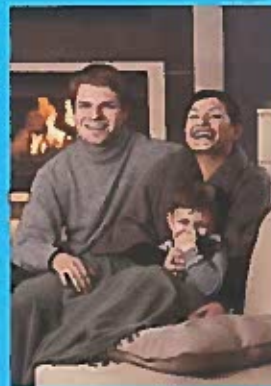
1. cleaning the alarm.
2. installing a new battery.
3. moving the alarm away from the kitchen or bathroom.
4. installing an exhaust fan.



If false alarms continue, replace the alarm. In a kitchen area, consider a photoelectric alarm or have an alarm silencing "hush" button which allows you to hush the alarm while you remove the source of nuisance. **Never take the batteries out of your smoke alarm** due to cooking or other non-fire causes. You may not remember to put the batteries back or to hook it back up.

### Never install a smoke alarm:

- in a kitchen, bathroom, or garage where cooking fumes, steam, or exhaust fumes could set off false alarms or clog the alarm.
- in an attic, garage, or other unheated space where humidity and temperature changes might affect the alarm's operation.
- too close to a window or door; radiator, air conditioner, air intake system, or fireplace where drafts could deter smoke away from the alarm.
- too close to a fan, forced-air register or return, or a grill or vent, where drafts could interfere with the alarm's operation.



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# Smoke Alarms



**Can save your life!**



# Smoke Alarms

Your first defense against fire.

A working smoke alarm can detect a small fire and provide crucial minutes necessary to prevent a tragedy from occurring in your home.

Over 94% of all homes in the U.S. have at least one smoke alarm. However, surveys show that 1/3 - 1/2 of them do not work because the battery is either dead or missing.

- Every 2 hours someone dies in a fire.
- Smoke, not heat, is the leading cause of death in home fires.
- Children and the elderly are at twice the risk of dying or being injured in a home fire.
- Most home fires occur during sleeping hours - between the hours of 11 p.m. and 6 a.m.
- Audible/visual signaling devices are available for children or people with special needs.

A residential home can be totally consumed in flames in less than 5 minutes from the time a fire starts.



Nearly 84% of all fatal fires burn 10 or more minutes before the fire department is notified.

## Smoke Alarms & Heat Detectors

**Ionization Alarms:** monitor "ions," or electrically-charged particles in the air and responds best to quick-burning fires from paper and drapes.

**Photoelectric Alarms:** respond to slow-burning fires such as smoldering mattresses and upholstery. The alarm goes off when smoke particles break a light beam. These alarms are much less likely to set off a false alarm.



**Heat Alarms:** use a special metal that melts or distorts when heat enters the air around it. They are used in garages, attics, unheated crawl spaces, and kitchens where other types of smoke alarms may cause false alarms. **Note:** Heat alarms add protection but are not effective early-warning devices alone because they must be very close to a fire to be set off.

**10-Year Battery Smoke Alarms:** are sealed to prevent the replacement of the battery. The entire unit should be replaced after 10 years. **Note:** 10-year batteries are not recommended for older smoke alarms because they will outlast the working life of the smoke alarm.

### Power Sources



**Hard-wired:** permanently wired into home's electrical system with battery back-up

**Battery-operated:** have batteries that last about one year

**Plug-in:** connected directly to an outlet where they will not be unplugged or turned off by a wall switch

### Select a smoke alarm that has a:

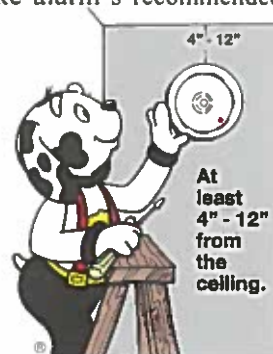
- ✓ loud and distinctive alarm.
- ✓ replaceable bulb and battery.
- ✓ low battery indicator.
- ✓ long-term warranty.
- ✓ UL label (Underwriter's Laboratory) or equivalent testing label.



## Placement & Installation

1. Place a smoke alarm on each level of your home, near bedrooms or sleeping areas, and in the basement.
2. Avoid installing alarms near the kitchen, bathroom, outside door, or fireplace. Steam, drafts, or heat may cause a false alarm.
3. Follow all of the smoke alarm's recommended installation procedures.

**Wall-mounted:** Install so the top of the alarm is 4 to 12 inches (10 to 30 cm) from the ceiling. Avoid corners. Installing alarms at the proper level will provide you with the earliest warning possible.



**Open stairway:** (with no doors at the top or bottom) Install the smoke alarm in the path of the smoke that would be moving up the stairs.

**Closed stairway:** (such as those leading to the basement) Position the smoke alarm at the bottom of the stairs because dead air trapped near the door at the top of a stairway could prevent smoke from reaching an alarm located at the top of the stairs.

**Ceiling-mounted:** Install at least 4 inches (10 cm) from the nearest wall or corner to avoid dead space where air is trapped. In a room with a vaulted ceiling, install the alarm at the highest point.

