

# Smoke Alarms Save Lives.

Properly installed and maintained smoke alarms can greatly reduce fire deaths and injuries. Fires burn fast, a smoke alarm will warn you to give you time to get out.

- Smoke alarms should be installed in every sleeping room and outside each separate sleeping area. Install alarms on every level of the home.
- Large homes may need extra smoke alarms.
- When a smoke alarm sounds, get outside and stay outside.
- Test your smoke alarms at least once a month. Press the test button to be sure the alarm is working.
- Replace all smoke alarms in your home every 10 years.
- If possible get smoke alarms that are interconnected, meaning, when one sounds, they all sound.
- There are two kinds of alarms. Ionization smoke alarms are quicker to warn about flaming fires. Photoelectric alarms are quicker to warn about smoldering fires. It is best to use of both types of alarms in the home.

## Installing smoke alarms

- Choose smoke alarms that have the label of a recognized testing laboratory.
- Install smoke alarms inside each bedroom, outside each sleeping area and on every level of the home, including the basement.
- On levels without bedrooms, install alarms in the living room (or den or family room) or near the stairway to the upper level, or in both locations.
- Smoke alarms installed in the basement should be installed on the ceiling at the bottom of the stairs leading to the next level.
- Smoke alarms should be installed at least 10 feet (3 meters) from a cooking appliance to minimize false alarms when cooking.
- Mount smoke alarms high on walls or ceilings (remember, smoke rises). Wall-mounted alarms should be installed not more than 12 inches away from the ceiling (to the top of the alarm).
- If you have ceilings that are pitched, install the alarm within 3 feet of the peak but not within the apex of the peak (four inches down from the peak). Don't install smoke alarms near windows, doors, or ducts where drafts might interfere with their operation.
- Never paint smoke alarms. Paint, stickers, or other decorations could keep the alarms from working.
- For the best protection, interconnect all smoke alarms. When one smoke alarm sounds they all sound. Interconnection can be done using hard-wiring or wireless technology.
- When interconnected smoke alarms are installed, it is important that all of the alarms are from the same manufacturer. If the alarms are not compatible, they may not sound.
- There are two types of smoke alarms – ionization and photoelectric. An ionization smoke alarm is generally more responsive to flaming fires, and a photoelectric smoke alarm is generally more responsive to smoldering fires. For the best protection, both types of alarms or combination ionization-photoelectric alarms, also known as dual sensor smoke alarms, are recommended.
- Keep manufacturer's instructions for reference.

## Testing smoke alarms

- Smoke alarms should be maintained according to manufacturer's instructions.
- Test smoke alarms at least once a month using the test button.
- Make sure everyone in the home understands the sound of the smoke alarm and knows how to respond.
- Follow manufacturer's instructions for cleaning to keep smoke alarms working well. The instructions are included in the package or can be found on the internet.
- Smoke alarms with non-replaceable 10-year batteries are designed to remain effective for up to 10 years. If the alarm chirps, warning that the battery is low, replace the entire smoke alarm right away.
- Smoke alarms with any other type of battery need a new battery at least once a year. If that alarm chirps, warning the battery is low, replace the battery right away.
- When replacing a battery, follow manufacturer's list of batteries on the back of the alarm or manufacturer's instructions. Manufacturer's instructions are specific to the batteries (brand and model) that must be used. The smoke alarm may not work properly if a different kind of battery is used.

## Facts and figures about smoke alarms

- In 2009-2013, smoke alarms sounded in more than half (53%) of the home fires reported to U.S. fire departments.
- Three of every five home fire deaths resulted from fires in homes with no smoke alarms (38%) or no working smoke alarms (21%).
- No smoke alarms were present in almost two out of every five (38%) home fire deaths.
- The death rate per 100 reported home fires was more than twice as high in homes that did not have any working smoke alarms compared to the rate in homes with working smoke alarms (1.18 deaths vs. 0.53 deaths per 100 fires).
- In fires in which the smoke alarms were present but did not operate, almost half (46%) of the smoke alarms had missing or disconnected batteries.
- Dead batteries caused one-quarter (24%) of the smoke alarm failures.

**Source:** NFPA's "[Smoke Alarms in U.S. Home Fires](#)" report, September 2015

