

# Smoke Detectors

Smoke alarms are the residential fire safety success story of the past quarter century. Smoke alarm technology has been around since the 1960s. But the single-station, battery-powered smoke alarm we know today became available to consumers in the 1970s, and since then, the home fire death rate has been reduced by half. NFPA estimates that 94% of U.S. homes have at least one smoke alarm today, and most states have laws requiring them in residential dwellings.

**Important:** Working smoke alarms are essential in every household. It is necessary to **practice home fire drills** to be certain everyone is familiar with the smoke alarm signal, and to determine if there are any obstacles to a quick and safe evacuation (including the inability for some to awaken to the smoke alarm signal).

## Facts & Figures

- 19 of every 20 homes (95%) in the U.S. have at least one smoke alarm.
- More than half of home fire deaths result from fires in the 5% of homes with no smoke alarms.
- Homes with smoke alarms (whether or not they are operational) typically have a death rate that is 40-50% less than the rate for homes without alarms.
- In one-quarter of the reported fires in homes equipped with smoke alarms, the devices did not work. Households with non-working smoke alarms now outnumber those with no smoke alarms.
- Why do smoke alarms fail? Most often because of missing, dead or disconnected batteries.

**Source:** NFPA's "[U.S. Experience with Smoke Alarms and Other Fire Alarms](#)"

## Installation Tips

- Install at least one smoke alarm on every floor of your home (including the basement) and outside each sleeping area. If you sleep with the door closed, NFPA recommends installing smoke alarms inside the room. In new homes, smoke alarms are required in all sleeping rooms, according to the [NFPA 72, National Fire Alarm Code®](#).
- Mount the smoke alarms on ceilings or high on walls – remember, smoke rises. Ceiling-mounted alarms should be installed at least four inches away from the nearest wall; wall-mounted alarms should be installed at least four inches, but not more than 12 inches away from the ceiling. On vaulted ceilings, be sure to mount the alarm at the highest point of the ceiling.
- Don't install smoke alarms near windows, outside doors, or ducts where drafts might interfere with their operation.
- Don't paint your smoke alarms; paint or other decorations could keep them from working when you most need it.

## Maintenance Tips

- Test smoke alarms at least once a month by using the alarm's "test button" or an approved smoke substitute, and clean the units in accordance with the manufacturer's instructions.
- Replace the batteries in your smoke alarms once a year, or as soon as the alarm "chirps," warning that the battery is low. Hint: schedule battery replacements for the same day you change your clock from daylight to standard time in the fall.
- Regularly vacuuming or dusting your smoke alarm following manufacturer's instructions can help keep it working properly.
- Replace your smoke alarms once every 10 years.
- Never "borrow" a battery from a smoke alarm.
- Make sure that everyone in your home can hear and recognize the sound of the alarm and knows how to react immediately.

- NFPA recommends that **people who have hearing impairments** install smoke alarms with strobe lights to alert them to a fire.
- Be sure that the smoke alarm you buy carries the label of an independent testing lab. For a list of manufacturers that distribute smoke alarms for the hearing impaired, please call NFPA 's Center for High-Risk Outreach at +1 617 984-7826.
- Alarms that are hard-wired to the home's electrical system should be installed by a qualified electrician.

**Source: [Nfpa.org](http://nfpa.org)**

The City of Katy Fire offers free smoke detectors to citizens living in our response area. These smoke detectors have been donated to the citizens in the Katy area from Wayne Wright Lawyers and are to be offered to all citizens free of charge with minimal stipulations. Anyone wanting the smoke detectors will need to submit a request either in person to the Fire Department or to **[smokedetectors@katyfire.com](mailto:smokedetectors@katyfire.com)**, sign a waiver of liability, allowing the Fire Department to report to Wayne Wright Lawyers the address and number of detectors placed in the home, and allow Fire Department personnel to install the detectors in their home. Further questions about the program may be sent to **[information@katyfire.com](mailto:information@katyfire.com)**.