

# Smoke Detectors

**Photoelectric** smoke detectors should be placed, at a minimum, on every floor level including the basement, inside every sleeping room, and outside of every sleeping area of all dwellings.



**SAVE MORE LIVES**

Interconnected **photoelectric** smoke detectors, either wired or wireless, should be strongly considered. With interconnected detectors, when one smoke detector sounds, all other smoke detectors in the home sound as well, which creates an early warning to occupants in all areas and allows a as much time as possible to escape.

To aid in choosing the correct smoke detector, consumers should look for the word "**photoelectric**" or a "**P**" symbol on the packaging or description of smoke detectors.

## NEOFPA

North Eastern Ohio  
Fire Prevention Association



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## The Details

### Sensor Types

There are three types of sensor technology used in smoke detectors: photoelectric, ionization and a combination or dual sensor that incorporates both sensors in one smoke detector.

**Photoelectric** is the sensor of choice. It responds faster (sometimes tens of minutes faster) than the other types of smoke detectors to smoldering fires that cause the most injuries and deaths in homes. It is also less prone to nuisance false alarms from cooking and steam.

Smoke detectors should bear the label of an approved testing agency (UL or FM). To aid in choosing the correct smoke detector, or to determine which type you have in your home, look for the word “**photoelectric**” or a “**P**” symbol on the detector, the packaging, or the description of the smoke detector.



### Power Types

**Battery-powered** detectors typically use standard 9 volt or AA batteries. Detectors with **long-life lithium batteries** may hold their charge up to 10 years. **Hardwired** detectors are wired to the home 110 volt electrical service (with battery back-up). Battery-powered detectors are readily available and can be installed by a homeowner or tenant. Hardwired detectors must be installed by a qualified electrician but can be easily replaced by the homeowner at the end of their service life or if faulty.

### Locations

Photoelectric smoke detectors should be placed, at a minimum, on every level of the home including the basement, outside every sleeping area and in every bedroom. Smoke detectors should be mounted on the ceiling or high on the wall (smoke rises). Always follow the manufacturer’s instructions. Additional smoke detectors can be added to increase your protection.

### Testing and Maintenance

- Test each smoke detector monthly by pushing the button.
- Replace 9 volt and AA batteries in smoke detectors twice a year. (*Remember: change your clocks, change your batteries.*)
- If the alarm “chirps,” warning that the battery is low, replace the battery right away.
- All smoke detectors have a recommended service life of 10 years. Replace your smoke detectors at this time or sooner if they are not functioning properly.
- Vacuum or dust out cobwebs that have accumulated in smoke detectors at least once per year.

### Additional Tips

- In the event of a false alarm, **never** remove the battery or disconnect the power source. Simply fan the smoke or steam away from the smoke detector until the alarm stops. Some detectors have a button you can push to temporarily silence the alarm.
- If a contractor or supplier is installing your smoke detector, make sure you are provided with the manufacturer’s instructions.
- Many communities provide free smoke detectors and batteries to residents who cannot afford them, and may install them for you if you require assistance. Check with your local fire department.
- Smoke alarms are one component of a complete home fire escape plan. Have a plan and practice it.