



Department of Commerce

Division of State Fire Marshal

John R. Kasich, **Governor**
Jacqueline T. Williams, **Director**

8895 East Main Street
Reynoldsburg, Ohio 43068

www.com.ohio.gov

Smoke Alarms

Install. Inspect. Protect.

- Three out of five home fire deaths result from fires in properties without working smoke alarms (U.S. Fire Administration)
- More than 1/3 (37%) of home fire deaths result from fires in which no smoke alarms are present (U.S. Fire Administration)
- When alterations, repairs or additions are made to your home, consult with your local building official for smoke alarm requirements.
- Ionization and Photoelectric smoke alarms detect different types of fires.
 - Ionization smoke alarms are generally more responsive to flaming fires. The ionization unit uses “ions” or electrically charged particles, to detect smoke in the air. The greater amount of the smoke, the higher the electrical imbalance. The horn will sound when the electrical imbalance reaches a preset level.
 - Photoelectric smoke alarms are generally more responsive to fires that begin with a long period of smoldering. This type of alarm uses a beam of light and a light sensor in the sensing chamber. The sensing chamber is designed so that the light beam does not strike the sensor, but smoke particles entering the chamber deflect the light onto the sensor. The greater amount of smoke entering the chamber, the more light will be deflected onto the sensor. The alarm sounds when the amount of light hitting the sensor reaches a preset level.
- There are also smoke alarms for people with hearing loss. These alarms have strobe lights and/or vibrate to alert those who are unable to hear a standard smoke alarm.
- **Install Smoke Alarms:**
 - All smoke alarms shall be listed in accordance with Underwriters Laboratories (UL) 217.
 - Smoke alarms should be installed:
 - On each level within each dwelling unit (including basement and habitable attics), utilizing photoelectric and ionization technologies or dual sensing smoke alarm.
 - In each sleeping room.
 - Outside each separate sleeping area in the immediate vicinity of the sleeping rooms, utilizing photoelectric technology.
 - Follow manufacturer’s instructions for the best placement of your alarm.



continued...

- **Inspect Smoke Alarms:**

- Test smoke alarms monthly by pushing the test button on the detector.
- Clean your alarm at least once a year. Vacuum out the dust and cob-webs that have accumulated.
- Smoke alarms are powered by battery or by your home's electrical system. If the smoke alarm is powered by battery, it runs on either a disposable nine-volt battery or a non-replaceable 10-year lithium ("long-life") battery. Even alarms that get power from your home's electrical system, or "hardwired alarms," usually have a back-up battery. All smoke alarm batteries (excluding the 10-year lithium batteries) need to be replaced twice a year ("Change your Clock, Change your Battery")

- **Protect Smoke Alarms:**

- Do not disable the smoke alarm or remove the batteries.
- Replace any smoke alarm that is past its 10 year service life.
- Have a family fire escape plan with a designated meeting place and practice your plan.
- Consider purchasing a long-life (lithium) battery-powered smoke alarm, which may last up to ten years with no battery change.
- Interconnected smoke alarms are best, because if one sounds, they all sound.



Ohio Department of Commerce
Division of State Fire Marshal
1-888-243-0305
TTY/TDD: 1-800-750-0750
www.com.ohio.gov/fire

United States Fire Administration
www.usfa.fema.gov