

SMOKE DETECTORS

Death by Fire: Nearly 4,000 Americans die every year in residential fires. Most of these deaths are not from heat or flames but from inhaling smoke and toxic fumes. Smoke is actually the particles of combustion generated by what is burning -- paper, wood, chemicals, plastic, upholstery, or other fuels.

Buying Time: When a smoke alarm senses smoke, an alarm automatically sounds. Most fatal home fires occur between 8 p.m. and 8 a.m. Fires often generate lethal amounts of unseen smoke and fumes well before flames are visible and before heat makes residents feel uncomfortably warm. As a result, many people who die in home fires are asleep and never wake up. When carefully purchased, installed, and maintained, smoke alarms can prevent such needless deaths. Smoke alarms buy time to get out of the house quickly before toxic fumes accumulate to lethal levels. **Working smoke alarms double an occupant's chance of surviving a fire.**

Purchasing: Quality, not price, should be the determining factor when buying smoke alarms. Check for the following:

- *Laboratory label, insuring that samples of the model was carefully tested.
- *Alarm loud enough to awaken the family through closed bedroom doors.
- *Malfunction signal, to warn you when batteries are weak or dead.
- *Manufacturer's warranty of at least five years.
- *Ease in maintenance and cleaning.

Types of Smoke Alarms:

IONIZATION: Contains a small amount of radioactivity that conducts electricity. Electric current flows continuously between two electrodes in the chamber. When smoke particles enter, they disturb the flow, causing the alarm to go off.

PHOTOELECTRIC: Contains a beam of light and a photocell within the chamber. When smoke enters, it deflects the beam, causing it to strike the photocell and set off the alarm.

IONIZATION VS. PHOTOELECTRIC: Ionization alarms are more sensitive to the tiny particles of combustion that can't be seen or smelled, those emitted by flaming fires. Photoelectric alarms are more sensitive to the large particles of combustion emitted by smoldering fires. The differences between the two types are generally not critical, since the difference in

response time is only a matter of seconds. Since most home fires produce a rich mixture of smoke types, with detectable amounts of both large-particle and small-particle smoke early in the fire's growth, either an ionization or a photoelectric alarm will meet most needs.

Some of the newer alarms have a "hush" feature, which allows the alarm to be quieted in "nuisance" situations without removing the battery, and are recommended over the older alarms.

Remember that a small investment - generally around \$10 each - can save your life and the lives of your family. If you cannot afford a smoke alarm, contact the NOCFA at 248-634-4511.

Placement:

*Buy as many smoke alarms as it takes to give your home complete coverage. You obviously increase your chances of survival with each alarm that you have, but one on each level of the house is the absolute minimum.

*You should have a smoke alarm in each bedroom, in the hallway close to each sleeping area and in heavily occupied areas like the living room.

*Having a smoke alarm in every bedroom and sleeping with the bedroom doors closed presents the best scenario for safe escape.

*Smoke alarms should be placed on or near the ceiling where smoke tends to be heaviest.

*Smoke alarms should not be placed directly over stoves, ovens or fireplaces.

Installation:

*Follow the manufacturer's installation instructions.

*On the ceilings, mount the device away from corners and walls, which have dead air space nearby. About eight to 10 inches is the recommended distance.

*On walls, install the alarms high, because smoke rises, and place them eight to 10 inches away from corners and ceilings.

Maintenance Checklist:

*Test your smoke alarm at least once a month by pressing the test button.

*Replace weak or worn-out batteries at once.

*Never borrow smoke alarm batteries for other uses.

*Keep extra batteries on hand.

*Change batteries at least once a year.

*Dust and vacuum smoke alarms at least once a year.

*Replace smoke alarms every 10 years.

*Make sure smoke alarms are working when you return home after an extended absence.