SMOKE ALARMS detect and alert people to fire in its early stages, giving them the time needed to escape safely. When working properly, smoke alarms can mean the difference between life and death in a fire. Smoke alarms must be maintained properly and tested regularly to ensure their effectiveness.

**Types of Smoke Alarms**

There is a difference between smoke alarms and smoke detectors:

- A smoke **alarm** detects smoke and sounds the alarm from the smoke alarm.
- A smoke **detector** is part of a fire alarm system that uses a separate fire alarm control unit. The detector senses the smoke and sends a signal to the control unit to sound the alarm. (These systems are often monitored by an off-site facility that can contact the fire department.)

There are two different types of smoke alarms: ionization and photoelectric.

- An **ionization alarm** is typically more responsive to a flaming fire, such as a pan fire.
- A **photoelectric alarm** is typically more responsive to a smoldering fire, as might occur where a lighted cigarette is dropped on a sofa.

Combination alarms provide ionization and photoelectric detection. NFPA recommends installing combination alarms, or both types of alarms, in the home.

Whatever type of smoke alarms you choose, make sure they bear the mark of a recognized testing laboratory.

**Installation**

Smoke alarms should be installed in every bedroom, outside each sleeping area, and on every level of the home.

For the best protection, smoke alarms should be interconnected, so that when one alarm sounds, they all do. A licensed electrician can do an interconnection by using hard-wired, multiple-station smoke alarms.

Wireless interconnection of smoke alarms is also available. A licensed electrician may be needed to replace existing hard-wired smoke alarms with those capable of wireless interconnection.

Whether smoke alarms are hard-wired or wireless, all interconnected smoke alarms must be compatible with one another, as specified by the manufacturer.

Combination smoke alarms (ionization and photoelectric) currently do not have wireless connection capabilities.

Smoke alarms should be installed at least 3 metres from a cooking appliance. Any smoke alarm between 3 to 6 metres of a stationary or fixed cooking appliance should be photoelectric, or must be equipped with a hush feature, which temporarily reduces the alarm's sensitivity for a short period of time.
Talking Points CONT.

The U.S. Environmental Protection Agency offers information on the safe disposal of smoke alarms at www.epa.gov/radiation/sources/smoke Dispose.html.

Smoke Alarms for the Deaf and Hard of Hearing

There are some smoke alarms with strobes or the ability to be used with strobes — also called visible notification appliances — that signal to awaken those that are deaf (those with profound hearing loss). The use of tactile notification appliances (such as a pillow or bed shaker) is also now required. These appliances are activated by the sound of the smoke alarm.

The means for signaling to awaken those who are hard of hearing (those with mild to severe hearing loss) is through the use of a complex low frequency audible signal. Smoke alarms currently on the market do not produce this signal. However, separate notification appliances are available that do produce this signal, and are activated by the sound of the smoke alarm.

Maintenance

Smoke alarms should be tested monthly using the test button; everyone in the home should know the sound of the alarm. Save and follow the manufacturer’s instructions for testing and maintenance.

Some smoke alarms are available with nonrechargeable, nonreplaceable 10-year batteries. The batteries in these alarms are not intended to be replaced.

Smoke alarms with replaceable batteries, including long-life replaceable batteries, should be replaced when the alarm chirps, warning that the battery is low. Always follow the smoke alarm manufacturer’s instructions regarding battery replacement.

For smoke alarms that are powered only by battery, batteries are required to last at least one year. Annual replacement of the battery for these types of alarms is a good practice.

Replace all smoke alarms, including those that use 10-year batteries and hard-wired alarms, when they are 10 years old or sooner if they don’t respond properly when tested.

And don’t forget to...

Replace the batteries once a year, or when the alarm “chirps,” warning that the battery is low.

Chirp!