## Preventing & Detecting

Many house-fire tragedies that make the news could have been prevented. But because the possibility of one's own house burning down seems so remote, many homeowners don't take even the most basic preventive measures. Many are surprisingly simple and inexpensive, yet very effective at saving both lives and property.

### Smoke Detectors

Smoke detectors may be the most cost-effective consumer product on the market. Just consider what it costs (about $15), how easy it is to use (just screw it to a ceiling), and what it can do (provide a warning in enough time to save lives). Detectors should be installed on every level of a home, high on the walls, or on ceilings in open areas like hallways. Because deaths are most likely from fires that start at night when everyone is asleep, it's important to install detectors in halls just outside bedrooms. Be sure your detectors are working by trying the testing mechanism, normally a button that triggers a brief warning blast to prove readiness.

### Heating Equipment

Regular checkups are the best preventive measure for your heating system. Annual tune-ups are recommended for oil-fired furnaces; once every 3 years for gas-fired units. Electric units, which do not produce any combustion by-products, normally do not need regular tune-ups.

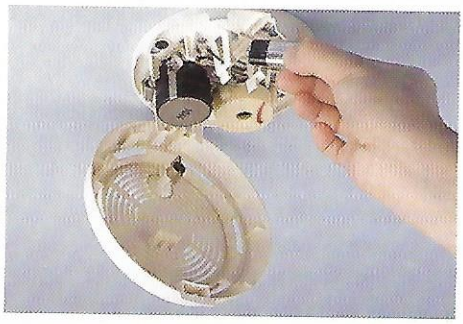
If you burn wood or coal regularly, have the flue cleaned annually by a chimney sweep. Wood and coal combustion in a stove is dirtier than other types of heating—you need the sweep because the worst hazards are out of sight: creosote, a gummy and flammable product of wood combustion that collects inside the chimney, and cracks in the chimney liner or bricks, which could let smoke and fire escape.

### Escape Routes

Fire departments call it an alternative means of egress—a second way out of a room. On the first floor you could climb out a window. On second stories, you may need a portable safety ladder with metal arms that hang on the window sill and steps that unroll to the ground below. It's important to go over escape routes with children, and walk through the route to make it familiar.

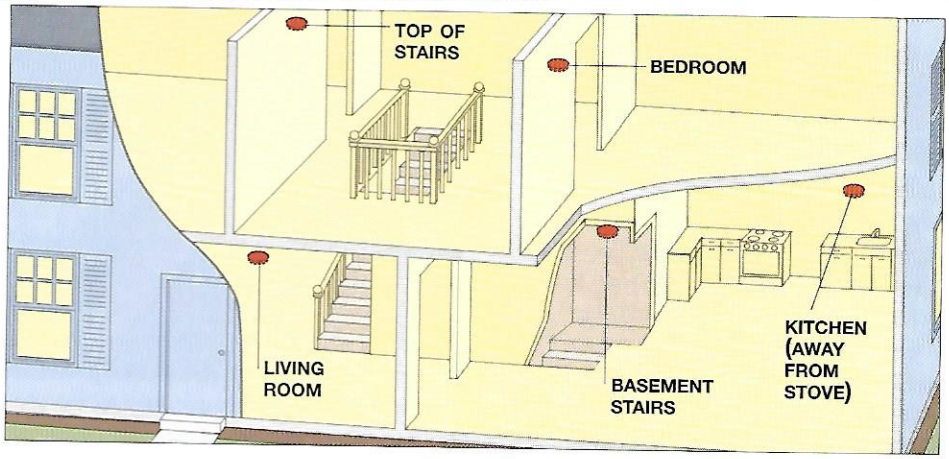
## Battery-Powered Detectors

Each year, more than 3,700 people die in over 400,000 residential fires. The best way to prevent property damage and injury is to install smoke detectors. About 90% of U.S. households have at least one, but up to 16 million detectors don't work, due mainly to dead or missing batteries. You should test battery-powered units monthly, and replace batteries that are low on power. (Most units warn you by beeping or chirping.) Some hard-wired units also have a battery backup.



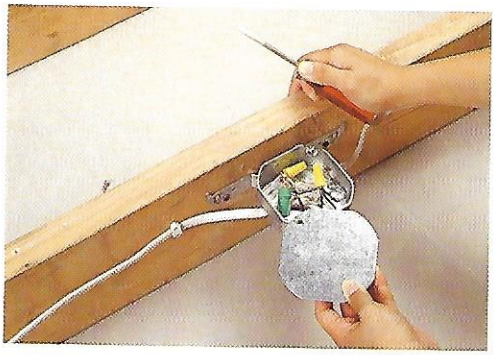
***Most safety organizations** recommend that you change the batteries in your smoke detector at least once a year.*

## Typical Detector Locations

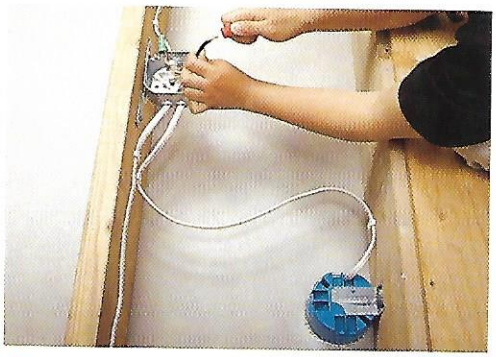



## Hard-Wiring a Detector

**USE:** ▶ circuit tester • combination tool • screwdriver • drywall saw • pliers ▶ hard-wired smoke detector



**1** ***The most convenient power source** is a junction box mounted to a ceiling joist. Cut power to the box before opening it.*



**2** ***Check your local codes** before running a new supply line from connectors in the junction box to the detector mounting box.*