

- If a room has a high pitched ceiling, mount the unit at or near the ceiling's highest point.
- When installing a detector in a stairway, position the detector in the path smoke would follow up the stairwell.
- Don't install a detector near a window, door, forced-air register, or fireplace, where drafts could detour smoke away from the unit.
- Install basement smoke detectors close to the bottom of the stairs. Don't install a detector at the top of basement stairs; dead air trapped near the door could prevent smoke from reaching the unit.

### Maintenance

Studies have shown that roughly one-third of the tens of millions of smoke detectors installed in homes are not in proper working condition. These poorly maintained units endanger occupants by creating a false sense of security.

**Batteries:** Replace batteries according to the manufacturer's recommendations or at least twice a year. A good time to remember to change the batteries is when the time changes and you change your clocks. Never borrow batteries from smoke detectors for other purposes. If you have problems with nuisance alarms, do not disconnect your detector. Try another location or another model of detector, but keep your home protected.

**Testing:** Test your smoke detectors at least once a month, following the manufacturer's instructions for testing. It takes only a moment to test a smoke detector that could save your life.

**Cleaning:** Clean your smoke detectors at least twice a year to remove cobwebs and dust that can degrade the unit's sensitivity. Never paint any part of a smoke detector.

## SMOKE DETECTORS IN YOUR HOME



California Department of Forestry  
and Fire Protection  
in cooperation with  
Riverside County Fire Department

## **SMOKE DETECTORS ARE PROTECTORS**

More than half of all fatal home fires occur at night when people are asleep. The sooner the sleeping person wakes up and begins to escape, the greater his or her chance of surviving the fire.

Fire officials consider smoke detectors to be the most effective low cost early warning device available. Years of real-life experience show that installing smoke detectors cut your risk of dying in a home fire almost in half. A smoke detector is your first line of defense.

### **What to buy**

No matter where you buy your smoke detectors and regardless of their type or brand name, buy only units bearing the label of an independent testing lab. There are several common types of home smoke detectors. Some are powered by batteries; some are designed to be plugged or wired into household current. Some operate in response to environmental ionization levels; others operate on a photoelectric principle. All tested and labeled smoke detectors offer adequate protection.

### **How many do you need?**

Smoke detectors should be installed on every level of your home, including the basement. Minimum protection requires smoke detectors outside each sleeping area. Riverside County recommends that you sleep with bedroom doors closed to slow the spread of smoke and fumes. If you do so, be sure you can hear your smoke detector. If you cannot, install additional detectors inside each bedroom. If you are hearing impaired, you should investigate acquiring smoke-detecting systems that produce a flashing-light alarm.

For added protection, you can install smoke detectors in dining rooms, furnace and utility rooms, and hallways. Smoke detectors are not recommended for kitchens, bathrooms, finished or unfinished attics, or garages because nuisance alarms caused by cooking fumes, steam, automobile exhaust, and such are common in these areas.

**Remember:** Roughly two-thirds of home-fire deaths are caused by inhaling smoke and the toxic fumes it contains. Smoke detectors alert you to deadly smoke and give you time to escape.

### **Installation**

To install most battery-operated smoke detectors, all you need are a screwdriver and a drill. Follow the manufacturer's installation instructions and be sure your detectors are securely in place.

Smoke detectors also operate on household current. A detector that plugs into an electrical outlet must be installed with a restraining device so that the plug cannot accidentally be pulled out. Detectors can also be hard wired directly into your home's electrical system. Hard-wire installations should be done by a qualified electrician. Never hard wire a detector to a circuit that can be turned off by a wall switch.

Heat and smoke rise, so all smoke detectors should be installed high on a wall or on the ceiling to detect the first traces of smoke.

- Wall-mounted smoke detectors should be installed four to twelve inches from the ceiling.
- Ceiling-mounted detectors should be placed at least four inches from any wall.