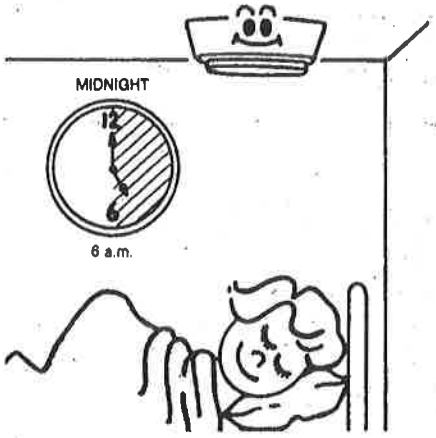
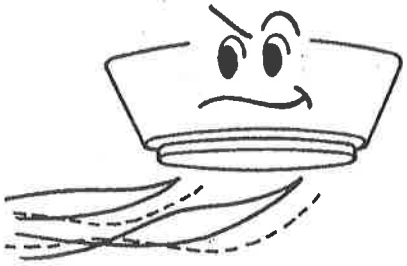
Smoke Detectors and Home Escape Planning could save your Life against Fire

Why a smoke Detector?

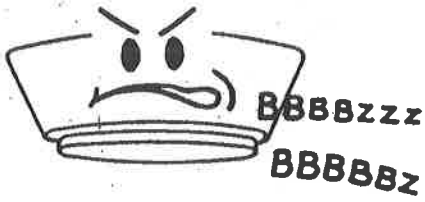
Most Fires occur at night when people are sleeping. A smoke detector can alert you when there is a fire, in time to save your life.



Smoke Detectors
work by sensing rising smoke
from a fire . . .

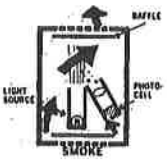


And sounding an ALARM.

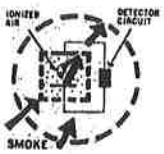


What type should I buy?

There are two types of smoke detectors available:



1. Photoelectric—uses photoelectric bulb that sends forth a beam of light. When smoke enters, light from the beam is reflected from smoke particles into a photocell and the alarm is triggered.



2. Ionization chamber—contains a small, safe radiation chamber source that produces electrically charged air molecules called ions. When smoke enters the chamber, it causes a change in the flow of ions, triggering the alarm.

Both are EQUALLY EFFECTIVE and neither requires that you be familiar with its inner workings. As long as you buy a detector that is tested by a major testing laboratory, such as Underwriters' Laboratories, Inc. (UL), you can be assured it has met certain testing requirements.

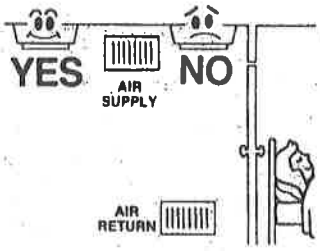
Where should I install my Detector?

Smoke rises, so the best place to install a detector is on the ceiling or high on an inside wall just below the ceiling.

If the ceiling is below an uninsulated attic or in a mobile home, the detector should be placed on the wall 4"-12" (10- 30cm) below the ceiling.

In a multi-level air-conditioned home, a detector is needed on each level. On the first floor, it should be placed on the ceiling at the base of the stairwell.

Detectors should be installed close enough to the bedrooms so the alarm can be heard when the door is closed. But, remember not to install a detector within 3 ft. (92 cm) of an air supply register that might blow the smoke away.

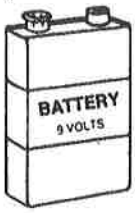


Don't install a detector between an air return and the sleeping area. The smoke will be recirculated and diluted resulting in a delayed alarm.

If you are installing more than one detector you may want to consider purchasing units that can be interconnected. That way when one unit detects smoke, all the detectors will sound an alarm.

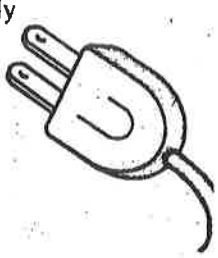
How are detectors Powered?

Detectors are powered two ways:



1. Batteries—these are the easiest to install. They require no outlets or wiring connection; however, batteries must be replaced once a year (approx.).

All UL listed battery-operated detectors are required to sound a trouble signal when a replacement is needed. The signal usually lasts 7 days, so it's advised to check the efficiency of the detector following extended periods away.



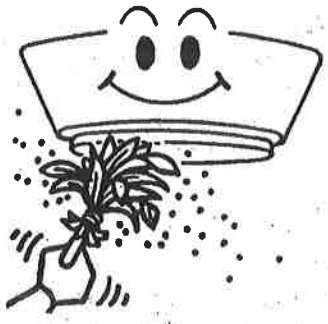
2. Household current—detectors can be powered with household current two ways. They can be plugged into any wall socket or can be wired permanently into your home's electrical system.

How can I best care for my detector?

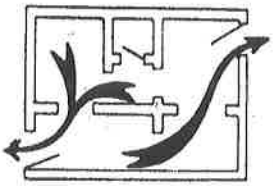
Dirt, extreme changes in temperature and cooking exhaust can cause a false alarm or malfunction of a detector. To prevent false alarms, locate the detector away from air vents, air conditioners and fans.

Keep the grillwork free of dirt by occasional vacuuming and dusting, don't paint.

Test your detector every 30 days, or more often if necessary to make sure it's working. This is usually done with test button, if provided.



Instruct your family in a pre-arranged evacuation plan.

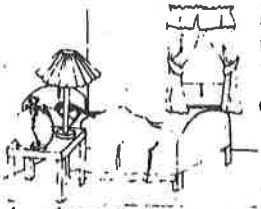


Have an escape floor plan.

Sit down with all members of the family and discuss escape routes to the outside from each room in the house, especially from the bedrooms. Whatever you do, as soon as smoke or fire is detected, must be done quickly, safely and from habit brought about by training.

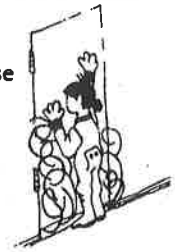
Once Out —Stay Out!

Your escape plan must include a pre-arranged assembly point, and all members of the family instructed to go to that location as soon as they are out of the house. In this way, no one will be overlooked.



MOST FATAL HOME FIRES occur at night while everyone is sleeping. We must make certain that everyone sleeps with their bedroom doors closed. Especially if you do not have a smoke detector. If fire strikes, the closed door protects the occupant from heat and smoke.

If you should find smoke seeping under the door of your room — **Don't Panic** feel the door. If hot, use the alternate escape route. If cool, brace your shoulder against the door and open it cautiously. Be ready to slam it shut if smoke or heat comes in.



Smoke, heat and gases can choke and kill you after only a few breaths. If you are caught in smoke, **Get Down and Crawl.** Take short breaths, breathing through your nose.

Windows normally offer the best alternate escape route. Make sure all windows and screens work easily to permit escape through them. There may be porch or shed roofs under the windows that can provide a pathway to safety. Special attention should be given to windows with air conditioner and security bars.

If the window can't be opened, break it with a chair, drawer or other large object; but be careful to protect yourself against flying glass. Shout for help. Exit to shed or porch roof if available or stay at the window. Firemen will rescue you when they arrive.

Don't Jump! metal escape ladders could possibly make your escape easier from 2 or 3 story buildings if no roof is available.

Call your local Fire Department from a neighbor's phone as soon as you are out of the house.

Dial 9-1-1, say you are reporting a fire ... give the address slowly and clearly, and do not hang up until your message is confirmed.

For more information contact:

Public Education Office
Fire Prevention Bureau
Chicago Fire Department
1010 South Clinton Street
Chicago, Illinois 60607
(312) 747-1723

City of Chicago
Richard M. Daley
Mayor