Fire Extinguishers

lancaster ca
it's positively clear.

Part of the Public Safety Office's "Be Ready" series

Fire extinguishers are your first line of defense should a fire start in or around your home or vehicle. They can easily and quickly put out small fires *before* they turn into larger fires that may destroy your home. That being said, it's important to know how to use one, and what they can and can't do.

Types

There are five main types of fire extinguishers, each for a particular type of fire.

Class A: Usable on ordinary combustibles, such as wood, paper, cloth, etc. May be water or dry chemical.

Class B: Usable on flammable liquids, such as cooking oils, gasoline, propane, grease, etc. Usually dry chemical or CO_2.

Class C: Usable on energized electrical parts, such as televisions or computers. Usually dry chemical or CO_2, and always non-conductive. If the component is unplugged AND has no other power source (i.e., batteries), a class C extinguisher is not necessary.

Class D: Usable on combustible metals, such as magnesium, titanium, etc. Never found in "combination" extinguishers. Highly specialized and usually found in chemical laboratories or fabrication shops. Usually a special agent that interrupts the chemical chain reaction of combustion.

Class K: A newer classification, usable on cooking oils. Generally found in commercial kitchens.

The most common type of fire extinguisher is the ABC "combination" type, which can put out class A, B, and C fires. Class D extinguishers, being highly specialized (and expensive), are rarely found on the common market.

All class A and B fire extinguishers have a numerical rating, which indicates how much fire the extinguisher can put out. For example, a 1A5BC can put out one "unit" of class A fire (the amount that 1.25 gallons of water can extinguish) and 5 square feet of class B fire. Class C extinguishers do not have a rating and are always found in combination with another extinguisher type, as the "C" simply indicates that the extinguishing agent inside is non-conductive.

When purchasing a fire extinguisher, select the largest one that you can afford and reasonably manage. A 2A10BC will last twice as long on both class A and B fires as a 1A5BC, and a 4A20BC will last four times as long. However, it does you no good if you can't pick it up and use it!

Location

Okay, so you've got your fire extinguisher. That's great! Now—where should you keep it?

Think about what you do that is likely to produce a fire, and where you typically spend time in your home. Do you work on your car in the garage? Do you use your kitchen (even in this fast-food age)? Do you relax in your bedroom, or have a work shed in the backyard?

Extinguishers need to be easily and quickly accessible to be effective. If you have to run all the way downstairs to the garage to get the extinguisher for your bedroom television that just caught fire, the fire will likely grow beyond the capability of the extinguisher before you get back upstairs. The same goes for any place in your home.

All homes should have at least two extinguishers. If you have a one-story home, keep one in the garage and one in the kitchen. If you have a two-story home, one in the kitchen and the other in a common area upstairs is advisable. That way you can save valuable seconds if a fire should start. Of course, if you can afford more, get more, but no need to go overboard—you don't need one in every

single bathroom and closet, so long as what you do have is easily and quickly accessible. Make sure wherever you choose to locate it is visible and reachable, without obstruction.

Also keep an extinguisher in your vehicle, in a place that you can easily reach from inside the passenger space of your car. The trunk is not recommended, especially considering all the items that we commonly transport or even keep in our trunks (such as vehicle disaster kits and breakdown kits).

Use

When using a fire extinguisher, remember PASS (pull, aim, squeeze, sweep). Pull the pin, aim at the base of the fire, firmly squeeze the handle, and sweep the nozzle back and forth across the fire's base (side-to-side, front-to-back, or up-and-down as appropriate).

Know the range of your extinguisher (check the labeling). When using your extinguisher, get close enough to the fire to be able to put it out, but don't get too close—you don't want to trip and fall in, or have the fire suddenly flare up and catch you. Most household ABC extinguishers have a maximum effective range of 5-20 feet.

Always keep yourself between the fire and a safe exit, in case the fire grows beyond your capability to extinguish. You may not have to fully discharge the fire extinguisher to put out the fire, but keep going until you are sure that the fire is out. When finished, slowly BACK AWAY from the fire and keep your eye on it to ensure that it's not going to flare up again.

Make sure that you familiarize yourself with using your extinguisher. At least once a month, practice getting and using your extinguisher, so that in the event you need to use it you'll already know what to do. Pretend to pull the pin (don't actually pull it unless you actually have a fire!), aim the hose/ nozzle with one hand, squeeze the handle with the other (it won't actually "squeeze" with the pin in place, but still make the motion), and sweep back and forth across your "fire." Remember your extinguisher's range, so that you can practice getting into the right position to effectively and safely put out the fire.

In the event of an actual fire, CALL 911. If you can safely do so, use your fire extinguisher to put out the fire. Remember: if a fire is too big, or if it's burning out of control, GET OUT. Let the fire department handle it. Possessions and homes can be replaced—you can't.

Maintenance

Fire extinguishers, just like any other equipment, need regular maintenance to ensure their effectiveness and safety. Have your extinguisher inspected by a certified technician once a year. If you ever use your extinguisher, it must be recharged and inspected (even if you didn't use the whole thing) before putting it back into service.

Extinguishers are pretty tough and rugged, being constructed of heavy-duty steel. They will withstand earthquakes, low falls, banging, etc. That being said, if your extinguisher is involved in a particularly traumatic event, such as a serious car crash, you may want to have it inspected as soon as possible. Minor dents (no bigger than a quarter) and small scratches on the extinguisher are not indicators of serious traumatic damage.

Family

Don't be the only one that knows where your extinguishers are and how to use them. Teach everyone in your family, including young children, where they are (children can tell babysitters or other people where they are), and teach all responsible family members how to use them. Practice your extinguisher drills with your whole family. You may not be home when a fire starts, so it's critical that other family members have the same knowledge.

For more information, visit the following websites:

National Fire Protection Agency (NFPA), Safety Information for Consumers:
http://nfpa.org/displaycontent.asp?categoryid=277

United States Fire Administration:
http://www.usfa.dhs.gov/citizens/all_citizens/home_fire_prev/extinguishers.shtm