

Fire Safety in Your Home and Business

Fire safety is a big topic, covering many aspects of the way we live and work. Listed below are some helpful tips to keeping a safe home and business.

Smoke Detectors - After prevention, smoke detectors are your first line of defense against fire and can cut the risk of dying in a home fire nearly in half.



- Locate smoke detectors on every level of your home and outside of every sleeping area.
- Test every detector monthly.
- Find the root cause of [Chirping Smoke Detectors](#).
- Never disable a smoke detector for any reason. Correct the cause of false activation.
- Gently vacuum out your detector regularly to help eliminate false alarms.
- Use your smoke detector in conjunction with your home exit drill.
- Replace your smoke detector batteries when you turn your clocks back in October of each year.
- Replace your smoke detectors once every ten years
- **Carbon Monoxide Detectors** - If you have a fuel-burning appliance or a fireplace, you should consider purchasing at least one carbon monoxide (CO) detector and placing it, ideally, in a hallway or sleeping area. There are several units on the market. If your alarm goes off and you're experiencing any of the symptoms of carbon-monoxide poisoning (dizziness, nausea, vomiting, fatigue), leave your house immediately (and take your pets with you!) and call your fuel company and 9-1-1 for the Fire Department. If the alarm goes off and you don't feel sick, shut off possible sources of CO, call 9-1-1 and/or a qualified technician to investigate right away.
- **Fireplaces and Woodstoves** - Your woodstove or fireplace is likely a focal point in whatever room it is located and provides you with warmth, relaxation, and enjoyment. The Blue Hills Fire Department urges you to ensure its safe and efficient operation by adhering to the following guidelines:

- Inspect and clean your stove/fireplace annually. You can either do it yourself or engage a professional. If you notice any cracks in the chimney or any loose mortar or brick, have your fireplace repaired. Be on the lookout for cracks in your chimney liner.
- Use the right fuel. Hardwoods (madrone, oak, ash, hickory, etc.) burn cleaner than softer woods (pine, fir, or cedar). In addition, seasoned woods with a low moisture content burn cleaner than green fuel.
- Do not overload your stove/fireplace by building a fire that is too large for it to accommodate safely. Make certain that your fire gets enough air.
- During the holidays, avoid burning wrapping paper. It burns at too high a temperature to be disposed of safely in this manner. Recycle your household papers instead of burning them.
- Always use a stove/fireplace screen, and never leave your fire unattended.
- When building the fire, place the logs at the rear of the stove/fireplace.
- **When you clean your stove/fireplace and remove excess ashes, BE CERTAIN TO STORE THEM IN A METAL CONTAINER, WITH A METAL LID, AT LEAST SIX (6) FEET AWAY FROM ANYTHING THAT BURNS, INCLUDING YOUR DECK OR HOUSE. PLEASE DO NOT EVER STORE THE ASHES INSIDE YOUR HOUSE OR GARAGE. These ashes can smolder for hours and possibly days after they may appear to be out. In addition to the danger of an unintentional fire, they can emit deadly fumes.**
- Keep the area around your stove/fireplace and chimney clean and free of debris, and trim overhanging branches from near the chimney.
- Keep furnishings, clothing, papers, and anything that can burn at least four feet away from the stove/fireplace.

Candles - Most of us enjoy the ambiance of a room with candles. Unfortunately, many house fires are caused by candles that were improperly used. When using candles please be sure to follow some simple guidelines:

- Extinguish all candles when you leave the room and when you begin to feel sleepy.
- Keep candles well away from items that can catch fire (holiday greenery, decorations, clothing, curtains, etc.).
- Make certain candles are placed on a secure surface, in sturdy holders that will not tip over and that the holders are non-combustible and big enough to collect dripping wax.
- Do not use candles in places where they can be knocked over by children or pets.

- Ensure that candles in wall sconces are not subject to drafts that would blow the flame in contact with the wall or anything else that can burn.

Safe Storage of Ammunition - Firefighters experience the surprise of exploding ammunition in a fire situation with some regularity. When bullets and shells are exposed to fire, as long as they are not chambered in a weapon, they are generally not lethal. They do explode and you certainly would not want to be in the immediate vicinity. Most often, however, they will simply explode and not project the pellets or slugs with much force.

The safety gear worn by firefighters has been fairly effective in protecting them from injury in this case. Loaded weapons exposed to high heat, however, will "shoot;" and semi-automatic weapons will keep shooting, especially if gas operated as most repeating shotguns and some rifles are. This is a severe hazard for emergency personnel (or anyone in the vicinity).

There is a documented instance (which occurred elsewhere, by the way) in which a loaded rifle, mounted on a wall rack, kept discharging during a fire, hitting the command vehicle, causing fire personnel to believe that they were being shot at. They withdrew to a safe location and, consequently, the house was destroyed. Fortunately, no one was hurt in that instance. So, this is another good reason for not keeping loaded weapons in the home.

Safe storage of shells and bullets would be best in a fire-resistive gun cabinet. Lacking that, there are metal ammunition boxes; however, they create a risk of a larger, more powerful explosion if the components were to detonate due to the confined energy created by the box itself. A personal safe with a fire rating would be the next best, giving security against unwarranted access as well as fire protection.

Escape Planning - To ensure your household knows what to do in the event of a fire come up with an escape plan and practice it.

- Draw a floor plan of your home that shows at least two ways out of each room.
- Sleep with your bedroom door closed; this will help to hold back heat and smoke.
- Agree on a fixed location out of doors where household members will gather for a head count.
- Practice your escape drills regularly.

Disposal of Oil-Soaked Materials - Some materials can undergo a slow oxidation that, like the rapid oxidation of burning, releases heat. If the heat generated cannot escape the substance, the temperature may continue to rise until ignition takes place. Spontaneous combustion can occur in piles of rags used to apply linseed oil products. Care in providing the appropriate storage can minimize the hazard. With furniture refinishing products containing linseed-like oils, read the warning label for storage or disposal instructions. Generally, they will indicate that you should do one of the following:

- Separate and spread out in a well-ventilated area for 24 hours to completely dry.
- Wash in a solution of soap and water and hang to dry in a well-ventilated area or store in an airtight metal can, filled with water and placed away from any combustibles.

Residential Fire Sprinklers - It is estimated that more than half of the fire deaths which occur in homes could be prevented by adding sprinkler systems to houses and apartments.

For the past fifteen years, sprinkler systems using lightweight piping materials have been available for use in residential occupancies such as houses and apartments. Some of these sprinklers may be supplied from a common household water supply when installed in a 1- or 2-family dwelling.

The cost of such a system is less than you might expect. It is estimated that installation of such a system would add approximately one to one-and-one-half percent to the cost of a new home. And the pipes can be placed behind walls and ceilings, making the system unobtrusive and inconspicuous. They can also be installed in existing buildings.

Homes with automatic sprinkler systems should also be equipped with smoke detectors; and all residents should have a plan for escape in the event of a fire.

You may have heard that sprinkler systems cause extensive water damage in homes. However, a sprinkler will control the fire with a fraction of the water which would be delivered by a fire department hose, primarily because it activates so much earlier than a fire department could possibly respond. Also, automatic sprinklers activate only in the area of the fire, thus avoiding widespread water damage.

Sprinklers rarely go off by accident. In fact, one study concluded that you are more likely to experience a mishap with standard home plumbing systems than with residential fire sprinklers.

Electrical Hazards - Electrical fire and safety hazards are among the most common problems discovered by firefighters and inspectors during fire & life safety inspections. While some of these hazards require a licensed electrician to be corrected, many problems may be solved simply by rearranging electrical appliances or by the use of approved equipment. Things to remember about electricity:

- Electricity does not burn, but electrical arcs and sparks range anywhere from 2,000 to 7,000 degrees Fahrenheit.
- Never drive nails or other metal objects through electrical cords!
- Never put cords through doorways, windows, or holes in the wall where they can be easily damaged.
- Extension cords are the cause of several fires every year for a variety of reasons:
 - Improper wire size for the appliance they serve.
 - Cords curled up on the floor, wrapped around nails, or tacked up with staples.
 - Items (boxes, clothing, magazines, etc.) placed on top of wires.
 - Cords lying where they can be walked on.

Wildland Precautions - Each summer, the woodsides becomes dry and the danger of fire increases everywhere and the impact of that heightened fire danger. In addition to waiting for rain, there are some short- and long-term measures residents should take to protect their property from fires. Outdoor fire protection measures which can be accomplished in a relatively short period of time include:

- Make certain house numbers are easy to find and clearly visible.
- Trim tree branches away from the roof and driveway.
- Store combustibles (wood pile, for example) at least 100 feet away from the house.
- Keep the yard well-trimmed and free of combustible debris.
- Clean leaves and pine needles off the roof and out of the gutters.
- Maintain a non-combustible safety zone around the house by clearing, trimming, and removing all dry combustible vegetation within 30 feet of the structure.

Longer-term measures include the following:

- In those areas without hydrants, consider establishing a water supply suitable for firefighting (i.e., a pool, tank, pond, cistern). An emergency gas-powered water pump will be invaluable to the homeowner in protecting his or her property.
- When re-roofing, use fire resistant roofing materials which have a Class A or B rating.
- Cultivate low-growing, less flammable plants--rather than resinous bushes--near the house. Characteristics of fire-retardant plants are little or no seasonal accumulation of dead vegetation; open, loose branching; no resinous woody material (avoid conifers); low volume of total vegetation; and high moisture content in leaves. OSU's extension service has some excellent guidelines, including a list of fire-resistant plants, shrubs, and trees.
- Consider replacing pines, firs, or other conifers around the structure with hardwoods such as quaking aspen, paper birch, canyon live oak, maple, poplar, or cherry.

Clothes Dryer Safety - Clothes dryers require maintenance like anything else and are often overlooked. Read through this [Clothes Dryer Safety Sheet](#) and watch this [Clothes Dryer Safety Video](#) to learn more.