

# COMMUNITY STAFF FIRE SAFETY



SELF-LEARNING PACKAGE

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## LEARNING OBJECTIVES

This purpose of this booklet is to provide an overview of fire safety in a Community Health Care Setting (Regional Offices, Clinics, Home Care, Mental Health, Primary Health, Public Health offices, and/ or Client Homes). Main points discussed are what a fire is, causes of a fire, how to put out a fire, what to do when you discover a fire, ways to prevent fires, and important takeaway points.

**IMPORTANT INFORMATION THAT ALL STAFF SHOULD KNOW:**

- Staff working in client homes should know the location of all exits, the location of a phone to call 911, the location of smoke alarms, carbon monoxide detectors, and fire extinguishers.
- Staff working in any regional work site should know the location of the nearest exit and the fire plan for their workplace. This should have a map showing the locations of all pull-stations, fire extinguishers, as well as the floor plan for that floor and an evacuation route along with an arrow indicating, "You are here". Please contact your supervisor or manager if you cannot find the fire plan.
  - These should be located at every elevator, stairway, fire pull stations, and fire extinguishers
- Note the location of pull stations, fire extinguishers
- Is there a sprinkler system at your site and if so, where?
- Note the location and function of fire doors, fire zones

UNIVERSAL EXIT SYMBOL:

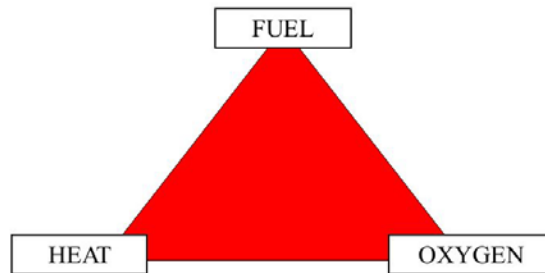


## FIRE FACTS

A fire is a chemical reaction that occurs when heat and a fuel source combine with oxygen in the air, creating flames and producing smoke and light.

### Fuel + Oxygen + Heat = Fire

The **FIRE TRIANGLE** represents the **three** elements needed for fire to occur: heat, fuel, and oxygen.



The flame is the visible part of the fire.

Fires cause destruction of the materials that are burning and damage the surrounding by the smoke and/or heat produced.

## CAUSES OF FIRES

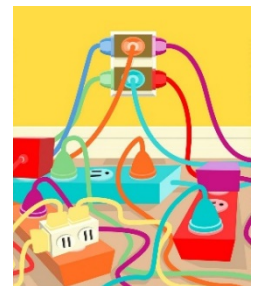
There must be a heat source in order for a fire to start.

There are 3 main causes of heat:

Electrical: short-circuiting, loose wiring or overloaded electrical circuits can produce heat that could start a fire

Mechanical: heat produced by a bearing failure on a piece of equipment

Chemical: substances can react and produce heat, such as mixing incompatible cleaning solutions or laboratory chemicals



**Common causes of fires in offices, clinics, and client homes:**

- Electrical negligence (overloaded sockets, faulty wiring, inappropriate use and/ or placement of small appliances such as heaters, etc.)
- Improper Storage and Materials Handling – pay attention to the safe storage of flammable materials such as paper, flammable liquids, glues and solvents.
- Cooking – kitchens in office settings or in homes can be a source of fire especially if food is left unattended while cooking. All electrical appliances used should be CSA approved.
- Arson (an individual intentionally setting fire to something)
- Smoking materials
  - Cigarettes
  - Matches
  - Lighters



**WHAT TO DO IF YOU DISCOVER A FIRE**

Any person seeing fire or smoke is to notify staff/ visitors/ clients in immediate area and go to the nearest pull station to activate the fire alarm (or call 911 if fire pull station is not available). Note: If you are in a multi-tenant building and/ or if there is no alarm system in place, ensure you do what you can to notify other tenants of the fire or smoke if it is safe to do so. You can try to contain the fire with a fire extinguisher only if it is safe to do so and if you are trained to use this.

Remember the acronym RACE

**R: Rescue**

- Remove yourself and any other persons from the immediate area of the fire

**A: Alarm**

- Activate the fire alarm at a pull station
- Call 911, or assign someone else in the vicinity to call 911
- Follow site protocols on how to provide details of the fire location to other staff members

**C: Confine**

- Close all windows and doors to the room/area where the fire is located
- This is crucial because it reduces the air and oxygen available for the fire to burn and limits the spread of smoke

**E: Extinguish**

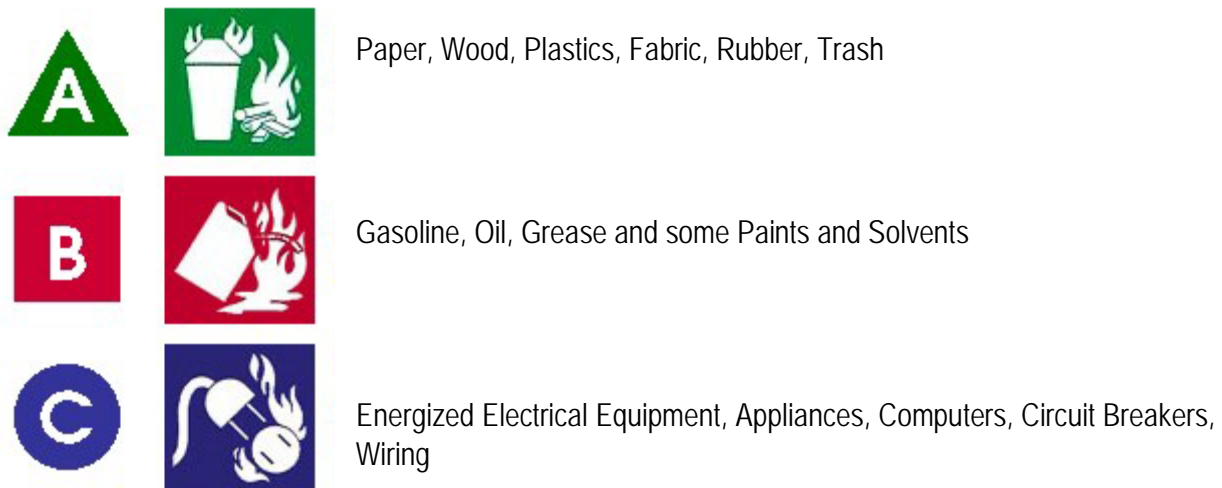
- Only if it is safe to do so
- If it is not safe to extinguish, evacuate the fire area while closing all the doors behind you

## FIRE CLASSIFICATIONS

Fires are classified according to the type of fuel that is burning. This is important to know because if you use the wrong type of fire extinguisher on the wrong class of fire, you might make matters worse.

Most fire extinguishers have a pictographic label (pictured below) to identify which type of fire the extinguisher is suitable for.

It is very important to understand the following 3 types of fire classifications:



***NOTE: FIRE EXTINGUISHERS AT ALL SITES ARE ABC EXTINGUISHERS THEREFORE; THEY CAN BE USED ON ANY AND EVERY TYPE OF FIRE (if it is safe to do so)! Home Fire Extinguishers generally cover ABC as well but it is best to check.***

## PORTABLE FIRE EXTINGUISHERS

Portable extinguishers spray an extinguisher agent that will either:

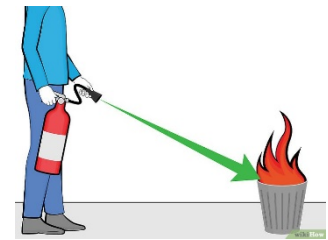
- Cool burning fuel
- Displace or remove oxygen, or
- Stop the chemical reaction so a fire cannot continue to burn

When the handle of the extinguisher is compressed, a high-pressure gas pushes the extinguishing agent from the cylinder through a siphon tube out of the nozzle. A fire extinguisher works much like a can of hair spray.

## HOW TO USE A FIRE EXTINGUISHER

### Remember the acronym PASS

- **P: Pull the Pin**
  - Pull the pin on the handle of the extinguisher with a twisting motion to break the plastic seal
- **A: Aim**
  - Aim the hose at the base/bottom of the fire
- **S: Squeeze**
  - Squeeze the lever to discharge the extinguishing agent
- **S: Sweep**
  - Sweep from side to side to cover the entire width of the fire



## DURING AN EMERGENCY

- Upon activation of the fire alarm, all staff, clients and visitors should evacuate the building IMMEDIATELY, closing their doors behind them and exiting the building via the nearest unobstructed exit (Please do not lock office doors)
- If it is safe to do so, the Fire Marshall and Deputy Fire Marshall will ensure that all space is vacant prior to exiting the building
- All staff, clients, and visitors are to gather at the muster location as predetermined as part of the escape plan so the Fire Marshall can account for all staff
  - Note: If available, the receptionist should bring the sign in/out and visitors log upon evacuation
- Elevators shall not be used during a fire response in those sites that have elevators
  - Elevators may be used only after clearance from Fire Chief or designate
- If staff exit using a doorway on the opposite side of the building to the muster location, **do not walk beside the building**, go around giving some distance from yourself and the building

- No one should attempt to move his or her vehicle from the parking lot

## HOW TO PUT OUT A FIRE

1. Remove the fuel source
  - This is not always possible
  - If the fire is caused by a liquid, turn off the broken or leaking line
2. Remove oxygen
  - Always close the doors to the room to reduce the availability of oxygen
  - Fire extinguishers work to displace air around the fire, this then reduces the overall amount of oxygen around the fire and causes it to go out – remember, a fire needs oxygen to burn!
3. Cooling the item that is burning
  - Putting water on the source manually from a water type fire extinguisher or water mist extinguisher or by automatic fire sprinklers
4. Interrupting the chemical reaction of the fire itself
  - Stopping the chemical reaction is the main function of the fire extinguisher
    - The extinguishing agent in the fire extinguisher disrupts the chemical reaction which causes the fire to go out



IF YOU HAVE THE SLIGHTEST DOUBT ABOUT YOUR ABILITY TO FIGHT A FIRE... EVACUATE IMMEDIATELY!



## WHEN NOT TO FIGHT A FIRE



- When you don't have the appropriate equipment
- When you might inhale toxic smoke
  - When synthetic materials burn (such as nylon in carpeting or foam padding in a sofa) they produce hydrogen cyanide, acrolein, ammonia or carbon monoxide
    - *THESE ARE FATAL EVEN IN SMALL AMOUNTS*
- When your instincts tell you not to
  - If you are uncomfortable with the situation just leave it to the fire department

## THINGS TO REMEMBER WHEN MANAGING A FIRE

### HAVE AN ESCAPE ROUTE

Never let the fire get between you and your path of exit out of the area



### WATCH FOR REKINDLING

Once the fire is extinguished back away while watching out for rekindling of the flame

### CLOSE ALL DOORS

Close all doors once you leave the area to reduce transmission of smoke and cut off oxygen to the fire

### COMMUNICATE TO THE FIRE DEPARTMENT

Provide details about how the fire started, what you did to put it out or how you attempted to put it out to the fire department

Let the fire department know if everyone was able to evacuate, or if people are trapped in the building/fire area

FEEL DOORS PRIOR TO OPENING, IF THEY ARE HOT – DO NOT OPEN THEM

ALWAYS HAVE AN ESCAPE PLAN OUT OF EVERY HOME AND BUILDING

### AFTER AN EMERGENCY

- Determine if the threat of fire has passed
- Assess for any damage and determine whether the site can function normally
  - This should be done in conjunction with the fire department, management, the landlord, and/or maintenance
- If there is no damage or if it is minor, staff and clients may return to their normal location, if safe to do
  - If damage has occurred, determine whether normal activities can resume
    - The fire department, the landlord and/ or a manager or director will make this determination
- Ensure that any items used during the response are re-stocked or re-place (i.e. fire extinguishers)
- Monitor staff and clients for any ongoing effects from the event
- For all false alarms or real fires – complete the occurrence reporting and managing critical incidents, critical occurrences, occurrences, and near misses

### WAYS TO PREVENT FIRES

#### Reduce possible sources of fuel

- The 2 main sources of fuel for fires are paper/plastics and textiles.
- Pay considerable attention to the safe

Reduce possible sources of heat

- Watch for unusual operation of equipment such as abnormal heating, discoloration, smoke, or frayed electrical cords. Overloading sockets are another danger. Never overload an extension lead by plugging in appliances that together exceed the maximum current rating stated for the extension lead. Take precautions like not stacking or covering electrical hardware that requires air to circulate around. This will help to avoid any risk of the equipment overheating and catching fire.
- Report flickering lights, unusual sounds, and improper operation of equipment
- Take equipment out of service if unusual operation of the device persist



Test smoke detectors regularly

- They should be tested once a month
- Batteries should be changed twice a year (with the time change)
- Smoking can be a common fire starter. Smoking is not allowed in offices. In smoking areas, ensure that smoking bins are emptied regularly and provide a sand or water bucket nearby. Ideally a fire extinguisher should be positioned in close proximity to the smoking area and a smoke detector installed where possible

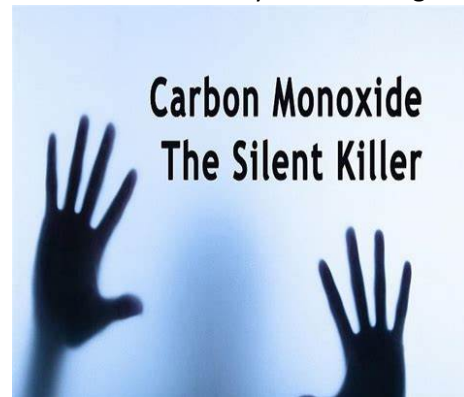
Be kitchen safe

- All electrical appliances used in office or home should be CSA approved
- Never leave the stove unattended. Nothing should be left on the stove if the burners are still warm
- Don't use the stove as extra counter space

**CARBON MONOXIDE POISONING**

What is carbon monoxide (CO)?

- A deadly gas that is tasteless, colorless, and odorless
- When you breathe carbon monoxide in, it replaces the oxygen on your red blood cells and makes it unavailable to our organs and can result in brain damage or death



Where does it come from?

- It is a byproduct of appliances that run on gas or oil
  - Fireplaces
  - Clothes dryer
  - Charcoal grills
  - Space heaters
  - A running vehicle

What are symptoms of CO poisoning?

- Headache
- Confusion
- Dizziness
- Blurry vision
- Nausea/Vomiting
- Tiredness
- Flu like symptoms

What if the carbon monoxide detector is going off?

- If anyone is experiencing symptoms evacuate and call 911
- If no one is experiencing symptoms open all of the windows and doors and turn off all fuel burning appliances

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