

# **Health**Stream<sup>\*\*</sup>

Welcome to **SQ: Fire Safety**. Select START MODULE to begin.

Be sure to click on all of the interactive elements in the module in order to advance.

Introduction

Fire Safety Standards

Fire Causes

Facility Safety Features

Response

Prevention

Reporting

Module Conclusion

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# Introduction



In this module, you will learn:

- How fires can start.
- How to respond to a fire.
- How to evacuate from a fire.
- What you can do to lower the risk of a fire.

Please look at the important terms before you begin.

Select "+" to expand.

#### Glossary \_

#### Alcohol-based solution

Liquid with an alcohol base used to sanitize

#### **Centers for Medicare & Medicaid Services (CMS)**

The agency in the U.S. Department of Health and Human Services (HHS) that oversees the nation's major healthcare programs

#### Electrical equipment

A machine powered by electricity

#### Evacuate/evacuation

Remove from a place of danger to a safer place

#### Fire extinguisher

A portable device that expels water, foam, gas, or other material to put out a fire

#### **Ignition source**

Something that can spark enough heat to cause a fire

#### Medical record

The history of a person's health

#### National Fire Protection Association (NFPA)

A group that provides best practices for fire safety

#### Occupational Health and Safety Administration (OSHA)

A group that makes rules and standards to protect workers

#### Oxygen

A type of gas used in surgery, also known as O<sub>2</sub>

#### **Partition**

A wall used to block fire and smoke from spreading

#### Positive latching hardware

A fire door latch to keep a door closed under pressure created by a fire

# Let's get started!

#### CONTINUE

# **Fire Safety Standards**



Facilities follow the rules in **Life Safety Code**, **NFPA 101** to make sure they meet life safety fire requirements. Your facility should follow all

# guidelines in the NFPA's Life Safety Code 101 and Tentative Interim Amendments.

# **Life Safety Code**

The Life Safety Code has the best tips to keep facilities and people safe.

For example, according to the Life Safety Code, a facility should:



Have clearly marked exits and exit paths, including backup exits.



Keep exit paths clear and well lit.



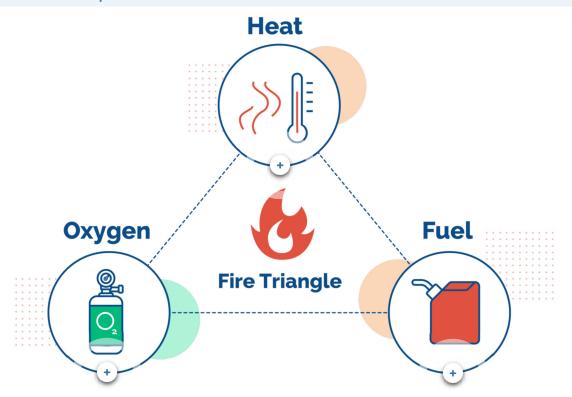
Use fire alarm systems.

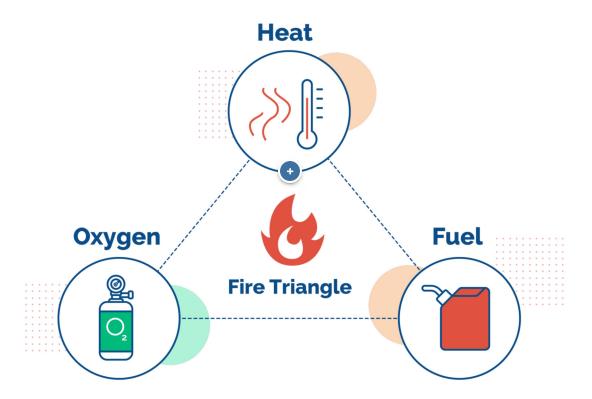


Use doors and windows that can contain a fire.

## The Fire Triangle

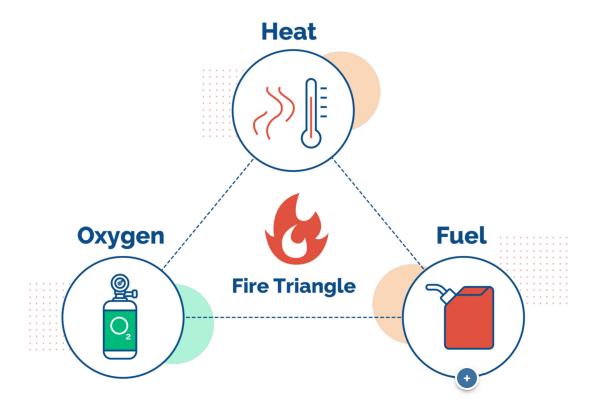
The fire triangle is made up of three elements: oxygen, heat, and fuel. The three elements together may start a fire. Be aware of each when you are at work.





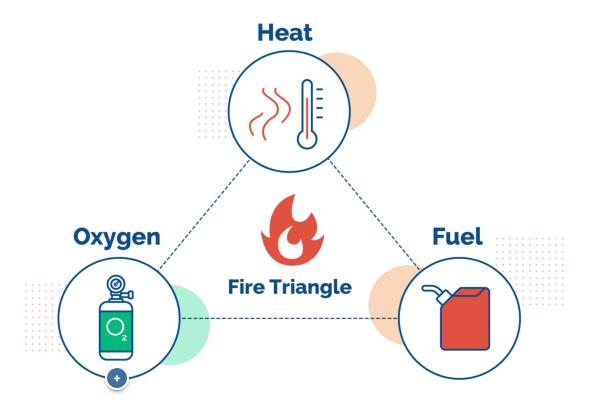
## Be Aware of Heat and Ignition Sources

A fire needs heat or an **ignition source** to start burning. Heat can come from lasers and other **electrical equipment**. Be aware that broken electrical equipment or cigarette ashes can also start fires.



#### **Be Aware of Fuel Sources**

A fire can be fed by alcohol-based solutions and hand rubs that have not dried. Other items include linens, bandages, ointments, and tubing.



## Be Aware of Oxygen and Other Gases

There are above-normal amounts of oxygen in a room when we use oxygen machines, which creates fire danger. Using **nitrous oxide (N\_2O)** and other gases can be as dangerous as using oxygen.

Complete the content above before moving on.

# **Fire Causes**

## **Common Causes**

Thousands of fires occur in facilities like yours every year. Common causes include:



Broken electrical equipment



Cigarette ashes



Electrical equipment used the wrong way

## **Common Locations**

Fires can happen where there is fuel, oxygen, or heat. These areas include:







Laundry rooms Laboratories Furnace rooms

## **Alcohol-Based Skin Solutions**

Alcohol-based solutions clean and sanitize skin. Alcohol-based hand sanitizers can clean your hands, and alcohol-based skin prep solutions can sanitize a person's skin.

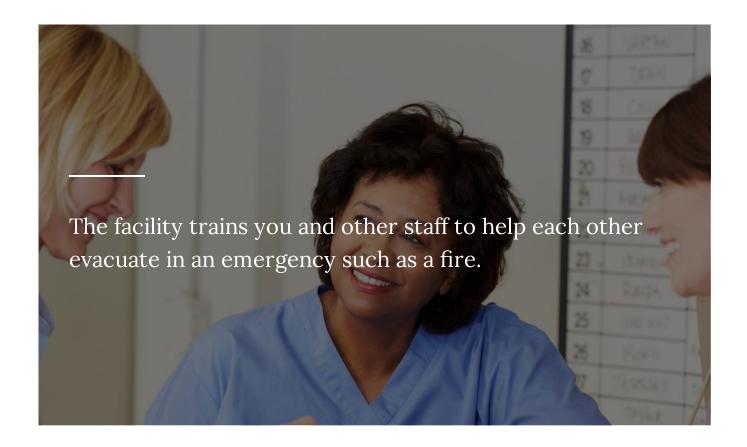
Be careful when you use them! They contain alcohol and can catch fire. There are policies and procedures to use alcohol-based solutions safely.

Let's review a few other tips:

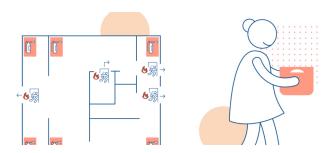
- Do not put hand sanitizer containers above, next to, or within one inch of any possible ignition source.
- Only use the smallest amount needed. Do not allow any solutions to pool.
- Make sure alcohol-based solutions dry after you use them. This is important in areas with high oxygen levels, such as operating rooms.
- Store supplies of alcohol-based solutions safely. Put them in cabinets or another storage space away from any possible ignition source.
- Record what you did to manage fire safety in the individual's **medical record** if alcohol-based solutions were used in a procedure or surgery.

#### CONTINUE

# **Facility Safety Features**



## Review your facility's fire emergency action plan when:



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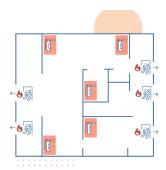




Developing the plan

Starting a new job





Changing job responsibilities

The plan changes



Know what to do in a fire. Practice with each fire drill. Go to all fire safety training classes.

The Occupational Safety and Health Administration (OSHA) has tools to help you do the right things in a fire.

## **Facility Fire Safety Features**

## Fire Alarm Systems

Fire alarm systems sound an alarm when they detect smoke. A person who sees a fire can trigger an alarm. These should be ready for all staff to use.

Alarms should have a special signal to tell you if there is a fire or other emergency.



## **Smoke Detectors**

Smoke detectors give early warning of fires.



## **Sprinkler Systems**

Sprinkler systems spray water to help put out fires. When a sprinkler system is out of order for more than 10 hours, the facility needs everyone to evacuate the building or start a fire watch until the sprinkler system is working.



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## **Manual Fire Alarm Devices**

Manual fire alarm devices include hand-activated pull stations.



## Positive Latching Hardware

Each fire door should have a latch to keep the door closed under pressure created by a fire. Include doors in hallways and the doors to rooms with any materials that could catch on fire.



#### Fire Extinguishers

**Fire extinguishers** can control small fires before they grow. Your facility should provide the proper types of fire extinguishers in the appropriate areas.



#### Fire Doors & Fire and Smoke Partitions

Your facility should have automatic fire doors and fire and smoke **partitions**. Partitions separate the building into many zones. They keep fire and smoke in one zone and prevent them from moving to other zones.





## **Emergency Exit Routes and Doors**

An exit route is a path from any point within a facility to a place of safety.



## Guidelines for emergency exits:

- Set up exit routes so that staff will not travel toward a high-hazard area.
- Exit paths should be free of clutter and have good lighting.
- Each exit should be visible and marked by a sign reading "Exit."
- Light exit signs with a reliable light source. Their color should be recognizable.
- The line-of-sight to an exit sign needs to be clear.



- Always unlock exit doors.
- Do not place decorations or signs that block the visibility of the exit route door.
- Mark each doorway that is not an exit with "Not an Exit" or mark it with a sign for its actual use (for example, "Closet").



- There should be stairs or a ramp where the exit route is not level.
- Exit routes should be open during construction, repairs, or alterations.
- Do not expose staff to fire hazards during construction, repairs, or alterations.



## CONTINUE

# Response



An emergency action plan includes every staff member's name or job title to contact for more information about the plan. It explains their duties under the plan.

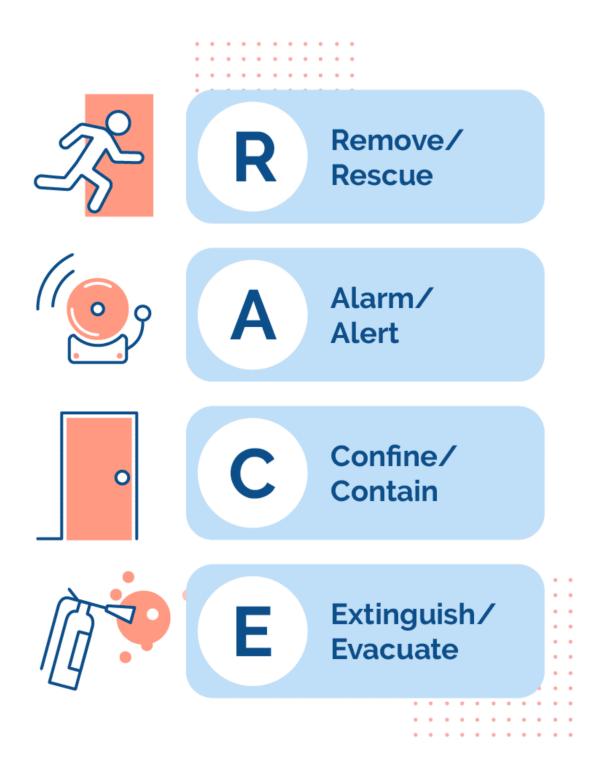
An emergency action plan also includes these procedures:



Always treat each alarm like a fire emergency, even if it is a practice fire drill.

## **RACE**

Use the acronym RACE for step-by-step tips. It can help you remember what you need to do if there is a fire.



**R - Remove/Rescue:** Rescue all individuals who are near the fire.

**A - Alarm/Alert:** Pull the alarm, get help, or call the fire department.

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**C - Confine/Contain:** Close all doors to the room where the fire is burning.

**E - Extinguish/Evacuate:** If you are trained and are sure it is safe to do so, try to put out the fire with a fire extinguisher. Otherwise, evacuate to your designated meeting location.

# **Assisting Individuals During Evacuation**

You may have to carry individuals to safety when rescuing them. Here are some ways to carry people to safety:



Side-by-side assist



Chair lift



Swing carry





**Extremity carry** 



(i) Move individuals who are very sick or injured in their beds.

Ask about the ways your facility transfers individuals.

## When to Evacuate

You may have to evacuate the facility right away when:





The fire does not go out with a fire extinguisher.

Individuals are in immediate danger of injury or death.

# **Types of Evacuation**

There are three different types of evacuations:





Defend-in-place evacuation

Staying inside the building but in a safe zone, away from the fire danger

Lateral evacuation

Involves moving all individuals through fire and smoke partitions to a safe area on the same floor

Vertical evacuation

Involves moving individuals down to a lower floor or safe area

If safety officials order a complete evacuation of individuals, follow these steps:



First, move individuals who can walk.

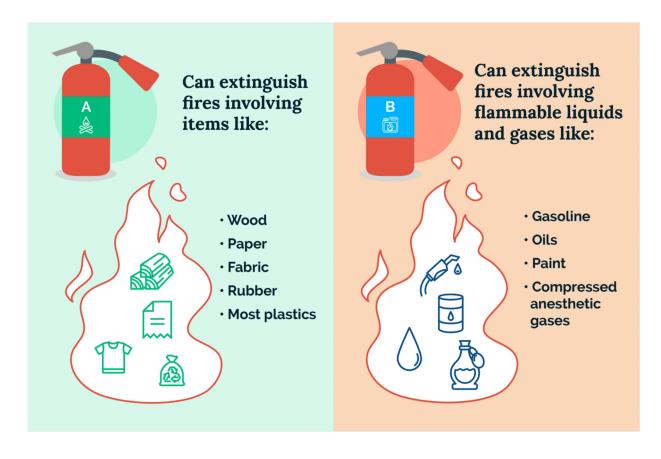


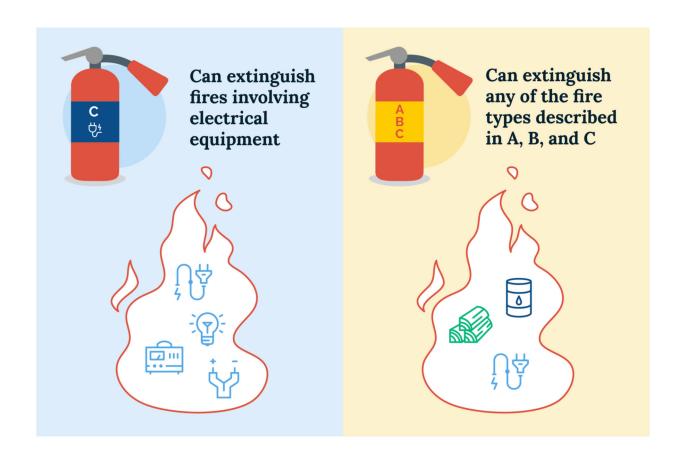
Next, move those who use wheelchairs.



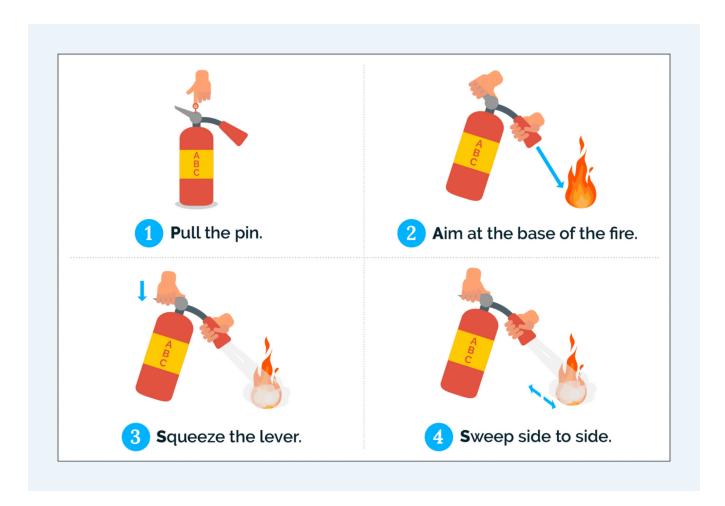
# Fire Extinguisher Use

Choose the right kind of fire extinguisher. Each type has a label to show which fires it will help put out. Using the wrong fire extinguisher or using it the wrong way could cause a fire to spread.





Using a fire extinguisher is not as hard as you might think! The acronym **PASS** gives you step-by-step tips for how to use one.



#### Choose the best option and select SUBMIT.

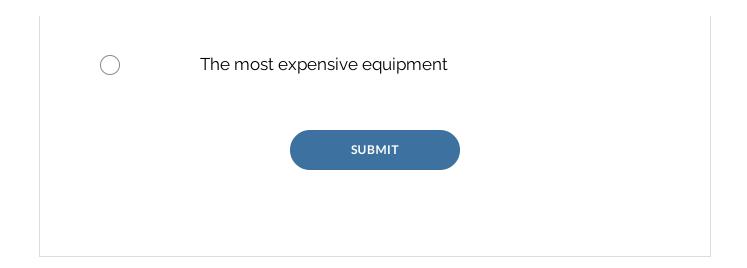
There is a dangerous fire. The facility needs to do a complete evacuation.

Who or what should you evacuate first?

The person confined to their bed

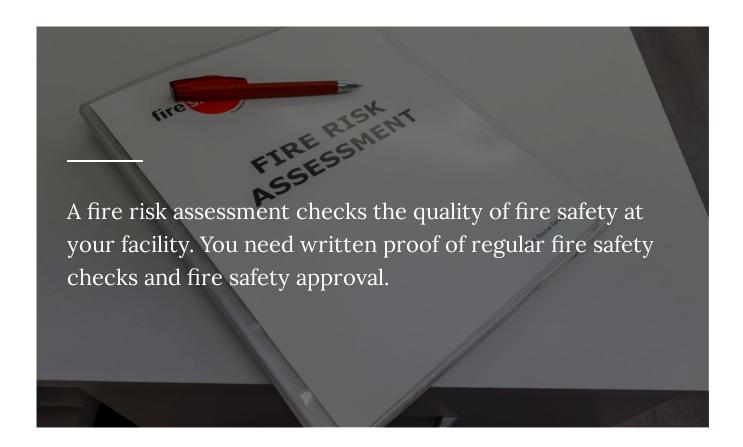
The person who can walk

The person in a wheelchair



Complete the content above before moving on.

## **Prevention**



These checks may include:



Knowing the fire hazazds in each area of the facility.



Knowing people at risk, including staff, patients or residents, visitors, and contract workers.



Evaluating, removing, and reducing risks.



Documenting risks, planning for them, and training staff members.

Ask questions to do a fire risk assessment when you are working in a team:

- Ask your team, "Is there a fire risk with this procedure?"
- Begin only after fixing any problems or concerns.
- Make sure the whole team recognizes the three elements of a potential fire.

Your facility should have a fire prevention plan. It should be in writing, kept in the facility, and available to staff for review. It includes:

- A list of all major fire hazards.
- How to safely use and store hazardous materials.
- Potential ignition sources and how to control them.

• The types of fire protection equipment necessary to control each major hazard.



- How to reduce waste materials that could catch fire.
- How to prevent an accident from materials that easily catch fire.
- The name or job title of staff members responsible for maintaining equipment.
- The name or job title of staff members responsible for controlling hazards that help a fire burn.



# Your facility should tell you about fire

hazards when you do a job for the first time. It should also review the fire prevention plan with you.

Always take steps to prevent fires.

To help prevent fires caused by smoking:

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Follow your facility's rules about smoking.

Smoke only in allowed areas.

Ask visitors to smoke only in permitted areas.

Do not allow smoking near oxygen supplies.

Here are some more things you can do to prevent fires:





Store liquids that could catch fire, alcohol-based solutions, disinfectants, and antiseptic pads away from any ignition source.

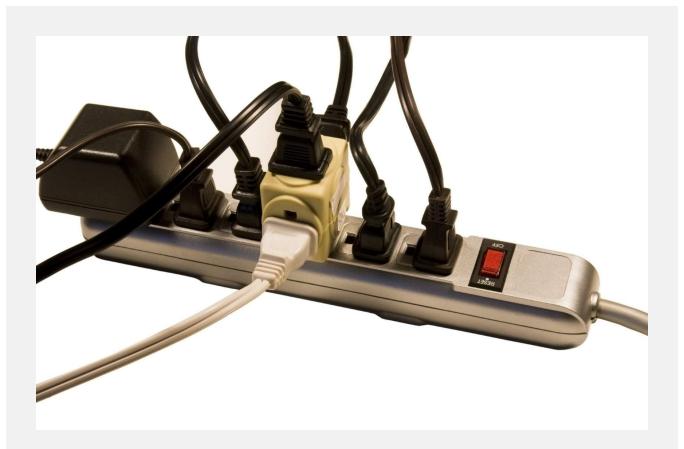
Be extra careful when working in areas where oxygen or other gases are present because sparks or hot surfaces can cause a fire. Only use electrical equipment after you make sure you are using it safely.

## **Equipment Maintenance**

To help prevent fires caused by using broken electrical equipment:



- Look closely at all equipment before use.
- Report broken equipment.
- Do not allow others to use damaged equipment.

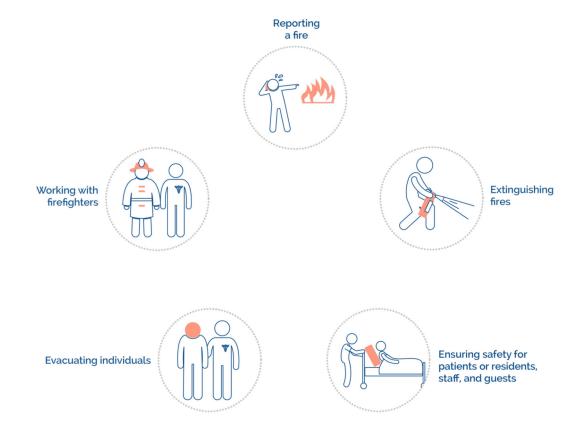


- Do not overload electrical outlets.
- Use extension cords and electrical adaptors safely.
- Tell staff, individuals in your care, and visitiors that small electrical appliances are not allowed in individual rooms without approval.

#### CONTINUE

# Reporting

The facility should have written fire control plans to handle:



The facility should **keep up inspection and written approvals** by state or local fire departments.

Keep medical records in a place safe from fire, water damage, and other hazards.

### CONTINUE

## **Module Conclusion**

Fire safety is a top priority. You and your team work together to keep everyone safe from fires.

In this module, you learned:

- How fires can start.
- How to respond to a fire.
- How to evacuate from a fire.
- What you can do to lower the risk of a fire.

#### References \_\_

The United States Department of Labor, Occupational Safety and Health Administration. (n.d.). *Fire safety standards*. Retrieved February 1, 2022, from https://www.osha.gov/fire-safety/standards

The United States Department of Labor, Occupational Safety and Health Administration. (2002, November 7). *Exit routes and emergency planning*. Retrieved February 1, 2022, from https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910SubpartEApp

You have reached the end of this module. To exit and return to the Activity Details, select **EXIT**.