Fire Safety Training

Introduction

Good Morning, Team.

I'm [Your Name], your Safety Officer. Today, we are going to cover a vital topic that concerns **everyone's safety on-site and off-site — Fire Safety Training**.

Fires can start in seconds and spread rapidly, causing serious injuries, property damage, or even fatalities. That's why it's critical that everyone here understands how to prevent fires, how to respond if one occurs, and how to protect yourself and your coworkers.

Purpose of Fire Safety Training

The purpose of today's training is to ensure that all workers:

- Understand **common causes of fires**
- Know how to **prevent fires through good housekeeping and controls**
- Can **respond quickly and safely** in case of a fire
- Are familiar with the **types of fire extinguishers and how to use them**
- Know the **emergency evacuation procedures**

Understanding the Fire Triangle

Before we move on, let's understand what causes a fire. Every fire needs three elements, also known as the **Fire Triangle**:

1. **Heat** – Any ignition source like flame, spark, hot surface.
2. **Fuel** – Anything that can burn such as paper, oil, gas, or wood.
3. **Oxygen** – Present in the air around us.

Remove any one of these three, and the fire cannot start or will be extinguished.

Pre-Work Preparations

Before starting any work where fire risk exists:

1. Conduct a Fire Risk Assessment

Identify all potential ignition sources and combustible materials.

2. Obtain Hot Work Permits (if applicable)

For welding, cutting, or grinding — ensure all safety measures are in place and a fire watch is assigned.

3. Ensure Availability of Fire Equipment

Confirm that the right fire extinguishers are available and easily accessible.

4. Check Emergency Exits and Assembly Points

Make sure escape routes are clear and all workers know where to gather during an evacuation.

Personal Protective Equipment (PPE)

Depending on the task, proper PPE can reduce fire-related injuries:

- **Fire-Resistant Clothing (FRC):** Minimizes burn injury.
- **Safety Shoes:** Protect feet from hot surfaces or burning materials.
- **Heat-Resistant Gloves:** For handling hot equipment or materials.
- **Eye Protection:** Shields eyes from sparks and smoke.
- **Respirators (if needed):** In smoky or toxic environments.

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10 Common Fire Hazards

1. Flammable Liquids and Gases

Improper storage or handling of fuel, thinners, or solvents can lead to explosions.

2. Electrical Faults

Overloaded circuits, damaged wires, or short circuits are a leading cause of industrial fires.

3. Smoking in Unauthorized Areas

Discarded cigarettes in flammable zones can trigger a fire.

4. Welding and Cutting

Sparks from hot work can ignite nearby materials if precautions aren’t taken.

5. Faulty Machinery or Overheating

Mechanical failure or lack of maintenance may result in overheating or sparks.

6. Improper Waste Disposal

Oily rags, packaging, or scrap can combust under the right conditions.

7. Portable Heaters

If left unattended or used improperly, they can easily start a fire.

8. Cooking Areas

Improper use of appliances in break rooms or campsites.

9. Combustible Dust

Fine particles from wood, grain, or metals can explode if airborne in high concentrations.

10. Lack of Housekeeping

Cluttered workspaces and blocked exits increase the fire risk and hinder evacuation.

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10 Fire Safety Precautions

1. Keep Work Areas Clean

Remove unnecessary flammable materials and maintain good housekeeping.

2. Store Flammable Liquids Safely

Use fire-approved containers and cabinets for flammable substances.

3. Follow Electrical Safety Protocols

Do not overload sockets, and report faulty equipment immediately.

4. Use Fire Extinguishers Correctly

Know the type of fire and the correct extinguisher to use (e.g., CO_2, foam, water, dry powder).

5. Never Block Fire Exits

Always keep exits and passageways clear.

6. Post No Smoking Signs

Prohibit smoking in fire-risk zones and enforce strict compliance.

7. Maintain Equipment

Regularly inspect and maintain all machinery to prevent overheating.

8. Conduct Fire Drills

Practice evacuation procedures to ensure everyone knows what to do in an emergency.

9. Assign Fire Wardens

Trained individuals should be responsible for helping in evacuations and reporting fire incidents.

10. Train All Employees

Make fire safety training mandatory during induction and refresher sessions.

During a Fire Emergency

If a fire breaks out:

1. Raise the Alarm

Shout “FIRE!” and activate the nearest fire alarm point.

2. Evacuate Immediately

Do not stop to collect belongings. Use the nearest safe exit.

3. Use Fire Extinguisher (If Trained)

Only attempt to extinguish a small fire if you are trained and it is safe to do so.

4. Close Doors Behind You

Helps contain the fire and smoke.

5. Report to Assembly Point

Account for all workers. Fire wardens must take roll calls.

Types of Fire Extinguishers

Know the right extinguisher for the right fire:

Type	Color Code	Use For	Not For
Water	Red	Paper, wood	Electrical, oil fires
Foam	Cream	Flammable liquids	Electrical fires
CO_2	Black	Electrical, flammable liquids	Confined spaces (suffocation risk)
Dry Powder	Blue	Most types of fire	Can obscure vision

Post-Fire Procedures

1. Do Not Re-Enter

Never return to the building until declared safe by emergency personnel.

2. Report the Incident

Submit a detailed report about what happened, how it was handled, and lessons learned.

3. Cooperate with Investigations

Assist safety and fire authorities in understanding the cause.

4. Review and Improve

Update fire safety plans and provide additional training if needed.

Conclusion

Let me end with this reminder: **Fire safety is everyone's responsibility.**

You may only get seconds to act during a fire. Always follow safe practices, report hazards, and never assume someone else will take care of it.

Stay alert, stay prepared, and most importantly — stay safe.

Thank you for your time and attention. If you have any questions, now is the time to ask.