

Fire Safety – Safety Share – Week 3 (Fire Protection)

Background for Sr. Leaders:

At all of our sites, we go to great lengths to prevent fires from starting. We establish safe storage practices for flammable materials, we conduct workplace examinations to control potential ignition sources, and we complete hot work permits when we know we will be creating ignition sources. Despite all these efforts, we may occasionally encounter a situation where a fire may start in one of our work areas. When this occurs, we must be ready to act to prevent more catastrophic outcomes.

At a minimum, we need to ensure that we have adequate resources to extinguish fires in their incipient or beginning stages. (30 CFR 56/57.4200(a)(1)) Whether our resources consist of fire extinguishers or sprinkler/foam systems, we need to make sure that we are inspecting them on a periodic basis to ensure that they will operate as designed as needed.

Understanding Fire Suppression for Frontline Leaders:

The firefighting resources available in your work area must be adequate for the types of fires you are likely to have in your work area. As a quick reference, most extinguishing media labeled as to what type of fire it will control.

- Type **A** – Ordinary Combustibles (Paper, cardboard, etc.) (Things that produce **Ash**)
- Type **B** – Flammable and Combustible liquids (gasoline, diesel, etc.) (Liquids = Things that **Boil**)
- Type **C** – Electrical fires (Power cords, outlets, etc.) (Electricity means **C**urrent)
- Type **D** – Combustible Metals (Magnesium, Sodium, etc.) (**D**on't let these burn)
- Type **K** – Kitchen / Grease Fires (Kitchen grease, oils, etc.)

Action: Verify that your work area(s) have an adequate number of fire extinguishers, that they are the appropriate type, and have been checked for the current month.

Action: Verify with the Safety Department that the fixed sprinkler and other suppression systems in your area have been checked in the previous six months.

Fire Extinguisher Tips for all Employees:

There is a simple acronym to remember if you are going to use a hand-held extinguisher to extinguish a small fire:

- P – Pull the pin on the extinguisher
- A – Aim the nozzle at the base of the fire
- S – Squeeze the handle on the extinguisher
- S – Sweep Side-to-Side

Always have an escape route when using a fire extinguisher to fight a fire.

EXTRA:

Question: Why are flammable and combustible liquids more hazardous at high temperatures than at room temperature?

Answer: The vapors from the liquid is what burns, not the liquid itself. The rate at which a liquid produces flammable vapors depend on its vapor pressure. The vaporization rate increases as the temperature increases.