The Silent Dangers of Confined Space Stats and Facts

FACTS

Four Main Causes of Confined Space Accidents That Lead To Injuries

1. Toxic atmospheric hazards can be roughly divided into two categories:

- Asphyxiation caused by low levels of oxygen. In these types of cases, oxygen has been replaced by other gases, such as nitrogen or carbon dioxide.
- Inhalation of harmful airborne contaminants, such as toxic gases, vapors, fumes, and dust.

2. Flammable atmospheric hazards refer to injuries resulting from fires and explosions in a confined space.

3. Engulfment is the result of being immersed in a liquid, such as oil or water, which then leads to drowning or asphyxiation. Engulfment can also be caused by free-flowing solids, such as rocks or dirt.

4. A portion of confined space-related fatalities stems from physical hazards. Many physical hazards and injuries are connected to atmospheric ones: exposure to low oxygen levels or toxic gases might lead to a worker losing consciousness and falling from a great height or drowning in a pool of liquid.

STATS

- An often-cited study found that 79 percent of deaths in confined spaces were due to atmospheric hazards.
- Approximately 60 percent of confined space fatalities would be rescuers trying to help a coworker.
- 1 confined space fatality occurs every four days on average

in workplaces across the United States. (US Department of Labor)

- 4 dangers of confined spaces are oxygen deficiency or oxygen enrichment; fire/explosion; the potential to drown in liquids or solids; and toxic atmospheres.
- About 50 percent of deaths in confined spaces in Canada result from insufficient oxygen.
- 61 percent of confined space fatalities in the US occur during construction, repair, or cleaning activities.

NIOSH Studies:

- Out of 100 deaths that were investigated, the main reasons the workers entered the confined space were to perform their work functions of routine maintenance, repairs, and inspections of the confined space.
- Out of 670 confined space deaths, the most common types of hazards were atmospheric hazards.
- Out of 217 confined spaces deaths that were investigated, the two most common types of gases in confined were spaces, hydrogen sulfide and carbon monoxide.
- The overall fatality rate in confined space work is estimated to range between 0.05 and 0.08 per 100,000 workers.