

Common Hazards of Confined Spaces

Once you have identified a restricted or confined space, determine whether any of the example hazards listed below do exist or could potentially develop in the space. Remember, if any hazards exist beyond being a) an enclosed or partially enclosed space, b) not being designed or meant for people to be in it continuously, and c) being difficult to get into or out of, you have a confined space!

- Too much oxygen
- Too little oxygen
- Hydrogen sulfide (H₂S) from organic materials breaking down in tanks, pits, or ponds
- Ammonia (NH₃) from organic material being broken down by bacteria
- Methane (CH₄) produced by bacteria digesting organic material
- Carbon monoxide (CO) from sources of combustion (i.e., engine or furnace)
- Carbon dioxide (CO₂) produced by respiration in living organisms and by combustion
- Ignitable or explosive atmospheres from fuels, solvents, aerosols, combustible dust, etc.
- Biological agents such as mold spores, allergens, Hantavirus, etc.
- Entrapment or engulfment in grains, feed, etc.
- Entrapment or injury from mechanical equipment, such as augers, conveyors, mixers, etc.
- Electric shock from cords, welding equipment, etc.
- Substances entering through pipes, such as toxic gases, hot substances that could result in burns, liquids that could result in immersion and drowning, or solids that could trap, crush, or bury a person
- Extreme temperatures resulting in hypothermia or heat stress
- Noise which can reflect off walls and make communication difficult
- Drowning can also occur if a person loses consciousness (i.e., due to lack of oxygen, toxic gas, or head injury) into just a few centimeters of liquid

Restricted or Confined Space Flow Chart

