Know the Dangers of Confined Spaces

Know the Dangers of Confined Spaces

You need to know about the dangers of confined spaces – even if you don't work in them.

Studies have shown more than half of the workers killed in confined space accidents were would-be rescuers.

Do you know what a confined space is? Do you know why it is dangerous? Here are some of the characteristics of a confined space:

- It is large enough that a person can enter it to work.
- It has limited or restricted access and exits.
- It is not designed for continuous human occupancy.
- It may have a hazardous atmosphere, such as flammable vapors, toxic gases or too little oxygen.
- It may have the danger of engulfment by liquids or solids such as granular material.
- It may have a shape which could cause entrapment, such as a sloping floor which tapers down to a narrow point.
- It may contain other hazards such as moving machinery, chemical substances or electrical equipment.
- These are examples of confined spaces: Vessels, tanks, vats, manholes, sewer tunnels, elevator shafts, storage bins, hoppers, holds of ships, cisterns, pits, boilers, stacks, pumping stations and equipment housings.

Why do people die in confined space accidents? Here are some common reasons:

- They don't recognize a confined space. They do not know the danger.
- They assume the space is safe because they cannot smell gas or vapor, or because it "looks" okay.
- They underestimate the danger. They think they can escape before they are overcome by the hazard.
- They let their guard down after they enter the confined space and do not realize a hazard is developing.
- They try to rescue others, but are not equipped to do so safely.

Sometimes workers must be assigned to work in confined spaces to do work such as removing waste materials, inspecting equipment, repairing equipment or resurfacing vessels.

However, before working in a confined space, extensive safety training is imperative. Workers must recognize the hazards and learn how to avoid them.

Extensive training in the use and fit of special protective equipment is also necessary. Respiratory protection appropriate to the hazard is vitally important. Workers must be fully trained in the correct use of breathing apparatus. They must also wear safety harnesses and lifelines so they can be rescued quickly if something goes wrong.

Confined space entry must be governed by a permit system to ensure that workers are properly prepared and protected from hazards. Other personnel, also equipped for confined space entry, must be on stand-by for rescue if something goes wrong.

Confined space entry is not something to take lightly, and it is not something to do on an impulse – even if the impulse is to save someone's life. If you are not properly equipped and trained for confined space entry, there will be two victims instead of one.