

Confined Spaces: Racing to The Rescue Is Deadly

Safety Talk

What's at Stake?

Two employees from a local construction company were assigned to repair a sewer line leak. One employee was responsible for entering the sewer—a confined space—to repair the leak. The other stayed topside as a standby person.

During the repair, toxic fumes overcame the employee inside the confined space, who collapsed unconscious into a waist-deep pool of water. The standby employee, recognizing the emergency, entered the sewer to rescue his co-worker. Sadly, he was unprepared and untrained to handle the toxic fumes. Instead of a heroic rescue, both men were pronounced dead at the scene.

Confined spaces—like storage tanks, pits, boilers, and sewers—can harbor or rapidly generate hazards that cause death. That's why a critical link for people working inside a confined space is the standby person or attendant. If you're a confined space attendant and think all the risks are inside the confined space, think again. Over 60% of confined space deaths don't involve people assigned to work in the confined space – they involve the standby person or other would-be rescuers who enter the confined space in an emergency. Today we'll review where the role of a standby person starts—and most importantly, stops—in order to prevent unnecessary injuries and deaths during a confined space emergency.

What's the Danger?

1 of every 10 confined space emergencies will result in death. Confined spaces are riddled with dangers—here are a few of the most common:

- Lack of oxygen
- Toxic or combustible air – sometimes undetectable

- Excessive heat
- Unguarded machinery
- Exposed wiring
- Untrained personnel entering confined spaces

When you perform standby duties for a confined space operation, you may encounter situations where a co-worker inside the confined space becomes injured or unconscious. There is one action you must take immediately: initiate and follow your organization's emergency response procedures. Not doing so immediately increases the chance of injury or death for you and everyone else involved.

How to Protect Yourself

No matter the situation, resist the urge to race into a confined space unprepared. Stick to the organization's emergency procedures. A co-worker may be visibly injured, screaming for help, or slumped and motionless, only increasing the urge to help. Don't. You'll likely meet the same fate as your co-worker, particularly if the hazard has to do with the air, which it does 90% of the time.

A few other key practices can minimize your risk during a confined space emergency:

- When possible, continue communicating with those inside the confined space and relay this information to your organization's rescue team
- Warn non-rescue or unauthorized personnel not to enter the confined space, even if they want to attempt a rescue
- If unauthorized personnel attempt to enter the confined space, do not initiate or encourage physical contact that can injure one or both of you. Instruct them repeatedly to exit immediately. Do not under any circumstances follow them into the confined space.
- If the person inside the confined space is attached to a retrieval line and you are trained to use the retrieval line, attempt to remove the person with it; however, do not alter the retrieval line or place yourself in danger if it is not working properly.

Equally important, ensure a few important steps are completed before and during any entry into a confined space, reducing the potential for injuries or death:

- Testing the confined space for toxic gases before any entry is attempted.
- Testing and using two-way communication equipment before and during entry and verifying the key words or signals that will be used in certain situations.
- Ensuring procedures for any necessary lock-out of electricity or machinery have been completed before entry.
- Maintaining consistent communication and alertness throughout the confined space operation. Because death by asphyxiation can occur in minutes, regular communication or other check-ins at regular intervals are critical.

Final Word

Responding properly and quickly to an injured or unconscious co-worker in a confined space is critical. If you're the standby person and encounter this type of event, resist the urge to enter the confined space and attempt a heroic rescue – racing into toxic fumes or other confined space hazards is likely to leave you dead or injured as well.