

TOOLBOX TALK #24

CONFINED SPACE RESCUE: HAVE A PLAN

What elements should a confined space rescue plan include?

If your employer allows entry into permit-required confined spaces, then it is critically important to have a rescue plan for each of those spaces. The old adage “proper planning prevents poor performance” is especially true when lives are at stake, and permit-required confined space entry rescue certainly fits that description. It doesn’t matter if the rescue will be performed as non-entry retrieval, or if rescuers need to enter the space to perform rescue – the need to have a clear and comprehensive rescue plan goes a long way in ensuring a successful outcome.

There are many reasons to have rescue plans completed for all permit-required confined spaces. First, OSHA requires that the employer make those spaces available to the rescue service for the purposes of rescue planning. But more important, over 60% of confined space fatalities in multi-fatality confined space incidents involve the would-be rescuer. By preplanning the strategies and requirements for a potential future rescue, the rescue service is able to perform a thorough evaluation without the pressure of having to make quick decisions, as would be the case in an actual emergency. The level of detail in a rescue plan varies depending on several factors and should be determined by the rescue service that completes the plan. Some, but not all, of those factors include:

- Configuration of the space
- Immediate surroundings
- Location of the space
- Position/dimensions of entry portals
- Hazards of the space
- Personal protective equipment required
- Number of authorized entrants
- Experience of the rescue team
- Available rescue equipment

The first thing to look at when preparing rescue plans is the configuration of the space. This will determine if non-entry rescue is feasible. Get an idea of what opportunities and limitations are included in the immediate surroundings of the entry portals. What are the anchor opportunities? Is there room to operate the rescue systems or to stage breathing air equipment? Is there enough headroom to complete a vertical lift of a stretcher? Will an elevated rescue be required to get the victim to the ground once clear of the space? An often-overlooked consideration is the shape and dimension of the entry portal. If the portal is too small to enter while properly wearing a self-contained breathing apparatus (SCBA) backpack, rescuers are often tempted to doff their SCBA and push it ahead of them as they enter the space. This practice has led to many fatalities and should never be allowed. If your equipment, including a rigid stretcher, will it pass through the portal with a victim loaded? Generally, you need more than 24 inches in the smallest dimension to get rigid stretchers to pass with a victim aboard.

Determine the hazards of the space, which will dictate the rescuer PPE requirements and the appropriate monitoring equipment, as well as guide what additional equipment you may take into the space to treat/stabilize the victim(s). How many planned entrants are typical for the space? This will affect the time it may take to get everyone safely out of the space and may require supplied air respirators with replacement air bottles ready instead of backpack SCBAs. What are the technical capabilities and the equipment inventory of the rescue team? By performing a comprehensive rescue plan, it may reveal some gaps in training or equipment that need to be closed. Once the rescue plans have been completed, they should become part of the confined space program and be updated and/or reviewed as conditions, team members, or any other factor that may affect the plan change.