Confined Space Rescue...Is it worth killing yourself over?

Part one of a two part series By Scott Goodwin, COSS Director of Safety and Training Confined Space Training Services

May 8, 2010 Middletown, OH a worker conducting a non-entry inspection of a manhole was incapacitated and fell into the hole. Moments later, two firefighters lowered their Captain into the hole to conduct the rescue. All three firefighters are overcome and nearly perish in the botched rescue.

May 26, 2010 Liberty Township, Indiana a worker is overcome and collapses in a 10 foot deep pit. A civilian attempts the rescue only to be overcome as well. Two Liberty Township firefighters arrive on the scene and attempt a rescue and are also overcome. The original victim dies.

September 6, 2010 Tarrytown, NY a worker is incapacitated in a manhole and a rescue attempt is made by a firefighter. Both the victim and the rescuer die from exposures in the confined space.

What is the common denominator here? Failed rescue attempts. The rescuers obviously felt that they were doing the right thing when entering into the confined spaces to perform a rescue. Allowing your emotions to control your response to a situation is dangerous and many times deadly! We must use our heads and think through the problem. Use your skills and talents to find a solution and not become a part of the problem. I know it is easier said than done but NOT entering a confined space to do a rescue may be the smartest thing to do. After all, if you go down, who will rescue you?

I am a Lieutenant firefighter with almost 30 years of service. My service is not only in firefighting but also in technical rescue. I am also a member of SUSAR (State Urban Search and Rescue) team with cross training in confined space, trench, high angle, structural collapse and swift water rescue. Firefighters typically do not receive technical rescue training during their careers; it is an extra commitment to receive the training. Technical rescue training takes time above and beyond the normal training requirements and is typically 40 hours each for the technician level. Firefighters look at that extra time commitment as a burden and many decide not to pursue it. Unfortunately though, the public persona of a firefighter is that "you can help them right?" This may or may not be the case and can lead to devastating results just like in the incidents above. Firefighters will almost always "attempt" to do a rescue even if it is beyond their level of training. Who are you willing to leave behind?

If a person is in need of rescue from the water, it is a water rescue. If a person is injured in a vehicle it is called a vehicle rescue. So one would think that if a person is injured in a tank, manhole, vessel, pit or other confined space that you would have a confined space rescue, and you do! Regardless of

atmospheric monitoring, the incident still occurred in a confined space. The May 8, 2010 incident came in as a response to a worker who had fallen. Upon arrival the Officer in Charge should have identified IMMEDIATELY that the worker had fallen inside a manhole. A manhole is ALWAYS a confined space! In a confined space rescue, some common denominators should be established. Air monitoring, fall protection for rescuers, retrieval methods, traffic and any other hazards of the space that could be present should always be identified and addressed PRIOR to any entry. We must size up the situation and identify hazards at confined spaces just like at vehicle accidents, structure fires or any other situation.

Atmospheric hazards are invisible most times. This is not Hollywood and we don't have nice green clouds floating inside the space showing you "I am toxic, stay away!" Carbon Monoxide alone is a huge problem and as we all should know is colorless, tasteless, odorless and undetectable without the use of an air monitor. Oxygen deficiency can occur due to many reasons and again is colorless, tasteless and odorless. The effects of oxygen deficiency are instant and will incapacitate a person immediately. It should be mandatory of responders that every confined space has the atmosphere monitored before an entry is made, even if the worker is conscious and talking. The monitoring must be performed prior to entry and during entry for all rescues in order to ensure it is not only safe to enter but also safe to work in. Most common atmospheric hazards can be attributed to oxygen deficiency, carbon monoxide, hydrogen sulfide and flammable atmospheres such as methane or natural gas. A simple blower can do wonders to provide a fresh air supply into the confined space and "turn the air over" removing or minimizing the hazards. Never the less, atmospheric monitoring of all confined spaces is a must and should NEVER be dismissed as the conditions can change instantly.

All three rescues above would not have been so tragic had the rescuers simply monitored the atmosphere before allowing a rescuer to enter the space. I realize that many departments don't have the resources, abilities and financial backing to teach a 40 hour confined space technician course but awareness training is simple. In about two hours ANYONE can be taught how to identify a confined space and determine the possible hazards of the space. At that point everyone should be able to identify a hazardous situation and know when to call for help. The bottom line is that awareness training is simple, cheap and should be a tool in the firefighter's bag of tricks. Not having awareness training is no excuse today, especially when we are called to perform all sorts of rescues and not just fires.

So the real question is this, if a tanker truck overturns in your area and is spilling a liquid on the ground and the driver is out of the truck lying in the middle of the road, would you approach it? I guess your answer will determine the next phase of training needed or at best will determine if you are on the right track to protecting yourself, your crew and the lives of civilians; just like we were commanded to do.

Scott Goodwin, COSS is a 27 year Lieutenant Firefighter with Ballville Township Fire Department in Fremont OH and is a member of SUSAR Region 1 for Northwest Ohio. He is also the Director of Confined Space Training Services offering confined space entry training, rescue training and standby rescue services to businesses and the fire service all over the United States using classroom training and hands on training with a mobile simulator. You can receive more information on confined space training by contacting Scott at 419-241-3601 or sgoodwin@cccouncil.com or visit www.confinedspacetrainingservices.com