

Entering Confined Spaces Is Dangerous

A confined space is defined traditionally as an area large enough for a person to enter but not designed for continuous occupancy. It usually will have limited access, poor ventilation, and/or poor lighting. The space may contain a hazardous atmosphere such as toxic vapors or combustible gases. There also might be a lack of oxygen. Other possible risks include getting entangled in moving machinery, entrapment because of the shape of the confined space or becoming engulfed in water, grain or other materials.

You may be at risk, in some cases, from excessive heat or cold. Slippery walking surfaces can cause you to lose your footing and fall. There may even be a danger of becoming wedged into a narrow or tapering space. Confined spaces can be both dangerous and uncomfortable places to work.

Before entry, the atmosphere must be tested and the work space must be isolated from hazards. Each confined space might require different actions to ensure your safety. Actions could include locking out power sources, venting the area or blanking off feeder lines. In many cases the use of a supplied-air respirator will be necessary.

You must follow company procedures for confined space entry. Typical procedures can include, but are not limited to, the following instructions:

- Obtain a written entry permit from your supervisor.
- Wear the correct PPE (Personal Protective Equipment) such as safety boots, gloves and hardhat. You may also be required to use a supplied-air respirator.
- Assemble the necessary equipment such as retrieval harness, communications system, spark-proof lighting, lifeline and testing devices.
- Isolate the area from all materials and energy sources by lockout and tagout, blanking off pipelines or other approved methods.
- Test the atmosphere for hazardous substances and ventilate by circulating fresh air into the space. Never use pure oxygen because it contributes to an explosive situation at higher concentrations.
- Know your job. This especially applies to the person who is designated as the attendant. This person must remain outside the confined space, ready to call for assistance if required. Never leave your post unless another person who is authorized and trained replaces you. The lives of the workers inside the restricted area depend upon you.

- Continual testing and monitoring of the atmosphere must be carried out as long as the space is occupied. This will alert the attendant to changing conditions that may affect the safety of the workers inside the confined space.

The attendant, who remains outside the restricted area, is responsible for controlling entry into the confined space. The attendant must keep a head count of permit holders as they enter and exit the confined space.

Rescuers account for about 70 per cent of the deaths in confined spaces. If an emergency occurs, the attendant must not enter the confined space unless properly:

- trained,
- authorized,
- equipped with supplied-air respirator or self-contained breathing apparatus and other required PPE, and
- the attendant is replaced by another trained attendant.

A confined space may not be a pleasant place to work, but it is sometimes unavoidable. However, entry procedures should never be taken lightly. They are essential to your continued well-being and good health. Know and strictly observe your company's procedures. ■

The information presented in **Safety Talks!** has been compiled from various sources believed to be reliable. However, it cannot be assumed that all acceptable measures are contained in this article nor that additional measures may not be required under particular or exceptional circumstances, or your own company procedures, or by federal, state/provincial and local law.

Safety Talks! is intended for in-house use only – commercial reproduction is a violation of our copyright agreement.

For a complete catalog of Bongarde Communications Ltd. products please call 1-800-667-9300. © MMI- Printed in Canada
Bongarde Communications Ltd., 201-284 Main Street, Penticton, B.C. V2A 9A6 • U.S. Div., P.O. Box 428, Oroville, WA 98844
Local, state/provincial and federal regulations take precedence over this material.

Name:

Date:

Q U I Z S H E E T

T406-3

1. A confined space is a small space designed for continuous human occupancy.
 True False
2. A confined space may have which of these hazardous conditions:
 - a. Limited entrances and exits
 - b. Poor ventilation
 - c. The possibility of engulfment in moving materials
 - d. The possibility of entanglement in moving machinery
 - e. Any of these
3. Extreme temperatures can be among the hazards of confined spaces.
 True False
4. The air may be unsafe to breathe in a confined space because it contains toxic substances.
 True False
5. A lack of oxygen is a serious hazard in a confined space.
 True False
6. Just a verbal okay is all you need to enter a confined space.
 True False
7. Rescuers account for more than half the fatalities in confined space incidents.
 True False
8. Training is unnecessary for confined space entry.
 True False
9. The correct personal protective equipment is important when you enter a confined space.
 True False
10. Pumping in pure oxygen is a safe way to ventilate a confined space.
 True False