



## **Farm Safety Association Inc.**

# **Confined Space Entry in Agriculture**

Confined spaces are common on agricultural operations. Examples include:

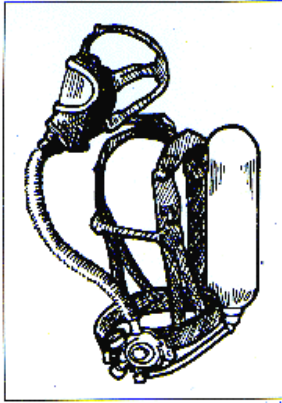
- silos
- grain bins
- manure pits
- controlled atmosphere storage buildings
- deep trenches
- well shafts

Many people associate the size of the opening to a space with whether it is confined or not. This can be misleading, since openings can vary greatly in size. They can be as small as 18 inches in diameter, or they may be very large (e.g. open top manure pits).

Confined spaces can be deadly. If the air in the space is not tested before entry, you could be overcome by fumes and pass out or die due to lack of oxygen, toxic gases, or an inability to escape quickly enough. Multiple deaths often occur when one person enters the space, is overcome, and others try unsuccessfully to save the first person.

Following are the basic guidelines for confined space entry:

1. Test the atmosphere for oxygen, and for levels of toxic and explosive gases.
2. If a dangerous atmosphere exists, you must wear a self-contained breathing apparatus. Ventilate the area as thoroughly as possible.
3. All mechanical and electrical equipment must be locked out.
4. Use the "buddy" system and wear a lifeline. Sufficient equipment and manpower must be available. A third person should be on hand to summon assistance, if needed.
5. Establish how you will be communicating before entering the confined space. The meaning of verbal signals, hand gestures, or tugging line signals must be understood by the people on the outside.
6. Never re-enter a confined space without retesting and venting the area.



gases.

A self-contained breathing apparatus is needed to enter areas where oxygen is deficient or where there are toxic

## **All others STAY OUT!**

Whether you're dealing with a grain bin, manure pit, or other confined space, the most important safety instruction you can give family members, visitors, and untrained workers is to **STAY OUT!**

Here are some steps to take if you suspect you have any confined spaces:

1. Conduct a walk-through of your operation, and closely evaluate each work area. Look not only for the obvious (such as deep trenches and pits), but also the less obvious (such as underground tanks).
2. Post warning signs on or next to all confined spaces. These signs should be sturdy, weatherproof, and display such wording as, "DANGER! CONFINED SPACE, DO NOT ENTER". (The Farm Safety Association Inc. can provide appropriate warning signs for various types of confined spaces.) Regularly inspect all warning signs to make sure they are clean, readable, and have not been tampered with.
3. Be sure that all openings to confined spaces are appropriately covered or blocked off. For example, openings to manure pits should be covered with substantial metal grill covers. These provide natural ventilation, and help prevent accidental falls or unauthorized entry.
4. If employees are not required to enter a confined space, lock the opening to prevent entry.
5. Institute a system for warning visitors, family members, and employees about the dangers of confined spaces. For visitors, this could be as simple as designating someone to tell them where the confined spaces are located and what the warning signs look like, and instructing the visitors to **STAY OUT!**

Family members and workers who are not authorized to enter confined spaces should receive basic training about the dangers, and why it's important to stay out. They should be told to:

- obey all warning signs on and around confined spaces,
- avoid going near confined spaces while smoking or using electrical equipment, and
- notify someone who has been trained in confined space rescue operations if they spot anyone in trouble in a confined space.

*The Farm Safety Association Inc. can provide advice and support materials for training workers about confined space dangers. Contact the Association's Guelph office.*

