

CONFINED SPACES LEARNER GUIDE



Training support material for:

RIIWHS202E
Enter and work in confined spaces



Produced by:



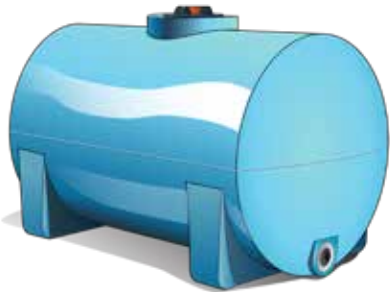
Picture based. Plain English. Learning made

ABOUT CONFINED SPACES



What are some examples of confined spaces?

Water or storage tanks



Ducts



Silos



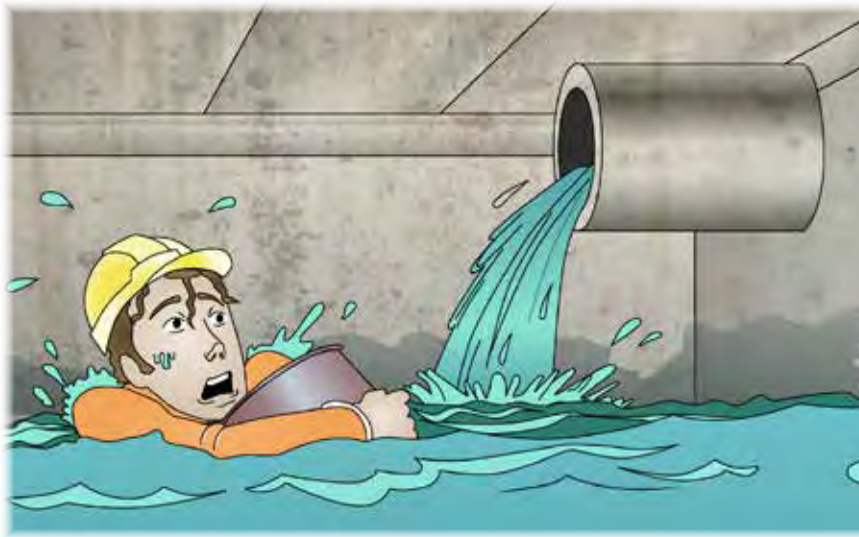
Shipping containers



Roof or floor cavity



CONFINED SPACE HAZARDS



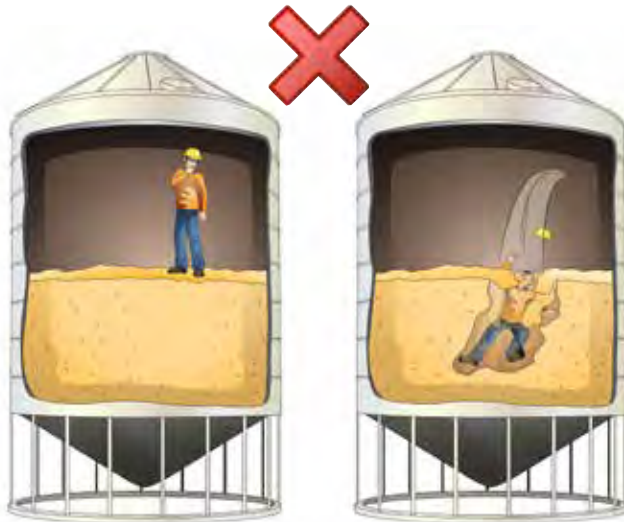
Hazards of working in a confined space (continued)

Loose materials could engulf (smother) you.

For example, if you are working in a wheat silo, the wheat you are standing on is a loose material.

It is easily displaced (moved) allowing you to sink and be trapped under the wheat.

You will not be able to breathe.



You may need to wear PPE such as a harness, which makes it hard to lift or carry tools or equipment.

You could strain a muscle or drop something.



Risk control

You must think about and control the risks of working in a confined space.

The steps you should follow to do this are:

Identify (work out) any hazards within the confined space.

This is called **hazard identification**.



Hot and cold work

You must have a permit before you do any hot or cold work in a confined space. The equipment you use for hot or cold work can be even more dangerous in a confined space. For example:

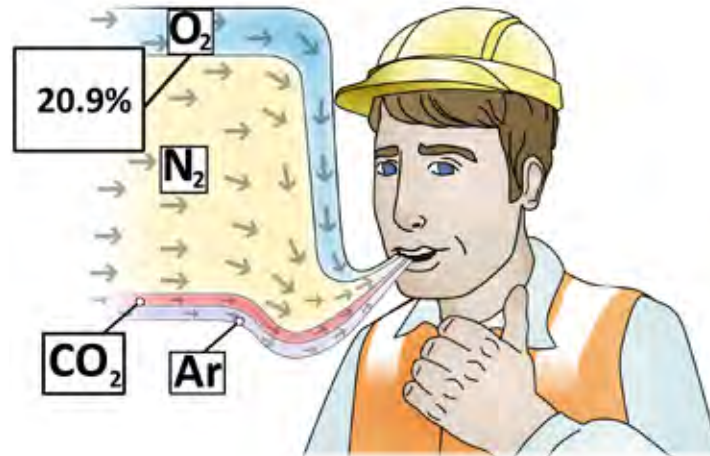
Welders create heat and use oxygen.
The welder could use all your oxygen and you could have trouble breathing.



The heat from the welder could make a flammable gas explode.



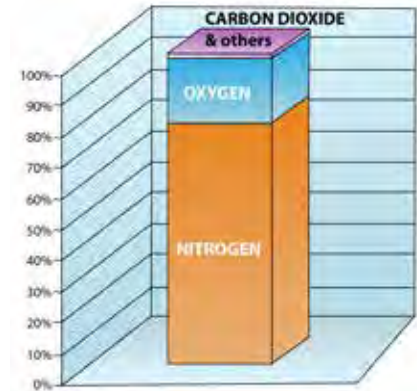
ATMOSPHERE AND GASSES



Air

For people to breathe, the amount of oxygen in the air needs to be just right. The air must be between 19.5% and 23.5% oxygen.

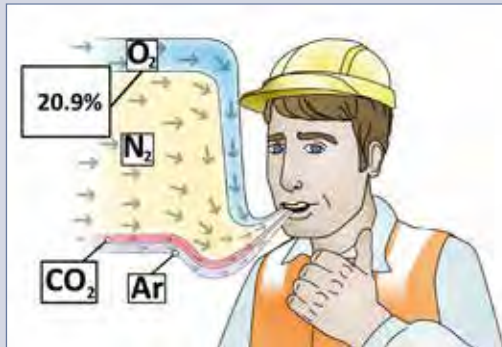
The perfect amount of oxygen is 20.9%



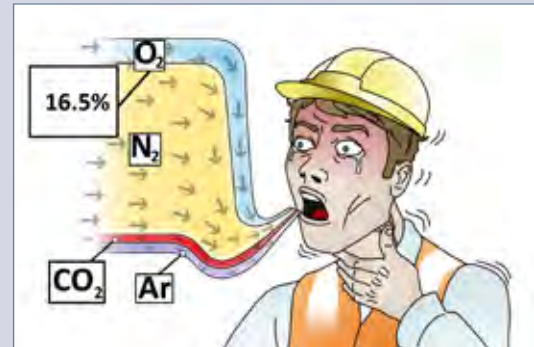
Oxygen levels – O₂

Oxygen will be marked as **O₂** on your gas monitor.

The perfect amount of oxygen is **20.9%**
If oxygen levels are between 19.5% and 23.5% it is **safe**.



If oxygen levels are **below 19.5%** (oxygen deficient) or **above 23.5%** (oxygen enriched) it is **unsafe**.



Carbon monoxide – CO

Carbon monoxide is a very dangerous gas. **It has no smell, taste or colour.**

When you start to breathe it, you will probably not even notice any symptoms.

If you breathe in a small amount, you may feel:

- Dizzy
- Confused
- Have a headache
- Feel like you have the flu.

If you breathe in a lot, it can affect your nerves, your heart, put you to sleep and even kill you.

Symptoms of carbon monoxide poisoning



Dizziness



Confusion



Headache



Flu

Carbon monoxide – CO (continued)

Your gas monitor will sound an **alarm** if it finds carbon monoxide.



Carbon monoxide is a little bit lighter than air. To find out if carbon monoxide is in a confined space you must test the **top part** of the space.

