Critical Risks – Working in confined spaces

TOOLBOX TALK #4

Project site:  
Employer:

Foreman/Supervisor:  
Date:

Attendees:

This toolbox talk is intended to help start a health and safety conversation and raise awareness about working in a confined space. It is not designed as a complete risk management tool for the activity.

Work in a confined space – why it’s a critical risk

A confined space is an area that is not intended for human occupancy. It has limited access or the potential to create a toxic or oxygen-deficient atmosphere. So it’s no surprise that working in a confined space is around 150 times more dangerous than doing the same job outside.

A confined space is, or is likely, to be a risk to health and safety from:

- an atmosphere that does not have a safe oxygen level
- contaminants including airborne gases, vapours and dusts that may cause injury from fire or explosion
- harmful concentrations of any airborne contaminants
- engulfment.

Step 1: IDENTIFY – do you need to go in?

Working in a confined space comes with multiple critical risks to a worker’s safety and health.

If you need to go into the confined space, make sure:

- People working in the confined space are trained and competent in entering the space and in rescue procedures. The Australian Standard (overleaf) sets out the requirements for particular areas of training and record keeping for work in confined spaces
- Rescue harnesses should be worn, alongside a suitable winching system near the point of entry
- Rescue equipment, such as breathing apparatus, should be available near the entrance
- Substances, such as paint, which give off dangerous vapours should not be brought into the space, water based alternatives should be used.

The golden rule is: don’t go in if you don’t have to.

As a first step, always check to see if the work can be done with equipment from outside the confined space.
Step 2: ASSESS air quality
Before entering a confined space a trained person should assess the quality of air, including:
- atmospheric testing for gases and vapours requires appropriate detection instruments
- removing any contaminated air – in some cases this may be done with a fan
- after contaminated air has been removed, the space must be isolated from the source of the hazardous vapour, preventing recontamination
- clean the space if harmful solids or sludge is present – never use oxygen as a cleaning mechanism, this can start a fire.

Step 3: MANAGE – have a spotter and escape plan
At least one person should be outside to keep watch and communicate with those inside the confined space. This person is often known as the ‘spotter’ and must:
- regularly communicate with the worker/s inside to check on their health, safety and wellbeing
- have safe and proper rescue equipment on hand. This may include a heavy-duty lifeline, tripod and personal winch, and harnesses and retrieval lines.

Rescue procedures or an escape plan should be included in the training of workers.
It’s important to also ensure that there are planned and practiced first aid procedures and provisions on site.

Where do we get more information?
The Safety Charter’s Critical Risk Confined Spaces webpage has more information which is regularly updated. You can view it here or by clicking on Improve Health & Safety – Critical Risks – Confined Spaces from the homepage.

If you want toolbox talks on the other 12 critical risks you can check them out online.

Quick fact
In Canterbury remember liquifaction after the earthquakes and mould can also be found in confined spaces. These risks need to be managed.

Quick quiz
Can oxygen be used as an effective cleaning mechanism?
What rescue gear should be on hand for the spotter?

Employee issues raised:

Date to be resolved by:

Thank you to Fletcher EQR and WorkSafe New Zealand for providing information for this toolbox talk.