

Safety when working in confined spaces

Published 01 Mar 2019

A reminder about the dangers of working in confined spaces.

Background

In October 2018, an apprentice died while working in an open-ended tanker. WorkSafe is still investigating the causes of this incident, including whether the apprentice was in fact and at law working in a confined space but in the meantime we remind you of the dangers of working in confined spaces.

A confined space means a space in any vat, tank, pit, pipe, duct, flue, oven, chimney, silo, reaction vessel, container, receptacle, underground sewer or well, or any shaft, trench, tunnel or other similar enclosed or partially enclosed structure, which meets certain conditions set out in regulation 5 of the Occupational Health and Safety Regulations 2017 (OHS Regulations). A space is considered a 'confined space' not just because work is done in an enclosed small space.

For more information about what defines a confined space, refer to the Compliance Code: Confined Spaces.

Safety issues

Working in confined spaces can be very dangerous. Some of the risks include:

- loss of consciousness, injury or death due to contaminants in the air
- fire or explosion from the ignition of flammable contaminants
- suffocation caused by a lack of oxygen

- enhanced combustibility and spontaneous combustion due to an increased level of oxygen
- suffocation or crushing after being engulfed by loose materials stored in the space.

Recommended ways to control risks

When working in confined spaces, WorkSafe reminds employers and self-employed persons to:

- ensure appropriate controls are in place
- ensure provision of adequate information, training, supervision and instruction
- conduct and document risk assessments before employees begin the job
- ensure safe operating procedures for working in confined spaces.

Specific controls:

- First, consider whether the work can be done another way without entering the confined space. For example, provide outlets and facilities for cleaning to eliminate the need for entry.
- Test the atmosphere to quantify the level of oxygen, atmospheric contaminants and any flammable gas or vapour present in the space. Then you can determine appropriate risk controls.
- Ensure employees do not enter a confined space unless they have been issued with an

entry permit for the space, and there is a stand-by person watching the work from outside the space.

- Establish entry and exit procedures for the confined space, and emergency procedures. Ensure these are communicated to your employees.
- Put signs on or near any confined space, and at each entry point, to warn that only people who have been properly trained and have an entry permit may enter.
- Ensure appropriate respiratory protective equipment (air-supplied or air purifying) is used where required.
- Provide employees with enough information, instruction and training to do their work safely and without risks to health. This may include

for example, training in hazard identification and risk control methods, entry permit procedures, emergency procedures and use of respiratory protective equipment.

Legal duties

Duty holders must eliminate risks associated with confined spaces, where reasonably practicable. If the risks cannot be eliminated, they must be reduced in line with the OHS Regulations.

The OHS Regulations have other specific duties about confined spaces. See the Compliance Code: Confined Spaces for full detail of these duties.