



Confined Space Safety

Working in a confined space may present a major health and safety risk for those employees having to go in to them. Many accidents occur because the hazards or working in a confined space are either not identified or are under estimated.

Tragically, many confined space accidents result in more than one fatality when attempted rescues of colleagues trapped in confined space are unplanned and rescuers unprepared. Only persons who are appropriately trained and qualified must carry out work in confined spaces.

CONFINED SPACES
<ul style="list-style-type: none"> • Has limited or restricted means of entry and exit that makes it physically difficult for a person to enter or exit the space
<ul style="list-style-type: none"> • May have inadequate ventilation and/or is an atmosphere which is contaminated or oxygen deficient
<ul style="list-style-type: none"> • Is intended to be at normal atmospheric pressure at occupancy
<ul style="list-style-type: none"> • Is not intended as a regular workplace, but may be entered by a person

CONFINED SPACE HAZARDS
<ul style="list-style-type: none"> • The gases or fumes given off by by-products of previously stored materials or chemicals
<ul style="list-style-type: none"> • Being trapped by fluids coming into the space such as in underground sewers and stormwater drains
<ul style="list-style-type: none"> • Accidental leaks or spills which can contaminate the atmosphere of the space and add to slipping, tripping and falling hazards
<ul style="list-style-type: none"> • Unexpected or continued operation of the plant, which leads to the worker being trapped or crushed by rotating or moving parts
<ul style="list-style-type: none"> • Suffocation or engulfment by solids
<ul style="list-style-type: none"> • Oxygen being used up by machinery or contamination by exhaust gases
<ul style="list-style-type: none"> • Chemical reactions that could lead to explosions or contaminated atmosphere
<ul style="list-style-type: none"> • Extremes of temperature causing heat exhaustion or hyperthermia
<ul style="list-style-type: none"> • Noise which may affect hearing but also prohibit or limit communication with those outside the confined space
<ul style="list-style-type: none"> • Manual handling injuries caused from working in cramped or awkward positions

Being able to identify these hazards and plan appropriately for work in the confined space can mean the difference between a completed job and a disaster.



Planning confined space work includes carrying out a detailed risk assessment of the work to be undertaken – which means identifying the hazards associated with performing the task, assessing the risk of these hazards causing harm and implementing suitable controls to eliminate or reduce the risk.

This planning should include a proper evaluation of the confined space and the areas surrounding it. This may be recorded on a Permit to Work or Job Safety Analysis Sheet. A vital part of the assessment will also include identifying appropriate emergency rescue systems and plans.

GUIDELINES TO FOLLOW BEFORE CONFINED SPACE WORK
<ul style="list-style-type: none">• Check that all residual contaminants have been removed from the confined space
<ul style="list-style-type: none">• Check the atmosphere within the space for toxic or flammable contaminants and measure the oxygen concentration
<ul style="list-style-type: none">• When working in boilers and furnaces, allow adequate time for cooling
<ul style="list-style-type: none">• Obey all lock out or entry permit procedures ensuring that all valves and switches connected with the confined space are closed and locked out
<ul style="list-style-type: none">• Purge the space if needed
<ul style="list-style-type: none">• Check the necessary personal protective equipment is available and is used
<ul style="list-style-type: none">• Establish and implement an emergency rescue plan just in case things go wrong

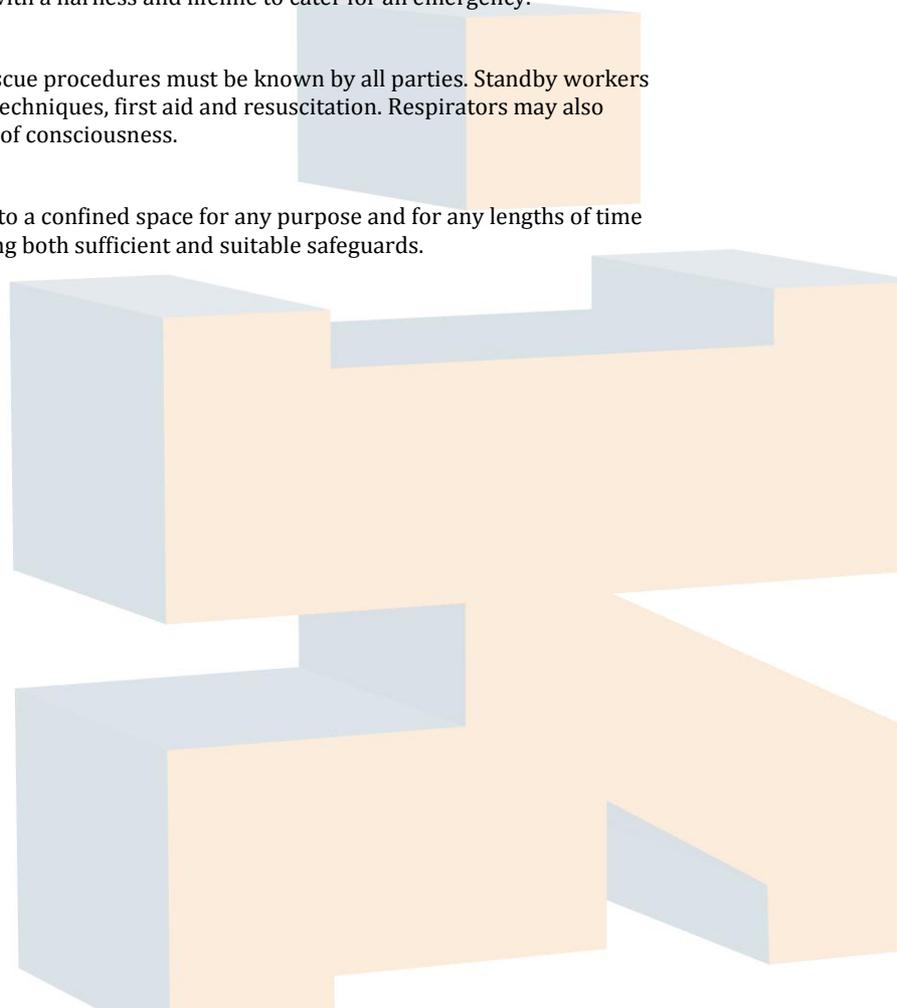
While work is being performed in the confined space, there needs to be continuous monitoring of the operation by another person or persons who do not go into the space.

Make sure that there is a means of communication between those working in the confined space and those on standby or observing. A person working in a confined space must never be left on their own. Someone should always be in a position to watch or listen to them.

Where necessary, workers should be fitted with a harness and lifeline to cater for an emergency.

During confined space work, appropriate rescue procedures must be known by all parties. Standby workers or observers need to be well trained in rescue techniques, first aid and resuscitation. Respirators may also need to be accessible in the event of the loss of consciousness.

It is important to recognise that any entry into a confined space for any purpose and for any lengths of time is a potentially dangerous operation requiring both sufficient and suitable safeguards.



Questions:

1. Do you think working in a confined space has the potential to be dangerous?

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2. Can you name three things that tell us that a space is a confined space?

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3. Can you name three general guidelines for working in a confined space?

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4. Can you name four hazards associated with working in a confined space?

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5. Is it ok to go away and leave a worker in a confined space to work on their own?

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6. Name three things that rescue procedures should include?

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