

# Confined Spaces



People can be killed or seriously injured in confined spaces. Among those killed are people who work in confined spaces and those who try and rescue them without having proper training or equipment.

## What is a Confined Space?

Confined spaces are large enough for a person to enter and perform work, has limited or restricted means, and is not designed for human occupancy. It is not possible to provide a comprehensive list of confined spaces, but some examples include:

- Manholes
- Enclosed drains
- Sewers
- Pump rooms
- Unventilated or poorly ventilated rooms



Some work areas may become confined spaces when work is carried out during their construction, fabrication, or modification.

## Dangers of Confined Space Work

Examples of conditions that may already be present in the confined space, or which can arise from work being carried out are:

- A lack of oxygen
- Poisonous gas, fume, or vapors
- Fire and explosions
- Dust particles present in high concentrations
- Hot conditions leading to heat stress
- Poor lighting



## Confined Space Work in KAUST

- First, avoid entering a confined space if possible. Can the work be done in another way, with better planning or a different approach?
- If you cannot avoid entering into a confined space, obtain an approved KAUST Confined Space Permit before starting work.
- Use a calibrated gas testing device for oxygen, combustible gas and toxic gas testing prior to entering a confined space. Repeat testing every 15 minutes.
- Identify confined space work in the risk assessment and implement procedures to eliminate confined space hazards using the hierarchy of control.
- Have a rescue plan for recovering people, and periodically test the rescue plan.
- Station an attendant outside the confined space to control access and egress with a register and verify that the attendant is present at all times.
- Prevent unauthorized entry and take action if the conditions change.
- Make sure that everyone involved in confined space work is adequately trained and instructed to know what to do and how to do it safely.