Some confined spaces are more well-known than others, but all of them pose hazards. It is critical to be aware of lesser-known confined spaces, such as:

- Water storage tanks
- Valve pits
- Excavations
- Mud tanks
- Storage containers
- Pipelines
- Process vessels
- Pits
- Frac tanks
- Building crawl spaces

Open top vessels are considered a restricted space in Alberta, while in British Columbia and Saskatchewan they are a confined space. Learn more about the hazards in this 5-minute video, part of ESC’s Surface Water Transfer Video Series. (Go to 3:22 for confined space.)
Confined space hazards fall into two categories:

1) **Work activity**
The presence of a worker or work materials can introduce hazards. E.g., welding gasses can rise; ungrounded wash wands can create an ignition source; or actuating a valve in a valve pit may allow a previously isolated leak to vent.

2) **The space itself**
Risks include exposure to gas or fumes, drowning, asphyxiation, fire and explosion, entrapment, and engulfment. When planning confined space work, consider:
- **Access and egress.** Ensure workers can get in and out of the area quickly.
- **Atmosphere and contents.** Be aware of hazardous vapours or combustible materials in the space.
- **Static or dynamic conditions.** Check if vapour or additional fluid could enter through piping or ventilation. Be aware that pyrophoric materials, such as iron sulphide, can dry out and become an autoignition hazard.

**Life Saving Rule**
This safety bulletin relates to the Confined Space Life Saving Rule.

- Obtain authorization before entering a confined space.
  - I confirm energy sources are isolated
  - I confirm the atmosphere has been tested and is monitored
  - I check and use my breathing apparatus when required
  - I confirm there is an attendant standing by and a rescue plan is in place

**TAKE-AWAYS**
- Identify all confined spaces.
- Ensure workers are trained in confined space entry.
- Know the regulations and jurisdiction requirements.
- Post signage to prevent accidental entry.
- Ensure workers conducting confined space work participate in the hazard assessments.
- Monitor workers continually, as the environment can change quickly.

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A quick look can be fatal — Do not pass the plane of the opening of a confined space without a safety plan and proper PPE. Even ‘just a peak’ is considered entry and can result in a fatal outcome.