

### Physical hazards

#### List confined spaces on site

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#### Identify controls

What can we do to control some of the physical hazards?

- Isolate the space by disconnecting supply and drain lines. Lock out and tag the lines so they won't be reopened while you're working inside.
- Inspect the space for dangerous contents such as grain or sand that could slide, shift, and bury you inside.
- Lock out any electrical, hydraulic, or pneumatic equipment that could unexpectedly rotate, drop, roll, or snap shut in the space.
- Block and secure any equipment that could move because of gravity or stored momentum.
- Wear safety harnesses and lifelines to make rescue more efficient in case of an emergency.
- Develop a rescue plan for the space and practice to make sure that everyone knows what to do.
- Use an entry permit system. This helps identify hazards and controls, and keeps track of who is inside.

#### Explain dangers

In addition to dangerous atmospheres, confined spaces such as tanks, vats, vessels, hoppers, and bins can present physical hazards:

- poor entry and exit
- cramped working conditions
- temperature extremes
- rotating or moving equipment
- reactive or corrosive residues
- electrical hazards
- uncontrolled movement of liquids or solids.

Some of these hazards involve greater risk inside a confined space than outside.

For example, electrical flashover can be more dangerous in a cramped maintenance hole where there's limited escape than in an electrical room with clear exits. And fire in a confined space can be far more dangerous than fire in an open work area.

#### Demonstrate

Review procedures for lockout, tagging, and entry. Discuss some of the controls shown in the diagram.

