Working in Confined Spaces

Working in a confined space is a unique and serious hazard. There is no partial problem: either there is or isn't one. By one definition, a confined space is one that is large enough and arranged so that an employee can fully enter and work, has limited or restricted entry or exit, and which is not primarily designed for human occupancy.

Hazards

Primary Hazards:
- Oxygen deficiency.
- Exposure to toxic substances.
- Presence of combustible or explosive gases or materials.
**Falling Objects:**
- Workers in confined spaces should be aware of the possibility of falling objects, especially in spaces which have topside openings and where work is being done above them.

**Temperature Extremes:**
- Extremely hot or cold temperatures can present problems for workers. For example, if the space has been steamed, it should be allowed to cool before entry is made.

**Noise:**
- Noise within a confined space can be amplified because of the design of the space.
- Excessive noise cannot only damage hearing, but can also affect communication, such as causing a shouted warning to go unheard.

**Slick/Wet Surfaces:**
- Slips and falls can occur on wet surfaces causing injury or death to workers.
- A wet surface will increase the likelihood and severity of electric shocks in areas where electrical circuits, equipment, and tools are used.

**Toxic Chemicals:**
- Chemicals in use in the space may cause various acute effects, including impaired judgement, unconsciousness and death. A toxic atmosphere may occur due to the presence or influx of hazardous substances.
- A toxic atmosphere can restrict a worker's ability to escape from the space.

---

**Making a Confined Space Workable**

**Safety Procedures:**
- Test for oxygen deficiency.
- Sample for combustible gases. (Most combustible gas meters will not work in oxygen deficient atmospheres).
- Continually monitor for toxic substances (i.e., gases) as work progresses.
- If space cannot be vented, be sure to provide proper respiration equipment.
- If space can be vented, continually flush out the space with fresh air.
- Be aware that spark producing equipment should never be used to flush out confined spaces.

**Basic Rescue Procedures:**
- Never rush to the aid of a fellow employee in a confined space.
- Always be sure that someone watches work in a confined space outside of the space.
- All workers in a confined space must work with a lifeline attached outside of the space.
- All rescuers must be competent in the use of rescue equipment and self-contained breathing units.
Remember

Confined spaces need not be dangerous places to work if the basic precautions are routinely followed. Remember that it is a rare circumstance that a single fatality occurs in a confined space; usually there are multiple fatalities.

Resources and References:

- Health and Safety Authority—Working in Confined Spaces: [https://www.hsa.ie/eng/Topics/Confined_Spaces/#hazards](https://www.hsa.ie/eng/Topics/Confined_Spaces/#hazards)
- CIRMA Tail Gate Topics II: [http://cirma.ccm-ct.org/Resources.ashx?id=9be4d177-1635-4f64-85c4-3b5dc52ade8b](http://cirma.ccm-ct.org/Resources.ashx?id=9be4d177-1635-4f64-85c4-3b5dc52ade8b)
- CT Technology Transfer Center’s Confined Space Awareness Workshop Learning Guide

For more Tailgate Talks, Safety Briefs or more information about the Connecticut Technology Transfer Center, visit us at: [www.T2center.uconn.edu](http://www.T2center.uconn.edu)

Adapted with permission from the CT Interlocal Risk Management Agency (CIRMA)
# Tailgate Safety Talk Sign In Sheet

**Topic:** Working in Confined Spaces

**Agency:** __________________________________________________________

**Crew:** __________________________________________________________

**Supervisor/Talk Leader:** __________________________________________

**Date:** ____________________________________________________________

<table>
<thead>
<tr>
<th>Print Name</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>___________________________</td>
<td>___________________________</td>
</tr>
<tr>
<td>___________________________</td>
<td>___________________________</td>
</tr>
<tr>
<td>___________________________</td>
<td>___________________________</td>
</tr>
<tr>
<td>___________________________</td>
<td>___________________________</td>
</tr>
<tr>
<td>___________________________</td>
<td>___________________________</td>
</tr>
<tr>
<td>___________________________</td>
<td>___________________________</td>
</tr>
<tr>
<td>___________________________</td>
<td>___________________________</td>
</tr>
<tr>
<td>___________________________</td>
<td>___________________________</td>
</tr>
<tr>
<td>___________________________</td>
<td>___________________________</td>
</tr>
<tr>
<td>___________________________</td>
<td>___________________________</td>
</tr>
<tr>
<td>___________________________</td>
<td>___________________________</td>
</tr>
<tr>
<td>___________________________</td>
<td>___________________________</td>
</tr>
<tr>
<td>___________________________</td>
<td>___________________________</td>
</tr>
</tbody>
</table>