

# HazCom in Confined Spaces Meeting Kit



## WHAT'S AT STAKE

When you're talking about confined spaces, things can get risky fast, especially if there are hazardous materials involved. That's where making sure everyone knows what's what – that's HazCom – becomes super important. If people going into these spaces don't know about potential dangers like toxic air you can't see or stuff that could explode, they're walking in blind. Good communication about these hazards, like clear labels and having safety info handy, can be the difference between someone going home safe and a really bad situation.

## WHAT'S THE DANGER

Before we dive into the specifics of hazardous atmospheres, it's important to understand the fundamental danger: entering a confined space where hazardous materials are or were present means you could be stepping into an environment that can harm or even kill you instantly without any obvious signs.

### **Invisible Threats: Hazardous Atmospheres**

One of the biggest dangers is the potential for hazardous atmospheres. You could have toxic gases like hydrogen sulfide or carbon monoxide that you can't see or smell, but just a few breaths can knock you out or even be fatal. Oxygen deficiency is another silent killer – you might feel a little dizzy and then suddenly lose consciousness. Flammable gases or vapors can also build up, and just a tiny spark can cause a massive explosion. Without proper testing and communication about what's in the air, entrants are completely vulnerable to these immediate and life-threatening hazards.

### **Contact Hazards: Residues and Materials**

Beyond the air, there's also the danger of contact with hazardous residues or materials left inside the confined space. Even if the space was used for something previously, dangerous chemicals might still be lingering on surfaces. These could be corrosive, causing burns on skin contact, or toxic, leading to absorption through the skin or inhalation of dusts. Without clear labeling or information about what these residues are, entrants could be exposed to harmful substances without taking the necessary protective measures.

## Unexpected Events: Reactions and Releases

Finally, there's the risk of unexpected events involving hazardous materials within the confined space. Disturbing residues could cause a chemical reaction, releasing harmful fumes. Changes in temperature or pressure could lead to the release of stored gases or vapors. If incompatible materials were previously used or are unknowingly introduced, dangerous reactions like fires or explosions could occur.

## HOW TO PROTECT YOURSELF

HazCom, or Hazard Communication, is all about making sure everyone knows about the hazardous chemicals they might encounter at work. It includes things like labels and safety data sheets to keep people informed and safe. To protect yourself when working in or around confined spaces where hazardous materials might be present, a multi-layered approach is essential, with thorough Hazard Communication (HazCom) being the foundation.

### Understand the Hazards Through Comprehensive HazCom

- Your workplace should have a robust permit-required confined space program. This program outlines the procedures, precautions, and permits required for entry, and it's where critical hazard information will be documented. Never enter a permit-required confined space without a valid entry permit.
- The entry permit will detail the specific hazards identified in the confined space, including atmospheric hazards, potential for engulfment, and any hazardous materials present or that may be generated. Carefully read and understand all the information on the permit before entry.
- SDSs for any hazardous materials known or likely to be in the confined space must be readily available and reviewed before entry. Know the specific hazards, handling precautions, and emergency procedures outlined in the SDSs.
- Participate in a thorough pre-entry briefing with all members of the entry team, the attendant, and the entry supervisor. Ensure everyone understands the identified hazards, planned work procedures, emergency procedures, and communication methods. Ask questions if anything is unclear.
- Be aware of any hazardous material inventories for the confined space and pay attention to any labels on containers or equipment inside or that were previously used in the space. Never ignore warning labels.

### Take Precautions Based on the Communicated Hazards

- **Atmospheric Testing:** Before entry and continuously during work, the atmosphere of the confined space must be tested for oxygen content, flammable gases/vapors, and potential toxic air contaminants. Entry is prohibited if the atmosphere is not within acceptable limits. Continuous monitoring provides ongoing safety assurance.
- **Ventilation:** If hazardous atmospheres are present or likely to develop, proper ventilation (natural or mechanical) must be implemented to maintain a safe atmosphere. Understand the type of ventilation being used and ensure it's functioning correctly.
- **Personal Protective Equipment (PPE):** Based on the identified hazards and information in the SDSs and entry permit, use the appropriate PPE. This might include respirators (SCBA or supplied air), chemical-resistant

clothing, gloves, eye protection, and hearing protection. Ensure your PPE is in good condition, fits properly, and you know how to use it correctly.

- **Lockout/Tagout:** If the confined space contains equipment that could release hazardous energy or materials, ensure proper lockout/tagout procedures are implemented and verified before entry. Never bypass lockout/tagout procedures.
- **Emergency Procedures and Equipment:** Know the established emergency procedures for the confined space, including evacuation signals and rescue plans. Ensure that necessary rescue equipment (e.g., retrieval systems, harnesses, respirators for rescuers) is readily available and in good working order.

## FINAL WORD

Think of HazCom as just making sure everyone's in the loop about any dangerous stuff around, especially in tricky spots like confined spaces. It's about getting the word out – what's dangerous and how to stay safe – so no one gets caught off guard.