What are the hazards?

- Oxygen Deficient (due to oxygen consumption from natural or chemical processes or displacement by nitrogen, carbon dioxide, etc.), or Enriched Atmospheres, and/or Toxic Atmospheres.
- Flammable or Combustible Atmospheres.
- Physical Hazards - entrapment, engulfment, falls, slips, obstructions, thermal, electricity.

How do I know if there are hazards?

- Test conditions prior to entry and during the course of entry to assure acceptable entry conditions are being maintained.
- Review the current and previous content and materials of construction of the confined space.
- Know whether what you are doing introduces a hazard – such as using solvents, applying coatings, painting, abrasive blasting, welding, or cutting.
- Monitor what others are doing within or near the permit-space.
- Visually assess hazards and monitor air for oxygen, combustible and toxic atmospheres.

Why should I care?

- Workers may be injured or die in confined spaces (60% of those who die in confined spaces are would-be rescuers).
- Failure to protect workers can result in injury or death as well as increase Worker’s Compensation costs, result in OSHA citations and fines, civil litigation, and potentially criminal sanctions.

What do I need to do?

- Permit-Required Confined Space entrants, attendants and Entry Supervisors
- Permit-Required Confined Space Entry Rescuers
- Personal Protective Equipment including respiratory protection
- Other training such as for high angle rescues may be necessary depending on job conditions

When do I need to do it?

- Before personnel:
  - enter confined spaces;
  - attempt to perform rescue;
  - must use personal protective equipment; or
  - perform specialty rescue.
- As program is developed
- Prior to entry into confined spaces
Prior to use

- Initial evaluation to identify and label confined spaces.
- Pre-entry inspections and hazard assessments
- Equipment inspections including air monitoring equipment calibrations or checks

When Confined spaces are identified and prior to entry,

- Written Permit-Required Confined Space Entry Program
- Training documentation
- Permit-Required Confined Space Entry Permits
- Documentation of annual program assessment

As training is provided and competency is determined,

- When permits are terminated
- Annually

When permits are terminated

- Prior to entry

Determine if control methods such as elimination, engineering controls or use of Personal Protective Equipment (PPE) is required.

- Determine whether entry is truly necessary
- Determine whether removal, isolation, shielding, ventilation or other hazard control techniques can be used,
- Chemical Protection – Respirators, clothing, gloves, boots,
- Physical protection – hard hats, eye and foot protection
- Fall protection and retrieval equipment

Developing programs and training

- When not experienced dealing with confined space hazards
- When Entry Rescue is required

Contact AIHA’s Confined Space Committee:
www.aiha.org

OSHA’s On-Site Consultation Service:
http://www.osha.gov/dcsp/smallbusiness/consult.html

OSHA’s Confined Space Safety and Health Topics Page:

Where can I get help?

When do I need more help?

Through OSHA’s Alliance Program, this Tip Sheet was developed as a product of the OSHA and American Industrial Hygiene Association Alliance for informational purposes only. It does not necessarily reflect the official views of OSHA or the U.S. Department of Labor. 06/2008