

Confined Space Objectives

Terminal Objective

Upon completion of this session, participants will identify and discuss examples of confined spaces, and identify basic safety measures.

Enabling Objectives

- Define confined spaces and give examples
- List the hazards associated with permit required confined spaces.
- Discuss what hazards a permit-required confined space should be monitored for, where the monitoring should be done and how often.
- Discuss the limitations of this confined space awareness Training and that it does not meet the requirements for a confined space entry.

Confined Space Video

Small Group Activity

Hand out the small group activity (15 minutes)

Confined Space Awareness
(Answer Guide)

1. Hazards in a permit-required confined should be monitored in what order? [see 1910.146 (c)(5)(ii)(C)]

toxic chemicals 3

oxygen content 1

flammable vapors or gas 2

It is important to measure the oxygen content first since some Combustible Gas Indicator meters which measure the LEL of flammable vapors are inaccurate in atmospheres of less than 14 - 16% oxygen.

2. OSHA defines an oxygen deficient atmosphere as one that contains less than **19.5%** oxygen. Below this level, SCBA or supplied air must be used. [see 1910.146 (b)]

a) 23%

c) **19.5%**

b) 16%

d) 13.5%

3. Before you enter a permit-required confined space you must (circle all that apply)

4.

a) monitor the air for oxygen content

b) be trained in confined space entry

c) make sure your dust mask is clean

d) make sure an entry permit has been issued and posted

e) monitor for toxic and flammable chemicals

All except "c" are correct

ASK the class if a dust mask can protect against either toxic vapors or oxygen deficiency.

No - dust masks should not be thought of as a respirator since they offer about as much protection as tying a handkerchief over your nose and mouth.

5. In the event of an emergency, the role of the attendant is to immediately enter and rescue the entrant. [see 1910.146 (i)(4), 1919.146 (i)(7), and 1910.146 (i) (9)]

TRUE _____

FALSE X

The attendant can try to remove the entrant with retrieval systems outside of the confined space, but they are not allowed to enter the space unless they are trained in rescue and have their own attendant

6. At least one-half of all permit-required confined space deaths and injuries occur among would-be rescuers.

TRUE _____

FALSE X

60% of confined space deaths have occurred in would-be rescuers ¹

¹ In the preamble to the Confined Space Standard (29 CFR 1910.146), there is the following citation from NIOSH:

In January 1988, NIOSH published an "Alert" titled "Request for Assistance in Preventing Occupational Fatalities in Confined Spaces". The Alert described the circumstances under which 16 workers died in confined space incidents. NIOSH focussed on problems employers have in three areas: (1) recognizing confined spaces; (2) testing, evaluating, and monitoring confined

7. Does emergency rescue equipment need to be present and set up in place before an entry is made? 1910.146 (h)(2)

YES _____

NO **X**

(h)(2) Does not have the answer: go to (d)(4)(viii) Rescue and Emergency equipment needed applies with (d)(9) :

Develop and implement procedures for summoning rescue and emergency and emergency services

Nitrogen Asphyxiation Scenario:

New Confined Space Video

Hand out Cards

Instruct the participants to list the cards in the following order

1. The END result
2. Actions taken
3. Contributing Factors

Report Back