

TEST ANSWERS: HYDROGEN SULPHIDE (H₂S)

The *BSO Plus Safety Topic* is a review designed from the BSO Plus agenda. This safety topic is your way to stay current on the safety information over the 3 years, so please ensure you submit this completed test to your employer for record retention.

1. If your work partner goes down in an H₂S area, you should: (Circle all the apply)

a) Smell the air to check for H₂S

b) Notify area personnel and contact the rescue team

c) Quickly go in and rescue him or her

d) Follow all site specific procedures

RATIONALE: High concentrations of H₂S, can kill you in seconds. Attempting to rescue your partner could be fatal to you. Contact the rescue team who is fully trained for such incidents and properly outfitted with personal protective equipment.

2. Which of the following are properties of H₂S? (Circle all the apply)

a) Colourless gas

b) Highly flammable

c) Rotten egg smell

d) Lighter than air

RATIONALE: H₂S is an extremely toxic colourless gas. It is highly flammable, even explosive in some gas/air mixtures. It has a “rotten egg” smell at very low concentrations but this cannot always be detected. H₂S gas is heavier than air. It collects in low-lying areas and poorly ventilated areas such as trenches, basements, sewers lines, and pits.

3. Which of the following are reliable warning systems for H₂S?

a) Signs

b) Personal monitors

c) Sense of smell

d) Audible alarms

e) (a), (b) and (d)

RATIONALE: According to the Canadian Centre for Occupational Health and Safety (CCOHS), H₂S takes only 100 ppm to overwhelm and deaden your sense of smell. You must never rely on your sense of smell to identify H₂S. Signs let you know the areas where H₂S is or may be present, and both personal and audible alarms warn you of a toxic vapour release.

4. Which of the following items should you be aware of before working on a unit that has H₂S?

- a) Location of safety showers, eye baths, and safe havens
- b) Direction of the wind
- c) Meaning of H₂S signs and H₂S alarms
- d) PPE required for the job you are doing

e) All of the above

RATIONALE: Before starting work in any area where H₂S is present, it is important that you review all controls that have been put in place and that you follow all site specific procedures. Being aware of your surroundings will help keep you safe.

5. Exposure to high concentrations of H₂S can kill you in seconds?

a) True

b) False

RATIONALE: Inhalation of H₂S is extremely toxic. H₂S affects the body's Central Nervous System and your ability to breath. Exposure to high concentrations of H₂S can result in death after only a matter of seconds.