

TEST ANSWERS: HEAT STRESS

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 between BSO Plus and BSR.

1. Your body may be suffering from heat stress if you experience:

- a. A red bumpy, itching rash
- b. Painful cramps in your most worked muscles
- c. Heavy sweating, nausea or vomiting
- d. All of the above

RATIONALE: The physical conditions caused by heat stress affect the body's ability to cool itself. These conditions can range from minor disorders to severe disorders, each with their own set of causes, symptoms and treatment. It is important to be aware of the symptoms of heat stress so that you can seek immediate treatment when necessary.

2. Workers become gradually acclimatized when exposed to environmental conditions for several weeks.

- a. True
- b. False

RATIONALE: Workers who are exposed to either extreme heat or extreme cold in their work environments are at risk for serious occupational illnesses and injuries. Individual susceptibility to heat-related illness can vary widely between workers. In Ontario, heat stress is usually of greatest concern at the beginning of the summer season when people haven't yet adjusted to the heat.

3. Heat stress can be caused by: (Circle all that apply)

- a. Cool temperatures and humidity
- b. Performing heavy physical work in warm environments
- c. Working alongside hot equipment
- d. Wearing certain types of protective clothing

RATIONALE: Work environments in the Chemical Valley have PPE requirements that include FRC, working alongside hot equipment, and working in areas where there is no breeze at all. These factors can also contribute to a person being exposed to excessive heat.

4. Which should you NOT do to help protect yourself from heat-stress-related disorders?

- a. Get informed – know your company's policies and procedures about working in hot environments
- b. Drink coffee to increase energy
- c. Choose appropriate clothing
- d. Drink enough water and avoid eating large meals prior to working in hot environments

RATIONALE: Avoid caffeinated beverages and alcohol because both of these make the body lose water, which can increase the risk of heat stress. The goal is to replenish fluids and keep your body properly hydrated.

5. The Safety Partnership’s Heat Stress guidelines recommend the following controls for heat stress: (Circle all that apply)

a. Issuing alerts

b. Increasing physical activity

c. Drinking water at regular intervals

d. Stopping non-essential work

RATIONALE: There is no official regulation regarding thermal extremes but the Ministry of Labour fact sheet on environmental conditions states: “For compliance purposes, the Ministry of Labour recommends the Threshold Limit Values (TLVs) for heat and cold exposure published by the American Conference of Governmental Industrial Hygienists (ACGIH).” The Safety Partnership released their Heat Stress Guidelines on July 30th, 2013. These guidelines list heat stress controls for various humidex ranges & working conditions for un-acclimatized workers.