

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Heat-Illness Prevention Training

### PRE-TEST

**Purpose:** An important part of this program is the evaluation of how well we have succeeded in increasing your knowledge on heat-illness prevention. This pre-training evaluation will give us an idea of how much participants know about heat stress and heat-illness prevention prior to the training. It will also give you an idea what you will be learning about in this course. **Instructions:** Without using any references or electronic devices, please take approximately 10 minutes to answer the following questions. Mark the best answer choice.

- Which of these are environmental risk factors associated with heat stress?
  - Temperature and humidity
  - Radiant heat
  - Air movement
  - Both a and b
  - All of the above
- Which of these are work-related risk factors associated with heat stress?
  - Age and physical fitness
  - Medical conditions
  - Acclimatization
  - Both a and b
  - All of the above
- New workers and workers who have not worked under hot conditions for more than a week or so are at an additional risk of heat stress.
  - True
  - False
- Which of the following physiological measurements are good indicators of heat stress that can help prevent heat-related illnesses from occurring?
  - Skin pinch test
  - Body temperature
  - Heart rate recovery
  - Both a and b
  - Both b and c
- What is the risk associated when the air temperatures are above 95 °F?
  - Sweat evaporates faster so there is no risk
  - Sweat cannot evaporate and thus the body cannot cool itself
  - Air temperatures above skin temperature can add heat to the body
- An outdoor worker wearing multiple layers of clothing is lifting and carrying heavy equipment. She is working in the sun. The air temperature is 75 °F and the relative humidity is 80%. Assuming no other factors are an issue, is this worker likely at risk of heat stress?
  - Yes
  - No
- An outdoor worker wearing light clothing, operating a saw. He is working under a shade. The air temperature is 75 °F, the relative humidity is 30% and there is a light breeze. Assuming no other factors are an issue, is this worker likely at risk of heat stress?
  - Yes
  - No
- An outdoor worker, working in the heat, starts noticing spasms and soreness in his abdominal muscles. This is likely a sign of:
  - Heat stroke
  - Heat exhaustion
  - Heat syncope
  - Heat cramps

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9. An outdoor worker, working in the heat, complains of a headache and feeling dizzy. Her skin is pale and clammy and she is sweating a lot. This is likely a sign of:
- a.  Heat stroke
  - b.  Heat exhaustion
  - c.  Heat cramps
  - d.  Heat syncope
10. An outdoor worker, working in the heat, appears to be mentally confused and you are having difficulty understanding what he is saying. His speech is slurred, as if he is drunk. His skin is red and dry, and even though he has been working hard, he is not sweating. This is likely a sign of:
- a.  Heat stroke
  - b.  Heat exhaustion
  - c.  Heat cramps
  - d.  Heat syncope
11. During a rest break, a worker's body temperature is 99.6 F and his heart rate is 130 beats per minute after 10 minutes of rest. Are these signs of heat stress?
- a.  Yes
  - b.  No
12. Which type of control is preferred when trying to reduce heat stress?
- a.  A protective clothing control such as providing an ice-cooled vest
  - b.  An engineering control such as use of powered tools or blocking radiant heat
  - c.  An administrative control such as training workers to recognize heat-related illnesses
13. Which type of control is more likely to be effective at reducing heat stress?
- a.  Adjusting the work schedule to reduce physical work during the hottest part of the day
  - b.  Having workers watch each other for signs and symptoms of heat stress
  - c.  Making sure there is a trash receptacle available for disposable cups
14. The basic on-the-job activities a worker can do to prevent heat stress are:
- a.  Drink a cup (8 ounces) of cool water every 15-20 minutes to stay hydrated
  - b.  Take rest breaks in a shaded area
  - c.  Avoid caffeine during the day
  - d.  All of the above
15. If air temperatures are above 95 °F, then it is best to:
- a.  Increase air movement and have workers decrease clothing coverage
  - b.  Decrease air movement and have workers increase clothing coverage
16. Evaporative coolers with water mist systems can be used to effectively cool the air by about 10 to 20 °F when:
- a.  temperature is above 100 °F
  - b.  there is no sun or radiant heat
  - c.  the humidity is below 50%
17. What first aid supplies are needed for the treatment of a worker showing signs of heat stroke?
- a.  A block or stand for putting up the worker's feet above heart level
  - b.  Ice packs or cold packs for placement in the arm pits and groin areas
  - c.  A spray bottle with water and fans
  - d.  Both a and b
  - e.  All of the above
18. Emergency preparation for heat stress includes supervision, training, providing adequate first aid supplies, having first aid providers on-site or available and knowing the location and phone numbers for nearby medical services.
- a.  True
  - b.  False

END OF TEST – PLEASE TURN IN WITHOUT SHARING YOUR ANSWERS WITH OTHERS