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.

1. Which of these are environmental risk factors associated with heat stress?
   a. ____ Temperature and humidity
d. ____ Both a and b
   b. ____ Radiant heat
e. ____ All of the above
   c. ____ Air movement

2. Which of these are work-related risk factors associated with heat stress?
   a. ____ Age and physical fitness
d. ____ Both a and b
   b. ____ Medical conditions
e. ____ All of the above
   c. ____ Acclimatization

3. 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.
   a. ____ True
   b. ____ False

4. Which of the following physiological measurements are good indicators of heat stress that can help prevent heat-related illnesses from occurring?
   a. ____ Skin pinch test
d. ____ Both a and b
   b. ____ Body temperature
e. ____ Both b and c
   c. ____ Heart rate recovery

5. What is the risk associated when the air temperatures are above 95 °F?
   a. ____ Sweat evaporates faster so there is no risk
   b. ____ Sweat cannot evaporate and thus the body cannot cool itself
   c. ____ Air temperatures above skin temperature can add heat to the body

6. 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?
   a. ____ Yes
   b. ____ No

7. 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?
   a. ____ Yes
   b. ____ No

8. An outdoor worker, working in the heat, starts noticing spasms and soreness in his abdominal muscles. This is likely a sign of:
   a. ____ Heat stroke
c. ____ Heat syncope
   b. ____ Heat exhaustion
d. ____ 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. ____ the humidity is below 50%
   c. ____ there is no sun or radiant heat

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

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