

Introduction Discussion

Review all accidents and “near misses” in the past week.

Purpose

The purpose of this topic is to inform workers on the hazards of heat stress along with understanding the symptoms and treatment of heat stress.

What is Heat Stress

The human body functions best at a constant temperature and heat stress occurs when the system cannot easily rid the body of excess heat. The sweat glands create sweat on the skin surface and as the sweat evaporates, it cools the skin and emits the heat from the body in the process. The sweat process consumes extra fluids that must be replaced by drinking more fluids than normal. When the body fluid level is less than normal, the body must work harder to keep the body at a normal temperature.

As the body temperature rises the body system becomes stressed and the first step is to increase circulation on the skin surface causing redness in the skin color. The extra blood flow used to expel heat from the body reduces the natural blood flow from other parts of the body causing the symptoms we feel.

Heat Stress Cause

Every person’s body responds differently to heat, but most people start having symptoms and problems when their body reaches 100.4 degrees Fahrenheit. At this point the person should be moved to a shaded area so they can start the cooling off process. Heat stress can occur due to the following environments:

- a) Direct sunlight
- b) Limited air movement
- c) High humidity
- d) Physical exertion
- e) Poor health
- f) Not acclimated to heat
- g) Improper clothing for the conditions

Heat Stress Symptoms

There are different levels of heat stress as the temperature slowly rises and the following symptoms can be observed:

- a) Heat rash
- b) Muscle cramps
- c) Headache
- d) Nausea
- e) Dizziness
- f) Confusion
- g) Weakness
- h) Irritability
- i) Moist clammy skin
- j) Thirsty and
- k) Decreased urine output

Heat Exhaustion Treatment

Heat exhaustion occurs just before a stroke occurs and the following items should be considered for treatment:

- a) Remove the worker into a shaded area
- b) Remove excess clothing
- c) Drink plenty of room temperature fluids
- d) Use a fan or water to slowly lower their core temperature

Heat Stroke

Every person's body responds differently to heat, but most people start having serious symptoms and problems at 104 degrees Fahrenheit. This is a medical emergency and individuals should be taken to the hospital as quickly as possible. This is different than heat stress and is handled differently. If you cannot get to the hospital quickly then steps like cold water and ice must be used to lower the body temperature.

A person with heat stroke will exhibit the following symptoms:

- a) Confusion
- b) Loss of consciousness
- c) Seizures
- d) Hot dry skin

General Discussion

Discuss scenarios in your work environment where heat stress could be a problem and your method of supplying drinking fluids.

Note

A person can adapt to working in hot environments if given a chance to gradually get use to the heat. When working with new workers, ask what their past exposure to heat has been.

Site Name

Date

Weekly Safety Topic “Heat Stress” Quiz

1. What are the main ways to prevent heat stress?
 - a) Be in good health
 - b) Drink plenty of fluids
 - c) Wear the proper clothing
 - d) All of the above

2. Heat stress occurs when the body can no longer maintain a fairly constant body temperature.
 - a. True
 - e) False

3. Which of these topics can be symptoms of heat stress?
 - a. Rash
 - b. Cramps
 - c. Dizziness
 - f) All of the above

4. Which of these topics can be symptoms of heat stroke?
 - a. Confusion
 - b. Loss of consciousness
 - c. Hot dry skin
 - g) All of the above

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Name Printed	Signature / Initials

Supervisor
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