

TRASHCAN TALK

Employee Safety Communication Frostbite & Hypothermia

EDITION: 9
December 2016



HYPOTHERMIA

- ▶ Occurs when the body's internal temperature falls below **95 degrees**
- ▶ When you become cold, two things will instinctively happen before hypothermia sets in:
 1. You will try to move around to generate heat and seek shelter from the cold.
 2. Your body will move blood to the middle of you to keep warm, goose bumps will form, we shiver to make more heat, and our body will release a hormone to speed up metabolism.
- ▶ **Mild hypothermia** → skin is pale and cool to the touch; numbness in extremities; sluggish responses; shivering.
- ▶ **Moderate hypothermia** → decreasing conscious state; blood working to prevent shutdown of organs, no longer shivering
- ▶ **Severe hypothermia** → unconscious and no longer responding; heart beat becomes irregular; no response to light in eyes; rigid muscles; pulse is hard to detect. This can become seriously life-threatening.
- ▶ **Things you can do to prevent hypothermia:**
 - Avoid prolonged exposure to cold weather
 - Dress for the weather; do not only rely on your vehicle heater to keep you warm.
 - Use gloves, scarves, hoods, and swap them out when they become wet.
 - Drink plenty of fluids, eat regularly.
 - Wear insulated boots and outerwear.
 - Avoid alcohol, cigarettes and caffeine.
- ▶ When participating in an outdoor activity in the cold with other people, use the buddy system; if you are experiencing symptoms of hypothermia, **it will be difficult to recognize your own symptoms due to the mental confusion that is caused by hypothermia.**

FROSTBITE

- ▶ Occurs when you are exposed to temperatures below the **freezing point of skin** and your skin tissue freezes.
- ▶ Steps leading up to frostbite:
 1. Your body sends a signal to your blood vessels to constrict and sends blood away from extremities and to the vital organs, to prevent further exposure of blood to the cold.
 2. As your fingers, toes and other extremities become colder, your body temperature will drop below 98.6 degrees. Then, your blood vessels fluctuate between dilation and constriction to let your extremities be as functional as possible, while also keeping your vital organs functioning.
- ▶ **Superficial frostbite** → burning, numbness, tingling, itching or cold sensations. Regions that are cold appear white and frozen but retain some resistance if you press on them.
- ▶ **Deep frostbite** → initial decrease in sensation that is eventually lost completely. Swelling and blood blisters are common, as is white or yellowish skin. Skin will look waxy; will turn a purple-blue color when warmed.
- ▶ When warming back up, you can experience pain as blood flow is re-established to the affected areas.
- ▶ **Things you can do to prevent frostbite:**
 - Wear layers, and mittens instead of gloves.
 - When working in extreme cold, wear two pairs of socks. Inner pair should be used to wick water away from skin and outer pair used for warmth in general.
 - Cover your face, head, nose and ears at all times.
 - Wear waterproof shoes.
- ▶ **Most important thing to remember: your body works to stay alive first, and to stay functioning second.**



Safety starts here!

Wear your Personal Protective Equipment
gloves, high visibility safety vest, safety glasses, safety boots, hearing protection, head protection, dust masks and respirators, harnesses and lanyards, work clothes
REQUIRED AT ALL DUMPS