

SAFETY MEETING

Company Name: Superior Waterproofing Job Name or #: _____ Date: _____

2

FREEZING FACTS

1/18/19

Bears have fur, whales have blubber, and people have Gore-Tex. Without protection from the cold, **HYPOTHERMIA KILLS**. Like a chicken breast tossed in an ice box, we freeze gradually from the outside in.

If you stick a thermometer in a healthy person you'll get a reading around 98.6F. If you're sick from an infection of some sort it might rise to over 104F, which is a serious problem. But when your core temperature starts dropping by even a few degrees it can be just as serious.

As your body temperature drops a mere two degrees below normal, the body will take several autonomic responses to warm itself: You'll start shivering in an attempt to increase movement and blood flow, and your extremities will become increasingly numb as the blood vessels constrict to reduce heat loss. Next, your breathing will become shallow.

At a core body temperature of 95F, you'll officially have hypothermia and your body will begin sacrificing heat needed at the extremities in an attempt to keep vital organs warm. Your skin will become cold and pale, your fingertips, toes, lips, and nose turn blue and shivering becomes more severe. You'll start to lose muscle coordination, noticeable by the loss of small-motor skills and then by out-and-out stumbling.

Next, confusion and disorientation will set in and you'll slur and mumble incoherently. All of your body movement will become noticeable slower. Finally, unable to cope with the heat deficit, your heart or respiratory system will seize entirely.

An oft-cited phenomenon is that hypothermia victims will remove their clothing at a time when body coverage is fundamental to survival. Between 20 and 50 percent of hypothermia victims are found partially or completely undressed. "Paradoxical undressing" is the result of peripheral vasodilation, which is the dilation of blood vessels resulting from the body's attempt to redistribute its remaining heat.

Vasodilation affects the sensation of warmth, just like when your face goes red from embarrassment. Though body temperature is plummeting perilously, the victim mistakes the skin sensation for body temperature, and undresses to cool down.

In cases where the lowering of body temperature is gradual, another curious behavior is that people will seek or create small places in which to curl up. Such victims are found in cupboards, under beds, or in a tiny snow cave. This phenomenon is known as terminal burrowing and it's the last hole you'll ever dig.

A Few Other Freezing Facts:

Medical Cause of Death: Cardiac or respiratory arrest.

Highest risk: Homeless alcoholics; people exposed to the elements after a disaster and winter hikers.

Kills Per Annum: More than 700 deaths in the United States.

Historic Death Toll: More than 75,000 in the twentieth century, though hypothermia is historically underreported in water fatalities. (Can't swim without muscle coordination, but hypothermia only gets credited with an assist when drowning is the cause of death.)

Misc Facts:

- Hypothermia is the Number 1 killer of outdoor recreationist.
- According to physicians at Mayo Clinic, early stages of hypothermia are marked by "umbles": stumbles, mumbles, fumbles and grumbles.
- Brain death by lethal hypothermia is rare. The brain may continue to function more than an hour after a victim loses consciousness.

QUESTION: Put in order as it occurs(1-5) : Death Shallow Breathing Shivers Confusion Loss of muscle control

WHAT UNSAFE OPERATIONS DID YOU FIND ON YOUR JOBSITE THIS WEEK? _____

What Corrective action was taken? _____

Meeting Attended By _____

Supervisor's Signature _____