

### WHY IS IT IMPORTANT TO PREVENT HEAT ILLNESS?

- Heat illness can be a matter of life and death. Workers die from heat stroke every summer and every death is preventable.
- When heat stroke doesn't kill immediately, it can shut down major body organs causing acute heart, liver, kidney and muscle damage, nervous system problems, and blood disorders.
- Having a serious injury or death occur at work affects everyone at a worksite.
- Workers suffering from heat exhaustion are at greater risk for accidents, since they are less alert and can be confused.



Factors That Put Workers at Greater Risk	
Environmental	High temperature and humidity Radiant heat sources Contact with hot objects Direct sun exposure (with no shade)

The temperature rises
Humidity increases
The sun gets stronger
There is no air movement
No controls are in place to reduce the impacts of equipment that radiates

heat

### WHY IS HEAT A HAZARD TO WORKERS?

### HEAT RELATED ILLNESS

Excessive exposure to heat can cause a range of <u>heat</u> <u>related illness:</u>

heat rash

heat cramps

heat exhaustion

heat stroke (heat stroke can result in death and requires immediate medical attention).

Exposure to heat can also increase the risk of injuries because of sweaty palms, fogged-up safety glasses, dizziness, and burns from hot surfaces or steam.



### Heat cramps

- -May occur alone or simultaneously with other heat-related illnesses.
- -Heat cramps are painful muscle spasms caused by sweating while performing hard physical labor in a hot environment.
- -The cramps may be caused by either too much or too little salt.
- -Tired muscles are very susceptible to heat cramps.

### **Heat Rash**

- -(Also known as prickly heat) often occurs in hot, humid environments where sweat does not easily evaporate from the skin.
- -The sweat ducts become clogged, resulting in a rash.
- -Heat rash can be very uncomfortable if the rash is extensive or complicated 1497w

### FAINTING...

### Fainting:

- -May occur when an employee who is not used to the heat stands in one position for an extended period of time.
- -An employee who has fainted should recover after a brief period of sitting or lying down.
- -Moving around, rather than standing still, will reduce the possibility of fainting

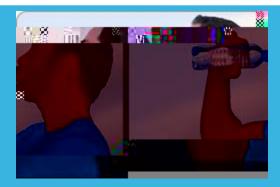
### HEAT EXHAUSTION

Caused by the loss of large amounts of fluid by sweating, sometimes with excessive loss of salt.

An employee suffering from heat exhaustion still sweats but may experience the signs and symptoms listed below:

- headache
- weakness
- mood changes (confused or irritable)
- vomiting
- decreased /dark-colored urine
- light-headedness or fainting

- dizziness
- pale clammy skin
- feeling sick to stomach



### TREATING HEAT EXHAUSTION...

- Move person to a cool, shady area
- Provide cool water to drink
- Cool the person by fanning them
- Cool the skin with a wet cloth
- Lay victim on his or her back and raise the victim's legs 6 to 8 inches if he
  or she is dizzy;
- Lay victim on his or her side if nausea occurs
- Loosen and remove heavy clothing
- Stay with the victim.

Call for emergency help if the victim does not feel better in a few minutes. If heat exhaustion is not treated, the illness may advance to heat stroke.

### HEAT STROKE

Heat stroke is the most serious heat-related illness.

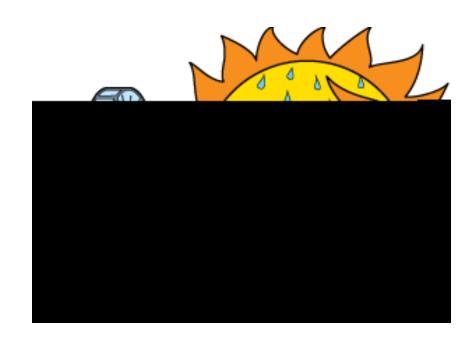
Heat stroke occurs when the body's temperature-regulating system fails and sweating becomes an inadequate way of removing excess heat.

Signs that an employee may be suffering a heat stroke are:

- dry pale skin (no sweating);
- hot red skin;
- mood changes (irritable,4 TfCID 22%BDC q0.000010Rin;

### WHAT ARE SOME SIGNS OF HEAT STROKE?

- · May be confused
- · May be unable to think clearly
- · May pass out
- · May collapse
- · May have seizures (fits)
- · May stop sweating



## CONTRIBUTING RISK FACTORS:

You aren't used to

# HOW CAN HEAT-RELATED ILLNESS BE PREVENTED?

### 1) ENGINEERING CONTROLS:

-Air conditioning and ventilation, that make the work environment cooler

### 2) WORK PRACTICES:

- -Work/rest cycles,
- -Drinking water often
- -Providing an opportunity for workers to build up a level of tolerance to working in the heat.
- -Wearing sunscreen to prevent burns
- -Wearing hats, sunglasses, and light weight clothing

### WHAT DO I DO??

### 1. Call 9-1-1 and call Security, then notify your supervisor:

-Be prepared to describe the symptoms and know how to describe our location to the emergency personnel so they can find us quickly. Don't wait because heat exhaustion can quickly become more dangerous. (Time: 15 minutes)

# REMEMBER THESE THREE SIMPLE WORDS: WATER, REST, SHADE.

### **SUNBURNS**

#### What Causes Sunburn:

The simple explanation behind sunburn is when your skin is exposed to the sun for a period of time, eventually it burns, turning red and irritated.

Under the skin, things get a little more complicated. The sun gives off three wavelengths of ultraviolet light:

UVA

UVB

UVC

UVC light doesn't reach the Earth's surface. The other two types of ultraviolet light not only reach your beach towel, but they penetrate your skin. Skin damage is caused by UVA and UVB rays.

But sun damage isn't always visible. Under the surface, ultraviolet light can alter your DNA, prematurely aging your skin. Over time, DNA damage can contribute to skin cancers, including deadly melanoma.



### SUNBURNS

#### Factors of sunburn include:

The time of day. Between 10am and 4pm daylight saving time, the sun's rays are the strongest. Even on a cloudy day, the sun's damaging UV light can pass through clouds.

Proximity to reflective surfaces, such as water, white sand, concrete, snow, and ice. All of these reflect the sun's rays and can cause sunburns.

The season of the year. The position of the sun on late spring and summer days can cause a more severe sunburn.

Proximity to the equator (latitude). The closer to the equator, the more direct sunlight passes through the atmosphere. For example, the southern United States gets fifty percent more sunlight than the northern United States.

The UV index of the day, which shows the risk of getting a sunburn that day.



# STAY COOL!



