



## Heat/Sun Injury and Hydration

Ultraviolet (UV) rays are an invisible form of radiation that is a part of sunlight. The structure of skin cells can be changed by UV rays penetrating the skin. UV Rays can damage your skin in as little as 15 minutes! Exposure to sunlight and heat can cause quick dehydration and increases the risk of heat stress.

### Facts

- \* Sunlight exposure is highest during the summer months between 10:00am and 4:00pm.
- \* Many drugs increase sensitivity to sunlight, increasing the risk of getting sunburned.
- \* Overexposure to the sun leads to an increased risk of skin cancer.
- \* When outdoors in the heat, your body's internal air conditioner kicks on (sweat) to cool your body off. It is important to stay hydrated.
- \* Feeling thirsty is the first sign of dehydration.
- \* Exposure to extreme heat can result in heat stress. Heat stress can result in heat stroke, heat exhaustion, heat cramps, or heat rashes.

### Prevention Tips

- \* Use sunscreen with at least Sun Protection Factor (SPF) 15. A higher number indicates increased protection.
- \* Some lip balms contain some of the same chemicals used in sunscreens. If they do not have at least SPF 15, don't use them by themselves.
- \* Cover up with clothing and wear a brimmed hat. Keep in mind that a typical T-shirt has an SPF rating lower than 15, so use other types of protection as well.
- \* Wear sunglasses that block UVA and UVB rays. They also protect the tender skin around your eyes.
- \* Reapply sunscreen at least every 2 hours.
- \* Drink water before, during, and after physical activity.
- \* Stay away from drinks that have caffeine or are loaded with sugar

The sun can affect your skin at any time, not just in the summer, in warm places, or when it is sunny outside.

**ALWAYS** wear sunscreen.

**NEVER** use sunscreen that is more than 1 year old.

**NEVER** sit in direct sunlight without protection.

**ALWAYS** be smart and stay hydrated.



## Types of Heat Illness

### Heat Stroke

Heat stroke is considered the most serious heat-related illness, occurring when the body can no longer regulate its temperature. The body temperature quickly rises, and the ability cool off by sweating often fails. Heat stroke can cause death or permanent disability in the absence of emergency treatment.

- \* Symptoms: Hot, dry skin; hallucinations; chills; throbbing headache; high body temperature; confusion/dizziness; slurred speech.
- \* First Aid: Call 911 and notify supervisor; move affected worker to shaded area; take steps to cool the individual (spraying with water, fanning).

### Heat Exhaustion

As a response to excessive loss of water and salt, the body may experience heat exhaustion. Those who are elderly or have high blood pressure are particularly vulnerable.

- \* Symptoms: Heavy sweating; extreme weakness; dizziness/confusion; nausea; clammy skin; pale complexion; muscle cramps; slightly elevated body temperature; fast, shallow breathing.
- \* First Aid: Have worker rest in a cool or shaded area; give worker plenty of water and have them take a cool bath, if possible.

### Heat Cramps

Heat cramps typically are a result of low salt levels in muscles as a result of excessive sweating. They also may be a symptom of heat exhaustion.

- \* Symptoms: Muscle pain or spasms, usually in the abdomen, arms or legs.
- \* First Aid: Stop activity and sit in a cool place; drink clear juice or a sports beverage; abstain from strenuous work for a few hours; seek medical attention if the worker has heart problems or the cramps don't subside after one hour.

### Heat Rash

Heat rash is a skin irritation caused by excessive sweating.

- \* Symptoms: Appears as a red cluster of pimples or small blisters; likely to occur on the neck, upper chest, groin, under the breasts and in elbow creases.
- \* First Aid: Keep worker in cooler, less humid environment; keep affected area(s) dry; use dusting powder, if available.