

# Safety Circular

April 2024

## Extreme Heat

### What is Extreme Heat?

Extreme heat is defined as summertime temperatures that are much hotter and/or humid than average. Because some places are hotter than others, this depends on what's considered average for a particular location at that time of year. Humid and muggy conditions can make it seem hotter than it really is. On average, extreme heat has killed more people in the last 10 years than any other weather phenomena.

### What Causes Heat-Related Illness?

Heat-related illnesses, like **heat exhaustion** or **heat stroke**, happens when the body is not able to properly cool itself. While the body normally cools itself by sweating, during extreme heat, this might not be enough. In these cases, a person's body temperature rises faster than it can cool itself down. This can cause damage to the brain and other vital organs.

Some factors that might increase your risk of developing a heat-related illness include:

- High levels of humidity
- Obesity
- Fever
- Dehydration
- Prescription drug use
- Heart disease
- Mental illness
- Poor circulation
- Sunburn
- Alcohol use

### Who is at Greatest Risk for a Heat-Related Illness?

Infants and children up to four years of age, and people 65 years of age and older. Also, people who are overweight, have previous medical conditions, or are on certain medications (psychiatric).

### Prevention of a Heat-Related Illness

- Increase frequency of fluid intake when working in hot environments
- Take a break every 30-60 minutes
- Decrease intensity of work under extreme conditions
- Dress in cool, loose clothing and shade your head/face with a hat or umbrella
- Be aware of high humidity conditions
- Be aware of areas with little to no breeze

### Treatment of a Heat-Related Illness

- Move person out of direct sunlight into an air-conditioned environment, if possible
- Remove clothing, maintaining modesty
- Have them drink water if conscious
- Sprinkle water on them and fan them if there is no breeze
- Get medical attention ASAP

**Always be aware of the locations of respite areas and understand the importance of their use. Remember, inmates may request access to respite areas 24 hours a day, 7 days a week.**

# Recognize the Signs of Heat Exhaustion and Heat Stroke

SIGNS OF

HEAT EXHAUSTION	HEAT STROKE
DIZZINESS & FAINTING	THROBBING HEADACHE
EXCESSIVE SWEATING	NO SWEATING
RAPID, WEAK PULSE	RAPID, STRONG PULSE
NAUSEA OR VOMITING	NAUSEA OR VOMITING
COOL, PALE CLAMMY SKIN	RED, HOT DRY SKIN
MUSCLE CRAMPS	MAY LOSE CONSCIOUSNESS



## Other Heat-Exhaustion Symptoms

- Temperature less than or equal to 104 F
- Normal mental status with possible mild confusion
- Normal heart rate with normal blood pressure
- Moderate dehydration
- Treat the symptoms; get medical assistance if needed

## Other Heat Stroke Symptoms

- Temperature greater than 104 F
- Abnormal mental status (coma, delirium, seizures, slurred speech, hallucinations)
- Normal to varied heart rate with hypotension
- Moderate to severe dehydration
- Treat the symptoms; get medical assistance **immediately**

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The Safety Circular, a publication of the Texas Department of Criminal Justice Risk Management Department, is published monthly in an effort to promote and enhance risk management awareness on issues relating to TDCJ employees.

Comments, suggestions and safety related items are welcome.

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