

BEAT THE HEAT

Summer's high temperatures put student athletes at increased risk of heat illness. There are several types of heat illness. They range in severity, from heat cramps and heat exhaustion, which are common but not severe, to heat stroke, which can be deadly. Although exertional heat stroke can be fatal, death is preventable if it's quickly recognized and properly treated.

DEHYDRATION AND HEAT ILLNESSES



It takes only **30 minutes** for cell damage to occur with a core body temperature of 105 degrees or higher.

Fluid replacement should be based on **SWEAT LOSS**.



As of August 2022, 14 states mandate all best practice heat acclimatization standards at the high school level.



Exertional heat stroke is one of the top three killers of athletes and soldiers in training.

- From 2015-19, 17 athletic heat stroke fatalities were reported.
- It takes seven to 14 days for a body to adapt to exercising in the heat.
- Dehydration at levels of 3% to 4% body mass loss can reduce muscle strength by an estimated 2%.

SAFETY TIPS



Have sports drinks on hand for workout sessions lasting longer than an hour.

Keep beverages cold – cold beverages are consumed 50% more than warm beverages.

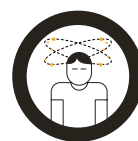
Hydrate before, during and after activity.

Remove unnecessary equipment, such as helmets and padding, when environmental conditions become extreme.

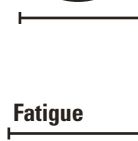


Clothing worn by athletes should be light colored, lightweight and protect against the sun.

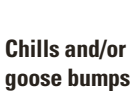
Signs of exertional HEAT ILLNESS



Headache, lightheadedness, dizziness, confusion and disorientation



Excessive sweating and/or flushing



Nausea and/or vomiting

Cramps, muscular tightening and spasms



Core body temperature of more than 105 degrees



Signs of nervous system dysfunction, such as confusion, aggression and loss of consciousness



Increased heart rate

Seizures

Excessive sweating

Low blood pressure

Rapid breathing

- During the first week, practices shouldn't exceed 120 minutes and should be limited to one practice per day.
- Also, during the first week, slowly integrate equipment into practice using the following schedule:
 - Days 1-2: Helmet/headgear only
 - Days 3-5: Helmet and shoulder pads
 - Day 6: Begin full equipment
- Follow a work-to-rest ratio based on environmental conditions.
- Get a location-specific measurement of heat stress using a wet-bulb globe temperature, which accounts for ambient temperature, relative humidity, wind and radiation from the sun.
- If someone is suffering from exertional heat stroke, remember to cool first and transport second.
- Have shade and cooling stations available and large cold tubs ready before all practices and games in case cold water immersion is needed to treat exertional heat stroke.
- According to best practice, the optimal way to determine core temperature, and whether someone is experiencing exertional heat stroke, is through the use of a rectal thermometer, which should be done by a trained medical professional, such as an athletic trainer.