

# 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 heat illnesses can be fatal, death is preventable if they're quickly recognized and properly treated.

## DEHYDRATION AND HEAT ILLNESSES



As a rule-of-thumb, most athletes should consume 200 to 300 milliliters of fluid every

**15 MINUTES**  
OF EXERCISE.

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



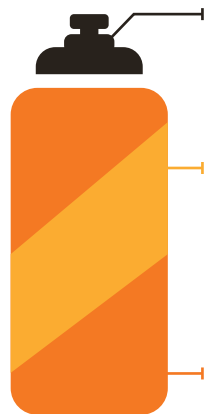
Currently, 13 states have heat-acclimatization policies for secondary school athletics with New Jersey being the first.



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

- From 2010-15, 20 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 percent body mass loss can reduce muscle strength by an estimated 2 percent.

### SAFETY TIPS



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

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

Hydrate before, during and after activity.

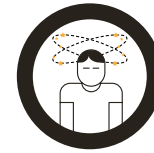
Remove unnecessary equipment, such as helmets and padding, when environmental conditions become extreme.



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

- For the first week or so, hold shorter practices with lighter equipment so players can acclimate to the heat.
- Follow a work-to-rest ratio, such as 10-minute breaks after 40 minutes of exercise.
- Get an accurate measurement of heat stress using a wet-bulb globe temperature, which accounts for ambient temperature, relative humidity and radiation from the sun.
- If someone is suffering from exertional heat stroke, remember to cool first and transport second.
- Have large cold tubs ready before all practices and games in case cold water immersion is needed to treat exertional heat stroke.

# SIGNS OF MINOR HEAT ILLNESS



Dizziness

Cramps, muscular tightening and spasms



Lightheadedness, when not associated with other symptoms

### EARLY WARNING SIGNS OF EXERTIONAL HEAT STROKE

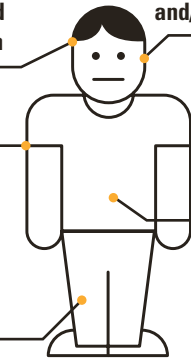
Headache, dizziness, confusion and disorientation

Excessive sweating and/or flushing

Fatigue

Nausea and/or vomiting

Chills and/or goose bumps



# SIGNS OF EXERTIONAL HEAT STROKE



Core body temperature of more than 105 degrees



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



Increased heart rate

Rapid breathing

Seizures

Low blood pressure



Sources: Korey Stringer Institute, American Medical Society for Sports Medicine, NATA