HOT WEATHER INFORMATION

The following repeats information from these sources: National Federation Sports Medicine Handbook, NATA Fluid Replacement Guidelines, NCHSAA Handbook, and the American Red Cross Sport Safety Training Handbook. Athletes should be informed of the information contained in this document.

Recommendations for Fluid Replacement

- Athletes should be educated in the process of hydrating themselves as a 24 hour a day process.
- Before exercise:
  - Drink 17-20 ounces of water 2-3 hours before exercise
  - Drink an additional 7-10 ounces of water 10-20 minutes before exercise
- During exercise:
  - Drink every 10- 15 minutes with breaks.
- After exercise:
  - Drink enough fluids to replace any weight loss within two hours of completion of activity
  - Fluid replacement should be at a rate of 24 ounces for every pound of body weight lost after exercise
- Urine color is an easy method to determine hydration status. Light yellow to clear urine indicates a well-hydrated athlete.

Signs and Symptoms of Heat Problems

Early Stages (sometimes called heat exhaustion)

- Cool, moist, pale, ashen, or flushed skin
- Headache, nausea, dizziness
- Weakness, exhaustion
- Heavy sweating

Late Stages (sometimes called heat stroke)

- Red, hot, dry skin
- Changes in level of consciousness
- Vomiting

Care

The athletic trainer should be contacted immediately when an athlete exhibits signs and symptoms of heat illness. The following care is recommended for an athlete exhibiting signs and symptoms of heat illness.

- Cessation of activity
- Move the athlete to a cool place
- Loosen tight clothing
- Remove perspiration-soaked clothing
- Apply cool, wet cloths to the skin
- Fan the athlete
- If conscious, give cool water to drink

If at any time the athlete exhibits the following signs and symptoms:

- refuses water
- vomits
- skin is unusually red, hot, and dry for the weather conditions (dry clothes also)
- starts to lose consciousness

ACTION

- Send someone to call EMS personnel (Emergency Action Plan).
- Place the athlete on his or her side.
- Continue to cool the athlete by using ice or cold packs on the wrists, ankles, groin, and neck and in the armpits.
- Continue to check breathing and pulse.

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.

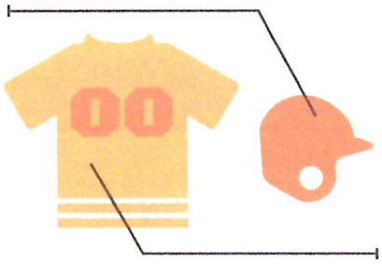
SAFETY TIPS

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.

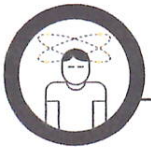
Remove unnecessary equipment, such as helmets and padding, when environmental conditions become extreme.



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

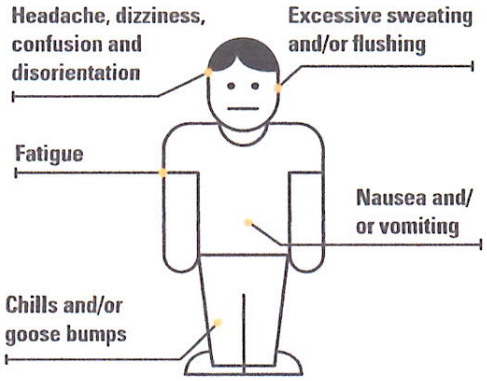


Dizziness

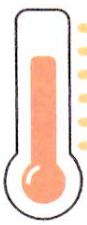
Cramps, muscular tightening and spasms

Lightheadedness, when not associated with other symptoms

EARLY WARNING SIGNS OF EXERTIONAL HEAT STROKE

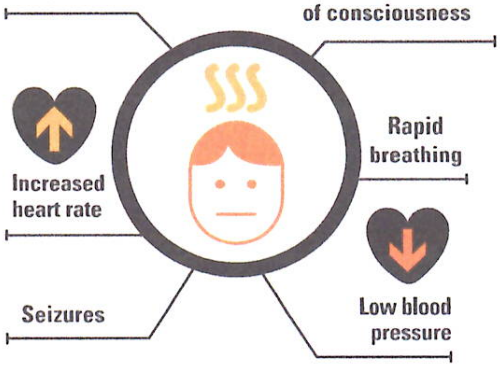


SIGNS OF EXERTIONAL HEAT STROKE



Core body temperature of more than 105 degrees

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

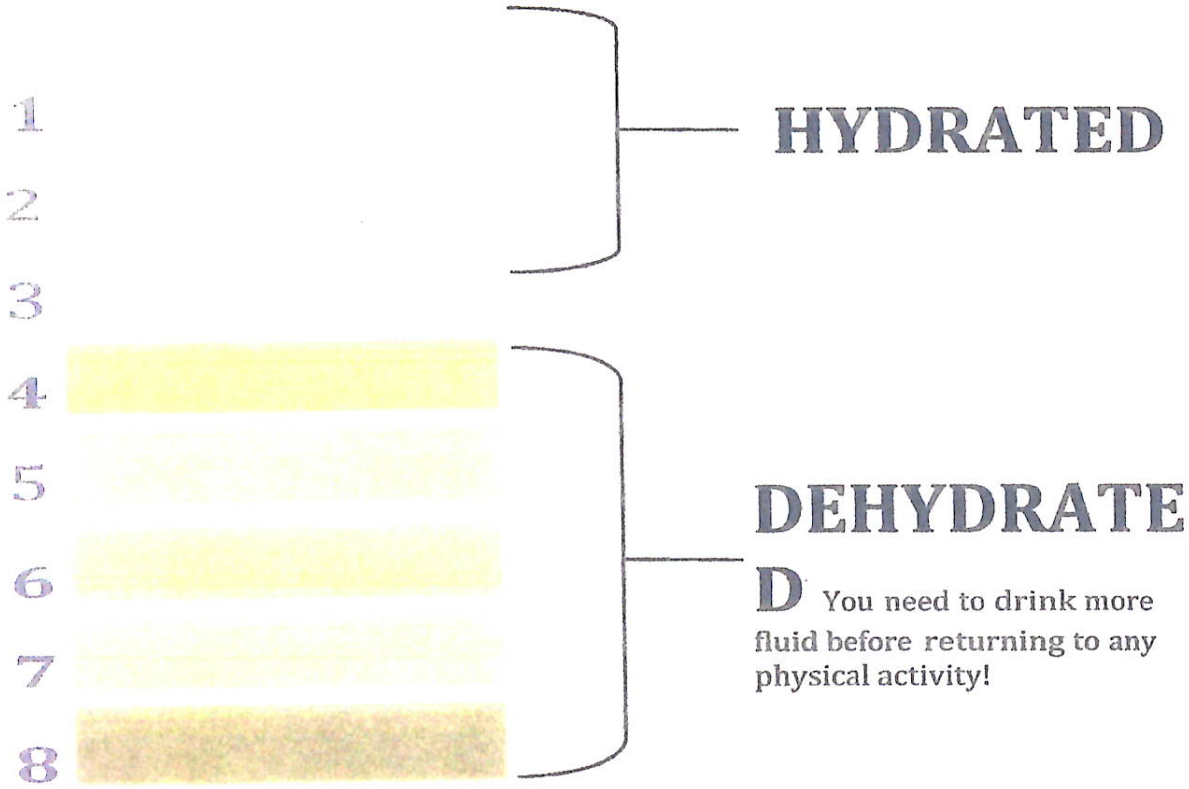


Sources: Korey Stringer Institute, American Medical Society for Sports Medicine, NATA

Infographic courtesy of the National Athletic Trainers' Association, www.nata.org

How Hydrated Are You?

This urine color chart is a simple tool you can use to assess if you are drinking enough fluids throughout day to stay hydrated.



Be Aware! If you are taking single vitamin supplements some of the vitamins can change the color of your urine for a few hours, making it bright yellow or discolored.