

## The Dangers of Heat Illness

When students are involved in physical practice and competition, they sweat. Sweating is a good thing because it's the body's natural cooling mechanism. However, sweating also results in fluid and electrolyte loss, which can lead to dehydration if fluids aren't replaced.

Students often underestimate fluid needs since they rely on thirst. Thirst is not a good indicator of fluid needs. Many students come to practices and games already dehydrated. Physical activity furthers the condition and by the time students feel thirsty, dehydration has already set in. Even levels of dehydration as little as 1-2% (1.3 to 2.6 lbs., for a 130 pound student) can lead to premature fatigue and impair physical and mental performance.

### KNOW THE EARLY WARNING SIGNS OF HEAT ILLNESS

#### DEHYDRATION

Symptoms:

- \*Thirst
- \*Fatigue
- \*Irritability
- \*Loss of Performance
- \*Muscle Cramps
- \*Nausea
- \*Vomiting

...Do this

Re-hydrate, preferably with a sports drink. The fluid carbohydrate can prevent fatigue and the sodium may help prevent muscle cramps.

#### HEAT EXHAUSTION

Symptoms

- \*Dizziness
- \*Rapid pulse
- \*Weakness
- \*Cold clammy skin
- \*Vomiting
- \*Headache
- \*Nausea

...Do this

Replace fluids. Re-hydration is critical. Rest in a cool, shaded area until all symptoms have passed.

If dizziness continues, lie down with your legs elevated to promote circulation and seek appropriate medical attention.

## **HEAT STROKE**

Symptoms:

- \*Dangerously high temperature
- \*Confused or disoriented
- \*Irrational behavior
- \*Drowsiness

## **THE HYDRATION GAME PLAN:**

- \*Bring fluids to the practice or game – always have unlimited fluids.
- \*Get ready to play – Arrive well-hydrated. Drink plenty of non-caffeine fluids before practice or competitions.
- \*Speak up – Tell the sponsor or coach if you aren't feeling well or are experiencing early signs of dehydration.

## **EMERGENCY PLAN**

(for dealing with emergency situations)

In case of a catastrophic injury an ambulance must be called, the following plan will be implemented at the discretion of the head athletic trainer.

**ATHLETIC TRAINER:** Immediate care of athletes; delegation of appropriate duties to others; notification of parents ASAP.

**HEAD COACH:** Maintain control of team; stop or move practice; practice should be moved to a location that will not interfere with the ambulance; remove onlookers.

**ASSISTANT TRAINER OR COACH:** Call 911; give all necessary information to dispatcher; if possible notify principal of ambulance coming on to campus.

**ASSISTANT COACH:** Direct ambulance onto field; remain available to assist with transfer of athlete.

**ALL OTHER COACHES:** Remain available to assist in any way needed. Keep others from interfering with the care of the injured athlete; do not ask for speculation on the injured athlete's condition.

**ALL INFORMATION WILL BE RELAYED TO THE COACHES AS SOON AS**

IT IS AVAILABLE AND APPROPRIATE. IF ASKED ABOUT AN ATHLETE'S CONDITION THE COACHES SHOULD REPLY, "I DO NOT HAVE ANY DETAILS. YOU WILL NEED TO SPEAK TO THE ATHLETIC TRAINER."

### **PREVENTION OF HEAT ILLNESS:**

Provide unrestricted fluids at practices and games.

Provide water breaks every 30 minutes or less in hot weather.

Allow athletes to become acclimated to the heat. This could take 7-12 days.

Wear light colored and loose fitting clothing while working out.

Provide water breaks in the shade if possible.

Stress the importance of re-hydration to athletes.

Restrict the drinking of beverages containing caffeine during the hotter months of the year, or while in season.

Drink cool to cold water.

Know what medications athletes are taking. Some can dehydrate the body.

### **Fluid replacement recommendations:**

Athletes should begin all practices and competitions well hydrated.

2-3 hours before workout athletes should consume 17-20 oz. of water or sports drink and 7-10 oz. of water or sports drink 10-20 minutes before workout.

Athletes should have 7-10 oz. of fluid every 10-20 minutes during the workout.

Drinks should be between 50 and 59 degrees F.

Athlete should begin re-hydration immediately following a workout and continue to drink plenty of fluids even when not thirsty.

### **REDUCING THE RISK OF CONTRACTING BLOODBORNE INFECTIONS (HIV AND HEPATITIS B VIRUS)**

#### **UNIVERSAL HYGIENIC PRECAUTIONS FOR THE ATHLETIC SETTING**

1. Before competing, cover any open wounds you have to reduce the transfer of blood from one open wound to another.
2. Athletes should render first aid to themselves, cover their own wounds, and treat uniforms whenever possible. This reduces the risk of transmitting a blood borne virus from one person to another.
3. When rendering first aid to others, wear protective gloves any time blood or other

body fluids containing visible blood, open wounds, or mucous membranes are involved. Clean gloves should be used for each athlete or the recurrence of an injury with the same athlete if any practice or competition has occurred following initial treatment.

4. If you get someone else's blood or other body fluids containing visible blood on yourself, wear protective gloves, and wipe it off with a disposable towel using a solution known to inactivate blood borne pathogens. That might be a solution of household bleach and water or a commercially prepared, EPA-approved solution. Disposable towel means any type of a wipe that is designed to be used once and discarded. Proper disposal would be the use of a plastic lined container with a lid. The household bleach solution should be mixed fresh daily and should be a dilution of 100 parts water to 1 part bleach – the equivalent of  $\frac{1}{4}$  cup bleach to each gallon of water or 1 tablespoon of bleach to each quart of water.
5. If blood or other bloody fluids containing visible blood are present during practice or competition, play should be stopped, the injured athlete removed from the activity and given proper attention, and any contaminated surfaces should be cleaned. Any open wounds should be cleaned, the bleeding should be stopped, and the wounds should be covered before the athlete is allowed to continue participation.
6. Wash your hands with soap and water immediately after exposure to blood or other body fluids containing blood, open wounds, or mucous membranes even if protective gloves were used.
7. Do not use common towels to clean surfaces contaminated with blood or other body fluids containing visible blood. The use of common towels any time during athletics is a very poor health habit.
8. Wash all soiled uniforms, towels, and other dirty linen in warm or hot soapy water. Any detergent containing bleach (chlorine or non-chlorine) would be appropriate.
9. In general, use good hygienic practices. Shower after each practice or competition, using a liberal amount of soap and water. Avoid the sharing of towels, cups, and water bottles.