



# Heat Illness Prevention

## We'll give your team the healthy advantage.

Baylor SportsCare provides the winning combination of education, promotional support and sports medicine for athletic groups of all ages. We can help your team:

- Prevent sports-related injuries by providing athletic trainer coverage and ongoing educational programs
- Organize valuable sponsorship connections for special events
- Lend proven expertise in the development and promotion of athletic programs and activities
- Help access Baylor Health Care System specialized sports medicine physicians\* and services throughout the Metroplex including locations in Dallas, Frisco, Fort Worth, Garland, Grapevine, Irving, Mesquite, Plano and Waxahachie.

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Athletes increase their risk of heat illness as they become dehydrated. According to the National Athletic Trainers' Association, it is not uncommon to reach dehydration levels significant enough to place athletes at risk of developing exertional heat illness in as little as an hour of exercise. Athletes can reach this level even more rapidly if they begin the workout, practice or competition dehydrated. Many of the risk factors for heat illness can be eliminated to help prevent heat injury to the athlete.

### DEHYDRATION

When fluid loss exceeds fluid intake.

### HEAT CRAMPS

Heat cramps are muscular pain and spasm due to heavy exertion and dehydration. Heat cramps usually involve the abdominal muscles or legs, and it is generally thought that dehydration is the cause.

### HEAT EXHAUSTION

Heat exhaustion typically occurs when people exercise heavily or work in a warm, humid environment where body fluids are lost through heavy sweating. Fluid loss causes blood flow to decrease in the vital organs, resulting in a form of shock.

### HEAT STROKE

Heat stroke is life threatening. The victim's temperature-control system, which produces sweating to cool the body, stops working. The body temperature can rise so high that brain damage and death may result if the body is not cooled quickly. Any heat stroke victim must be quickly cooled and referred for advanced medical attention.

### EFFECTS OF DEHYDRATION

- Dehydration can affect an athlete's performance in less than an hour of exercise—sooner if the athlete begins the session dehydrated
- Dehydration of just 1%-2% of body weight (only 1.5-3 lbs. for a 150lb. athlete) can negatively influence performance
- Dehydration of greater than 3% of body weight increases an athlete's risk of heat illness (heat cramps, heat exhaustion, heat stroke)

### WARNING SIGNS OF DEHYDRATION

- Thirst
- Weakness
- Nausea
- Irritability
- Dizziness
- Decreased performance
- Headache
- Cramps

### FLUID GUIDELINES

#### *Before exercise*

- 2-3 hours before exercise 17-20 oz. of water or a sports drink
- 10-20 minutes before exercise drink another 7-10 oz. of water or sports drink

#### *During exercise*

- Drink early—even minimal dehydration compromises performance
- Drink every 10-20 minutes, at least 7-10 oz of water or sports drink. To maintain hydration, remember to drink beyond your thirst. Optimally, drink fluids based on amount of sweat and urine loss.

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***After exercise***

- Within 2 hours, drink enough to replace any weight loss from exercise. Drink approximately 20-24 oz. of a sports drink per pound of weight loss.

***Re-hydration***

An athlete's hydration status can be monitored by:

- Body weight after exercise vs. before (weighing in)
- Urine color (i.e. urine color chart per Internal Journal of Sports Nutrition)
- Urine volume

*National Athletic Trainers' Association Position Statement: Fluid Replacement for Athletes:*