This handout is designed to help parents and caregivers recognize the symptoms of heat-related illness and learn about how to treat and prevent its occurrence.

**Heat cramps** are muscle pains or spasms, usually in the legs, abdomen, or arms and might occur in association with strenuous activity.

Sweating depletes the body’s salt and moisture and the low salt level in the muscles can cause painful cramps.

**Treatment:**
- Have athlete rest in a cool, shady, or air-conditioned place.
- Drink water, clear juice, or a sports beverage.
- Do not allow athlete to return to strenuous activity for a few hours after cramps subside.
- Seek medical attention if cramps do not subside in one hour.

**Heat exhaustion** is a milder form of heat-related illness that can develop after exposure to high temperatures and inadequate or unbalanced replacement of fluids.

**Symptoms:**
- Heavy sweating
- Paleness
- Muscle cramps
- Tiredness
- Weakness
- Dizziness
- Headache
- Nausea or vomiting
- Fainting
- Cool, moist skin
- Fast, weak pulse
- Breathing fast and shallow

**Treatment:**
- Remove restrictive clothing, equipment, and helmet.
- Rest in a cool, shady area or seek an air-conditioned place.
- Drink water, clear juice, or a sports beverage.
- Take a cool shower, bath, or sponge bath.
- Monitor body temperature and continue cooling efforts until body temperature drops to 101-102°F (should then be removed from water to prevent overcooling).
- If the person is alert, give him or her sips of cool water.
- Do not give the person alcohol to drink.
- If emergency medical personnel are delayed, call the hospital emergency room for further instructions.

**Heat Stroke** is the most serious heat-related illness. It occurs when the body becomes unable to control its temperature:
- the body’s temperature rises rapidly,
- the sweating mechanism fails, and
- the body is unable to cool down.

**Warning!** Body temperature may rise to 106°F or higher within 10 to 15 minutes. Heat stroke can cause death or permanent disability if emergency treatment is not provided. **Seek medical attention immediately.**

**Symptoms:**
- An extremely high body temperature (104°F or higher)
- Red, hot, and dry or moist skin
- Rapid, strong pulse
- Throbbing headache
- Dizziness
- Nausea
- Confusion
- Unconsciousness

**Treatment:**
- Have someone call for immediate medical assistance while you begin cooling the athlete. Response time will be critical.
- Cool the person rapidly:
  - immerse him or her in a tub of cool water or ice water;
  - place the person in a cool shower;
  - spray the person with cool water from a water hose;
  - sponge the person with cool water;
  - use icebags at neck, armpit, and groin area; or
  - if the humidity is low, wrap the person in a cool, wet sheet and fan him or her vigorously.
- Monitor body temperature and continue cooling efforts until body temperature drops to 101-102°F (should then be removed from water to prevent overcooling).
- If the person is alert, give him or her sips of cool water.
- Do not give the person alcohol to drink.
- If emergency medical personnel are delayed, call the hospital emergency room for further instructions.