

Heat Illness: How to recognize it in young athletes

By Dev K. Mishra, M.D.

I am often asked this time of year about some strategies for coaches and parents to recognize heat illness, and for some strategies to manage the young athlete. With that in mind let's review some basic principles.

Key Points

- * A good hydration strategy will go a long way toward minimizing the chance of heat illness.
- * A young athlete with suspected heat illness will typically respond to cooling and re-hydration in around 15 minutes.
- * Beware of hot skin. This is a possible sign of heat stroke, and is a medical emergency.

"Heat Illness" is a broad term used for a range of problems such as dehydration, cramping, dizziness, heat exhaustion and a very serious problem called heat stroke.

Young athletes are at a higher risk than adults for developing heat illnesses. Children absorb heat faster than adults, they don't sweat as much (sweat helps the body cool), they take longer to get conditioned to exercising in warmer weather and often they don't feel the need to drink fluids before or during exercise.

Recognizing Possible Heat Illness

Most young athletes will first start to show signs of heat-related illness through dehydration. The athlete may come off the field complaining of being tired, having leg cramps or feeling light-headed. On a hot day, be suspicious of the athletes with poor performance. They might not tell you anything -- be alert.

You might see signs of decreased performance, more fatigue than typical, they may be irritable. In more severe cases there may be nausea and headache. From the coach and parent's perspective you'll often need to be suspicious and watch for these signs on a hot day.

Basic Sideline Management for Heat Illness

- * Get the athlete off the field and let her lie down in a cool, shaded place.
- * Elevate the legs above the level of the head.
- * Provide a sports drink (not carbonated, no caffeine).
- * Loosen any tight fitting clothing and remove socks.
- * If the player doesn't start to feel better within 10-15 minutes, seek medical help.
- * Prevent future dehydration with a good fluid management strategy

Warning Signs

Young athletes should respond within 10-15 minutes from re-hydrating. You should see them “perk up” and get back toward their normal attitude and appearance. If an athlete does not improve, it may signal more severe dehydration and they should be evaluated in the emergency department of the local hospital.

“Heat Stroke” is a medical emergency. In heat stroke, the athlete will have very hot skin that can be wet or dry, a change in normal behavior (confused, irritable), vomiting, and even seizures or loss of consciousness; the athlete will look in obvious trouble. If you have any suspicion of this, call local emergency services or 911 immediately.

If you have called for emergency help, start cooling the athlete by applying ice packs to the armpits, groin, or neck. If ice is not available, squirt cold water over the head and trunk.

Play or Sit Out?

Once the athlete suffering from dehydration and mild heat illness has started to re-hydrate with fluids, he should return to his normal appearance and attitude in 10-15 minutes and with proper fluids should be able to return to play later that day.

If the athlete has not fully recovered, it may signal a more significant problem and a physician should be consulted before the athlete returns to play.

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