

Insurance 101: Heat-Related Injuries ~ Prevention and Treatment

One of the biggest concerns for summer lacrosse players is preventing heat injuries. Heat-related injuries, such as heat exhaustion or heat stroke are emergency conditions that need immediate treatment and medical care. However, such incidents can be prevented with a few simple steps, which are described in this article to keep coaches, players and officials in the game.

What are Heat-related Injuries?

Normally, our bodies produce a tremendous amount of internal heat, which is cooled by sweating and expelling heat through the skin. When there is extreme heat, high humidity or vigorous activity in the hot sun, this cooling system may begin to fail, and allow heat to build up to dangerous levels. Heat injuries manifest themselves in a number of forms, from mild symptoms to life-threatening conditions.

- **Heat Cramps:** Heat cramps are muscle contractions, usually occurring in the calf or hamstring muscles. These contractions are forceful and painful. They are typically related to heat, dehydration, and poor conditioning. Treatment for cramps is simple: rest, drink water and get to a cool environment.
- **Heat Exhaustion:** Heat exhaustion stems from excessive heat and dehydration. Its symptoms can be detected in the appearance and activities of your players during practice or a game. The range of symptoms includes nausea, dizziness, weakness, headache, heavy perspiration, normal or low body temperature, weak pulse, dilated pupils, disorientation, and fainting spells. Treat heat exhaustion by getting the person to a cool or shady environment, drinking liquids and applying cool water or ice to the body. Most people respond to these treatments, but prompt attention is necessary in order to prevent the condition from progressing to heat stroke. More severely heat-exhausted patients may need IV fluids, especially if vomiting keeps them from drinking enough.
- **Heat Stroke:** Heat stroke, the most serious form of all heat-related conditions, is a life-threatening medical emergency. A person with heat stroke usually has a very high temperature (over 104 degrees) and along with the other symptoms above, may be delirious, unconscious or having seizures. These patients need to reduce their temperature quickly and must also be given IV fluids for rehydration. Take them to a hospital as quickly as possible – although cooling treatments need to be started immediately and continue until emergency medical personnel can take over. In addition to applying ice, another effective form of cooling in this case is “evaporative cooling” where the person is sponged or misted with cool water, and fans are used to circulate the air around the person to encourage rapid evaporation.

Lacrosse Players are Vulnerable

Because lacrosse is a warm-weather running sport, lacrosse participants are at risk for heat illnesses. Coaches can take a number of steps to prevent heat-related injuries among their players:

1. Recognize the dangers of playing in the heat.
2. Schedule regular fluid breaks during practice and games. Players should be hydrated prior to the start of games or practices and to continue to drink eight ounces of fluid every 20 minutes during the activity with water or sports drinks.
3. Players should avoid soda, caffeine drinks and alcohol before or during games, as these can promote dehydration.
4. Make player substitutions more frequently in the heat.

5. Have players wear light-colored, "breathable" clothing.
6. For boys & men, take "helmet breaks" every 30 minutes to ensure that heat in the helmets gets released. Just as your mother told you to wear a hat in winter so "90% of the heat would not be lost through the top of your head," the converse is true in summer – wearing a helmet keeps in a great deal of heat that the body is trying to expel.
7. Use misting water sprays to keep players cool.
8. In the early part of the season, particularly in warm, humid climates, acclimate players slowly to the heat. Play at cooler times of day, and build up players' tolerance to heat a little more each day. If you are attending a camp or tournament in a climate that is hotter than you are used to, go early (if possible) to help the team adapt and be vigilant about enforcing preventative measures.
9. And always, respond quickly if heat-related injuries occur.

For more information on safety and risk management, or to see prior Insurance 101 articles, please visit the US Lacrosse Insurance and Risk Management web site at www.BollingerLax.com.

Lori Windolf Crispo, CPCU is the Executive Vice President in charge of Bollinger's Sports Insurance Division. Bollinger is the insurance administrator for US Lacrosse. Contact her at Lori@BollingerInsurance.com.