

**August 2009**

## **First Responders**

By Doug Brown

### **What is heat stroke?**

Heat stroke is a form of hyperthermia, an abnormally elevated body temperature with accompanying physical and neurological symptoms. Unlike heat cramps and heat exhaustion, two forms of hyperthermia that are less severe, **heat stroke is a true medical emergency that can be fatal if not properly and promptly treated. Call 911.**

The body normally generates heat as a result of metabolism, and is usually able to dissipate the heat by either radiation of heat through the skin or by evaporation of sweat. However, in extreme heat, high humidity, or vigorous exertion under the sun, the body may not be able to dissipate the heat and the body temperature rises, sometimes up to 41.1°C (106°F) or higher. Another cause of heat stroke is dehydration. A dehydrated person may not be able to sweat fast enough to dissipate heat, which causes the body temperature to rise.

Those most susceptible to heat strokes include: infants, the elderly (often with associated heart diseases, lung diseases, kidney diseases, or who are taking medications that make them vulnerable to heat strokes), athletes, and outdoor workers physically exerting themselves under the sun.

### **What are heat stroke symptoms?**

Symptoms of heat stroke can sometimes mimic those of heart attack or other conditions. Sometimes a person experiences symptoms of heat exhaustion before progressing to heat strokes.

Symptoms of heat exhaustion include: nausea, vomiting, fatigue, weakness, headache, muscle cramps and aches, and dizziness.

However, some individuals can develop symptoms of heat stroke suddenly and rapidly without warning. Different people may have different symptoms and signs of heat stroke. But common symptoms and signs of heat stroke include: high body temperature, the absence of sweating, with hot red or flushed dry skin, rapid pulse, difficulty breathing, strange behaviour, hallucinations, confusion, agitation, disorientation, seizure, coma.

### **How do you treat a heat stroke victim? Call 911**

**Victims of heat stroke must receive immediate treatment to avoid permanent organ damage.**

***First and foremost, cool the victim.***

- Get the victim to a shady area, remove clothing, apply cool or tepid water to the skin (for example you may spray the victim with cool water from a garden hose), fan the victim to promote sweating and evaporation, and place ice packs under armpits and groins.
- Monitor body temperature with a thermometer and continue cooling efforts until the body temperature drops to 38.3-38.8°C (101-102°F).
- Always notify emergency services (911) immediately. If their arrival is delayed, they can give you further instructions for treatment of the victim.

### **How can heat stroke be prevented?**

- The most important measures to prevent heat strokes are to avoid becoming dehydrated and to avoid vigorous physical activities in hot and humid weather.
- If you have to perform physical activities in hot weather, drink plenty of fluids (such as water and sports drinks), but avoid alcohol, caffeine, and tea which may lead to dehydration.
- Your body will need replenishment of electrolytes (such as sodium) as well as fluids if you sweat excessively or perform vigorous activity in the sunlight for prolonged periods.

- Take frequent breaks to hydrate yourself. Wear hats and light-colored, lightweight, loose clothes.

We need new first responders. Come out to our practices and see what we do. We meet every second Wednesday at Sorrento Fire Hall #2 across from Shuswap Lake Estates Golf Course. Meetings start at 7PM (rain or shine), August meetings are August 5<sup>th</sup> and 19<sup>th</sup>. There is no cost except your time. We have a new course for responders starting in October. All training is done in house at no cost to the students. For more information call Sherri at 250.675.2420 or Doug at 250.675.3920