

# Doc Talk

By Dr. Veronica Naudin



## Heat Stroke/Exhaustion - How do I know and What do I do?

**Q:** My son is in the middle of junior life guards. Could he get heat stroke from spending too much time at the beach??

**A:** It is definitely summertime. Late July & August bring the most heat to sunny Southern California. It also heralds the start of the soccer season, football conditioning drills and of course long days at the Beach. Children can get symptoms of heat exhaustion and heat stroke from the combination of dehydration and vigorous activity on a hot humid day or weekend. Heat stroke, thankfully, is rare but it is the most serious of the heat related illnesses. Heat stroke is more likely to occur in older adults, small infants, morbidly obese adults and people who have impaired ability to sweat. Nevertheless, it is a good idea to learn the precautions to keep all individuals healthy in the warm weather.

The best way to prevent mild dehydration is to simply drink more water. Studies show that children probably only drink 50% of the water they need. What kids need in water is as follows. Children weighing 36 pounds should have 24 ounces of water daily. Children weighing 60 pounds should have 30 ounces daily. Children 12 and above need the same daily water requirements as an adult, 6-8 8 ounce glasses of water daily. Juice, Tea, Soda, etc are not included in the daily water tally.

What many youngsters fail to understand is that if they are thirsty, their body is telling them that they already are under hydrated. Another way to help your child understand how well they are hydrated is to ask them to pay attention to the color of their urine. The clearer the urine, the better hydrated they are. Yellow urine should always be treated with more water. Caffeinated beverages and sugar filled beverages also will not help the body. Often the caffeine and sugar in these beverages will actually make children lose more water in the form of urine.

During periods of intense sports activity, remind you child to take frequent drink breaks. They should drink 4-6 ounces of water every 20 minutes during a sports activity. Send a bottle of water to mist your child so that he/she will not get overheated. Encourage coaches to schedule practices in the cooler portions of the day. Wear a hat and sunglasses if possible.

Heat Exhaustion is a mild form of heat stroke. The symptoms include heavy sweating, paleness of the skin color, muscle cramps, weakness, dizziness, headache, vomiting and fainting.

To treat, use cooling measures. Take the child to the shade. Take off any optional layers of clothing, use cool, not cold water to help hydrate the skin. With cooling measures, the child should start to feel more comfortable in a short period of time. But this child will still require additional fluids for the next 24 hours.

Heat Stroke is a form of hyperthermia and a true medical emergency. Children or Teens with this condition are very ill. They will feel markedly hot to the touch (Body Temperature is generally 104 degrees Fahrenheit). Their ability to control their temperature is broken and needs to be remedied immediately. Symptoms of heat stroke include high body temperature, the absence of sweating, rapid pulse, difficulty breathing and/or rapid and shallow breathing, confusion, and agitation. In addition, they can have seizures and/or coma.

To treat, Immediately cool the patient with moist, cool, towels. You can fan the patient to stimulate sweating and use ice packs in the groin and armpits. If you truly suspect heat stroke, call 911 for additional assistance.

Heat stroke and heat exhaustion do occur. However, with vigilance and education to children and coaches, it can be prevented. If you have further questions about this topic, please discuss with your pediatrician.

### Doc Talk is sponsored by

#### *"Pediatric Medical Associates of Tri-City"*

Dr. Jorge Castro, Dr. Veronica Naudin, Dr. Stanley Ambo, and Dr. Lyra Ng are dedicated to providing you with the quality health care that you desire for your children.

#### **Please send questions and/or suggestions to:**

Doc Talk, c/o PMA,  
2067 Vista Way #180, Vista, CA 92083  
or call: (760) 945-3434 or fax: (760) 945-6761