

HEAT STROKE -- FACT SHEET

Definition:

Heat stroke is the most severe heat illness (see Heat Exhaustion and Heat Cramps) because of its potential for high morbidity and mortality. It is sporadic and uncommon and can be difficult to treat, even in the hospitalized setting.

Symptoms and Signs:

Initially there may be headache, nausea, vomiting, lightheadedness, malaise, and myalgias. Vital signs show tachycardia, hypotension, and tachypnea (*panting like a dog*). Temperature regulation is then lost. Temperature can exceed 42_C and organ system dysfunction and failure occurs. Major complications of this disease are: seizures, adult respiratory distress syndrome, acute renal failure, liver failure, and disseminated intravenous coagulation.

Causes:

This occurs in healthy individuals subjected to severe heat and usually during extreme physical exertion. Risk factors are chronic illness, medications or drug abuse, inappropriate clothing, poor fluid intake, and poor judgment regarding exertion.

Treatment:

1. Remove person from heat stress immediately.
2. Arrange for immediate transportation to emergency facility.
3. Cool patient by:
 - Spraying patient with water and fan the patient.
 - Place ice packs over neck, and in groin and axillae.
 - Place a wet sheet over patient.

Prevention:

- Acclimatizing young athletes to the heat is essential. As acclimatization takes 90 minutes of activity per day in hot conditions for one week, true acclimatization is rarely achievable in San Diego's school environment.
- Only allow slow increases of activity on hot days. Do not attempt to approach ones previous record speeds or duration of exertion on hot days.
- Exertion should be timed to avoid the hottest times of the day.
- Light, loose clothing should be worn, allowing for maximal air flow but reducing sunlight exposure. Football uniforms can be dangerous.
- Fluid intake is critical. Most athletes mistakenly believe they are drinking sufficient amounts.