

# HEAT STRESS

Coal miners often work in hot environments. Learn the symptoms of heat stress and how to protect yourself and your co-workers from this hazard. Heat stress results from exposure to excessive heat, high humidity, physical exertion or a combination of these factors. Heat stress includes:

**Heat Stroke (Sunstroke)** – A life-threatening condition when the body cannot adequately cool itself

Symptoms: High body temperature (105 °F or greater)  
Confusion, loss of coordination, hallucinations  
Throbbing headache, slurred speech  
Hot dry skin, skin is red or mottled  
Seizures, coma, death

First Aid: Call for emergency medical assistance  
Remove excess clothing, cool victim immediately

**Heat Exhaustion** – Body's reaction to the loss of water and electrolytes

Symptoms: Extreme weakness or fatigue, irritability, dizziness  
Fast shallow breathing, elevated heart rate  
Heavy sweating, moist clammy skin, pale skin  
Nausea, vomiting, fainting

First Aid: Stop exertion, rest in the shade or a cool place  
Drink plenty of water, sports drinks or juice  
Shower or sponge with cool water  
Seek medical attention

**Heat Cramps** – Painful cramps or spasms resulting from loss of electrolytes

Symptoms: Profuse sweating accompanying heavy exertion  
Victim has drunk lots of water  
Muscle pain or spasms in arms, legs or abdomen

First Aid: Rest in a cool place  
Drink juice or performance sports beverage  
Do not resume heavy activity for several hours  
Seek medical attention if there is a history of heart problems  
Seek medical attention if cramps persist more than one hour

**Prevention:** Increase fluids intake when hot; drink 1 cup of water every 15 to 20 minutes\*, take frequent cooling breaks; schedule strenuous activities for cooler time of day; work at a slower pace when hot; provide relief workers; limit time performing heavy tasks; provide fans, shade or other cooling; wear light, breathable clothing; allow workers to acclimatize to heat; monitor heat index; monitor workers that are at risk for heat stress; persons with certain health conditions should check with their physician before attempting strenuous activities