



Preventing Heat Related Injuries



Be aware of flag conditions, risk factors, symptoms and first aid

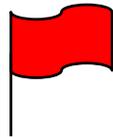
Flag Conditions

*Determined by Wet Bulb Global Temperature (WBGT)**

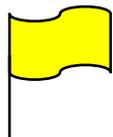
More than 90° Physical training and non-mission essential strenuous exercise suspended for *all personnel*



88-89.9° Strenuous exercise curtailed for all personnel with less than 12 weeks training in hot weather.



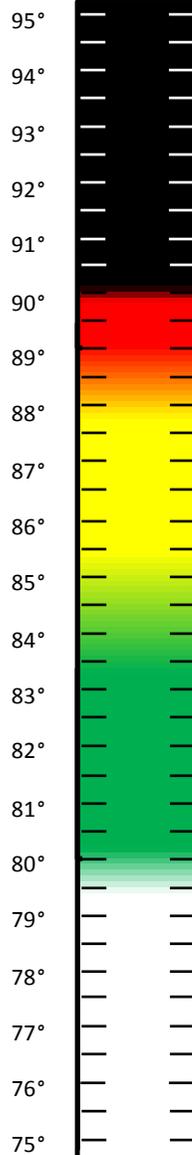
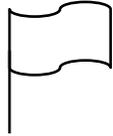
85-87.9° Strenuous exercise and activity should be curtailed for new and unacclimatized personnel during the first 3 weeks of heat exposure.



80-84.9° Discretion required in planning heavy exercise for unacclimatized personnel.



Less than 80° Extreme physical exertion may precipitate heat exhaustion or heat stroke, therefore, caution should be taken.



Injury Symptoms and First Aid

Heat injuries can happen at any temperature; know the signs and symptoms!

Heat Stroke is damage to the brain due to heat. If the person is not cooled immediately, the damage may worsen, become permanent, or lead to death. In addition to symptoms of heat exhaustion (below), may have altered mental status, be unresponsive, and have convulsions. Remove the person from heat, remove clothing, apply cool water or ice to head, neck, armpits, and groin. Arrange transport to the emergency room while continuing to cool the victim.

Heat Exhaustion occurs when a person can no longer effectively cool himself. Without cooling may progress to heat stroke. Symptoms can include headache, irritability, confusion, nausea, vomiting, weakness, dizziness, and thirst. Water, rest, and immediate cooling are critical. More severe cases can be recognized by elevated core body temperature, confusion, and lack of prompt response to water and rest. Emergently transport to medical care.

Rhabdomyolysis (muscle breakdown) may result from exertion in heat. Muscle pain, swelling, and dark urine should be evaluated emergently by a physician.

Heat Syncope or Fainting (includes light-headedness and dizziness). Sit or lie down in a cool area and drink water.

Heat Cramps are from strenuous work in a hot environment. Rest in a cool area and drink water.

Heat Rash or "Prickly Heat" (itchy, tiny red bumps around sweat ducts). Cool the person, especially the skin (i.e., apply a cool, wet washcloth).

Environmental Risk Factors

Hot, humid weather, no breeze or wind, exposure to direct sun or other radiant heat sources.

*WBGT Index is NOT the air temperature! It takes into account temperature, humidity, wind, and radiant heat (sun exposure).

Individual Risk Factors

Restrictive clothing, protective gear, physical exertion, dehydration, certain medications, recent illness, lack of acclimatization (new to area or recent change from cool to warm environment)