





## **Heat Illness**

Clinical Description, Critical reporting Elements, and Comments

## **Clinical Description:**

- Heat Illness encompasses a spectrum of acute conditions associated with exertion or heat exposure.
- <u>Heat Exhaustion</u>: Heat exhaustion (HE) is defined as the inability to continue physical activity due to competing demand for cardiac output between thermoregulation and metabolic requirements. Clinically, HE may present as weakness, fatigue, ataxia, dizziness, headache, nausea, vomiting, and malaise in individuals with a core body temperature less than 104°F or 40°C. HE may be accompanied by evidence of end organ damage (Hypo/hyperkalemia, elevated aspartate aminotransferase (AST) or alanine aminotransferase (ALT), elevated creatinine kinase (CK), rhabdomyolysis/myoglobinuria). HE resolves rapidly with minimal cooling intervention.
- Heat Stroke: Heat stroke (HS) is defined as an elevated core body temperature associated with central nervous system (CNS) dysfunction. Clinically, HS presents as hyperthermia, physical collapse or debilitation, and encephalopathy as evidenced by a change in mental status, delirium, stupor, or coma, occurring during or immediately following exertion or significant heat exposure. HS may be complicated by organ and/or tissue damage, systemic inflammatory activation, and disseminated intravascular coagulation. Heat stroke will likely be the working diagnosis for any Service member with altered mental status and exposure history consistent with heat illness.

## **Critical Reporting Elements and Comments:**

- Specify type of illness (HS vs HE).
- Document the circumstances under which the case patient was exposed; i.e., duty exposure, occupational activities, environmental exposures, or other high-risk activities.
- Enter wet bulb globe temperature, if available.
- Enter the core body temperature, if available.