

Tempe Fire Department Policies and Procedures

Heat Stress Management

205.09

Rev 1-20-05

PURPOSE

The purpose of this procedure is to establish guidelines and responsibilities for minimizing the effects of heat stress to department members. The effects of heat on the human body can be devastating and life threatening for firefighters, especially during fires, long rescues, and hazardous materials situations. Heat stress causes more demand on the heart and the body's cooling system and if heat is not dissipated can lead to severe health problems such as heat cramps, heat exhaustion, heat stroke or even heart attacks. Probably the best method of controlling heat stress is through prevention measures. The following practices are to be implemented whenever temperatures are expected to exceed 105 degrees or whenever the combination of air temperature and humidity equal a humidity index of 105 degrees. Taking in appropriate fluids and including fruits, such as bananas in ones diet can significantly reduce the likelihood of suffering the ill effects of heat stress.

MEMBER'S RESPONSIBILITIES

Each member is responsible for:

- Maintaining proper rest/nutrition regimen
- Observing appropriate work/rest cycles
- Hydrating before, during, and after each shift, a minimum of 64 ounces (2 quarts) of water or electrolyte solution should be consumed during the 24 hour shift. (minimize coffee, Tea, and cola products)
- Informing his/her supervisor of any ill effects to heat

COMPANY OFFICER'S RESPONSIBILITIES

Company officers are responsible for monitoring/managing:

- Cardiovascular activity (running). Shall be limited to a maximum of 30 minutes.
- Consider switching physical fitness to indoor afternoon activities and do outside activities in the morning.
- Hydration during the 24 hour shift.
- Work/rest cycles--request a relief company and assignment to rehab after crew has consumed two bottles of air.
- Having crew evaluated for heat stress in Rehab by ALS crew
- Company activity and request additional resources as necessary.
- Request to be relieved from duty if crew is unable continue to function safely.
- Limit outdoor training to morning hours if possible.

COMMAND RESPONSIBILITIES

- Establish a Rehab Sector, with an ALS component on all working fires.
- Assign companies to Rehab Sector as needed or requested (companies shall remain in rehab for a minimum of 20 minutes and be evaluated for heat stress before leaving).
- Utilize the practice of first Company in, first Company out routine.
- Request additional resources as necessary.
- Consider relieving crews from duty that are unable to function safely due to heat stress

DISPATCH/DEPLOYMENT RESPONSIBILITIES

- Announce the projected high temperature for the day.
- 3 & 1 assignment--one additional relief Company, ambulance, and the Rehab van will be dispatched on all working structural fires when temperature/humiture index is 105 degrees or higher
- 1st Alarm--one additional relief Company, ambulance, and the Rehab van will be dispatched on all working 1st Alarm assignments same as above.