LOOKOUTS
COMMUNICATION
ESCAPE ROUTES
SAFETY ZONES

Volusia County Fire Services Safety Gram

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Heat Stress

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Heat stress may cause serious illness from heat cramps, heat exhaustion, and heat stroke. There are measures that a firefighter can use to prevent heat stress illness. Physical fitness, hydration and using the rehabilitation policy will help combat heat stress.

Firefighters prevent heat disorders by improving their levels of fitness and becoming acclimated to the heat. By maintaining aerobic fitness firefighters will have a well-developed circulatory system and increased blood flow. This causes the body to regulate body temperature and lower heart rate. Fit firefighters will adjust twice as quickly as an unfit firefighter.

Being aerobically fit is only one of the key elements, drinking plenty of water is another element. At the beginning of the shift, drink extra fluid such as one to two cups of water, juice, or sport drink to assist you for the hot day ahead. Coolers on board apparatus must be cleaned and refreshed each day with ice and water. While working, take several fluid breaks every hour, drinking at least one quart of fluid. Drink as much as you can during the lunch break. Water intake is most important during work in the heat. Electrolyte sport drinks will also assist in retaining fluids, electrolytes, and maintaining energy levels.

Battalion Commanders shall be aware of the need for hydration during a motor vehicle accident, structure fire and brush fire. Commanders shall consider the circumstances of each incident and make adequate provisions early in the incident for the rest and rehabilitation for all members operating at the scene. The Incident Commander must call out a second or third alarm to meet the criteria of Incident Personnel Rehabilitation S.O.G. 103.002.

Lieutenants shall maintain an awareness of the condition of each member operating within their span of control and ensure that adequate steps are taken to provide for each member's safety and health. The command structure shall be utilized to request relief and the reassignment of fatigued crew.

There is no excuse for heat exhaustion, heat stroke, or any injuries due to fatigue on the fire ground.

Refer to Incident Personnel Rehabilitation S.O.G. 103.002.

Dispersion level Chart

Dispersion Range 0-40 is stable air, low fire intensity, less long range spotting.

Dispersion Range 41-70 is moderate unstable air, increased fire intensity and long range spotting.

Dispersion Range 70+ is unstable air, high amount of upper lifting, intense fire activity, potential for long range spotting and plume dominated wildfires.

Fight fire aggressively, but provide for safety first.
Initiate all action based on current and expected fire behavior.
Recognize current weather conditions and obtain forecasts.
Ensure instructions are given and understood.

Obtain current information on status.
Remain in communication with crewmembers, your supervisor, and adjoining forces.
Determine safety zones and escape routes.
Establish lookouts in potentially hazardous situations.
Remain in control at all times.
Stay alert, keep calm, act decisively.
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