

State Fire Marshal Training Division

8-29-07

Fire Department Preparatory Guide – Hydration Policy

Purpose: The State Fire Marshal Training Division has implemented a Hydration Policy for the protection of students and instructors. SFMTD Instructors will monitor weather conditions for any training session or testing site, however the SFMTD is unable to control or monitor activities of fire department personnel prior to their arrival at the class or test location. Therefore, it is imperative that local officers make sure all department members are properly prepared for the upcoming training/testing evolutions.

Guide: This guide addresses procedures and precautions for preparation for the upcoming class/course/test site, detailing information for properly hydrating any member who will be attending the function; and who will be physically involved – requiring the use of full personal protective equipment and involved in strenuous activities.

NOTE: Even though this guide does not specifically address other extreme weather conditions, the SFMTD Environmental Conditions Guide is posted on our website. It addresses extreme heat, extreme cold and inclement weather preparation.

Procedure: The Lead Instructor for the SFM Training Division is required to adhere to the policy for training or testing evolutions that are physically demanding. Attendees will be briefed before the training or testing begins, and students will be monitored throughout the evolutions.

The SFMTD policy will not circumvent any local policies, as long as those policies are more stringent than the SFMTD policy/guidelines. If you have policies that address weather conditions or other concerns for fire fighter protection, discuss them with the Lead Instructor prior to the commencement of the course.

The following suggestions and recommendations need to be discussed with your personnel a few days before the upcoming training or testing. If questions arise because of these guides, contact the Lead Instructor for additional information.

Extreme Heat Conditions-

Environmental conditions have proven to have a significant impact on an individual's physiological response to physical activity. Factors such as age and physical condition of individuals may affect susceptibility to heat disorders.

Inform your personnel of the following guidelines that will be adhered to at the training/testing location.

- The SFMTD Instructors may consider conditions as dangerous when the heat index is between 100°F and 110°F. The use of full personal protective clothing may increase the heat index by another 10°F; therefore any decisions to conduct the training/testing will require all participants to adhere to the orders of the Instructors.
- Instructors will monitor students before, during and after the training or testing. They will not permit excessive consumption of water or fluids, which is an attempt to hyperhydrate (excessive consumption of fluids in an attempt to over hydrate so dehydration doesn't become a problem). Students will be required to take breaks between strenuous activity periods of 15 to 20 minutes, and the students will be required to report to a rehab area for rest and rehydration.
- **Hydration Suggestions/Recommendations**
 - Drink at least eight 8-ounce servings of water each day in addition to what is consumed in fruit juice and/or sports drinks.
 - Do not wait until you are thirsty to drink water, you have probably already lost two or more cups of your total body water and your performance will suffer.
 - Do not substitute beverages with alcohol or caffeine for water. They act as diuretic beverages and can cause water loss through increased urination. This suggestion also applies to the day prior to the training/testing.
 - On training days, drink three glasses of water two hours before you begin the training/testing, and then two glasses 10-15 minutes before your activities.
 - Once training begins, drink up to 1 liter (approximately 1 quart) of water per hour (not all at once), either as pure water or an isotonic carbohydrate drink, throughout the training/testing session. DO NOT attempt hyperhydration! Gatorade should be mixed with water to make a 50-50 drink.
 - Do not underestimate the amount of fluids lost from perspiration. Following exertion, drink two cups of water for each pound lost.
 - Physical activity the day before the training/testing evolutions must be monitored and addressed. Don't come to the training/testing location already dehydrated.

Disclaimer-

The SFMTD Hydration Policy and subsequent Guides are written for the protection of personnel involved with strenuous physical activities for training or testing. The Policy will provide merit for the development of a policy and guidelines for emergency response, but should not be considered complete for these purposes. The SFMTD shall not be held accountable for any occurrences whereas the Policy or Guide is used for any purpose other than what it was written for.

Credit for the information contained in this Guide is given to the University of Maryland, Maryland Fire and Rescue Institute; and to the Center for Fire Fighter Safety Research and Development, located at the Maryland Fire and Rescue Institute at College Park. The release of the publication called "Health and Safety Guidelines for Firefighter Training" was the main source of information for the SFMTD Guide, as reference for the Hydration Policy.