



**MONTGOMERY COUNTY
FIRE AND RESCUE SERVICE**

25-06AM

Policy and Procedure

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**Public Safety Training Academy
Operations During Inclement Weather**

08/16/2022

Issued by: Fire Chief Scott E. Goldstein

Policy Number: 25-06AM

Authority: Montgomery County Code Section 21-3 (b)

Supersedes: 25-06, dated March 13, 2018

Effective Date: 08/16/2022

SECTION 1. Purpose:

To establish a policy and procedure that governs the actions of MCFRS personnel while training during extreme weather conditions.

SECTION 2. Applicability:

This policy applies to all MCFRS personnel and those from other organizations, participating in Public Safety Training Academy (PSTA)-sponsored training.

SECTION 3. Background:

Operations conducted during extremes in hot or cold temperatures or other extreme weather conditions have a high potential for causing illness or injury. Outdoor operations involving strenuous physical activity conducted in hot weather and direct sun increase the risk of heat-related illness. Exposure to environmental cold can lead to cold stress and injury, particularly when coupled with increased wind speed. Additionally, thunderstorms have potential to expose personnel to risk of injury or death in the presence of cloud-to-ground lightening.

SECTION 4. Definitions:

- a. **Acclimatization** – The ability of the body to undergo physiological adaptations so that the individual can cope better with the environmental and physiological heat stress. Acclimatization may take place over several days but is reversible after cessation of exposure. Heat acclimatization increases sweating (by 50-100%) and this enhances the evaporative cooling capacity of the body. Increased sweating, however, can lead to dehydration. As such, individuals can adapt to heat (i.e., they can acclimatize), but not to dehydration. Physically fit individuals acclimatize more rapidly than the less fit.
- b. **Environmental Condition Assessment for Training (ECAT)** form used by instructors to record environmental conditions while training on or off site of the PSTA.



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- c. **Heat Stress Index** – A method used to estimate the impact of the thermal environment on a person. The Heat Stress Index is expressed as a Wet Bulb Globe Temperature reading, which considers the combined effect of air temperature, air speed, humidity, and solar radiation.
- d. **Outdoor Alerting System (OAS)** – An electronic instrument that monitors and alerts when cloud-to-cloud and cloud-to-ground lightning is detected within a 10-mile radius of the PSTA.
- e. **PSTA-Sponsored Training** – Any training occurring on PSTA property or where the MCFRS PSTA, or one of its representatives or managers has provided a MICRIB-certified instructor to facilitate, lead, or deliver training to other personnel, whether civilian or uniformed.
- f. **Wet Bulb Globe Temperature** – WBGT is calculated by temperature readings from three thermometers on the WBGT instrument, including a dry bulb, wet bulb and black globe.

SECTION 5. Policy:

- a. It is the policy of MCFRS that all PSTA-sponsored training, whether at the PSTA or offsite, will adhere to the procedures set forth within. Where training may be bound by more than one weather policy, MCFRS personnel will follow the policy that is more stringent.
- b. All personnel are responsible for recognizing the signs and symptoms of environmental emergencies and initiating appropriate treatment in accordance with established protocols, policies and procedures.
- c. All personnel will seek shelter upon activation of the Outdoor Alerting System (OAS).
- d. A student's level of fatigue will supersede any work/rest schedule; the lead instructor is ultimately responsible for making necessary adjustments to address perceived changes in level of fatigue.
- e. The lead instructor shall use discretion with regard to outside activity cancellation or modification and should consider other factors such as time of day and type of activity when making heat-related decisions.
- f. WBGT will be the primary environmental reading used during all PSTA-sponsored training to determine permitted activities; 10°F will be added to the WBGT when personnel are wearing turn-out gear, encapsulation suits, or whole-body chemical protective suits
- g. Extreme Heat:
 - 1. Outside training activities requiring physical activity or full protective clothing shall not be conducted when the heat index reaches more than 110°F. Consideration should be given to the factors that full protective clothing will add 10° to the heat index value, and age/physical condition of individual students may affect susceptibility to heat disorders.



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Where the heat index is between 100° and 110° F, conditions may be considered hazardous and outside training shall be adjusted accordingly.

2. Outside training activities requiring physical activity or full protective clothing may be conducted under the following conditions:
 - A. Live-fire and structural burns should be evaluated case by case.
 - B. Activities other than live firefighting can be safely conducted with reduced protective clothing at the discretion of the lead instructor.
 - C. An adequate supply of cool drinking water is available at the training site.
 - D. Strenuous physical activity is monitored and limited to 15 to 20 minutes and followed by a corresponding rest period.
 - E. A rehabilitation area is established for rest and rehydration (a cool, shady area is preferred).
- h. Extreme cold:
 1. Wind chill factors may vary depending on the training location's proximity to wind barriers. Frostbite is possible at temperatures less than 0 °F and temperatures are considered dangerous at 20° F. Outside training activities should not be conducted when the wind chill factor is less than 20° F, unless:
 - A. Students are properly dressed for an appropriate cold weather activity;
 - B. The cold weather will not affect the safe and proper function of tools, equipment, and apparatus;
 - C. An adequate supply of warm liquids and/or food is available at the training site;
 - D. Strenuous physical activity is monitored and limited to 15 to 20 minutes;
 - E. A heated indoor rehabilitation area is in close proximity to the training site;
 - F. When conducting outside training activities in temperatures where climbing/walking surfaces are subject to freezing and may create a slip hazard, instructors shall exercise due caution.
- i. Other Conditions: Instructors shall consider other extreme weather-related conditions and modify or cancel outside training activities accordingly. These conditions include but are not limited to high winds, snow, ice, sleet, hail, rain, lightning, thunderstorm (active or warning), and tornado warning.



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SECTION 6. Responsibilities:

- a. All personnel are responsible for ensuring the safety and well-being of themselves and other personnel present at the PSTA and are expected to alert the lead instructor when there is a safety concern.
- b. The lead instructor is responsible to monitor weather conditions (extremes in temperature, impending storms, etc.) and make decisions consistent with their findings.

SECTION 7. Procedure:

- a. The Lead Instructor will obtain a WBGT reading or National Weather Service heat index prior to every outdoor training activity and tailor work/rest cycles accordingly.
- b. The Lead Instructor or his/her designee will record the WBGT, time, and his/her name on an Environmental Condition Assessment for Training (ECAT) form for every outdoor session. If a WBGT reading is unavailable, the latest heat index, according to the National Weather Service for the zip code of the training, will be utilized.
- c. The Lead Instructor will ensure a WBGT reading is obtained and recorded on the ECAT at least every 3 hours during training.
- d. All ECATs will be submitted with class files.
- e. The Lead Instructor shall ensure an appropriate rest area, which provides shelter from the elements, a sitting area, cross-ventilation, and water, is available to participants.
- f. The Lead Instructor will ensure availability of fans in training areas during periods of extreme heat.

SECTION 8. Cancellation:

This policy supersedes Policy 25-06, *PSTA Operations During Inclement Weather*, dated March 13, 2018.

SECTION 9. Attachments:

Appendix A: Environmental Condition Assessment for Training



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Approved:

A handwritten signature in black ink that reads "Scott Goldstein". The signature is written in a cursive style and is contained within a thin black rectangular border.

Scott E. Goldstein
Fire Chief

08/16/2022

