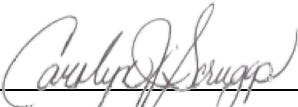





PSETC Facility Directive


Carolyn J. Scruggs
 Secretary

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| Title: Heat-Related Illness Prevention and Management Plan | Directive Number: PSETC.055.0013 |
| Related MD Statute/Regulations: COMAR 09.12.32 | Supersedes: N/A |
| Related ACA and MCCS Standards: N/A | Responsible Authority:  <hr style="width: 100%;"/> Kathleen M. Gossard Executive Director Public Safety Education and Training Center |
| Related Directives/Manuals: DPSCS.055.0013 - Prevention of Heat-Related Illness and Injury During Exposure to Heat and Hot Environments | |
| Issued Date: July 1, 2025 Effective Date: July 1, 2025 | Number of Pages: 14 |

.01 Purpose.

This directive establishes procedures to prevent heat-related illnesses as recommended by Maryland Occupational Safety and Health (MOSH), the U.S. Department of Labor’s Occupational Safety and Health Administration (OSHA), the National Institute for Occupational Safety and Health (NIOSH) and in compliance with the Maryland Heat Stress Standard outlined in the Code of Maryland Regulations (COMAR) 09.12.32.

.02 Scope.

- A. This directive applies to all Department of Public Safety and Correctional Services (Department) administrative and operational units assigned to the Public Safety Education and Training Center (PSETC) whose employment activities, indoor or outdoor, expose staff, students, or visitors to a heat index rating that equals or exceeds 80 degrees Fahrenheit.
- B. This directive does not apply to:
 - (1) Emergency operations and essential services that involve protecting life or property;
 - (2) Incidental exposures when staff are not required to perform work activities for more than 15 consecutive minutes per hour; or
 - (3) Buildings, structures, and vehicles that have a mechanical ventilation system or fan that maintains a heat index below 80 degrees Fahrenheit.
- C. Resident partners and public safety agencies with current PSETC user agreements, shall comply with the heat-related illness standards outlined in COMAR and their departmental policies.

.03 Policy.

To ensure appropriate measures are enacted to manage and mitigate the risks of heat-related illness to staff, students, and visitors.

.04 Definitions.

A. In this directive, the following terms have the meanings indicated.

B. Terms Defined.

- (1) “Acclimatization” means the body’s temporary adaptation to work in heat that occurs as a person is exposed over time.
- (2) “Alternate cooling and control measures” means engineering, work-practice, administrative, or other controls to manage heat.
- (3) “Designated monitor” means a staff member assigned by the PSETC Executive Director to monitor and implement heat related prevention procedures at PSETC.
- (4) “Drinking water” means potable water that is safe to drink and cool in temperature.
- (5) “Dynamic Training” means training which there is a possibility of strenuous exertion and/or required protective equipment to protect from injury or exertion.
- (6) “Emergency operations and essential services” means work in connection with an emergency that requires the involvement of one or more of the following entities:
 - (a) Law enforcement;
 - (b) Emergency medical services;
 - (c) Firefighting;
 - (d) Rescue and evacuation operations; or
 - (e) Emergency restoration of essential utilities or telecommunications.
- (7) “Executive Director” means the Executive Director of PSETC.
- (8) “Heat index” means a measure of how hot it feels when relative humidity is taken into account along with the actual air temperature, which can be extrapolated from temperature and relative humidity using the National Weather Service Heat Index Calculator.
- (9) “High heat conditions” means working conditions where the heat index of the work area equals or exceeds 90 degrees Fahrenheit.
- (10) “Job rotation” means a practice where staff members are moved between different tasks or jobs to reduce their overall exposure to high temperatures and physical exertion.

- (11) “Mechanical ventilation system” means a system that uses mechanical devices like fans and ducts to move air and regulate temperature.
- (12) “MOSH” means Maryland Occupational Safety and Health.
- (13) “NIOSH” means the United States Centers for Disease Control and Prevention’s National Institute for Occupational Safety and Health.
- (14) “NOAA” means the National Oceanic and Atmospheric Administration.
- (15) “OSHA” means the U.S. Department of Labor’s Occupational Safety and Health Administration.
- (16) “Personal protective equipment” means equipment worn to minimize exposure to hazards that could cause serious workplace injuries and illnesses.
- (17) “Physical Conditioning” means the development of physical fitness through the adaptation of the body and its various systems to an exercise program.
- (18) “PSETC” means the Maryland Public Safety Education and Training Center.
- (19) “PTC” means the PSETC Physical Training Center.
- (20) “Resident partners” means those agencies and their personnel that maintain administrative offices and classroom space at the PSETC for the purpose of conducting business on behalf of their agencies.
- (21) “Shade or shaded areas” means areas where there is blockage of direct sunlight.
- (22) “Staff” means a member of the Department’s administrative or operational units assigned to PSETC and individuals attending law enforcement and correctional training academies conducted by PSETC regardless of employer.

.05 Procedure.

A. Management and Oversight.

- (1) The Executive Director has primary operational authority and responsibility to monitor and implement heat-related illness prevention procedures throughout PSETC.
- (2) Designated Monitors.
 - (a) Deputy Director;
 - (b) Director of Correctional Training;
 - (c) Director of Law Enforcement Training;
 - (d) Director of Support Services; and

(e) PTC Manager.

- (3) Staff conducting PSETC training shall ensure the applicable procedures included in this directive are applied to students.

B. Heat Index Monitoring.

- (1) Throughout working shifts, designated monitors, or a monitor's designee, shall monitor the heat index where staff is working using:
- (a) The NOAA Heat Index Chart (Appendix A) utilizing direct measurements of the temperature and humidity at the same time and location in the areas where staff perform work;
 - (b) Local weather data reported by the National Weather Service; or
 - (c) The NIOSH Heat Safety Tool smartphone application.
- (2) In buildings, structures, and vehicles, designated monitors, or their designee, shall directly measure the temperature and humidity at the same time and location in areas where staff is performing work or activities.

C. Acclimatization.

- (1) Supervisors shall provide for acclimatization of exposed employees for a period of up to 14 days:
- (a) When a staff member is newly exposed to heat in the workplace; and
 - (b) When a staff member returns to work after 7 or more consecutive days of absence from the workplace.
- (2) Acclimatization schedules shall be incorporated into law enforcement and correctional training academy schedules.
- (3) A task specific PSETC Acclimatization Schedule (Appendix B) shall be developed for staff exposed to a heat index above 80 degrees Fahrenheit prior to work beginning.
- (4) The acclimatization schedule shall be in writing and consider the following elements:
- (a) Acclimated and unacclimated staff;
 - (b) Environmental conditions;
 - (c) Anticipated workload;
 - (d) The impact of required clothing and personal protective equipment to the heat burden on staff;
 - (e) Personal risk factors that put staff at a higher risk of heat-related illness;

- (f) Re-acclimatizing staff as necessary; and
 - (g) The use of alternate cooling and control measures.
- (5) The acclimatization schedule shall gradually increase exposure time over a 5 to 14-day period, with a maximum 20 percent increase each day.
 - (6) Supervisors shall implement the acclimatization schedule and monitor staff during the acclimatization period for signs of heat-related illness through regular communication via:
 - (a) Direct supervision;
 - (b) Phone or radio;
 - (c) Staff; or
 - (d) Other effective means of observation approved by the Executive Director or a designated monitor.
 - (7) Acclimatization schedules shall be approved by the staff member's unit director and submitted to the Office of the Executive Director once completed.
 - (8) Acclimatization schedules shall be maintained electronically by the Office of the Executive Director for a period of 1 year from schedule completion.

D. Shade.

- (1) Supervisors shall ensure shaded areas are provided to exposed staff, working outdoors, in an area that is as close to the worksite as possible.
- (2) In the event staff changes locations during a shift, shaded areas shall be relocated, or new shaded areas provided as close to the worksite as possible.
- (3) Shaded areas shall be established prior to work or activities being performed.
- (4) Shaded areas shall:
 - (a) Be outside, open, and exposed to air on at least 3 sides;
 - (b) Prevent contributing heat sources from reducing the effectiveness of the shaded areas;
 - (c) Be sufficiently sized for the number of staff utilizing the shaded area;
 - (d) Be arranged in a configuration that allows staff to sit in normal posture; and
 - (e) Accommodate the removal and storage of personal protective equipment during periods of use.
- (5) If creating a shaded area is demonstrably infeasible or unsafe, supervisors shall implement alternate cooling and control measures that provide equivalent protection to shade.

- (a) Approved alternate cooling and control measures include:
 - (i) Job rotation; and
 - (ii) Mechanical ventilation systems.
 - (b) Alternate cooling and control measures shall be readily available while work is being performed.
 - (c) When alternate cooling and control measures are implemented, their use shall be documented in writing on a PSETC Internal Memo (Appendix C) and forwarded to the Office of the Executive Director.
 - (d) The Office of the Executive Director shall electronically maintain the PSETC Internal Memo documenting alternate cooling and control measures for a period of 1 year.
- (6) Indoor or vehicular mechanical ventilation systems may be used as an alternative to shaded areas if they:
- (a) Prevent contributing heat sources from reducing the effectiveness of the ventilation system;
 - (b) Are sufficiently sized for the number of staff utilizing the ventilation system;
 - (c) Allows staff to sit in normal posture; and
 - (d) Accommodate the removal and storage of personal protective equipment during periods of use.

E. Drinking Water.

- (1) Supervisors shall ensure that each staff member is provided with ready access to at least 32 ounces of cool drinking water per working hour.
- (2) Water shall be free of charge to staff.
- (3) The total drinking water supply does not need to be distributed at the beginning of shifts, but sufficient quantities shall be available while work is being performed.
- (4) Drinking water shall be located in an area located as close to the worksite as possible.
- (5) In the event staff changes locations during a shift, water shall be relocated, as close to the worksite as possible.
- (6) Water can be provided by:
 - (a) Pre-packaged bottles;
 - (b) Refillable coolers or containers;

- (c) Fountains; or
 - (d) Faucets.
- (7) Staff shall be verbally encouraged to drink at least 4 ounces of water every 15 minutes while working in the heat by supervisors and co-workers not just if they are thirsty.
- (8) Water shall not be used as a reward or for discipline.
- (9) Staff may use the OSHA Urine Color Chart (Appendix D) to evaluate their hydration levels.

F. Work Severity and Duration Adjustments.

- (1) The following procedures shall be implemented in environments where the heat index is 80 degrees Fahrenheit or higher:
- (a) Slower paced and less demanding task shall be scheduled during the hotter parts of the day, and heavier, more difficult tasks shall be scheduled during the cooler parts of the day (early morning or evening);
 - (b) Nonessential tasks shall be postponed until the temperature lowers;
 - (c) Staff shall be rotated through tasks to allow breaks from fast-paced, physically demanding work;
 - (d) Supervisors shall encourage staff to take regular breaks throughout the workday;
 - (e) Supervisors shall observe staff behavior and physical conditions for signs and symptoms of heat-related illness;
 - (f) Staff shall observe their co-workers' behavior and physical conditions for signs and symptoms of heat-related illness; and
 - (g) Supervisors shall ensure that staff has an accessible means of communication at all times at the worksite to contact supervision, co-workers, or emergency medical services if needed.
- (2) The following additional high heat procedures shall be implemented in environments where the heat index is 90 degrees Fahrenheit or higher:
- (a) A minimum rest period of 10 minutes for every 2 hours where staff is exposed to a heat index above 90 degrees Fahrenheit and below 100 degrees Fahrenheit;
 - (b) A minimum rest period of 15 minutes for every hour where staff is exposed to a heat index above 100 degrees Fahrenheit;
 - (c) Rest periods may coincide with a scheduled meal period;
 - (d) Rest period shall be taken in shade;

- (e) Supervisors and staff shall not discourage other staff members from resting or taking breaks as needed to prevent heat-related illness; and
- (f) Supervisors shall monitor exposed staff for signs of heat-related illness through regular communication via:
 - (i) Direct supervision;
 - (ii) Phone or radio;
 - (iii) In-person observation by non-supervisory staff; or
 - (iv) Other effective means of observation approved by the Director of Support Services or a designated monitor.
- (3) Supervisors shall ensure work and rest schedules are adjusted to protect staff from heat-related illness for a change in environmental conditions, workload, and for the impact of required clothing and personal protective equipment.

G. Physical Conditioning and Dynamic Training.

- (1) PSETC has implemented procedures based off the Federal Law Enforcement Training Centers Heat Stress Guidelines.
- (2) Training participants shall:
 - (a) Report any physical or medical conditions to staff conducting training sessions:
 - (i) Before training if present; and
 - (ii) During or after training sessions as soon as discomfort is felt;
 - (b) Ensure they are properly hydrated prior to training sessions;
 - (c) Have water readily available; and
 - (d) Wear lightweight breathable clothing during physical conditioning training sessions.
- (3) Staff conducting the training sessions shall:
 - (a) Monitor the heat index indoor and outdoor, every hour;
 - (b) Document the heat index on the PSETC Physical/Dynamic Training Safety Check List (Appendix E) and retain with training records;
 - (c) Adjust training accordingly when the heat index increases or decreases;
 - (d) Monitor participants for the signs and symptoms of heat related illnesses and treat heat related illnesses accordingly;

- (e) Have a first aid kit, an AED, water, and a communication device readily accessible at all times; and
 - (f) Encourage participants to consume water at the rate of at least 4 ounces for every 15 minutes of training.
- (4) Outdoor Physical Conditioning.
- (a) When the heat index is above 65 degrees Fahrenheit:
 - (i) Training participants shall not be required to wear clothing that covers the arms and/or legs;
 - (ii) A minimum rest period of 10 minutes for every 50 minutes of training shall be provided;
 - (iii) Rest periods shall be taken in shade; and
 - (iv) Training sessions shall be limited to a maximum of 2 hours.
 - (b) When the heat index is 80 to 84.9 degrees Fahrenheit, training sessions shall be limited to a maximum of 50 minutes.
 - (c) When the heat index is 85 to 89.9 degrees Fahrenheit, training sessions shall be limited to a maximum of 30 minutes.
 - (d) When the heat index is above 90 degrees Fahrenheit, training sessions shall be moved indoors or rescheduled.
- (5) Outdoor Dynamic Training.
- (a) In any 2-hour training session when the heat index is below 84.9 degrees Fahrenheit, a minimum rest period of 10 minutes for every 50 minutes of training shall be provided.
 - (b) In any 2-hour training session when the heat index is 85 to 88.9 degrees Fahrenheit, a minimum rest period of 10 minutes for every 30 minutes of training shall be provided.
 - (c) When the heat index is above 90 degrees Fahrenheit, all outdoor training courses shall be modified as necessary to ensure training is conducted safely. Modifications include:
 - (i) Moving the training indoors;
 - (ii) Increased rest periods; and
 - (iii) Decreasing the physical intensity of the training.

H. Emergency Response Procedures.

- (1) PSETC has implemented the First Aid for Heat Illness procedures recommended by NIOSH (Appendix F).

(2) General Instructions.

- (a) Supervisors and staff shall monitor each other for the signs and symptoms of heat-related illness.
- (b) When signs and symptoms of a heat-related illness are suspected, working shall stop immediately and supervision shall be notified.
- (c) 911 shall be contacted:
 - (i) Whenever a staff member has an altered state of mind;
 - (ii) Their condition is worsening or not improving; and
 - (iii) When heat syncope, heat exhaustion, or heat stroke are suspected.
- (d) Retrieve necessary equipment or supplies if needed. Utilize a second individual to perform these tasks if available.
- (e) Provide care if properly trained. If not properly trained to render aid, send someone to locate properly trained staff.
- (f) Do not move the injured person unless they are in danger or their location is inaccessible to emergency responders.
- (g) Send someone to meet the emergency responders and guide them to the patient.

(3) Heat Rash.

(a) Signs and Symptoms.

- (i) Red cluster of pimples or small blisters, usually on the neck, upper chest, groin, under breasts, or in elbow creases.
- (ii) Extensive areas of skin that do not sweat on heat exposure, but present a goose bump appearance that subsides with cool environments.

(b) Treatment.

- (i) When possible, a cooler, less humid work environment is the best treatment.
- (ii) Keep rash area dry.
- (iii) Do not use ointments or creams, as they may impair cooling – warm, moist skin can make the rash worse.

(4) Heat Cramps.

(a) Signs and Symptoms.

- (i) Muscle cramps, pain, or spasms in the abdomen, arms, or legs.
 - (ii) Heavy sweating.
 - (b) Treatment.
 - (i) Drink fluids every 15 to 20 minutes and eat a snack or consume a sports drink.
 - (ii) Avoid salt tablets, but drinks containing electrolytes are okay.
 - (iii) Contact emergency medical services when the staff member has heart problems, a low sodium diet, or if cramps do not subside within 1 hour from onset.
- (5) Heat Syncope.
- (a) Signs and Symptoms.
 - (i) Fainting.
 - (ii) Dizziness.
 - (iii) Light-headedness after standing or suddenly rising from a sitting/lying position.
 - (b) Treatment.
 - (i) Sit or lie down in a cool place when beginning to feel faint or dizzy.
 - (ii) Slowly drink water or a clear juice.
- (6) Heat Exhaustion.
- (a) Signs and Symptoms.
 - (i) Headache.
 - (ii) Nausea.
 - (iii) Dizziness or weakness.
 - (iv) Irritability.
 - (v) Thirst/heavy sweating.
 - (vi) Elevated body temperature.
 - (vii) Decreased urine output.
 - (b) Treatment.
 - (i) Contact emergency medical services.
 - (ii) Remove staff member from the hot area and provide liquids to drink.

- (iii) Remove unnecessary clothing, including shoes and socks.
 - (iv) Cool staff member with water, cold compresses, an ice bath, or fans.
 - (v) Encourage frequent sips of cool water.
- (7) Heat Stroke.
- (a) Signs and Symptoms.
 - (i) Confusion or an altered mental state.
 - (ii) Slurred speech.
 - (iii) Loss of consciousness.
 - (iv) Hot, dry skin or profuse sweating.
 - (v) Seizures.
 - (vi) Very high body temperature.
 - (b) Treatment.
 - (i) Contact emergency medical services immediately.
 - (ii) Move staff member to a cool area and remove clothing.
 - (iii) Immerse staff member in a tub of ice water.
 - (iv) If a tub is not available, place worker in a tarp with ice and water.
 - (v) If cold water immersion is not possible, soak staff member in water from a hose or shower, and apply cold, wet towels to as much of the skin as possible, and replace towels frequently.

I. Education.

- (1) Heat stress training shall be developed and updated as needed by the Director of Support Services, the Director of Correctional Training, and the Director of Law Enforcement Training, or their designees, utilizing reference information available through MOSH, OSHA, NIOSH, or other recognized sources.
- (2) The training shall be presented in a language, manner, and format that all staff can understand.
- (3) At a minimum, training shall include:
 - (a) The work and environmental conditions that affect heat-related illness;
 - (b) The personal risk factors that affect heat-related illness;

- (c) The concept, importance, and methods of acclimatization;
 - (d) The importance of frequent consumption of water and rest breaks in preventing heat-related illness;
 - (e) The types of heat-related illness, signs and symptoms of heat-related illness, and the appropriate first aid and emergency response measures;
 - (f) The importance of and procedures for staff immediately reporting to the employer signs and symptoms of heat-related illness; and
 - (g) A review of this directive.
- (4) Heat stress training shall be approved by the Executive Director and conducted by staff.
 - (5) Initial heat stress training shall be provided to staff prior to their first heat exposure.
 - (6) Staff shall be retrained at least:
 - (a) Annually prior to exposure; and
 - (b) Immediately following any incident at the worksite involving a suspected or confirmed heat-related illness.
 - (7) Annual and incident related training records shall be electronically maintained by the Office of the Executive Director for a period of 3 years from the date on which training occurred and include:
 - (a) The names of staff trained;
 - (b) The date of the training session; and
 - (c) A summary or outline of the content of the training session.
 - (8) Training records shall be made available to MOSH upon request.
 - (9) OSHA Prevent Heat Illness at Work Posters (Appendix G) shall be placed in staff common areas as training reinforcement.

.06 Appendix.

Appendix A – NOAA Heat Index Chart

Appendix B – Acclimatization Schedule

Appendix C – PSETC Internal Memo

Appendix D – OSHA Urine Color Chart

Appendix E – PSETC Physical/Dynamic Training Safety Check List

Appendix F – NIOSH First Aid for Heat Illness

Appendix G – OSHA Prevent Heat Illness at Work Poster

.07 History.

This directive supersedes provisions of any other prior existing communication with which it may be in conflict.

.08 Distribution.

Administrative and operational units at PSETC, MOSH and client agencies upon request.