DPSCS Heat Illness & Injury Prevention Plan (HIIPP) Template

Under the authority of Labor and Employment Article §§ 2-106(b)(5) and 5-1201(b) of the Annotated Code of Maryland, the Code of Maryland Regulations (COMAR) 09.12.32 requires employers to establish minimum requirements to protect employees whose employment activities, indoor or outdoor, expose employees to a heat index that equals or exceeds 80°F, and from heat-related injury/illness caused by heat stress in the workplace (see Regulation .02 Scope of COMAR 09.12.32 for exemptions).

Employers should develop and implement a written *Heat Illness/Injury Prevention Plan*, which includes but is not limited to:

- Monitoring the heat index throughout the work shift
- Providing sufficient amounts of drinking water
- Providing shade and the implementation of rest breaks
- Recognizing signs and symptoms of heat-related injuries/illnesses
- Procedures for acclimatization to working conditions
- Procedures for high-heat conditions
- An emergency response plan

This document is intended to guide employers in developing a written *Heat-Related injury/illness Prevention and Management Plan*; e*mployers should refer to COMAR 09.12.32 for full requirements of the standard.

Employers should evaluate all conditions found in their workplace(s) that are likely to cause heat injury or injury/illness before establishing their work-site-specific plan. Use of this document does not guarantee compliance with all sections of COMAR 09.12.32. It is important to effectively implement and maintain the plan you develop, including training all workers and supervisors.

Note:

These procedures describe the minimum heat injury/illness prevention steps applicable to most outdoor and indoor work settings. You may need to exercise greater caution and employ greater protective measures to protect workers.

To tailor these procedures to your work activities, evaluate and consider the specific conditions present at your site, such as:

- Whether workers work indoors, outdoors, or both
- The number of workers and types of work performed
- The length of the work-shift(s) and the workload
- The heat index in the work area
- Personal protective equipment, work processes, or other factors that may contribute to the overall net heat load

* The plan shall be made available and accessible to employees and provided to MOSH upon request.

HIIPP OVERVIEW

A. This heat-related injury/illness prevention and management plan has been developed and implemented for to comply with COMAR 09.12.32 by _____

B. This plan is available in the following locations for review by any interested employee.

_____

C. The following designated person(s) (e.g., Managing Official, ECSO, Supervisor/Shift Commander, Maintenance/DCCFM, Emergency Preparedness Coordinator) has/have the authority and responsibility for implementing the provisions of this plan at this worksite:

Name	Title	HIPP Role	Phone Number
	Warden	Plan administration and implementation	
		Facility Maintenance	
	ECSO	Facility compliance with occupational health regulations and policies	
		Supply Requisition	
		Supply Delivery	

D. List all alternative cooling sources and control measures provided at the worksite and how they will be maintained (e.g. cold packs, cooling towels, portable fans, misting stations, etc.):

ENVIRONMENTAL MONITORING

✓ *Employers shall monitor the heat index throughout the work shift in areas where employees perform work in accordance with Regulation .04(A) of COMAR 09.12.32.*

A. List the different types of job classifications, tasks performed, associated locations, and methods for monitoring the heat index where employees could be exposed to a heat index that equals or exceeds 80°F:

B. On-site monitoring of the heat index will be conducted by:_____

C. Frequency of monitoring: (How often will the heat index be monitored? e.g. outdoor area supervisor checks app hourly, or, indoor supervisor utilizes both heat index sheet and thermometer twice per shift):

D. Select how the heat index will be determined in each work area:

☐ **DIRECT MEASUREMENT** of the temperature and humidity in all areas where employees perform work.

What instrument(s) or equipment are used to monitor heat and humidity?

Heat index is (select one):

- ○ Displayed on the instrument(s) listed above
- ○ Calculated using the National Weather Service Heat Index Calculator or Chart
- ○ Calculated using the OSHA Heat Safety Tool

☐ **USE OF LOCAL WEATHER DATA** reported by the National Weather Service or other recognized source to determine the heat index.

☐ **USE OF THE OSHA-NIOSH HEAT SAFETY TOOL APP** developed by the Occupational Safety and Health Administration and the National Institute for Occupational Safety and Health .

What device(s) will the app be accessible on?

DRINKING WATER

✓ *Employers shall provide sufficient amounts of cool drinking water (at least 32 ounces per hour for each exposed employee) at no cost and as close to the work area as practicable in accordance with Regulation .07 of COMAR 09.12.32.*

A. In the event there are not adequate locations for staff to access drinking water directly from a source, what steps will be taken to ensure sufficient quantities of drinking water will be made available throughout the day and how will you ensure the water remains cool:

B. Describe how drinking water will be made available as close to the work area as practicable:

C. Describe how employees will be provided with opportunities and encouragement to stay hydrated:

D. Attach a facility map (e.g. fire exit map) to the approved and published HIPP indicating where water sources are located.

SHADE ACCESS

✓ *Employers shall provide shaded areas as close to the work area as practicable to each exposed employee in accordance with Regulation .06 of COMAR 09.12.32.*

A. Describe the types of shade or cool climate-controlled areas that will be made available to exposed employees:

B. Where shade cannot be implemented due to infeasibility or unsafe work conditions, the following alternative cooling and control measures will be made available:

Note:

Shaded areas must be: outside, open, and exposed to air on at least three sides; prevent contributing heat sources from reducing effectiveness; be sufficiently sized for the number of employees to sit in normal posture; and accommodate the removal and storage of personal protective equipment (PPE) during periods of use. Enclosed, cool, climate-controlled areas may be provided as an alternative to shade.

ACCLIMATIZATION

✓ *Employers shall provide for acclimatization of exposed employees, monitor employees during acclimatization, and implement a written acclimatization schedule in accordance with Regulation .05 of COMAR 09.12.32.*

A. Select from the methods below to indicate how employees will be acclimatized to the working conditions (select one)**:**

☐ A schedule that gradually increases exposure time over a 5–14-day period, with a maximum 20 percent increase each day

☐ A schedule that uses the current National Institute for Occupational Safety and Health's recommendations for acclimatization

☐ A schedule that uses gradual introduction and/or alternative cooling and control measures that acclimate an employee to the heat, as listed below:

Note: *The schedule shall consider acclimated and unacclimated employees, the environmental conditions and anticipated workload, the impact of required clothing and PPE, personal risk factors, and alternative cooling and control measures.*

B. The responsibility for developing and maintaining acclimatization schedules has been assigned to:

The Managing Official (Warden) _____

C. Implementing acclimatization schedules at the jobsite is the responsibility of:

The Supervisor/Shift Commander _____

D. Describe how employees newly exposed to heat in the workplace will be provided a period of acclimatization:

E. Describe how employees returning to work after 7 or more consecutive days of absence from the workplace will be re-acclimated to the working conditions:

F. Describe the methods used to observe and monitor employees during the acclimatization period for signs of heat-related injury/illness through regular communication (radios, buddy system, video monitoring):

HIGH-HEAT PROCEDURES

Employers shall implement high-heat procedures when the heat index reaches or exceeds 90 degrees Fahrenheit in the work area and shall include a work-rest schedule to protect employees from heat-related injury/illness in accordance with Regulation .08 of COMAR 09.12.32.

A. The responsibility for developing and maintaining our high-heat procedures in writing has been assigned to:

The Managing Official/Warden_____

B. Implementing high-heat procedures at the jobsite is the responsibility of:

The Supervisor/Shift Commander _____

C. Select from the methods below to indicate the work/rest schedule that will be implemented when high-heat procedures are in place (choose one)**:**

☐ A minimum rest period of 10 minutes for every 2 hours worked where employees are exposed to a heat index between 90 and 100 degrees Fahrenheit, and a minimum rest period of 15 minutes for every hour worked where employees are exposed to a heat index above 100 degrees Fahrenheit.

☐ A work/rest schedule as provided for in the current National Institute for Occupational Safety and Health recommendations for managing heat exposures.

D. Alternative cooling sources and control measures listed below:

Notes*:*

- *Work/rest schedules must take into consideration the environmental conditions, workload, duration of work, impact of required clothing or PPE, and alternative cooling and control measures.*
- *In circumstances where prescribed rest breaks may be infeasible, alternative cooling and control measures must be utilized and documented below.*
- *Where alternative cooling and control measures are utilized, these measures must be effective, maintained, and made readily available and accessible to all employees at all times work is being performed.*

E. Describe how employees will be observed and monitored for signs and symptoms of possible heat-related injury/illness (radios, buddy system, video monitoring):

F. Describe how rest breaks and/or alternative cooling & control measures will be implemented:

G. Describe how employees will be encouraged and permitted to take rest breaks to prevent heat injury/illness:

H. The following locations are available to employees for rest breaks:

EMERGENCY RESPONSE PROCEDURES

Employers shall implement an emergency response plan in accordance with Regulation .09 of COMAR 09.12.32.

A. Describe the methods of communication available and accessible at all times at the worksite that enable employees to immediately contact a supervisor, manager, and/or emergency medical services:

B. Describe procedures for immediately reporting signs and symptoms of heat-related injury/illness to supervisors and managers:

C. Describe procedures for responding to and providing care for employees who are exhibiting signs and/or symptoms of heat-related injury/illness:

D. List any first aid procedures and resources available onsite for employees experiencing signs and/or symptoms of heat-related injury/illness:

E. Describe the procedures for contacting emergency medical services and providing prompt transportation and treatment:

TRAINING

Employers shall provide and implement a training program in accordance with Regulation .10 of COMAR 09.12.32.

A. Describe how initial heat stress training will be presented to employees prior to their first heat exposure (i.e., format, materials used, etc.):

B. Describe when and how re-training will be presented to employees annually and after a suspected or confirmed heat-related injury/illness (i.e., format, materials used, etc.):

C. Describe the elements of the training program:

Note: *At a minimum, the training program must include:*

- *The work and environmental conditions that affect heat-related injury/illness*
- *The personal risk factors that affect heat-related injury/illness*
- *The concept, importance, and methods of acclimatization*
- *The importance of frequent consumption of water and rest breaks in preventing heat-related injury/illness*
- *The types, signs, and symptoms of heat-related injury/illness*
- *Recognizing the hazards and symptoms of heat-related injury/illness, including heat exhaustion and heat stroke*
- *Appropriate first aid and emergency response measures for suspected heat-related injury/illness*
- *The importance of and procedures for employees immediately reporting to the employer the signs and symptoms of heat-related injury/illness*
- *The employer's procedures and the requirements for complying with this chapter*

IMPORTANT – Training records must be maintained for **three years** and shall include:

A. The names of the persons trained

B. The dates of the training sessions

C. A summary or outline of the content of the training sessions

D. Training records shall be made available to MOSH upon request.

Clear Form

ADDITIONAL RESOURCES AND TEMPLATE LOGS

The following example templates and resources for developing and implementing a heat-related injury/illness prevention plan are provided:

A. TRAINING RECORD TEMPLATE

B. ENVIRONMENTAL MONITORING LOG

C. HEAT INDEX CHART MEASUREMENTS LOG

D. QUESTIONS TO CONSIDER

A. TRAINING RECORD TEMPLATE

Example Training Record:

Initial Heat Stress Training for New Employees	
Date of Hire:	MM/DD/YYYY
Date of Training:	MM/DD/YYYY
Trainer:	(Supervisor)
Training Outline:	**1.** The work and environmental conditions that affect heat-related injury/illness **2.** The personal risk factors that affect heat-related injury/illness **3.** The concept, importance, and methods of acclimatization **4.** The importance of frequent consumption of water and rest breaks in preventing heat-related injury/illness **5.** The types of heat-related injury/illness, the signs and symptoms of heat-related injury/illness, and the appropriate first aid and emergency response measures **6.** The importance of and procedures for employees immediately reporting to the employer the signs and symptoms of heat-related injury/illness **7.** Procedures and the requirements for complying with COMAR 09.12.32
I acknowledge receiving the training outlined above and understand its requirements and the expectations of me as an employee. I have been given the opportunity to provide feedback and ask questions regarding heat injury/illness and related training.	
Employee Name:	
Employee Signature:	

B. ENVIRONMENTAL MONITORING

List the different types of job classifications, tasks performed, and associated locations for which employees could be exposed to a heat index that equals or exceeds 80°F.

Job Classification/Title	Tasks/Work Activities	Locations	Heat Index Monitoring Procedure and Tool
Ex. Landscaper	*Planting, mowing, weeding, mulching, pruning*	*Outdoors in full sun*	*NIOSH Heat Safety Tool app every hour by the onsite supervisor*

C. HEAT INDEX CHART MEASUREMENTS

Date	Time	Work Area Location	Temperature (°F)	Relative Humidity (%)	Heat Index
Ex. 06/18/25	*12:20 PM*	*Warehouse Yard*	*85*	*53*	*87*

D. QUESTIONS TO CONSIDER

Environmental Monitoring

- Do employees perform work outdoors, indoors, or both?
- If indoors, does the building/structure have a mechanical ventilation system?
- How many different "work areas" do employees work in?
- Who will be responsible for monitoring the heat index throughout the work shift in areas where employees perform work?
- How often will the monitoring occur during the work shift? (e.g., more frequent monitoring during high heat days)

Drinking Water

- How will you ensure that drinking water is provided as close to the work area as practicable?
- How will you ensure that sufficient quantities of drinking water are available at all times while work is being performed?
- How many employees must you provide drinking water to in a typical work shift?
- Who is responsible for ensuring the accessibility and availability of drinking water?
- Do you have "mobile work crews" (i.e., workers move to different locations throughout the day)?
  If so, how will water be provided/replenished for these "mobile crew" employees?
- When outdoor work is performed, how will you ensure the drinking water stays cool?
- If your worksite is a construction site, what additional measures might you have to consider to ensure drinking water is provided?
- Do you plan to provide electrolyte beverages in addition to water?

Acclimatization

- What tasks with exposure to heat are employees performing? What is the anticipated workload?
- Are tasks with exposure to heat performed year-round, seasonally, or only occasionally/rarely?
- Do employees routinely perform these tasks, or do they have regular periods of absence (e.g., several days or weeks of no heat exposure in between)?
- What conditions will be considered when developing/implementing an acclimatization schedule?
- Do employees wear personal protective equipment, such as coveralls, a Tyvek suit, or non-permeable body coverings that may increase the heat burden?

Shade Access

- How many employees are expected to utilize the shaded area(s) at any one time?
- Are shaded areas affected by location or time of day? (i.e., south-facing vs north-facing)
- Is each shaded area sufficiently sized for the number of employees utilizing the shaded area?
- Are employees able to remove and store their PPE?
- Are employees able to sit in a normal posture?
- Is each shaded area open and exposed to air on at least three sides?
- Will you need to provide additional cooling and control measures in addition to or in lieu of shade?
- How will you ensure alternative cooling and control measures are readily available and accessible to employees at all times work is being performed?
- What contributing heat sources could reduce the effectiveness of the shaded area(s)?
- How will "mobile crew" employees be provided with shade?

High-Heat Procedures

- What protective measures will be taken during periods of high heat (e.g., mandatory rest breaks, reduced workload, job rotation, alternative cooling and control measures)?
- How will employees be monitored and observed during periods of high heat?

Rest Breaks

- When and how will rest breaks be taken?
- Will rest breaks coincide with a scheduled rest or meal period?
- Are there any circumstances in which an employee may feel compelled to skip a rest break? If so, how will this be addressed?
- Are rest breaks taken in cool, shaded areas?
- If not implementing rest breaks, what effective heat management and protection procedures are utilized?

Emergency Response

- Who are the points of contact for each worksite and each shift?
- How will employees who require emergency care be treated, monitored, and/or transported?
- What first aid measures are available for employees who experience signs/symptoms of heat exhaustion or heat stroke?
- Will employees receive any first-aid training?

Training

- Describe the elements of your training program and compare them to the elements required by the standard. Does your program cover all of the required elements?
- What formats of training are used? For example, classroom instruction, self-paced, program learning, etc. (You may want to attach a copy of your training outline to this program.)
- When is training or re-training required (e.g., initially and annually prior to exposure and subsequent to a heat-injury/illness)?
- Who is responsible for maintaining training records?

For additional resources or more information, please visit the MOSH website:
https://www.labor.maryland.gov/labor/mosh/