Written Heat Illness Prevention Plan

For Maryland Employers

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 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-Related Illness Prevention and Management 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 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 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 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 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

✎ *See ATTACHMENT C: QUESTIONS TO CONSIDER*

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

"Note: This template was prepared to assist employers in complying with Section 09.12.32.04.C. of the regulation, which requires employers to "develop, implement, and maintain an effective heat-related illness prevention and management plan in writing" that contains the elements specified in subsection D of the regulation. Employers are free to use a different model, or to develop their own plan, so long as the plan meets the regulatory elements."

INTRODUCTION

This heat-related illness prevention and management plan has been developed and implemented to comply with COMAR 09.12.32 by:

[Name of Company]

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

[Locations Where Available]

The plan and all required written procedures are available in the following languages:

The following designated person(s) (e.g., program administrator, safety coordinator, supervisor, foreman, field supervisor, crew leader) has/have the authority and responsibility for implementing the provisions of this plan at this worksite:

Name	Title	Phone Number

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

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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.*

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:

✎ *See ATTACHMENT A: ENVIRONMENTAL MONITORING for an example and optional template.*

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

Frequency of monitoring: *(How often will the heat index be monitored? – e.g., hourly in each work area)*

Select from the methods below to indicate 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.

- Instrument(s) or equipment used to monitor heat and humidity:

Heat index is (select from below):

☐ 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?

✎ *See ATTACHMENT B: HEAT INDEX CHART MEASUREMENTS for an example and optional template.*

[Include any other additional procedures or information involving environmental monitoring.]

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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.*

Describe below:

- **How drinking water will be kept cool and palatable;**
- **How sufficient quantities of drinking water will be made available throughout the workday;**
- **How drinking water will be made available as close to the work area as practicable; and**
- **How employees will be provided with opportunities and encouragement to stay hydrated.**

[Include any other additional procedures or information for drinking water.]

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.*

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

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.

[Include any other additional procedures or information for shade access.]

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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.*

Select from the methods below to indicate how employees will be acclimatized to the working conditions:

☐ 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.

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

Implementing acclimatization schedules at the jobsite is the responsibility of:

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

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:

Describe the methods used to observe and monitor employees during the acclimatization period for signs of heat-related illness through regular communication:

[Include any other additional procedures or information for acclimatization.]

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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 illness in accordance with Regulation .08 of COMAR 09.12.32.*

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

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

Select from the methods below to indicate the work/rest schedule that will be implemented when high-heat procedures are in place:

☐ 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;

☐ Alternative cooling 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.*

Describe how employees will be observed and monitored for signs and symptoms of possible heat-related illness:

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

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

The following locations are available to employees for rest breaks:

[Include any other additional procedures or information for high-heat procedures.]

EMERGENCY RESPONSE PROCEDURES

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

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:

Describe procedures for immediately reporting signs and symptoms of heat-related illness to supervisors, managers, and employer representatives:

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

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

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

[Include any other additional procedures or information for emergency response procedures.]

TRAINING

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

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

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

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

[Include any other additional procedures or information for training.]

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IMPORTANT – Training records must be maintained for **one year** and shall include:

1. The names of the persons trained
2. The dates of the training sessions
3. A summary or outline of the content of the training sessions

Training records shall be made available to MOSH upon request.

Example Training Record:

Initial Heat Stress Training for New Employees	
Date of Hire:	MM/DD/YYYY
Date of Training:	MM/DD/YYYY
Trainer:	Ash Ember (Supervisor)
Training Outline:	1. The work and environmental conditions that affect heat-related illness 2. The personal risk factors that affect heat-related illness 3. The concept, importance, and methods of acclimatization 4. The importance of frequent consumption of water and rest breaks in preventing heat-related illness 5. The types of heat-related illness, the signs and symptoms of heat-related 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 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 illness and related training.	
Employee Name:	Sunny Ray
Employee Signature:	Sunny Ray

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

- **ATTACHMENT A: ENVIRONMENTAL MONITORING**
- **ATTACHMENT B: HEAT INDEX CHART MEASUREMENTS**
- **ATTACHMENT C: QUESTIONS TO CONSIDER**

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ATTACHMENT A: 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
Ex. Landscaper	*Planting, mowing, weeding, mulching, pruning*	*Outdoors in full sun*	*NIOSH Heat Safety Tool app every hour by the on-site supervisor*

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ATTACHMENT B: 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*

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ATTACHMENT C: 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 nonpermeable 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

- Are the procedures available in writing in a language and manner that all employees can understand?
- 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.)
- Is training presented in a language and manner that all employees and supervisors can understand?
- When is training or re-training required (e.g., initially and annually prior to exposure and subsequent to a heat-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/

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