

OUTDOOR HEAT SAFETY PLAN TEMPLATE

INTRODUCTION

The purpose of the Outdoor Heat Safety Plan is to help prevent heat-related illnesses and injuries. University units and departments with personnel who work outdoors for more than 15 minutes during any 60-minute period are required to complete this template to customize the plan as a component of their [Supplemental Accident Prevention Plan](#) to meet the requirements in [Washington Administrative Code, WAC 296-62-095 through 09560](#) enforced by the Washington State Department of Labor and Industries (L&I), Department of Occupational Safety and Health (DOSH).

Supervisors are required to complete this plan and review it with personnel initially, annually, and when updates are needed. Evaluate and consider the specific conditions (i.e., temperature and type of clothing worn) during your outdoor worksite activities to successfully tailor this plan and procedures. [Attachment A](#) can be used to document the review of this plan with unit/department personnel.

1. Scope

This plan applies to all outdoor work environments year-round (WAC 296-09510). Additionally, this plan applies to personnel working outdoors more than 15 minutes in any 60-minute period at the following temperatures and conditions:

- **At 52°F or above** when wearing clothing that is non-breathable or provides a vapor barrier like rain gear, chemical-resistant suits, or Level A suits.
- **At 80°F or above** when wearing any other type of clothing such as typical shirts and pants.

The 15-minute exception applies to every hour of the work shift.

[Name of Unit/Department] personnel doing the following jobs or tasks at _____ worksites are considered to meet the descriptions above:

- [list job titles/types and/or tasks]

1.

2.

3.

4.

5.

6.

2. Definitions

WAC 296-62-09520 through 09720: Previous Definitions of 07-05-08:

Acclimatization. The body's temporary adaptation to work in heat which occurs as a person is exposed to it over a period of seven to 14 days depending on the amount of recent work in the heat and the individual factors. **Please Note:** Acclimatization can be lost after seven consecutive days away from working in the heat.

- (2) **Buddy system.** A system where individuals are paired or teamed up into work groups so each employee can be observed by at least one other member of the group to monitor and report signs and symptoms of heat-related illness.
- (3) **Drinking water.** Potable water that is suitable to drink and suitably cool in temperature. Other acceptable beverages include drinking water packaged as a consumer product, and electrolyte-replenishing beverages (i.e., sports drinks) that do not contain high amounts of sugar, caffeine, or both such as energy drinks.
- (4) **Engineering controls.** The use of devices to reduce exposure and aid cooling, not including wearable items. Examples of engineering controls include fans, misting stations, air-conditioning, etc.
- (5) **Heat-related illness.** A medical condition resulting from the body's inability to cope with a particular heat load, and includes, but is not limited to, heat cramps, heat rash, heat exhaustion, fainting, and heat stroke.
- (6) **Outdoor environment.** An environment where work activities are conducted outside. Work environments such as inside vehicle cabs, sheds, and tents or other structures may be considered an outdoor environment if the environmental factors affecting temperature are not managed by engineering controls.
- (7) **Risk factors for heat-related illness.** Conditions that increase susceptibility for heat-related illness including:
 - (a) Environmental factors such as air temperature, relative humidity, air movement, radiant heat from the sun and other sources, conductive heat sources such as the ground;
 - (b) Workload (light, moderate, or heavy) and work duration;
 - (c) Personal protective equipment and clothing worn by employees; and
 - (d) Personal factors such as age, medications, physical fitness, and pregnancy.

- (8) **Shade.** A blockage of direct sunlight. Shade may be provided by any natural or artificial means that does not expose employees to unsafe or unhealthy conditions and that does not deter or discourage access or use. One indicator that blockage is sufficient is when objects do not cast a shadow in the area of blocked sunlight. Shade is not adequate when heat in the area of shade defeats the purpose of shade, which is to allow the body to cool. **Example, a car sitting in the sun does not provide acceptable shade to a person sitting in it, unless the car is running with air-conditioning.**
- (9) **Vapor barrier clothing.** Clothing that significantly inhibits or completely prevents sweat produced by the body from evaporating into the outside air. Such clothing includes encapsulating suits, various forms of chemical resistant suits used for PPE, and other forms of nonbreathable clothing.

3. Roles and responsibilities

Project Managers

To ensure personnel safety and compliance with the Washington state rule ([WAC 296-62-095 Outdoor Heat Exposure](#)), crews/ employees are required to:

- Ensure personnel who work outdoors, and their supervisor/ foreman conduct annual training sessions and perform a daily Safety Tailgate session on “Outdoor Heat Safety” prior to each work shift.
- Develop and implement an Outdoor Heat Safety Plan by completing this template. Review this plan with your personnel initially and daily.
- Inform personnel that they are protected from retaliation for reporting signs or symptoms of heat-related illness, or for seeking medical care for heat-related illness resulting from outdoor work. Personnel are also protected from retaliation for taking a cool-down rest period when they feel the need to prevent heat-related illness.

Personnel

- Attend and complete an “Outdoor Heat Safety” training and/ or daily Tailgate Safety session initially and daily.
- Follow the company's guideline requirements for preventing heat-related illness.
- Drink adequate amounts of suitably cool **water** (up to one quart/hour).
- Request **breaks** when needed.

- When temperatures are at or above **90° Fahrenheit (F)** take preventive cool-down rest breaks of at least 10 minutes every 2 hours.
- When temperatures are at or above **100°F** take preventive cool-down rest breaks of at least 15 minutes every hour.
- Recognize and monitor yourself for [symptoms of heat-related illness](#) and know your [personal risk factors](#) for heat-related illness, which may include obesity, diabetes, heart disease among others:

4. Worker health and safety requirements

Personnel and supervisors share responsibility for safety at the jobsite. This includes watching out for yourself and others because heat illness can quickly become a life-threatening condition if unnoticed or ignored.

1. Hydration

Encourage personnel to stay hydrated:

- Drink at least 1 cup every 15-20 minutes.
- Don't wait to be thirsty to drink water, and don't drink it all at once. In fact, it's best to start drinking water before work. Drink small amounts often throughout the day to stay hydrated.
- Sport drinks low in sugar are okay. Avoid drinks with caffeine and high sugar content like sodas because they won't hydrate you.

Supervisors and foreman personnel will:

- Allow additional water breaks during hot days.
- Make sure there is enough clean cool water to allow each person to drink at least a quart of water each hour.

[Describe how you will ensure this. Determine how much water will be needed for each person or team, and how to make it accessible and keep it cool to encourage frequent drinking. On hotter days individuals may drink more water so plan accordingly.]

[Identify who is in charge of setting up and carrying supplies, who checks water level and replenishes the supplies (e.g., disposable cups, etc.). If reusable containers are used, include details to ensure proper cleaning. Explain how you ensure personnel only drink potable water. Emphasize not sharing cups/bottles, not dipping cups in water, and not drinking from non-potable water sources like lakes or from hoses not labeled as safe for drinking.]

2. Encourage cooling breaks.

Encourage and allow personnel to take preventative cooling breaks to reduce the potential for overheating. Personnel should be aware of personal factors that can contribute to susceptibility to heat-related illnesses.

[Describe the procedure for communicating and allowing personnel to take additional breaks to prevent overheating.]

3. Set up the worksite for shade.

[Describe how to utilize shade in work and/or break areas to reduce the heat. Include details to accomplish the task. For example: Before work begins, the supervisor will assess shade options for each job site. Use available shade such as trees, walls and/or set up shade structures like a portable canopy when no other options are available. Fans can help as long as the air temperature doesn't go above 95°F, but if air-conditioned spaces are available, like cabs, they can be utilized to cool individuals off. The job supervisor is responsible to ensure that equipment is available, functional, transported, and set up properly.]

4. Schedule work to reduce heat exposure.

[Describe the established work/rest schedule for routine and heavy work. Consider changes in shift timing to avoid working during the hottest period of the day. For example, night work, early half days or stopping work completely. Include additional precautions in the event of a heat wave or a temperature change of 10 degrees or more.]

5. Adjusting to heat (acclimatization)

It takes about two weeks to fully adjust to hot working conditions. This adjustment is lost if you are away from the hot conditions for seven days or more. Acclimatization is required for the first 14 days of exposure above 80°F (52°F if wearing non-breathable clothing) and after an absence of seven days or more when temperatures are at or above the same levels. Acclimatization is also required during a heat wave where temperatures are above the same levels and at least 10 degrees higher than the average daily high temperature in the preceding five days.

[Describe your acclimatization plans for workers and supervisors to follow. Start with light physical work and/or short duration of work time and slowly increase each day. The following example shows how time is increased by 20% (of the total shift) each day for non-acclimatized workers.]

Day 1: (Example, 96 minutes per 8 hours of work)

Day 2: (Example, 192 minutes per 8 hours)

6. Employee observation

Personnel must be observed for [signs and symptoms of heat-related illness](#) during the acclimatization period and during periods of extreme heat over 90°F. Observation must involve one or more of the following:

- Regular communication with personnel working alone, such as by radio or cellular phone,
- A mandatory buddy system,
- Other effective means of observation.

[Describe your observation plans for unacclimated workers and supervisors or during periods of high heat.]

7. High heat procedures

High heat procedures must be implemented during periods of outdoor temperatures at or above 90°F unless engineering or administrative controls are implemented to reduce exposure below 90°F. Mandatory rest periods must be provided in the shade or equally or more effective method to reduce body temperature. At or above 90°F, a mandatory rest period of 10 minutes every two hours is required. At or above 100°F, a mandatory rest period of 15 minutes every hour is required. Observations described in Section 6 must also be implemented.

[Describe the procedures for communicating and implementing the high heat procedures including mandatory breaks, employee observations, hydration and reporting of incidents]

8. Training

Initially, daily, and annually thereafter, personnel working on the jobs listed above are required to receive outdoor heat safety training. This requirement can be met by company course, consultant, or outside provider, such as AGC. Training will encompass Risks of outdoor heat exposure, signs and symptoms of heat related illness, and the steps take to stay hydrated, rested, healthy and safe.

[You may want to pair an experienced worker with new personnel to monitor each other and ensure they can put the training into practice.]

Personnel need to be aware of the following as part of training:

- How heat can make them sick, and how to recognize the common [signs and symptoms of heat-related illness](#) in themselves and coworkers. Four most common conditions are heat rash, heat cramps, heat exhaustion and heat stroke.

- The environmental factors that increase risk for heat-related illness such as higher temperatures, humidity, sunlight (working under direct sunlight makes it feel about 15 degrees hotter), additional sources of heat like powered equipment and asphalt, no wind, level of physical activity, and wearing of personal protective equipment (PPE) or layers of clothing.
- Personal factors that may increase susceptibility to heat-related illness including age, not being acclimatized, having medical conditions such as hormonal and heart issues and diabetes, dehydration, and use of substances that can affect the body's response to heat like drugs, alcohol, caffeine, nicotine, and medications.
- The importance of removing heat-retaining PPE such as non-breathable chemical resistant clothing during all breaks to allow their body to cool down.
- How to stay well hydrated by drinking small quantities of water or other acceptable beverages frequently throughout the day.
- The importance of acclimatization (to get used to the conditions). It takes about 5 days to start and two weeks to be fully acclimated.
- How to immediately report signs or symptoms of heat-related illness they experience or observe in coworkers, and how to **immediately** respond to prevent the situation from becoming a medical emergency. How to identify and what to do during a heat-related medical emergency (e.g., potential heat stroke).
- The contents of this Outdoor Heat Safety Plan and Unit-specific information and procedures.

Supervisors need to know the following as part of training (in addition to what is detailed for personnel above):

- The procedures to follow to implement this Plan including the acclimatization schedule, how to keep track of environmental conditions throughout the day, when to increase the number of breaks or stop work early, to check that workers are accessing shade and water (especially for mobile operations), encourage them to stay hydrated, and communicate with lone workers to ensure they are safe. (*The free [OSHA-NIOSH Heat Safety Tool app](#) could be helpful.*)
- Steps the supervisor must take if an individual shows signs and symptoms of possible heat-related illness including appropriate emergency response procedures and how to transport affected individuals to a medical service provider.

5. Responding to heat-related illness

Let a Supervisor, Foreman, Safety Officer, or someone nearby know if you or a co-worker is experiencing any [signs or symptoms of heat-related illness](#) and take immediate action to ensure things don't get worse. Unit-specific emergency response procedures should be included below.

1. Time is critical. Get the individual(s) experiencing symptoms away from the hot area into a cool shaded area. Quick action increases the chances of full recovery.

2. Let the individual(s) rest and drink cool water. *[List other Emergency Medical Services (EMS) practices adopted to reduce heat and to help cool affected individuals such as removing PPE. Inventory and list available supplies such as ice packs and other first aid supplies.]*
3. Never leave an individual who is experiencing heat-related problems alone, as their condition may worsen. *[For personnel working alone, specify the supervisor or designee staying on the line to monitor their recovery and the need to contact emergency services.]*
4. If the individual does not respond quickly, call 911 for EMS.
[Describe the method to access emergency medical services. Include a map and clear directions to give if emergency services are called.]
5. *[If the individual is in a remote or non-developed area with unidentified roads, create procedures for moving or transporting them to a place where they can be reached by emergency medical services. For example, you may need to have the supervisor, or another person meet emergency services at the closest point to guide them to the ill employee's location.]*

6. Injury Reporting and Documentation

If the individual receives medical attention, get a written authorization from the provider that the worker can get back to work and if there is any restriction or limitations.

The supervisor, foreman, or Safety Officer, and the person injured, or another company representative must submit a report of the incident to the company within 24 hours on the incident. Any inpatient hospitalization requires immediate notification to the corporate Safety Officer and an 8-hour notification to Washington State L&I or OSHA appropriately.

Washington Industrial Safety and Health Act (WISHA): File Employer's Report of Accident. Employers by law must report the death or in-patient hospitalization of any worker (within 8 hours) and any non-hospitalized amputation or loss of eye (within 24 hours) due to an on-the-job injury by calling **1-800-423-7233**.

Occupational Safety and Health Act (OSHA): 1-800-321-OSHA (**1-800-321-6742**). By electronic submission using the reporting application located on OSHA's public Web site at www.osha.gov.

Any/ all document in relation to the injury/ incident are highly confidential and will be collected from the attending physician, injured worker (injury report), completed accident investigation, and any/ all documents associated with the injury will be submitted timely to Human Resources for filing.



ATTACHMENT A:

**Site-Specific Training Documentation Form
Outdoor Heat Safety Plan Review**

Workplace Name: _____

Name	Training Date	Signature
Click here to enter name.	Click here to enter date.	
Click here to enter name.	Click here to enter date.	
Click here to enter name.	Click here to enter date.	
Click here to enter name.	Click here to enter date.	
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Click here to enter name.	Click here to enter date.	
Click here to enter name.	Click here to enter date.	
Click here to enter name.	Click here to enter date.	
Click here to enter name.	Click here to enter date.	
Click here to enter name.	Click here to enter date.	

By signing this log, you confirm that you have been provided with site specific outdoor heat safety information, that the content of the information is understood, and that you have had an opportunity to ask questions.