# Heat Injury and Illness Prevention Plan (HIIPP)

## Section 1: Purpose

The purpose of the Enter company name Heat Injury and Illness Prevention Plan (HIIPP) is to establish procedures and guidelines that ensure the safety and well-being of all personnel during periods of extreme heat.

This plan aims to minimize short- and long-term health consequences associated with heat exposure. It is designed to be a comprehensive guide for preparedness, injury and illness recognition and mitigation, and training activities that will enhance our resilience against extreme heat and help ensure compliance with regulatory requirements.

## Section 2: Scope

This HIIPP covers all activities, both indoor and outdoor, where employees may be adversely affected by high heat. The HIIPP applies to all personnel, facilities, and operations within our organization and includes:

* Roles and responsibilities,
* Initial and high heat triggers,
* Monitoring temperatures,
* Acclimatization procedures,
* Implementation of engineering controls,
* Implementation of additional controls,
* High-heat procedures,
* Emergency response and communication protocols,
* Training requirements,
* Recordkeeping and program reviews, and
* Key definitions (provided in Appendix B)

For multiple work sites that are substantially similar, this HIIPP may be developed by work site type rather than by individual work sites only if all site-specific information is included in the plan (e.g., phone numbers, location addresses, site-specific heat sources, etc.). Therefore, the Company HIIPP may be used in the development of plans for individual work sites.

Enter Company name has assessed where employees may be exposed to heat at or above trigger points for indoor and outdoor work environments. Refer to Section 6 for heat monitoring details.

Activities covered by this plan include:

* Enter activity such as landscaping, building erection, road work, etc.
* Enter activity such as welding, agricultural field work, poultry processing, etc.
* Enter activity such as XYZ manufacturing, etc.
* Enter activity such as tree-trimming, electrical installation, etc.
* Enter activity such as office, laboratory, truck driving/delivery, etc.
* Enter additional activity
* Enter additional activity
* Enter additional activity
* Enter additional activity
* Enter additional activity
* Enter additional activity
* Enter additional activity

The plan is intended to be a dynamic document, subject to regular review and updates to reflect changes in our risk environment or regulatory requirements, improvements of heat illness and injury prevention protocols, and advancements in technology.

## Section 3. Company information

3.1 Company name: Enter company name

3.2 Facility name: Enter facility name (i.e., plant #1, warehouse X, etc.)

3.3 Company owner/representatives: Enter name of program owner representative

 Heat Safety Coordinator: Enter name of program representative

 Company representative: Enter name of program representative

3.4 **EMERGENCY** Contact Information:

|  |  |  |
| --- | --- | --- |
| CONTACT (NAME) | SITE LOCATION | EMERGENCY PHONE NO. |
| Emergency Services | (ALL, unless otherwise posted) | 9-1-1 |
| Company Response Team |  |  |
|  |  |  |
|  |  |  |
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## Section 4: Roles and responsibilities

Enter company name is committed to managing worker safety during extreme heat while complying with regulatory requirements. Management will be prepared to initiate this plan throughout the year as required, but especially during peak temperatures (April – August for most regions).

As such, input and involvement of non-managerial employees and their representatives has been sought for the development of this HIIPP.

Our Heat Safety Coordinator (HSC), Enter assigned HSC , has overall authority and responsibility for implementing this plan, along with managerial and supervisory support. The HSC and/or supervisors will ensure that all personnel questions regarding heat management and safety are answered in a timely manner.

All managers, supervisors, and personnel are responsible for complying with the provisions of this HIPP in their assigned work areas and must follow safe work practices outlined herein.

This plan is maintained by the HSC and can be accessed at Enter physical and/or electronic location. The HIIPP will also be made available to employees, their company representatives, or auditors upon request.

## Section 5: Initial and high heat triggers

The Enter company name HIIPP establishes requirements for identifying heat hazards, implementing engineering and other control measures at or above two heat trigger levels that are based on heat index and/or wet bulb globe temperature (WBGT) – initial and high heat.

The **INITIAL** heat trigger is Enter trigger for your specific state or company requirement. (For example, proposed federal and many states is 80 degrees.)

The **HIGH-HEAT** trigger is Enter trigger for your specific state or company requirement. (For example, proposed federal 90 degrees, California is 95 degrees, etc.)

When determining the effects of these triggers, the HSC and supervisors will also take into consideration the following which can increase the potential for heat stress on workers:

* **Location** – outdoor versus indoor
* **Workload** – heavier workloads or more labor-intensive activities
* **Length of shift** – longer shifts versus shorter durations of heat exposure
* **Clothing and personal protective equipment (PPE)** – heavy, bulky, impermeable, or fire-retardant clothing and protective equipment like respirators, high-visibility vests, and hard hats
* **Additional factors** - such as individual physiology (health, medicines, pregnancy, etc.), physical fitness for duty, and acclimatization.

**Section 6. Monitoring temperatures**

Determining when employees are exposed to heat at or above the initial and high-heat triggers is critical for ensuring that employees are appropriately protected. Monitoring will be performed as often as necessary to determine employee heat exposure with reasonable accuracy.

OSHA permits employers to choose the heat metric they will use to monitor temperatures —the National Weather Service or similar heat indexes (such as the OSHA-NIOSH Heat Safety Tool) or wet bulb globe temperature (WBGT).

Enter company name will use Enter either Heat Indexing or WBGT to determine when exposures above the initial and high-heat triggers occur. On-site monitoring will have monitoring devices at or as close as possible to the work area. When consulting forecasts, the HSC or supervisor will check the forecast as close to the start of the work shift as possible to determine whether and when the heat index is at or above the initial or high heat triggers for the work area(s).

Monitoring will take into consideration:

* Temperature and humidity,
* Wind speed,
* Radiant heat,
* Work demands,
* Required PPE and protective clothing, and
* Worker acclimatization.

6.1 **OUTDOOR**

* The HSC and site supervisors will be trained and instructed to check the extended weather forecast in advance. Weather forecasts will be checked with the aid of the internet [(h](http://www.nws.noaa.gov/%29)t[tp://www.nws.noaa.gov/),](http://www.nws.noaa.gov/%29) calling the National Weather Service directly, or by checking the television weather forecasts. Work schedules will be planned in advance, taking into consideration whether high temperatures or a heat wave is expected.
* If using WBGT, enter requirements here.
* Initial temperature or heat index measurements shall be taken where workers work and at times during the work shift when worker exposures are expected to be the greatest. Additional measurements will be taken when there are anticipated changes of 5 degrees or more.
* Based on critical weather information, the HSC or site supervisor will make necessary modifications to work schedules (e.g., stopping work early, rescheduling the job, working at night or during the cooler hours of the day, increasing the number of water and rest breaks).

6.2 **INDOOR**

Indoor work areas where it can reasonably be expected that employees would be exposed to heat at or above the initial heat trigger include:

* List indoor work area
* List indoor work area
* List indoor work area
* List indoor work area
* List indoor work area
* List indoor work area
* The HSC and site supervisors will be trained and instructed on how to monitor indoor temperatures using thermostats, indoor heat index readers, or other effective means.
* Initial temperature or heat index measurements shall be taken where workers work and at times during the work shift when worker exposures are expected to be the greatest. Additional measurements will be taken when there are anticipated changes of 5 degrees or more.
* Monitoring instruments will be maintained according to manufacturer's recommendations and will be located in areas where a clear measurement can be made that will be *representative of worker exposure.*
* The HSC or site supervisors will document temperatures or heat indexes including the date, time, and location the measurement was taken. Because weather forecasting cannot predict indoor temperatures, these documented records will help the Company assess the conditions at the time of an injury or illness so future events can be prevented.
* Indoor temperature records will be retained by the HSC for at least 6 months or until the next measurements are taken, whichever is later.

## Section 7: Acclimatization procedures

## Acclimatization of workers is one of the most effect controls for reducing the risk of heat-related injuries and illnesses. It is the process of slowly adapting the body to work in the heat, especially for workers who are new or returning to work after an extended leave (more than 14 days). Acclimatization procedures will be implemented at no cost to employees.

* New workers, those returning from time away, and newly assigned workers to high-heat areas will be closely observed for signs of heat stress or illness by the HSC or supervisor during the first 14 days.
* Acclimatization will be on the following schedule when the heat is at or above the initial heat trigger (see Section 5 for heat triggers):
	+ No more than 20% of a normal work shift exposure duration on the first day of work, and
	+ Increasing exposure by 20% of the work shift exposure duration on each additional day.
* Whenever possible, using procedures such as scheduling slower paced, less physically demanding work during the hot parts of the day, and the heaviest work activities during the cooler parts of the day (early morning or evening) will be used to lessen the intensity of the workload for new or returning workers.
* The HSC, supervisors, and workers will be trained in the importance of acclimatization, how it is developed, and how company procedures address it.
* Other: List any additional acclimatization requirements.

## Section 8: Implementation of engineering controls

Engineering controls are the most effective form of protection for workers and will be implemented especially when heat triggers are reached. (See Section 5 for heat triggers.) Administrative controls will be added if feasible engineering controls are insufficient for full employee protection.

The following engineering controls will be implemented to lower temperatures and humidity to the lowest possible level:

* Increased natural ventilation — opening windows and doors when the outdoor temperatures are lower than the indoor temperatures
* Local exhaust ventilation — especially in areas of high-heat generation (laundry room or welding station exhaust hoods, near steam processes or furnaces, etc.)
* Air conditioning or cooling fans
* Dehumidifiers
* Reflective shields to block radiant heat from ovens, kilns, furnaces, etc.
* Installation of cooling seats or benches
* Elimination of steam leaks
* Other: List any additional engineering controls.

**Section 9. Implementation of additional controls**

Administrative controls and work practices will be implemented to help reduce heat exposure any time engineering controls are not feasible or are insufficient to ensure worker protection. If both feasible engineering and administrative controls are not enough to decrease the temperature and minimize the risk of heat illness, then personal heat-protective equipment will be provided

**NOTE:** This section includes minimum requirements when the initial heat trigger is reached. High heat triggered protocols are listed in Section 10.

9.1 **GENERAL ADMINISTRATIVE CONTROLS**

* When heat triggers are reached, work schedules and activities will be modified to cooler times of the day or shifts will be shortened to reduce the potential for heat stress on workers.
* Job functions will be rotated whenever possible to help minimize exertion and heat exposure.

9.2 **WATER**

Working and sweating in the heat significantly increases workers’ risk of dehydration and heat stress and related injury or illness. Replacing fluids is critical to maintain blood volume and thermoregulation and prevent potential fainting episodes. Therefore:

* The HSC or supervisors will ensure that fresh, clean, suitably cool water is provided and accessible to workers free of charge.Water supplies will be examined at the start of each shift and throughout shifts as needed.
* At least one quart of fresh, clean, suitably cool water will be provided per worker per hour for consumption during their work shift. During extremely hot weather or in high indoor heat working conditions, water will sufficiently cool to encourage regular consumption and not cause discomfort.
* Whenever possible, drinks with electrolytes or electrolyte supplements will be provided to assist workers’ bodies with regulating chemical balances and maintaining the balance between fluids inside and outside of the body’s cells.
* Water containers will be maintained in a sanitary condition per the requirements of 29 CFR 1910.141 or 29 CFR 1926.51. The use of refillable water containers is encouraged. Common drinking utensils, such as dipping scoops into a shared water source or shared cups, are not permitted.
* Bottled water must be kept free of debris and out of direct sunlight whenever possible.
* Workers will be reminded and encouraged to frequently consume small quantities of water throughout their shift. Reminders may be verbal or through the use of a sound system, phone texts, or similar means.
* Due to the increased push for water consumption, readily available toilet facilities must be provided for workers per sanitation standards.
* Other: List any additional facility- or site-specific requirements for water.

9.3 **REST**

Adequate break areas will be provided where employees (indoor or outdoor) can hydrate, remove PPE, and cool down as a means of preventing heat stress.

* Workers are encouraged to take rest breaks, which are paid, whenever they feel they are overheating or in need of reprieve. Unscheduled rest breaks are permitted any time an employee feels it’s necessary to prevent overheating. Preventative rest periods will be at least 15 minutes, in addition to the time needed to access the break area. The duration of the rest breaks will be increased as heat or humidity rises. NOTE: Slowing or pacing work shall not be considered a rest break.

**IMPORTANT:** Any worker who takes a preventative rest break will be monitored for signs and symptoms of heat illness. **NO** worker shall be ordered back to work until signs or symptoms of heat illness have abated. (Refer to Section 11 for emergency response protocols.) Any time a worker exhibits signs or symptoms of heat illness, appropriate first aid or emergency response will be provided.

* Rest locations must be as close to work areas as practical and have either shade, air-conditioning, or other means of cooling. The interior of a vehicle will not be used to provide shade unless the vehicle has a working air conditioner and is cooled down ahead of time.
* Rest locations must be such that they will accommodate all the workers who are on a break at any point in time and will be large enough for workers on break to move around freely. Breaks may be staggered to accommodate resting workers.
* Rest locations for mobile workers must be identified at the start of each shift, or when the work site is relocated.
* Other: List any additional facility- or site-specific requirements for rest.

9.4 **SHADE**

* Shade that blocks direct sunlight will be as close as practicable to the workers when the outdoor temperatures reach established trigger points and whenever possible during normal working conditions. (See Section 5.) Shade sources may include:
	1. Tents, pavilions, or other structures;
	2. Awnings or umbrellas; or
	3. Natural shade from trees or buildings.

**IMPORTANT:** Heavy equipment, tractors, or other moving machinery may NOT be used as sources of shade. Large vehicles such as trucks and vans which are used to transport employees or goods to the work site, but not as part of the work itself can be used as shade as long as the vehicle is not running. Vehicle operators must perform a 360-degree walk-around prior to starting vehicles to ensure all personnel are clear from shade cast by the vehicle.

* Shade locations must be such that they will accommodate all the workers who are on a break at any point in time and will be large enough for workers on break to move around freely. During meal breaks or other congested periods, workers may be rotated in and out of shade locations to ensure all those on break can fit comfortably within the shade area.
* Shade locations for mobile workers must be identified at the start of each shift, when the work site is relocated, or when direct sun shifts and shade must be adjusted to ensure adequate protection. The HSC or site supervisor is responsible for relocating shade locations when a change of conditions dictates the need.
* Shade locations must be such that they will accommodate all the workers who are on break or needing rest and will be large enough that eachcan sit in a normal posture without having to be in physical contact with each other.
* In situations where it is not safe or feasible to provide access to shade (e.g., during high winds), the unsafe or unfeasible conditions will be documented, and alternative procedures will be used to provide access to shade that provides equivalent protection. Alternate procedures may include vehicles with working air conditioning, buildings or other structures with sufficient air movement and dehumidification, or other reasonable cool down areas (e.g., control rooms).
* Indoor work areas must have controls in place any time work areas are at or above the initial heat trigger. (Refer to Section 5.) Appropriate controls include shielding radiant heat from ovens, kilns, furnaces, etc.; dehumidification; air conditioning; portable or ceiling fans; or any combination of these.
* Other: List any additional facility- or site-specific requirements for shade.

9.5 **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Wearing certain types of clothing and PPE can increase the risk of heat stress on workers by increasing blood pressure and core body temperature. Wearable PPE that protects against heat exposure, called auxiliary cooling systems or personal cooling systems, are essential when temperatures rise.

* The following personal heat-protective equipmentwill be provided if feasible engineering and administrative controls are not effective in minimizing the risk of heat illness.
	+ Water and/or air-cooled garments such as cooling vests, jackets, and neck wraps
	+ Supplied air personal cooling systems (fans)
	+ Insulated suits
	+ Heat-reflective clothing
	+ Infrared reflecting face shields
	+ Other: List any additional PPE options available to workers.
* Cooling sources may include reusable ice packs or cooled air connected to an external source. However, cooling properties of cooling PPE must be maintained at all times.
* Optimal clothing during elevated temperatures includes:
	+ Hats with neck coverings
	+ Loose-fitting, light, brightly colored, reflective shirts
	+ Breathable or ventilated clothing

**Section 10. High-heat procedures**

High-heat procedures must be implemented when temperatures reach or exceed the high heat trigger per Section 5 of this HIIPP. These procedures are in addition to the initial heat trigger procedures already being taken.

10.1 **REST**

* A mandatory paid break for a **minimum of 15 minutes every two hours** will be provided for workers when the high heat trigger is met or exceeded. The total time of the rest break does not include reasonable time it takes employees to walk to and from the break areas or remove PPE.
* Additional preventative breaks will be permitted, as needed, to avoid heat stress.

NOTE: Slowing or pacing work shall not be considered a rest break. Staggering employee break times, within the required two-hour period, is permitted to ensure that some employees are always available to continue working for continuous operations.

* Workers must be encouraged to drink water and remove outer layers of clothing (vests, etc.), boots, and PPE to assist with cool down process.

10.2 **OBSERVATION AND MONITORING**

It’s imperative that signs and symptoms of heat-related illness are identified and reported early so appropriate action can be taken to prevent the condition from worsening. The physiological indicators of a heat-related illness which include headache, nausea, weakness, dizziness, elevated body temperature, muscle cramps, and muscle pain or spasms.

* Employes must be observed for signs and symptoms of heat-related illness when the high heat trigger is reached or exceeded. Observation will be either:
	+ The HSC or supervisor must remain in near proximity and observe employees;

NOTE: No more than 20 employees may be observed per HSC or supervisor.

* + Mandatory buddy systems in which coworkers in the same work area observe and monitor one another.
	+ For remote or mobile workers, an effective, two-way communication system must be established so the HSC or supervisor can make contact with the worker(s) at least every two hours. If no return communication is received, direct contact must be made with the employee(s) to ensure their safety.

10.3 **COMMUNICATION**

Hazardous heat can lead to sudden and traumatic injuries and can quickly progress to life threatening incidents if not treated properly and promptly. Communication is key to preventing potentially catastrophic consequences.

The following are required for effectively communicating with workers during times of hazardous heat:

* **HAZARD ALERT!** A hazard alert must be issued to all employees (including remote and mobile workers) when the high heat trigger is met or exceeded, and before exposure occurs.

The alert will include a minimum of:

* 1. A notification of heat hazards;
	2. Information on heat-related illness prevention;
	3. Encouragement for employees to utilize prevention measures such as water, rest, and shade;
	4. Reminder to workers of their right to take a rest break when necessary;
	5. Direction on how to access drinking water, cooled or shaded break areas, and additional PPE; and
	6. Emergency notification and response procedures.

NOTE: See Appendix A – Forms for a sample Hazard Alert.

Posted signs may be used to fulfill the notification requirements for stationary workers. Signs must be posted at locations that are readily accessible and visible to employees.

Hazard alerts, especially for remote or mobile workers, may also be issued electronically (e.g., via email or text message) or through verbal means (e.g., an in-person meeting, radio, or voicemail).

* Effective two-way communication will be maintained so that workers can contact a supervisor when necessary. Communication may be direct contact, visual cues if within near proximity of one another, or via radio, text, or phone.
* Frequent two-way communication will be maintained with workers working through the use of two-way communication, the buddy system, or other effective means. The worker(s) will be contacted regularly and as frequently as possible throughout the day since a worker in distress may not be able to summon help on their own.
* Reminder notifications will be through direct instruction or the use of audible devices, such as whistles, air horns, or other effective means.
* Other: List any additional communication requirements.

10.4 **EXCESSIVELY HIGH HEAT AREAS**

During periods of high heat, certain locations may experience a prolonged period of unusually high temperatures and humidities and can be dangerous for workers. To avoid heat-related illnesses, warning signs must be placed at indoor work areas with ambient temperatures that regularly (not isolated occurrence) exceed 120°F. These signs must specify:

* + Signal word “Danger;”
	+ Possible health effects;
	+ “Authorized Personnel Only” or identification of who is permitted to enter the area; and
	+ Precautionary safety measures.

Signs must be:

* Legible, visible, and understandable to all workers and contractors entering the area;
* Located where employees can clearly see them before entering the area; and
* Adequately lit and not blocked by items that may prevent visibility of the sign.

**Section 11. Emergency response and communication protocols**

Heat emergency response planning is a critical part of this HIIPP to minimize the severity of heat-related illnesses when they occur and allow for more efficient access to medical care when needed. These protocols have been developed with input and involvement of management and non-managerial employees and/or their representatives and are in addition to specific elements required in the Company’s emergency response plan.

For multiple work sites that are distinct from each other, individual response plans will be tailored to each work site or type of work site using this plan as a foundational starting point.

11.1 **EMERGENCY CONTACT INFORMATION**

See Section 3.4 for emergency contact information.

11.2 **EMERGENCY PROCEDURES**

The severity and survival of heat stroke or other heat-related illness is highly dependent on how quickly effective cooling and emergency medical services are provided. Indications that a worker is in distress due to heat may include:

* Red skin and hot face, does not look well, or does not get better after drinking cool water and resting in the shade;
* Headache or muscle cramps;
* Decreased level of consciousness;
* Disorientation or staggering;
* Nausea or vomiting;
* Irregular heart rate;
* Irrational behavior, anger, or incoherent speech; or
* Convulsions.
* Appropriately trained and equipped personnel will be made available at work sites to render first aid.
* To ensure that emergency medical services can be called, the HSC and supervisors will have access to or carry communication devices, such as cell phones, radios, or other effective means. These communication devices will be checked prior to each shift to ensure that they are functional.
* Site maps will be posted at each work location which include the address of the work site, nearest cross street, and emergency contact numbers to ensure the timeliest response. NOTE: GPS coordinates may be necessary for certain remote or mobile locations.
* When a worker displays possible signs or symptoms of heat illness, the HSC, supervisor, or a trained first aid worker will evaluate the sick worker and determine whether resting in the designated shade/cool area and drinking cool water will suffice, or if emergency service providers will need to be called. Under no circumstances will the affected worker be left unattended.
* For lone or remote workers, if the HSC, supervisor, or trained first aid worker(s) are not available at the site, emergency service providers must be contacted immediately by dialing 9-1-1. (See Section 3.4 for additional emergency contact numbers.)
* A designated worker will be sent to the nearest road or highway where emergency responders can see them. If daylight is diminished, the designated worker will be given reflective vests or flashlights to direct emergency personnel to the sick worker’s location.

**IMPORTANT**: Employees who may not have phone service or access to a phone to call for medical help, must have access to other means of communication such as radios, walkie-talkies, personal locator beacons, and/or audio signals.

* First aid will be initiated while waiting for the ambulance or medical services to arrive. Steps include:
	1. Take the worker to a shaded location or air-conditioned area,
	2. Remove PPE and excess layers of clothing,
	3. Place ice packs on their neck and in their armpits and groin area,
	4. Fan the victim, and
	5. Offer them reassurance until additional help arrives.

**IMPORTANT**: Workers who are experiencing heat-related illness will never be sent directly home or transported by company personnel. Even if they start to feel better, their condition could worsen and they could potentially die before reaching the hospital.

* Workers and supervisors will be trained in these written procedures for emergency response.
* Other: List any additional emergency response procedures.

11.3 **COMMUNICATION PROTOCOLS**

Effective two-way communication is essential for notification of heat-related hazards so that appropriate precautions can be taken. It is also a key means for employees to communicate with the employer about temperature and humidity changes, signs and symptoms of heat-related illness, and appropriate response measures. (See Section 10.1.)

Two-way communication means that both the employer and employee can communicate back and forth. The HSC or site supervisor must regularly reach out to employees to ensure their safety during high heat conditions.

**IMPORTANT:** If the HSC or site supervisor does not hear from an employee in a reasonable amount of time, they must attempt contact by any means possible to ensure that the employee is not experiencing heat-related illness symptoms.

* In some cases, such as employees working closely together, voice (or hand signals) may be an effective two-way communication method.
* Workers not within ear- or eye-shot of another worker must use electronic means of two-way communication, such as handheld radios, phones, or similar devices.

**Section 12. Training requirements**

To be effective, training must be understood by workers. Therefore, it must be given in a language and vocabulary the workers understand. Supervisors will be trained prior to being assigned to supervise other workers. Training will include the Company’s written procedures and the steps to follow when workers exhibit symptoms consistent with heat-related illness.

* Training will be provided for HSCs, supervisors, and employees based on their level of responsibility. It may be conducted in a variety of ways, or a combination of:
	+ Classroom,
	+ Online with site-specific details added,
	+ Safety meetings or toolbox talks, or
	+ Written materials.

Regardless of the training method, employees must be offered the opportunity to ask questions and have those questions answered.

* Training will occur annually before or at the start of the heat season, but no sooner than 30 days before the start of the heat season.
* Additional training will occur as a “lessons learned alert” whenever a heat-related injury or illness occurs at a work site that results in death, days away from work, medical treatment beyond first aid, or loss of consciousness.
* Refresher training will be provided:
	+ Any time changes occur in the workplace that affect employee exposure to heat (e.g., new job tasks, relocation to a different facility or area of a facility);
	+ When there is a change in polices, procedures, or this HIIPP; or
	+ When conditions indicate training or expectations are not understood.
* Employee training must include the following, at a minimum:
	+ An overview of this HIIPP and how to access it, heat triggers, related policies or procedures, and regulatory requirements;
	+ Identity and contact information for the HSC;
	+ Heat-related hazards (temperature, humidity, lack of air movement, radiant heat, lack of acclimatization, clothing, PPE, etc.) and control measures;
	+ Environmental and personal risk factors of heat illness, as well as the burden of heat load on the body caused by exertion, clothing, and PPE;
	+ Types of heat-related illness (rash, cramps, exhaustion, stroke, etc.);
	+ Types of heat-related injuries (slips, trips, falls, etc.);
	+ Signs and symptoms of heat-related illness;
	+ Acclimatization procedures;
	+ Provisions for providing water, access to cool-down areas or shade, preventative cool-down rests, and first aid;
	+ Assurance of workers' ability to utilize their rights under this standard without retaliation;
	+ Communication procedures;
	+ Training participation expectations; and
	+ Emergency response procedures and the importance of immediately reporting signs and symptoms of heat-related illness or injury.
* HSC and supervisor training will include the above PLUS:
	+ How weather information and forecasting is to be used to modify work schedules, increase the number of water and rest breaks, or cease work early if necessary;
	+ Employee monitoring;
	+ Initial and high-heat triggers and associated control requirements; and
	+ All aspects of implementing, reviewing, and updating this HIIPP.
* Training will be provided in a language and at a literacy level that employees can understand.
* Post-training assessments will be given to ensure understanding of all requirements. Assessments may be in the form of a quiz, verbal discussion, oral assessments, or other effective means.
* Training records will be maintained by the HSC for at least one year, or until the next training has been provided. Training records must include:
	+ The date of the training,
	+ Name of the training provider,
	+ Names of attendees, and
* Other: List any additional training requirements.

**Section 13. Recordkeeping and program reviews**

The Heat Safety Coordinator (HSC), in coordination with area supervisors, will conduct regular inspections of work sites to ensure the HIIPP is implemented appropriately and to monitor the ongoing effectiveness of the plan. Inspections will include a combination of employee observation, interviews, and document reviews. Any gaps in program implementation or compliance will be corrected immediately and this plan will be updated accordingly.

13.1 **RECORDKEEPING**

The HSC is responsible for implementing, reviewing, and updating this HIIPP. They will ensure all personnel understand and comply with it. An updated copy of this plan is accessible at:

13.1.1 Enter location.

13.1.2 Enter location.

13.2 **RECORDKEEPING – INDOOR WORK AREAS**

For indoor work sites where there is a reasonable expectation that employees are or may be exposed to heat at or above the initial heat trigger, and that are therefore required to conduct on-site temperature measurements:

* Written or electronic records of on-site temperature measurements will be maintained to identify heat trends and their effects on workers.
* Indoor temperature measurements must be retained for at least 6 months. See Appendix A – Forms for a sample Heat Tracking Form.

13.3 **PROGRAM REVIEWS**

The Enter Company name. HIIPP will be reviewed and evaluated for effectiveness:

* Annually;
* Whenever a heat-related injury results in:
	+ Death,
	+ Days away from work,
	+ Medical treatment beyond first aid, or
	+ Loss of consciousness;
* When there are changes in job assignments that may be affected by heat; or
* When employees demonstrate a lack of knowledge or adherence to requirements.

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**APPENDICES**

Appendix A – Forms

The following forms are to be used to warn personnel of extreme heat exposures and controls, as well as track necessary assessment and analytical information.

* High-Heat Alert Form
* Heat Tracking Form

Appendix B – Key Definitions

* **Acclimatization** — exposing a person to heat gradually over time so as to adapt to temperatures and prevent heat stress.
* **Ambient temperature** — the temperature of the air surrounding a person’s body.
* **Cooling PPE** — equipment with cooling properties that is used to protect against heat-related injury or illness.
* **Heat index** — a measure of temperature and humidity that helps indicate the level of discomfort the average person is thought to experience. Heat index represents what the temperature “feels like” to a person.
* **Heat Safety Coordinator (HSC)** — designated person authorized to monitor employees and implement all aspects of the heat-injury and illness prevention plan.
* **High heat trigger** — heat index that initiates specific protective measures. The high heat trigger commonly used is 90 degrees F.
* **Heat injury and illness prevention plan (HIIPP)** — a site-specific plan developed by employers (with employee input) that addresses heat-related hazards in the workplace.
* **Indoor** — defined by OSHA as, “an area under a ceiling or overhead covering that restricts airflow and has along its entire perimeter walls, doors, windows, dividers, or other physical barriers that restrict airflow, whether open or closed.” Examples include garages even if doors are open, warehouses even if dock doors are open, and sheds with four walls and a ceiling. NOTE: Construction activity is considered to be “indoor” when work is performed inside a structure that has erected outside walls and a roof.
* **Initial heat trigger** — heat index that initiates specific protective measures. The initial heat trigger commonly used is 80 degrees F.
* **Outdoor** — defined by OSHA as, “anything that’s not considered indoor (per definition). Examples include agricultural work, work under pavilions, and normal exterior construction.
* **Hazard** — a source that could cause harm to a person, property, or other entity.
* **Occupational Safety and Health Administration (OSHA)** — federal agency that sets and enforces health and safety standards for employers.
* **Radiant heat** — heat that is transferred between two surfaces without the need for an external medium such as air or water. Examples include heat from the sun, a fireplace, or floor heating system.
* **Risk** — the potential or probability of a person, property, or entity being harmed.
* **Shade** — defined by OSHA as, “the blockage of direct sunlight, such that objects do not cast a shadow in the area of blocked sunlight.”
* **Wet bulb globe temperature (WBGT)** — a heat stress measurement in direct sunlight that takes into account temperature, humidity, sun angle, cloud cover, and wind speed. WBGT could be considered heat index PLUS sun, clouds, and wind.
* **Work area** — defined by OSHA as, “an area where one or more employees are working within a work site.” In some cases, this will be within vehicles or heavy equipment cabs.
* **Work site** — defined by OSHA as, “a physical location (e.g., fixed, mobile) where the employer’s work or operations are performed.” Generally speaking, this defines indoor versus outdoor locales but may also include structures or groups of structures.