

**HEAT RELATED ILLNESS**  
**SAFETY PROGRAM**

**Objective**

To provide a safe and healthful working environment and protect Selzer-Ornst employees who perform work in an outdoor environment. Selzer-Ornst will evaluate and reduce hazards if employees are exposed to temperature extremes.

**Policy**

It is the policy of Selzer-Ornst that all affected employees are required to comply with this Heat Related Illness policy and are encouraged to actively participate in identifying ways to reduce the risk of experiencing heat related illness in the workplace.

It is also the policy of Selzer-Ornst to check the workplace for unsafe conditions, monitor the health and safety of employees, and take prompt action in response to any identified heat related illness hazards.

**Hazard Evaluation**

Selzer-Ornst has evaluated the workplace and identified the following heat related illness hazards:

- *Heat during the months of May, June, July, August, September*
- *Reflective heat from surface materials (i.e., parking lot, roof top, etc.)*
- *Radiant heat from equipment*
- *Heavy clothing and PPE's*
- *Specific job duties like demolition, drywall and/or concrete work.*
- *Age, weight, degree of physical fitness, degree of acclimatization, metabolism, use of alcohol or drugs, and a variety of medical conditions such as hypertension all affect a person's sensitivity to heat. However, even the type of clothing worn must be considered. Prior heat injury predisposes an individual to additional injury.*

**Temperature Trigger Chart**

To determine the temperature trigger, select the type of clothing or PPE the employee is wearing and whether the work is being performed in the direct sun or the shade.

<b>Type of clothing</b>	<b>Work in direct sun</b>	<b>Work in shade</b>
Work Clothes	89° F	96° F
Double-layer woven clothes (e.g., cotton coveralls on top of summer clothes	77° F	87° F

**Prevention, Controls, and Correction of Hazards**

When heat related illness hazards are present the following actions will be taken:

- *Additional rest breaks will be provided during peak temperature times; **construction workers are encouraged to take appropriate breaks during high heat conditions (as described in this plan) in shaded, cool areas and drink frequent amounts of water***
- *Employees will be encouraged to frequently drink small quantities of water since 1 quart or more over the course of an hour may be necessary when the work environment is hot and employees may be sweating more than usual during the performance of work*
- *Employees will be encouraged and allowed to take paid preventative cool-down rest breaks when they feel the need to do so.*
- *New employees or employees newly assigned to a project susceptible to heat related illness shall acclimate themselves to the heat conditions while gradually increasing moderate to heavy work exposure to avoid a heat related emergency.*
- *Superintendents may elect to modify job start times to reduce heat exposure during the hottest times of the day.*
- *Employees working in remote locations shall be contacted periodically by their superintendent.*

When temperatures exceed 100 degrees Fahrenheit, Shade must be provided that is either open to the air or provided with ventilation or cooling and not adjoining an adjacent heat source. Shade space shall be adequate to accommodate the number of employees who may need to access it on the meal or rest period schedule. Shade must be reasonably located near employee work locations as practicable. In lieu of shade, the employer will provide sufficient means to reduce body temperature. Above 100 degrees Fahrenheit, cool-down rest periods must be offered for 10 minutes every two hours and can be concurrent with any meal or rest period provided.

**First Aid awareness and actions in the event of a heat related illness**

The following chart helps employees recognize the main types of heat related illnesses, signs, symptoms, and the appropriate treatment to reduce the effects of the heat related illness. This chart will be posted in the heat safety plan in the Superintendent’s Safety Folder on Google Drive and in the Safety Manual.

	<b>Signs and Symptoms</b>	<b>First Aid and Treatment</b>
<b>Sunburn</b>	<ul style="list-style-type: none"> <li>● red, hot skin</li> <li>● may blister</li> </ul>	<ul style="list-style-type: none"> <li>● move to shade, loosen clothing</li> <li>● apply cool compresses or water</li> </ul>
<b>Heat Rash</b>	<ul style="list-style-type: none"> <li>● red, itchy skin</li> <li>● bumpy skin</li> <li>● skin infection</li> </ul>	<ul style="list-style-type: none"> <li>● apply cool water or compresses</li> <li>● keep affected area dry</li> <li>● control itching and infection with prescribed medication</li> </ul>
<b>Heat cramps</b>	<ul style="list-style-type: none"> <li>● muscle spasms in legs or abdomen</li> <li>● grasping the affected area</li> <li>● abnormal body position</li> </ul>	<ul style="list-style-type: none"> <li>● move person to a cooler location</li> <li>● stretch or massage muscles for cramps</li> </ul>

		<ul style="list-style-type: none"> <li>● get medical evaluation if cramps persist</li> <li>● give cool water or electrolyte-containing fluid to drink</li> </ul>
<b>Heat exhaustion</b>	<ul style="list-style-type: none"> <li>● headaches</li> <li>● clumsiness</li> <li>● dizziness/lightheadedness/fainting</li> <li>● weakness/exhaustion/fatigue</li> <li>● heavy sweating/clammy/moist skin</li> <li>● irritability/confusion</li> <li>● nausea/vomiting</li> <li>● paleness</li> <li>● high pulse rate</li> </ul>	<ul style="list-style-type: none"> <li>● move person to a cooler place (do not leave alone)</li> <li>● loosen and remove heavy clothing that restricts evaporative cooling</li> <li>● if conscious, provide small amounts of cool water to drink</li> <li>● fan person, spray with cool water, or apply a wet cloth to skin to increase evaporative cooling</li> <li>● lay flat and elevate feet</li> <li>● evaluate mental status (ask who, where, when questions)</li> <li>● call 911 if not feeling better within a few minutes</li> </ul>
<b>Heat stroke</b>	<ul style="list-style-type: none"> <li>● any of the above, but more severe</li> <li>● sweating may or may not be present</li> <li>● red or flushed, hot dry skin</li> <li>● bizarre behavior</li> <li>● mental confusion or losing consciousness</li> <li>● panting/rapid breathing</li> <li>● rapid, weak pulse</li> <li>● seizures or fits</li> <li>● can be fatal</li> </ul>	<ul style="list-style-type: none"> <li>● <b>call 911</b></li> <li>● move person to a cooler place (do not leave alone)</li> <li>● cool worker rapidly</li> <li>● if conscious, provide small amounts of water to drink</li> <li>● loosen and remove heavy clothing that restricts evaporative cooling</li> <li>● fan person, spray with cool water, or apply a wet cloth to skin to increase evaporative cooling</li> <li>● lay flat and elevate feet</li> <li>● monitor airway and breathing, administer CPR if needed</li> </ul>

If medical treatment is needed beyond first aid and 911 must be called, employees should contact 911 immediately and request transport to the nearest hospital. Employees should also notify their superintendent as soon as possible of their illness.

The nearest first aid, AED and emergency contact for Fire, EMS and hospitals are listed on the project safety board, where applicable.

### **Training**

All training will be provided prior to outdoor work assignments presenting heat related illness hazards during the months of May, June, July, August, and September, and at least annually

thereafter. Training will be documented and kept on file. Temperature exposure records are not required to be kept.

### **Employee training**

Training in the following topics will be provided to all employees who may be exposed to a heat-related illness hazard:

- The environmental factors that contribute to the risk of heat-related illness;
- Awareness of personal factors that may increase susceptibility to heat illness;
- Selzer-Ornst procedures for identifying, evaluating, and controlling exposure;
- The importance of removing personal protective equipment during all breaks;
- The importance of frequent consumption of small quantities of water, 1 quart or more over the course of an hour may be necessary when the work environment is hot and employees may be sweating more than usual in the performance of their duties;
- The importance of acclimatization;
- The different types of heat-related illness and the common signs and symptoms of heat-related illness;
- The importance of immediately reporting to Selzer-Ornst, directly or through the employee's supervisor, symptoms or signs of heat illness in themselves, or in coworkers;
- Selzer-Ornst procedures for responding to symptoms of possible heat-related illness, including how emergency medical services will be provided should they become necessary;
- The purpose and requirements of this standard; and
- The worker's right to receive the protections provided by this standard.

### **Supervisor training**

Prior to assignment, supervisors must have training on the following topics:

- The information required to be provided in employee training above.
- The procedures the supervisor is to follow to implement the applicable provisions in this section;
- The procedures the supervisor is to follow when an employee exhibits signs or symptoms consistent with possible heat-related illness, including emergency response procedures;
- Procedures for moving employees to a place where they can be reached by an emergency medical service provider, if necessary; and
- How to provide clear and precise directions to the emergency medical provider who needs to find the work site.

### **Definitions**

“Acclimatization” – means the body's temporary adaptation to work in the heat that occurs gradually as a person is exposed to it.

“Drinking water” – means water satisfying the Department of Health's requirements as potable water suitable for drinking by the public. Water packaged as a consumer product is an acceptable source of drinking water.

“Environmental risk factors for heat related illness” - means working conditions that increase the susceptibility for heat related illness including air temperature, relative humidity, radiant heat from the sun and other sources, conductive heat sources such as the ground, air movement, workload severity and duration, clothing and personal protective equipment worn by employees.

“Heat Related Illness” (HRI) - means a serious medical condition resulting from the body’s inability to cope with a particular heat load, and includes, but not limited to, heat cramps, heat rash, heat exhaustion, heat syncope (fainting), and heat stroke.

“Outdoor environment” – means an environment where work activities are conducted outside of a building shell (generally referring to a ceiling and at least three sides). Environments such as vehicle cabs, sheds, and tents, or other non-permanent structures may be considered an outdoor environment when the environmental factors are not controlled.

“Personal risk factors for heat related illness” - means factors including, but not limited to, an individual’s age, degree of acclimatization, health, medical condition, water consumption, alcohol consumption, caffeine consumption, nicotine consumption, and use of prescription and non-prescription medications that affect the body’s water retention or other physiological responses to heat.

“Shade”- A blockage of direct sunlight. 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. For example, a car sitting in the sun does not provide acceptable shade to a person inside it, unless the car is running with air conditioning. 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.