



Heat Illness Prevention Plan

Table of Contents

Statement.....	3
Scope.....	3
Responsibilities.....	3
Risk Factor for Heat Illness.....	4
Prevention Procedures.....	4
Heat Illness Signs/Symptoms.....	5
Responding to Heat Related Medical Emergencies.....	6
Training.....	10
Enforcement.....	10

Statement

Saint Joseph's College (SJC) is committed to protecting employees from the hazards of hot working environments. The Heat Illness Prevention Plan (the Plan) outlines our procedures for hazard assessment, hydration, rest, and emergency response. This Plan is intended to provide the necessary work practices to promote a culture of safety within the SJC campus community and is designed to be compliant with the Occupational Safety and Health Administration (OSHA) General Duty Clause and OSHA's National Emphasis Program on Outdoor and Indoor Heat-Related Hazards.

Scope

The Plan applies to SJC employees (faculty, staff, and student employees) whose activities, conducted indoor and outdoor, exposes them to a heat index in the work area that equals or exceeds 80 °F for more than 15 consecutive minutes per hour. The program is not applicable to activities performed by emergency responders, student athletes, or visitors. This program is also not applicable to buildings, structures, and vehicles that have a mechanical ventilation system or fan that maintains the heat index below 80 °F. Contractors should utilize their own heat safety programs.

Responsibilities

Human Resources and Facilities Departments

- Develop, implement, and monitor for compliance with the Heat Illness Prevention Plan
- Monitor injuries, illnesses and incidents related to heat safety and assist in developing corrective actions
- Oversee and document training, as it relates to the Heat Illness Prevention Plan
- Ensure departments have appropriate heat-illness prevention resources available to employees
- Communicate responsibilities to supervisors within the department

Managers/Supervisors (see General Requirements for Managers/Supervisors for additional information)

- Monitor weather conditions and heat advisories daily using the OSHA-NIOSH Heat Safety Tool App / National Weather Service, or other recognized source to determine heat index
- Plan for, implement and monitor heat-illness control measures for employees under their supervision
- Ensure cool drinking water is readily available and accessible

- Allow and encourage employees to take cool-down breaks
- Monitor employees for signs of heat illness
- Report all incidents to direct supervisor and Human Resources
 - [Procedure for documenting a work-related injury incident](#)
 - [Accident/Incident Form \(Employee\)](#)
 - [Accident Investigation Form \(Supervisor\)](#)

Employees

- Complete all required training for the Heat Illness Prevention Program
- Notify Human Resources of any personal risk factors necessitating adjustments to assigned work (see next section Risk Factors for Heat Illness)
- Monitor self-conditions as well as check in on colleagues
- Report incidents to direct supervisor regarding all heat-related illnesses
- Report hazardous conditions related to heat exposure
- Hydrate (approx. 1 cup every 15-20 minutes) and utilize provided shade and rest breaks

Risk Factor for Heat Illness

Personal Risk Factors

- Age
- Medical conditions
- Alcohol/Caffeine consumption
- Water consumption
- Degree of acclimatization

Environmental Risk Factors

- Air temperature
- Relative humidity
- Air movement
- Radiant/Conductive heat
- Work intensity
- Clothing

Prevention Procedures

Hydration

- Drinking water is available across campus, including in Pearson's Cafe, Saint George Hall and Standish Hall.

Shade and Rest

- At least every 2 hours a shade break will be taken while in the field. Shaded shoreline areas will be sought while in the canoe.
- Ice packs and/or wetted cloth (bandanas/towels) will also be made available for regulating heat by evaporative cooling.
- As needed, refuge from the heat may be taken in the air-conditioned field vehicle.

HEAT INDEX TEMPERATURE	REST BREAK DURATIONS
80 OR GREATER	As needed to prevent overheating
90 OR GREATER	15 minutes every two hours
100 OR GREATER	15 minutes every hour
110 OR GREATER	High risk of heat stress; consider rescheduling activities (if rescheduling is impossible, best practice is 15 minutes of work with 45 minutes of rest every hour)

Acclimatization (getting used to heat) schedule when the heat index reaches or exceeds 80 degrees Fahrenheit:

DAY ONE	On Day One in the heat, a new or returning worker should work 20-25% of a shift at full intensity.
WEEK ONE	Increase the time working at full intensity by 20-25% a day
14 DAYS	Closely watch all new or returning workers for 14 workdays

Importance of Acclimatization

- Reduces risks of dehydration and salt loss
 - Sweating and evaporative cooling becomes more efficient
 - Salt loss becomes more efficient
- Core body temperature maintained more efficiently
- Reduces strain on heart
 - Blood circulation to skin becomes more efficient
 - Recovery heart rate improves

Heat Illness Signs/Symptoms

Early signs/symptoms of heat illness include:

- Dehydration
- Muscle cramps
- Headache
- Unusual fatigue

Progression to serious illness, such as heat exhaustion and heat stroke, can be fast and is indicated by symptoms including:

- Cool, moist skin
- Dizziness, lightheadedness
- Nausea or vomiting
- Fast heartbeat
- Confusion or unusual behavior
- Excessive sweating OR red, hot, dry skin/face
- Convulsions or seizures
- Fainting

Responding to Heat Related Medical Emergencies

Recognizing the symptoms of heat stress and heat-related illness early is critical to preventing more serious conditions. Report all signs and symptoms of heat illness to your manager or supervisor immediately.

For urgent medical assistance, contact Campus Safety at 207-893-7911 (emergency line).

Campus Safety Officers are trained in First Aid, CPR, and AED use, and will coordinate emergency medical services to respond directly to the work area.

Heat Syncope: Prolonged standing or sudden rising from a sitting or resting (supine) position; dehydration can be a contributing factor

- Preventative measures:
 - Acclimatization to heat helps reduce dehydration
 - Drink adequate amounts of water throughout the day
 - Break up long periods of standing with small rest breaks
 - Rise slowly from sitting or resting positions
- Signs and symptoms:
 - Light-headedness or dizziness
 - Fainting
- First aid treatment:
 - If the person is only slightly dizzy and able to move, have two people assist them carefully to a cool location
 - Have the person lie down on their back with their feet elevated above heart level, and provide small amounts of water
 - If the dizziness persists, call Campus Safety **(207-893-7911)** immediately
 - If they fainted, secure the area, elevate their feet above heart level and immediately call Campus Safety **(207-893-7911)**; do not allow them to get up quickly or walk about

Heat Rash: irritation of skin due to excessive sweating

- Preventative measures:
 - Wear loose fitting clothing that allows sweat to dissipate
 - Avoid working in sweat soaked clothing for prolonged periods (e.g., change at breaks as needed)
 - Wash sweat-soaked areas with mild soap and water; dry thoroughly at breaks and after your shift ends
- Signs and symptoms:
 - Itchy and painful clusters of red blisters
 - Common to the neck, chest, groin, armpits and creases of the elbows and knees
- First aid treatment:
 - Have person take a cool shower and thoroughly dry the skin following shower
 - Ensure skin is cleaned and dried frequently, especially before and after shifts
 - Have person seek medical treatment if rash persists for more than two days or if rash becomes infected

Heat Cramps: Depletion of salt and water in the body due to excessive sweating. This is a precursor to more serious heat exhaustion and/or heat stroke.

- Preventative measures:
 - Acclimatization to heat helps reduce salt and water loss
 - Drink adequate amounts of water throughout the day
 - Salt your foods to taste
- Signs and symptoms:
 - Muscle cramps, spasms and/or pain common to major muscles used for work (e.g., arms, legs, abdominal and back muscles)
- First aid treatment:
 - Direct person to a cool location
 - Provide an electrolyte replacement fluid to replace lost salt and water
 - Call Campus Safety **(207-893-7911)** immediately if cramps persist or other heat-illness symptoms develop (e.g., elevated body temperature, elevated heart rate, headache, dizziness, etc.)

Heat Exhaustion: The body's inability to cool itself, often due to a combination of several factors (e.g., high temperatures, humidity, physical exertion, dehydration, clothing that blocks sweat evaporation and/or alcohol use). This is a serious condition that can lead to a life-threatening heat stroke.

- Preventative measures:
 - Acclimatization to heat helps reduce dehydration
 - Drink adequate amounts of water throughout the day

- Take rest breaks in shade to allow body to recover from heavy physical exertion and heat exposure
- Protect skin against sunburn, which reduces body's ability to cool itself
- If possible, perform heavier physical labor towards cooler part of the day (e.g., early morning or evening)
- Signs and symptoms:
 - Elevated oral temperature 99.6 to 101.4 °F
 - Weak, but rapid pulse (elevated heart rate)
 - Cool, moist skin (person may appear pale with clammy skin)
 - Excessive sweating
 - Headache and possible irritability
 - Fatigue or weakness
 - Dizziness and/or feeling faint
 - Nausea and/or vomiting
 - Decreased urine output
- First aid treatment:
 - Call Campus Safety **(207-893-7911)** immediately
 - Until Campus Safety arrives:
 - Remove or loosen unnecessary clothing
 - Have them drink small amounts of cool water
 - Spray skin with cool water and fan rapidly to increase evaporation and cooling

Heat Stroke: the body is unable to cool itself and regulate core body temperature. This is a serious and life-threatening condition that requires immediate medical attention.

- Preventative measures:
 - Acclimatization to heat helps reduce dehydration
 - Drink adequate amounts of water throughout the day
 - Take rest breaks in shade to allow body to recover from heavy physical exertion and heat exposure
 - Protect skin against sunburn, which reduces body's ability to cool itself
 - If possible, perform heavier physical labor towards cooler part of the day (e.g., early morning or evening)
- Signs and symptoms:
 - Elevated core body temperature above 104 °F (40 °C); oral temperature above 103.2 °F
 - Hot, dry skin or heavy sweating
 - Mental confusion, agitation and/or irrational behavior
 - Clumsiness
 - Slurred speech

- Fainting or a loss of consciousness
- Seizures or convulsions
- First aid treatment:
 - Call Campus Safety (207-893-7911) immediately; do not wait as the victim's life depends on getting immediate medical care
 - Until Campus Safety arrives:
 - Provide immediate and aggressive cooling to their body
 - Elevate feet above heart level
 - Remove or loosen unnecessary clothing
 - Pack ice in groin and armpit areas
 - Soak skin with cool water and fan rapidly and vigorously to increase cooling of skin
 - As an alternative, spray body with large amounts of cool water
 - Do not give person fluids to drink, especially if they are unconscious
 - Administer CPR (only if trained and have active certification) as needed, if blood circulation or breathing stops, until emergency medical services arrive

Rhabdomyolysis: sometimes caused by a combination of heat stress and prolonged physical exertion, muscle starts to break down and die, releasing proteins and electrolytes into the bloodstream. This is a potentially life-threatening condition affecting the kidneys that requires immediate medical attention.

- Preventative measures:
 - Acclimatization to heat helps reduce dehydration
 - Drink adequate amounts of water throughout the day
 - Take rest breaks in shade to allow body to recover from heavy physical exertion and heat exposure
 - Protect skin against sunburn, which reduces body's ability to cool itself
 - If possible, perform heavier physical labor towards cooler part of the day (e.g., early morning or evening)
 - Avoid overexertion, such as lifting objects heavier than you can comfortably lift or straining muscles to a point where they can no longer function properly
 - Those with diabetes, thyroid conditions or muscular dystrophy are at greater risk
 - Those with a viral infection, such as flu or herpes, are at greater risk
 - Use of alcohol and illegal drugs can increase the risk
 - Some medications, such as such antipsychotics or statins, can increase the risk
- Signs and symptoms:
 - Muscle cramps, pain and/or loss of range
 - Joint pain and/or stiffness
 - Swelling of muscles

- Weakness and a decreased ability to perform physical exertion for even a small amount of time
- Dark urine (similar to tea or cola in color)
- If kidney damage and/or failure occurs the following life-threatening indicators may be observed:
 - Shortness of breath
 - Irregular heart beat
 - Swelling in the legs and feet
 - Seizures
 - Coma
- First aid treatment:
 - Call Campus Safety **(207-893-7911)** immediately (IV fluids and treatments to combat toxic proteins in blood are needed to prevent kidney failure)

For employees working off-campus or participating in external events: if a heat-related medical emergency arises, please contact 911 or local emergency services immediately for urgent assistance.

Training

All SJC employees (faculty, staff, and student employees) must complete the *Heat Illness Prevention* training upon hire and annually thereafter if their indoor or outdoor work activities expose them to a heat index of 80 °F or higher for more than 15 consecutive minutes per hour.

Enforcement

Saint Joseph's College is committed to maintaining a safe and healthy workplace. All employees have the right to report dangerous working conditions, request rest and hydration breaks, and report heat-related symptoms without fear of discipline, termination, or retaliation. Any manager or employee who engages in retaliation against an employee for exercising these health and safety rights will face disciplinary action up to and including termination of employment. For more information on worker rights visit the Federal Occupational Safety & Health Administration (OSHA) webpage: [osha.gov/](https://www.osha.gov/).

Constant awareness of and respect for heat stress hazards, and compliance with all safety rules are considered conditions of employment. Failure to comply with the standards set forth in this Plan may result in disciplinary action up to and including termination of employment.