

# **SINGH GROUP INC**



## **INJURY AND ILLNESS PREVENTION PROGRAM ( NON-HIGH HAZARD WORK)**

### **Heat Illness Prevention Bloodborne Pathogen Program**

This IIPP conforms to Title 8 of the California Code of Regulations, Section 3203 (T8 CCR 3203) and consist of the following elements. SGI is committed to providing a safe and healthy workplace, complying with OSHA's standard (29 CFR 1910.12 and Cal/OSHA T8 CCR 3203).

- Responsibility
- Compliance
- Communication
- Hazard Assessment
- Accident/Exposure Investigation
- Hazard Correction
- Training and Instruction
- Employee access to the IIP Program
- Recordkeeping

FOR INFORMATION ON IIPP

CONTACT

ADOLF SINGH

760-213-5462

# **INJURY AND ILLNESS PREVENTION PROGRAM (IIPP) for Singh Group Inc**

## **RESPONSIBILITY**

The Injury and Illness Prevention Program (IIP Program) administrator, Adolf Singh, Safety Manager, has the authority and responsibility for implementing the provisions of this program for Singh Group Inc.

Isabel Ferrer will be the point of contact for initial contact or the immediate supervisor.

All managers and supervisors are responsible for implementing and maintaining the IIP Program in their work areas and for answering worker questions about the IIP Program.

## **COMPLIANCE**

All workers, including managers and supervisors, are responsible for complying with safe and healthful work practices. Our system of ensuring that all workers comply with these practices include one or more of the following checked practices:

- Informing workers of the provisions of our IIP Program.
- Evaluating the safety performance of all workers.
- Recognizing employees who perform safe and healthful work practices.
- Providing training to workers whose safety performance is deficient.
- Disciplining workers for failure to comply with safe and healthful work practices.
- Communicating any changes or updates in the IIP Program
- Providing incentive for safety in the work place
- Providing online and other social media communication platform for employees

## **COMMUNICATION**

All managers and supervisors are responsible for communicating with all workers about occupational safety and health in a form readily understandable by all workers. Our communication system encourages all workers to inform their managers and supervisors about workplace hazards without fear of reprisal. Any request for IIPP by employees shall be provided Immediately or within 5 days of request.

Our communication system includes one or more of the following checked items:

- New worker orientation including a discussion of safety and health policies and procedures.
- Review of our IIP Program.
- Workplace safety and health training programs.
- Regularly scheduled safety meetings.
- Posted or distributed safety information.
- A system for workers to anonymously inform management about workplace hazards.
- Our establishment has less than ten workers and communicates with and instructs workers orally about general safe work practices and hazards unique to each worker's job assignment.
- Providing open door communication to employees
- Anonymous reporting of any safety issues

## HAZARD ASSESSMENT

Periodic inspections to identify and evaluate workplace hazards shall be performed by a competent observer in the following areas of our workplace:

Competent Observer	Area
Adolf Singh	Job Sites
Adolf Singh	Office and Yard

Periodic inspections are performed according to the following schedule:

1. Weekly random inspection and when there is a project
2. When we initially establish our IIP Program.
3. When new substances, processes, procedures, or equipment that present potential new hazards are introduced into our workplace.
4. When new, previously unidentified hazards are recognized.
5. When occupational injuries and illnesses occur.
6. Whenever workplace conditions warrant an inspection.

## ACCIDENT/EXPOSURE INVESTIGATIONS

Procedures for investigating workplace accidents and hazardous substance exposures include:

1. Visiting the accident scene as soon as possible.
2. Interviewing injured workers and witnesses.
3. Examining the workplace for factors associated with the accident/exposure.
4. Determining the cause of the accident/exposure.
5. Taking corrective action to prevent the accident/exposure from reoccurring.
6. Recording the findings and corrective actions taken.
7. Fill out any OSHA paperwork.
8. Report to OSHA immediately in case of serious accident.

## **HAZARD CORRECTION**

Unsafe or unhealthy work conditions, practices or procedures shall be corrected in a timely manner based on the severity of the hazards. Hazards shall be corrected according to the following procedures:

1. When observed or discovered.
2. When an imminent hazard exists that cannot be immediately abated without endangering employee(s) and/or property, we will remove all exposed workers from the area except those necessary to correct the existing condition. Workers necessary to correct the hazardous condition shall be provided with the necessary protection.

## **TRAINING AND INSTRUCTION**

All workers, including managers and supervisors, shall have training and instruction on general and job-specific safety and health practices. Training and instruction are provided as follows:

1. When the IIP Program is first established.
2. To all new workers, except for construction workers who are provided training through a construction industry occupational safety and health program approved by Cal/OSHA.
3. To all workers given new job assignments for which training has not previously been provided.
4. Whenever new substances, processes, procedures, or equipment are introduced to the workplace and present a new hazard.
5. Whenever we are made aware of a new or previously unrecognized hazard.
6. To supervisors to familiarize them with the safety and health hazards to which workers under their immediate direction and control may be exposed.
7. To all workers with respect to hazards specific to each employee's job assignment.

General workplace safety and health practices include, but are not limited to, the following:

1. Implementation and maintenance of the IIP Program.
2. Emergency action and fire prevention plan.
3. Provisions for medical services and first aid, including emergency procedures.
4. Prevention of musculoskeletal disorders, including proper lifting techniques.
5. Proper housekeeping, such as keeping stairways and aisles clear, work areas neat and orderly, and promptly cleaning up spills.
6. Prohibiting horseplay, scuffling, or other acts that tend to adversely influence safety.
7. Proper storage to prevent stacking goods in an unstable manner and storing goods against doors, exits, fire extinguishing equipment and electrical panels.
8. Proper reporting of hazards and accidents to supervisors.
9. Hazard communication, including worker awareness of potential chemical hazards, and proper labeling of containers.
10. Proper storage and handling of toxic and hazardous substances, including prohibiting eating or storing food and beverages in areas where they can become contaminated.

## **EMPLOYEE ACCESS TO THE IIPP**

Our employees – or their designated representatives - have the right to examine and receive a copy of our IIPP. This will be accomplished by:

(The contact person for access to the IIPP is Adolf Singh, Safety Manager and Isabel Ferrer, Office Manager). IIPP can also be access our company website at [www.sgiwebsite.com](http://www.sgiwebsite.com)

1. Provide access in a reasonable time, place, and manner, but in no event later than five (5) business days after the request for access is received from an employee or designated representative.
  - a. Whenever an employee or designated representative requests a copy of the Program, we will provide the requester a printed copy of the Program, unless the employee or designated representative agrees to receive an electronic copy of the Program.
  - b. One printed copy of the Program will be provided free of charge. If the employee or designated representative requests additional copies of the Program within one (1) year of the previous request and the Program has not been updated with new information since the prior copy was provided, we may charge reasonable, non-discriminatory reproduction costs for the additional copies.
2. Provide unobstructed access through a company server or website [www.sgiwebsite.com](http://www.sgiwebsite.com), which allows an employee to review, print, and email the current version of the Program. Unobstructed access means that the employee, as part of their regular work duties, predictably and routinely uses the electronic means to communicate with management or coworkers.
3. IIPP is on the company website without access restrictions at [www. Sgiwebsite.com](http://www.Sgiwebsite.com)

(The contact person for any questions on IIPP is Adolf Singh, Safety Manager and Isabel Ferrer, Office Manager). Phone number is 760-450-0534.

Any copy provided to an employee or their designated representative need not include any of the records of the steps taken to implement and maintain the written IIP Program.

Where we have distinctly different and separate operations with distinctly separate and different IIPPs, we may limit access to the IIPP applicable to the employee requesting it.

An employee must provide written authorization in order to make someone their “designated representative.” A recognized or certified collective bargaining agent will be treated automatically as a designated representative for the purpose of access to the company IIPP. The written authorization must include the following information:

- The name and signature of the employee authorizing the designated representative.
- The date of the request.
- The name of the designated representative.
- The date upon which the written authorization will expire (if less than 1 year).

## RECORDKEEPING

We have checked one of the following categories as our recordkeeping policy.

Inspection records and training documentation will be maintained according to the following checked schedule:

**Category 2.** Our establishment has fewer than twenty workers and is not on a designated high hazard industry list. We are also on a designated low hazard industry list or have a workers' compensation experience modification rate of 1.1 or less, and have taken the following steps to implement and maintain our IIP Program:

1. Records of hazard assessment inspections.
2. Documentation of safety and health training for each worker.

Inspection records and training documentation will be maintained according to the following checked schedule:

- For one year, except for training records of workers who have worked for less than one year, which are provided to the worker upon termination of employment.



# HAZARD ASSESSMENT AND CORRECTION RECORD

---

Date of Inspection: \_\_\_\_\_ Person Conducting Inspection: Adolf Singh, Safety Mgr.

---

Unsafe Condition or Work Practice: \_\_\_\_\_

---

Corrective Action Taken: \_\_\_\_\_

---

Date of Inspection: \_\_\_\_\_ Person Conducting Inspection: Adolf Singh, Safety Mgr.

---

Unsafe Condition or Work Practice: \_\_\_\_\_

---

Corrective Action Taken: \_\_\_\_\_

---

Date of Inspection: \_\_\_\_\_ Person Conducting Inspection: Adolf Singh, Safety Mgr.

---

Unsafe Condition or Work Practice: \_\_\_\_\_

---

Corrective Action Taken: \_\_\_\_\_

\*Report Serious Accident immediately to OSHA

**Call the nearest OSHA office.** San Diego State Plan Office

7575 Metropolitan Drive, Suite 207  
San Diego, CA 92108  
(619) 767-2280  
(619) 767-2299

Call the OSHA 24-hour hotline at [1-800-321-6742](tel:1-800-321-6742) (OSHA).

# ACCIDENT/EXPOSURE INVESTIGATION REPORT

---

Date & Time of Accident:

Location:

Accident Description:

---

Workers Involved:

---

The underlying cause(s) of the accident/exposure:

---

Corrective Actions Taken:

Manager Responsible:

Date Completed:

\*Report any Serious Accident Immediately to OSHA

## WORKER TRAINING AND INSTRUCTION RECORD

[illegible]

# **SINGH GROUP INC**

## **HEAT ILLNESS PREVENTION PROGRAM And BLOODBORNE PATHOGEN PROGRAM**



# **Table of Contents**

## **1.0 Policy, Authority, and Scope**

- Policy
- Authority
- Scope

## **2.0 Definitions**

## **3.0 Accountability**

- Environmental Health and Safety (EH&S)
- Supervisors
- Employees

## **4.0 Program**

- Access to Water
- Access to Shade
- Monitoring the Weather
- Worker Acclimatization
- Heat-Related Illness Response
- Medical Emergency Procedures
- Training

## **5.0 Records**

## **6.0 References/Resources**

## **7.0 Additional information on Heat Prevention**

## **8.0 Bloodborne Pathogen Program**



## 2.0 Definitions

### Policy

Employees working in the outdoors or in locations when environmental risk factors for heat illness are present are at greater risk for injury if they do not take the necessary steps to protect themselves. The objective of this program is to enhance employee awareness regarding heat illness, the different types of heat illness, prevention measures, and related first aid.

It is the policy of Singh Group, Inc. (SGI) that employees who work outdoors and warm environments and all individuals who supervise these employees must comply with the procedures in this program in addition to those in the Injury and Illness Prevention Program.

### Authority

California Code of Regulations, Title 8, Section 3395.

### Scope

This program applies to employees who work outdoors and in warm environments, and their supervisors, when environmental risk factors for heat illness are present.

**Acclimatization** is the beneficial physiological adaptations that occur during repeated incremental exposure to a hot environment. These physiological adaptations include:

- Increased sweating efficiency (earlier onset of sweating, greater sweat production, and reduced electrolyte loss in sweat)
- Stabilization of blood circulation
- The ability to perform work with lower core temperature and heart rate
- Increased skin blood flow at a given core temperature



**Drinking water** - Must be fresh, pure, suitably cool and located as close as reasonably achievable to employees.

**Environmental risk factors for heat illness** - The cumulative effects of 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), tools, clothing and personnel protective equipment.

**Heat illness** - A serious medical condition resulting from the body's inability to cope with a particular heat load, and includes heat rash, heat cramps, heat exhaustion, heat syncope and heat stroke.

**Personal risk factors for heat illness** - Characteristics and lifestyle behaviors including age, degree of acclimatization, health, consumption (water, alcohol and caffeine) and prescription medications that affect the body's retention of fluids and other physiological responses to heat.

**Preventative cool down rest period** - A period of time taken (as needed) by an employee to "cool down" or restore the body's vitals to restive numbers.

**Shade** – That which results from blocking direct sunlight. Canopies, umbrellas, and other temporary structures or devices may be used to block the sun and provide shade. An appropriate shade area must factor in both the lack of exposure to direct sunlight as well as a lower temperature. Both are essential for the body to cool.

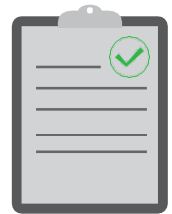


## 3.0 Accountability

### Environmental Health and Safety (EH&S)

Environmental Health and Safety will:

- Prepare and maintain a written program which complies with the requirements of Cal/ OSHA Title 8, 3395.
- Provide training to potentially impacted employees and their supervisors on the risk factors of heat illness and ways to prevent it, including how to recognize symptoms and take appropriate response measures.



### Supervisors

Supervisors will:

- Identify all employees having work duties, environments, or health issues that put them at higher risk for heat illness.
- Provide fresh, pure, and suitably cool drinking water and cool shaded areas that are closely accessible to employees when access to a building's amenities is beyond a short walk.
- Monitor the weather (current and forecast) and make necessary adjustments to the work load or schedule for the purpose of reducing the risk of heat-related illnesses.
- Ensure that all employees receive proper training on heat illness prevention to reduce the risk of heat-related illness.
- Ensure that the requirements in this program are followed.
- Contact the Department of Public Safety (DPS) for medical emergencies or when medical assistance is required.

### Employees

Employees will:

- Comply with the provisions of the Heat Illness Prevention Program. Attend and adhere to information/ guidelines that were covered and/or documented as part of the Heat Illness Training.
- Consume drinking water frequently when risk factors for heat illness are present.
- Utilize cool shaded areas to rest and recover after working in the heat.
- Report any heat related illness symptoms to their supervisor.
- Be alert for the signs and symptoms of heat illness.
- Inform your supervisor of any health issue that might affect your ability to work safely in the heat.
- Inform your supervisor if water or shade is not readily available.
- Look out for fellow co-workers.





## 4.0 Program

### Access to Water

- Supervisors must provide employees with access to fresh, pure, and suitably cool water and encourage consumption of small amounts frequently throughout the workday.
- All workers, whether working alone or in groups, will have access to drinking water.
- If plumbed potable water is not readily accessible, portable water containers or bottled water must be made available before work can commence.
- Water storage containers, drinking vessels and support utensils must be kept in a condition that is both clean and sanitary.
- Water must be placed as close as possible to the workers to encourage frequent water consumption.
- When the work environment is such that water cannot be placed close to the workers, bottled water or personal water containers must be provided.
- Storage containers must be refilled with fresh cool water when levels drop below 50%.
- When the aforementioned mandates cannot be met, work must cease and the workers must be moved into a controlled environment.
- During employee training, the importance of frequent water intake will be stressed.










### Access to Shade

- Access to open shade structures is required when temperatures equal or exceed 80F.
- Supervisors must provide access to shade promptly at temperatures less than 80F when requested by an employee.
- Employees in need of a recovery period from the heat must be provided with access to shade that is either open to the air or provided with ventilation or mechanical cooling.
- Alternative cooling methods may be used if they prove to be at least as effective as an appropriate shaded area.
- When access to open shade structures is required, the shade structures must be as close to the workers and work site as practical.
- During employee training, the importance of taking frequent rests breaks in cool shade will be stressed.



## Monitoring the Weather

- Prior to each workday, supervisors will monitor the weather via either the National Weather Service, the Weather Channel, AccuWeather, or local broadcast station.
- Work scheduling and type of work performed must be respectful of the forecast and modified, if necessary, to prevent heat illness.
- A thermometer will be used to determine current temperatures at work locations.
- When the temperature equals or exceeds 95F, outdoor activities will be modified accordingly.
- Supervisors will remind workers before and during the work shift to take frequent breaks and drink plenty of water; small amounts frequently is best!

Su	M	Tu	W	Th	F	Sa
						
95°	105°	105°	90°	90°	100°	100°

## Worker Acclimatization

- Supervisors of new employees and employees not accustomed to working in the heat must lessen the work load and intensity for the first two weeks. Acclimatization must be gradual and deliberate.
- Acclimatization process must be appropriate and tailored to the individual employee.
- Supervisors will remind employees before and during the work shift to pace themselves, take frequent breaks in cool shade, and to drink plenty of water.

## Heat-Related Illness Response

- When an employee displays signs or symptoms of heat illness, move the victim to shade, provide cool water to drink, remove excess layers of clothing, place ice packs in the armpits and groin and fan the victim. Do not leave the victim unattended at any time.
- When an employee suffering from heat illness condition does not improve after consuming water and resting, initiate medical emergency procedures.
- When an employee displays signs or symptoms of severe heat illness (loss of consciousness, incoherent speech, convulsions, red and hot face), initiate medical emergency procedures.
- When any of the above occurs at a location in which a hospital is greater than 20 minutes away, initiate medical emergency procedures.

# Medical Emergency Procedures

- Notify Singh Group, Inc. office at 760-798-3088.
- All other locations and work sites notify the local emergency medical response at 911.



## Training

When environmental risk factors for heat illness are present in a job site or work location, heat illness training must be provided for employees assigned to work in those areas. Supervisors of those employees must also attend or complete subject appropriate training. Refresher training must be conducted annually. All training must be documented.

### Employees

All employees working on job tasks where environmental risk factors for heat illness are likely shall receive instruction before being assigned to work tasks. Training topics shall include the following:

- The environmental and personal risk factors related to heat illness.
- The procedures for identifying, evaluating, and controlling exposure to the risk factors.
- The importance of:
  - Acclimatization
  - Water, rest, and shade
- The different types, signs and symptoms of heat illness.
- The importance of promptly reporting any symptoms of heat illness to their supervisor.
- How to respond to symptoms of heat illness, including how to request emergency medical services should they become necessary.

### Supervisors and Affected Employees

Supervisors or their designees shall receive training from EH&S or an accredited outside source on the following topics prior to being assigned to supervise outdoor employees:

- Information as detailed above in the employee training requirements.
- How to effectively implement the provisions of this program.
- How to respond effectively when an employee exhibits or reports symptoms consistent with possible heat illness, to include requesting emergency medical services.



## 5.0 Records

### Records

All training records (electronic or hard copy) prepared in association with the Heat Illness Prevention Program will be maintained by the main office.



## 6.0 References/Resources

**Cal/OSHA:** <http://www.dir.ca.gov/dosh/heatillnessinfo.html>

**OSHA Heat Safety Tool (Heat Safety Application)** <https://www.osha.gov/heat/heat-app>

**National Weather Service:** <https://www.weather.gov/>



## 7.0 Additional Information On Heat Prevention

**The environmental and personal risk factors for heat illness, as well as the added burden of heat load on the body caused by exertion, clothing, and personal protective equipment.**

### Environmental Risk Factors

Environmental conditions can significantly raise the risk of heat illness. Key environmental risk factors include:

- **High Air Temperature:** Hot conditions increase the external heat load.
- **High Relative Humidity:** Humidity slows sweat evaporation, limiting cooling.
- **Direct Sun Exposure & Radiant Heat:** Sunlight and heat from equipment or surfaces intensify heat load.
- **Limited Air Movement:** Stagnant air restricts heat loss from the body.
- **Conductive Heat Sources:** Contact with hot surfaces, such as the ground or machinery, can raise body temperature.
- **Workload Severity & Duration:** Longer or more intense physical work under these conditions amplifies risk.

### Personal Risk Factors

Certain personal and health-related factors make individuals more susceptible to heat illness, including:

- **Age:** Older adults and young children face increased vulnerability.
- **Medical Conditions:** Cardiovascular disease, diabetes, high blood pressure, respiratory diseases, kidney disease, and a previous history of heat illness increase risk.
- **Medications:** Diuretics, antihistamines, psychiatric medicines, blood pressure medications, and others can impair hydration or the body's ability to regulate temperature.
- **Physical Fitness and Acclimatization:** Poor physical condition, lack of acclimatization, or being overweight/obese heighten susceptibility.
- **Hydration Status:** Dehydration from insufficient water intake rapidly increases risk.
- **Behavioral Factors:** Alcohol or illicit drug use, inadequate water intake, and poor nutrition contribute.
- **Other:** Pregnancy, fatigue, lack of sleep, and psychological stress can be contributing factors.

### Added Heat Burden: Exertion, Clothing, and PPE

#### Physical Exertion:

Exertion generates internal heat, raising core body temperature. Intense or sustained activity in hot environments elevates risk even further, especially if combined with other risk factors.

- **Clothing:** Tight, dark, or non-breathable fabrics restrict sweat evaporation and trap heat against the body. Long sleeves, when not made of breathable material, may impede heat dissipation. Appropriate clothing should be lightweight, loose-fitting, and light-colored to encourage airflow and cooling.
- **Personal Protective Equipment (PPE):** PPE, especially when it is impermeable or made from heavy or encapsulating materials, significantly hinders the body's natural cooling mechanisms. It traps heat and moisture, prevents sweat evaporation, and adds insulation. Wearing multiple layers or vapor-barrier suits can sharply increase physiological strain, leading to more rapid onset of heat stress symptoms. Even light exertion while wearing PPE in hot, humid conditions can quickly raise core temperature and increase risk. Properly selected and managed PPE (e.g., incorporating cooling features or breaks for removal) can help mitigate these risks.

# Employer's procedures for complying with the requirements of this standard

Complying with requirements concerning heat illness risk factors involves identifying, minimizing, and managing exposures in the workplace or during activities that raise the risk of heat-related health issues.

## 1. Hazard Assessment

- Evaluate Environmental Conditions: Monitor temperature, humidity, and heat index; track sun exposure and radiant heat sources.
- Identify At-Risk Individuals: Recognize personal and health-related risk factors among employees such as age, underlying health conditions, medication usage, fitness level, and acclimatization status.
- Assess Job Tasks: Determine the level of physical exertion, required clothing, and PPE that might exacerbate heat retention or hinder cooling.

## 2. Engineering & Administrative Controls

- Workplace Modifications:
  - Increase ventilation or install cooling systems to minimize environmental heat.
  - Provide shaded or air-conditioned rest areas.
  - Use reflective or heat-reducing barriers when feasible.
- Scheduling Adjustments:
  - Schedule strenuous or outdoor work during cooler hours.
  - Implement regular rest breaks in cool or shaded locations.
  - Rotate job tasks to limit continuous heat exposure.

## 3. Personal Protective Measures

- Hydration: Supply cool, potable water and encourage frequent intake (not just relying on thirst).
- Appropriate Clothing: Mandate lightweight, loose, and light-colored clothing when possible.
- PPE Adjustments: Select the least insulating PPE that ensures safety, or use PPE with cooling features.

## 4. Training & Supervision

- Educate Workers: Train workers and supervisors on heat illness symptoms, prevention, early recognition, and emergency response procedures.
- Buddy Systems: Implement buddy checks for mutual monitoring of symptoms among teams.
- Acclimatization Programs: Gradually increase exposure for new or returning workers over 7–14 days.

## 5. Medical Management and Emergency Preparedness

- Health Screenings: Encourage disclosure of relevant health risks.
- Emergency Plans: Establish clear protocols for responding to heat illness, including onsite first aid, rapid cooling, and timely medical assistance.
- Incident Documentation: Record and analyze any heat illness incidents to improve safety measures.

## 6. Regulatory Compliance

- Follow Legal Standards: Adhere to OSHA, NIOSH, or other local regulations and guidelines regarding heat exposure limits, monitoring, and preventive actions.
- Recordkeeping: Maintain compliance documentation, such as training records, hazard assessments, and intervention logs.

# The importance of frequent consumption of small quantities of water, up to one quart per hour or 8 ounces per hour, when the work environment is hot and employees are likely to be sweating more than usual in the performance of their duties

The **frequent consumption of small quantities of water (up to about 8 oz per hour)** during work in hot environments is critically important for several reasons:

## 1. Maintains Hydration and Prevents Dehydration

- In hot conditions, especially with physical exertion, the body loses water rapidly through sweating to help regulate core temperature.
- Drinking small amounts of water frequently helps **replace fluids lost continuously**, preventing dehydration.
- Drinking large volumes infrequently can overwhelm the stomach and reduce absorption efficiency, whereas small, regular sips maintain steady hydration.

## 2. Supports Thermoregulation

- Adequate hydration keeps blood volume sufficient to allow effective sweating and skin blood flow.
- Sweating and evaporation are the body's primary cooling mechanisms—without enough water, sweating decreases, leading to elevated body temperature and increased risk of heat illness.

## 3. Prevents Decline in Physical and Cognitive Performance

- Dehydration, even at moderate levels (as little as 1–2% body weight loss), impairs muscle endurance, strength, and coordination.
- Cognitive functions such as concentration, vigilance, and decision-making deteriorate with dehydration, increasing the risk of errors and accidents.

## 4. Reduces Risk of Heat-Related Illnesses

- By maintaining hydration, the body can better dissipate heat and avoid severe conditions such as heat exhaustion, heat cramps, and heat stroke.
- Proper fluid intake reduces physiological strain and prevents early onset of heat stress symptoms.

## 5. Practical and Physiological Benefits of Small Frequent Drinks

- Small amounts are easier to absorb and less likely to upset the stomach.
- Consistent hydration counters electrolyte imbalance from sweating (when combined with electrolyte replacement as necessary).
- Encourages development of a hydration habit during work, making dehydration less likely.



# The importance of acclimatization

Heat acclimatization is crucial for preventing heat-related illness at work because it enables the body to gradually adapt to hot environments, reducing physiological strain and improving heat tolerance.

## Importance of Acclimatization

- Physiological Adaptations:
  - Earlier onset and increased production of sweat, improving the body's evaporative cooling.
  - Reduced salt loss in sweat, minimizing electrolyte imbalances and heat cramps.
  - Lower heart rate and core body temperature during exertion, easing cardiovascular strain.
  - Increased blood flow to the skin, enhancing heat dissipation.
- Risk Reduction:
  - Unacclimatized workers are significantly more vulnerable to heat illnesses—including heat exhaustion and potentially fatal heat stroke—especially new, returning, or those transitioning suddenly into hot work environments.
  - Approximately 74% of heat-related OSHA citations involve lack of acclimatization, highlighting its critical role in workplace safety.
- Productivity and Safety:
  - Acclimatized workers maintain better physical and cognitive performance under heat stress.
  - Reduces workplace injury risk associated with heat-induced fatigue and impaired judgment.

## Acclimatization Process and Guidelines

- The body typically requires 5 to 14 days of gradually increased exposure to heat stress to develop acclimatization.
- For new workers, the CDC and OSHA recommend starting with 20% of normal work duration in heat on day 1, increasing by no more than 20% each day until full exposure is reached (full acclimatization typically after 7–14 days).
- For workers returning after extended absences, a slightly accelerated schedule can be used, but reacclimatization is necessary after about a week or more of absence.
- Maintaining acclimatization requires regular heat exposure; loss of adaptation can occur after about a month away from hot environments, necessitating reacclimatization.

## Additional Considerations

- Physical fitness accelerates acclimatization and helps maintain it.
- Suitable hydration and rest between heat exposures enhance the benefits of acclimatization.
- Acclimatization alone doesn't eliminate heat illness risk—combined preventive measures like hydration, shade, rest, and proper clothing are essential

# The different types of heat illness and the common signs and symptoms of heat illness

<u>Heat Illness</u>	<u>Common Signs and Symptoms</u>
Heat Rash	Red clusters of pimples; skin irritation
Heat Syncope	Dizziness, fainting, lightheadedness
Heat Cramps	Muscle pain/cramps, especially after heavy sweating
Heat Exhaustion	Headache, nausea, dizziness, weakness, heavy sweating
Rhabdomyolysis	Muscle pain, weakness, dark urine, reduced activity tolerance
Heat Stroke	Very high temp, confusion, unconsciousness, seizures, rapid pulse

**The importance to employees of immediately reporting to the employer, directly or through the employee's supervisor, symptoms or signs of heat illness in themselves, or in co-workers.**

Immediate reporting of heat illness symptoms is essential because it facilitates rapid medical and supervisory response, prevents worsening conditions, supports regulatory compliance, and protects worker health and safety during heat exposure. Employees must be trained and encouraged to report promptly to help create a safe working environment in hot conditions.

**The employer's procedures for responding to symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary.**

<u>Procedure Element</u>	<u>Required Actions</u>
Communication	Ensure employees can quickly contact supervisors or EMS, with backup plans if electronic communication fails
Immediate Response	Move affected worker to shade, provide water, remove extra clothing, apply cooling, and monitor continuously
Emergency Activation	Call 911 for severe symptoms; give clear site directions to EMS; arrange transport if EMS access is limited
Onsite First Aid	Provide first aid measures until help arrives or symptoms resolve
Training and Awareness	Train workers and supervisors on detection, response, reporting, and EMS protocols; promote symptom reporting

**The employer's procedures for contacting emergency medical services, and if necessary, for transporting employees to a point where they can be reached by an emergency medical service provider**

#### **Summary of Key Requirements**

<b><u>Employer Action</u></b>	<b><u>Description</u></b>
Designate EMS callers	Specify employees authorized to call 911; allow others if none available. Jose Cervantes or Office at 760-450-0534
Ensure reliable communication	Voice, electronic devices with reliable reception; alternative methods at remote sites
Provide clear directions to EMS responders	Maps, signage, assigned guide personnel. Call 911 if emergency. Or call office at 760-450-0534
Train workers and supervisors	Heat illness recognition, emergency response, calling EMS protocols
Arrange transport if EMS access is limited	Safely move employee to EMS reach without delay
Never leave symptomatic employees unattended	Provide onsite first aid and EMS before sending home

The employer's procedures for ensuring that, in the event of an emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders. These procedures shall include designating a person to be available to ensure that emergency procedures are invoked when appropriate.

#### **Summary Table of Procedures for Emergency Direction**

<b>Procedure Element</b>	<b>Description</b>
Designate emergency coordinator	Responsible person(s) available to initiate emergency procedures and provide directions. Isabel Ferrer 760-450-0534.
Prepare detailed directions	Maps, addresses, access routes, entry instructions, and security protocols. This to be done at the job site during tail gate meeting.
Ensure reliable communication	Multiple contact methods, backup plans for communication failures. Other contact info. Adolf Singh 760-213-5462
Maintain continuous availability	Coordinator(s) reachable at all times work is performed. Contact office at 760-450-0534
Train and drill regularly	Employees trained on procedures; periodic testing of response



## 8.0 Bloodborne Pathogen Program

Bloodborne Pathogens are microorganisms (such as viruses) that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV), hepatitis C (HCV) and human immunodeficiency virus (HIV).

### How Are Bloodborne Pathogens and Infections Spread?

The Chain of Infection

For disease to be spread, it requires that all of the following conditions be present:

An adequate number of pathogens, or disease-causing organisms.

A reservoir or source that allows the pathogen to survive and multiply (e.g., blood).

A mode of transmission from the source to the host

An entrance through which the pathogen may enter the host.

A susceptible host (i.e., one who is not immune).

Effective infection control strategies prevent disease transmission by interrupting one or more links in the chain of infection.

### Modes of Transmission

Direct contact occurs when microorganisms are transferred from one infected person directly to another person. For example, infected blood from one person enters a care giver's body through an open cut.

Indirect contact involves the transfer of an infectious agent through a contaminated object or person. For example, a caregiver doesn't wash hands in between caring for someone with infected body fluids and other patients. For Example, Parenteral contact with a needle stick.

Airborne transmission occurs when droplets or small particles contain infectious agents that remain effective over time and distance in the air. Tuberculosis is a common disease spread this way. Bloodborne pathogens are not typically spread this way.

### How Are Bloodborne Pathogens Spread?

- Bodily fluids, especially those visibly contaminated with blood, have the potential to transmit disease
- cerebrospinal fluid (Brain)
- synovial fluid (Joints)
- pleural fluid (Lungs)
- amniotic fluid (Uterus)
- pericardial fluid (Heart)
- peritoneal fluid (Abdomen)
- semen
- vaginal secretions
- blood
- any body fluid contaminated with blood
- body fluids that cannot be recognized
- Sexual contact is the primary mode of transmission for Bloodborne Pathogens, however the risk of exposure does exist while providing medical or first aid care.
- When a contaminated sharp object cuts or punctures the skin. (Parenteral examples: needle stick, illegal drug usage, cut from broken glass, bite).
- When an infected body fluid gets into an open cut or mucous membrane (inside eyes, mouth, ears or nose).
- When a contaminated object touches inflamed skin, acne, or skin abrasion.

### How Are Bloodborne Pathogens NOT spread?

- Intact skin is wonderfully created as our first defense against disease. Bloodborne Pathogens cannot "soak" through normal intact skin.
- Casual contact like handshakes, hugging, sharing food, doorknobs, sneezing, toilet seats, swimming pools, etc...

# HIV and AIDS

HIV attacks your body's ability to protect itself against disease and it causes AIDS.

Approximately 1.1 million people in the US are living with HIV/AIDS. Approximately 50,000 people become infected with HIV each year. About 14,000 people every year in the USA die from AIDS.

Symptoms may or may not be present. You may be infected for years and not know it. Only a blood test can determine the infection, not symptoms:

- Fever
- Fatigue
- Weight loss
- Rash

The HIV virus is fragile and dies within seconds outside the body. The amount of HIV present in the body fluid and the conditions will determine how long the virus lives.

HIV is primarily spread by sexual contact with an infected person or by sharing needles and/or syringes (primarily for drug injection). Babies may become infected before/during birth or through breast-feeding. Only a fraction of less than 1% of the people contract the virus from providing medical care.

HIV it is not spread by casual contact like handshakes, sharing food, doorknobs, sneezing, toilet seats, swimming pools, etc.

There is no vaccination.

# Hepatitis B

Hepatitis B virus reproduces in the liver causing inflammation and possibly cirrhosis or liver cancer.

HBV affects over 1.25 million people in the US. About 70,000 people/year become infected with HBV. Each year, about 5,000 people die as a result of liver disease caused by HBV. Infections have decreased since 1982 because of the HBV vaccine.

Symptoms may or may not be present. The older, the more apt to have symptoms. Only a blood test can determine the infection. Symptoms may include:

- |                            |                                |
|----------------------------|--------------------------------|
| • yellow skin (jaundice)   | • dark urine                   |
| • yellowing eyes           | • clay-colored bowel movements |
| • tiredness                | • joint pain                   |
| • loss of appetite, nausea | • abdominal discomfort         |

Up to 100 times easier to catch than HIV. HBV can live outside of body for at least 7 days and longer.

90% adults who contract hepatitis B clear the virus from their systems within a few months and develop immunity. About 10% become chronic — the virus stays in the blood, infecting liver cells damaging them over time.

HBV is primarily spread by sexual contact with an infected person, sharing needles and/or syringes (primarily for drug injection), from an infected mother to her baby during birth, or sharps exposures on the job.

However, still like HIV it is not spread by casual contact like handshakes, sharing food, doorknobs, sneezing, toilet seats, swimming pools, etc.

## Hepatitis B Vaccine

There is a vaccine available given in 3 doses over a period of 6 months. It is safe and effective.

Booster doses of hepatitis B vaccine are not recommended. Immune memory remains indefinitely following immunization.

The HBV vaccine must be offered free to employees who face occupational exposure to bloodborne pathogens.

Occupationally exposed employees include those who:

- Administer first aid
- Provide medical aid to students
- Assist in bathroom care
- Work in medical or dental offices
- Perform custodial duties involving the cleaning and decontamination of surfaces that may be contaminated with blood and or other potentially infectious materials (OPIM).
- Handle Regulated medical waste

If an employee does not want the vaccine a declination statement must be signed.

### Sample HBV Vaccine Declination Statement

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no charge to myself. However, I decline hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

## Hepatitis C

HCV reproduces in the liver causing inflammation and possibly cirrhosis or liver cancer. Disease can incubate for decades.

4.1 million carriers in the USA. About 26,000 new cases each year. Deaths from chronic disease each year: 8,000-10,000.

About 80% of exposed people develop a chronic infection. 20% are able to clear the virus by naturally building immunity.

Symptoms are not a reliable way to detect HCV. A blood test is needed. Symptoms may look the same as HBV.

Unlike HIV or HBV, HCV is spread primarily through parenteral contact:

- Illegal injection drug use
- Transfusion or transplant from infected donor
- Tattoos

Occupational exposure to blood mostly through needle sticks

It is also spread through:

- Birth to HCV-infected mother
- Multiple sex partners

There is no cure or vaccination.

## Standard Precautions

Treat all body fluids from every person as potentially infectious.

Follow the recommendations in the employer's Bloodborne Pathogens Exposure Control Plan.

An employer's Bloodborne Pathogens Exposure Control Plan should include:

- Various levels of risk of employees that may have occupational exposure
- Training requirements
- Work practice controls
- Engineering controls
- Procedure for an exposure incident

## Use Personal Protective Equipment (PPE)

PPE should be provided by your employer. It includes gloves, CPR shields, masks, gowns, and eye protection.

Know where PPE is at your workplace.

Know what PPE is available and how to use it.

Make sure first-aid kits and emergency supplies include disposable gloves and CPR face shields or rescue masks.

Do not eat, drink, smoke, apply cosmetics or handle contact lenses in areas where there is the possibility of exposure to BBP.

When emptying trash containers, do not use your hands to compress the trash in the bag.

Lift and carry the trash bag away from your body.

Follow your facility's procedures for handling laundry General Laundry procedures:

- Wear PPE, If needed wear masks such as K95 or respiratory masks.
- Keep contaminated laundry separate from other laundry
- Bag potentially contaminated laundry where it is used
- Use leak-proof bags for wet laundry
- Transport in properly labeled bags

The Needlestick Safety and Prevention Act requires appropriate, commercially available, and effective safer medical devices designed to eliminate or minimize occupational exposure.

Needles and other sharps must be discarded in rigid, leak-proof, puncture resistance containers.

Do not bend, shear, break or recap needles. If you must recap, use one-handed method.

## Hazardous Disposal

- Liquid or semi-liquid blood or other potentially infectious materials (OPIM)
- Contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed
- Dispose of in a properly labeled biohazard container: either a red bag or container labeled in orange or orange-red with the Bio-Hazard symbol.
- Properly labeled and bundled waste needs to be handled according to your facility's disposal procedures.

## Cleanup Procedures

- Use a solution of 1 part household bleach mixed with 9 parts water (a 1:10 solution).
- Other commercial disinfectants registered with the EPA as effective against HIV/HBV may be used. Check the label.
- Use Personal Protective Equipment.
- If a Body Fluid Spill Kit is available, use according to manufacture's directions
- First, put on Personal Protective Equipment
- Remove visible material with absorbent towels
- If any sharp object or broken glass is visible, remove with tongs or dust pan and place in a ridged sealable container. Never use bare hands.
- Spray disinfectant on contaminated area and let stand for several minutes
- Once the area has been disinfected, dry area with absorbent towels and dispose of towels in regular trash

## Glove Removal

- Grip one glove near the cuff and peel it down until it comes off inside out. Cup it in the palm of your gloved hand.
- Place two fingers of your bare hand inside the cuff of the remaining glove.
- Peel that glove down so that it also comes off inside out and over the first glove.
- Properly dispose of the gloves.
- Remember, only touch glove to glove and skin to skin.



## Wash Your Hands

- Wet your hands and apply liquid, bar, or powder soap.
  - Rub hands together vigorously to make a lather and scrub all surfaces.
  - Continue for 20-30 seconds! It takes that long for the soap and scrubbing action to dislodge and remove stubborn germs. Need a timer? Imagine singing “Happy Birthday” all the way through– twice!
  - Rinse hands well under running water.
  - Dry your hands using a paper towel or air dryer.
  - If possible, use your paper towel to turn off the faucet
- 
- An exposure incident is defined as a specific mucous membrane, broken skin, or puncture contact with blood or OPIM that results from the performance of an employee’s duties.
  - If you think you’ve been exposed, decontaminate, report to supervisor, and seek medical treatment. An immediate confidential medical evaluation and follow-up needs to be conducted by a physician.
  - Complete forms as soon as possible after incident. Don’t delay medical treatment to fill out paperwork. Forms and continued action will proceed according to employer’s policies and procedures.