

# **Occupational Safety Program**

Workplace Safety Program

Form

# **Heat Illness and Injury Prevention Checklist**

This checklist is intended to assist departments in the following: 1) To identify heat-related hazards; 2) To determine appropriate hazard controls to prevent heat-related illness/injury; and 3) To assess readiness based on control requirements. Note: Though departments are encouraged to implement preventative measures to protect employees from heat illness, prevention measures are not required for the following: 1) Emergency operations and essential services that involve saving lives or protecting property; 2) Incidental exposures when an employee is not required to perform work activities for more than 15 consecutive minutes per hours; or 3) Buildings, structures, and vehicles that have a mechanical ventilation system or fan that maintains the heat index below 80 degrees.

### Part 1: Basic Information (This form should be filled out by Supervisor)

Department/Unit:

Event:

Event Date(s):

## Part 2: Heat Hazards

#### Environmental Heat Conditions

Ambient Considerations (High Temperature, High Humidity, Radiant Heat, Less Air Movement)Heat Index: $\square$  80-90°F $\supseteq$  90°FRelatively High Humidity, > 50%: $\square$  Yes $\square$  No

Reduced Air Movement - Lack of Adequate Ventilation:  $\Box$  Yes  $\Box$  No

Wind Blockage (i.e. area and structures which block movement at worksite):  $\Box$  Yes  $\Box$  No

Work Area: Indoor Outdoor Specify Workplace Location:

Heat Stress Sources (Check all that apply):

- □ Areas with Heat-Generating Appliances (e.g. kitchen, laundry)
- Direct Sunlight
- Equipment (e.g. furnace, power tools, heavy machinery)
- □ Fire-Containing Structures (e.g. fireplace, fire pit, chimney, kiln)
- □ Hot Phenomena/Substances (e.g. fire; hot gas, liquids, and materials)
- □ Hot Work (e.g. welding, soldering, brazing, cutting, grinding, riveting, metalworking, glassblowing, work with open flame, sparks, and flammable materials, etc.)
- □ Reflective Material (e.g. water, metal, other materials that reflect sunlight onto workers)
- Uncontrolled Temperatures Indoors (e.g. attic, warehouse)
- □ Work in Confined Spaces (e.g. boilers, steam tunnels, hot water/steam pipe areas, vents)
- □ Work Outdoors (e.g. agriculture, landscaping, roofing and building construction,
- asphalt/road maintenance, utility work, deliveries)

# Metabolic Heat Conditions

Workload Considerations (Personal Weight, Heavy Lifting, Speed/Rate, Duration, Clothing)

Physical Activity Involved, Moderate to Strenuous: 
Yes 
No

Explain Activity Type:

Heavy or Non-Breathable Clothing/Personal Protective Equipment Worn: Clothing/PPE Used (e.g. respirators, head coverings):

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Part 3: Hazard Controls

Engineering Controls (Barriers, Cooling, Mechanization)

□ Air Conditioning (e.g. air-conditioned vehicles, air conditioning in break rooms)

□ Barriers or Reflective Heat Shields (e.g. walls)

□ Cooled Seats (i.e. cooled benches for rest breaks)

□ Cooling and/or Misting Fans or Chillers

□ Elimination of Leaks (e.g. steam)

General Ventilation/Circulation (e.g. natural [open windows/doors] or mechanical ducts/fans)

□ Insulation of Hot Surfaces

□ Local Exhaust Ventilation

□ Mechanical Equipment/Automation to Reduce Manual Work/Exposure

□ Shade Areas/Devices (e.g. covers, canopies, or other shelter)

Administrative Controls (Work Practices, Scheduling, Communication, Procedures)

Heat Index Monitoring Method:

□ Direct Measurement, Temperature & Humidity (Required in Buildings w/o Mechanical Ventilation)

□ Use of local weather data (National Weather Service or other recognized source)

□ NIOSH Heat Safety Tool

Acclimatization

Acclimatization is based on experience and time in environment. A department shall provide for acclimatization of exposed employees for a period of up to 14 days: a) When an employee is newly exposed to heat in the workplace; and b) When an employee returns to work after 7 or more consecutive days of absence from the workplace.

Acclimatization schedule must comply with one of the following (select one):

□ A schedule which gradually increases exposure time over a 5 — 14-day period, with a maximum 20% increase each day.

□ A schedule which uses the current NIOSH recommendations for acclimatization.

□ A schedule which uses a combination of gradual introduction and alternative cooling and control measures that acclimate an employee to the heat.

Acclimatization schedule shall be in writing and consider the following: a) Acclimated and unacclimated employees; b) The environmental conditions and anticipated workload;

c) The impact of required clothing and personal protective equipment to the heat burden on employees; d) The personal risk factors that put an employee at a higher risk of heat-related illness; e) Re-acclimatizing employees as necessary, in accordance with the first paragraph of this section; and f) The use of alternative cooling and control measures.

Is this in writing? □ Yes (Attach Copy) □ No

Communication Method: 
Phone or Radio 
Buddy System 
Other Observation Means
During Acclimatization

Shade Access (Outdoor Work)

Shade Access must be outside, open, and exposed to air on at least 3 sides.

Readily Available:  $\Box$  Yes  $\Box$  No  $\Box$  N/A Identify Shade Area(s):

Drinking Water/Fluids

The available volume of drinking water/fluids must be a minimum of 32 oz per hour for each worker and readily available. Calculate Amount Below: (# of Exposed Employees) X (Exposure Time [hr]) X (Volume [oz]/Time [hr]) X (Conversion Factor to Gallons) = Total Required Volume

\_\_\_\_ Employees X \_\_\_\_\_ hr X (32 oz/hr) X (1 gal/128 oz) = \_\_\_\_\_ gal

Drinking Water/Fluids Readily Available: 
Yes 
No

Method for Free Drinking Water Provision (Check all that apply):

□ Indoor Fountain/Bottle Filler □ Portable Insulated Dispenser □ Bottled Water & Fluids Method for Promoting Hydration (Check all that apply):

□ Direct Supervision □ Buddy System □ Signage □ Mandatory Break Schedule

Work & Rest Scheduling

Roster Created With Respective Duties/Rotation Assigned: □ Yes (Attach Copy) □ No Work and Rest Schedule Created and Made Available: □ Yes (Attach Copy) □ No Method for Promoting Rest/Shade Access (Check all that apply):

□ Direct Supervision □ Buddy System □ Signage □ Mandatory Break Schedule

High Heat Procedures (≥ 90°F)

Procedures include: a) *i*. A minimum rest period of 10 minutes for every 2 hours worked where employees are exposed to a heat index above 90 and below 100 degrees Fahrenheit; and *ii*. a minimum rest period of 15 minutes for every hour worked where employees are exposed to a heat index above 100 degrees Fahrenheit; or

b) A rest period as provided for in the current National Institute for Occupational Safety and Health (NIOSH) recommendations for work and rest schedules to manage heat exposures. Is Work and Rest Schedule Made Available (Required)? 
 Yes 
 No

Communication Method: 
Phone or Radio 
Buddy System 
Other Observation Means Explain Plan for Heat Advisory/Heat Warning Issued:

Emergency Procedures

Emergency procedures are required for recognizing and responding to employees with symptoms/signs of heat-related illness.

Emergency Plan Instructions Known, Made Available (e.g. posted at worksite): □ Yes □ No First Aid Equipment & Methods to Be Used:

Medical Services: Call 911/ TUPD - (410) 704-4444

Emergency Communication Method:Phone or RadioBuddy SystemBlue Light/Other, Explain:Yellow Phone

Information & Training

The Supervisor for the Event is the designated, trained individual for assessing/monitoring conditions (e.g. temperature & humidity) and workers for signs/symptoms of heat illness; implementing the heat plan; and notifying workers when the heat plan is in effect. Proper training for the Supervisor includes knowing how to identify and control heat hazards, recognize early symptoms of heat stress, administer first aid for heat-related illnesses, and activate emergency medical services quickly when needed.

Are you trained/currently certified in heat stress and heat illness prevention?  $\Box$  Yes  $\Box$  No Ideally, the individual who is responsible for the heat management plan should be on-site with the workers. Will you be on-site?  $\Box$  Yes  $\Box$  No

Is heat stress and heat illness prevention training provided to each Employee? □ Yes □ No Have Employees been provided information on all hazards and controls (e.g. "the Plan") for this Event? □ Yes □ No

Personal Protective Equipment (PPE), if applicable (	(for Heat Prevention/Cooling Purposes)

Cooling Devices and Thermally-Conditioned Clothing

□ Cooling Neck Wraps

- □ Cooling Vests/Jackets (i.e. has pockets reusable ice/cooling packs or receive cooled air)
- □ Infrared Reflecting Faceshields
- □ Insulated Suits
- □ Reflective Clothing

### Part 4 – Authorization

I have read and completed this checklist and I will fully comply with all requirements. Relevant plan information is permitted to be attached to this form. I certify that all required precautions have been taken and necessary equipment, materials, information, and training have been distributed.

Supervisor Name, Printed	
Signature	Date