

# PROTECTING OUTDOOR WORKERS FROM EXTREME WEATHER EXTREME HEAT

WE ARE YOUR DOL



This New York State Department of Labor (NYSDOL) guidance provides some of the best ways to protect outdoor workers during hot weather. According to federal Occupational Safety and Health Administration (OSHA), employers have a legal and moral responsibility to protect workers from heat injury and illness, including not to assign work in high heat conditions without protections in place for workers.

## NEW YORK STATE EMPLOYERS SHOULD TAKE THESE 4 STEPS TO PROTECT OUTDOOR WORKERS FROM EXTREME HEAT (BASED ON HEAT INDEX):



PROVIDE **WATER**



ALLOW FOR  
**REST & RELIEF**



DEVELOP AND  
PROVIDE **TRAINING**

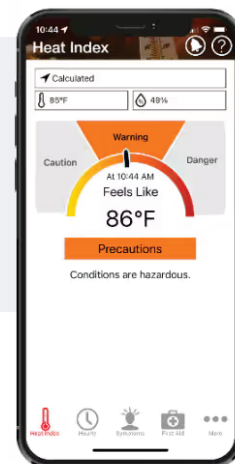


DEVELOP AND  
PROVIDE A **PLAN**

### HOW TO MEASURE HEAT INDEX

The heat index is what the temperature feels like to the human body when relative humidity is combined with the air temperature. It is the best way to assess the level of heat on a worksite. Employers can determine the current and forecast heat index using the OSHA-NIOSH Heat Safety Tool App: [cdc.gov/niosh/topics/heatstress/heatapp.html](https://www.cdc.gov/niosh/topics/heatstress/heatapp.html).

See the following pages for more detail on each recommended step. In a unionized workplace, employers must follow any collective bargaining agreement currently in place.





# WATER

Regardless of the heat index, employers should provide each outdoor employee **32 ounces of cool drinking water per hour.**



The water should be provided at no cost to workers, available to workers **at all times**, potable, and as close to the worksite as practicable



Workers should be given sufficient time to consume the water



In the heat, employers should encourage workers to drink water regularly, even when they do not feel thirsty



# REST & RELIEF

Employers should provide **shade and paid rest** when the heat index reaches 80 degrees Fahrenheit or above, and more frequent rest breaks once the heat index exceeds 90 degrees.

## SHADE

Employers should establish one or more shaded areas when the heat index equals or exceeds 80 degrees Fahrenheit. Shade should:



Be open to the air or have mechanical ventilation for cooling



Be located as close as practicable to the areas where employees are working



Accommodate at least the number of workers on recovery, rest, or meal periods so they have room to sit



Be free of and protected from other potential hazards

Even when the heat index is below 80 degrees Fahrenheit, employers should be prepared to provide shade or erect the shade structure if requested to by an employee or if an employee shows any signs of heat-related illness.

## WORK/REST SCHEDULES

When the heat index reaches 90 degrees Fahrenheit or greater, employers should institute standardized rest breaks, adjusted based on how strenuous work activities are. These schedules should be written down.

### RECOMMENDED EMPLOYER-SPECIFIC REST BREAK DURATIONS AND INTERVALS

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)

## CLOTHING & PERSONAL PROTECTIVE EQUIPMENT

Some clothing can serve as protection from high heat, and employers are encouraged to provide some or all those items when possible. Outdoor workers should wear the following types of items in the heat so long as they do not interfere with safety equipment:



Lightweight, light colored, long-sleeved, loose-fitting clothes



Cooling vests



Sweat-wicking fabric (air-cooled garments)



Water-cooled garments or wetted overgarments (such as a wet towel on the neck)



Wide-brim hats



Sunscreen



# WORKER & SUPERVISOR TRAINING

Employers should train outdoor workers and supervisors annually and before extreme heat exposure.

## AN EFFECTIVE TRAINING WILL INCLUDE:



The signs and symptoms of common heat-related illness



Information on the employer's acclimatization and emergency/ first aid plans



An overview of the rest and relief measures that the employer will provide to workers during extreme heat



An overview of workers' rights to not be retaliated against for reporting any workplace health or safety concern

Signs and Symptoms of common heat-related illnesses, and basic first aid measures, can be found on this Center for Disease Control & Prevention webpage: [on.ny.gov/cdcextremeheat](http://on.ny.gov/cdcextremeheat)



# PLANNING & PREPAREDNESS

Employers should acclimate workers to the heat and make a written plan for how they handle acclimatization, extreme heat preparedness, and emergency response.

## ACCLIMATIZATION: EASING INTO WORK

Employers should institute acclimatization measures when the heat index reaches or exceeds 80 degrees Fahrenheit. New and returning workers need to build tolerance to heat (acclimatize) and take frequent breaks. New workers whose bodies have not had time to adjust to working in the heat are most vulnerable.

### RECOMMENDED ACCLIMATIZATION SCHEDULE

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

*Another way to put it:* For an employee that works 8-hour shifts, start them off with **two** hours the first day, then **four** hours the second day, **six** hours the third day, and finally **eight** hours by the final day

## WRITE A PLAN ON PROTECTIONS & EMERGENCY RESPONSE

Employers should write down their plans for employee rest and relief, training, acclimatization, and emergency protocols. The plan should be provided to workers during their onboarding and during an annual training on extreme heat. The written plan should include elements such as, but not limited to:



Flexibility measures to move work to cooler times of the day when the heat index is high



Methods of alerting affected staff to hazard exposure



Signs and symptoms of common heat-related illnesses and basic first aid that workers and supervisors can easily follow



A "buddy system" during times of extreme weather



Methods of monitoring the conditions that workers are exposed to



A two-way communication system with workers to ensure supervisors are keeping track of all workers when the heat index is high



Procedures for activating the illness prevention and emergency response plans



Site-specific emergency response procedures

*Note that a worker experiencing heat stroke needs prompt medical treatment, and any delay can be deadly. NYSDOL advises employers call 911 if symptoms are present.*

Where applicable, these written plans should be negotiated in good faith and implemented under existing collective bargaining agreements. Also, employers should keep daily records of all heat-related illnesses and injuries, regardless of severity, as they occur.

NYSDOL encourages all employers utilize this guidance as needed. Extreme weather hazards in the workplace correlate to higher accident rates, illness, injuries, and deaths. They can also have an impact on a business through increased workers compensation claims, insurance costs, worker utilization of Paid Sick Leave, and overall decreased or diminished worker productivity.

**Employers:** You cannot retaliate against workers for reporting any workplace health or safety concern. For more information on worker rights visit the NYSDOL Public Employee Safety & Health (PEOSH) Bureau: [dol.ny.gov/public-employee-safety-health](https://dol.ny.gov/public-employee-safety-health) or the Federal Occupational Safety & Health Administration (OSHA) webpages: [osha.gov/](https://www.osha.gov/).