

Heat Illness Prevention

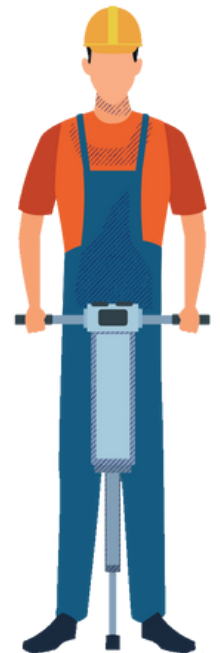
What Employers Can Do to Protect Workers from Heat



This toolkit equips Louisiana employers with the knowledge and resources to safeguard outdoor workers from the dangers of heat stress. With proper training and essential protections, employers can prevent serious illness or even death among employees.

Training

- Train ALL employees and supervisors on heat illness prevention.
- Heat safety training resources in this toolkit include:
- [Heat Illness Prevention: What Workers Need to Know](#): A guide to the core elements of worker trainings.
- [Heat Illness Prevention: Water, Rest and Shade](#): Details about the three essential prevention elements.
- [Heat Illness](#): Know how to recognize the symptoms and respond to heat illness.
- [Employer's Daily Checklist](#): Use this to reinforce trainings and safe work practices.
- Conduct trainings close to hot seasons (i.e., spring). Refresh trainings annually and during the hot season.
- Provide trainings in the language of workers.
- Ensure workplace settings and resources align with practices outlined in trainings.



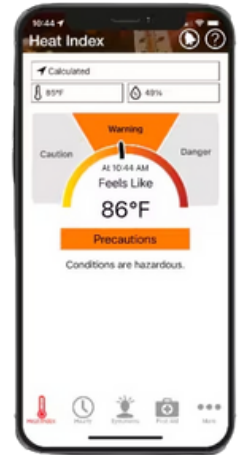
Scheduling

- Employers can use scheduling to prevent heat-related illness.
- Modify work schedules based on current worksite conditions.
 - Reduce physical demands during the hottest part of the day by moving heavy work to cooler times of the day or night.
 - Split up or rearrange shift work to earlier or later in the day to avoid the hottest hours.
 - Stagger job tasks and/or rotate workers to accommodate rest breaks.
- Remember: Physical labor increases the heat experienced by workers. Heat-related illness can occur at low to moderate temperatures when the workload is very heavy.



Monitoring

- Monitor heat hazards.
 - **Wet bulb globe temperature (WBGT):** WBGT is a parameter that estimates the effect of temperature, relative humidity, wind and solar radiation on humans. OSHA recommends the WBGT to measure workplace environmental heat and to establish activity modifications during outdoor work.
 - **OSHA-NIOSH Heat Safety Tool:** This app calculates heat index for worksites and displays a risk level for outdoor workers. Keep in mind that the app's weather data may not accurately reflect worksite conditions, and the heat index-based risk levels may not be sufficiently protective for all workers.



OSHA-NIOSH Heat Safety Tool

Acclimatization

- **WHAT is acclimatization?**
 - Acclimatization is the body's slow adjustment to working in heat that occurs as a person is gradually exposed to hot conditions.
 - Workers who are new to working in warm environments need time to adapt to working in hot conditions.
 - Acclimatization is fully achieved in most people within 4 to 14 days of gradually increasing the amount of work per day in the heat.
- **WHO needs to acclimatize?**
 - New, temporary or existing employees who start work activities:
 - In warm or hot environments
 - With increased physical activity
 - Wearing additional clothing (e.g., chemical protective clothing)
 - Workers returning to work after an absence for one week or more
 - Workers who work on days when the weather is significantly warmer than on previous days
 - Workers who continue to work through seasonal changes when temperatures first begin to increase in spring or early summer
- **WHY acclimatize?**
 - Workers are more likely to develop heat illness if they have not adjusted to working in hot conditions.
 - Over half of heat-related deaths occur on a worker's very first day.
 - Over 70% of heat-related deaths occur during a worker's first week.



• HOW to acclimatize:

- Schedule new workers to work shorter amounts of time working in the heat.
- Give new workers more frequent rest breaks.
- OSHA recommends the “Rule of 20%” for building heat tolerance.
 - **20% first day:** New workers should work only 20% of the normal duration on their first day.
 - **20% each additional day:** Increase work duration by 20% on subsequent days until the worker performs a normal schedule.
- Following the 20% rule, most new workers will be working a full schedule by the end of the first week.
- Other workers may require more time to adapt to heat — up to 14 days in some cases. When in doubt, give workers more days to acclimatize.
- Remember, to help workers build heat tolerance, reduce the duration of the work but not the intensity of the work.

EXAMPLE ACCLIMATIZATION SCHEDULE

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
Total Hours Worked	1.6 hours	3.2 hours	4.8 hours	6.4 hours	8 hours
Example	7 a.m. – 8:30 a.m.	7 a.m. – 10:15 a.m.	7 a.m. – 11:45 a.m.	7 a.m. – 1:20 p.m.	7 a.m. – 3 p.m.