Outdoor and Indoor Heat-Related Hazards in Construction: A Q&A Session on OSHA's National Emphasis Program

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Today's webinar is being recorded and will be posted along with slides at cpwr.com/webinars.

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CPWR Resources to Prevent Heat-Related Illness

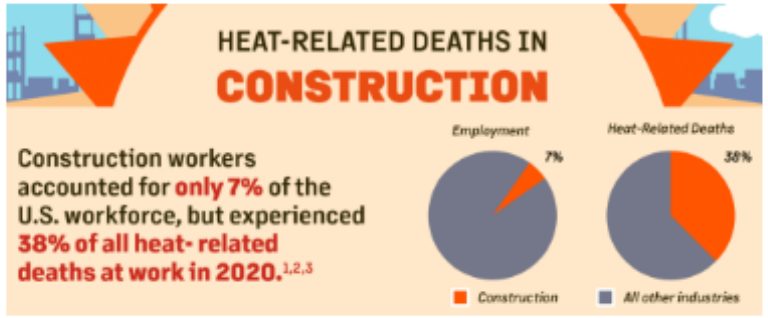
cpwr.com/heat

Heat Hazards

Construction workers, who often work outdoors in direct sunlight or in hot, enclosed spaces, are at risk for heat-related illnesses and, in severe cases, death. Rising global temperatures in recent decades increase that risk. However, **these illnesses and deaths are preventable.**

The resources below are organized by topic and contain information about heat hazards in construction and ways to prevent related illnesses. The sections correspond to the following new checklists from the CPWR-OSHA Alliance:

- Overall Heat-Illness Prevention Program Checklist for Construction
- Daily Heat-Illness Prevention Checklist for Construction

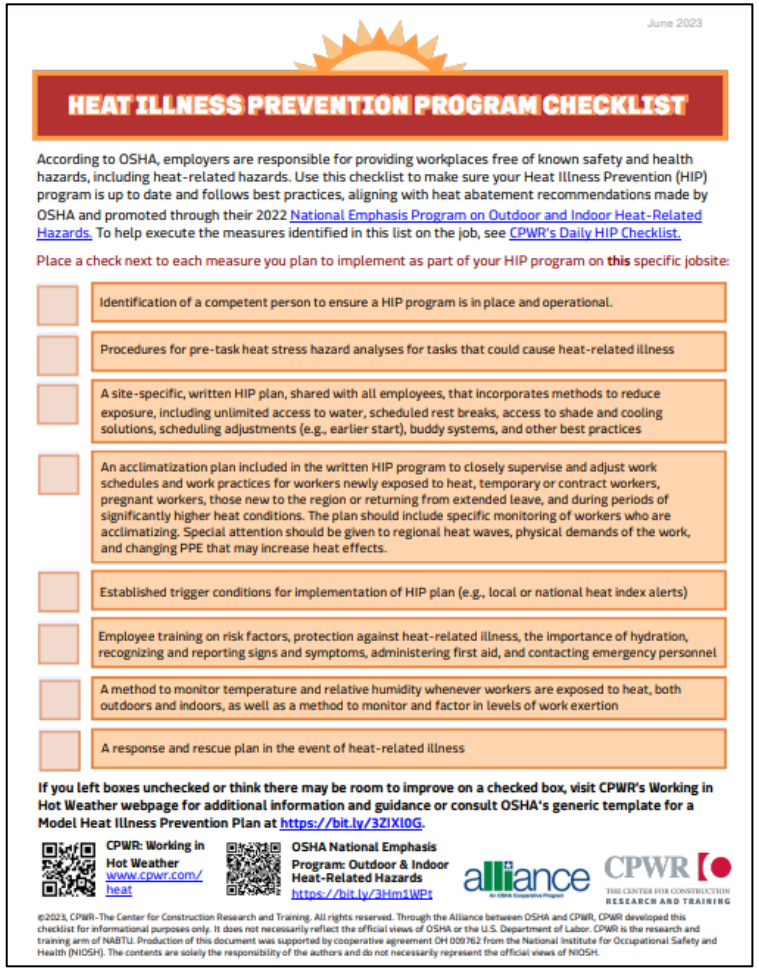


CLICK ON A TOPIC BELOW TO EXPAND FOR LINKS TO RESOURCES & MORE INFO

- Heat Illness Prevention Planning
- Employee Training
- Acclimatization

CPWR-OSHA Alliance Checklists

Overall Heat-Illness Prevention Program Checklist for Construction



June 2023

HEAT ILLNESS PREVENTION PROGRAM CHECKLIST

According to OSHA, employers are responsible for providing workplaces free of known safety and health hazards, including heat-related hazards. Use this checklist to make sure your Heat Illness Prevention (HIP) program is up to date and follows best practices, aligning with heat abatement recommendations made by OSHA and promoted through their 2022 National Emphasis Program on Outdoor and Indoor Heat-Related Hazards. To help execute the measures identified in this list on the job, see CPWR's Daily HIP Checklist.

Place a check next to each measure you plan to implement as part of your HIP program on **this** specific jobsite:

- ☐ Identification of a competent person to ensure a HIP program is in place and operational.
- ☐ Procedures for pre-task heat stress hazard analyses for tasks that could cause heat-related illness
- ☐ A site-specific, written HIP plan, shared with all employees, that incorporates methods to reduce exposure, including unlimited access to water, scheduled rest breaks, access to shade and cooling solutions, scheduling adjustments (e.g., earlier start), buddy systems, and other best practices
- ☐ An acclimatization plan included in the written HIP program to closely supervise and adjust work schedules and work practices for workers newly exposed to heat, temporary or contract workers, pregnant workers, those new to the region or returning from extended leave, and during periods of significantly higher heat conditions. The plan should include specific monitoring of workers who are acclimatizing. Special attention should be given to regional heat waves, physical demands of the work, and changing PPE that may increase heat effects.
- ☐ Established trigger conditions for implementation of HIP plan (e.g., local or national heat index alerts)
- ☐ Employee training on risk factors, protection against heat-related illness, the importance of hydration, recognizing and reporting signs and symptoms, administering first aid, and contacting emergency personnel
- ☐ A method to monitor temperature and relative humidity whenever workers are exposed to heat, both outdoors and indoors, as well as a method to monitor and factor in levels of work exertion
- ☐ A response and rescue plan in the event of heat-related illness

If you left boxes unchecked or think there may be room to improve on a checked box, visit CPWR's Working in Hot Weather webpage for additional information and guidance or consult OSHA's generic template for a Model Heat Illness Prevention Plan at https://bit.ly/3ZIXI0G.

CPWR: Working in Hot Weather www.cpwr.com/heat

OSHA National Emphasis Program: Outdoor & Indoor Heat-Related Hazards https://bit.ly/3Hm1WPt

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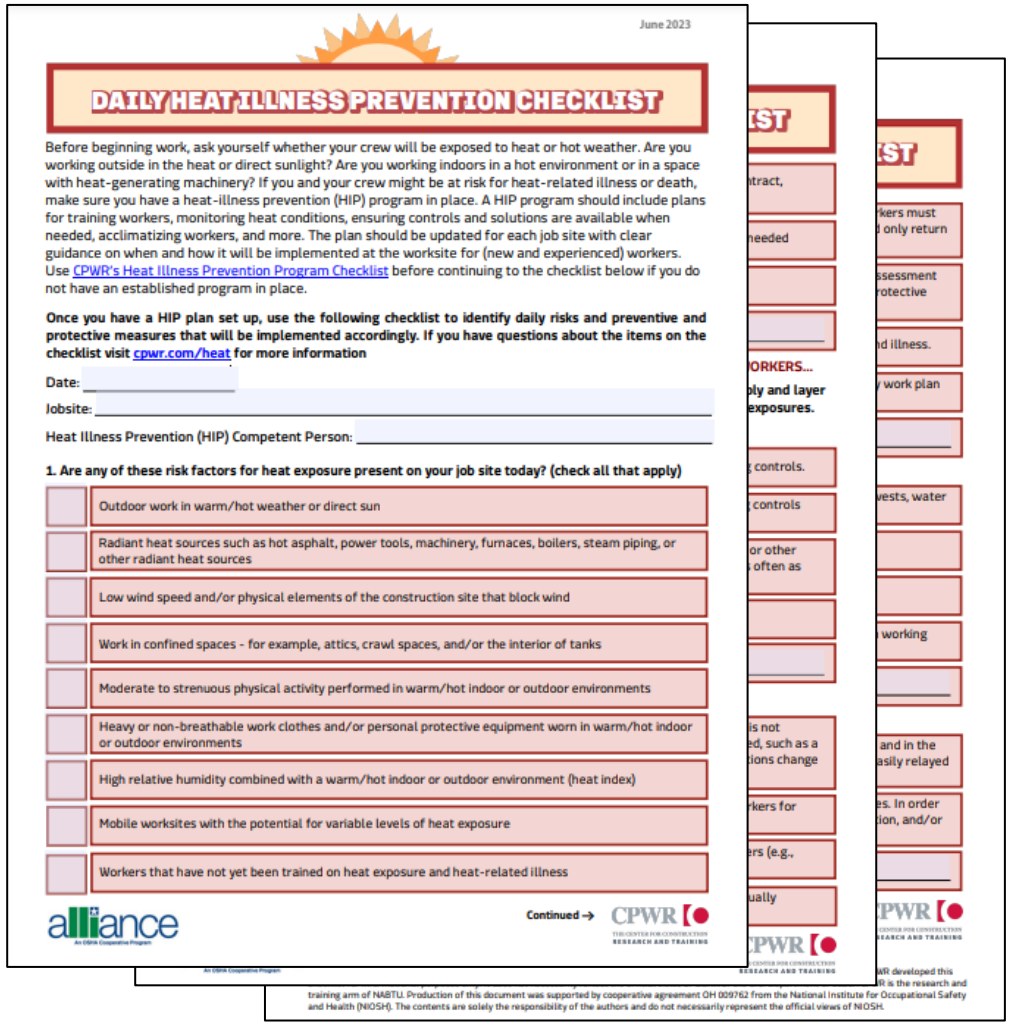
Daily Heat-Illness Prevention Checklist for Construction



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DAILY HEAT ILLNESS PREVENTION CHECKLIST

Before beginning work, ask yourself whether your crew will be exposed to heat or hot weather. Are you working outside in the heat or direct sunlight? Are you working indoors in a hot environment or in a space with heat-generating machinery? If you and your crew might be at risk for heat-related illness or death, make sure you have a heat-illness prevention (HIP) program in place. A HIP program should include plans for training workers, monitoring heat conditions, ensuring controls and solutions are available when needed, acclimatizing workers, and more. The plan should be updated for each job site with clear guidance on when and how it will be implemented at the worksite for (new and experienced) workers. Use CPWR's Heat Illness Prevention Program Checklist before continuing to the checklist below if you do not have an established program in place.

Once you have a HIP plan set up, use the following checklist to identify daily risks and preventive and protective measures that will be implemented accordingly. If you have questions about the items on the checklist visit cpwr.com/heat for more information

Date: _____

Jobsite: _____

Heat Illness Prevention (HIP) Competent Person: _____

1. Are any of these risk factors for heat exposure present on your job site today? (check all that apply)

- ☐ Outdoor work in warm/hot weather or direct sun
- ☐ Radiant heat sources such as hot asphalt, power tools, machinery, furnaces, boilers, steam piping, or other radiant heat sources
- ☐ Low wind speed and/or physical elements of the construction site that block wind
- ☐ Work in confined spaces - for example, attics, crawl spaces, and/or the interior of tanks
- ☐ Moderate to strenuous physical activity performed in warm/hot indoor or outdoor environments
- ☐ Heavy or non-breathable work clothes and/or personal protective equipment worn in warm/hot indoor or outdoor environments
- ☐ High relative humidity combined with a warm/hot indoor or outdoor environment (heat index)
- ☐ Mobile worksites with the potential for variable levels of heat exposure
- ☐ Workers that have not yet been trained on heat exposure and heat-related illness

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Continued →

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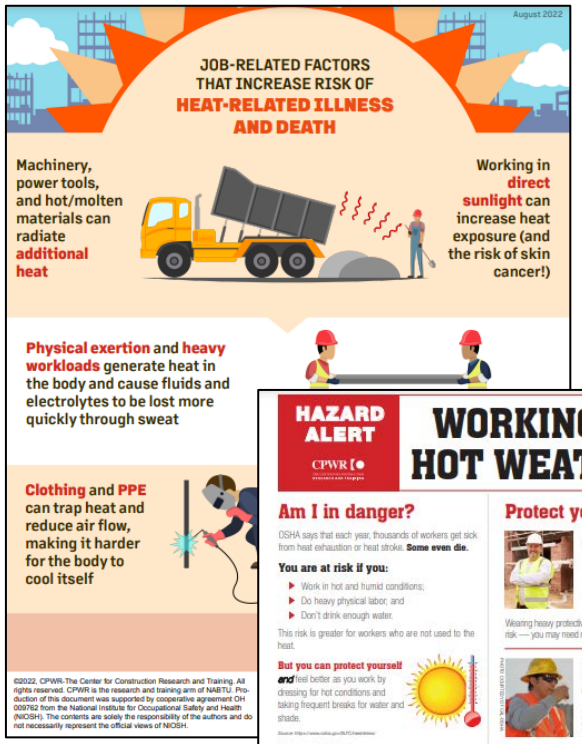
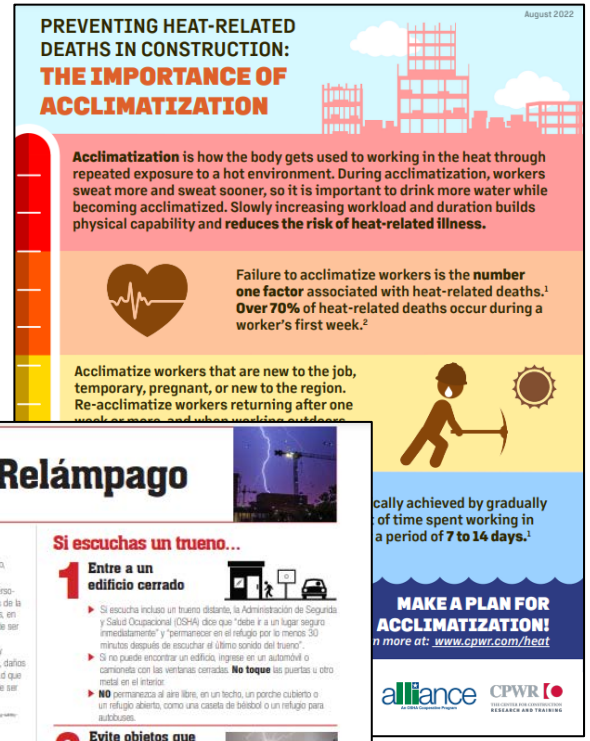
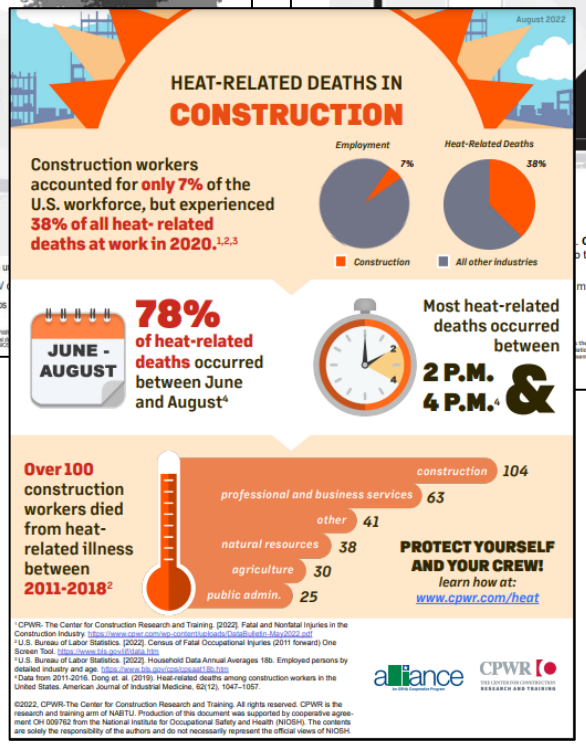
Toolbox Talks, Posters & Worker Handouts







Previous Webinars

Seminario web: Enfermedades y muertes relacionadas con el calor en la construcción (OSHA-NIOSH-CPWR)
16 de junio de 2022. Ver video. Descargar presentación. Otros recursos

Heat related Illness & Death in Construction Webinar
June 30, 2021. Play Recording. Download Presentation

An Overview of Health Hazards Associated with the Aftermath of Hurricanes Webinar
Thursday, September 27th, 2019. Play Recording. Download Presentation

CPWR
July 12, 2023

OSHA's HEAT National Emphasis Program (NEP)

Gary Orr

Directorate of Enforcement Programs

Office of Health Enforcement

OSHA® Occupational Safety and Health Administration

OSHA's Heat Enforcement
Background

- **1974 –** OSHA standards advisory committee provides heat recommendations
- **2011 -** OSHA started the Heat Illness Prevention Campaign, osha.gov/heat
- **Consumer and Legislative Interest**
  - Senate and House Bills
  - "Public Citizen" petition for an ETS on Heat – Aug 2021
  - Letter from 13 Senators and 24 Representatives urging OSHA to issue an ETS –Aug 2021
  - Oct 2021 **-** Proposed Heat Rule appears for first time on Regulatory Agenda
    Prerule Stage - Heat Illness Prevention in Outdoor and Indoor Work Settings

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OSHA's Heat Enforcement
Background Cont.

- **White House Priorities and Federal Initiatives**
  - On January 27, 2021, President Joseph R. Biden issued **Executive Order (EO) 14008**, "Tackling the Climate Crisis at Home and Abroad,"
  - **U.S. Department of Labor** developed the Climate Action Plan, Sept 2021
    - Charting definitive public policy that will reduce the federal government's carbon footprint, increase our climate resilience, and boldly lead by example in protecting our environment.
    - Priority Adaptation Action (PAA#1) Ensuring Worker Safety -OSHA is lead agency (page 6-7)
  - **White House Statement-** Fact Sheet, Sept 20, 2021
- Jan 2022 – **Extreme Heat IWG** (Interagency Working Group) , see heat.gov

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OSHA's Heat Enforcement
Responses on Heat

- **OSHA Wide:**
  - **Feb 2022 -** Formed a Heat Injury and Illness Prevention Work Group under the National Advisory Committee on Occ. Safety and Health (NACOSH)
  - **May 2022 -** Heat Forum Public Stakeholder Meeting, May 3, 2022
  - **Jun 2022 -** Heat is a topic for Susan Harwood Training Grants
  - **April 2023** – Beat the Heat Contest

- **Office of Health Enforcement :**
  - **Sept 2021 -** OSHA Heat Enforcement Initiative (Memo, 9/1/2021 – 4/8/2022)(Now archived)
  - **April 2022 -** OSHA Heat NEP CPL 03-00-024, effective date 4/8/2022, operative for 3 years (supersedes Heat Initiative Memo)

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Heat NEP: Goals

- To reduce or eliminate worker exposures to heat hazards.
- To target industries and worksites where employees are exposed to heat-related hazards and are not provided with cool water, rest, cool shaded areas, training, and acclimatization.
- To be more proactive

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OSHA's Heat Enforcement: NEP

Purpose

- The NEP is designed to protect employees in high-hazard industries from both **indoor** and **outdoor** heat-related hazards.
- The NEP adds an **enforcement component** to its long-running **compliance assistance campaign** to target high-heat-hazard industries.
- The NEP focuses on vulnerable workers by coordinating with the Department of Labor **Wage and Hour Division** (WHD).
  - WHD and OSHA MOU, dated August 4, 2021

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OSHA's Heat Enforcement: NEP

Inspection and Assistance Triggers

- On **heat priority days** (when the heat index is expected to be **80 degrees F or higher)**:
  - During any programmed or unprogrammed inspections, CSHOs should inquire about heat-related hazard prevention programs
  - The NEP prioritizes **on-site** (in person) response for complaints and for all employer-reported hospitalizations and fatalities (i.e., severe injury reports) related to heat hazards.
  - **Provide compliance assistance** where needed
- On any day that the National Weather Service (**NWS)** has announced a heat **advisory or warning,** for the local area: https://www.weather.gov/safety/heat-ww
  - **Conduct programmed inspections** at worksites in targeted industries
  - May expand inspection scope if heat hazards are present

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Heat NEP: Inspection Procedures

- Observations: heat sources, exertional heat, PPE, duration
- Records Review: OSHA 300 & 301, emergency records
- Interviews: symptoms, previous incidents
- Weather Conditions
- Heat Illness Prevention Program

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OSHA's Heat Enforcement

Heat Illness Prevention Program

- Is there a written program?
  - Are you monitoring ambient temperature(s) and levels of work exertion at your worksite?
  - Acclimatization procedures
- Is there unlimited cool water that is easily accessible to employees?
- Do you provide additional water breaks with warmer temperatures?
- Provide cool shaded areas for rest
- Controls - Engineering, Administrative, Work Practices, PPE
- Provide training
  - Train workers on symptoms and reporting
  - Train supervisors on what to observe and emergency response procedures

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ENFORCEMENT DATA

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Heat NEP by the Numbers (Total Inspections by Federal OSHA)

- As of 6/20/23, 1,827 total Heat NEP Federal inspections since 4/8/22
- 47% construction, 15% manufacturing, 1% maritime, and 37% other NAICS
  - Other NAICS include agriculture, transportation, warehousing, food services, waste management, remediation services, etc.
- 1,001 unprogrammed and 826 programmed (not all programmed were primary for Heat NEP)
- 567 are complaints and 58 are FAT/CAT inspections (not all fatalities were heat-related)
- For Fiscal Year 2023, 20 5(a)(1)'s and 85 HALs.

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HEAT Illness Prevention Resources

- Heat Illness Prevention Campaign, www.osha.gov/heat
  - Heat Illness General Education
  - Employers Responsibility
  - Worker Information
- Safety and Health Topics Webpage on Heat Exposure, www.osha.gov/heat-exposure
  - Prevention
  - Heat-Related Illnesses & First Aid
  - Standards
- Alliance products CPWR, NAPA, ARTBA, www.osha.gov/alliances/products
- OSHA Technical Manual (OTM), www.osha.gov/otm/section-3-health-hazards/chapter-4
- NIOSH/OSHA Heat App, www.osha.gov/heat/heat-app
- Federal Agency Heat Resources, www.heat.gov

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Questions?

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