

The Safety & Health Advisor

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OSHA's 'New' Heat National Emphasis Program

On April 8, 2022, OSHA launched a targeted program to protect workers from the increasing threat of heat-related illness. The National Emphasis Program (NEP) creates a nationwide enforcement mechanism for OSHA to proactively inspect workplaces for heat-related hazards in general industry, maritime, construction, or agriculture operations alleging hazardous exposures to heat (outdoors and/or indoors). The NEP is intended to protect workers when it's 80 degrees or higher on the heat index (air temperature + relative humidity). See [National Emphasis Program – Outdoor and Indoor Heat-Related Hazards](#) (OSHA CPL 03-00-024).

The appendix includes three tables of industries (NAICS codes at the 4-digit level) with the following: 1) High numbers or high incidence rates of heat related illnesses from the Bureau of Labor Statistics (BLS) data; 2) Elevated number of days away from work (BLS) or high numbers of severe cases of heat-related illnesses, as indicated by death or hospitalization, from OSHA severe injury reports made by employers; or 3) the highest number of heat-related general duty clause 5(a)(1) violations and hazard alert letters (HALs) over a 5 year period (1/1/2017 thru 12/31/2021), or highest number of OSHA heat inspections since 2017. Non-construction targeted industries in Appendix A includes the following NAICS codes:

- 3118: Bakeries and Tortilla Manufacturing
- 3371: Household and Institutional Furniture and Kitchen Cabinet Manufacturing
- 4244: Grocery and Related Product Merchant Wholesalers
- 4248: Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers
- 4931: Warehousing and Storage
- 6231 Nursing Care Facilities (Skilled Nursing Facilities)

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The NEP requires OSHA inspectors to:

1. Review OSHA 300 logs and 301 incident reports for evidence of heat-related illnesses;
2. Review records of heat-related emergency room visits or ambulance transport;
3. Interview workers for symptoms of headache, dizziness, fainting, dehydration, or other indications of heat-related illnesses;
4. Document the existence of conditions, such as high temperature, that cause the heat-related hazards;
5. Determine whether the employer has a heat illness and injury program, including whether:
 - The employer has a written program
 - The employer monitors temperature and worker exertion
 - There is unlimited cool water easily accessible to workers
 - There are required hydration breaks for hydration
 - There are scheduled rest breaks
 - Workers have access to a shaded area
 - New and returning workers are provided time for acclimatization
 - A "buddy" system is in place on hot days
 - Work is scheduled to avoid hot parts of the day
 - Job rotation is used to limit heat exposure
 - Employees are trained in the importance of hydration, heat illness signs, first aid and summoning of emergency personnel



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OSHA's annual heat illness campaign message is **Water. Rest. Shade** (see <https://www.osha.gov/heat> and <https://www.osha.gov/heat-exposure>). The OSHA/NIOSH Heat Safety Tool can be used to calculate a heat index based on temperature and humidity and provides recommended precautions. It can be downloaded to an iPhone at <https://apps.apple.com/us/app/osha-niosh-heatsafety-tool/id1239425102>. NIOSH's Heat Stress webpage can be viewed at <https://www.cdc.gov/niosh/topics/heatstress/>.

You can find a 'sample' OSHA Heat Illness Prevention Plan [here](#). Check out the summer 2021 edition of The Safety and Health Advisor for an article on workplace heat stress: [here](#).

Risk Assessment Tools in Construction Industry



Despite advances in construction safety equipment, technology and training, the construction industry continues to face high rates of fatal and non-fatal injuries and accidents among its workers. According to OSHA, 1 in 5 deaths among U.S workers are in the construction industry. The U.S. Bureau of Labor Statistics (BLS) reports that roughly 20% of worker deaths in the United States occur in construction, but construction workers make up only 6% of the labor force in the U.S.

Construction sites are hazardous by nature where workers are exposed to electrocution, falling from heights, injuries from tools, equipment and machines; illness due to hazardous substances such as dust, chemicals, etc.

Risk assessments are comprised of identification of risks followed by evaluation and the determination of appropriate control measures for these hazards. Performing risk assessments helps to prioritize these risks and provides a system of recognizing hazardous conditions so that those conditions can be corrected in a proactive manner. In this way, companies are able to implement safety improvements.

Utilizing risk assessment tools such as phone applications or templates within the industry helps to identify exposures and assess the associated hazards to help bring them to a tolerable level. These tools can contribute towards enhancing the safety of workers, operations, and equipment.

Data can be collected while performing assessments to be used in identifying hazards and barriers so that they can be addressed with items such as procedure changes or purchasing different PPE. While one of the goals of a risk assessment is the prevention of injuries, there are additional reasons to perform an assessment:

- Determine who is at risk, such as employee or site visitors
- Raise awareness of the risk(s) and any hazards
- Determine if existing measures are adequate for controlling the risk(s) or if you need to take further action
- Decide if you need a particular control program for a hazard
- Fulfill any legal requirements, if applicable

Risk Assessment Templates:

- [Risk assessment template \(Word Document Format\) \(.docx\)](#)
- [Risk assessment template \(Open Document Format\) \(.odt\)](#)

Risk Assessment Phone Applications:

- [IAuditor](#)
- [Aptien](#)
- [Risk Cloud](#)
- [RLDatix](#) (Healthcare Industries)

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OSHA Safe + Sound Week 2022

Workplace accidents, including ones resulting in injuries and fatalities, don't just impact workers and their families, but can affect businesses in a variety of ways. OSHA believes that implementing a formal safety and health program not only helps improve businesses' safety and health performance, but potentially saves them money and improves their competitiveness. OSHA's **Safe + Sound** campaign encourages employers to develop and implement a safety and health program in their workplaces. Safe + Sound Week is an annual event, occurring during the month of August, designed to help bring focus to this campaign, celebrate successes of safety and health programs and provide information and ideas for workplace safety.

This year it will be held from **August 15-21**. Free campaign resources including materials about management leadership, worker participation and finding and fixing hazards may be found at: <https://www.osha.gov/safeandsoundweek>



OSHA states that successful safety and health programs can proactively identify and manage workplace hazards before they cause injury or illness, improving sustainability and the bottom line. Over 5,300 employers participated in the event during 2021. Participating in Safe + Sound Week can help get your program started, energize an existing one, or provide your organization with an opportunity to recognize your safety successes.

Automotive Mechanic Fatally - Massachusetts FACE (Fatality Assessment and Control Evaluation)

On September 25, 2019, a 64-year-old white non-Hispanic male automotive mechanic was injured in an explosion inside a service garage. He was welding on top of a nearly empty steel drum of flammable washer fluid,

which caused the drum to explode. The explosion covered him with burning fluid and he died from the burns six weeks later.

Key contributing factors identified in this investigation include:

- Worksite lacked a proper welding station
- Welding in the vicinity of a drum containing flammable materials
- Lack of a safety and health program and overall safety training

Massachusetts FACE investigators concluded that, to help prevent similar occurrences, employers should:

- Provide an appropriate location to perform welding work. All hot work should be a safe distance away from flammable and combustible liquids. Ensure workers using welding equipment are trained in the safe operation of their equipment.
- Ensure that all workers are properly trained about hazardous materials in the workplace.
- Develop and implement a comprehensive safety and health program that addresses hazard recognition, avoidance of unsafe conditions, and proper use of equipment.

For the complete report and story see:

<https://www.cdc.gov/niosh/face/stateface/ma/19ma058.html>

Hurricane Preparedness

Potential exists across all states for hurricanes and tropical storms. No one is immune to storms as the intensity, frequency, and duration of North Atlantic hurricanes have all increased since the early 1980s. The National Hurricane Center projects that intensity and rainfall will increase as the climate continues to warm. Hurricanes and tropical storms are responsible for the largest U.S. economic cost year after year and have increased to an average of 14 storms a year between the months of August, September, and October.

The worst hurricanes to hit Massachusetts from 1900-2000, are: the Great New England Hurricane of 1938, "the twins" from 1954, Hurricanes Carol and Edna; and most recently, Hurricane Bob in 1991. Out of the three,

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The Great New England Hurricane, caused the most substantial damage. Overall, 8,900 buildings were destroyed in New England, and another 15,000 were damaged. Coastal communities were decimated; 2,600 boats were destroyed and another 3,300 damaged, and fishing fleets suffered terribly, with 2,605 vessels destroyed and 3,369 damaged. A total of 564 people were killed and another 1,700 injured in southern New England. Storms are unpredictable, and "100-year" events can happen in rapid succession.

Hazards associated with hurricanes includes storm surge, heavy rainfall leading to flooding, high winds, rip currents, and tornadoes. Narrowing the path of potential destruction can be helpful in taking steps to mitigate the impact of storms and can help preserve the community that you know best. Hurricane-force winds, 74 mph or more, can destroy buildings and mobile homes. Debris, such as roofing material, siding, and items left outdoors become flying missiles during hurricanes. Items to keep in mind during a storms arrival include: make sure you have a plan, periodic checks of insurance, clean gutters, secure outside items.

Here are some additional tips to help prepare for a hurricane:

- Pay attention to weather forecasts so your business can act early when a hurricane is approaching.
- Board up doors and windows to help protect these openings from high winds and debris.
- Maintain maximum fuel levels in emergency generators, fire pumps and company vehicles, as fuel could be in short supply when a storm is forecasted.
- Develop a plan for moving vehicles, and any movable machinery and equipment located in flood-prone areas, to higher ground.
- Confirm that fire detection systems and protective equipment are functioning properly.
- Secure important documents and move them offsite if possible.
- Properly shut down production equipment and non-essential machinery.

**The chart below represents Colorado State University's (CSU) 2022 hurricane forecast projection, updated as of 6/2/2022:*

Forecast Parameters	CSU Forecast for 2022	Average for 1991-2020
Named Storms	20	14.4
Named Storm Days	95	69.4
Hurricanes	10	7.2
Hurricane Days	40	27.0
Major Hurricanes	5	3.2
Major Hurricane Days	11	7.4
Accumulated Cyclone Energy+	180	123

Important Elements of Lockout/Tagout Programs

During fiscal year 2021, Control of Hazardous Energy (lockout/tagout), general industry (29 CFR 1910.147) remained on OSHA's Top 10 list of most frequently cited standards following inspections of worksites across for all industries.

Here are some of the most common elements of the standard that are frequently cited and should not be overlooked:

Establish specific lockout/tagout procedures for each piece equipment or process that could create a hazard during servicing or maintenance if they start up or cycle unexpectedly, or release stored energy 29 CFR 1910.147(C)(4).

The procedure must address how to control each type of hazardous energy associated with the machine, and enable a worker to safely lock out each of those power sources.

Another required component of an effective energy control program that can be overlooked is a periodic inspection (at least annually) for each piece of equipment requiring lockout and tagout procedures while it is being performed 29 CFR 1910.147(c)(1). The periodic inspection process evaluates the adequacy of the procedures and the ability of the authorized employee to follow the procedures.

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At a minimum, the inspection process must contain BOTH an inspection of each energy control procedure and a review of each authorized employee's responsibilities under the energy control procedure being inspected. The "inspector" must be an authorized employee who is not part of the lockout/tagout being performed. As part of the inspection, the inspector must review each participating employee's responsibilities with that employee.

Employers are also required to train workers in the purpose and function of the lockout/tagout program, and to ensure that they have the knowledge and skills they need 29 CFR 1910.147(C)(7). Employees need to be grouped into one of three specific categories for the training:

1. Authorized employees, who actually perform servicing and maintenance on locked-out equipment, must be able to recognize the types of hazardous energy sources that exist in the workplace, and know how to isolate and control them.
2. Affected employees are the operators of machinery that is being serviced, or employees who work in an area where equipment is being serviced. They must understand lockout/tagout well enough to know not to interfere or place themselves in danger.
3. All other employees. In a workplace where energy control procedures are used, all employees must have a basic understanding of lockout/tagout, and the importance of not attempting to restart or reenergize machinery that is locked/tagged out.

The training program must cover, at a minimum, the following three areas: energy control program, elements of energy control procedures relevant to employee duties, and the pertinent requirements of the standard (1910.147(c)(7) and (d) through (f)).

Ensure all energy sources are identified for each Lockout/Tagout Procedure. According to 29 CFR 1910.147(b), they include electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy sources. Each of these potential energy sources needs to be carefully considered.

Establish procedures for shift or personnel changes. Each facility must develop their own written procedures based on their need (e.g., multiple authorized personnel across shifts) and capabilities. Your procedure must specify how you will ensure the continuity of lockout or tagout protection at any time throughout the Lockout/Tagout procedure 29 CFR 1910.147(e)(4).

Outside personnel/contractors also need to be advised that the company has and enforces the use of lockout/tagout procedures. They need to be informed of the use of locks and tags and notified about the prohibition relating to attempts to restart or re-energize machines or equipment that are locked out or tagged out. In turn each employer should obtain information from the outside personnel/contractor about their lockout/tagout procedures and advise all affected employees of this information as well. The outside personnel/contractor should be required to sign a certification form of the policy 29 CFR 1910.147(F)(2).

Here is a link to a sample lockout/tagout program from the Massachusetts Executive Office of Labor and Workforce Development

<https://www.mass.gov/doc/lockout-tagout>

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OSHA Updating Powered Industrial Truck Standards



OSHA has proposed to update the powered industrial truck standards (29 CFR 1910.178 for General Industry and 29 CFR 1926.602(c) for Construction) to align with current industry practices as well as with new technologies.

The proposed rule will update the design and construction requirements for OSHA's powered industrial trucks standards for both general industry and construction, including fork trucks, tractors, platform lift trucks, motorized hand trucks and other specialized industrial trucks powered by an electric motor or an internal combustion engine.

Under the proposed rule, OSHA will update its general industry and construction standards for powered industrial trucks by adding references to the latest design and construction requirements published by the ANSI (American National Standards Institute) in conjunction with the ITSDF (Industrial Truck Standards Development Foundation). ANSI/ITSDF Safety Standard B56.1-2020 contains the safety requirements for both low and high lift trucks.

In addition to updating the design and construction requirements for future manufactured powered industrial trucks, the proposed rule will also address equipment manufactured before the effective date of the final rule. Atlantic Charter will provide a future update if the proposed rule is implemented.

If you need assistance in evaluating your ergonomics or safety and health program, please contact Neal Freedman, John Cotnam, Mark Hickox or Colin Trombley from Atlantic Charter's Safety and Health Department at (617) 488-6500.