AGC Heat NEP Questions / OSHA Responses

(6-12-2023)

1. **Question: How does OSHA define a new or returning worker with respect to acclimatization?**

   Response: OSHA includes guidance on protecting new and returning workers on its Heat Safety and Health Topics page at: https://www.osha.gov/heat-exposure/protecting-new-workers. For purposes of that guidance, the term "workers who are new to working in warm environments" includes the following groups:

   - New, temporary, or existing employees who start new work activities:
     - in warm or hot environments
     - while wearing additional clothing (e.g., chemical protective clothing)
     - with increased physical activity
   - Workers returning to work environments with potential exposure to heat hazards after an absence of one week or more. This includes, for example, an existing worker returning from any kind of extended leave.
   - Workers who continue working through seasonal changes when temperatures first begin to increase in the spring or early summer.
   - Workers who work on days when the weather is significantly warmer than on previous days (i.e., heat wave).

2. **Question: The NEP states that during heat-related inspections, compliance safety and health officers (CSHOs) should determine if the employer has a heat illness prevention program which includes a "buddy" system on hot days. Will the absence of such a system incorporated into a heat illness prevention program increase the potential for an employer to be cited under 5(a)(1)?**

   Response: Establishing a "buddy" system is just one possible element of a heat illness prevention program that employers should consider. The purpose of a "buddy" system is to proactively identify when an employee may be experiencing signs and symptoms of heat-related illnesses requiring first aid or medical attention, that they may not be able to recognize in themselves when working alone. It is a way to intervene before the condition worsens.

   Other methods of identifying signs and symptoms of heat-related illnesses, in combination with training, may include periodic check-ins to monitor workers' signs of heat-related illnesses, regular communication with employees working alone by mobile

phone or radio, and encouraging employees to self-report when experiencing signs/symptoms of heat illness.

OSHA compliance officers will determine, based on the facts of a particular inspection, if unabated hazards are present and may issue a (5)(a)(1) citation if sufficient evidence is gathered to support issuance of a citation.

3. **Question: The NEP and [heat] illness campaign material discuss physiological and medical monitoring (e.g., monitoring blood pressure, heart rates, change in body temperature and weight). Does OSHA expect employers to incorporate this type of monitoring into their heat illness prevention programs?**

   Response: OSHA recognizes that many employers lack the expertise in this area to accurately take such physiological measurements. However, employers should consider all potential methods to control heat stress, including monitoring metabolic load. For example, new smart watches can help people monitor their own heart rates, and technologies exist for monitoring hydration levels. Some employers employ a medical specialist at their facility to provide monitoring and to determine if medical attention is needed beyond first aid, and/or if workloads need to be adjusted.

   Typically, medical monitoring is used to determine the metabolic load (i.e., heavy, medium, light) as part of a calculation to determine if recommended heat exposure limits will be exceeded. See also https://www.cdc.gov/niosh/docs/2016-106/default.html, which further discusses physiological and medical monitoring.

4. **Question: The NEP states that access to cool/shaded areas must be provided to address exposure to heat. Does OSHA expect these areas to be a certain temperature below the heat index?**

   Response: Employers should understand that weather services report local temperatures and Heat Indexes from measurements at shaded outdoor locations. Outdoor work in the sun may be considerably hotter than the locally reported temperature and Heat Index. If workers rest in a cooler location than their work area, they will be ready to resume work more quickly. Rest breaks should last longer if there is no cool/shaded location for workers to rest. OSHA's website on prevention of heat illness provides the following guidance regarding the shaded areas: "*Workers should be given a cool location where they can take their breaks and recover from the heat. Outdoors, this might mean a shady area, an air-conditioned vehicle, a nearby building or tent, or an area with fans and misting devices.*" Additionally, see our response to Question 7 that also regards shaded areas, below.

5. **Question: The NEP identifies training as an effective method to prevent heat illness. Will toolbox talks satisfy OSHA's training expectations?**

   Response: Toolbox talks can be an effective method to provide and reinforce information to workers on topics related to the prevention of heat-related illnesses and may be part of

an overall training program. Training programs, including toolbox talks, should include at least the following components:

- Hazards of heat-related illnesses and personal health factors that may increase the risk of heat illness.
- How to avoid heat-related illnesses by recognizing and avoiding situations that can lead to heat-related illnesses.
- Recognition of signs and symptoms of heat-related illnesses.
- First aid procedures including when and how to contact emergency personnel.
- Employer's program to address heat-related illnesses.

While it may be possible to provide effective training with this method in some workplaces, limitations on the effectiveness of training that relies exclusively on toolbox talks include ensuring timely training for new employees, making sure training is in a language understood by employees, ensuring all employees are present and participate in the training, and whether the format of toolbox talks is sufficient and effective in covering all necessary issues.

6. **Question: The NEP states that CSHOs are to determine if an employer has a written heat illness prevention program. Can an employer demonstrate an effective program in the absence of a written program?**

   Response: Yes. Employers may demonstrate the existence of an effective heat illness prevention program even if that program is communicated to their workforce verbally. Training that includes the elements listed above can also be provided verbally. However, OSHA recommends that employers have a written program that employees can easily access to help ensure employees are informed about policies, programs, and protections implemented to protect them from heat-related hazards. A written plan helps establish clear expectations and prevent miscommunication, particularly for larger employers. OSHA compliance officers will assess existence and effectiveness of a heat illness prevention program through observations, document reviews, and interviews.

7. **Question: In some construction operations, providing shaded areas may be infeasible or create a greater hazard, such as roadway construction and roofing operations, among others. Will OSHA consider alternate control measures to be effective in these situations?**

   Response: Employers should provide access to cool shaded areas where possible. For example, the employer could provide access to artificial shade (e.g., a tent or pavilion) or natural shade (e.g., trees). Alternatively, an employer could provide access to air-conditioned spaces (e.g., trailers, vehicles, building) so employees can cool down as needed. However, if these measures are infeasible or create a greater hazard, employers can implement alternative cooling measures. For example, an employer could consider using fans and misting devices. Employers may also need to provide employees time to reach a shaded area if it is unsafe or infeasible to provide one in the immediate work area.

8. **Question: The NEP instructs CSHOs to consider whether there was "unlimited cool water…easily accessible to employees." What does OSHA consider to constitute an "unlimited" water supply in the context of the NEP?**

   Response: To prevent heat-related illness, employers should ensure enough cool drinking water is available for workers to remain adequately hydrated. In this context, "unlimited" is meant to emphasize that the employer should take steps to ensure it does not run out of water. Employers can utilize any potable water source that is readily accessible and can be replenished by the employer during the shift (*i.e.*, a bottled water supply or potable water dispensers). Proper hydration is essential to prevent heat-related illness. Employers may also want to provide access to additional fluids that contain electrolytes, in addition to water, particularly for employees working in the heat for two hours or more. The exact amount of water a worker needs to remain adequately hydrated will vary by person. NIOSH recommends a cup of water every 15 minutes (or 1 quart per hour). Employers should encourage workers to drink at least one cup (8 ounces) of water every 20 minutes while working in the heat, even if they are not thirsty. See OSHA's Heat Safety and Health Topics page: https://www.osha.gov/heat-exposure/water-rest-shade.

   Also note, OSHA's Sanitation standards at 29 CFR § 1910.141, 29 CFR § 1915.88, 29 CFR § 1917.127, 29 CFR § 1918.95, 29 CFR §1926.51, and 29 CFR § 1928.110 require employers to provide potable water. Additionally, OSHA's First Aid standards at 29 CFR § 1910.151 and 29 CFR § 1926.50 require the ready availability of first aid personnel and equipment. *See also* Heat-Related Illnesses and First Aid (osha.gov).

9. **Question: The NEP instructs CSHOs to "determine if the employer has a heat illness and injury program addressing heat exposure and consider the following:" The list includes ten (10) specific program elements for the CSHO to consider ranging from a written program to monitoring levels of work exertion. Does OSHA expect employers to adopt/implement all ten (10) items into their program?**

   Response: Not necessarily. The list covers a range of heat hazard controls employers can implement to reduce or eliminate heat hazards. However, OSHA does not expect all employers to implement every control measure. Employers should perform a pre-job hazard assessment to identify jobs that present heat hazards and then implement those controls, or combination of controls, that best fit their respective operations to reduce or eliminate heat hazards and prevent heat-related injuries, illnesses, and deaths.

OSHA References:

Heat National Emphasis Program:

- CPL 03-00-024*, National Emphasis Program – Outdoor and Indoor Heat-Related Hazards*, April 8, 2022 - https://www.osha.gov/enforcement/directives/cpl-03-00-024
- Fact Sheet on Heat NEP – https://www.osha.gov/sites/default/files/heat-nep-factsheet-en.pdf
- OSHA letter to AGC regarding the Heat NEP, September 1, 2022 - https://www.osha.gov/laws-regs/standardinterpretations/2022-09-01

Heat-related webpages:

- Heat-Illness Prevention Program - https://www.osha.gov/heat
- Safety and Health Topics/Heat - https://www.osha.gov/heat-exposure

Heat Stress Fact Sheet:

- https://www.osha.gov/sites/default/files/publications/heat_stress.pdf