ET&D Partnership Questions on Heat NEP/ OSHA Responses
(8-9-2023)

Acclimatization Questions

1) **Question: What is OSHA's expectation or guidance regarding acclimatization on mobile outdoor crews (2 hours, then 4, then 6, etc.)?**

   OSHA Response: Each employer is responsible for the safety and health of its workers and for providing a safe and healthful workplace for its workers, including those who work outdoors. Therefore, employers should put in place heat hazard controls, including an acclimatization plan, to protect employees who work in hot temperatures. The term "acclimatization" means that the body gradually adapts and tolerates higher levels of heat stress. Workers who are new to working in warm environments may not be acclimatized to heat. Their bodies need time to adapt to working in hot conditions. One option for acclimatizing workers who are new or returning to working in hot environments is for employers to have workers get used to the hot working environment by beginning work with 20 percent of the normal time spent in the hot environment, and then gradually increasing the work duration by 20 percent on subsequent days until the worker is performing a normal schedule. OSHA includes guidance on acclimatization to protect new and returning workers on its Heat Safety and Health Topics page at: https://www.osha.gov/heat-exposure/protecting-new-workers.

2) **Question: Acclimatization is physiologically different in every human and factors complicating an employee's ability to acclimate include many variables (employee health, medications taken, diet, weight, and metabolic rate). How will OSHA take into consideration these factors, or others, that are related directly to the employee? Where does the employee's responsibilities and the employer's start/stop in relation to acclimation?**

   OSHA Response: As with any exposure that has health consequences, individuals vary in their response and tolerance to an exposure. Acclimatization is one of several control options that should be implemented for workers to be adequately protected from workplace heat hazards. Employers should consider all applicable methods to control heat stress, including, but not limited to, acclimatization, providing water, rest breaks, shade, and employee training. Employers need to ensure that workers have knowledge of the hazards of heat stress and methods of prevention. Workers should also receive training on risk factors for heat injury and illness, signs and symptoms of heat-related illness, and first aid procedures, including when and how to contact emergency personnel. Workplace controls should focus on making jobs safe for all the employees.

See OSHA's Safety and Health Topics Page on Heat Personal Risk Factors at https://www.osha.gov/heat-exposure/personal-risk-factors.

Each employer is responsible for the safety and health of its workers and for providing a safe and healthful workplace for its workers. This includes protecting workers from heat-related hazards. For more information on employer responsibilities related to heat illness prevention, please see https://www.osha.gov/heat/employer-responsibility.

Break & Shade Questions

3) **Question: How will OSHA look at rest and shade breaks when workers are atop of electrical structures such as towers?**

OSHA Response: Employers are responsible for evaluating the job tasks of their employees and determining the most appropriate way to incorporate water, rest, and shade into their heat illness prevention programs. For example, employers may need to provide employees additional time to reach a shaded area if it is unsafe (e.g., if doing so will create another hazard) or infeasible to provide one in the immediate work area. Other options to help minimize exertion and heat exposure may include staggering job tasks, and/or rotating workers to accommodate rest breaks, and conducting work at cooler times of the day or night. The fact that employees are engaged in particular job tasks does not relieve employers of their compliance responsibilities under OSHA standards or the Occupational Safety and Health Act of 1970 (OSH Act), or the equivalent State Plan standards and requirements. Employer compliance is evaluated on a case-by-case basis.

4) **Question: If a single outdoor worker gets in their vehicle and drives 30 minutes to the next job site, does that count as a "break"?**

OSHA Response: The determination of whether a single outdoor worker gets in their vehicle and drives 30 minutes to the next job site would suffice as a rest break will be handled on a case-by-case basis. Breaks should last long enough for workers to recover from the heat. Several factors may be taken into consideration, including whether the vehicle was allowed to cool prior to use. If workers rest in a cooler location, they will be ready to resume work more quickly. Breaks should last longer if there is no cool location for workers to rest.

5) **Question: Does a vehicle meet the shade expectations?**

OSHA Response: Workers should be given a cool location where they can take their breaks and recover from the heat. This might include a cooled vehicle. However, keep in mind that hot vehicles can also be a source of heat-related illnesses. If vehicles are being considered as rest area(s), employers should allow the inside of the vehicles to cool prior to using the vehicle for employee rest breaks.

PPE Questions

6) Question: What kind of PPE is OSHA recommending that could work for the power/electrical work when FR clothing is required?

OSHA Response: Employers should conduct a pre-job hazard assessment to identify work-related hazards and determine appropriate personal protective equipment (PPE). Additionally, as part their heat hazard assessments, employers should consider the contributions of PPE to heat stress. When selecting PPE for employees exposed to extremely hot conditions, employers should provide light weight breathable fabrics, if possible (*see* OSHA letter to Rep. Jeff Landry, January 12, 2012). Where specific PPE is required that may contribute to employees' exposure to heat hazards, the employer should use Clothing Adjustment Factors (CAF) to determine workers' effective Wet Bulb Globe Temperature (WBGT). These procedures can be found in the OSHA Technical Manual, Section III, Chapter 4 – Heat Stress at https://www.osha.gov/otm/section-3-health-hazards/chapter-4#clothing and on OSHA's Safety and Health Topics Page on Heat at https://www.osha.gov/heat-exposure/hazards.

7) Question: Will OSHA consider the use of cooling components such as cooling bandanas & etc.?

OSHA Response: Cooling vests and water-cooled/dampened garments may be an effective component of an employer's heat illness prevention program. For more information on controls to protect workers from heat-related illnesses, see OSHA's Safety and Health Topics Page on Engineering Controls, Work Practices, and Personal Protective Equipment at https://www.osha.gov/heat-exposure/controls.

Storm Response Questions

8) Question: How will acclimatization be enforced in emergency restoration efforts when employees travel from outside the area to restore power?

OSHA Response: Emergency restoration efforts do not eliminate the need for worker acclimatization. Traveling from a cooler climate to a hotter climate may even further necessitate allowance for workers to become acclimated to hotter temperatures. As stated above, each employer is responsible for the safety and health of its workers and for providing a safe and healthful workplace for its workers. Please visit OSHA's Heat – Protecting New Workers Safety and Health Topics Page (https://www.osha.gov/heat-exposure/protecting-new-workers), which includes information on acclimatization. If an incident were to occur in one of the 22 states, Puerto Rico or Virgin Islands which are State Plan States (https://www.osha.gov/stateplans), in most situations the State would have primary response responsibility, which may include enforcement action as necessary and appropriate. OSHA would work cooperatively with the OSHA-approved State Plan in providing the response.

9) **Question: Will exceptions be made for emergency response?**

OSHA Response: During all phases of an emergency response, employers have the primary responsibility for the health and safety of their employees and must implement safety and health procedures that protect their workers while responding. The fact that workers are engaged in emergency response does not relieve employers of their compliance responsibilities under OSHA standards or the OSH Act, or the equivalent State Plan standards and requirements. However, during the initial phases of an emergency response (e.g., following a natural disaster such as a storm, hurricane, tornado, etc), OSHA may take a compliance assistance posture and will assist employers to assure worker safety and health. As the response shifts to recovery and clean-up, OSHA may initiate enforcement actions as necessary and appropriate. Please see OSHA's webpage, Worker Protection: OSHA's Role During Response to Catastrophic Incidents Guide at https://www.osha.gov/emergency-preparedness/guides/osha-role-during-response for more information.

10) **Question: How will OSHA address workers involved in hurricane restoration where the hazard of not restoring power can sometimes outweigh the hazard of restoring it in high temperatures?**

OSHA Response: OSHA often takes the role of providing compliance assistance during the initial phase of an emergency response operation so as to avoid interruption of the important work of response workers. However, employers still have a responsibility for the health and safety of their employees. Injuring workers could further exacerbate the impacts of a storm or disaster situation. Please see response to Question 9.

Other Questions

11) **Question: With Utilities and Contractors sharing similar performance with heat and incident rates overall, why is NAICS 2371 – "Utility System Construction" (contractors) listed in Appendix A as a high-risk industry and not NAICS 2211 – "Electric power generation, transmission and distribution" (utilities)?**

OSHA Response: NAICS code 2211 did not meet all the criteria used in compiling the tables listed in Appendix A of OSHA's Heat NEP. The list included over 70 industries (4-digit NAICS) with high incidents and rates of heat-related fatalities, illnesses, days away from work, or past OSHA enforcement actions. However, the NEP also allows field offices to inspect additional establishments, regardless of NAICS code, based on evidence that heat exposures have occurred (*e.g.*, complaints, employer-reported heat-related illness or fatalities, or workers' compensation data).

12) **Question: How will OSHA evaluate good faith efforts to provide water, rest, and shade for environments/tasks that are difficult to apply consistently?**

OSHA Response: OSHA will evaluate employer efforts to address hazardous heat conditions on a case-by-case basis and will consider any program elements the employer

has implemented or is in the process of implementing. Inspection procedures can be found in the National Emphasis Program (NEP) at https://www.osha.gov/enforcement/directives/cpl-03-00-024.

13) **Question: Would OSHA consider making indoor situations more strictly controlled (Employees cannot be asked to spend X amount of time in temperatures over Y degrees) due to the higher likelihood that the temperature can be controlled and then have less strict standards for outdoor workers such as requiring breaks, shade, and hydration?**

OSHA Response: Because heat-related illnesses can occur in both indoor and outdoor environments, employers should conduct a hazard assessment to determine work-related hazards, including heat, whether workers are exposed in indoor or outdoor working environments. Based on the hazard assessment, the employer should develop a heat illness prevention program with controls to materially reduce or eliminate heat hazards. When developing that program, employers should take into consideration a number of factors, e.g., the amount of time workers are exposed, the temperature, workload, and/or use of PPE that may increase the likelihood of heat stress.

14) **Question: What is required from a written program standpoint?**

OSHA Response: OSHA recommends that employers' heat illness prevention program be written and easily accessible to employees to help ensure employees are informed about policies, programs, and protections implemented to protect them from heat-related hazards. A written program helps to establish clear expectations and prevent miscommunication, particularly for larger employers. The program, whether written or not, must be communicated to workers and workers should be provided training that includes the elements listed below. This includes 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, whether the format of training is sufficient and effective in covering all necessary issues. OSHA compliance officers will assess existence and the effectiveness of a heat illness prevention program through observations, document reviews, and interviews.

Training programs should include at least the following components:

- Hazards of heat-related illnesses
- 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

Employers can use the tools on the OSHA Heat Planning and Supervision webpage (https://www.osha.gov/heat-exposure/planning) to help create a heat illness prevention plan.

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 Campaign - 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

OSHA Technical Manual, Section III, Chapter 4 – Heat Stress:

- https://www.osha.gov/otm/section-3-health-hazards/chapter-4

Other References:

- OSHA State Plan States - https://www.osha.gov/stateplans
- Worker Protection: OSHA's Role During Response to Catastrophic Incidents Guide - https://www.osha.gov/emergency-preparedness/guides/osha-role-during-response