Worker Heat Protection

Legislation Updates
Nationally with Focus on Virginia
July 24th, 2020
Worker Heat Exposure

- Heat is the leading weather-related killer in the United States.

- 19 of the 20 hottest years on record have occurred since 2001.

- Fourth National Climate Assessment identifies outdoor workers...as a population that “experience(s) increased climate risks due to a combination of exposure and sensitivity”
Worker Heat Exposure

• Between 1992 and 2017, 815 United States workers died from heat and almost 70,000 were seriously injured.

• By 2090, according to the 2018 National Climate Assessment, the costs of lower labor productivity under rising temperatures is estimated to reach $160,000,000,000 in lost wages annually in the United States.

• Three states have legislation to protect workers from heat. There is no federal legislation.
Enacted Legislation/Regulations

- California: *Heat Illness Prevention in Outdoor Places of Employment Regulation (California Code of Regulations, Title 8, Section 3395)*, 2006
- Minnesota: *MNOSHA HEAT STRESS GUIDE*, 2009
- Armed Forces:
  - Army/Air Force: *Heat Stress Control and Heat Casualty Management*
  - Navy/Marine Corps: *Prevention of Heat and Cold Stress Injuries (Ashore, Afloat, and Ground Forces)*
Proposed Legislation


- Virginia: *Employment health and safety standards; heat illness prevention*
California Worker Heat Protection (Outdoor)

- Title: Heat Illness Prevention in Outdoor Places of Employment Regulation (California Code of Regulations, Title 8, Section 3395)

- *Has served as model for Virginia and Federal bills.*

- The death of four workers in 2005 due to heat-related illnesses spurred a push for an official state standard regarding occupational heat which was passed in 2006. This was the first worker heat protection legislation passed in the nation.
California Worker Heat Protection

- Renamed the Maria Isabel Vasquez Jimenez Heat Illness Prevention Regulation in 2018

- 17 y/o Maria Jimenez was tying grape vines at a farm east of Stockton in May of 2008 when the temperature went well above 95 degrees. The nearest water cooler was a 10-minute walk away, which was a longer time than the workers’ break. Ms. Vasquez collapsed from heat exhaustion.

- When she arrived at the hospital she was in a coma, her body temperature topped 108 degrees, and she died two days later.
• H.R. 3668: Asuncion Valdivia Heat Illness and Fatality Prevention Act of 2019

• Asunción Valdivia came to America in July of 2004 to join his son.

• 5 days later, after a 10-hour workday picking grapes in the 105 degree sun, he collapsed in a field from heatstroke. The crew’s boss told Luis to drive his father home. In the car, Mr. Valdivia began foaming at the mouth and then went limp.

• Luis immediately headed to the closest hospital but by the time they reached their destination his father had died.
Federal Legislation- H.R. 3668

- Sponsors: Reps. Judy Chu (CA), Raul Grijalva (AZ)

- “To direct the Occupational Safety and Health Administration to issue an occupational safety and health standard to protect workers from heat-related injuries and illnesses.”
Rep. Judy Chu introduced the Asuncion Valdivia Heat Illness and Fatality Prevention Act of 2019 (H.R. 3668), which would help workers adapt to current climate change impacts, like heat stress, by requiring employers to provide water, shade, and rest.
Federal Legislation- H.R. 3668

Federal Heat Stress Coalition:

- Center for Progressive Reform
- Change to Win
- Communication Workers of America
- Natural Resources Defense Council
- Public Citizen
- United Automobile Workers
- United Farm Workers
- Union of Concerned Scientists
- Virginia Clinicians for Climate Action
Common Standards/Requirements

• Impacted Industries
  • Agriculture
  • Construction
  • Landscaping
  • Oil and gas extraction
  • Transportation
Common Standards/Requirements

• Provision of Water
• Access to Shade
• High Heat Procedures
• Emergency Response Procedures
• Acclimatization
• Training
• Heat Illness Prevention Plan
Provision of Water

Shall be located as close as practicable to the areas where employees are working.

Be fresh, pure, suitably cool, and provided to employees free of charge.

Provide one quart per employee per hour for drinking for the entire shift (VA-one cup per 15-20 minutes with electrolytes prn sweating).

The frequent drinking of water shall be encouraged.
Access to Shade

- Shade shall be present when the temperature exceeds 80 degrees Fahrenheit
- Either open to the air or provided with ventilation or cooling
- Shall be located as close as practicable to the areas where employees are working
- Shall be at least enough to accommodate the number of employees on recovery or rest periods so that they can sit in a normal posture fully in the shade without having to be in physical contact with each other
High Heat Procedures

- When temperature > 95°F (VA-90°F)
  - **Ensuring that effective communication is maintained** so that employees at the work site can contact a supervisor when necessary
  
  - **Observing employees for alertness and signs or symptoms of heat illness** via supervisor or buddy system
  
  - **Designating one or more employees** on each worksite as authorized to call for emergency medical services
  
  - **Reminding employees** throughout the work shift to drink plenty of water
  
  - For employees employed in agriculture, **when temperatures reach 95 degrees or above** ensure that the employee takes a minimum ten minute net preventative cool-down rest period every two hours
    
    (VA-Rest periods away from the hot environment that should range in duration from 15 to 45 minutes depending on the workplace temperature and worker activity level)
Emergency Response Procedures

- **Ensuring that effective communication** by voice, observation, or electronic means is maintained

- **Responding to signs and symptoms** of possible heat illness, including but not limited to first aid measures and how emergency medical services will be provided

- If a supervisor observes, or any employee reports, any signs or symptoms of heat illness in any employee, *the supervisor shall take immediate action* commensurate with the severity of the illness

- If the signs or symptoms are indicators of severe heat illness the employer *must implement emergency response procedures*

- **Contacting emergency medical services** and, if necessary, transporting employees to a place where they can be reached by an emergency medical provider
Common Standards/Requirements

• **Acclimatization**
  CA-An employee who has been newly assigned to a high heat area shall be closely observed by a supervisor or designee for the first 14 days of the employee's employment.
  VA/NIOSH—...be gradually acclimatized to the work over a period of between seven and 14 days.

• **Heat Illness Prevention Plan**
  ▪ Shall be in writing in both English and the language understood by the majority of the employees and shall be made available at the worksite
  ▪ Procedures for the provision of water and access to shade
  ▪ The high heat procedures referred to in subsection (e)
  ▪ Emergency Response Procedures in accordance with subsection (f)
  ▪ Acclimatization methods and procedures in accordance with subsection
Training

• Training for each supervisor and employee
  ▪ Environmental and personal risk factors for heat illness
  ▪ Employer's procedures for complying with the requirements of this standard
  ▪ Importance of frequent consumption of small quantities of water
  ▪ **The common signs and symptoms of heat illness, and appropriate first aid and/or emergency responses**
  ▪ The importance to employees of immediately reporting to the employer
  ▪ The employer's procedures for responding to signs or symptoms of possible heat illness
  ▪ The employer's procedures for contacting emergency medical services

• Supervisor Training
  ▪ The procedures the supervisor is to follow to implement the applicable provisions in this section
  ▪ **The procedures the supervisor is to follow when an employee exhibits signs or reports symptoms consistent with possible heat illness, including emergency response procedures**
  ▪ How to monitor weather reports and how to respond to hot weather advisories
Virginia Worker Heat Protection
For the Commonwealth of Virginia the Bureau of Labor Statistics reported for the years 2011 through 2018 there were 620 nonfatal injuries and illnesses and 12 fatalities for workers caused by “environmental heat” exposure.

“These numbers are generally understood to be gross undercounts because many heat-related illnesses and deaths are blamed on natural causes” as well as the methods of data collection.

And it’s getting hotter...In the first three weeks of July 2019, over 1,000 Virginians were admitted to emergency departments or urgent-care clinics for heat illness, compared to 584 admissions in 2018 and 764 in 2017 during the same period.
Virginia Temperature Trend

Day count is based on rate of change since 1970.
Source: RCC-ACIS.org -- Applied Climate Information System
Virginia Temperature Trend

RICHMOND
FUTURE DAYS ABOVE 100°

- Current emission trends
- Moderate emission cuts

Projections based on an ensemble of CMIP5 climate models (20-yr average)
Current values are the 1957-2016 averages from Daymet (ORNL)
Virginia Cases

Incident Information

• Date: 08/11/2009
• Region: 3
• City/State: Nathalie, VA
• Industry: Tobacco Farming
• Inspection No.: 313479495
• Summary of Report: The employee was working in a tobacco field pruning tobacco leaves by hand. He collapsed, when he suddenly tried to seek shade. He died en route to the hospital. Possible heat stress fatality.

Incident Information

• Date: 06/28/2010
• Region: 3
• City/State: Ridgeway, VA
• Industry: Roofing, siding and sheet metal work
• Inspection No.: 314620881
• Summary of Report: The worker was working on a roof when he collapsed against a wall. An ambulance arrived at the scene and transported him to the hospital where he was pronounced dead. Possible heat stress fatality.

Incident Information

• Date: 7/6/2013
• Region: 3
• City/State: Norfolk, VA
• Industry: Ship Building and Repairing
• Inspection No.: 917201
• Summary of Report: A worker performing cleanup operations on a ship’s deck collapsed and later died. The heat index reported by NOAA reached a high of 97 degrees Fahrenheit.
Virginia Worker Heat Protection (indoor/outdoor)

• Title: Employment health and safety standards; heat illness prevention

• HB 805-Del. Jeion Ward (92nd-Hampton), SB 411-Sen. Ghazala Hashmi (10th-Powhaton/Chesterfield Co’s, Richmond)

• Virginia Heat Stress Coalition
  - Human Rights Watch/Women's Rights Division
  - Occupational Safety & Health for Laborers' Health & Safety Fund of North America
  - Public Citizen
  - United Farm Workers Foundation
  - Virginia Clinicians for Climate Action
  - Virginia Interfaith Center
  - Virginia Justice Project for Farm and Immigrant Workers
  - Virginia League of Conservation Voters
Virginia Current Status

• HB 805 and SB 411 voted in Labor and Commerce to be continued to 2021 if patrons so choose.
• Impact of COVID-19
• Relationship to NOIRA (Notice of Intended Regulatory Action) to Adopt a Regulation on Heat Illness Prevention- currently being addressed
• Regulatory vs statutory process
• Heat Stress Coalition next steps:
  ▪ “Keep it on the GA agenda, don’t let if fall off”
  ▪ Contact patrons regarding intentions for 2021
  ▪ Significant education needed
  ▪ Get district specific data
Worker Heat Protection

Thank You!!!

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