

Virginia Heat Stress Regulation

Group 1 Report

10/7/2021

Elements of Heat Stress Management

Identified elements from the current draft regulation and recommendations from other sources

We hoped to provide organization and context to the proposed elements regulation

We tried to stay at a high level of discussion rather than make detailed recommendations on specific details or language.

Discussed the elements and attempted consensus to

- Recommend inclusion in the regulation
- Recommend inclusion only in guidance material
- Not include

Heat Stress Plan

Written Heat Stress Plan

- Divided between Required in regulation or Guidance
- Employer Developed

Provision for a Waiver

- Divided between Required or Guidance
- Provide at least the same level of protection
- Follows a recognized source (e.g., NIOSH)

Trigger Point

The trigger point marks the conditions at which the regulation becomes enforceable.

Separate values for outdoor and indoor conditions

- Consensus Agreement for Required

Notes

- Recognition that the source of heat stress can be varied (e.g., protective clothing)
- Trigger guided by when acclimatization becomes important

High Heat Stress Level

Conditions above which specific actions are required

- tb: actions such as acclimatization and work/recovery

We placed this in the parking lot

tb note: If trigger is driven by need to acclimatize, the high heat stress level may be redundant.

Managing Personal Risk Factors

Recognition that there is wide variation in heat tolerance among individuals broadly associated with personal risk factors.

Acclimatization

Include general principles such as a phase in over 4 to 14 days; close supervision; importance of new worker perceptions/incentives

- Consensus Agreement

Specific Schedules

- Divided between Required or Guidance
- Employer Developed
- Importance of providing important features of acclimatization schedules (e.g., ramping up exposures) so that the employer has flexibility in designing the schedule

Hydration

General Principles of Hydration

- Consensus agreement on Required
- Include planning for 1 qt/person/hr (tb: this is not a requirement to drink this much)
- Importance of easy accessibility

Specific Recommendations

- General agreement on Guidance
- Acceptable drinks / Unacceptable drinks

Health Status (e.g., Chronic Disease)

General Principles

- General agreement on Required
- Advise employees to consult with personal healthcare provider
- Do this during training

Specific Recommendations for Chronic Disease

- General agreement not to include in Regulation or Guidance

Heat Stress Training

Training Program

General Guidance on Format and Delivery

- General agreement to Require
- Preplacement and Annual

Specific Training Requirements

- General agreement to Require
- Content described on following slides
- Note: Positive attributes are participatory, supporting material, demonstrate competency

Training Topics 1

Causes and Effects of Heat Stress

Heat Stress Hygiene Practices (Actions an employee can take to reduce their own risk of heat-related illness)

- Acclimatization
- Hydration
- Risks associated with alcohol, drugs (OTC, Rx, Recreation), lifestyle, diet and rest/sleep
- Effects of acute illness on heat tolerance
- Seek advice from provider supervising chronic conditions

Training Topics 2

Recognition, first aid and prevention of heat illness

- Employer Developed

Heat Illnesses

- Heat Stroke
- Heat Exhaustion
- Also
 - Heat Fatigue
 - Cramps
 - Fainting (syncope)

Other Heat Stress Management Topics

Emergency Response

Emergency Response and First Aid Plan

- General agreement to Require
- Employer Developed
- tb: Importance of early recognition and first aid – **this is the backstop**

Specific Provisions for Plan

- General agreement for Guidance

Buddy System

Plan for Working in Pairs or Groups

- General agreement in principle to Require
- Employer developed plan

Hierarchy of Controls

This was not discussed in any detail by Group 1

- There was agreement that there should be at least information in guidance

The following are tb thoughts

- General guidance should be provided for engineering controls, administrative controls and personal cooling
- There was some agreement on calling out recovery areas to facilitate cooling down
- Providing recommendations on work and recovery can be complicated.
- Differentiate between personal cooling that provides comfort versus personal cooling that reduces heat stress

Thanks to Group 1

Philip F. Abraham

Donald Aheron

MK Fletcher

Rob Harris

Chris Hughes

Bob Kitchen

Dirrick Simmons

Darius Sivin

Gavin West

