



GFVGA WEBINAR SERIES: Heat Stress for Ag Employees: What do Know and What to Do

Presented by the
Georgia Fruit & Veg Growers Assoc.
www.gfvga.org

AgWorks H2, a MasLabor Co.
www.maslabor.com/agworksh2

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HOUSEKEEPING ITEMS



- GFVGA Anti-Trust Rules are in effect for this webinar.
- This webinar is being recorded.
Available at the online GFVGA STORE, www.gfvga.org.
- Please self mute during the webinar.
- Submit written questions anytime in the Q&A box.



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GFVGA

- Non-profit, trade association
- Growers, packers, shippers
- United voice of southeast produce industry

- Heat Stress Toolkit

<https://www.gfvga.org/page/heatstress>

- Posters
- Sample Heat Stress Policy
- Training Materials



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PANELISTS

Heat Stress Preparedness for the Southeastern Produce Farmers and Employees



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Index

- Heat Plan Requirements
- Recommendations
- What to do if OSHA shows up
- Resources



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Why do you need a heat plan

- OSHA has found that:
 - Almost half of heat-related deaths occur on a worker's very first day on the job (Arbury 2014).
 - Over 70 percent of heat-related deaths occur during a worker's first week (Tustin 2018).
 - Since 2011, the Bureau of Labor Statistics reports 436 people have died due to workplace heat exposure, with an annual average of 38 deaths between 2011 to 2019.
- In October 2021, OSHA published an Advance Notice of Proposed Rulemaking for Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings in the Federal Register.
- April 8, 2022- effective date for OSHA National Emphasis Program
- This continues to be a high priority issue for OSHA and the Biden Administration.
- Last year was **HOT**.
 - Record heat in Georgia- January to August 2023 was the second-hottest start to a year since 1895, when recordkeeping began. (Atlanta Journal Constitution- 09/12/23)



Updates

- July 2023- President Biden asked DOL to issue the first ever Hazard Alert for Heat
 - DOL increased enforcement initiatives specifically to protect workers from heat
- Hazard Alert- https://www.osha.gov/sites/default/files/publications/OSHA_HA-4279.pdf
- Outline:
 - Employer Responsibility:
 - Provide adequate cool water, rest breaks, and shade or a cool rest area for employees.
 - Give new or returning employees the chance to gradually acclimatize (or become used to working in hot temperatures), train and plan for emergencies, and monitor for heat signs/symptoms.
 - Train employees on heat illness prevention, signs of heat illness, and how to act immediately if they or another employee appears to be suffering from a heat related illness.
 - Worker Rights:
 - Can file a confidential complaint with OSHA if they believe their working conditions are unsafe.
 - It is illegal to fire, or retaliate in any way, against a worker who complains to OSHA.
 - Federal Enforcement:
 - National Emphasis Program- geographic areas and industries at higher risk.
 - OSHA planned enhanced enforcement, focusing on these areas and industries.
 - More inspections, broader enforcement. Working on publishing a proposed standard on heat illness prevention.

OSHA national emphasis program

- Target Industries for the Heat NEP
- 1121 Cattle Ranching and Farming
- 1151 Support Activities for Crop Production
- 1112 Vegetable and Melon Farming
- 1113 Fruit and Tree Nut Farming

OSHA national emphasis program

- CSHOs (compliance safety and health officers) should inquire during inspections regarding the existence of any heat-related hazard prevention programs on heat priority days
 - A heat priority day occurs when the heat index for the day is expected to be 80°F or more
 - Area Office will assess the potential for heat-related serious illnesses and injuries where such hazards may exist in indoor or outdoor work areas on heat priority days and provide compliance assistance where needed.
 - programmed inspections shall occur on any day that the NWS has announced a heat warning or advisory for the local area.
 - Another source for heat inspections are referrals from the Wage and Hour Division (WHD) of the U.S. Department of Labor.
 - When the weather is hot or a heat alert is issued for an area where the WHD is investigating, WHD is encouraged to coordinate with OSHA by providing information on heat-related hazards by making timely referrals

Considerations for a heat plan

- Create a Heat Illness Prevention Plan
 - **Written plan**
 - Example from OSHA- <https://www.osha.gov/sites/default/files/2021-07/Model%20Heat%20Illness%20Prevention%20Plan.pdf>
 - Someone at the worksite should be responsible for monitoring conditions and implementing heat plan throughout the day
 - Consider- crew supervisor, farm/nursery manager, anyone else with proper training
 - Proper training means knowing how to: identify and control heat hazards; recognize early symptoms of heat stress; administer first aid for heat-related illness; and activate emergency medical services when needed.
 - Workers returning from extended leave (typically defined as more than two weeks) may also be at increased risk.
 - Plan ahead for first aid situations and think about medical assistance .
 - (who will you call, how long will it take?)

WBGT-Wet Bulb Globe Temperature

- WBGT-Indicator of heat related stress on the human body at work in direct sunlight.
 - Takes into account: Temperature, humidity, wind speed, sun angle and cloud cover.
- Different from heat index!
 - Heat index assumes you are in shade, WBGT measures in sun.
- OSHA WBGT Calculator- <https://www.osha.gov/heat-exposure/wbgt-calculator>
- OSHA-NIOSH Heat Safety App- <https://www.cdc.gov/niosh/topics/heatstress/heatapp.html>





Considerations-planning for the weather

- How to respond when the National Weather Service issues a heat advisory or heat warning?
- How will we determine if the total heat stress is hazardous?
- What training will be provided to workers and supervisors?
- Day-to-Day Supervision
- **BEST PRACTICE- create a heat plan before your workers arrive and have plans and procedures in place for training supervisors/crew leaders and workers on heat safety.**

¹Note: Adjust the temperature reading as follows before going to the temperature column in the table:

Full sun (no clouds): Add 13°

Partly cloudy/overcast: Add 7°

No shadows visible/work is in the shade or at night: no adjustment

Per relative humidity:

10%: Subtract 8°

20%: Subtract 4°

30%: No adjustment

40%: Add 3°

50%: Add 6°

60%: Add 9°

³High levels of heat stress; consider rescheduling activities.

Adjusted temperature (°F) [†]	Light work (minutes work/rest)	Moderate work (minutes work/rest)	Heavy work (minutes work/rest)
90	Normal	Normal	Normal
91	Normal	Normal	Normal
92	Normal	Normal	Normal
93	Normal	Normal	Normal
94	Normal	Normal	Normal
95	Normal	Normal	45/15
96	Normal	Normal	45/15
97	Normal	Normal	40/20
98	Normal	Normal	35/25
99	Normal	Normal	35/25
100	Normal	45/15	30/30
101	Normal	40/20	30/30
102	Normal	35/25	25/35

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Main Elements of Heat-Illness Prevention Plan

Control	Description
1. Train supervisors and workers	Train supervisors and workers on heat-illness prevention strategies, as well as to recognize and report the signs and symptoms of heat-related illnesses.
2. Monitor weather and workplace conditions	Monitor weather workplace conditions and take preventative measures to protect workers when the temperatures exceed 70 °F (21 °C).
3. Conduct a heat hazard assessment when temperatures exceed 70 °F	Determine an effective wet-bulb globe temperature (WBGT-Effective) and use established recommended alert limits (non-acclimatized workers) and exposure limits (acclimatized workers) to determine the level of risk to heat stress.
4. Implement heat-illness prevention strategies	Implement appropriate heat-illness prevention strategies based on established risk levels for heat stress.
5. Plan for heat-related medical emergencies	Ensure adequate supervision, first aid and medical services are readily available in the event a worker suffers from a heat illness.

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Training

- Employee Training and Responsibilities
 - Recommended: Heat Illness Prevention Training guide- 3 sessions
 - Health Effects of Heat; How to respond to Symptoms; Preventing Heat Exhaustion
 - [https://www.osha.gov/sites/default/files/oshaheattrainingguide 0411.pdf](https://www.osha.gov/sites/default/files/oshaheattrainingguide0411.pdf)
- Employer Responsibilities
 - On the job, it is the responsibility of the Safety Manager to implement this Heat-Illness Prevention Plan.
 - Continual observational safety checks of work operations and the enforcement of the safety policy and procedures shall be regularly enforced.
 - Responsible for correcting any unsafe practices or conditions immediately.
 - Recommended: Daily Checklist – next slide-
[https://www.osha.gov/sites/default/files/oshaheattrainingguide 0411.pdf](https://www.osha.gov/sites/default/files/oshaheattrainingguide0411.pdf)
- It is the responsibility of the employer to ensure that all employees understand and adhere to the policies and procedures of this plan.
 - It is also the responsibility of the employee to bring to management's attention any unsafe or hazardous conditions or practices that may cause injury to either themselves or any other employees.
 - The Safety Manager must approve any changes to the Heat-Illness Prevention Plan.



Recommended Training- Daily Checklist

Daily Checklist ☒

This is a helpful guide that you may choose to use before each workday.

Daily Checklist

Drink water often

Rest in the shade

Report heat symptoms early

Know what to do in an emergency

Checklist		
Water	Is there plenty of fresh, cool drinking water located as close as possible to the workers?	☒
	Are water coolers refilled throughout the day?	☐
Shade	Is there shade available for breaks and if workers need to recover?	☐
Training	Do workers know the:	☐
	Common signs and symptoms of heat illness?	☐
	Proper precautions to prevent heat illness?	☐
	Importance of acclimatization?	☐
	Importance of drinking water frequently (even when they are not thirsty)?	☐
Emergencies	Steps to take if someone is having symptoms?	☐
	Does everyone know who to notify if there is an emergency?	☐
	Can workers explain their location if they need to call an ambulance?	☐
Worker Reminders	Does everyone know who will provide first aid?	☐
	Drink water often	☐
	Rest in the shade	☐
	Report heat symptoms early	☐
	Know what to do in an emergency	☐



Recommended Training-

- Train Employees on YOUR Heat-Illness Prevention Plan
 1. Training-what yours is and when it will be done.
 2. Monitoring-how to monitor for heat illness.
 3. Hazard Assessment
 4. Heat-Illness Prevention Strategies
 5. Emergency Preparedness
- Risk Factors for Heat Stress
 - Environmental risk factors for heat stress
 - Work-related risk factors for heat stress
 - Personal risk factors for heat stress
- How the Body Handles Heat
 - Acclimatization
 - consuming water
 - Importance of rest breaks and shade
- Heat related illnesses
 - Including cause, preventative measures, signs and symptoms, first aid treatment and reporting requirements



Recommended Training

- **MONITORING WEATHER AND WORKPLACE CONDITIONS**
 - The Safety Manager and supervisors are responsible for monitoring the daily weather and workplace conditions to determine if workers will be exposed to temperatures greater than 70 °F (21 °C).
 - **Recommendation:** The National Weather Service (www.weather.gov) should be used to monitor weather conditions.
 - Use the closest weather station to the worksite location.
- If the temperatures will exceed 70 °F for more than an hour during the work shift, a heat hazard assessment needs to be performed.
- The following additional weather information is required for the heat hazard assessment.
 - Air temperature (°F)
 - Humidity (%)
 - Wind speed (mph)
 - Barometric pressure (inches)
 - Longitude and latitude
 - Cloud cover



Recommended Investigation of Incidents

- All incidents that result in a worker suffering from a heat-related illness, regardless of their nature, shall be investigated and reported to management.
 - DOCUMENT **as soon as possible** so that the cause and means of prevention can be identified to prevent a reoccurrence.
 - Have a "Worksite Incident Form" (See following slide for sample from OSHA.gov)
 - If an incident occurs, review you plan afterwards to determine if it is sufficient.
- Any changes to your plan should be reviewed by your safety manager or other qualified personnel



APPENDIX B: WORKSITE INCIDENT FORM

This Worksite Incident Form is to be completed and turned into the employer following any cases of heat-related illness. No matter how serious the illness (e.g., heat cramps or increased resting heart rate), it should be reported to facilitate an investigation and ensure a more serious incident does not occur later. The goal of the incident investigation is to take necessary corrective actions to prevent further occurrences.

Worker Name: _____ Date: _____

Worker Job Title: _____ Time: _____

Job Location: _____

Location of incident: _____

WBGT-Effective _____ °F and (circle one) REL / RAL _____ °F

HQ _____ and Risk Level _____

Were you able to interview the worker? _____ Yes _____ No

How many witnesses did you interview? _____

Names and titles of all witnesses interviewed: _____

Provide a detailed description of the incident. Include relevant events leading up to, during and after the incident.



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Identify and describe any of the below factors that contributed to the incident:

1. Failure to follow safety procedures
2. Faulty equipment, machinery or tools
3. An unidentified heat stress hazard(s)
4. The work environment and conditions
5. Environmental conditions (e.g., weather)
6. Improper work procedures
7. Lack of proper training

Recommend corrective actions that should be initiated to prevent future incidents

Preparer Name: _____

Preparer signature: _____ Date: _____

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Training Example

- Heat Index training example- following slide-
- https://www.osha.gov/sites/default/files/2023BeatTheHeatWinners/Contest_Message_JEDUNNConstruction_TrainingExample_508c.pdf

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Heat Illnesses- Train Employees

Heat Stroke	Heat Exhaustion	Heat Cramps	Fainting (heat syncope)	Heat Rash
Confusion, slurred speech, unconsciousness, seizures, heavy sweating, high body temperature, rapid heart rate	Fatigue, irritability, thirst, nausea/vomiting, dizziness, heavy sweating, elevated body temperature, fast heart rate	Muscle spasm or pain- usually in arms, legs, or trunk	Fainting/dizziness	Clusters of red bumps on skin- typically on neck, chest

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Posters

- Heat training examples- following slides- Make sure you have your posters up and in a visible location
- Make sure to find and use the OSHA resources in Spanish

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Heat illness can be prevented!

✓ Water

✓ Shade and Rest

✓ Training

✓ Emergency Plan

OSHA 3422-10R-2011

WATER.
REST.
SHADE.

The work can't get done without them.

A HEAT SAFETY FACT SHEET

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Two types of heat illness:

Heat Exhaustion



Heat Stroke



Stay safe and healthy!

Drink water even if you aren't thirsty – every 15 minutes



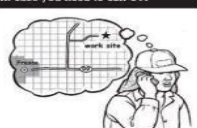
Watch out for each other



Wear a hat and light-colored clothing



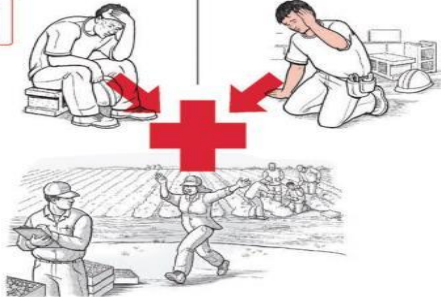
Know where you are working in case you need to call 911



Rest in the shade

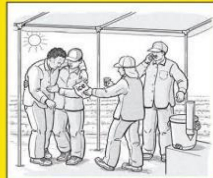


Heat kills – get help right away!



Be prepared for an emergency

Heat kills – get help right away!



If someone in your crew has symptoms:

- 1) Tell the person who has a radio/phone and can call the supervisor – you need medical help.
- 2) Start providing first aid while you wait for the ambulance to arrive.
- 3) Move the person to cool off in the shade.
- 4) Little by little, give him water (as long as he is not vomiting).
- 5) Loosen his clothing.
- 6) Help cool him: fan him, put ice packs in groin and underarms, or soak his clothing with cool water.

When you call for help, you need to:

- Be prepared to describe the symptoms.
- Give specific and clear directions to your work site.



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Heat illness can be prevented!

At our work site, we have:



Water

We are extra careful when there is a heat wave or temperature goes up. Then we may change our work hours, and we all need more water and rest.



Shade to rest and cool down



Training and emergency plan

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Heat exposure can be dangerous



Signs of a medical emergency!

- Abnormal thinking or behavior
- Slurred speech
- Seizures
- Loss of consciousness

Take these actions

- 1** >> CALL 911 IMMEDIATELY
- 2** >> COOL THE WORKER RIGHT AWAY WITH WATER OR ICE
- 3** >> STAY WITH THE WORKER UNTIL HELP ARRIVES



Drinking enough fluids is one of the most important things you can do to prevent heat illness.

- ☑ Hydrate before, during, and after work.
- ☑ Drink 1 cup of cool water every 20 minutes – even if you aren't thirsty! Water is generally sufficient for short jobs. For longer jobs, drink an electrolyte-containing beverage.
- ☑ Avoid energy drinks and alcohol.
- ☑ Your work performance may suffer when you are dehydrated, even if you don't notice.

osha.gov/heat



WHAT MIGHT OSHA BE LOOKING FOR DURING AN INVESTIGATION?

- Determine if the employer has a heat illness and injury program addressing heat exposure, and consider the following:
 - Is there a **WRITTEN** program?
 - How did the employer monitor temperature(s) and levels of work exertion at the worksite?
 - Was there unlimited **cool** water that was easily accessible to the employees?
 - Did the employer require additional breaks for hydration?
 - Were there scheduled rest breaks?
 - Was there access to a shaded area?
 - Did the employer provide time for acclimatization of new and returning workers?
 - Was a “buddy” system in place on hot days?
 - Were administrative controls used (earlier start times, and employee/job rotation) to limit heat exposures?
 - Did the employer provide training on heat illness signs, how to report signs and symptoms, first aid, how to contact emergency personnel, prevention, and the importance of hydration?

RESOURCES

- <https://www.osha.gov/sites/default/files/2021-07/Model%20Heat%20Illness%20Prevention%20Plan.pdf>
- <https://www.osha.gov/heat-exposure>
- <https://www.osha.gov/laws-regs/federalregister/2021-10-27>
- <https://www.osha.gov/heat>
- https://www.osha.gov/sites/default/files/enforcement/directives/CPL_03-00-024.pdf



Questions?

Contact us at ...

info@agworksh2.com

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UPCOMING EVENTS

GFVGA Webinar Series

April 9: State Legislative Recap

May 7: Food Safety

August 13: Ag Labor

October 8: The Import Issue

More details and registration
available at www.gfvga.org >
[Events and Communications](#) tab

Save the Date:

**Georgia Agricultural Labor
Relations Forum**

August 2024

**Southeast Regional Fruit and
Vegetable Conference**

January 9-12, 2025

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