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SOLUTIONS FOR SPECIALTIES

Summer of Safety

Heat Illness Prevention: Protecting Workers from Heat Stress

Wednesday, July 10 | 11:00am ET

Speakers

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CJB Industries, Inc.

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Heat stress

Facts about heat

Heat leaves your body in several ways:

- Evaporation by perspiration
- Exhaling hot air
- Transfer from skin to air
- Touching a cool object

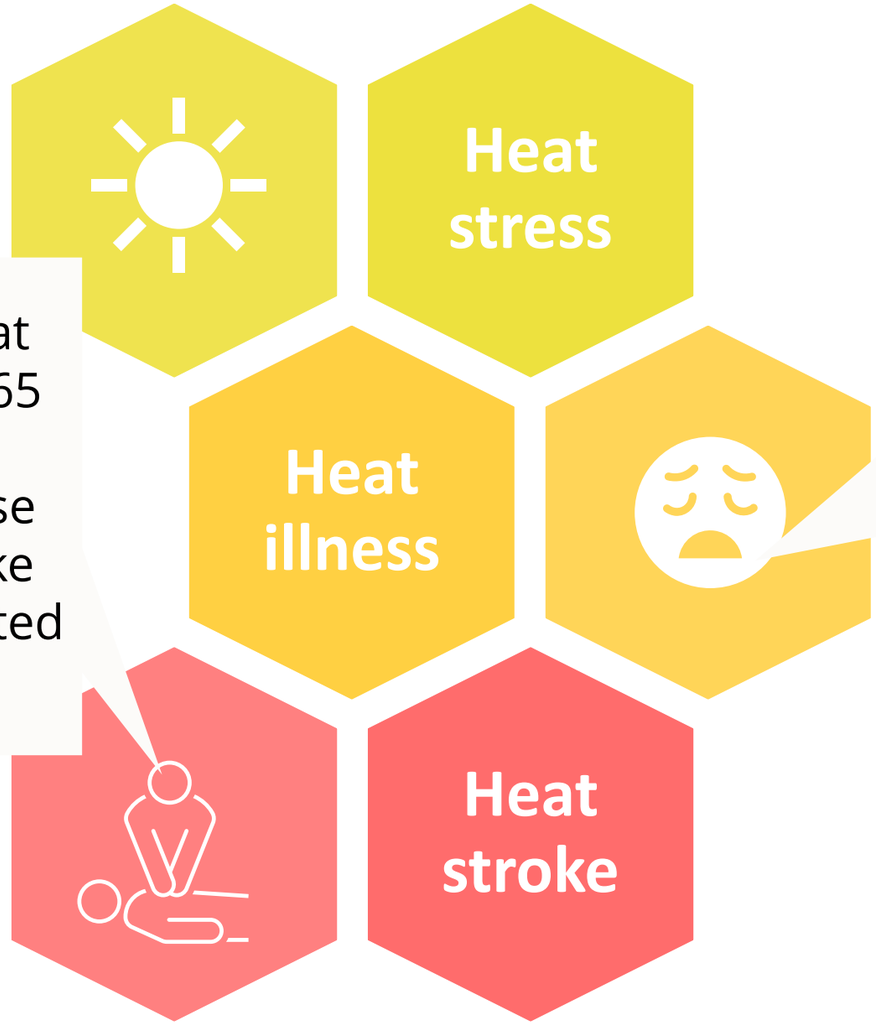
Your body must work even harder to get rid of excess heat when conditions are both hot and humid

Water is crucial to helping the body adjust to high temperatures

Temperatures as low as 80°F can be hazardous

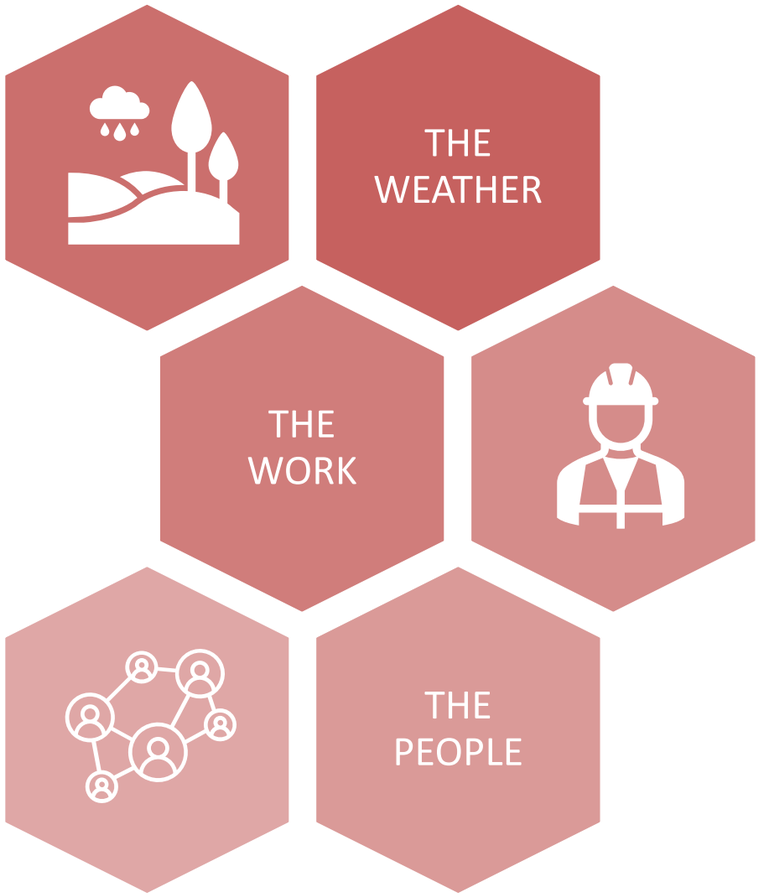
Why do I need to consider temperature?

Workers at greater risk of heat stress include those who are 65 years of age or older, are overweight, have heart disease or high blood pressure, or take medications that may be affected by extreme heat



During 2004–2018, an average of **702 heat-related deaths** occurred in the United States **annually**

What do I need to consider when it’s hot?



Heat stroke

Heat stroke can kill a person quickly!

Once the body uses up all its water and salt, sweating ceases.

Temperature can rise quickly. You can assume a person is suffering from heat stroke if their body temperature is over 105°F and any of the following symptoms are present:

- Weakness, confusion, distress, strange behavior
- Hot, dry, red skin
- Rapid pulse
- Headache or dizziness

In later stages of heat stroke, a victim may pass out and have convulsions.

Get medical help immediately!

Heat stress hazards

When the body overheats:

- Heat cramps
- Heat rashes
- Heat exhaustion
- Heat stroke

Call an ambulance immediately if the victim is experiencing warning signs of a medical emergency

- Heat stroke may mean that the victim's life is on the line!
- Until help arrives, move the victim to a cool area and remove their excess clothing. Fan them and spray them with cool water. Offer sips of water if the victim is conscious.

Heat exhaustion

Inadequate water and salt intake causes the body's cooling system to break down.

Symptoms include:

- Heavy sweating
- Cool, moist skin
- Body temperature over 100.4°F
- Weak pulse
- Normal or low blood pressure

The victim is likely to be tired, weak, clumsy, upset, or confused. They will be very thirsty and will pant or breathe rapidly. Their vision may be blurred.

Heat exhaustion can lead to heat stroke, which can kill. Move the person to a cool, shaded area. Loosen or remove their excess clothing. Provide cool, lightly salted water. Fan the victim and spray them with cool water.

Get medical help immediately!

Heat cramps

Heavy sweating drains the body of salt, which cannot be replaced by simply drinking water.

Painful cramps occur in the arms, legs, or stomach while on the job, or later at home.

Move to a cool area at once if cramping is experienced. Loosen clothing and drink cool, lightly salted water or a commercial fluid replacement beverage. Seek medical aid if the cramps are severe or don’t go away.

Heat rashes

Heat rashes are the most common problem in hot work environments

Prickly heat is manifested as red papules and usually appears in areas where the clothing is restrictive

In most cases, heat rashes will disappear when the affected individual returns to a cool environment

The weather

Heat index

- Influenced by both humidity and temperature
- Perspiration can’t evaporate as readily under muggy conditions

Air movement

- Evaporation takes place more quickly if the air is moving

Direct sunlight

- How sunny or cloudy will it be?

Environment

- High temperatures, especially with high humidity, which makes sweating less effective
- Direct sun exposure
- Lack of wind or breeze to cool the body; however, when ambient conditions are higher than body temperature, warm airflow can actually *increase* heat gain
- Proximity to engines or other hot equipment

What is a heat index?

John has staff members working on a project site. The expected temperature is to be as high as 90°F. The weather app states the relative humidity will be 75% when staff are on-site.

What is the expected heat index?

- 109°F

- What is our level of risk?
  - Danger (heat stroke possible and heat exhaustion likely)

- What mitigation and controls can John use and plan on having at the project site?

The National Weather Service Heat Index Chart

Relative Humidity (%) \ Temperature (˚F)*	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
55	81	84	86	89	93	97	101	106	112	117	124	130	137			
60	82	84	88	91	95	100	105	110	116	123	129	137				
65	82	85	89	93	98	103	108	114	121	128	136					
70	83	86	90	95	100	105	112	119	126	134						
75	84	88	92	97	103	109	116	124	132							
80	84	89	94	100	106	113	121	129								
85	85	90	96	102	110	117	126	135								
90	86	91	98	105	113	122	131									
95	86	93	100	108	117	127										
100	87	95	103	112	121	132										

Heat Index	Category	Hazard of Heat Disorder
~80 - 89˚F	Caution	Possible fatigue with prolonged exposure
~90 - 104˚F	Extreme Caution	Heat exhaustion possible with long exposure
~105 - 125˚F	Danger	Heat stroke possible and heat exhaustion likely
~≥126˚F	Extreme Danger	High risk of heat stroke

* Formula to convert Fahrenheit to Celsius: (°F - 32) x 5/9 = °C

Our work

Where are we working?

- Air movement
- Direct sun
- Other heat sources – pavement vs. ground

The Wet Bulb Globe Temperature (WBGT) is a measure of the heat stress in direct sunlight that takes into account **temperature, humidity, wind speed, sun angle** and **cloud cover** (solar radiation)

Our work

- What PPE do we require?
  - How does this impact heat stress?
- How hard are we working?

Clothing type	WBGT correction (in °F (°C))
Work clothes (long-sleeved shirts and pants)	0 (0)
Cloth coveralls (woven material)	3 (0)
SMS polypropylene coveralls	6 (0.5)
Polyolefin coveralls	8 (1)
Double-layer woven clothing	9 (3)
Limited-use-vapor-barrier coveralls	18 (11)

Light: performing light hand or arm work, occasional walking

Moderate: moderate lifting and pushing or pulling, walking at a moderate pace

Hard: digging, carrying, pushing/pulling heavy loads, walking at a fast pace

Very hard: very intense activity at fast to maximum pace

Allocation of Work in a Work/Rest Cycle (WBGT Values in °F (°C))								
Workload	**Acclimated (Action Limit)**				**Not Acclimated (Action Limit)**			
	Light	**Moderate**	**Heavy**	**Very Heavy**	**Light**	**Moderate**	**Heavy**	**Very Heavy**
Continuous Work	87.8°F (31°C)	82.4°F (28°C)	-	-	82.4°F (28°C)	77°F (25°C)	-	-
75% Work / 25% Rest	87.7°F (31°C)	84.2°F (29°C)	81.5°F (27.5°C)	-	83.3°F (28.5°C)	78.8°F (26°C)	75.2°F (24°C)	-
50% Work / 50% Rest	89.6°F (32°C)	86°F (30°C)	84.2°F (29°C)	82.4°F (28°C)	85.1°F (29.5°C)	80.6°F (27°C)	77.9°F (25.5°C)	82.4°F (29°C)
25% Work / 75% Rest	90.5°F (32.5°C)	88.7°F (31.5°C)	86.9°F (30.5°C)	86°F (30°C)	86°F (30°C)	84.2°F (29°C)	82.4°F (29°C)	81.5°F (27.5°C)

Are there other tools that can help?

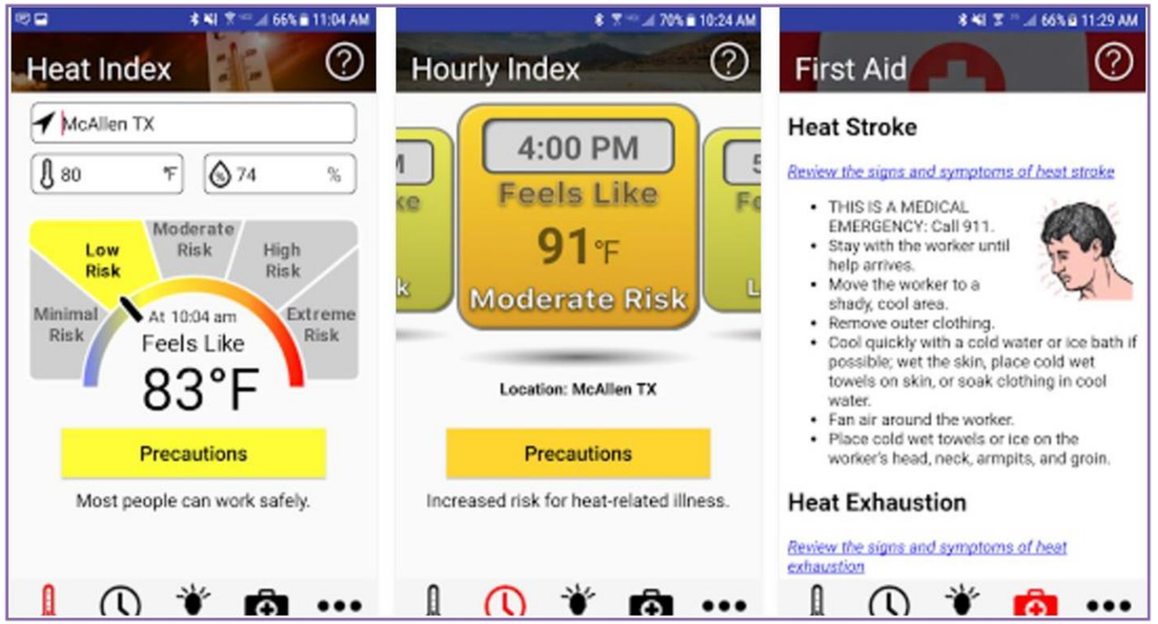
OSHA-NIOSH Heat Safety Tool app:

- App available for Android and iPhone
- Useful resource for planning outdoor work activities throughout the day

Some key features:

- Visual indicator of heat index and risk level associated with your location
- Interactive
- Hourly forecast of heat index values
- Risk level and recommendations for planning outdoor activities in advance
- Signs and symptoms of heat-related illnesses and first aid information

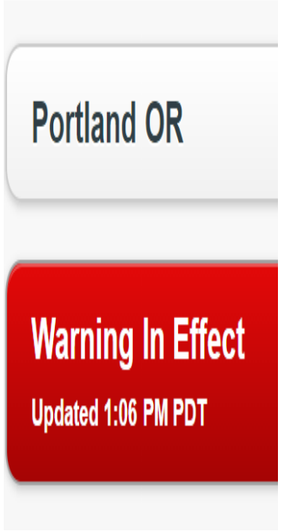
OSHA-NIOSH Heat Safety Tool
Centers For Disease Control and Prevention



Are there other tools that can help?

Do you want NWS "App" functionality on your cellular device? Simple!

Visit mobile.weather.gov on your Smart Phone or web-enabled device and add us to your home screen (or bookmark your cell phone's browser) to access ALL of your weather needs on the go!



Excessive Heat Warning

247 AM PDT Thu Jun 24 2021

...EXCESSIVE HEAT WARNING REMAINS IN EFFECT FROM 10 AM S
TO 11 PM PDT MONDAY...

* WHAT, Dangerously hot temperatures of 98 to 103 likely, with temperatures locally 103 to 108 are possible. Overnight low temperatures mostly 65 to 70 degrees, but few spots such as the Columbia River Gorge and the Portland - Vancouver metro area may only cool down to the middle 70s Saturday and Sunday nights.

* WHERE, All of the lower elevations of southwest Washington and northwest Oregon, except for those along the coast.

* WHEN, Saturday through Monday evening.

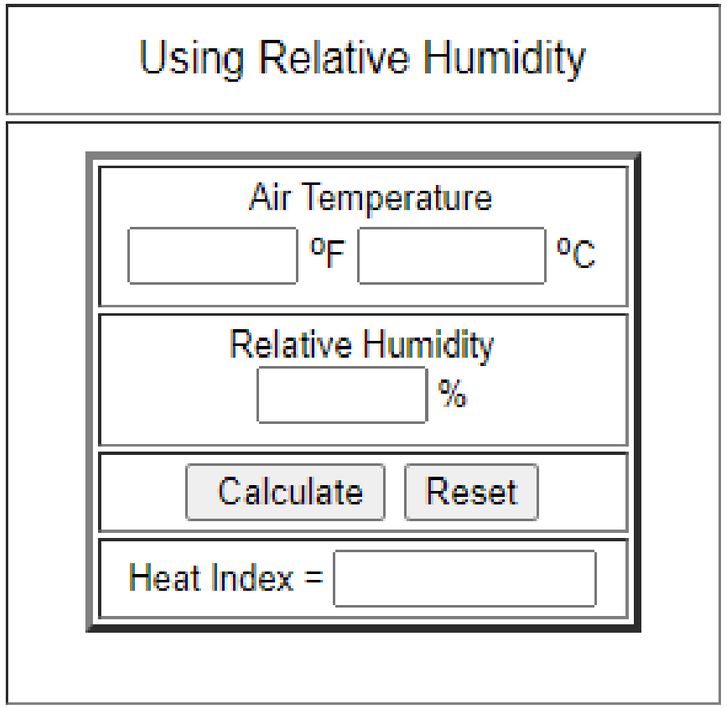
* IMPACTS, Extreme heat will significantly increase the potential for heat related illnesses, particularly for those working or participating in outdoor activities.

* ADDITIONAL DETAILS, The hot daytime temperatures, combined with warm overnight lows, will result in high heat risk and heat related stress.

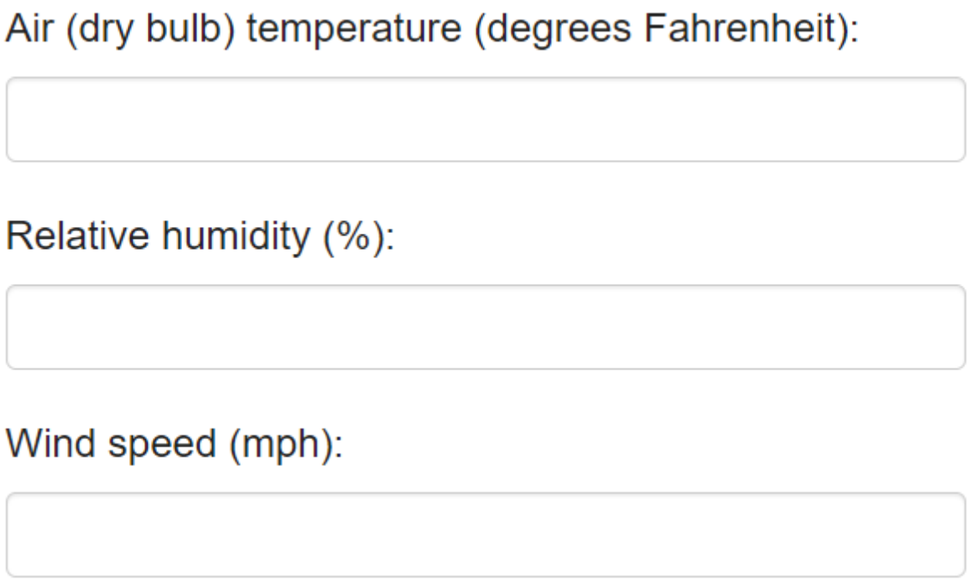
PRECAUTIONARY/PREPAREDNESS ACTIONS...

Are there other tools that can help?

The National Weather Service provides an online heat index calculator



OSHA has an online WBGT calculator that allows for customizations based on location



Our people

Are they acclimated?

- Maine vs. Arizona in August
- Full-time field staff vs. mostly office-based staff

Are they an “at-risk” employee?

- Age and weight
- Alcohol or drug use, including medications
- Individual sensitivity to heat, including preexisting medical conditions
- Level of physical fitness

Are they used to the type of work they are doing?

Are they fit for duty when they arrive to work?

What can we do?

Engineering controls

- Shade
- Ventilation/air movement
- Fans
- Air conditioning

Administrative controls

- Work/rest cycles or pace of work
- Requirements to drink water
- Plan day to do stressful work in the cooler hours
- Worker monitoring
- Heat Illness Prevention Plan

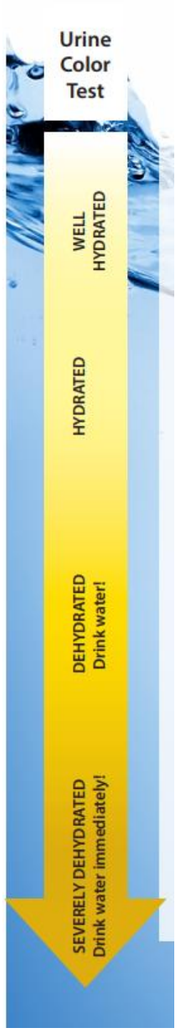
PPE

- Cooling vests and clothing
- Wicking clothing
- Cool gear
- Cooling towels
- Sunscreen

Water and nutrient replacement

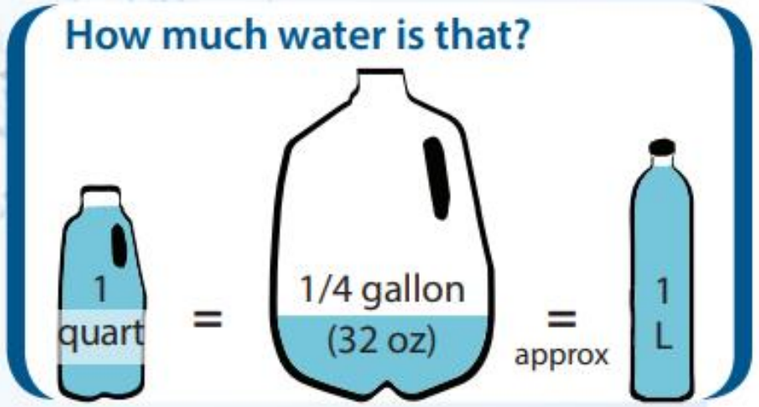
- Cool (50°-60°F [10°-15°C]) water or other cool liquids, except alcoholic beverages, should be made available to workers
- Workers should drink small amounts frequently (e.g., 1 cup [237ml] every 20 minutes)
- Ample supplies of liquids should be placed close to the work area
- Although some commercial replacement drinks contain salt, this is not necessary for acclimated people, because most people have enough salt in their normal diets
- Commercial replacement drinks contain high amounts of sugar and may contribute to an individual’s inability to cope with the warm environment

Water and nutrient replacement



Hydrate *During* Work

- Drink before feeling thirsty. **By the time you feel thirsty, you are already behind in fluid replacement.** Dehydration is a primary contributor to heat exhaustion.
- Your work performance may suffer when you are dehydrated, even if you don't notice.
- When working in the heat, drink 1 cup (8 ounces) of water every 15–20 minutes.
  - This translates to ¾–1 quart (24–32 ounces) per hour.
  - Drinking at shorter intervals is more effective than drinking large amounts infrequently.
- Do not drink more than 48 oz (1½ quarts) per hour! Drinking too much water or other fluids (sports drinks, energy drinks, etc.) can cause a medical emergency because the concentration of salt in the blood becomes too low.



Training

Supervisors shall be trained on additional procedures and emergency response requirements

All workers shall receive proper training before beginning work in the heat

- Personal and environmental risk factors
- Increased severity of working in the heat
- Importance of hydration, work/rest cycles, and acclimatizing
- Signs and symptoms of heat stress
- Emergency response

Preventing heat stress at home

Risky activities include:

Yard work (gardening, mowing, shoveling, etc.)

Jogging or exercising outdoors

Hiking

Participation in sports

Leaving children or pets unattended in hot vehicles

Homes with little to no AC or ventilation

Questions?

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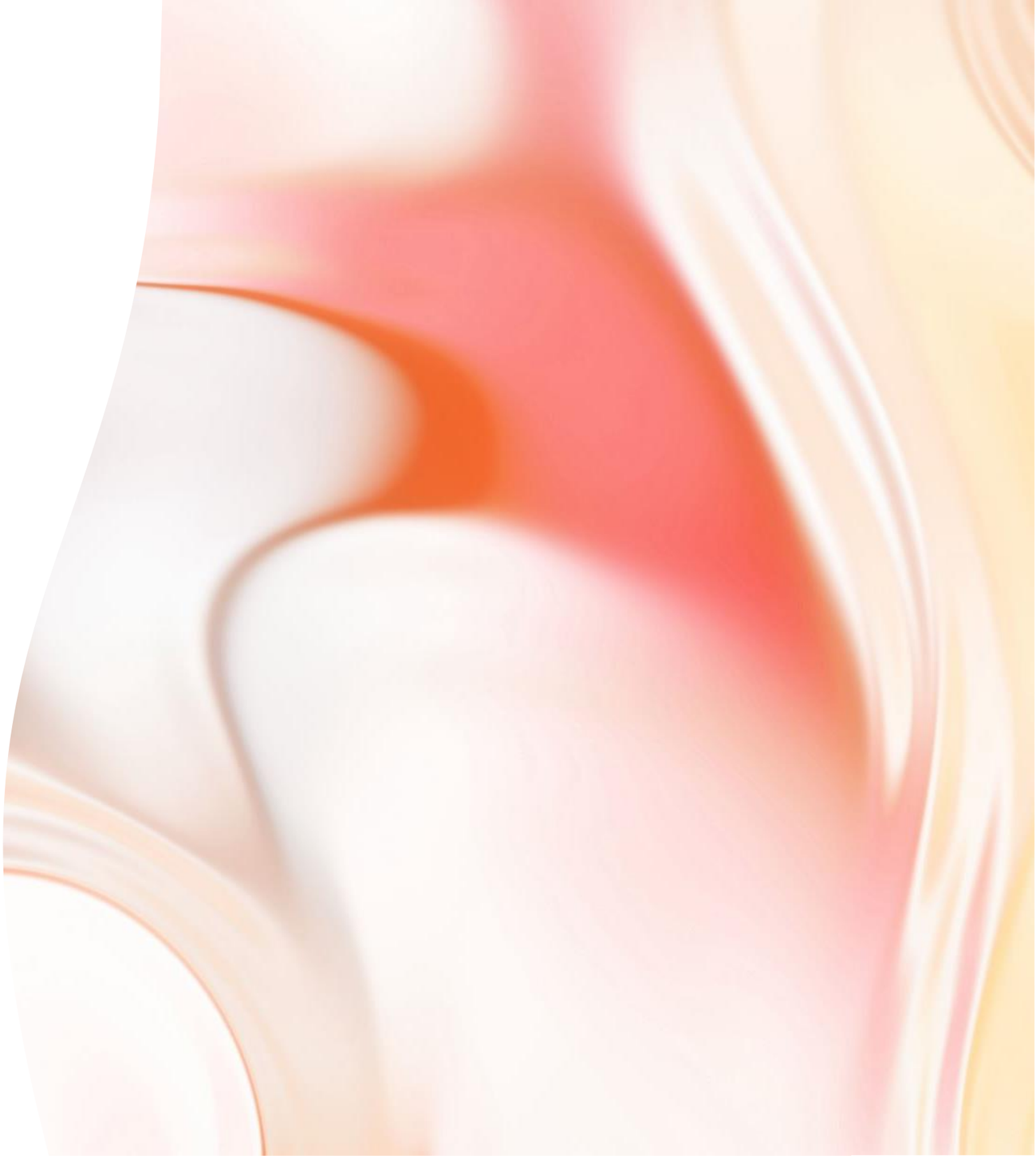
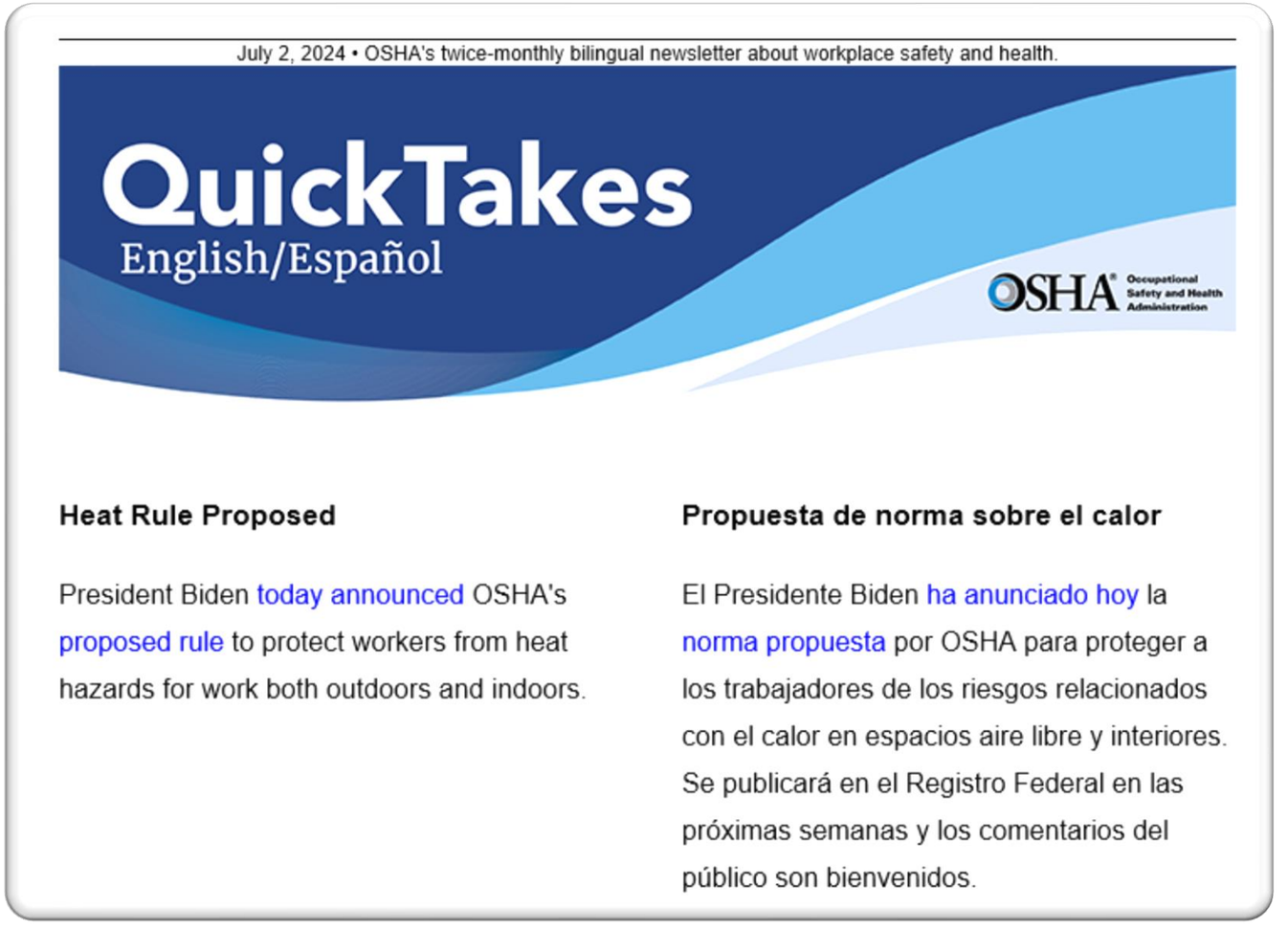
Haley & Aldrich

Heat-related Injury & illness prevention



The agency continues to conduct heat-related inspections under its National Emphasis Program – Outdoor and Indoor Heat-Related Hazards, launched in 2022.

Since the launch, OSHA has conducted more than 5,000 federal heat-related inspections.



July 2, 2024 • OSHA's twice-monthly bilingual newsletter about workplace safety and health.

QuickTakes
English/Español

OSHA Occupational Safety and Health Administration

Heat Rule Proposed

President Biden today announced OSHA's proposed rule to protect workers from heat hazards for work both outdoors and indoors.

Propuesta de norma sobre el calor

El Presidente Biden ha anunciado hoy la norma propuesta por OSHA para proteger a los trabajadores de los riesgos relacionados con el calor en espacios aire libre y interiores. Se publicará en el Registro Federal en las próximas semanas y los comentarios del público son bienvenidos.

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SOCMA Member Alert

OSHA Proposes Updates to Standard on Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings

OVERVIEW

OSHA's proposed Heat Injury and Illness Prevention standard requires employers to implement various measures to protect workers from heat-related hazards. Some key requirements include:

- **Heat Illness Prevention Plan:** Employers must develop and implement a heat illness prevention plan specific to their workplace, outlining procedures to prevent heat-related illnesses.
- **Monitoring and Training:** Employers are required to monitor weather conditions and implement a system to monitor workers for signs of heat-related illness. Training must be provided to workers and supervisors on how to recognize symptoms of heat illness and appropriate responses.
- **Water, Rest, and Shade:** Employers must provide access to drinking water that is fresh, cool, and located close to the work area. Rest breaks in shaded or cool areas must be scheduled and encouraged to prevent heat stress.
- **Acclimatization:** Employers should establish and maintain an acclimatization program for new employees and those returning from extended absences to gradually build tolerance to working in hot conditions.
- **Emergency Response:** Procedures must be in place for responding to and treating workers experiencing heat-related illness, including emergency medical services if necessary.
- **Recordkeeping:** Employers are required to maintain records of heat stress monitoring, training, and any incidents of heat-related illness.

Statistics

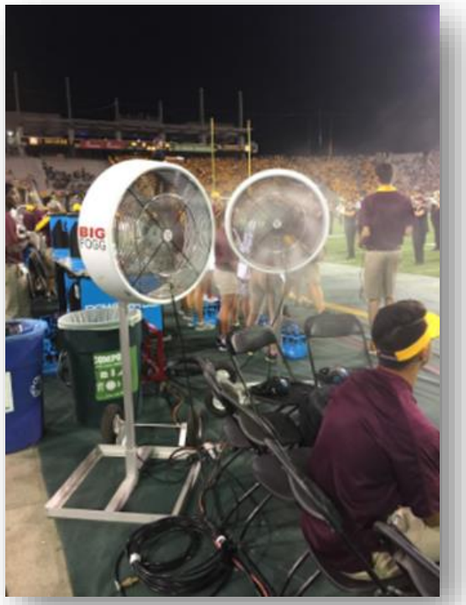
- At heat stroke core temp. >103F, critical window 30 minutes – actions not taken to lower body temperature 80% victims will die or suffer permanent disability
- 50% of fatalities from heat related illness are on the 1st day on the job
- 75% of fatalities happen in the first week on the job
- Between 2017 – 2023 there were 128 (known) heat-related illness fatalities reported
- KNOWN – heat-related illness deaths are often mis-diagnosed as heart attack
- When heat stroke occurs body temp can rise to 106F + within 10-15 minutes
- Heat stroke is when the body's cooling mechanisms have failed

Heat Stroke Treatment

- Assign someone to call 911
- Immersion in cold water (bath of cold or ice water)
- Evaporation cooling (if bath is not feasible) – cool water misted over the body while warm air is fanned over them (mimics sweating)
- Ice packs to the neck, back, groin and armpits
- TACO method – tarp-assisted cooling with oscillation

Prevention – Engineering Controls

- A/C
- LEV
- Cooling fans
- General ventilation
- Reflective or heat absorbing shield/barriers high heat sources
- Insulation
- Misting fans
- Use of mechanical equipment to lower workload
- Humidity reduction



Prevention – Engineering Controls

- Reflective or heat absorbing shield/barriers high heat sources
- Insulation
- Misting fans
- Use of mechanical equipment to lower workload
- Humidity reduction

Prevention Administrative Controls

Administrative:

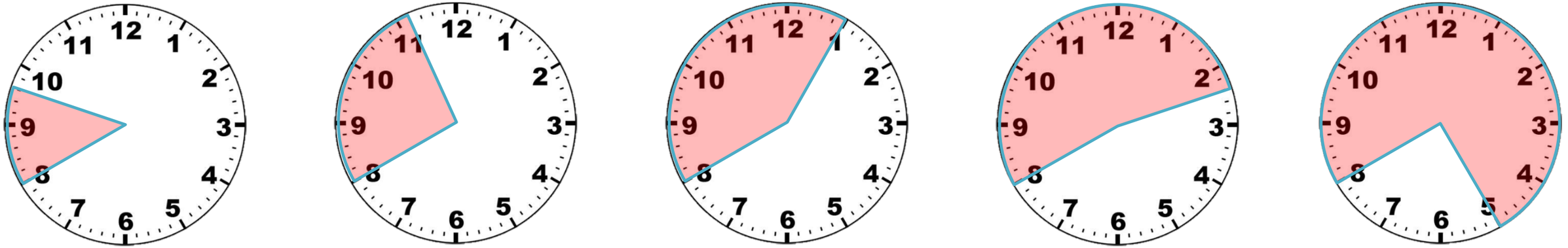
- Acclimatization
- Mandatory rest breaks
- Schedule shifts
- Pre-planning
- Job rotation
- Proper hydration
- Physiological and hydration monitoring
- Buddy system
- Heat alerts
- HIIP program
- Training

Prevention Administrative Controls

Acclimatization

- Gradually increasing the intensity and or duration of work
- Ideal 1-to-2-week period to acclimatize
- (proposed standard) prescribes 20% rule for new employees
- New employees closely supervised 14 day or until full acclimatized
- (proposed standard) prescribes returning (14 days away) start day 1 at 50%, 2 at 60%, 3 at 80% and day 4 back to 100%

20% Rule applied to 8-hour workday (starting at 8:00 AM with two 30 min. breaks)



Prevention Administrative Controls

Mandatory rest breaks (work-rest cycle)

Work Rest Cycle Guide

Temperature is based on wet bulb globe temperature (WBGT) not ambient temperature. (WBGT includes relative humidity, ambient temperature and air movement)

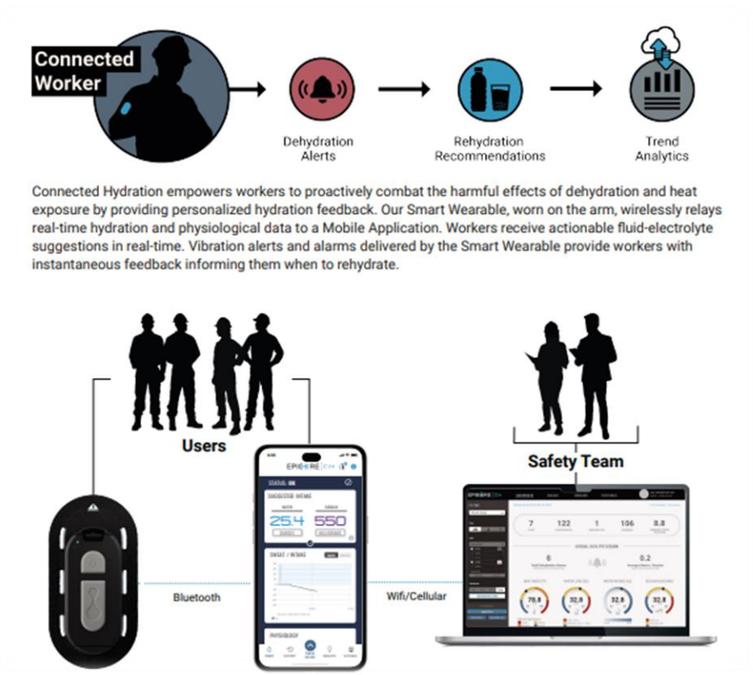
WBGT (°F)	Light Work		Moderate Work		Heavy Work	
	Work/ Rest Cycle	Water Intake Qt/hr.	Work/ Rest Cycle	Water Intake Qt/hr.	Work/ Rest Cycle	Water Intake Qt/hr.
Less than 80	No Limit	0.5	No Limit	0.75	No Limit	0.75
80 - 85	No Limit	0.5	No Limit	0.75	No Limit	1
85 - 90	No Limit	0.75	55/05 min	1	50/10 min	1.25
Greater than 90	55/05 min	1	50/10 min	1.25	45/15 min	1.5

Workload Determination Guide

Light Work	Moderate Work	Heavy Work
▪Carrying a load of less than 30 lbs. ▪Wearing gloves, safety glasses, and dust mask. ▪Driving a forklift. ▪Capping, torqueing, QA checks, loading jugs on conveyors.	▪Carrying a load between 30 to 50 lbs. ▪Wearing gloves, safety glasses, dust mask, apron and face shield or full-face respirator. ▪Filling operations ▪Maintenance tasks (not involving hot work). ▪Moving hoses or lines. ▪Operating palletizer.	▪Carrying a load over 50 lbs. ▪Wearing gloves, safety glasses, face shield, suit and respirator. ▪Operating boxer, ▪Moving hoses or lines. ▪Confined space entry. ▪Manually charging batches. ▪Maintenance tasks involving hot work.

Prevention Administrative Controls

Physiological and hydration monitoring



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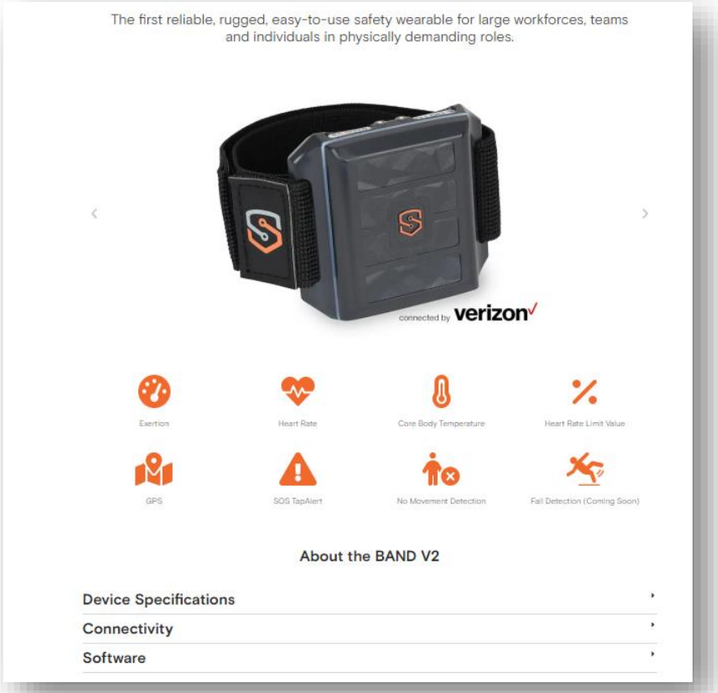

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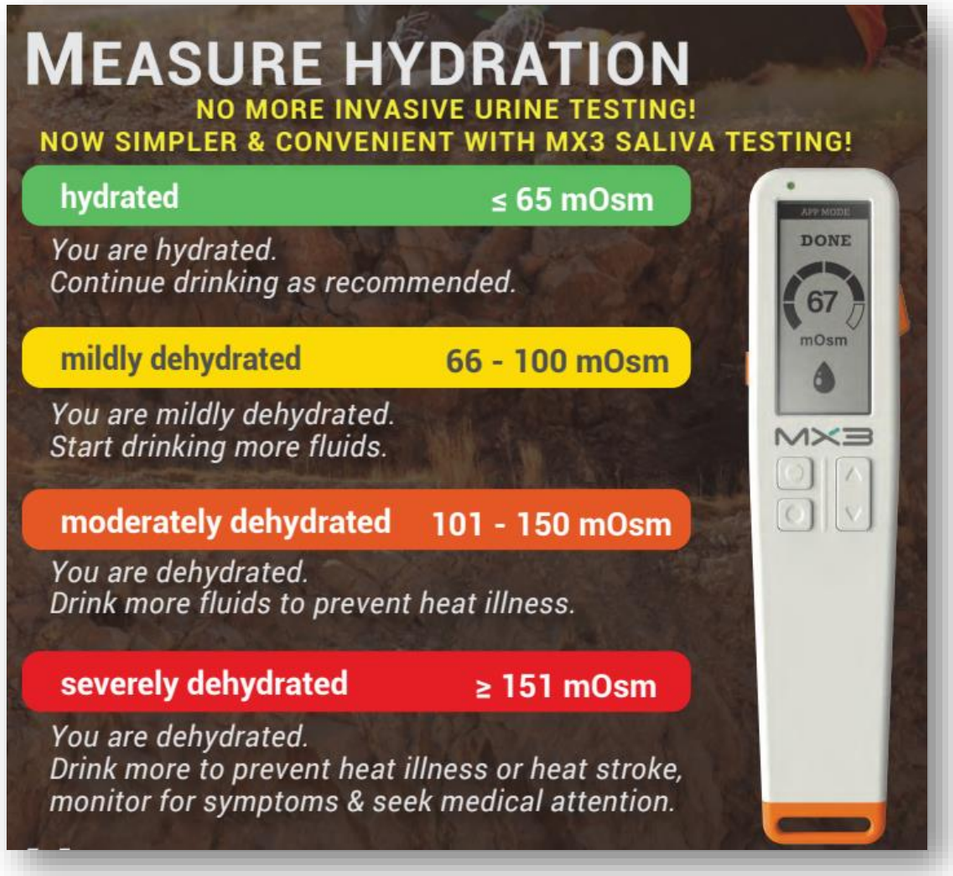
Prevention Administrative Controls

Physiological and hydration monitoring

https://www.mx3diagnostics.com/



Prevention Administrative Controls

- Heat alerts – NIOSH app

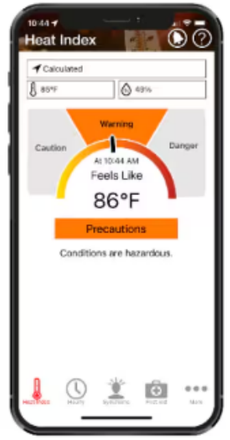
The OSHA-NIOSH Heat Safety Tool is a useful resource for planning outdoor work activities based on how hot it feels throughout the day. It has a real-time heat index and hourly forecasts specific to your location. It also provides occupational safety and health recommendations from OSHA and NIOSH.

The OSHA-NIOSH Heat Safety Tool features:

- A visual indicator of the current heat index and associated risk levels specific to your current geographical location
- Precautionary recommendations specific to heat index-associated risk levels
- An interactive, hourly forecast of heat index values, risk levels, and recommendations for planning outdoor work activities
- Location, temperature, and humidity controls, which you can edit to calculate for different conditions
- Signs and symptoms and first aid for heat-related illnesses

Download on the App Store

GET IT ON Google Play



- WBGT Thermometer

Sponsored

BTMETER BT-881W Heat Stress Meter Anemometer, Digital Indoor/Outdoor WBGT (Wet Bulb Globe Temperature) Meter with Wind Speed, Ambient...

4.1 out of 5 stars 7

$34.99

FREE delivery on $35 shipped by Amazon.

Add to cart

Sponsored

Digital Wind Speed Meter Anemometer,Handheld Heat Stress WBGT Meter Tracker Measures Wind Velocity/Wind...

3.5 out of 5 stars 23

$19.94 Typical: $24.99

prime

FREE delivery **Mon, Jul 8** on $35 of items shipped by Amazon

Or fastest delivery **Fri, Jul 5**

Add to cart

Triplett HS10 Indoor/Outdoor Heat Stress WBGT (Wet Bulb Globe Temperature) Meter - Humidity, Temperature, Heat Index

4.1 out of 5 stars 16

200+ bought in past month

$54.71 List: $59.99

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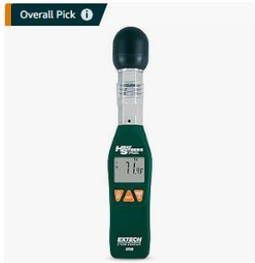

Extech HT30 Heat Stress WBGT Meter , black

4.6 out of 5 stars 70

50+ bought in past month

$180.73 List: $207.89

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Prevention Administrative Controls

HIIP program

- Describes organization strategies for heat-related illness mitigation and employee protection:
  - Employee training plans
  - Water locations
  - Shade cooling locations
  - Organization specific controls including: work-rest cycle, shift adjustments, buddy system, etc.

- Identifies specific workplace activities that may expose employees, contractors, visitors to heat stress hazards (hazard identification)
- Controls measures determined by the organization

Prevention Administrative Controls

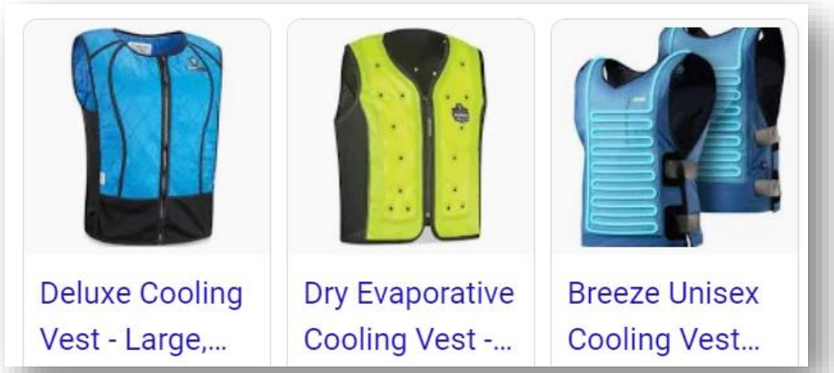
Training

- Recognizing signs/symptoms of heat-related illnesses
- First aid procedures
- Causes of heat-related illnesses and risk reduction techniques
- Use and care of heat-protective clothing and equipment and added heat load from exertion, clothing and PPE
- Personal factors that affect heat tolerance (drugs, alcohol, obesity, pregnancy, other health conditions)
- The importance of acclimatization
- Reporting heat-related illnesses
- Emergency response
- Indications of dehydration
- Lifestyle factors

Prevention PPE Control

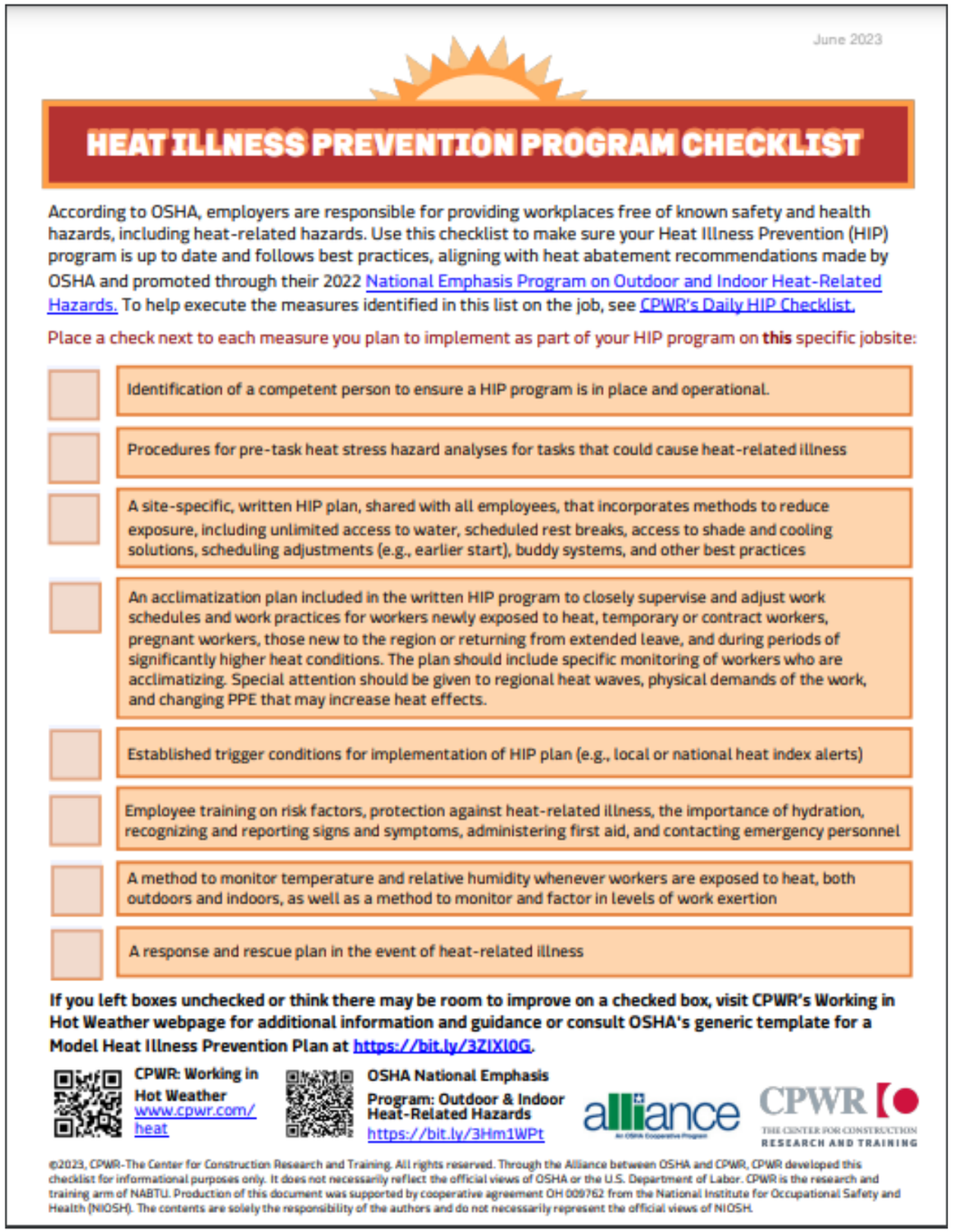
PPE:

- Cooling garments
  - Water cooled (circulating pump, coolant, container)
  - Ice
  - Air cooled
  - Lightweight, loose-fitting, breathable fabric
  - Light colors (outdoors)
  - UVB protective sleeves/shirts (outdoors)
  - Wetted over garments
    - Head/neck wraps
    - Cooling caps, sweatbands



Highlights from the Heat Injury and Illness Prevention Standard

- Proposed standard has several exemptions including time durations and activities covered in other standards
- HIIPP updated at least annually or after event
- Monitoring can be completed through National Weather Service or other reputable source alerts; personal monitoring can be through WBGT or heat index
- Trigger will be 80 F by heat index or WBGT equal to NIOSH recommended alert limit
- High heat trigger requires 15-minute paid rest break every two hours and controls implemented including pre-shift hazard alerts
- Heat stress mitigation measures for employees wearing chemical protective PPE must be in HIIPP
- Two options for acclimatizing employees:
  - 15 minute paid rest break every two hours; observe signs/symptoms (buddy system, heat safety coordinator overseeing); hazard alerts every pre-shift.
  - 20% rule for new and returning (14 days away) starting at 50%



June 2023

HEAT ILLNESS PREVENTION PROGRAM CHECKLIST

According to OSHA, employers are responsible for providing workplaces free of known safety and health hazards, including heat-related hazards. Use this checklist to make sure your Heat Illness Prevention (HIP) program is up to date and follows best practices, aligning with heat abatement recommendations made by OSHA and promoted through their 2022 National Emphasis Program on Outdoor and Indoor Heat-Related Hazards. To help execute the measures identified in this list on the job, see CPWR's Daily HIP Checklist.

Place a check next to each measure you plan to implement as part of your HIP program on **this** specific jobsite:

- ☐ Identification of a competent person to ensure a HIP program is in place and operational.
- ☐ Procedures for pre-task heat stress hazard analyses for tasks that could cause heat-related illness
- ☐ A site-specific, written HIP plan, shared with all employees, that incorporates methods to reduce exposure, including unlimited access to water, scheduled rest breaks, access to shade and cooling solutions, scheduling adjustments (e.g., earlier start), buddy systems, and other best practices
- ☐ An acclimatization plan included in the written HIP program to closely supervise and adjust work schedules and work practices for workers newly exposed to heat, temporary or contract workers, pregnant workers, those new to the region or returning from extended leave, and during periods of significantly higher heat conditions. The plan should include specific monitoring of workers who are acclimatizing. Special attention should be given to regional heat waves, physical demands of the work, and changing PPE that may increase heat effects.
- ☐ Established trigger conditions for implementation of HIP plan (e.g., local or national heat index alerts)
- ☐ Employee training on risk factors, protection against heat-related illness, the importance of hydration, recognizing and reporting signs and symptoms, administering first aid, and contacting emergency personnel
- ☐ A method to monitor temperature and relative humidity whenever workers are exposed to heat, both outdoors and indoors, as well as a method to monitor and factor in levels of work exertion
- ☐ A response and rescue plan in the event of heat-related illness

If you left boxes unchecked or think there may be room to improve on a checked box, visit CPWR's Working in Hot Weather webpage for additional information and guidance or consult OSHA's generic template for a Model Heat Illness Prevention Plan at https://bit.ly/3ZIXl0G.

CPWR: Working in Hot Weather www.cpwr.com/heat

OSHA National Emphasis Program: Outdoor & Indoor Heat-Related Hazards https://bit.ly/3Hm1WPt

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 Through the Alliance between OSHA and CPWR, CPWR developed this checklist for informational purposes only. It does not necessarily reflect the official views of OSHA or the U.S. Department of Labor. CPWR is the research and training arm of NABTU. Production of this document was supported by cooperative agreement OH 009762 from the National Institute for Occupational Safety and Health (NIOSH). The contents are solely the responsibility of the authors and do not necessarily represent the official views of NIOSH.

Resources

https://www.osha.gov/heat-exposure/rulemaking

https://oshainfo.gatech.edu/written-program-templates/

https://www.socma.org/summer-of-safety/

Summer of Safety

Upcoming Events & Webinars

- July 25: Climate-Related Disclosures
- August 6-7: Houston Roundtable
- Mid-August: PPE Effectiveness

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