

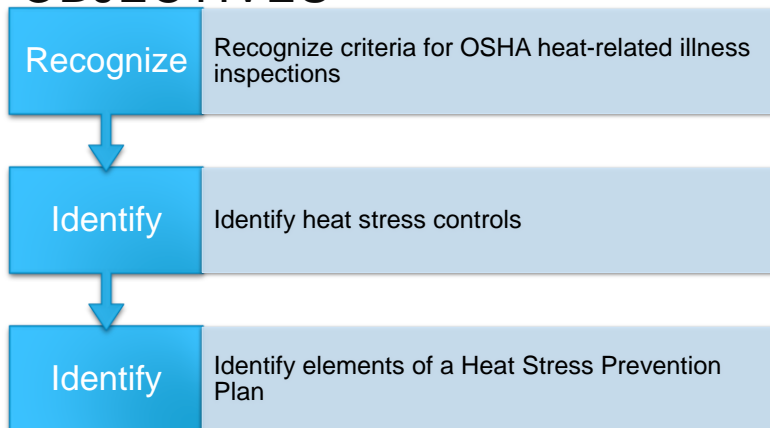


# HEAT STRESS AND OSHA'S EMPHASIS PROGRAM

WELCOME

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## OBJECTIVES



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## POLL QUESTION

Do you have a formalized heat stress protocol in place?

### Formalized:

- ACGIH TLV Guidance.
- Policy at certain temperatures.



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## OSHA HEAT STRESS NEP



In effect as of April 8, 2022



Prioritize heat-related complaints and illnesses



Based upon OSHA Region VI (AR, LA, OK, NM, TX) Regional Emphasis Program

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# SO WHY IS OSHA DOING THIS?

Affects hundreds of industries, occupations and tasks

Across all geographic regions

Disproportionately affects lower wage workers

Climate change

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# EXISTING PREVENTION EFFORTS

Notice of Proposed Rulemaking  
Heat Illness Prevention Campaign  
General Duty Clause  
NEP Emphasis Program  
State Standards

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# HEAT INJURY PREVENTION CAMPAIGN



**Prevent  
Heat Illness  
at Work**

**Outdoor** and **indoor**  
heat exposure  
can be dangerous.



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## REGION VI EMPHASIS PROGRAM

Based on NWS Heat  
Advisories for area offices

Train employees on  
hazards of working in heat

Provide drinking water and  
first aid

Provisions for emergency  
medical attention

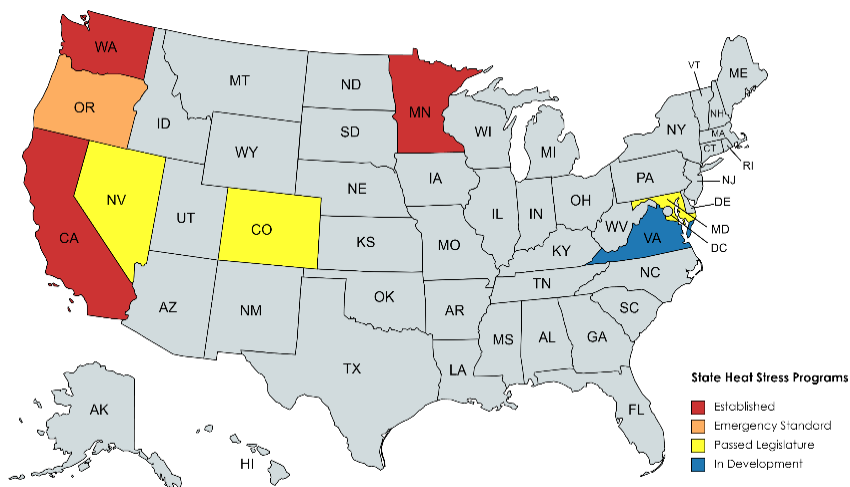
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## NEP EMPHASIS PROGRAM

- Encourage early intervention
- Based on Heat Priority Days and NWS heat warning or advisory
- Train employees on hazards of working in heat
- Provide drinking water and first aid
- Provisions for emergency medical attention

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## STATE HEAT STRESS PROGRAMS



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# NEP HEAT INSPECTION GUIDANCE

- Prioritized based on referrals or complaints
- Review OSHA 300 logs and injury/illness reports
- Heat stress prevention plan
- Conditions and/or activities relevant to heat stress

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# OSHA REQUIREMENTS

Under OSHA law, employers are responsible for providing workplaces free of known safety hazards.

This includes protecting workers from extreme heat.

An employer with workers exposed to high temperatures should establish a complete heat illness prevention program.

- Provide workers with water, rest and shade.
- Allow new or returning workers to gradually increase workloads and take more frequent breaks as they acclimatize or build a tolerance for working in the heat.
- Plan for emergencies and train workers on prevention.
- Monitor workers for signs of illness.

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# HEAT ILLNESS

## Facts about heat illness

- During 2004–2018, an average of 702 heat-related deaths (415 with heat as the underlying cause and 287 as a contributing cause) occurred in the United States annually. Natural heat exposure was a contributing cause of death attributed to certain chronic medical conditions, alcohol poisoning, and drug overdoses

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## TYPES OF HEAT- RELATED ILLNESS

Heat syncope

Heat rash

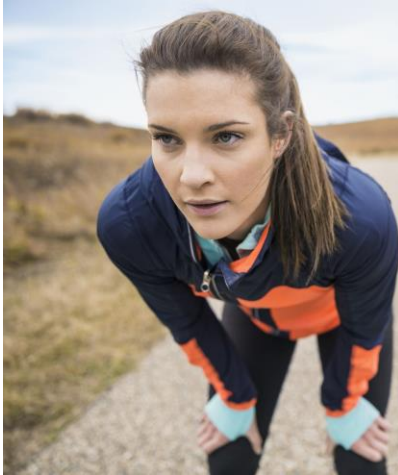
Heat cramps

Heat exhaustion

Heat stroke

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## HEAT SYNCOPE



### Signs and symptoms:

- Sluggish or fainting while standing erect or immobile in heat.

### Treatment:

- Move person to a cooler area.
- Rest in recumbent position.
- Increase fluid intake.
- Recovery is *usually* prompt.

### Prevention measures:

- Acclimatization and intermittent activity.



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## HEAT RASH

### Signs and symptoms:

- Profuse, tiny, red blister-like vesicles on effected areas
- Prickling sensations during heat exposure

### Treatment:

- Mild drying lotions and powders.
- Skin cleanliness to dry skin and prevent infection.

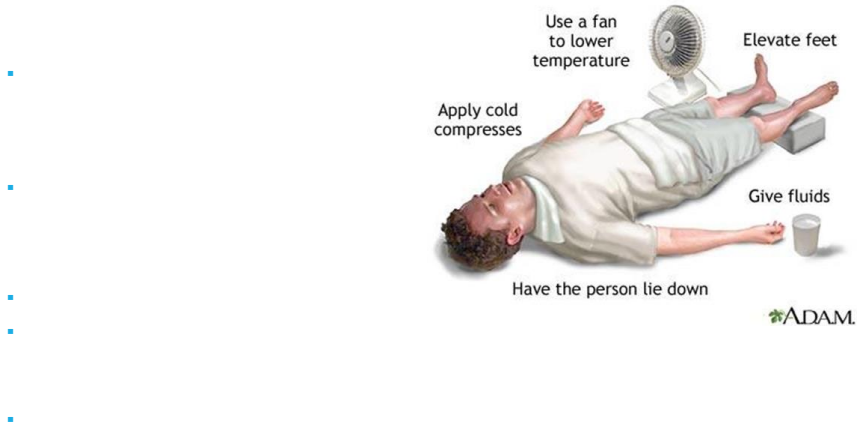
### Prevention measures:

- Allowing skin to dry between heat exposures.



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## HEAT EXHAUSTION

Signs and symptoms:

- Fatigue, nausea, and headache.
- **Clammy skin.**
- **Pale or flushed complexion.**
- May faint while standing.
- Low or normal oral temperature.

Treatment:

- Move to a cooler area.
- Rest in recumbent position with head in low position.
- Administer fluids by mouth if conscious.
- Seek medical attention.

Prevention methods:

- Acclimatization and intermittent activity.



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# HEAT STROKE

## Signs and symptoms:

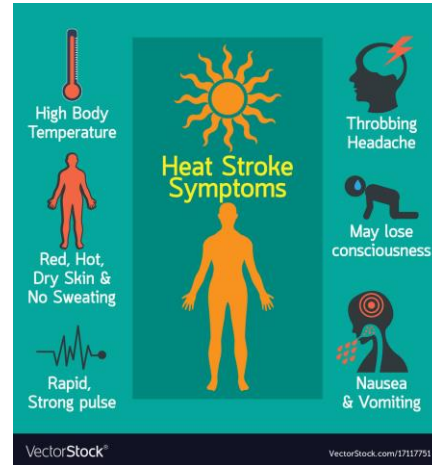
- Red, hot, **dry** skin.
- Dizziness and confusion.
- Rapid breathing and pulse
- High oral temperature

## Treatment:

- Cool rapidly by soaking in cool water.
- Seek immediate medical attention.

## Prevention Methods

- Acclimatization and intermittent activity.



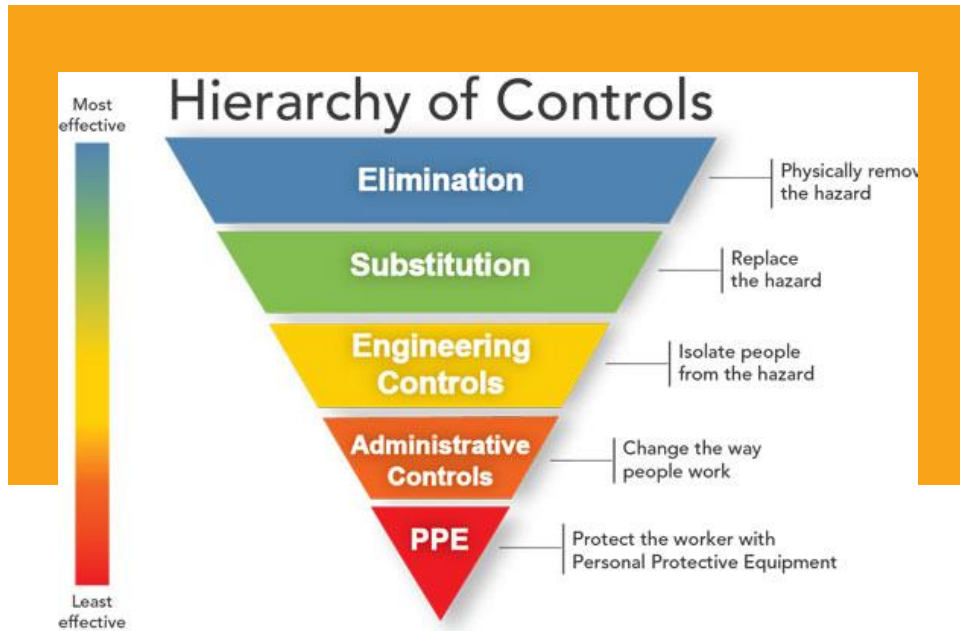
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## NIOSH HEAT STRESS APP

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## HEAT RELATED ILLNESS PREVENTION

### Acclimatization

Structured program  
Increase time daily  
7-14 days

### Medical Monitoring

Preplacement  
Periodic  
OTJ monitoring

### Training

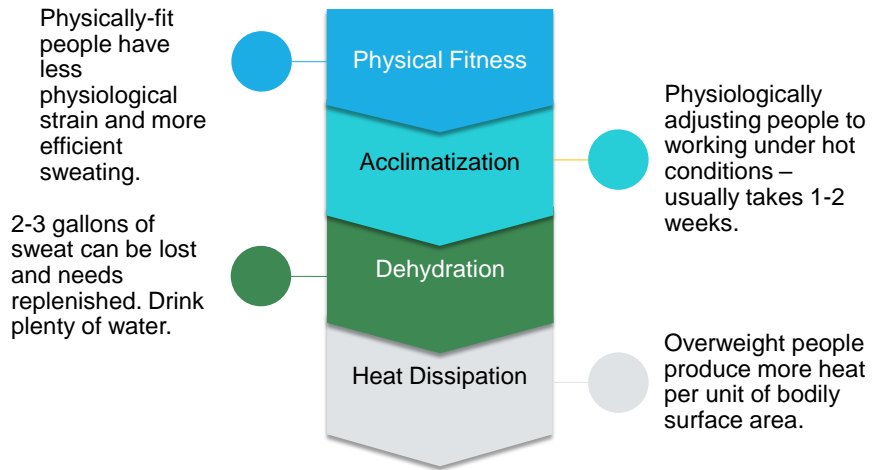
Recognize symptoms  
Proper hydration  
Contributing factors

### Heat Alert Program

Temperature/humidity based  
Heat Index  
Warnings

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## HEAT SUSCEPTIBILITY FACTORS



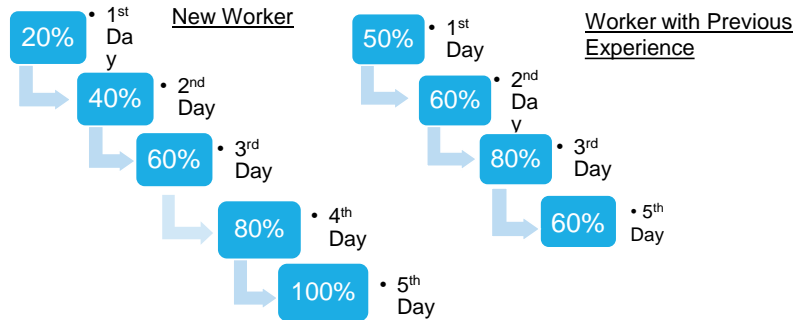
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# HOW TO ACCLIMATE

- Gradual increase in work time in the hot conditions most likely over 7 to 14 days.
- Cooling off and rehydrating between the shifts.



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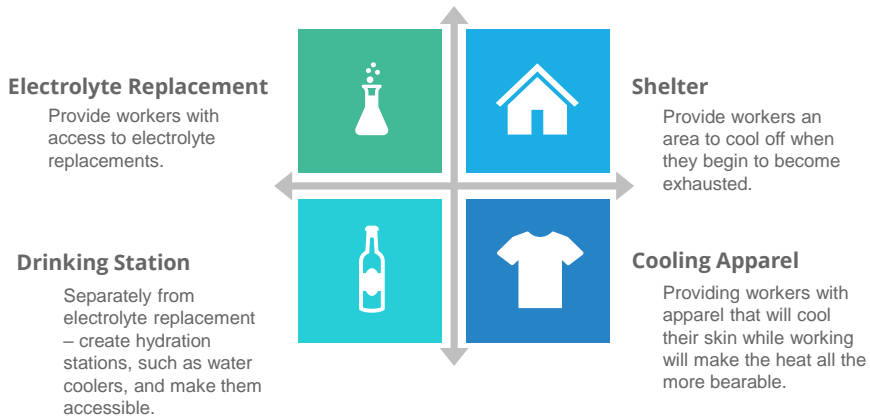
# ACCLIMATIZATION

Allowing your circulation to be more stable in the intense heat environment.



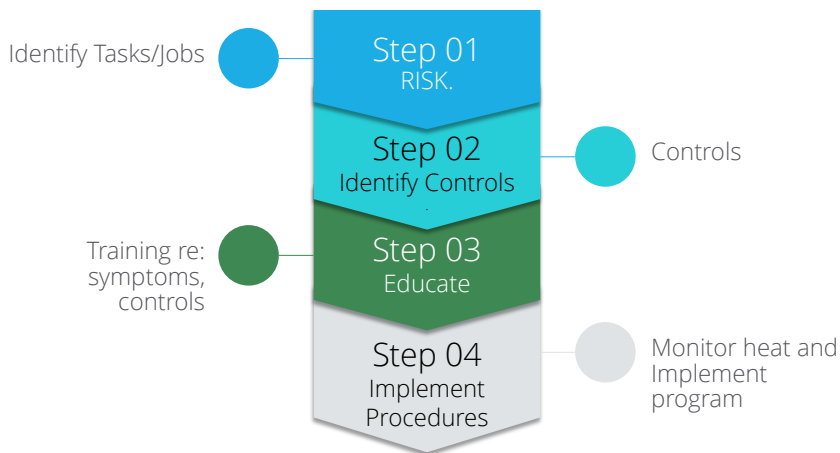
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## KEEPING WORKERS COOL ON THE JOB



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## ACTION ITEMS



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Heat Stress App - Apple



Heat Stress App - Android



# ADDITIONAL RESOURCES

[OSHA's Recommended Practices for Safety and Health Programs](#)

[OSHA Heat Campaign](#)

[Occupational Heat Exposure Safety and Health Topic Page](#)

[NIOSH Heat Stress Safety and Health Topic Page](#)

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Questions?

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