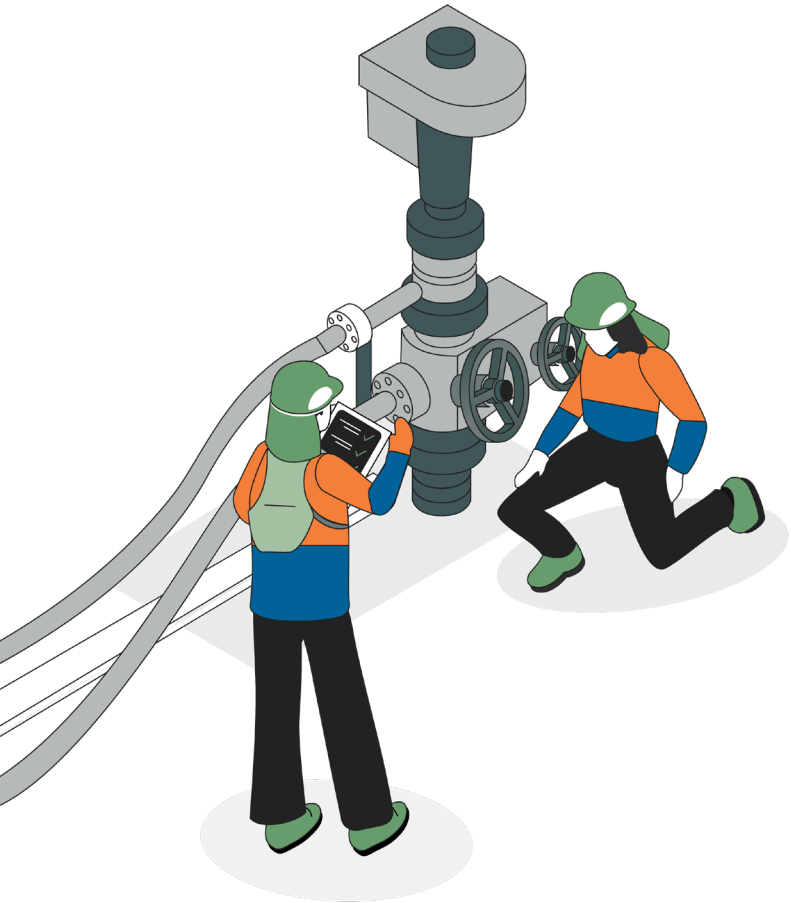
Working in the Heat Safeguards

When this applies

Any work done outdoors from around October to March, in temperatures above 30°C or with work-related hazards such as:

- Radiant heat from hot equipment or materials.
- Confined or restricted work locations with limited natural airflow.
- Working consecutive days in the heat.
- High humidity.
- High levels of physical work activity.
- Wearing additional PPE such as a chemical suit over the top of your work clothes.



Hazards and risks

People may feel uncomfortable when working in hot conditions, however, this does not normally cause harm if the body can adjust and cope. Individual risk factors can influence the effects working in the heat, including:

- Drinking alcohol or excessive caffeine.
- Fatigue.
- How acclimatised you are to the heat.
- Underlying health issues.
- Low fitness levels.
- Using certain prescription medications or illicit drugs.
- Hydration levels.

Key Safeguards

Wherever possible, reduce your risk by adopting the following Safeguards:

- Schedule work in the cooler parts of the day and avoid the peak hottest periods.
- Adjust summer schedules to reduce workloads.
- Start work well-rested and hydrated.
- Rotate workers to avoid too many consecutive days in the heat.
- Use cooling equipment (e.g. portable cooling / airflow, shade structures).
- Make sure there's an adequate supply of cool water, ice and low-sugar electrolytes.
- Establish work / rest cycles with access to cool breaks.
- Wear cooling vests, wide brims on hard hats, neck protection, and lightweight breathable clothing.
- Monitor your body temperature, fluid intake and the frequency / colour of your urine.
- Look out for your mates and quickly seek medical help if you observe any heat-related illness symptoms.

Did you know:

Heat stress can be a serious condition if not identified and treated quickly, to the extent that it can be life-threatening.

Working in the Heat
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What you need to do

- **Before starting work:**
  - **Plan your day** with your supervisor and team and decide how you'll manage working in the heat throughout your shift. Document the plan as part of the Toolbox meeting or within the task-specific Safe Work Method Statement (SWMS).
  - **Implement controls** by consulting the Safer Together Heat Stress Controls / Mitigation Matrix (attached).
  - Ensure there's an **adequate supply of cool drinking water**, you've planned regular breaks and there's a cool refuge available.
- **During work:**
  - **Monitor yourself and others** for common symptoms of heat-related illness.
  - **Keep up hydration** by drinking at least 1 litre of fluid (cold drinking water + electrolytes) per hour, limiting your caffeine intake. Increase if needed by monitoring the colour of your urine (pale yellow generally indicates healthy hydration).
  - **Monitor heat stress controls** to make sure you have enough supplies, and the cool refuge is utilised during rest breaks.

What you need to know

Seek medical help when anyone is showing heat-related illness symptoms such as:

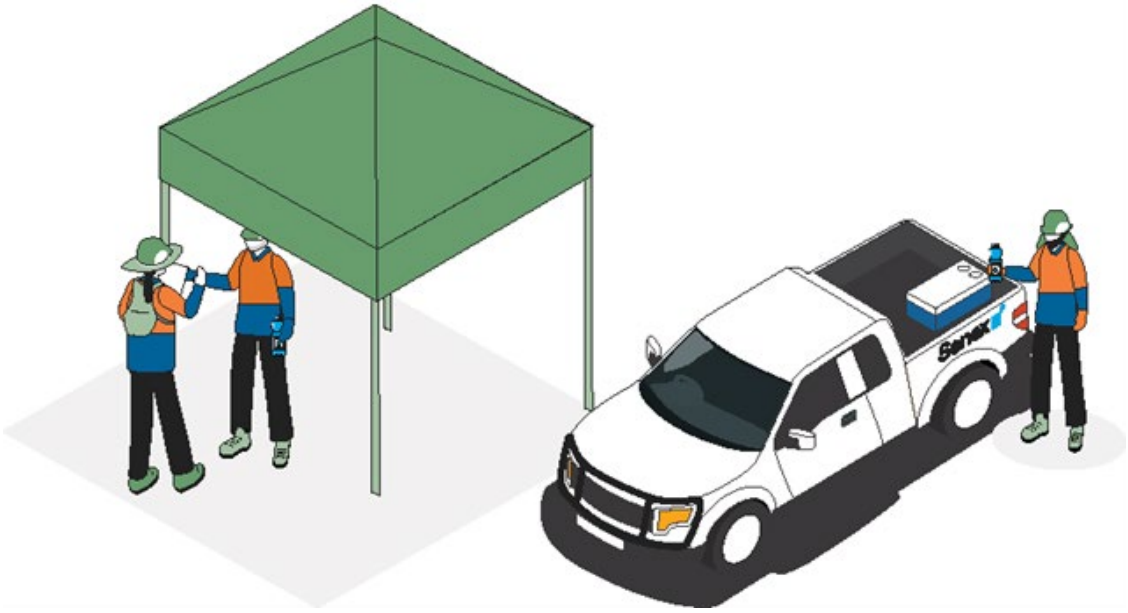
- tiredness / lethargy
- headache
- dizziness / feeling faint
- erratic behaviour
- muscle cramps / feeling weak
- cold / clammy skin with excessive sweat
- feeling thirsty
- urinating less often, and / or
- feeling sick / vomiting.

Worker competencies required

- Safer Together Heat Stress e-Learn module.
- HLTAID009 Provide CPR.
- HLTAID011 Provide First Aid.

Additional resources

- Health and Fitness for Work Procedure SENEX-CORP-HS-PRC-031
- Safer Together Management of Heat Stress Guideline
- QLD Government WHSQ Heat Stress Calculator



CHECKLIST
SENEX-CORP-HS-CTL-009

Working in the Heat Safeguards

Complete this checklist before starting work.

START HERE
Have you considered other methods that don't require you to work in the heat?

○ Yes

Are you aware of how to respond if you suspect you or someone else is affected by a heat-related illness?

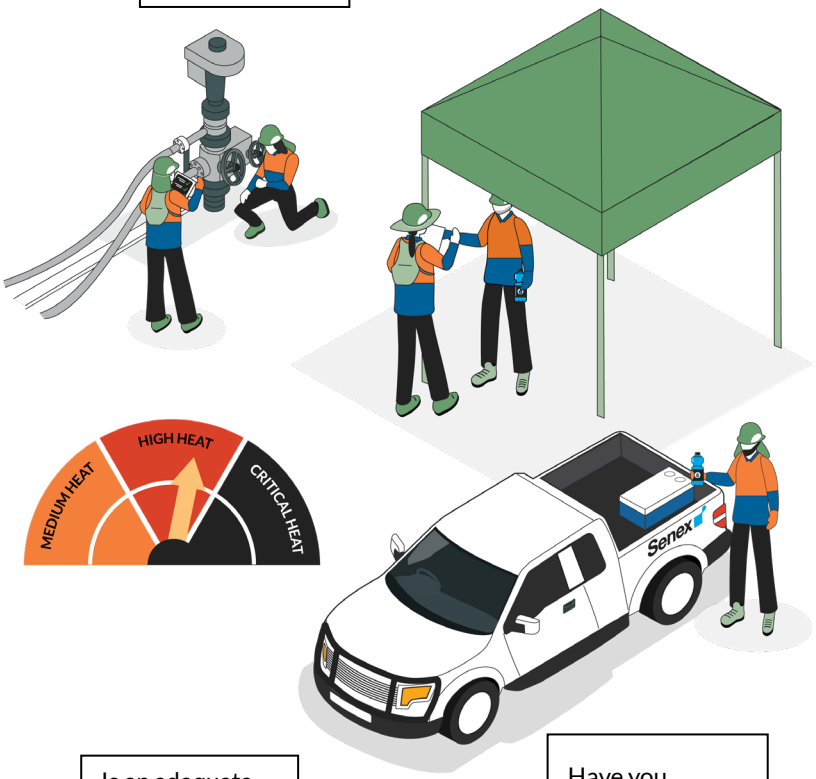
○ Yes

Are you well-rested and hydrated?

○ Yes

Have you completed the Safer Together Heat Stress e-Learn module?

○ Yes



Are you and your team wearing heat-appropriate PPE (e.g. cooling vests, wide-brims on hard hats, neck protection, neck bands and lightweight breathable clothing)?

○ Yes

Have you scheduled this work outside of high-risk heat-stress work hours?

○ Yes

Are your team rotating to avoid consecutive days in the heat?

○ Yes

Do you have equipment to cool your work environment (e.g. portable cooling/airflow or a structure to provide shade)?

○ Yes

Is an adequate supply of cool water, ice and low-sugar electrolytes available?

○ Yes

Have you established work/rest cycles with a cool refuge for workers to escape the heat?

○ Yes

Scan for more

If you can't achieve all applicable controls in this safeguard, STOP work, review with your Supervisor and ensure hazards are controlled.

Working in the Heat
Safeguards

Did the task have any challenges or complications? ◯ Yes ◯ No

If yes, how were they managed?

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Were there any controls on the safeguard which could not be achieved? ◯ Yes ◯ No

If so, why not and how was this managed?

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Did you improve the safeguards during verification? ◯ Yes ◯ No

If yes, how did you improve it?

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Do you have any feedback on this safeguard document or the controls? ◯ Yes ◯ No

If yes, please detail below.

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Name: ..... Role: .....

Site: .....

Working in the Heat
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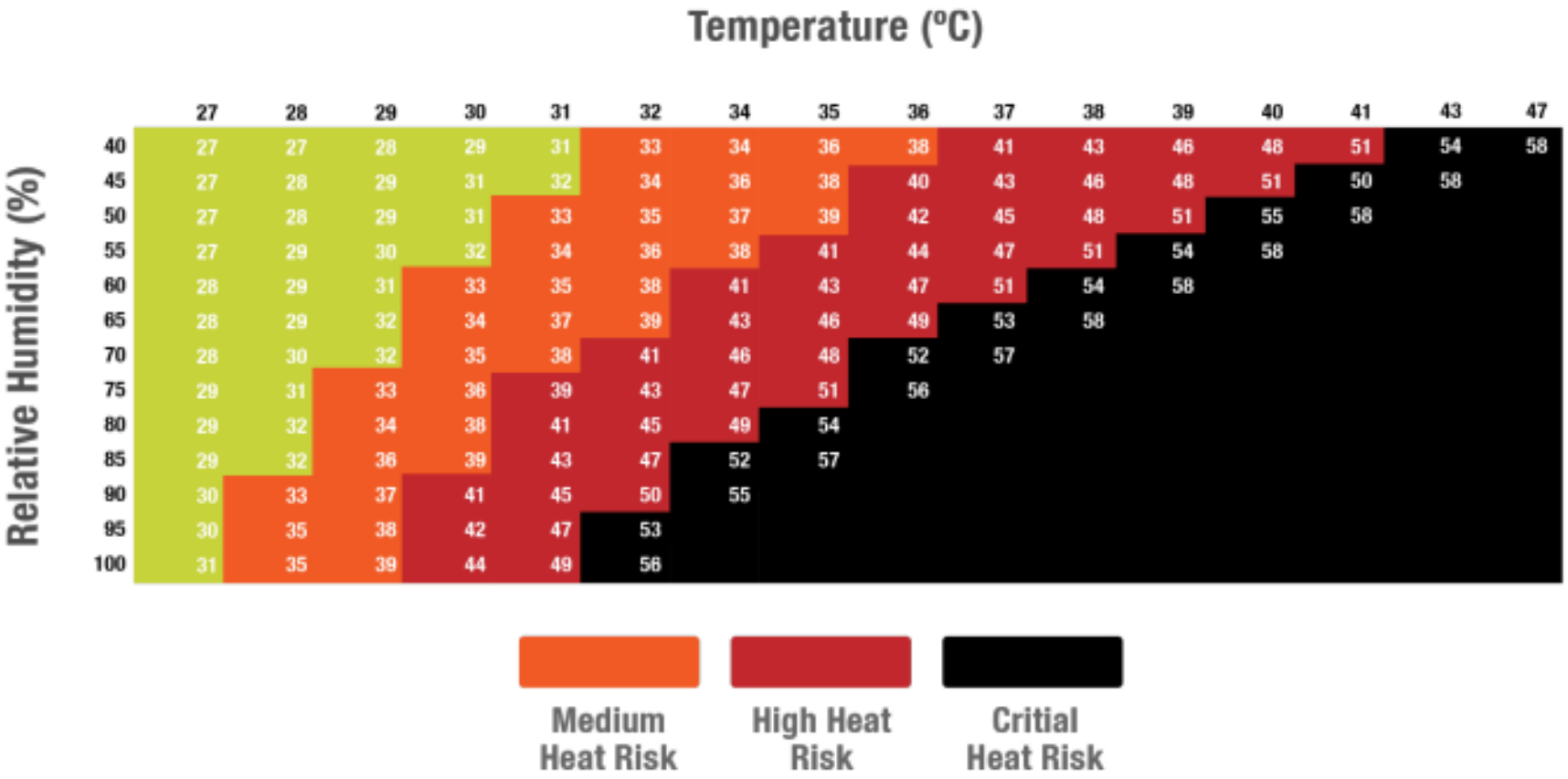

Working in the Heat
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MEDIUM HEAT RISK DAY >30ºC Apparent Temperature

Safe Worksite
- Provide an air-conditioned refuge close to the worksite if possible (e.g. air conditioned vehicle)
- Increase ventilation at the worksite, where possible (e.g. fans, evaporative systems
- Ensure camp/accommodation rooms are air conditioned and cool drinks are available at camp pre and post-work
- Provide a shaded refuge at the worksite
- Provide easy access to cool fresh drinking water at the worksite
- Monitor forecasted and real time Apparent Temperatures and notify workforce (e.g. prestart, email, radio call-ins). See http://www.bom.gov.au/qld/observations/qldall.shtml?ref=hdr
- Consider scheduling tasks for cooler periods of the day, but take account of resultant fatigue risk
- Communication means to be made available and operational (especially in remote locations) such as sat. phone, UHF radios, mobile phone, and/or SPOT devices). Identify that signal is available (mobile or UHF).

Safe Supervisor
- Evacuation/rescue plans need to be prepared/considered for staff working in remote areas
- Confirm with workers they feel medically fit for the work
- Review First Aid arrangements available to workers
- Consider the option to assign higher risk work tasks to workers who are acclimatised
- Schedule regular rotation for manual work amongst the team
- Consider increase in ratio of Rest vs Work breaks, and cycle appropriate to tasks
- Reinforce early identification of heat stress and the subsequent treatment of symptoms to all personnel at start of activity
- Additional monitoring of workers in double layer or impermeable clothing
- Increase monitoring of team members: e.g. implement buddy system for hazardous manual tasks
- Ensure that communication means are available and operational. Assign appropriate call-in times to ensure that regular check-ins are being made by workers (especially in remote locations).

Safe Worker
- Worker has seen the awareness package & is familiar with Heat Stress risks and mitigations
- Self-assess as fit for work – recent illness, medication, age, weight, general conditions, chronic illness, specific supplements – consult your doctor
- Actively participates in daily pre-job briefing to be aware of daily heat levels
- Identify individual heat stress hazards/controls – consider Heat Stress Risk Assessment (see section 5 of this Guideline)
- Speak to your supervisor if you have concerns about yourself or a co-worker
- Remain hydrated throughout the shift (see details on hydration / fluid replacement in Appendix.3)
- Pre-hydrate if going to carryout a specific task
- Self-monitor urine colour throughout their shift (self-hydration monitoring – see Appendix 3)
- Use personal protective clothing appropriate to hot weather
- Maintain communication with colleagues and your supervisor as per prescribed frequency (especially if working in the field, remotely or alone).

HIGH HEAT RISK DAY >40ºC Apparent Temperature

Safe Worksite
- Declare 'Red Alert Day' for site location, and communicate to region/sites.
- Design tasks to use mechanical aids rather than human effort.
- Consider if any heat sources can be removed from the area (e.g. welding activity).
- Ensure eskies with ice and/or refrigerators for water and food storage are available at the worksite.
- Provide additional aids and equipment for cooling (eg. Ice vests, ice scarfs).

Safe Supervisor
- Consider slowdown and deferral of activities
- Ensure heat risks are considered in risk assessments for hazardous manual/high risk tasks (e.g. working at height, on ladders, confined space / restricted work, lone work)
- Monitor all work and ensure that all Heat Controls are in place as per Risk Assessment
- Formalise and Monitor the increase in ratio of Rest vs Work breaks
- Where possible, conduct additional hydration testing, including at commencement and completion of work.
- Ensure un-acclimatised workers only work subject to a risk assessment.

Safe Worker
- Only perform work that is subject to a risk assessment and ensure that all mitigations/recommendations are in place to prevent Heat stress
- Use additional items to lower core body temperature (e.g. ice scarf/tie, ice vests)
- Increase frequency of urine checks throughout shift (self-hydration monitoring).

CRITICAL HEAT RISK DAY >54ºC Apparent Temperature

Safe Worksite
- Declare 'CRITICAL HEAT DAY'
- Remove heat sources that can be removed from the working area
- If possible, deploy heat monitor to site to confirm Apparent Temperature
- All work subject to specific risk assessments and signed off by Supervisor.

Safe Supervisor
- Risk assessments for all tasks; consider whether work is critical/needs to go ahead on day (i.e. postpone)
- No Lone Work
- Specific evacuation/rescue plan(s) to be prepared/considered for any person working
- Check each Team member Is fit for work
- Assign work that is critical only to workers who are very fit & acclimatised
- Maintain constant high level of vigilance to identify early signs of heat stress
- Implement specific arrangements for active monitoring of team including formal buddy system & ongoing risk assessments.
- Don't allow workers in double layer or impermeable clothing to do manual tasks
- Seriously Consider slowdown and deferral of activities.

Safe Worker
- Do not work alone
- Do not work if you are un-acclimatised, unfit or fatigued
- Identify heat stress hazards/controls as they affect you – consider Heat Stress Risk Assessment (see section 5 of this guideline)
- Wear single layer, permeable clothing.