



Title	Working in the Heat	Document Number	ANC.WITH.WI
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Scope	ANC NATIONAL
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Definitions	<p>Heat Illness- Such as heat stroke, dehydration, headaches etc.</p> <p>Fatigue- is more than feeling tired and drowsy. In a work context, fatigue is a state of mental and/or physical exhaustion that reduces a person’s ability to perform work safely and effectively. Working in the heat can compound the effects of fatigue on a person.</p> <p>Rapid Incident- ANC’s incident reporting data base</p> <p>Rest- is taken away from the general workspace/area in an area that permits a person to relax and refresh.</p> <p>Trigger level A trigger level may be singular or a combination of measurable factors that, when reached, require and specify the action to be taken. Factors such as air velocity, wet bulb, dry bulb, body core temperature, time, or other matter as agreed with the workers involved, may be used.</p>	<p>Working in the Heat- The human body sheds excess heat by sweating and any factor that reduces the effectiveness of sweating makes it harder for the body to regulate its temperature. Heat-related illness happens when the body can’t cool itself down by sweating.</p> <p>Exposure to heat depends on many factors – not just temperature alone.</p> <p>In addition to the air temperature (how hot the air is around you), these factors include:</p> <ul style="list-style-type: none"> • humidity – the moisture content of the air (as humidity increases, the air is less able to absorb moisture from the skin and sweating becomes less effective at cooling the body) • amount of air movement (indoors) or wind speed (outdoors) • radiant temperature of surroundings, such as the sun (outdoors) or furnaces, ovens and working under a metal roof (indoors) • clothing being worn – including personal clothing being worn under protective clothing such as overalls • type of physical activity being done and the length of time it is done for • age and physical fitness of the worker
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Heat Stress Awareness and Facts

Heat illness awareness- Heat illness covers a range of medical conditions that can arise when the body is unable to properly cope with working in heat. These conditions, brought on by heat stress, include:

- Heat stroke – a life threatening condition that requires immediate first aid and medical attention
- Fainting in heat (heat syncope)
- Heat exhaustion
- Heat cramps
- Skin rashes (Prickly Heat)
- Heat fatigue
- Aggravation of pre-existing illnesses and conditions.

Signs and symptoms of heat illness include feelings of sickness, nausea, dizziness, weakness, clumsiness, collapse and convulsions. Employees with these signs or symptoms, and employees observing these in others shall seek immediate first and/or medical attention. Other health and safety problems caused by hot working conditions include:

- Sweaty hands causing a loss of grip while handling objects, controls, etc.
- Falls and trips occurring due to fainting or fatigue
- Mental and/or physical fatigue leading to errors and mistakes
- Not using personal protective equipment due to increased discomfort when it is hot
- Cutting corners during work due to fatigue or discomfort
- Heat interacting with other hazards such as chemicals and manual handling
- Burns from contact with hot surfaces or substances.

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Continued-

The Work Health and Safety (WHS) Regulation 2011 requires your employer to ensure, so far as is reasonably practicable, that workers working in extremes of heat or cold are able to carry out their work without risk to their health and safety but the WHS legislation does **not** state a precise temperature at which workers should stop work.

Exposure to heat depends on a number of factors – **not just temperature alone**.

In addition to the air temperature (how hot the air is around you), these factors are:

- **humidity** – the moisture content of the air
- amount of **air movement** (indoors) or wind speed (outdoors)
- **radiant temperature** of surroundings either from the sun (outdoors) or furnaces, ovens and working under a metal roof (indoors)
- **clothing being worn** including the personal clothing being worn under protective clothing
- type of **physical activity** being done and the **length of time** it's done for
- **physical fitness** of the worker – including whether a worker is used to working in a hot environment or has any pre-existing conditions – e.g. overweight, heart/circulatory diseases, skin diseases or use of certain medicines.

Equipment	Correct PPE or Clothing, Fresh Water, Suitable Rest Area
Responsibilities	<p>National/State Operations Manager These Managers hold the responsibility of ensuring the heat stress management plan is effectively implemented, assessed and monitored. This shall be communicated to all Managers/supervisors/Team leaders and operational personnel.</p> <p>Health and Safety Personnel Following the directions of the Operations Manager, H&S Personnel must ensure that appropriate risk assessment is being undertaken of the working conditions in which personnel operate, specifically assessing heat in the work place.</p> <p>Site Managers/Supervisors/Schedulers Any Heat Stress Management Plan must be communicated to all employees. Managers/Supervisors/Schedulers must ensure the employees are aware of the temperatures they may experience and are appropriately prepared.</p> <p>Workers All workers should adhere to reasonable directions given by their Scheduler/Supervisor/Manger regarding heat management. Workers should also follow any process put in place to manage the risk of heat related stress or illness.</p>

Permits / Licenses	Reference	Risk Assessments
N/A	Work Health and Safety Act 2011, Division2, Section 19 Work Health and Safety Regulations 2011, Chapter 3, Part 3.2, Division 2 General Working Environment Section 40	Working in the Heat RA

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Step #	Task/Heading	Information/Actions
1	Heat Stress Prevention Controls	<p>A control is a mechanism used to minimise or eliminate an exposure to a hazard, such as heat. Work related injuries and illnesses due to exposure to heat must be prevented primarily through elimination, modifying the workplace or systems of work. Where these measures do not adequately control the risk, it may be necessary to introduce administrative controls (for example introduction of a work-rest regime). It is the responsibility of the manager/supervisor to ensure that where a heat risk has been identified (e.g. through audits, hazard reports, formal and informal risk assessments, etc.). That adequate controls are identified, assessed, implemented and monitored for control of heat risks.</p> <p>Each person and situation are unique, so controls and their application will vary. Following are a few basic precautions that can prevent heat-related health problems. A variety of engineering controls including cooling by shades may be helpful. Shading will also protect employees from radiant heat sources. Other controls Include but not limited to:</p> <ul style="list-style-type: none"> • Cooling fans • Equipment modifications • Use of power tools to reduce manual labour • Protective clothing • Shift rotation and rest breaks <p>Some preventative controls for heat stress:</p> <p>Hydration The human body is highly dependent on adequate fluids and minerals to function properly. Adequate water intake is the single most important actor in avoidance of heat injury. In extreme hot working environments, it is not unusual to lose a litre of water per hour. If the loss is not replaced, the exposed employee will most likely experience a rapid rise in body temperature and heart rate. The risk of heat injury is reduced when exposed employees frequently drink water in small amounts throughout the work period. Clean, cool, drinking water shall be provided in readily accessible locations for all personnel. This may include the provision for such water at depots in sufficient quantities for workers to fill adequately sized drink containers for tasks and journeys.</p> <p>Good physical condition A good level of physical condition (fitness) can reduce the likelihood of heat strain. Those that are more than 20% overweight are more prone to developing heat illness symptoms. Those that are fit will most readily acclimatise and have some level of 'protection'. Planning Work Schedules/Shift rotation and resting Work schedules should be tailored to complete the task while considering the climate and physical condition of the workers. Scheduled "regular" rest breaks should also be considered as a control measure for workers exposed to ongoing heat in the workplace. An example here (but not limited to) is- 15 mins break every hour, away from the work environment where heat is a factor. Monitoring</p> <p>It may be deemed appropriate via risk assessment and the development of control action plans to implement a program for monitoring the health of employees in the workplace. Implementing a monitoring program to evaluate heat stress can be complex. Heat Stress (thermal load and the body's response to it) is influenced by numerous important factors:</p> <ul style="list-style-type: none"> • radiant heat; • air temperature; • air movement; • humidity; • intensity of physical work; • clothing worn; and • Individual acclimatisation.

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2	Heat Stress Management	<p>Workers who work outdoors or in indoor environments with elevated temperatures should make every attempt to follow the below points;</p> <ul style="list-style-type: none"> • Understand the signs and symptoms of heat stress, as well as risk factors. • Take extra care if you are at high risk. You may be at increased risk if you are older or overweight, you overexert, you have a chronic medical condition including diabetes, heart or lung disease, thyroid disease or high blood pressure. If you take medications, you should check with your doctor to see if you are at increased risk because of the effects of these medications. • Take time to acclimatise to heat and humidity. You will have a greater tolerance for heat if you limit physical activity until you become accustomed to it. • Stay hydrated by drinking small amounts of cool water frequently, to relieve thirst and maintain adequate urine output • Wear appropriate clothing. • Pace yourself. Start slowly and pick up the pace gradually. • Monitor yourself for the signs and symptoms of heat-related illness, described above. • When working in the heat, monitor the condition of your co-workers. Ask your co-worker to do the same for you. • Promptly report to your supervisor any known or suspected instances of heat stress.
7	Rest	<p>Every Job, task or role is potentially exposed to working in the heat at some time, therefore every job/task should be risk assessed and heat exposure be listed as a potential hazard.</p> <p>Rest periods and temperature limits change with every location, every task, every individual and the seasonal time of year. Therefore, it is critical that all workers consult and communicate the needs for rest when working, considering the surrounding conditions as outlined within this WI.</p>

STOP – Have you fully understood this Work Instruction?

If "NO" please seek advice from your Manager or Safety Officer
 If Yes, complete the WI competency assessment - Over page if applicable.

SAFETY



RESPECT



HONESTY



LOYALTY



CARE



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