Staying Healthy in a Heatwave Service Plan & Heatwave Preparedness and Management Guide

Whiddon

Document Control

Title	**Staying Healthy in a Heatwave; Service Plan & Heatwave Preparedness and Management Guide**
Review Date	August 2025
Initiating service area	Compliance and Risk
Release Authority	GMC&R
Version	0.5
Effective Date	15/11/2023 11:04 AM

Document Review

Date	Description of review	Initiated by	Version
November 2017	New document resulting from review of Staying Healthy in the heat audit review	GMC&R	0.1
January 2018	Staying Healthy in the Heat Service Plan and Heat Wave Management combined	GMC&R	0.11
February 2018	Review post consultation	GMC&R	0.12
October 2019	Update – regular time-based review, brand update	GMC&R	0.2
July 2021 Full review	Full review; incorporation of Com DoH guidelines Heat Wave Readiness annual requirement. Power Generator availability added as standard operational controls. Flyer Update	GMC&R	0.3
August 2023 Full review	Major review in keeping with updates to WHO and NSW/ QLD Gov advice. Flammable substances additional information	GMC&R	0.4
Nov 23 - Major Review with departmental advice included	Clinical Alert information added. Additional Part added to document structure to incorporate clinical alert	GMC&R	0.5

Contents

Background

Heatwave conditions are among a number of hazards Australians face across the warmer months Early preparation is critical. A heatwave occurs when the maximum and the minimum temperatures are unusually hot over a three-day period at a location. This is considered in relation to the local climate and past weather at the location.

Heatwaves are classified into three types, based on intensity.[1]

- **Low-intensity heatwaves** are more frequent during summer. Most people can cope during these heatwaves.
- **Severe heatwaves** are less frequent and are likely to be more challenging for vulnerable people such as the elderly, particularly those with medical conditions.
- **Extreme heatwaves** are rare. They are a problem for people who do not take precautions to keep cool—even for people who are healthy. People who work or exercise outdoors are also at greater risk of being affected.

Any heatwave categorised as severe or extreme can be particularly challenging for vulnerable people, and the sustained heat can have flow-on impacts for infrastructure.

Whiddon services are located across regional and remote NSW and towards the southern border of Queensland and are at a heightened risk of heat wave. As a result of climate change, heatwaves are projected to be more intense, occur more often, and last longer. We already see these changes, and they are projected to continue in the future.[2]

Scope and application

This document and the standard operational risk controls for management of the work and living environment is intended as a practical guide for persons who have a duty under the WH&S and Aged Care Act and Regulations to manage risks to health and safety, in the heat wave context.

Introduction

The WH&S Act and Regulations require persons who have a duty to ensure health and safety to 'manage risks' by eliminating health and safety risks as far as is reasonably practicable, and if it is not reasonably practicable to do so, to minimise those risks as far as is reasonably practicable[3].

The document provides a resource for Whiddon services to use in the event of heat wave conditions to assist in managing the risk to health and safety of staff, clients, and visitors. The resource is intended for use in any setting and should be used in conjunction with the; Whiddon

[1] Understanding Heatwaves (bom.gov.au)

[2] Climate change impacts on heatwaves | AdaptNSW

[3] NSW Legislation WH&S Act 2011

Staying Healthy in the Heat Annual Assessment.

As days of extreme temperatures, usually coincide with days of extreme fire danger, this resource in conjunction with other contingency plans are used in preparation for emergencies.

How to use this Document

These resources provide information to assist in preparation and response to episodes of extreme heat events and help to minimise the health impacts of heat waves on clients, staff, and visitors. The resource is intended for use in any setting.

Heatwaves often accompany other extreme weather events; this guide should be used in conjunction with standard operational procedures and risk controls that are in place to manage the work and living environment, emergency procedures and business continuity activities.

Printable flyers guiding how to manage in a hat wave designed for staff, volunteers, clients, and families accompany this document and are at the end of the document.

The Staying Healthy in the Heat plan outlined in steps within this document details Whiddon's arrangements for the control and coordination of, the preparation for, and response to and, immediate recovery from heat events including the role responsibilities, and action steps for staff. It is broken into four parts:

- Part 1: Clinical Alert: Caring for older people in hot weather,
- Part 2: Standard Operational Risk Controls.
- Part 3: Heatwave Response; the Heat Wave Management Plan,
- Part 4: Myths and misunderstandings about heat.

PART 1: Clinical Alert: Caring for older people in hot weather.

The unprecedented high temperatures across Australia during spring and confirmation of an El Niño weather phenomenon for the 2023–24 summer both foreshadow the likelihood of multiple heatwaves in coming months.

It is vital that Whiddon services recognise and prepare for the risks that heatwaves present for older people.

While very high temperatures can affect people differently, it is known that frail older people are at higher risk of hospitalisation and even death when exposed to extreme heat. A recent report from the Australian Institute of Health and Welfare indicated that extreme heat accounted for 7,104 injury hospitalisations and 293 deaths in Australia over the 10 years from July 2012 to June 2022. Heatwave-related deaths during this period spiked during severe El Niño years, such as during 2014, 2016, and across 2019 and 2020. In the 3 years from July 2019 to June 2022, people aged 65 and over were the most commonly hospitalised age cohort of all those admitted to hospital for heat-related injuries.

Research just published in the journal Nature Medicine reporting on the number of people who died during the recent heat waves across Europe showed that heat stress caused more heat-related deaths than heatstroke. **In most cases, these deaths are caused by the very high temperatures interfering with how the body usually copes with existing health problems like heart and lung disease**.

Both **residential and home services aged care providers** need to be aware that older people, especially those with comorbidities such as heart disease, are more likely to suffer from severe clinical and physical problems associated with extreme heat events. **Older people living in the community may be at an even higher risk of heat exhaustion/stress, especially those who live alone without frequent contact from others**.

Key advice: prioritise and monitor.

1. Ensure that your workforce is aware of the individual vulnerabilities of elderly people they care for, and that they know to **prioritise and monitor** the most vulnerable people during extreme hot weather events.
2. Create a **vulnerable people list** to identify and record care recipients at particular risk such as those who:
    - live alone or with other vulnerable people.
    - are socially isolated and may not have family and friends available to check on them frequently or help in case of an emergency.
    - have cognitive impairment, which may reduce awareness of situations and ability to respond, problem solve, or identify and communicate their discomfort or thirst.

    - take certain medications—such as allergy medicines (antihistamines), blood pressure and heart medications (betablockers), fluid tablets (diuretics) and antidepressant or anti-psychotic medications.
    - have an alcohol or other substance use.
    - have mobility problems or another disability and may not be able seek help.
    - live in certain environmental settings that make them more at risk of heat stress e.g., no air conditioning or other cooling means, or a home that is particularly hot.
3. Have an **action plan** in place for each vulnerable person that includes strategies for reducing and minimising their exposure to extreme heat, and also contains information about who needs to be contacted if the individual becomes unwell in an extreme heat event and requires medical attention.
4. Remind staff to check that care recipients minimise the time they spend outside during extreme heat events, that their clothing is appropriate, that they have **access to adequate fluids** such as water, and that cooling devices are working and switched on. If no air conditioning is available, a fan blowing with a wet sheet or towel in front of it (not over it) can be highly effective for cooling the air.
5. Educate care staff to enable them to **recognise any deterioration** in a person's condition due to heat, and how to provide first aid and an emergency response for heat exhaustion/stress, dehydration, and heat stroke.

Clinical assessment

A **clinical assessment is required** if a care recipient shows any signs of deterioration. The effects of heat-related illnesses can range from mild to very serious signs and symptoms (see lists below) and can progress quickly.

If you are concerned about a care recipient's wellbeing in a heatwave, you should act. Depending on your level of concern, you should call a family member, and/or the person's general practitioner or another medical professional, or emergency services.

Heat stroke and heat exhaustion/stress

These two heat-related illnesses exert different physical effects on a person's body, but each can be dangerous, especially for older people.

- Heat exhaustion, also called heat stress, is related to dehydration (not getting enough non-alcoholic fluids such as water) and a person's cardiovascular system struggling to pump blood through the body.
- Heat stroke occurs when a person's body temperature gets so dangerously high that it begins overheating tissues and organs.

Elderly people are much more likely to be affected by heat exhaustion/stress.

Heat exhaustion/stress

Heat exhaustion/stress is the body's response to an excessive loss of water and salt, usually through profuse sweating. People taking fluid tablets or on fluid restrictions may be unable to recognise and respond to thirst and are particularly vulnerable. Drinking too much water can also be dangerous, so monitoring the amount and colour of urine is important. The optimal level of water consumption should ensure that urine is light yellow.

Drinks with high levels of sugar, caffeine, and alcohol should be avoided.

Symptoms of heat exhaustion can include:

- headache
- nausea
- dizziness
- weakness
- irritability
- thirst
- heavy sweating
- elevated body temperature
- decreased urine output.

Heat stroke

Heat stroke occurs when a person's body can no longer control its temperature: their body temperature rises rapidly, their sweating mechanism fails, and they are unable to cool down. When heat stroke occurs, body temperature can rise to 40°C or higher within minutes. This can cause permanent disability or death if the person does not receive emergency treatment.

Symptoms of heatstroke can include:

- reduced sweating
- high body temperature (above 40°C)
- dry, flushed, hot skin.
- nausea
- muscle spasms
- pain throughout the body
- unusual behaviour or signs of confusion
- seizure or loss of responsiveness.

Further information

Department of Health and Aged Care: Are you prepared to manage older peoples' health during heatwaves?

Bureau of Meteorology: heatwave information

NSW Health: Beat the heat

NT Health: Heat stress

Frequently asked questions about Heat wave in an aged care context

What is a heatwave[4]?

Three days or more of high maximum and minimum temperatures that is unusual for that location.

What is heatwave severity based on?[5]

Every location across Australia has its own unique climatology of heat. The bulk of heatwaves at each location are low intensity with local communities expected to have adequate adaptation strategies for this level of thermal stress. Less frequent, higher intensity heatwaves are classified as severe and will challenge some adaptation strategies, especially for vulnerable sectors such as aged or the chronically ill. Even rarer and exceptionally intense heatwaves are classed as extreme and will challenge many normally reliable sectors, including power and transport infrastructure and anyone who does not adopt protective adaptation strategies.

What is heatwave intensity?

Heatwave intensity is a function of the maximum and minimum temperature over a three-day period and how this relates to climatology at every location, including how this function has changed over the last thirty days.

Heatwaves are classified into three types, based on intensity.

- **Low-intensity heatwaves** are more frequent during summer. Most people can cope during these heatwaves.
- **Severe heatwaves** are less frequent and are likely to be more challenging for vulnerable people such as the elderly, particularly those with medical conditions.
- **Extreme heatwaves** are rare. They are a problem for people who do not take precautions to keep cool – even for people who are healthy. People who work or exercise outdoors are also at greater risk of being affected.

[4] Australian Institute for Disaster Resilience - Disaster Resilience Knowledge Hub Accessed 21/8/23.

[5] Ibid

Risks to human health in Australia[6]

Severe and extreme heatwaves have claimed more lives than any other natural hazard in Australia.

The bulk of heatwaves at each location are of low intensity, with most people expected to have adequate capacity to cope with this level of heat. Less frequent, higher intensity heatwaves are classified as severe and will be challenging for some more vulnerable people, heatwaves can be dangerous because they post health risks to the most vulnerable people, such as the elderly and young children.

Extreme heatwaves are a risk for anyone who does not take precautions to keep cool, even those who are healthy. Heatwaves can also affect the transport, agriculture and energy sectors and associated infrastructure.

Why are heat waves a problem?

Heat waves can cause people to become ill, and sometimes die. Heatwaves are most dangerous if they occur early in the summer season, if they last for several days, and if they include hot nights.

Heat waves can cause fatigue, heat rash, heat cramps, heat exhaustion, and heat stroke. Heat exhaustion and heat stroke can lead to death.

Heat waves also cause death by causing a worsening of existing health problems, especially heart or lung disorders.

Who is most at risk?

In an aged care service, all clients are at risk of heat-related illness.

Older people living at home alone.

Those most at risk are[7]:

- Aged 65 years or older, are overweight or obese and people with a chronic disease, such as heart disease, high blood pressure, diabetes, cancer, or kidney disease.
- Are unable to care for themselves, have limited mobility or confined to bed.
- Have a health condition that impairs sweating, such as scleroderma, or extensive scarring from burns, have a diagnosis of dementia or psychiatric illness.
- Are receiving medications that interfere with the body's ability to regulate body temperature.

[6] Australian Institute for Disaster Resilience - Disaster Resilience Knowledge Hub Accessed 21/8/23

[7] ibid

Why are older people at risk during heatwaves?

Older people have a reduced ability to adapt to summer heat and are more prone to heat stress. They are more likely to have a combination of factors, including the effects of ageing, chronic medical conditions, and disability, taking prescribed medication, and social factors.

Age-related changes can reduce the sweating response to hot weather and older people may not drink enough to keep themselves hydrated. Chronic illnesses associated with an increased risk of death during heatwave occur more often in older people. These illnesses and the medications used for their treatment may affect normal responses to heat, mobility, and awareness of a hot environment or the ability to care for oneself.

Many older people live alone and are unable to reach help during a heatwave.

Our Bodies Response to Heat

How is the human body affected by heat?

Normal body temperature varies by person, age, activity, and time of day. The average normal body temperature is generally accepted as (37°C). Some studies have shown that the "normal" body temperature can have a wide range, from (36.1°C) to (37.2°C). [8] ;

The human body generates heat from muscle activity and metabolism of food. The body can lose heat to the environment in cooler circumstances and gain heat from hot surroundings.

The temperature of the skin determines heat loss or gain, and the body normally cools itself by sweating. Sometimes sweating is not enough and the body temperature rises.

What are the effects of hot weather on human physiology?[9]

Fatigue, dehydration, and heat-related illnesses can be caused by hot weather. People may become lethargic as the body reduces heat producing muscle activity and appetite is suppressed by the brain to reduce heat from the metabolism of food.

Dehydration can occur when fluid intake does not match fluid loss. Even mild dehydration is associated with increased risk of injury and heat-related illness. Mild to moderate dehydration increases work for the heart. It also reduces fluid available for sweating, and to circulate to extremities or flush the kidneys.

Heat-related illness occurs when the body is unable to adequately cool itself. Heat-related illness can range from mild conditions, such as rash, cramps or escalate to serious conditions such as heat exhaustion or heat stroke, which can be potentially fatal. Heat may worsen the condition of

[8] Body temperature norms US National Library of Medicine via Medline Plus Medical Encyclopedia accessed 21.08.23

[9] Emergency preparedness in residential aged care - heat health - health. Vic Accessed 21/8/23

someone who already has a medical condition, particularly cardiovascular disease, and respiratory disease. Prevention is the best way to manage heat-related illness.

How does heat impact health?[10]

Heat gain in the human body can be caused by a combination of external heat from the environment and internal body heat generated from metabolic processes. Rapid rises in heat gain due to exposure to hotter than average conditions compromise the body's ability to regulate temperature and can result in a cascade of illnesses, including heat cramps, heat exhaustion, heatstroke, and hyperthermia.

Deaths and hospitalizations from heat can occur extremely rapidly (same day) or have a lagged effect (several days later) and result in accelerating death or illness in the already frail, particularly observed in the first days of heatwaves. Even minor differences from seasonal average temperatures are associated with increased illness and death. Temperature extremes can also worsen chronic conditions, including cardiovascular, respiratory, and cerebrovascular disease and diabetes-related conditions.

Heat also has important indirect health effects. Heat conditions can alter human behaviour, the transmission of diseases, health service delivery, air quality, and critical social infrastructure such as energy, transport, and water. The scale and nature of the health impacts of heat depend on the timing, intensity and duration of a temperature event, the level of acclimatization, and the adaptability of the local population, infrastructure, and institutions to the prevailing climate. The precise threshold at which temperature represents a hazardous condition varies by region, such as humidity, wind, local levels of human acclimatization and preparedness for heat conditions.

Some heat-related illnesses and common symptoms[11]

Heat Illness	What to Look For	What to Do
Heat cramps are muscle pains or spasms, usually in the abdomen, arms, or legs. They may occur after strenuous activity in a hot environment, when the body gets depleted of salt and water. Heat cramps may also be a symptom of heat exhaustion.	Heavy sweating with muscle pain or spasms	Move to a cool place. Drink water or a sports drink. Get medical help right away if cramps last longer than 1 hour or the person affected has heart problems
Heat exhaustion is a serious condition that can develop into heat stroke. Warning signs may	Heavy sweating Cold, pale, and clammy skin Fast, weak pulse	Move to a cool place, loosen tight clothing. Cool the body using wet cloths, misting, fanning or a cool

[10] WHO Heat and Health – How does heat impact health? Accessed 21.8.23

[11] Red Cross Extreme Heat Preparedness Check-list Accessed 21.8.23

include a pale complexion and sweating, rapid heart rate, muscle cramps and weakness, dizziness and headache, nausea, vomiting or fainting.	Nausea or vomiting Muscle cramps Tiredness or weakness Dizziness-Headache-Passing out	bath. Sip water slowly. Get medical help right away if: Vomiting occurs. Symptoms last longer than 1 hour or get worse. Confusion develops
Heat stroke is a life-threatening emergency and requires urgent attention. Heat stroke occurs when the body is unable to prevent the temperature rising rapidly. Widespread organ injury may occur. The symptoms may appear the same as for heat exhaustion, but the skin may be dry with no sweating and the person's mental condition worsens. They may stagger, appear confused, have a seizure, appear to have a stroke or collapse, and become unconscious.	High body temperature (40°C or higher) Hot, red, dry, or damp skin Fast, strong pulse Headache-Dizziness Nausea-Confusion-Passing out	Call 000 right away, then: Move to a cool place. Cool the body using wet cloths, misting, fanning or a cool bath. Do NOT give the person anything to drink
High Risk Medication: Clients' blood levels that may require more frequent monitoring for some drugs due to the possibility of drug toxicity death12.during hot weather. Commonly used medicines that may significantly increase the risk, examples are antibiotics, anti-arrhythmics, anti-hypertensives, anti-fungals, ephedrine and pseudoephedrine, anticonvulsants, diuretics, and interferons[13]		The above symptoms and actions apply to pharmacologically induced heat illness . Other symptoms may also apply such as increased risk of sunburn, and inability to sweat

[12] *J Clin Pharm Ther.* 2015 Aug; 40(4):363-7. doi: 10.1111/jcpt.12294. Epub 2015 Jun 13. Medicines can affect thermoregulation and accentuate the risk of dehydration and heat-related illness during hot weather. Accessed 21.8.23

[13] http://www.healthhype.com/drug-fever-drugs-and-substances-that-raise-body-temperature.html Accessed 21.8.23

Heat impacts on health

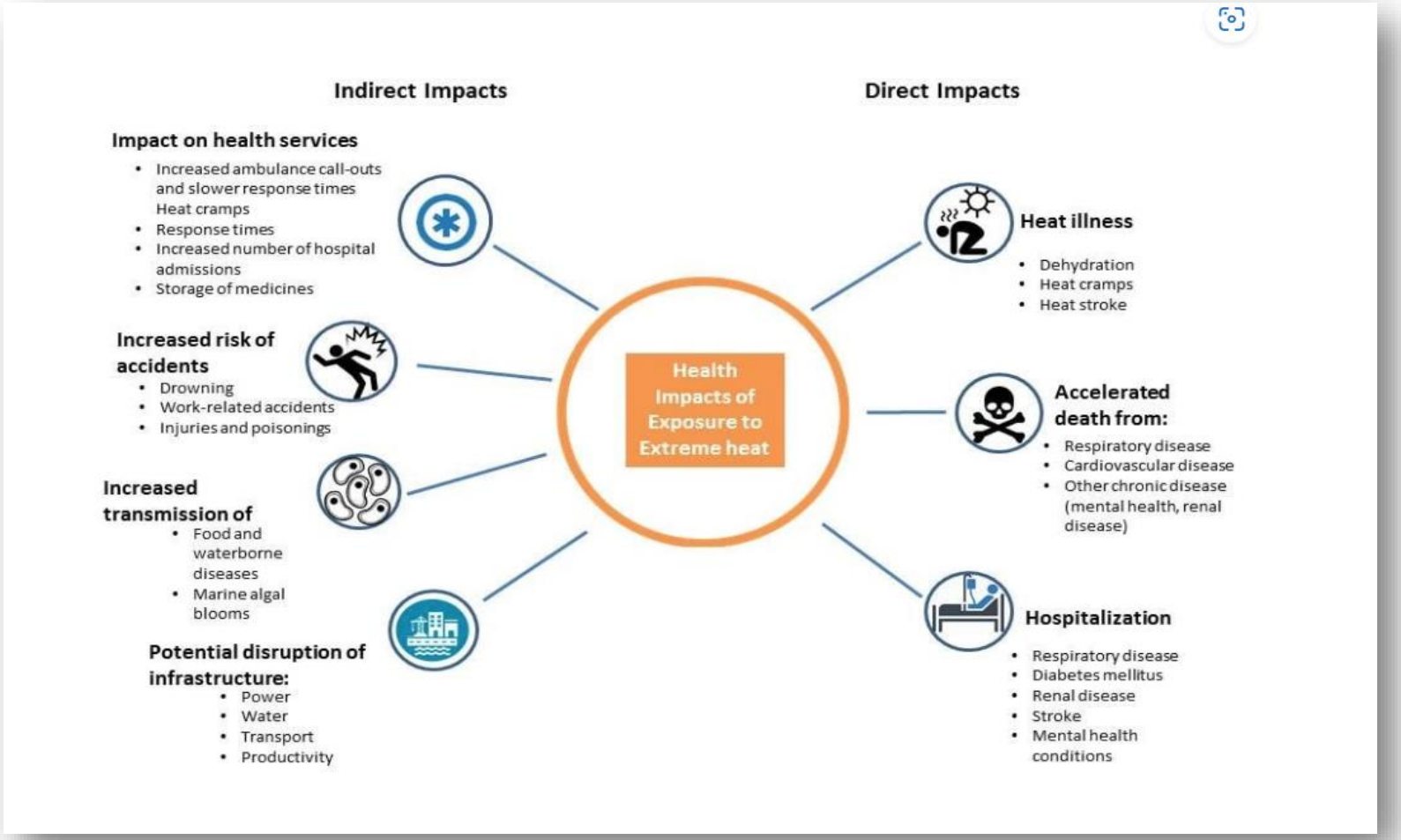


Figure 1 Health impacts of heat (WHO) accessed August 2023

PART 2: Standard Operational Risk Controls

Image NSW heatwave: Sydney the hottest place on Earth Daily Telegraph

What we do at Whiddon

Standard operational risk controls for the management of extreme heat

Whiddon has in place a number of standard operational risk controls to ensure a comfortable environment is provided for clients, visitors, and staff.

- Staff have read and understand their roles and responsibilities in relation to client care and the environment.
- Staff can access this plan and clinical and emergency management plans and this plan in the event of a power failure. There are hard copies available.
- Generators are in place in some services to ensure continuity of power supply. Where there is no generator, an agreement is in place for emergency supply and installation of portable power generation.
- An annual "Staying Healthy in the Heat" audit is undertaken and acted upon if gaps are identified in heat wave preparation.
- There is a Whiddon weather 7 day forecast alert email sent daily to the DCS. The forecast is monitored and acted upon if extreme temperatures are noted. Heatwave forecast conditions are acted upon by the following strategies:
- The details of an extreme hot weather forecast are communicated to staff, volunteers, clients, and their families by use of available tools such as communication books, handover, AutumnCare messaging, noticeboards, and fliers.
- Staff are assigned responsibilities for monitoring procedures such as ensuring clients are kept adequately hydrated and temperatures are monitored etc.
- Contingency measures are in place to deal with potential power outages during periods of extreme heat. Checks are conducted of the backup power supply / generator (if applicable).
- Contact numbers for essential service providers, maintenance personnel and staff are accurate Staff have access to MyStaffroom instructions and operational manuals.
- Volunteers and visitors including contractors, who may be affected by extreme heat, are offered drinks and an opportunity to rest in a cool environment.
- A local method is in place to ensure an increased availability and supply of cool drinks for clients, staff, and visitors during periods of extreme hot weather by involving catering service in planning and preparing for warmer weather.
- Stock levels are appropriate so that access to water, ice, icy-poles, ice cream, jellies, custards, and thickened/texture modified drinks, and cooling foods, are available throughout potentially hot periods. The use of drinks rounds, offering additional fluids through drinks, fruit and ice confections and supply is available for clients, staff, and visitors.
- The summer menu which has high-water content meals are light during hot weather and reduces the need for hot ovens and hot food.
- The Food Safety Plan is followed closely to ensure food safety storage requirements.

- Client's usual patterns of fluid intake, preferred fluids, ability to access fluids, ability to drink fluids, need for aids such as straws and special cups is known and a component of their care plan. Consumption of alcoholic or caffeinated beverages is monitored to reduce dehydration risks. Clients taking diuretics (fluid tablets) are monitored and/or discussed with their general practitioner. Referral to other health practitioner is actioned if required.
- Emergency contact numbers for general practitioners, family, and other emergency services are up to date and available.
- We ensure Clients have an adequate supply of light, loose fitting cotton clothing to wear in hot weather and activities programs are adjusted for hot weather events, particularly if scheduled outdoor events coincide with hot weather days; client exposure to heat during peak times and includes consideration of bus and car temperatures; trip schedules /outings are revised.
- Staff know how to use air conditioning, refrigerators, fans, including backup responses in case of power failure how to keep themselves cool well while working in extreme heat.
- Fire Safety Training and Evacuation Drills are undertaken twice per year.
- Reverse cycle air conditioning is changed to cooling at the commencement of warm weather, or after winter. There are maintenance programs and repair contracts for air conditioning equipment. There are emergency provisions and backup systems available in case of power failure.
- Staff are aware of and understand the limitations of relying on fans during hot weather; fans not being effective in cooling a person down on very humid days and when the indoor air temperature exceeds 35°C; and that a fan may help when the indoor temperature is less than 35°C. Fans are not used in closed rooms where windows and doors are shut and never used to blow air directly onto a person when the indoor air temperature is above 35°C.
- The amount of opening and closing of refrigerator / cool room/ freezer doors in extreme heat is minimised to ensure performance of refrigerators and freezers. There is a maintenance program in place to maintain refrigerators and freezers.
- Emergency food and fluid supplies are in stock and in date. Stock on hand is appropriate to cover unexpected needs or supply shortages. Emergency and business continuity plans include alternative services and suppliers in the event of disruption, including generators.
- Heatwaves often accompany other extreme weather events; this guide should be used in conjunction with standard operational procedures and risk controls that are in place to manage the work and living environment, emergency procedures and business continuity activities.

High Risk Medications:

Clients' blood levels that may require more frequent monitoring for some drugs due to the

possibility of drug toxicity death[14].during hot weather. Commonly used medicines that may significantly increase the risk, examples are antibiotics, anti-arrhythmic, anti-hypertensives, anti-fungal, ephedrine and pseudoephedrine, anticonvulsants, diuretics, and interferons[15]

Medications are stored and transported at appropriate temperatures, as indicated by manufacturer's instructions; not left in direct sunlight, medications storage in the event of extended power failure is considered.

Living Environment Considerations

- One of the most significant impacts to the climate within a building is its initial position, design, and structure.
- Heatwaves rarely occur in isolation. Infrastructure failure or other natural emergencies can add another level of stress on services.

Considerations leading into a heatwave period.

- There are adequate supplies of suitable drinks and ice blocks. Clients that require fluids to be thickened have suitable cool drinks that can be given.
- The menu is appropriate for extreme heat conditions. Food storage is adequate.
- Medication and medical supplies are stored in suitable conditions and will not spoil.
- Garden and maintenance buildings do not have unnecessary flammable liquids such as paints, methylated spirit etc. in quantities and there is adequate ventilation.
- Fuel should not be stored with incompatible substances (e.g., fertilisers and combustible materials). The fuel should be stored away from ignition sources (naked flames, grinder sparks, welding areas, work areas where electrical or mechanical equipment is used)
- Fuel should be stored in a location separate from residential care buildings.
- Maintenance such as grass cutting, edging or anything that creates a spark/ ignition source should not be undertaken during extreme heat. This may affect scheduled work.

Flammable substances

- Flammable liquids or combustible substances must be kept in the lowest practical quantity at the workplace.

---

[14] *J Clin Pharm Ther.* 2015 Aug; 40(4):363-7. doi: 10.1111/jcpt.12294. Epub 2015 Jun 13. Medicines can affect thermoregulation and accentuate the risk of dehydration and heat-related illness during hot weather.

[15] http://www.healthhype.com/drug-fever-drugs-and-substances-that-raise-body-temperature.html

- Flammable liquids include petrol, ethanol, methylated spirit, paint thinners, kerosene, acetone, and diesel.
- Flammable substances includes both full and empty gas cylinders.
- Combustible substances include dust, fibres, fumes, mists, or vapours produced by the substance, like heating oil, engine oil and vegetable oil, as well as timber products, plastics, and dry grasses.

Risks from flammable or combustible substances[16]

- Even small quantities of flammable liquid vapours may ignite and cause serious injury and damage, especially when the vapours accumulate in poorly ventilated rooms or closed containers, they may explode.
- Importantly, changes in temperature and pressure can affect the properties of flammable or combustible substances.
- One litre of flammable liquid – when fully evaporated – may produce 5,000 litres of an explosive vapour / air mix, enough to fill a small storeroom or garage.

Considerations to reduce heat impact.

- Maximise breeze when temperatures are comfortable through use of windows.
- Never have windows that do not open.
- Ensure there is adequate Insulation in roof, walls, and floors.
- Double glaze and/or tint glass windows and doors.
- Minimise car parking spaces and concreted areas close to buildings.
- A lighter colour roof will assist in the reflection of heat.
- Plant trees to create shade on and around the building.

Considerations for keeping existing buildings cool.

- Developing cool garden space adjacent to building.
- Plant trees to create shade on and around the building.
- Use water features, gardens, and indoor plants.
- Creating external shading using non-metal blinds/coverings, trees, leafy plants.
- Sealing doors and windows to prevent heat entry.

[16] Flammable substances | SafeWork NSW Accessed 21.8.23

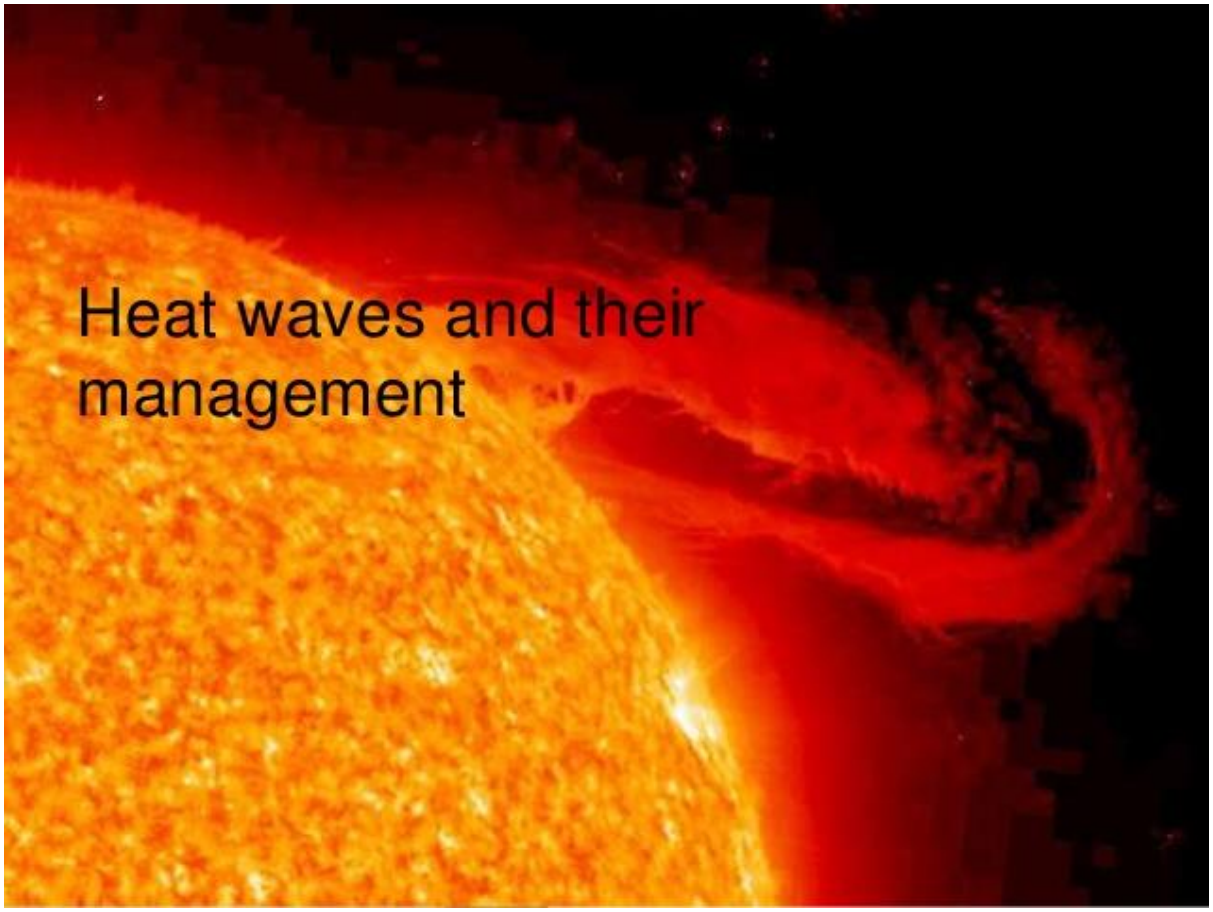
- Monitoring heat entry during periods of extreme heat.
- Ventilation of roof to allow the outflow of heat built up in the roof space.
- Using light reflecting paints and building materials.
- Double glazing for domed skylights.
- Replacing heat producing lights to low temperature LED lights.

Building & equipment maintenance in heat wave preparedness context.

- Poorly maintained plant underperforms and adds strain to plant and power requirements.
- Air-conditioning plant should; regularly serviced and filters cleaned.
- Fans such as ceiling fans should; serviced and clean.
- Generators should be recently tested and have fresh fuel/ diesel available.
- Refrigerators and freezers should function at maximum efficiency; be serviced and well-sealed.
- Automatic doors should be regularly serviced and well-sealed.
- Exterior doors should be well sealed with a draft stopper to prevent heat entering around the door. Window coverings should be of block out level of cover and in good condition.

PART 3: Heat wave response –

The Heat Wave Management Plan



Image; M. Pavithra Dept. of Agronomy TAM

Activate the Staying Healthy in the Heat Plan

The three phases of the Staying Healthy in the Heat Plan.

Phase 1 Standard Operational Risk Controls

Activities in preparation for these events occur all year and are outlined separately. They involve.

- Living environment controls
- Plant and equipment controls
- Communications - Staff, clients, and visitor's awareness controls.

An awareness campaign with information should occur. The flyers at the back of this document should be made available on noticeboards. Heat safety should be mentioned in client, staff, and family meetings.

Operational controls.

- The daily email seven (7) day whether forecasts should be closely monitored during peak times, especially commencing November until February each year, although these times may change.

Before the commencement of summer, The DCS/ Manager or delegate should conduct the

- Annual Staying Healthy in the Heat Service Assessment and ensure any action required is taken before the commencement of summer season.

Phase 2 Activation of the Plan

If any of the following conditions occur, the Staying Healthy in the Heat Plan should be activated by the DCS for the Service:

- The daily temperature is predicted to remain at or above 35° via the email alert. This will be flagged yellow in the email alert.
- The Bureau of Meteorology (BOM) or Department of Health issues a hot weather warning.
- The local conditions are unseasonably hot or humid (particularly important at the commencement of summer as people have not become acclimatized to the heat).

If this plan is activated an 'extreme weather' event should be recorded in eQstats

Phase 3 Stand Down

The DCS/ Manager will:

- Announce Stand Down when it has been determined that the activation of the Staying Healthy in the Heat Plan is no longer required, that is, that temperatures have dropped as the period of sustained high temperatures has passed.
- Advise decision to Stand Down and cessation of Staying Healthy in the Heat Plan

- Arrange for service debrief(s) to review response operations.
- Develop and document in eQstats a continuous improvement plan linked to the eQstats extreme weather event. The plan will show mitigation steps of risks that may have arisen and WH&S diligence.

Residential Aged Care Service – management of heatwaves

Caring for Older People in Warmer Weather[17]

High temperatures are often experienced across Australia every summer and you must be alert to the possibility of heatwaves.

Residential care providers need to be particularly aware of the severe hazards associated with extreme heat events. Care recipients may not understand the danger of being outside in the heat for too long.

Heatwave checklist

To assist the comfort of care recipients and meet responsibilities under the *Aged Care Act 1997*, the department has created a checklist which may be useful in considering the activities to undertake during a heatwave.

It is useful to display this checklist as a reminder for your staff during summer months.

Clinical assessment

A clinical assessment will be required if a care recipient shows any signs of deterioration. The effects of heat-related illnesses can range from mild conditions such as a rash or cramps to serious conditions such as severe confusion or heat stroke. If you are concerned about a care recipient's wellbeing their general practitioner should be contacted immediately.

[17] Australian Government DoH -Residential Care - Caring for Older People in Warmer Weather fact sheet accessed 21.8.23

Checklist[18]

Residential Care Checklist - Before a heatwave

- ❑ Assess which care recipients are at risk - who has limited capacity to keep cool; or which areas of the facility are prone to being hot.
- ❑ Ensure entry/exit points can be monitored.
- ❑ Ensure cooling systems in the facility are adequate and working effectively.
- ❑ Ensure alternative forms of fluid, such as jelly, ice-cream or fruit juice blocks are available.

Residential Care Checklist - During a heatwave

- ❑ Ensure that the temperature in care recipients' rooms and within the facility is kept comfortable, keeping curtains and blinds closed to reduce excess heat.
- ❑ Monitor entry/exit points to avoid the unsupervised departure of care recipients during extreme heat events.
- ❑ Be aware that care recipients may be at particular risk following high overnight temperatures.
- ❑ Ensure small amounts of fluids are readily available, rather than large amounts of fluids less frequently.
- ❑ Avoid serving caffeinated or alcoholic beverages.
- ❑ Provide care recipients with frequent small meals.
- ❑ Help care recipients to keep skin covered when exposed to direct sunlight and to wear loose fitting clothing.
- ❑ Avoid taking care recipients outside between 11 am and 3pm
- ❑ Offer tepid showers or sponging.
- ❑ Look for signs of heat stress, such as nausea or changes in appearance including red, pale, or severely dry skin.
- ❑ Ask for a clinical assessment if care recipient shows any signs of deterioration.

[18] Ibid

Staff responsibilities - What to Do

Roles and Responsibilities of staff during a heat wave event – check list

DCS/ Service Manager Actions to take during excessively hot weather.[19]	Yes/ No
Monitor temperature predictions via the automated daily email alert that provides weekly forecasts	
Provide staff, client, volunteer, family, and other stakeholders with information, ensure clerical staff make the flyers at the end of this document available at the start of the summer season.	
Ensure that the annual Staying Healthy in the Heat Service assessment is completed, and any action required taken before the commencement of summer season.	
Coordinate staying Healthy in the Heat Plan operations and, as necessary, control the allocation of resources in accordance with service need.	
Activate the Staying healthy in the Heat Plan when conditions warrant and Stand Down the Staying Healthy in the Heat plan when conditions become cooler.	
Coordinate communications re activating the Staying Healthy in the Heat Plan and other related information to staff, clients, volunteers, families and visitors, contractors, and other key stakeholders.	
Coordinate the allocation of support resources during Heatwave events.	

[19] Emergency preparedness in residential aged care - heat health - health. Vic

Ensure clients are dressed in light coloured, loose-fitting cotton clothing, this could include sleeveless summer dresses, summer night wear, short-sleeved shirts, shorts, summer cotton socks.	
Ensure clients are encouraged and assisted to sip cool water or other drinks, are given ice blocks. Ensure a supply of cool drinks and ice blocks are available.	
Ensure clients are observed for any signs of physical distress such as. Rapid breathing or difficulty breathing Weakness, dizziness, fainting, nausea, vomiting. Fatigue, headache, confusion.	
Cancel outdoor activities when temperatures are excessively high or uncomfortable or if the air quality is poor. Outdoor activities can be cancelled at any time due to comfort levels but should be cancelled if the temperature is above 32°C	
If the air outside is cooler that the air inside, opening windows will allow cooler air to move inside. It is best to have a thermometer that measures indoor and outdoor temperatures, so that the correct decision can be made about opening windows. If the air is cooler outside, fans can be used to bring cooler air into a building.	
Do not use fans in rooms on days of high humidity/temperatures where windows and doors are shut, because this simply circulates the same hot air. Fans are not effective in cooling a person down on very humid days and when the indoor air temperature exceeds 35°C. A fan may help when the indoor temperature is less than 35°C. Never use a fan to blow air directly on to a person when the	

indoor air temperature is above 35°C.	
Stand down the plan when cooler conditions arrive	
DDCS/ADCS/RN/ Care Coordinator	Yes/ No
Coordinate assessment of clients for vulnerability to heat symptoms and refer to GP as necessary for advice.	
Ensure that staff keep a check that clients fluid intake is maintained.	
Liaise with medical officer for advice on clients who are taking high risk medications or who are on a fluid restriction. High risk medications are discussed in the standard operational controls in this document.	
Ensure clients are dressed in light coloured, loose-fitting cotton clothing, this could include sleeveless summer dresses, summer night wear, short-sleeved shirts, shorts, summer cotton socks.	
Ensure clients spend at least three hours in an air-conditioned space.	
Ensure that any clients displaying signs and symptoms that may be related to heat stress or illness are reported, documented, and treated immediately, including referral to GP or hospital if necessary.	
Ensure clients are observed for any signs of physical distress such as. Rapid breathing or difficulty breathing Weakness, dizziness, fainting, nausea, vomiting. Fatigue, headache, confusion.	
Support staff to provide appropriate client care in extreme heat conditions.	

Liaise with DCS re any menu changes in periods of excessively hot weather.	
Assist with securing extra resources if an extreme heat event is predicted.	
Report to their supervisor if they feel unwell.	
Do not use fans in rooms on days of high humidity/temperatures where windows and doors are shut, because this simply circulates the same hot air. Never use a fan to blow air directly on to a person when the indoor air temperature is above 35°C.	
Cancel outdoor activities when temperatures are excessively high or uncomfortable or if the air quality is poor. Outdoor activities can be cancelled at any time due to comfort levels but should be cancelled if the temperature is above 32°C	
Open windows if the air outside is cooler that the air inside to allow cooler air to move inside. If possible, measure indoor and outdoor temperatures, so that the correct decision can be made about opening windows.	
Clerical, admin team	Yes/ No
Print/ photocopy flyers at the back of this document	
Make the flyers at the back of this document known and available on noticeboards	
Make copies of this booklet available in common rooms for clients, staff, and visitors	
Maintenance Officer	Yes/ No
Ensure essential and backup equipment is maintained and in working order.	

Ensure the emergency generator (if the Service has one) is checked weekly and sufficient supplies of fuel are on hand for use.	
Immediately alert DCS or delegate of any failure of cooling equipment, including. • Air-conditioning units • Fans • Fridges and freezers • Cool rooms • Window or door mechanisms • Water supply. • Electrical supply.	
Provide assistance with implementing back up cooling mechanisms if primary cooling failure occurs, for example, placing portable fans, or cooling units in key areas, and setting up portable refrigeration units.	
Wear sunscreen and protective clothing if working outdoors.	
Schedule high exertion or outdoors tasks for coolest times during the day.	
Report to their supervisor if they feel unwell.	
Recreational / Leisure Officer	Yes/ No
Ensure the daily recreational and activities program is suitable for hot weather.	
When the Staying Healthy in the Heat Plan is activated, liaise with DCS/ADCS/ DDCS to discuss any necessary changes to the program.	

Ensure that fluids are available for clients, volunteers, family members, contractors, staff, and all people involved during activities.	
Report to their supervisor if they feel unwell.	
Care Staff	Yes/ No
Provide assistance to clients to assist them to keep cool.	
Provide assistance to ensure that clients have appropriate fluid intake.	
Alert the RN immediately if clients display any signs or symptoms of heat related illness, or if they state they feel unwell, or if their behaviour is markedly changed, or if a client is not eating or drinking.	
Ensure that fluids are available for clients, volunteers, family members, contractors, and staff.	
Report to their supervisor if they feel unwell.	
Support Staff	Yes/ No
Report any temperatures in kitchen, laundry or cleaning areas that are above 35 degrees C.	
Alert the RN immediately if a client is not eating or drinking.	
Ensure food and fluid stocks are at appropriate levels and alert DCS if more are required.	
Ensure that fluids are available for clients, volunteers, family members, contractors, and staff.	
Report to their supervisor if they feel unwell.	

Taking Action

The Staying Healthy in the Heat Wave Management Plan - Action Steps Check

RN/ Care Coordinators – actions &considerations for clients	Yes/ No
Inform Clients and their families of the likelihood of very hot weather.	
Ensure flyers at the back of this document are known and available on noticeboards	
Observe clients for signs of heat stress or heat related illnesses.	
Ensure clients going out or on leave are aware of the heat risks.	
Encourage clients to stay in the coolest areas of the building.	
Schedule extra drink rounds (drinks rounds may include cool beverages, cool desserts, high water content fruits, frozen ices, and cooling foods) throughout the day and evening.	
Clients showing signs of illness should be placed on a fluid balance chart to monitor intake. if the client is on a fluid restriction; the GP should be consulted for appropriate levels of intake during the excessively hot weather,	
Clients on medication that may potentiate their reaction to excessive temperatures, the clients GP should be consulted. Some guidance is provided in the standard operational controls of this document on which drugs are more likely to do this.	
Refer clients with heat related illness symptoms or any client who is generally unwell to their GP to hospital for review as appropriate	
Clerical, admin team – actions &considerations for clients, visitors, and staff	Yes/ No

Print/ photocopy flyers at the back of this document	
Make the flyers at the back of this document known and available on noticeboards	
Care Staff – actions &considerations for clients	Yes/ No
Inform Clients and their families of the likelihood of very hot weather.	
Make flyers at the back of this document known and available on noticeboards	
Observe clients for signs of heat stress or heat related illnesses and report these immediately to the RN.	
Encourage clients to stay in the coolest areas of the building.	
Offer extra food and fluids to encourage clients to keep up water intake (see below). Encourage clients to dress in cool, natural fibre non-restrictive clothing.	
Offer cool wipes and footbaths.	
Leisure Staff –actions &considerations for clients	Yes/ No
Inform Clients and their families of the likelihood of very hot weather.	
Observe clients for signs of heat stress or heat related illnesses.	
Liaise with DCS/ Manager in relation to the activities program in extremely hot weather to avoid placing additional heat stress on clients	
Maintenance Officer – actions &considerations for clients and others	Yes/ No

Monitor • Air-conditioning units • Fans • Fridges and freezers • Cool rooms • Window or door mechanisms • Water supply. • Electrical supply	
All Staff – actions &considerations for family, volunteers, and visitors	Yes/ No
Inform volunteers, visitors, and families of the likelihood of very hot weather.	
Ensure cooling non-caffeinated fluids are available for volunteers, visitors, and family members. Assist volunteers, visitors, or family members if they display signs of heat related illness	
DCS/ Managers –actions &considerations for the staff team	Yes/ No
Ensure staff are informed of the Staying healthy in the Heat Service Plan and the requirements of their roles	
Ensure roster is appropriate during activation of the Staying Healthy in the Heat Service Plan	
Ensure that staff are taking breaks in cool areas and have access to cooling fluids and foods.	
If staff members develop signs of heat stress or heat related illness, assist them to recover and or seek medical advice	
All staff –actions &considerations for the staff team	Yes/ No

Know your role and follow the action steps during periods of excessive heat.	
Ensure that you take sufficient breaks in a cool spot.	
Ensure you increase their intake of cooling non-caffeinated fluids	
Wear protective clothing and sunscreen if going outdoors	
Schedule high exertion or outdoors tasks for the coolest part of the day	
Report to your supervisor if feeling unwell.	
Take care of yourself![20]	
Stay out of the sun	
Avoid travelling in the hottest part of the day	
Spend at least three hours in an air-conditioned space	
Have plenty to drink	
Avoid strenuous activity	
Environmental – actions & considerations	**Yes/ No**
Monitor internal temperatures throughout the service throughout the day, report to DCS if. • Temperature is elevated. • Cooling equipment is failing.	

[20] ibid

• Airflow is compromised	
Ensure blinds and curtains are kept drawn to prevent heat entering building	
If air-conditioners in use, ensure doors and windows are closed.	
If windows are being used as ventilation and for cooling, ensure they are open and secured so they cannot fall and injure people.	
Ensure client safety if windows are to be left opened. Discuss with the team how to monitor this	
Review the standard operational risk controls listed in this document	
Review the common myths and misunderstandings in relation to heat management listed in this document	
Food and Fluids – actions & considerations	Yes/ No
Provide cooling non-caffeinated fluids. Consider extra fluid rounds if necessary.	
Provide jellies, ice blocks, ice-creams, and high-water content fruits frequently.	
Provide cool light meals during periods of extreme heat.	
Ensure all clients have access to water and appropriate drinking vessels.	
For clients who require assistance with eating or drinking, ensure assistance is given between meals as well as at mealtimes	

Home Care/CHSP Service – management of heatwaves

Caring for Older People in Warmer Weather[21]

High temperatures are often experienced across Australia every summer and you must be alert to the possibility of heatwaves.

Service providers need to be particularly aware of the severe hazards associated with extreme heat events. Older people living in the community may suffer from heat stress and those who live alone without regular contact from others may be particularly at risk.

Heatwave checklist

To assist the comfort of care recipients, and to meet responsibilities under the *Aged Care Act 1997*, the department has created checklists which may be useful in considering the activities you may need to undertake during a heatwave.

Clinical assessment

A clinical assessment will be required if a care recipient shows any signs of deterioration.

The effects of heat-related illnesses can range from mild conditions such as a rash or cramps to serious conditions such as severe confusion or heat stroke.

If you are concerned about a care recipient's wellbeing their general practitioner should be contacted immediately.

[21] Australian Government DoH - Caring for Older People in Warmer Weather Home Care CHSP accessed 21.8.23.

Checklist

Community Care Checklist - Before a heatwave

- ❑ Assess which care recipients are at risk—who has limited capacity to keep cool; or which homes are prone to being hot.
- ❑ Check cooling systems in care recipients' homes are adequate and working effectively.
- ❑ Ask relatives and friends to ensure care recipients are cool and comfortable and appropriately dressed on hot days.
- ❑ Offer extra support to care recipients where family and friends are not available to help.
- ❑ Provide contact details of your care recipients to the local emergency services, where appropriate.

Community Care Checklist - During a heatwave

- ❑ Continue to deliver care—source additional staff or volunteers if required.
- ❑ Be aware care recipients may be at particular risk following high overnight temperatures.
- ❑ Keep curtains and blinds closed in care recipients' homes to reduce excess heat.
- ❑ Make small amounts of fluids readily available to care recipients.
- ❑ Provide alternative forms of fluid and discourage alcoholic or caffeinated beverages.
- ❑ Encourage care recipients to eat frequent small meals.
- ❑ Encourage care recipients to wear loose fitting clothing, use sunscreen and keep skin covered when exposed to direct sunlight.
- ❑ Encourage care recipients to seek shade when outside, and to avoid going out between 11 am and 3 pm
- ❑ Offer additional tepid showers or sponging.
- ❑ Look for signs of heat stress, such as nausea, and changes in appearance including red, pale, or severely dry skin.
- ❑ Ask for a clinical assessment if care recipient's condition deteriorates.

•

Part 4: Myths and misunderstandings about heat[22]

Myth 1: We often have hot weather in Australia, so it will not hurt us.

FACT: Heatwaves do cause illness and death in Australia

Even though we experience a lot of hot weather in Australia, heatwaves are still dangerous for many people in our community. A little-known fact is that heatwaves have caused more deaths in Australia over the past 200 years than floods or cyclones.

In January 2009, a heatwave in Victoria led to 374 more deaths than expected for that time of year, with most of these deaths being of those aged over 75 years.

People who are most vulnerable to harm from heatwaves are older people or the very young, those who are already unwell or frail, those who have a reduced ability care for themselves, those who live alone and have little social contact, and those who have limited access to resources such as air conditioners, shelter, transportation, cool spaces, and drinking water.

People at risk during hot weather include those:

Aged 65 years and older.

With chronic medical conditions

Who have a physical or mental disability.

Take some medications, e.g., those for high blood pressure or mental illness.

Myth 2: One hot day won't do any harm.

FACT: One hot day can be dangerous, especially if it occurs early in summer or before summer commences.

Studies have shown that even one very hot day, especially if occurring early in the summer, and if followed by a hot night, can be very dangerous. It is important not to be complacent, even if summer has not started. Heatwaves tend to produce more severe impacts in the early summer season, as acclimatisation increases people's ability to cope with heat later in the season.

Myth 3: The temperature needs to be really high to be a danger to health.

FACT: The temperature does not need to be very high to be a danger to health:

Studies in Melbourne have shown that the average temperature over 24 hours is the most

[22] Heatwave information for residential aged care-10 common myths and misunderstandings - heat health - health. Vic

important temperature measure. In Melbourne, it has been found that the death rate of older people increases when the mean temperature over a 24-hour period (that is, the average of the daytime maximum temperature and the minimum temperature of the following night) reaches 30°C, even if this occurs for just one day. An increase in death rates is also seen when there are elevated night-time temperatures. Therefore, even a day that is not extremely hot can be dangerous if followed by a hot night.

Myth 4: Old people often say they feel cold rather than hot, so they are less likely to be harmed by hot weather.

FACT: Older people are at risk of illness and death during heat waves even if they are not aware of feeling overly hot.

Even if a resident says they are not hot and may dress for cooler weather; the important thing to keep in mind is the ambient temperature to which they are exposed. Heat loss from the skin may be trapped by excessive layers or thickness of clothing, so residents should have suitable clothes for hot days. Relatives and friends can help by ensuring residents have an adequate supply of loose, cotton, light coloured clothing for day and night wear, as well as a sun hat.

Myth 5: When an older person is not thirsty, they do not need to drink any more in hot weather.

FACT: Older people still need to drink extra fluids during hot weather even if they do not feel thirsty.

Age-related changes are known to decrease the amount of fluid older people drink in response to feeling thirsty. It is important to provide drinks that are palatable, and to make sure they are readily available and accessible. Icy-poles, ice chips or jelly may provide an alternative source of liquid. Some older people may require drinking aids such as straws and special cups or may require thickened liquids on the advice of dieticians and/or speech therapists. A few simple measures may increase the opportunity for an older person to frequently sip a drink during hot weather, decreasing the chance of dehydration.

Some people may be on fluid restricted diets, in which case it is important to discuss their ideal fluid intake during hot weather with their doctor.

Myth 6: Windows should always be kept closed on hot days and then opened at night.

FACT: Regardless of the time of day, if the air outside is cooler that the air inside, opening windows will allow cooler air to move inside.

It is best to have a thermometer that measures indoor and outdoor temperatures, so that the correct decision can be made about opening windows.

Myth 7: Older people who have an air conditioner are safe in the hot weather.

FACT: People who have air conditioning may not actually use it.

In past heatwaves in other countries, it has been found that many older people who died had.

Air conditioners but did not actually use them. Older people may not use an air conditioner

because they are worried about the cost of electricity, or they do not know or cannot remember how to use the air conditioning.

Spending time in a cooler space for as long as possible on a hot day is very important since this is known to be protective against heat-related illness. Taking the time to help an older person use their air conditioner may be lifesaving.

Knowing where the coolest space in a building is and relocating to that space is useful.

Myth 8: Fans keep the air cool.

FACT: Fans move air around but do not cool the air.

A fan by itself cannot cool the air, only an air conditioner or a cool breeze can do this. 'Fans' includes ceiling and portable fans, not evaporative coolers.

Fans move air across our skin and help to speed up the evaporation of sweat, which can help to cool us down. This process is less effective if the weather is very humid, and if the indoor temperature of the air rises above 35°C.

Remember:

Fans do not cool the air; they just move the air around.

Fans only help to cool people down by moving cooler air into a room and by causing sweat to evaporate.

If the air is cooler outside, fans can be used to bring cooler air into a building.

Fans are not effective in cooling a person down on very humid days and when the indoor air temperature exceeds 35°C. A fan may help when the indoor temperature is less than 35°C.

Do not use fans in rooms on days of high humidity/temperatures where windows and doors are shut, because this simply circulates the same hot air.

Never use a fan to blow air directly on to a person when the indoor air temperature is above 35°C.

Myth 9: If a room is dark, it will be cool.

FACT: A dark room can still become very hot.

Sitting in a dark room with the windows shut and the curtains and blinds drawn may be cool for a while but can become dangerously hot. Also, a darkened room can increase the risk of a person falling and may create confusion for those with dementia.

If possible, monitor the temperature of a room and compare this to the temperature outside. If it is cooler outside, open the windows and doors to allow cooler air in. Ensure a suitable drink is nearby to allow regular fluid intake.

Myth 10: Young, fit people will not be harmed by hot weather.

FACT: Young, fit people can become ill during a heatwave.

Anyone can become ill if exposed to hot weather, especially if they are very active, don't drink enough, and are not in the shade.

If you are a career of an older person, it is important that you also look after yourself by drinking adequate fluid, wearing a hat and loose-fitting, light- coloured clothing, staying indoors during the hottest part of the day, and spending several hours in a cool environment.

Statutory Compliance

Aged Care Act 1997 (Cwlth) and Quality of Care Principles 2014

Work Health and Safety Act 2011

Work Health and Safety Regulations 2011 (QLD)

Work Health and Safety Regulations 2017 (NSW)

Resources used in the development of this document,

ClAdaptNSW | Climate change impacts on heatwaves |

Australian Government Bureau of Meteorology

Australian Institute for Disaster Resilience - Disaster Resilience Knowledge Hub

Bureau of Meteorology Special Climate Statements

Australian Government DoH -Residential Care - Caring for Older People in Warmer Weather

Australian Government DoH - Caring for Older People in Warmer Weather Home Care CHSP

Body temperature norms National Library of Medicine via Medline Plus Medical Encyclopedia

Emergency preparedness in residential aged care - heat health

Extreme Heat Preparedness Checklist (redcross.org)

Flammable substances | SafeWork NSW

Health Hype - Drug Fever – Drugs and Substances that Raise Body Temperature [1] **http://www.healthhype.com/drug-fever-drugs-and-substances-that-raise-body-temperature.html**

How-to-prepare-for-a-heatwave.pdf (redcross.org.au)

Legal-obligations/employer-business-obligations

National Library of Medicine National Center or Biotechnology Information *Journal Clinical Pharmacy Therapy.* 2015 Aug; 40(4):363-7. doi: 10.1111/jcpt.12294. Epub 2015 Jun 13. Medicines can affect thermoregulation and accentuate the risk of dehydration and heat-related illness during hot weather.

The American National Red Cross Heatwave Safety Checklist

World Health Organisation Public Health Advice on preventing health effects of heat

WHO Heat and Health – How does heat impact health?

(All sites accessible as at 15/11/23)

Heat wave checklist for clients and families

Source - [Heatwave_checklist.pdf (nsw.gov.au)]

How to prepare for a heat wave

❏ Listen to local weather forecasts and stay aware of upcoming temperature changes.

❏ Plan to avoid exposure to direct sunlight as it can increase the risk of the heats effect. .

❏ Prepare for the possibility of power outages, ❏ Make sure vehicles have fuel.

❏ Ensure home and car air conditioners are in good working order with the filters cleaned.

❏ If you do not have air conditioning, choose places you could go to for relief from the heat during the warmest part of the day (schools, libraries, theatres, malls).

❏ Be aware that people living in urban areas may be at greater risk from the effects of a prolonged heat wave than are people living in rural areas & quality of air may be affected. People with respiratory problems may have difficulties.

❏Have some Icy-poles, ice chips or jelly as an alternative source of liquid. Have drinks available in your vehicle if you go out.

❏ Ensure that you consider others in the family such as those who are disabled, young, or elderly, that their needs are met, and that they have plenty of fluids available & accessible. .

❏ Ensure that pets & animals have water and shade available

What to do during a heat wave

❏ Listen to ABC Radio for critical updates from the Bureau of Meteorology

❏ Never leave children, pets in, or alone in enclosed vehicles.

❏ Stay hydrated by drinking plenty of fluids even if you do not feel thirsty. Avoid caffeine or alcohol. Eat ice blocks or ice chips.❏ Eat small meals and eat more often.

❏ Wear loose-fitting, lightweight, light- coloured clothing. No dark colours they absorb the sun's rays.

❏ Use air conditioning. ❏Fans may help if indoor temperature is less than 35°C, but NOT above 35°C.

❏Keep windows and curtains shut if the outside temperature is higher than the inside temperature.

❏Do not use fans in rooms on days of high humidity/temperatures where windows and doors are shut, because this simply circulates the same hot air. If the air outside is cooler that the air inside, open the windows.

Flyer for Staff / Heat Wave Safety

Dehydration: Mild to moderate dehydration makes the heart work faster and leads to reduced fluid available for sweating. DO drink plenty of water and keep cool to prevent heat stress.	
Symptoms: • Dizziness & tiredness • Irritability' • Thirst • Bright or dark yellow urine • Loss of appetite • Fainting	What to do – first aid Drink plenty of water or diluted fruit juice (1-part juice in 4 parts water) and avoid tea, coffee, or alcohol. Have an ice block. Move somewhere cool, ideally air-conditioned. If possible, use a spray bottle with water to cool yourself down. If you start to feel unwell, seek medical advice
Heat cramps: usually affects people who sweat a lot during strenuous activity (e.g., sport or gardening). The sweating causes the body to lose salt and water. The low salt levels in the muscles may be the cause of heat cramps and they can be a symptom of heat exhaustion.	
• Symptoms: • Muscle pains • Muscle spasms	What to do – first aid /Stop all activity ; lie in a cool space, legs slightly raised Drink water or diluted fruit juice (1-part juice in 4 parts water) Have a cool shower or bath. Massage limbs to ease spasms, apply cool packs. Rest until a few hours after the cramps subside. (Exertion may lead to heat exhaustion/heat stroke). Seek medical advice if there is no improvement
Heat exhaustion: the body's response to an excessive loss of water and salt contained in sweat. If heat exhaustion is not treated, it can turn into heat stroke	
Symptoms: Heavy sweating (cool and moist skin), pale skin Fast and weak pulse rate. Shallow and fast breathing. Muscle weakness or cramps. Tiredness and dizziness. Headache, fainting. Nausea or vomiting	What to do – first aid / Move to a cool place, ideally air-conditioned and lie down. Remove excess clothing /Take small sips of cool fluids. Take a cool shower, bath, or sponge bath. Put cool packs under armpits, on the groin, or on the back of the neck to reduce body heat. If symptoms worsen or if there is no improvement, seek urgent medical advice and call an ambulance if necessary
Heat stroke: is a life-threatening emergency and occurs when the body temperature rises above 40.5°C. Immediate first aid is important, aim to lower body temperature as quickly as possible	
Symptoms: Sudden rise in body temperature Red, hot, and dry skin (sweating has stopped) Dry swollen tongue, rapid pulse Rapid shallow breathing Intense thirst, headache Nausea or vomiting Dizziness or confusion Poor coordination or slurred speech Aggressive or bizarre behaviour Loss of consciousness, seizures, or coma	What to do – first aid / Immediately call 000 and ask for an ambulance Move into the shade, lay the person down, keep them as still as possible. Give small sips of cool fluids if conscious and able to drink. Bring their temperature down using any method available (sponging with cool water, cool shower, spraying with cool water from garden hose or soaking clothes with cool water) Put cool packs under armpits, on the groin, or on the back of the neck to reduce body heat. Do not give aspirin or paracetamol; they do not help and may be harmful. If unconscious, lay the person on their side (recovery position) and check they can breathe properly. Perform CPR if needed

How to prepare for a heat wave

❑ Listen to local weather forecasts and stay aware of upcoming temperature changes.

❑ Plan to avoid exposure to direct sunlight as it can increase the risk of the heats effect.

❑ Prepare for the possibility of power outages, ❑ Make sure vehicles have fuel.

❑ Ensure home & car air conditioners are in good working order with the filters cleaned.

❑ If you do not have air conditioning, choose places you could go to for relief from the heat during the warmest part of the day (schools, libraries, theatres, malls).

❑ Be aware that people living in urban areas may be at greater risk from the effects of a prolonged heat wave than are people living in rural areas & quality of air may be affected. People with respiratory problems may have difficulties.

❑Have some Icy-poles, ice chips or jelly as an alternative source of liquid. Have drinks available in your vehicle if you go out.

❑ Consider others in the family such as those who are disabled, young, or elderly, that their needs are met, and that they have plenty of fluids available & accessible. .

❑ Ensure that pets & animals have water and shade available

What to do during a heat wave

❑ Listen to ABC Radio for critical updates from the Bureau of Meteorology

❑ Never leave clients, children, pets in, or alone in enclosed vehicles.

❑ Stay hydrated by drinking plenty of fluids even if you do not feel thirsty. Avoid caffeine or alcohol. Eat ice blocks or ice chips.❑ Eat small meals and eat more often.

❑ Wear loose-fitting, lightweight, light- coloured clothing. No dark colours they absorb the sun's rays.

❑ Use air conditioning. ❑Fans may help if indoor temperature is less than 35°C, but NOT above 35°C.

❑Keep windows and curtains shut if the outside temperature is higher than the inside temperature.

❑Do not use fans in rooms on days of high humidity/temperatures where windows and doors are shut, because this simply circulates the same hot air. If the air outside is cooler that the air inside, open the windows.


Whiddon