



Merri-bek
City Council

Extreme Heat Subplan

Merri-bek City Council

2023 - 2026



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Acknowledgement of Country

Merri-bek Municipal Emergency Management Planning Committee (MEMPC) acknowledges the Wurundjeri Woi-wurrung people as the Traditional Custodians of the lands and waterways in the area now known as Merri-bek. We pay respect to their Elders past, present, and emerging, as well as to all First Nations communities, who significantly contribute to the life of the area.

Version Control

This Sub-plan should be evaluated on an annual basis and reviewed every 3 years by the Extreme Heat Coordination Group and the MEMPC.

Date	Version	Page #	Description	Amended by
01/06/2010	V1	ALL	Construction of original document	Creative Environment Enterprises
1/10/2012	V2.0	ALL	Review and Update	Andrew Day
1/11/2012	V2.1	ALL	Action Plan updated in accordance with MEMPC endorsement	Andrew Day
1/10/2013	V2.2	ALL	Review and Update – Name details	Andrew Day
1/11/2014	V2.3	ALL	Review and Update – Name details	Samantha Sharp
3 /02/16	V3	ALL	Complete reformat to align with revised MEMPC	Samantha Sharp
23/12/2018	V3.1	ALL	Review and Update	Zoe Smith
5/11/2020	V3.2	ALL	Review and Update	Eliza Tipping James Boyce DFFH
24/11/2021	V3.3		Review and Update <ul style="list-style-type: none"> - Removed duplicate detail to MEMP & Contact Directory - Updated agency names/detail - Updated links to other plans 	Eliza Tipping
28/10/2022	V3.4	All	Review and Update <ul style="list-style-type: none"> - Moreland City Council to Merri-bek City Council - Updates – DHHS to DFFH - Updated branding and cover pages. - Acknowledgement of Country added 	Martha Martin
12/12/2022	V3.5	10 10 13 14 14	Updated with new BOM procedures Role of Chief Health Officer UHIE added People with disabilities More information in table re: CALD groups	Martha Martin
24/11/2023	V4.0		Full rewrite and review	Martha Martin

MEMPC Endorsement

This document has been adopted by the members of the Merri-bek City Council Municipal Emergency Management Planning Committee as representatives and with authority of their agencies on the:

13th February 2024

The signature below indicates that this document has been approved for release under the delegation of the Unit Manager Environmental Health on behalf of the Municipal Emergency Management Planning Committee

Stephen Meloury

Unit Manager Environmental Health

Acronyms/Glossary

Acronym	Full Title
BCP	Business Continuity Plan
Black out	Total loss of power to a wide area for a long period of time
BoM	Bureau of Meteorology
Brown out	Drop in the magnitude of voltage in an electrical power system
CALD	Culturally and Linguistically Diverse
CEO	Chief Executive Officer
CEOC	Council Emergency Operations Centre
CERA	Community Emergency Risk Assessment
CHO	Chief Health Officer
CHSP	Commonwealth Home Support Program
COM	City of Merri-bek – Geographic Municipality that this plan covers
DEECA	Department Energy, Environment and Climate Action
DFFH	Department of Families, Fairness & Housing
DH	Department of Health
DJSIR	Department Jobs, Skills, Industry and Regions
EHCG	Extreme Heat Coordination Group
EHF	Excess Heat Factor
EMV	Emergency Management Victoria
ERV	Emergency Recovery Victoria
FRV	Fire Rescue Victoria
HACC	Home and Community Care
HESP	State Emergency Management Plan: Health Emergencies Sub-Plan
HR	Human Resources
LGA	Local Government Area
MCC	Merri-bek City Council
MEMO	Municipal Emergency Management Officer NEW
MEMP	Municipal Emergency Management Plan
MERC	Municipal Emergency Response Coordinator
MEMO	Municipal Emergency Management Officer
MRM	Municipal Recovery Manager
OHSR	OHS and Risk
SEMP	State Emergency Management Plan
SES	State Emergency Service
VicPol	Victoria Police

Framework

This document is a risk-based sub plan of the City of Merri-bek Municipal Emergency Management Plan (MEMP). Background information on the municipality and detailed information on supplementary emergency management arrangements can be found in the MEMP. The sub -plan aligns with and should be read in the context of the following documents that are available on the Merri-bek City Council Website:

State Plans

- [State Extreme Heat Sub Plan](#)
- [State Health Emergency Response Plan](#)
- [Heat Health Plan for Victoria](#)

Resources

- [Extreme heat and heatwaves \(health.vic.gov.au\)](#)
- [Heatwave Knowledge Centre \(bom.gov.au\)](#)

Within a legislative context, this plan complies and aligns with the following legislation:

- [Emergency Management Act 2013 \(legislation.vic.gov.au\)](#)
- [Local Government Act 2020 \(legislation.vic.gov.au\)](#)
- [Public Health and Wellbeing Act 2008 \(legislation.vic.gov.au\)](#)
- [Climate Change Act 2010 \(legislation.vic.gov.au\)](#)
- [Planning and Environment Act 1987 \(legislation.vic.gov.au\)](#)

Municipal Plans

- [Municipal Emergency Management Plan \(merri-bek.vic.gov.au\)](#)
- Merri-bek Municipal Emergency Relief and Recovery Plan
- [Merri-bek's council plan](#) (Inclusive of Municipal Public Health and Wellbeing Plan)
- [Merri-bek Climate Risk Strategy](#)
- [Climate Risk Foundational Action Plan 2023 - 2025](#)
- [Urban Heat Island Effect Action Plan](#)

Municipal Policies/Plans

- Business Continuity Plan - D21/145242
- Departmental Heat Management Plans
- Heat Management Procedure - D20/517153

Background

In 2023 the Merri-bek Municipal Emergency Management Planning Committee identified Extreme Heat as a **high** risk in the municipality via the Community Emergency Risk Assessment (CERA). It is anticipated that extreme heat will likely occur in the geographic area of the City of Merri-bek.

The Extreme Heat Plan provides an overall framework for Council's planning, preparation, response and recovery in relation to extreme heat and activation of this plan.

Aim

The aim of the Sub-plan is to detail the municipal arrangements for the coordinated preparation, mitigation, response, and recovery to extreme heat events impacting the community, infrastructure, environment, and services.

The plan provides a staged approach to extreme heat which includes:

- Ensure health information and support is readily available to the community, particularly those identified as being vulnerable or at risk during extreme heat.
- Develop and enhance partnerships and collaborative arrangements to better respond to extreme heat.
- Increase staff awareness of the effects of extreme heat and implement internal processes across council program areas to manage essential service provision.
- Encourage and develop long term and sustainable approaches to encourage behaviour change to minimise the impact of extreme heat to communities.

Heatwaves

Sometimes called the “silent killer”, extreme heat events have caused more deaths than any other type of natural disaster in Australia. In addition to causing serious illness and fatalities, extreme heat events can influence our infrastructure, economy, agriculture, social cohesion, and biodiversity. As the climate continues to warm, extreme heat events are becoming hotter, longer, and more frequent.

A heatwave is a period of unusual and uncomfortable hot weather that could negatively affect human health, and community infrastructure (such as the power supply and public transport) and services.

Clearly defining heatwaves is difficult. Factors such as humidity, demographics, urban or rural design issues and acclimatisation mean that similar temperatures might have a different impact in different environments or communities. As a result, there is no single internationally accepted definition of a heatwave.

Thresholds for the declaration of a heatwave are in accordance with the National Heatwave Warnings Framework (2022) and the activation of heatwave plans differ depending on certain geographical factors. Due to the impact of climate change, the frequency and intensity of heatwaves in Victoria are expected to increase in the future. In January 2009, during a prolonged state-wide heatwave, temperatures were amongst the highest ever recorded in the state, and in January 2014 the state endured a four-day heatwave that also had significant impact on health.

Heat and Climate Change

Merri-bek City Council declared a Climate Emergency in September 2018. It is recognised that climate change has the potential to adversely affect our environment, communities and economy unless action is taken to reduce greenhouse gas emissions and move toward a low carbon economy. Further information about the impacts of climate change and heat can be found in the [Merri-bek Climate Risk Strategy](#) and [Climate Risk Foundational Action Plan 2023 - 2025](#).

Urban Heat Island Effect

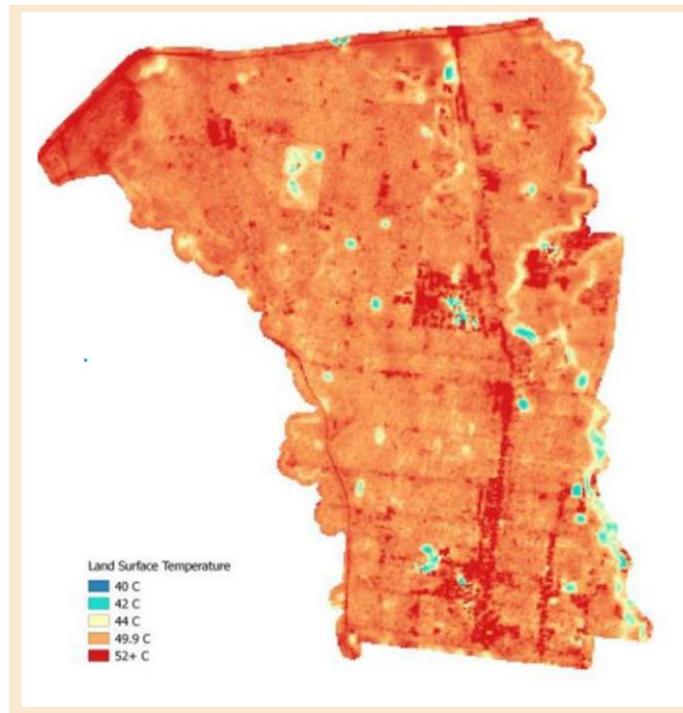
Merri-bek City Council has been identified as an area which is prone to the Urban Heat Island Effect (UHIE) which means hot days are hotter for longer. This is caused through several factors including:

- A high percentage of solid surfaces e.g., asphalt and concrete – these surfaces absorb, trap and re-radiate heat. This prevents rainwater soaking into the soil, reducing water available for plants, which in turn reduces evaporative cooling.
- Limited vegetation - reduces shading and cooling through evaporation from plants through leaves.
- Urban development pressure – creates denser urban environments that trap heat and removal of green areas reducing cooling.
- Construction materials which hold heat and have low reflectivity – e.g., terracotta tiles, bricks, bitumen and concrete - these materials absorb, trap and re-radiate heat.
- Heat production from the activities of people – produced by vehicles, split system air conditioners etc.

- Air pollution – that creates a local ‘greenhouse’ effect trapping heat.¹

Merri-bek’s [Urban Heat Island Effect Action Plan](#) notes that Glenroy and Coburg are among the Melbourne suburbs most at risk due to a combination of extreme heat and social vulnerability.

The map below indicates areas within Merri-bek which may be more susceptible to the UHIE. (Mapping from 2014)



Extreme Heat Vulnerability Profile

Everyone is at risk of harm during extreme heat events if appropriate precautions are not taken. Extreme heat events can cause death and seriously affect thousands of people. As well as the health impacts of such events, there can also be social and cultural impacts (which may mean social contact depending on the person and their situation), economic impacts, a natural and a built environment impact.

Most people have the knowledge, ability, and capacity to look after themselves in the heat and will respond appropriately to public health messages. However, many peoples’ capacity to respond to the extreme heat is impaired for a variety of reasons. An understanding of who is the most vulnerable to extreme heat events allows targeted action to assist those most in need. The following table outlines the most vulnerable groups in the municipality and how extreme heat events may affect them:

Vulnerability	Reason for vulnerability in an extreme heat event
Aged (over 65)	Ability to perceive and adapt to temperature variation declines with age as does perception of hydration resulting in vulnerability to heat stress and illness

¹ Merri-bek City Council Urban Heat Island Effect Action Plan – Page 5

Vulnerability	Reason for vulnerability in an extreme heat event
	High likelihood to have at least one, if not multiple other vulnerabilities
Overweight or Obese	Greater mass to surface ratio makes it harder for the body to cool down
Pregnant and breastfeeding women	Greater body mass to cool, higher than normal hydration needs, and hormonal variation can affect perception of heat and hydration
Babies, Infants, Children	Ability to perceive and adapt to temperature variation is still developing. Children may not be able to undertake adaptive measures on their own.
Chronically ill	Ability to perceive and respond (consciously and unconsciously) to environment impaired. Particularly medical conditions that affect the cardiovascular, respiratory, renal, and endocrine systems or thermoregulation capacity
Limited or poor mobility	Less able to adapt to physical environment to make it cooler or to seek cool respite
People with disabilities	Some people with disabilities may be at more risk of heat related illness including people who have difficulties with eating and drinking and people with an intellectual or physical disability.
People taking certain medications	Some medications may interfere with temperature regulation
CALD groups	Multiple and complex barriers in accessing health services and community messages. Newly arrived migrants and refugees may have difficulty understanding warnings and weather and climate conditions.
Low socio-economic status	May have restricted use of, or limited access to, air-conditioning
People living alone or who are socially isolated	May not have the support systems in place to cope during the heat.
Homeless and housing insecure	Difficulty in accessing relief from the heat (cool places) and health services
Outdoor workers and outdoor event goers	Difficulty in accessing relief from the heat (cool places), inaccessibility of water
Anyone else who cannot find relief from the heat for at least 2 hours per day	2 hours relief provides the body with critical recuperation time ² . Factors such as poverty and/or social isolation can impair the ability for a person to find relief from the heat for at least 2 hours per day.

Demographic Snapshot

The demographics of the area include:

The population of Merri-bek Council is 173, 541 people, with 32.9% of the population born overseas. Merri-bek is home to 1,088 First Nations people.

Over 50 different languages are spoken in homes with 34.5% speaking a language other than English: Italian (5.8%), Arabic (4.5%) & Greek (4%); Urdu (2.2%), Nepali (2.2%), Turkish (1.8%), Mandarin (1.7%), Spanish (1.2%), Vietnamese (0.9%) and Hindi (0.6%).

There are 6.5% of the population reported needing assistance with activities of daily living and 7.3% of residents are over the age of 70 and 2.7% over the age of 85.

² Heat Health Plans, WHO Europe, 2006

The geographical areas of Merri-bek Council differ in disadvantage and advantage. Glenroy, Hadfield and Fawkner are identified as having a higher level of disadvantage in comparison to Brunswick and Brunswick East and West.

The municipality is mainly made up of residential properties (72,000) including high density areas consisting of 31 registered boarding houses, 2556 Homes Victoria owned properties and 220 community housing properties.

Industrial and business usage is 10% and 23% reserved for open space and public use.

Business

Merri-bek has a variety of businesses and industries located within the area. The top five local industries include Construction (16.5%), Professional Scientific and Technical Services (14.7%), Transport, Rental, Hiring and Real Estate (9.3%). Merri -bek also has the longest shopping strip in the Southern Hemisphere and various other retail precincts throughout the suburbs

Consequences of extreme heat

Extreme heat events can cause significant harm to the individuals, groups and communities. The types of harm caused by extreme heat events include:

- Illness, injury or fatality
- Displacement of population from housing estates
- Decreased economic activity
- Disruption to public transport and electricity supply (including blackouts and brownouts)
- Increased Council staff absenteeism
- Increased anti-social behaviour
- Increased probability of fires
- Increased severity in the consequences of concomitant emergency events
- Stress to parks and gardens
- Stress and injury to domestic animals and wildlife
- Increased demand on medical and social facilities

Impact on physical health

When the surrounding temperature is higher than skin temperature the only effective heat-loss mechanism is sweating. Therefore, any factor that reduces the effectiveness of sweating can cause the body to overheat. The following table outlines the three types of heat-related illnesses:

Heat related illness	Symptoms
Heat cramps	Usually muscle pains or spasms, commonly occurring in the abdomen, arms or legs and may be a symptom of heat exhaustion. Heat cramps may occur after strenuous activity in a hot environment, when the body gets depleted of salt and water.
Heat exhaustion	A serious condition that can develop into heat stroke. Someone experiencing heat exhaustion may appear pale and sweating. They may have a rapid heart rate, muscle cramps, weakness, dizziness, headache, nausea, vomiting or fainting.
Heat stroke	<u>A life-threatening emergency.</u> It occurs when the body temperature rises above 40.5°C. The symptoms may be 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 fit or collapse and become unconscious.

Extreme heat events can also aggravate existing medical conditions.

Impact on Social Behaviour

Extreme heat has an impact on social behaviour. Research has shown the following may impact individuals during extreme heat, thus causing issues around mental health and psychological wellbeing:

- Heat affects biochemistry and can alter the production of serotonin and dopamine
- Raises the core temperature of our body
- Impacts the ability to sleep and get good quality sleep – insomnia
- Increases irritability and can heighten anxiety levels
- Can trigger stress responses
- Can affect a person's cognitive function
- Can affect the ability to maintain activities of daily living at home, work etc.
- Increase in the consumption of alcohol and illicit drugs

Evidence is beginning to emerge that drought and extreme heat events lead to higher rates of self-harm and suicide, as much as 8 per cent higher.

Impact on Infrastructure

Extreme heat events can impact on infrastructure including roads, train and tram tracks, and overhead power lines. This includes overhead power lines sagging, power failures or blackouts impacting the operation of electrified trains, trams and traffic signals. Infrastructure stress compounds stress on the community, economy, and services. There are significant flow on implications, particularly for those managing their heat stress with air-conditioning. Mass stranding of public transport passengers may also occur if outages are enough to disrupt transport services.

Under the State Emergency Management Plan (SEMP), there are two Sub-plans which support extreme heat events:

- [Energy Sub Plan](#)
- [State Public Transport Distribution Sub-plan](#)

Impact on Economy

Extreme heat can restrict the productivity of workers, particularly those working outdoors or in heat-exposed jobs. This can cause decreased labour productivity causing an increase in costs and changes in the workplace to mitigate risk to staff.

Outages of infrastructure and utilities can constrain economic productivity and growth of the economy, as business may suspend, or products become unavailable for consumption. Individuals may also find themselves in economic hardship if they are dependent on costly methods of cooling (e.g., air conditioning).

Impact on the Natural Landscape

Merri-bek has natural landscapes located along the waterway corridors. Due to the extent of urbanisation, these landscapes are small and an extreme heat event in Merri-bek could reduce the health of the water and amount of vegetation along these corridors.

Impact on Wildlife and Pets

Wildlife and pets may be susceptible to heat related stress and illness. Animal owners should consider a range of solutions to prepare and protect animals during extreme heat. These include:

- Bring pets inside
- Ensure there is shade outside for pets
- Don't leave pets in garages, sheds or cars on hot days
- Ensure pets have water that is clean, fresh and topped up

- Refrigerate pet food
- Avoid walking dogs during the middle of the day and don't walk dogs on asphalt on hot days
- Older and long-haired animals can be more susceptible to the effects of heat
- If pets show signs of lethargy, excessive panting or breathing problems, put pets in a cool (but not icy cold) bath, if they do not improve take them to the vet
- Provide containers of water in your garden for birds and wildlife to drink from.

Impact on Business Continuity

A heat event could disrupt business operations and services across the municipality. Businesses should have processes and procedures in place which enable an effective response to a heat event or a power outage.

Considerations for business continuity include:

- Increased staff absenteeism
- Staff fatigue and heat stress
- Power outages leading to suspension or cessation of works and service delivery
- High demand on air-conditioned facilities
- High demand on social services
- Impaired ability to undertake outdoor work
- Cancelled public transport services
- Increase in anti-social behaviour

Stakeholders Roles and Responsibilities

In the City of Merri-bek, a range of stakeholders have important roles and responsibilities regarding extreme heat planning, preparedness, response, and recovery.

Emergency Management Commissioner

The Emergency Management Commissioner undertakes the Control function for Extreme Heat Events. At times the Commissioner may appoint a State Controller-Heat.

Victoria Police

In an extreme heat event, Victoria Police undertake the Municipal Emergency Response Coordination (MERC). As extreme heat events may impact infrastructure, such as electricity generation and distribution or transport failure, as well as human health impacts, Victoria Police will play a key role in ensuring appropriate coordination responses are conducted at the municipal level.

Bureau of Meteorology

The Bureau of Meteorology will issue heatwave warnings on their public channels when ten percent or more of a weather district is in a severe or extreme heatwave based on the Excess Heat Factor (EHF). These warning will be issued up to four days prior to the event. The warnings will appear on the website <http://www.bom.gov.au/> or via the app <http://www.bom.gov.au/app/>

Chief Health Officer

The Chief Health Officer (CH) may also issue a Heat Health Alert when the forecast minimum temperatures do not meet the criteria for a Bureau of Meteorology warning but the CHO considers a heat health risk exists.

Department of Health

Individuals and service providers can register to receive Heat Health Alerts and other health alerts and advisories via the Victorian Chief Health Officer alerts and advisories subscription service which can be found at: <https://www2.health.vic.gov.au/newsletters>. The Department of Health (DH) also posts heat health alerts online: <https://www2.health.vic.gov.au/about/news-and-events/healthalerts>. DH is responsible for public health control and health system coordination.

The department may request information from Merri-bek City Council when a heat health alert is issued, such as details on specific actions undertaken by the Council.

Department of Families, Fairness and Housing

Department of Families, Fairness and Housing's (DFFH) role, under the State Extreme Heat Sub Plan, outlines the responsibility to ensure high-rise apartment buildings are equipped with electrical generators to operate core functions and elevators to ensure that tenants will be able to safely exit premises in the event of a power outage. DFFH has also identified and prepared community rooms within several housing complexes that can be maintained as cool places available to tenants during extreme heat events.

DFFH also have a role in regional relief and recovery services following an emergency.

Not-For-Profit, Community and Commercial Organisations

Not-for-profit community groups, community and commercial service providers delivering services to vulnerable people should develop their own heat management plans.

There are many not-for-profit organisations and community service providers within the City of Merri-bek that need to ensure that they support and monitor vulnerable clients during an extreme heat event and take necessary action if clients suffer heat related illness. These service providers should also ensure that their clients receive appropriate and timely information and advice in the event of extreme heat.

Merri-bek City Council

It is recognised that local government as the closest level of government to the community is often the first point of contact for assistance, advice and information. A clear and structured response to an extreme heat event is critical. For most extreme heat events, council is equipped to manage within their current operational frameworks, however a rare extreme event could result in a reallocation of resources.

Extreme Heat Planning Committee

Planning for extreme heat requires an all of organisational approach. The Extreme Heat Planning Committee is made up of internal personal and external agencies who are recognised as playing a key role in the management of extreme heat. Committee members include:

Merri-bek City Council:

- Unit Manager Environmental Health
- Unit Manager Communications
- Coordinator Emergency Management
- Municipal Emergency Management Officer
- Municipal Recovery Manager
- Unit Manager Integrity Risk and Resilience
- Climate Resilience Integration Lead

External Agencies:

- Ambulance Victoria

- Department of Health
- Department of Families, Fairness and Housing
- Merri Health
- Northern Health
- Victoria Police

The committee meets on an annual basis prior to summer to assess the Extreme Heat Plan and following legislative changes and/or an extreme heat event. The objectives of the committee are:

- Maintain the Extreme Heat Plan, policies and other plans which are consistent with the role of local government.
- Compliment Victorian and Australian legislation and frameworks, policies and plans in relation to heat.
- Develop, maintain and implement the Merri-bek Extreme Heat Plan.
- Support national and state led frameworks including recovery by representing the needs of the local community.

Heatwave Warnings

In Victoria, heat health plans are normally activated when temperatures are forecast that are likely to impact on the health of the community. These thresholds vary between different population areas mainly due to acclimatisation factors.

A Heatwave warning will be issued by the Bureau of Meteorology (BoM) when ten per cent or more of a weather district is in a severe or extreme heatwave based on the Excess Heat Factor (EHF). The EHF is based on three days of unusually high maximum and minimum temperatures for a location. Heatwave warnings will be issued up to four days prior to the event.

Heatwaves are calculated using the forecast maximum and minimum temperatures over the next three days. This information is compared to what would be considered hot for that location, and also to the observed temperatures over the last 30 days. This calculation considers people's ability to adapt to heat.

This means that in any one location, temperatures that meet the criteria for a heatwave at the end of summer will generally be hotter than the temperatures that meet it at the beginning of summer.

There are three heatwave categories based on intensity:

- Low-intensity heatwaves – Most people can cope
- Severe heatwaves – Vulnerable people at risk
- Extreme heatwaves – Everyone is at risk, even people who are healthy

The weather District for Merri-bek is the Central District.

The Chief Health Officer may also issue a heat health warning when they consider forecast temperatures pose a health risk for example a single day of extremely high temperatures.

Health Alert: Heat Health Warnings are provided through a subscription service which, although available to the public, is particularly targeted to departmental program areas, health services, local government, agency partners and service providers.

Subscription to Heat Health Warnings: [Extreme heat and heatwaves](#)

Subscribers are notified of forecast severe and extreme heat conditions that are likely to affect human health. Subscribers are asked to act in accordance with their heat health plans, monitor local weather conditions, and activate other plans such as service continuity plans, emergency management plans and occupational health and safety plans that contain heat-related actions.

The Bureau of Meteorology heatwave warning:
<http://www.bom.gov.au/vic/warnings/heatwave.shtml>

Extreme Heat Phases and Trigger Points

There are a number of phases and trigger points which may indicate the activation of this plan. The below table outlines warning trigger points which correspond to predicted extreme heat.

Phase	Trigger	Notification
Planning	An effective heatwave response requires planning to be undertaken prior to summer	
Phase 1: Notice and Preparation	Prior Notice	Heat Health Warnings issued may indicate one or more days of expected severe or extreme heat.
	36 hours' notice	<ul style="list-style-type: none"> Heatwave Local Area Plans and Heat Management Plans are activated. Employees made aware of the heat health warning. Marketing and communication activities begin with clients, external organisations, and residents. <p>Information communicated and disseminated via telephone, MCC internet and intranet, site visits and heatwave promotional material.</p>
Phase 2: Low Intensity Heatwave	1-2 days heatwave	Departmental Managed Response: All departments are monitoring the heatwave impacts, using coping strategies and resources, and keeping management, staff and clients informed of impacts and rising issues.
Phase 3: Severe Heatwave	3-4 days heatwave	Coordinated Response: Flexible working arrangement implemented if need, coordinators, and managers to ensure all impacted critical services have adequate resources and being well monitored.
Phase 4: Extreme Heatwave	4+ days heatwave	Escalated Response: <ul style="list-style-type: none"> MRM and MEMO to ensure business continuity and consider community safety needs. <p>Ensure staff and clients are implementing regular cooling strategies.</p>
Phase 5: Recovery (After extreme heatwave)	No trigger indicators in 7-day forecast	Deactivation: <ul style="list-style-type: none"> MEMO to contact relevant managers and stand down personnel, arrange debrief with relevant personnel. Review response to the heat event and record findings.

Extreme Heat Action Plan

There are a number of tasks which need to be undertaken and considered in relation to extreme heat and service provision to the community. The Heat Management Procedure (D20/517153) outlines nine key tasks to manage staffing and services. These include:

- Identifying heat illness hazards
- Controlling the risk of heat illness
- Required action on high heat days (outdoor staff)
- Personal Protective Equipment (PPE)
- If COVID 19 or Pandemic conditions – wearing a fitted/P2 face mask
- Wearing a P2 face mask for bushfire smoke
- Indoor employees – air conditioning
- Indoor employees – no air conditioning
- Training and consultation

Provision of Critical Services

Council provides a range of critical services where the disruption to the delivery of these services can have a significant adverse impact on the community. Continuity of critical services must be maintained regardless of temperature, The following services are examples of some of the services that have been identified as critical:

- Waste services
- Delivered meals preparation and delivery
- Community transport
- Personal and respite care
- Fleet workshop
- School crossing supervisors

The following tables outline Council departments and key components of their response in each stage. Departments within Merri-bek are advised to develop their own localised plan to identify minimum staffing requirements, triggers for service provision etc. This ensures service provision and business as usual is maintained in line with business continuity planning. There are five phases outlined in the Heat Action Plan which range from planning to response to recovery.

Cooling Refuges/Centres

Merri-bek does not open centres specifically used for Cooling Refuges. There are options across the municipality where residents can get some respite from the heat.

These include:

- Community swimming pools and leisure centres
- Council Libraries
- Neighbourhood houses and community centres
- Shopping Centres

MERRI-BEK CITY COUNCIL – INDOOR STAFF					
PLANNING	PHASE ONE	PHASE TWO	PHASE THREE	PHASE FOUR	PHASE FIVE
<p>Discuss heatwave planning and heatwave phases at team meetings leading up to summer.</p> <p>Departmental Local Area Plans to be revised and communicated with all staff and management.</p> <p>Identify capacity for supporting organisation wide business continuity.</p> <p>Continue with OH&S Committees.</p> <p>Communicate with staff the effects of heatwaves and coping strategies to implement.</p>	<p>Implement communication strategy.</p> <p>Manager/coordinator to communicate to all staff the heatwave threat on the same business day of receiving the heat health warning message.</p>	<p>Manager/ Coordinator to monitor council officers and resources and implement coping strategies.</p> <p>Communicate flexible working hours available, where appropriate</p> <p>Provide resources across the organisation for business continuity.</p> <p>Provide organisational support to undertake heatwave actions.</p> <p>Continue to monitor high risk and vulnerable clients.</p> <p>Staff to drink adequate amounts of liquids and keep hydrated?</p>	<p>Manager/ Coordinator to monitor council officers and resources and implement coping strategies.</p> <p>Implementation of flexible working arrangements where appropriate.</p> <p>Monitor office resources to ensure core business functions are being met.</p> <p>Provide organisational support to undertake heatwave actions and ensure core business functions are delivered.</p> <p>Consider implementation of changes in service delivery where staff maybe working through the heat of the day.</p>	<p>Continue to monitor staff and ensure heatwave coping strategies are providing relief.</p> <p>Ensure business continuity through flexible working hours where appropriate.</p> <p>Allow council officers with vulnerable family members to work from home where appropriate.</p> <p>Implementation of changes in service delivery where appropriate.</p> <p>Continue adequate information supply and communication to both internal and external organisations.</p>	<p>Managers inform team members and coordinators of a decrease in temperature and return and debrief where appropriate.</p> <p>Identify and review the effectiveness of the Heatwave Action Plan and revise where appropriate.</p> <p>Consider adequacy of service delivery and identify service gaps for future changes.</p>

MERRI-BEK CITY COUNCIL – OUTDOOR STAFF					
PLANNING	PHASE ONE	PHASE TWO	PHASE THREE	PHASE FOUR	PHASE FIVE
<p>Discuss heatwave planning and heatwave phases at team meetings leading up to summer.</p> <p>Provide a safe and healthy work environment.</p> <p>Implement and ensure compliance with OH&S policies and procedures (personal protective equipment, first aid kits, drink bottles, sun protection etc.).</p> <p>Periodically review the work area of employees and their work procedures.</p> <p>Continue with OH&S Committees.</p> <p>Issue all staff with Heat Management Procedure.</p> <p>Develop specific alternative duties for staff working during a declared heatwave.</p> <p>Assign Team Leaders and coordinators the responsibility for monitoring weather conditions.</p> <p>Provide Emergency Contact lists for all vehicles.</p> <p>Update staff manuals and ensure resources are adequately stocked.</p>	<p>Implement communication strategy.</p> <p>Issue staff email to advise we are approaching heatwave in the next 1-7 days.</p>	<p>Issue staff email to advise of the heat health warning for the next 1-2 days.</p> <p>Ensure all staff have P.P.E., sun protection and adequate drinking liquids.</p> <p>Consider implementation of changes in service delivery where appropriate</p> <p>Continue to monitor high risk and vulnerable clients.</p>	<p>Issue staff email to advise we are in a heatwave for the next 3-4 days.</p> <p>Ensure all staff have P.P.E, sun protection and adequate drinking liquids.</p> <p>Implement alternative duties where appropriate.</p> <p>Consider implementation of changes in service delivery where appropriate.</p>	<p>Issue staff email to advise we are in a heatwave for the next 4 or more days.</p> <p>Ensure all staff have adequate P.P.E, sun protection and drinking liquids.</p> <p>Implement alternative duties where appropriate.</p> <p>Consider implementation of changes in service delivery where appropriate.</p>	<p>Email to all staff advising them that temperatures have decreased and return to normal working duties.</p> <p>Conduct department debrief ensuring all resources used during heatwave are replenished.</p> <p>Identify and review the effectiveness of the Heatwave Action Plan and revise where appropriate.</p> <p>Consider adequacy of service delivery and identify service gaps for future changes.</p>

Communications

The key purpose of extreme heat communications is to generate preparedness and improve community resilience to extreme heat conditions.

State Government

DFFH has the lead responsibility for preparing messages and general information about management in an extreme heat event. Fact sheets are provided on the Department's website and the Better Health Channel website. A media toolkit has been prepared for local government. This toolkit comprises a range of electronic documents that can be used to ensure media releases are localised.

Health advice and warning messages relating to extreme heat events are prepared by the Chief Health Officer and disseminated by Department of Health and Human Services, the Bureau of Meteorology, Ambulance Victoria, service providers, health professionals and local media. Relevant Community Groups are encouraged to subscribe to the DFFH heat alert emails.

In addition to the ongoing communications tasks, the Merri-bek City Council Communications Department undertake campaigns for Facebook, twitter and Council's website to ensure that key messages can continue to be accessed by members of the community. Following are links to relevant resources:

Extreme Heat and Heatwaves

<https://www2.health.vic.gov.au/public-health/environmental-health/climate-weather-and-public-health/heatwaves-and-extreme-heat>

Heat Resources

<https://www2.health.vic.gov.au/public-health/environmental-health/climate-weather-and-public-health/heatwaves-and-extreme-heat/heatwave-community-resources>

Survive the Heat - campaigns

<https://www.betterhealth.vic.gov.au/campaigns/survive-the-heat>

Bureau of Meteorology – Heatwave Knowledge Centre

[BOM Heatwave Knowledge Centre](#)

Merri-bek City Council Communications

Council acts as a supporting agency to assist in the localised dissemination of advice and warnings. The key aim during a heatwave will be to communicate to the community the potential for hot days which may affect health and well-being and how to prepare for the event. Communication responsibilities include:

- Staff and community receive timely and accurate information about heatwaves.
- Staff receive guidelines about heatwave practices and occupational health and safety information.
- Communications remain aligned with Victorian and National communications.

Key Messages

Everyone can be affected by heat in different ways, but there are a number of people in the community more susceptible to prolonged extreme heat. The following outlines a variety of options which can be shared with Merri-bek residents and staff to create awareness about extreme heat:

Encourage people to consider how extreme heat could affect their daily activities by planning for :

- losses of electricity
- disruptions to public transport
- school and/or workplace closures
- adverse health for either them or someone they know.

Encourage people to keep out of the heat by:

- Planning their day in a way that allows them to stay out of the heat.
- Ahead of hotter weather, buy a few extra items to make sure they have enough food at home to last over the hot period.
- avoiding travel
- paying bills online or over the phone.
- staying indoors or in the shade during the hottest part of the day.
- undertaking unavoidable strenuous activities like sport, home improvements or gardening during the coolest parts of the day such as early morning.
- If outside activities are essential – stay in the shade, wear hat and light-coloured, loose-fitting clothes, preferably made of natural fibres, wear sunglasses, apply sunscreen with a sun protection factor of 30 to exposed skin and take plenty of drinking water with them.
- Ensure their pets or companion animals are also well hydrated and have plenty of shade when they are outside.

Encourage people to stay cool by:

- Looking at the things they can do to make their home cooler. E.g., installing or upgrading roof insulation, awnings, shade clothes or external blinds on the sides of their house facing the sun.
- Staying in the coolest rooms of the house.
- Reducing heat from sunlight entering through windows by using external shades or light-coloured curtains.
- Using an air-conditioner, evaporative cooler, or fan.
- Having their air-conditioner serviced before summer.
- Having an alternate way to cool their home available if their electricity fails during a heatwave.
- Ensuring there is sufficient air circulation, either from an air conditioner or by leaving a secured window or door open
- Taking cool showers and splashing themselves several times a day with cold water, particularly focusing on their face and back of neck. Wearing a loose, cotton, damp cloth, or scarf on the back of their neck can also help them to stay cool.
- Going to an air-conditioned building in their local area to cool off (see below list for options)
- Place feet in a bucket of cold water

Merri-bek's communication strategy for extreme heat has four phases:

- Pre-summer
- During summer
- Heat Health Warning and forecast extreme heat/heatwave (7 days prior to the event)
- Declared heatwave

Communication Strategy

STAGE	ACTION	TASK/STRATEGY	RESPONSIBILITY
Pre-summer	Prepare heat information and promotional material the address the need of the Merri-bek community.	<ul style="list-style-type: none"> • Review existing materials • Prepare any additional resources • Work across council to identify community groups and leaders to disseminate information. • Ensure identified at risk populations have access to information which is relevant and meets community needs. 	<p>Emergency Management Coordinator</p> <p>Community Engagement Team</p> <p>Communications</p>
	Educate the community about heat.	<ul style="list-style-type: none"> • Disseminate information via Council publications, websites and socials. • Update any community or agency registers • Conduct information sessions for community groups about heat. • Provide access to resources and education material on heat that are relevant, translated and accessible to different cohorts of the community. • Liaise with other stakeholders to ensure consistency and interoperability of extreme heat messaging and activity • Prepare or revise key heat health messages. • Provide information to service areas – Aged Care, MCH etc to share with clients and service users. • Assist vulnerable persons in developing heat health and personal emergency plans 	<p>Emergency Management Coordinator</p> <p>Communications</p> <p>Service providers</p>
	Provide information and advice to mitigate the impacts of climate change.	<ul style="list-style-type: none"> • Work with the Sustainability and Climate Team to inform the community of programs for retrofitting homes, solar etc. 	<p>Climate Resilience Lead</p> <p>Emergency Management Coordinator</p>
	Provide information to staff about heat and its impacts.	<ul style="list-style-type: none"> • Heat Management Procedure • Team meeting discussions • Grapevine posts • Provide information around heat stress, heat stroke etc. • Provide information on keeping cool, use of sunscreen etc. 	All organisation
During Summer	Promote and provide key heat health messages to the community	Promote heat health messages through internal and external communications channels (e.g., newsletters, meetings)	Communications

STAGE	ACTION	TASK/STRATEGY	RESPONSIBILITY
	Educate parents of young children about effects of hot weather on children	<ul style="list-style-type: none"> Discuss at MCH visits and new parents' groups. Display posters and distribute brochures at MCH centres, Youth Centres, Community Centres and Libraries etc., Distribute information via socials, website and newsletters etc. 	<p>MCH staff</p> <p>Youth Centre staff</p> <p>Communications</p>
	Educate older adults regarding the effects of heatwaves	<ul style="list-style-type: none"> Display information at Seniors Centres' Discuss during service provision from Aged Services, Meal Delivery and Community Transport Aged Care Newsletter Distribute information via socials, website etc. 	
Heatwave Forecast (up to 7 days prior to forecast event)	Alert people to forecast Heat Health Warning / Heatwave	<ul style="list-style-type: none"> Email to all internal staff and external key stakeholders. 	Emergency Management/MRM
		<ul style="list-style-type: none"> Alert to managers and coordinators as to warnings 	HR and Safety and Wellbeing leads
		<ul style="list-style-type: none"> Internal staff to forward alert to their stakeholders (e.g., Sporting Clubs, Seniors Clubs, Child Care Centres) 	Coordinators/Team Leaders
		<ul style="list-style-type: none"> Each departmental lead to email staff with information and advice on working in the heat 	Coordinators/Team Leaders
		<ul style="list-style-type: none"> Contact known at risk service users and groups to inform of the alert 	Relevant lead
		<ul style="list-style-type: none"> Information to be displayed on website, socials and other forms of media. 	Communications
		<ul style="list-style-type: none"> Information to be displayed on Grapevine. 	Communications
During Declared Heatwave	Alert people to the severe or extreme heat conditions and provide information on appropriate behaviour	<ul style="list-style-type: none"> Display severe or Extreme Heat Warning on Website, socials etc. Display Heat Health Warnings in key public places (e.g., Council foyers, libraries, and childcare centres) Update information on opening hours of community centres and aquatic facilities via socials and website. Update (if possible) areas which may have been affected by power shedding. 	Communications
		<ul style="list-style-type: none"> Welfare check to known service users (via telephone) who may be at risk. 	Aged Services/Community engagement
		<ul style="list-style-type: none"> Continue to update staff on services and keeping safe in the heat. 	HR and Safety

Community Support and Recovery

Any relief and recovery assistance required following an extreme heat event will be managed using the relief and recovery arrangements documented in the City of Merri-bek Municipal Emergency Management Plan (MEMP), Relief Sub-plan and Relief and Recovery Plan.

Council will also endeavour to assist the community in dealing with the psychological effects of the heatwave, i.e., loss of loved ones, disruption to work and life, fear and anxiety caused by the heatwave etc., and provide information to the community on action to prevent subsequent heat related illness.

References

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<https://www.health.vic.gov.au/publications/heat-health-plan-for-victoria>
- Emergency Management Victoria [State Extreme Heat Sub Plan](#)
- [Energy Safe Victoria \(2014\) Look Up and Live](#)
- [Merri-bek Climate Risk Strategy](#)
- Merri-bek Urban Heat Island Effect Action Plan 2016/2017 – 2025/2026
- [State Health Emergency Response Plan Edition 4](#) (SHERP4)
- The Climate Institute (2013) [The human impact of heatwaves and extreme weather](#)
- WHO Europe (2008) [Heat Health Action Plans: Guidance](#)