



# Extreme Heat Plan

January 2024



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## VERSION CONTROL TABLE

Version Number	Date of Issue	Author(s)	Brief Description of Change
1.0	July 2010	Greg Little	First version.
1.5	April 2014	Melissa Mair	General review and update.
2.0	Jan 2024	Kelly Boladeras (Emergency Management Officer)  Dominic Diocera (Community Resilience Officer)  Nola Tudball, MRM	Update to reflect all-hazards, multi-agency approach to risk management under the <i>Emergency Management Legislation Amendment Act 2018</i> ; SEMP Extreme Heat Sub-Plan; changes in heat health warnings and heat metrics.

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## PART ONE – INTRODUCTION

### 1.1 Purpose

Victoria's climate has changed in the past 100 years by becoming more than 1.0°C warmer and the number of unusually hot days has almost tripled.<sup>1</sup> Victorian climate projections indicate that these trends will continue, with estimates of a further doubling of the number of very hot days and warming of up to 2.4°C by 2050.

The Northern Grampians Shire Council (NGSC) Extreme Heat Plan (the Plan) seeks to address the impact of extreme heat on the most vulnerable in the community within the Northern Grampians municipality, including identifying mitigating actions for risk factors. This will be achieved through collaboration between organisations who already have connections with at risk populations, using a multi-agency communication strategy and action plan.

This Plan builds on the State Emergency Management Plan (SEMP) Extreme Heat Sub-Plan.

### 1.2 Policy context

The Extreme Heat Plan (the Plan) is a complementary plan of the *Northern Grampians Shire Municipal Emergency Management Plan* (MEMP). It builds on the framework outlined in the *State Emergency Management Plan* (SEMP).

The Plan outlines actions for NGSC and key stakeholders and partner agencies to plan and prepare for the impact of extreme heat for individuals and community. This includes response, relief and recovery activities.

Under the [State Emergency Management Plan](#), the Emergency Management Commissioner is the Control Agency for extreme heat events.

Heat health has been identified as a hazard by the NGS Municipal Emergency Management Planning Committee through the Community Emergency Risk Assessment (CERA) process.

### 1.3 Plan review

To ensure the Plan remains relevant and meets the changing needs of the community, it will be reviewed annually before each summer and any amendments will be used to inform an updated plan every three years.

All relevant partners will actively participate in the evaluation.

### 1.4 Aim and objectives

The aim of the Plan is to reduce the impact of extreme heat affecting vulnerable persons living in the municipality and thus save lives and/or reduce hospital admissions. This will be achieved by raising awareness of the dangers of extreme heat events as well as educating staff and community members of possible actions that can be taken before, during and after extreme heat events.

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<sup>1</sup> Information in relation to climate change has been extracted from the State Emergency Management Plan Extreme Heat Sub-Plan, Published by Emergency Management Victoria (EMV) November 2022. This information has been extracted from the Department of Environment, Land, Water and Planning. Victoria's Climate Science Report 2019. [Internet] Melbourne: Department of Environment, Land, Water and Planning; 2019. Available from [https://www.climatechange.vic.gov.au/\\_\\_data/assets/pdf\\_file/0029/442964/Victorias-Climate-Science-Report-2019.pdf](https://www.climatechange.vic.gov.au/__data/assets/pdf_file/0029/442964/Victorias-Climate-Science-Report-2019.pdf)

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The Plan:

- Identifies vulnerable or at-risk groups
- Provides information to the community to increase awareness about the dangers of extreme heat events
- Integrates the Plan with the MEMP and other emergency management processes
- Identifies, documents, and assigns tasks and the resources necessary to execute these tasks
- Establishes governance arrangements to action the Plan
- Reviews the implementation of actions undertaken

This Plan is also aligned with the following objectives of the *Heat Health Plan for Victoria (2020)*.

- Protect the health of the Victorian community from heat-related harm.
- Communicate the actions of the department to prepare for and respond to extreme heat.
- Outline preparedness and response activities for local government and the health and human services sectors to reduce the impact of extreme heat on Victorians.

## PART TWO –EXTREME HEAT AND HEATWAVES

### 2.1 Climate

Climate in the Grampians Region (the Grampians) is typified by daily mean summer temperatures ranging from a minimum of 8°C to a maximum of 29°C. Mean daily winter temperatures range from a minimum of 2°C to a maximum of 13°C.

Under climate change projections, climate risks for the Grampians include more days of extreme heat with double the number of very hot days by the 2050s (Figure 1)<sup>2</sup>. The temperature reached on hot days will increase substantially, there will be more hot days (greater than 35°C), and warm spells will last longer. Expected increases in daily maximum temperature of 0.9 to 1.8°C are projected by 2030. Rainfall will continue to be very variable over time, but over the long term is expected to continue to decline in winter and spring with extreme rainfall events expected to become more intense on average through the century.

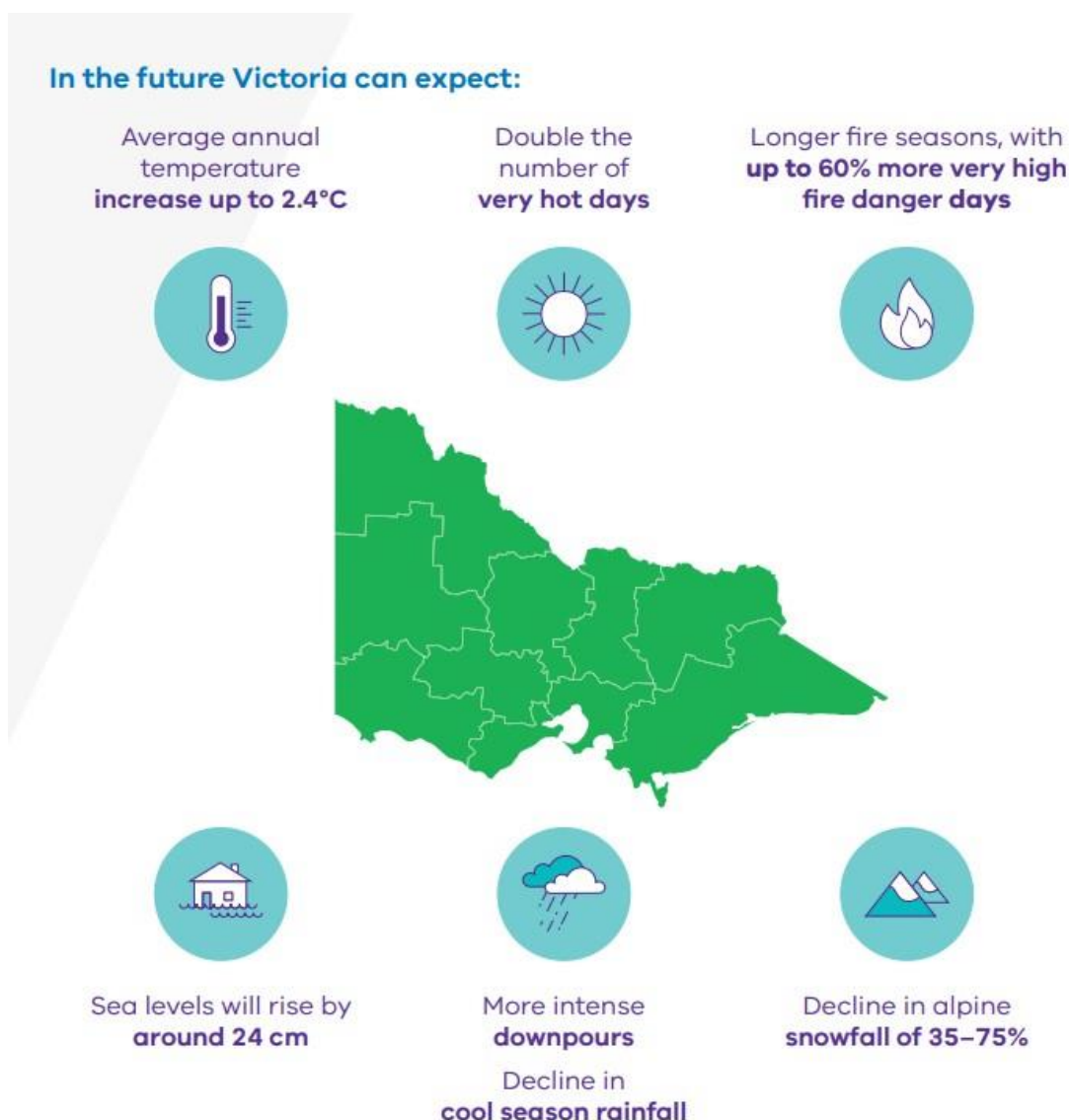


Figure 1: Summary of projected climate change impacts in Victoria by 2050s under a high emissions scenario

<sup>2</sup> Department of Health, 2020. Accessed from: <https://www.health.vic.gov.au/environmental-health/municipal-public-health-and-wellbeing-planning-and-climate-change>

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## 2.2 Extreme heat events and heatwaves

Extreme heat events include periods of high temperatures which would impact the general population and include consequences for essential services, energy and water supply, health and wellbeing, and the environment. These may include one or two days of abnormal high temperatures as well as heatwaves.

A heatwave involves three or more consecutive days of extreme heat. It can be classified as low-intensity, severe, or extreme. These levels allow for a scalable response and are determined using the Excess Heat Factor (EHF).<sup>3</sup>

## 2.3 Excess Heat Factor (EHF)

The Bureau of Meteorology (BOM) determines an impending heatwave or heat event using the Excess Heat Factor (EHF). The EHF compares the forecast maximum and minimum temperatures for each three-day period in the coming week (e.g., Monday-Wednesday, Tuesday-Thursday) to what would be considered hot for that location, and also to observed temperatures over the last 30 days.

Heatwaves are classified into three types, based on intensity:

- Low-intensity heatwaves: more frequent; most people can cope
- Severe heatwaves: less frequent, likely to be more challenging for at risk people such as older people, particularly those with medical conditions.
- Extreme heatwaves: rare. a problem for people who don't 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.

A heatwave warning is issued when ten per cent or more of a weather district is in severe or extreme heatwave. Heatwave warnings will be issued up to four days prior to the event. The warnings will appear on the Bureau of Meteorology website (<http://www.bom.gov.au/>), the Bureau of Meteorology app (<http://www.bom.gov.au/app/>) and their telephone service.

## 2.4 Heat health warnings

The Department of Health (DoH) uses BOM's severe and extreme heatwave warnings and will issue a heat health warning (formerly a heat health alert).

A heat health warning notifies the community, local governments, hospitals, health and community services of the risk and likely impact on people's health.

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.

A heat health warning includes information on staying safe, what you should do, where you can get further information and links to the BoM's heatwave warning.

More information is available on heat health warning subscription and operation from the DoH website at (<https://www.health.vic.gov.au/environmental-health/extreme-heat-and-heatwaves>).

Subscribers are notified of forecast 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

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<sup>3</sup> Emergency Management Victoria, 2022. Accessed from: <https://files.emv.vic.gov.au/2022-11/SEMP%20Extreme%20Heat%20Sub-Plan.pdf>

other plans such as service continuity plans, emergency management plans and occupational health and safety plans that contain heat-related actions.

The [VicEmergency](#) website and mobile app also has a Heat Health Alerts filter which can be applied to the user's Watch Zone.

## 2.5 Heat impacts and consequences

Heat-related deaths account for more fatalities than any other natural disaster.

As temperatures increase, so do the risks of suffering from heat-related illness. A heat-related illness occurs when the body is unable to adequately cool itself, causing the body temperature to rise uncontrollably. A heat-related illness can manifest as heat cramps, heat exhaustion or heat stroke<sup>4</sup>.

HEAT-RELATED ILLNESS	SYMPTOMS	WHAT TO DO
HEAT CRAMPS	Muscle pains Spasms in the abdomen, arms, or legs	Stop activity and sit quietly in a cool place Increase fluid intake Rest a few hours before returning to activity Seek medical help if cramps persist
HEAT EXHAUSTION	Pale complexion and sweating Rapid heart rate Muscle cramps, weakness Dizziness, headache Nausea, vomiting Fainting	Get the person to a cool area and lie them down Remove outer clothing Wet skin with cool water or wet clothes Seek medical advice
HEAT STROKE (LIFE THREATENING EMERGENCY)	Same symptoms as heat exhaustion Dry skin with no sweating Mental condition worsens, confusion Seizure Appear to have a stroke or collapse Unconsciousness	Call an ambulance Get the person to a cool area and lie them down Remove clothing Wet skin with water, fanning continuously Position an unconscious person on their side and clear the airway

<sup>4</sup> Department of Human Services, 2009. Accessed from: <https://content.health.vic.gov.au/sites/default/files/migrated/files/collections/policies-and-guidelines/p/planning-guide---pdf.pdf>



Extreme heat can worsen pre-existing medical conditions, including heart (cardiac) and kidney (renal) disease, asthma, and other respiratory illnesses. The risk of drowning can also increase as people engage in water-based recreational activities. Further information relating to the health impacts of extreme heat is available on the *Better Health Channel* website at <https://www.betterhealth.vic.gov.au/campaigns/survive-heat>

Extreme heat rarely occurs in isolation. Infrastructure failure or other natural emergencies can add another level of demand on a community and services. Power outages will affect the ability to operate air-conditioners; bushfires will increase vulnerability by reducing air quality; and public transport disruptions will reduce access to alternative air-conditioned venues.

## 2.6 What the community can do

Heat-related illnesses are preventable.

There are things that community members can do to reduce the impacts of extreme heat. The community has a responsibility to keep up to date with weather forecasts, plan and prepare for extreme heat events. Community members can also check in on people they know most at risk in the heat – their neighbour living alone, older people, young children, or people with a medical condition.



Figure 2. Community advice from the Department of Health's Survive the Heat campaign.

## 2.7 Extreme heat and health risks

Extreme heat events and heatwaves can affect anyone. Some people are more vulnerable to its effects due to factors such as their age, health, environment, social and economic circumstances, location or occupation.

The following population groups are likely to be most affected. While these groups are not in any specific order, belonging to more than one at-risk group may further increase susceptibility to extreme heat events.

AT-RISK GROUP	RISK FACTORS
First Nations people	<p>First Nations people have poorer health outcomes compared to non-First Nations people as a result of colonisation and its long-term impacts. More frequent and intense extreme heat events because of a changing climate may worsen the health inequities experienced by First Nations people.</p> <p><b>In Northern Grampians Shire, 229 residents (or 2% of the population) identify as First Nations people.<sup>5</sup></b></p>
People over 65 years, especially those living alone	<p>Older adults in our community are more prone to heat stress due to several reasons. For example, they may not adjust as well as younger people to sudden changes in temperature. They may also have one or multiple other risk factors including having chronic medical conditions and needing to take medications.</p> <p><b>In Northern Grampians Shire, 3,210 residents (or 27% of the population) are aged 65 and over. There are 1,724 residents (or 35.2 of the population) living alone.<sup>6</sup></b></p>
Pregnant women and breastfeeding mothers, babies and young children (0-4 years)	<p>Pregnant women and breastfeeding mothers have higher than normal hydration needs and experience hormonal variation that affects their perception of heat and hydration.</p> <p>Babies and young children are particularly sensitive to the effects of high temperature. As children's capacity to regulate their body temperature is still developing, they may not immediately show signs of heat stress.</p> <p><b>In 2021, there were 582 children (or 4.9%) aged 0-4 years in Northern Grampians Shire.<sup>7</sup></b></p>
People with chronic illnesses or are taking medications	<p>People with chronic illnesses or long-term health conditions such as cardiovascular disease, psychiatric illness, cognitive impairment, and respiratory disease may have impacted ability to perceive and respond to heat stress. If they are taking any medications, this may also impair their body's ability to regulate and cool itself.</p>

<sup>5</sup> Australian Bureau of Statistics, 2021. Accessed from: <https://www.abs.gov.au/census/find-census-data/quickstats/2021/LGA25810>

<sup>6</sup> *Ibid.*

<sup>7</sup> *Ibid.*

AT-RISK GROUP	RISK FACTORS
	<p><b>In 2021, 4,265 residents (or 35.7% of the population) in Northern Grampians Shire have reported having at least one long-term health condition.<sup>8</sup></b></p>
<p>People with low socioeconomic status</p>	<p>People with low socioeconomic status may have reduced access to adequate housing, less likely to have access to air-conditioning or ability to pay for electricity for air-conditioning, reduced access to health and wellbeing services, or limited capacity to access cool places due to lack of transport.</p> <p><b>Approximately 55% of the population in Northern Grampians shire live in areas that are within the lowest two deciles of relative disadvantage in Australia.</b></p> <p><b>Further, the Northern Grampians municipality has the second highest percentage of social housing (4%) in the Wimmera Southern Mallee region, and homelessness has been reported as 0.3% of the population.<sup>9</sup></b></p>
<p>People outdoors during extreme heat (including farmers)</p>	<p>People who are outdoors in extreme heat are at increased risk of suffering from heat related illnesses due to their exposure. They may include people needing to work outdoors such as farmers. Extreme heat may impair cognition and perception, increasing the risk of accidents and injuries. Due to their increased exposure to heat, they need to be aware of effective strategies to prevent and manage heat related illnesses.</p> <p><b>In 2021, 682 residents (or 13.2% of the population) in Northern Grampians shire are employed in the Agriculture, Farming and Fishing sector.<sup>10</sup></b></p>
<p>People from culturally and linguistically diverse backgrounds or recently arrived in Australia</p>	<p>People from culturally and linguistically diverse backgrounds may have difficulties in accessing and understanding available information on heat. Further, if they have recently arrived in Australia or are new to the Grampians region, they may not be familiar with the risks and occurrence of extreme heat.</p> <p><b>In 2021, 277 residents (or 5.6% of the population) in Northern Grampians shire speak a language other than English at home. The top non-English languages used are Mandarin, Tagalog or Filipino, Punjabi and Spanish.<sup>11</sup> There are also temporary migrant workers living in the shire who have come through the Pacific Labour Scheme as well as temporary skilled migration streams.</b></p>

A comprehensive list of at-risk populations can be found in [Appendix A](#).

<sup>8</sup> Australian Bureau of Statistics, 2021. Accessed from: <https://www.abs.gov.au/census/find-census-data/quickstats/2021/LGA25810>

<sup>9</sup> *Ibid.*

<sup>10</sup> *Ibid.*

<sup>11</sup> *Ibid.*

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## 2.8 Other potential impacts

Extreme heat events rarely occur in isolation. Infrastructure stress and failure and other natural emergencies can compound stress on the community, economy and services. Hot, dry conditions have a major influence on bushfires, increasing the likelihood of very high fire danger weather.

Extra steps may need to be considered when heat events coincide with either bushfires or power outages. In addition, heat events occur during summer holidays when key staff members may be on leave, therefore replacement personnel must be identified and trained appropriately. All staff who may potentially have a role in delivering the EHP should be familiar with the plan.

It should be noted that a power outage may also have the following implications.

- People are unable to use their fans, air conditioners or evaporative coolers.
- Food may spoil.
- There is decreased access to cool drinks or ice.
- Water pumps may not work and there may be no running water for drinking.
- People may be unable to shower and toilets may not flush.
- Power operated garage doors may not be able to be opened for evacuation.
- Radios, home computers and televisions may not work for updates on alerts.
- People who depend on television for company may feel increasingly isolated.
- People who are dependent on power for survival due to usage of life support systems may be compromised.
- Lighting will be an issue at night.
- Medication may not be able to be kept cool.
- Phones may not work.
- Medical alert systems may not work unless they have a battery operated back up.
- Automated water and feed systems for livestock and pets may be compromised.

For managers and direct care workers, if heat events coincide with power outages the following issues may also arise.

- Access to computers for access to at risk registers contact details.
- Implementation of 'no drive' policies for visiting by direct care workers.
- Occupational Health and Safety issues regarding performing physical work in extreme heat conditions.
- An increase in absenteeism at work, and its effect on business continuity.

If bushfire alerts are issued on the day of a heat health warning, this may have the following implications.

- An increased risk to the whole community.
- The Municipal Emergency Coordination Centre (MECC) may be operational and will lead response and recovery activities.
- Emergency services may be attending to the fires.
- Relief centres may be activated.
- Volunteers who may be monitoring at risk populations may also be responding to the fires.

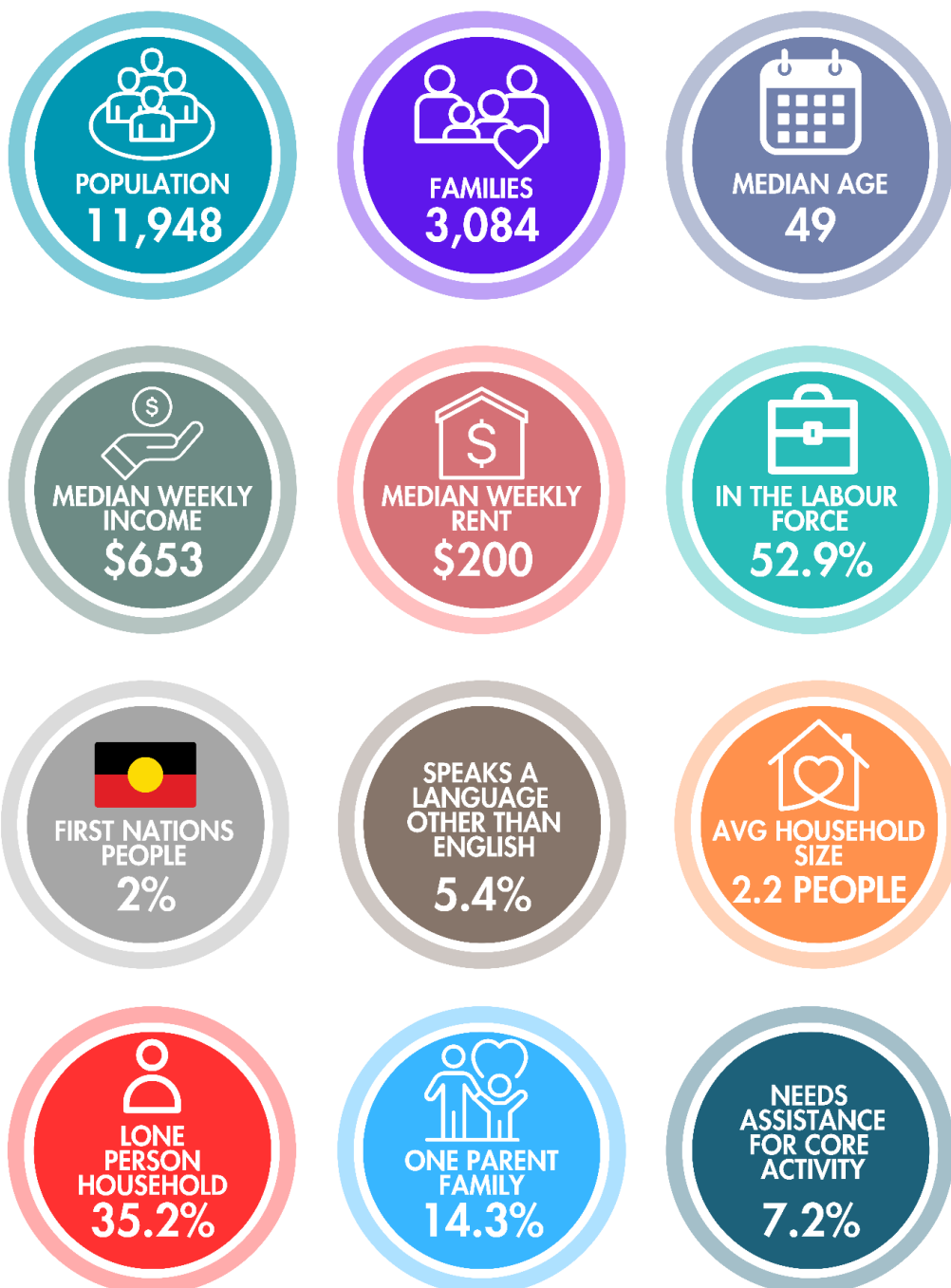
The [VicEmergency](#) website and mobile application has a Power Outage filter which can be applied to the user's Watch Zone, as well as containing up to date information on Bushfire and other emergency events.

## PART THREE – COMMUNITY PROFILE

A detailed description of the shire's municipal district characteristics can be found in the [NGS Municipal Emergency Management Plan](#).

### 3.1 Demographics

## NORTHERN GRAMPIANS COMMUNITY SNAPSHOT



SOURCE: ABS CENSUS 2021

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## 3.2 Vulnerable people

The Northern Grampians Shire Council (NGSC), Australian Red Cross, community groups and direct care services have identified vulnerable individuals living within the community. There are also several special needs groups and facilities throughout the municipality including hospitals, aged care facilities, schools, kindergartens and community health facilities.

Members of the community who are reliant on power for life support systems may be compromised if their service provider is unable to restore back up power during a power outage event. Energy distributors are required to comply to rules set out by the Essential Services Commission Victoria on protecting customers requiring life support equipment.

Local VICSES and Victoria Police may also support local government in ensuring the safety of the community members.

NGSC maintains the Vulnerable Persons Register, which is available to Victoria Police in case of an emergency. Council also maintains a Vulnerable Facilities Register (a list of locations where vulnerable people may be likely to gather), which is available to emergency agencies planning or responding to an incident. The Vulnerable Facilities Register is available to Victoria Police via request to the MEMO.

## 3.3 Population age and health

The Western Victoria Primary Health Network (WVPHN) is a Commonwealth Government entity that plans for, and financially supports, initiatives to promote best practice in primary health care. It covers 21 Local Government Areas (LGAs) and a population of around 618,000, including the Northern Grampians Shire and the large towns of Horsham, Ballarat, Geelong, and Warrnambool.

Data from WVPHN show that the Northern Grampians shire has an ageing population that is reducing over time; higher levels of chronic disease and obesity, alcohol related incidents, self-reported fair or poor health, higher rates of psychological distress and lower levels of psychology services than either the Western Victorian region or Victoria as a whole<sup>12</sup>.

- A higher percentage of the population are aged 65yrs and over – 26% compared to 21% in WVPHN, 16% in Victoria (Vic) and 17% in Australia
- A higher percentage of the population are aged 70yrs and over – 19% compared to 14% in WVPHN and 12% in Vic and 12% in Australia
- A higher % of people who are obese – 30% compared to 25% in WVPHN and 21% in Vic
- Higher rates of drug related incidents – 1.5% of alcohol-related ambulance attendances compared to 0.5% in WVPHN; and 0.8% of alcohol-related family violence incidences compared to 0.1% in WVPHN
- Higher rates of unmet need for assistance – 6.2% compared to 4.5% in the WVPHN and 4.2% in Australia
- Higher rates of self-reported fair/poor health – 23% compared to 21% in WVPHN and Vic
- High rates of high or very high psychological distress – 26% compared to 24% in Vic
- Low rates of psychology services – 0.6% compared to 5% in the WVPHN, 6% in Victoria and Australia

The Northern Grampians LGA will continue to experience a rise in its ageing population, particularly in the 75+ age cohort. Data projections indicated that by 2036, people aged 75 years and above will represent

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<sup>12</sup> Western Victoria Primary Health Network, 2023. Accessed from: <https://westvicphn.com.au/about-us/population-health/western-victoria-health-information-by-local-government-area-dataset/>

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21.4% of the shire's population.<sup>13</sup> This group may require higher levels of assistance to manage extreme heat as well as bushfire risk, increasing pressure on health and community care services.

### **3.4 Socioeconomic profile**

The Australian Bureau of Statistics Social and Economic Indices for Areas (SEIFA) Relative Index of Social Advantage and Disadvantage has reported NGS as the sixth most disadvantaged Local Government Area in Victoria.

The SEIFA index shows relative disadvantage is concentrated within small rural towns and larger centres such as Stawell. In NGS approximately 55% of the population live in areas that are within the lowest two deciles of relative disadvantage in Australia.<sup>14</sup>

The Northern Grampians municipality has the second highest percentage of social housing (4%) in the Wimmera Southern Mallee region, and homelessness has been reported as 0.3% of the population.

### **3.5 Visitors**

Extreme heat can also be a risk for non-acclimatised visitors. The Grampians Region attracts up to 2.5 million visitors each year, including domestic and international travellers. In 2019, 591,000 people visited Northern Grampians Shire and they stayed for two nights on average.<sup>15</sup> Many of these visitors may not access traditional messaging sources such as local radio stations, websites, or social media pages.

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<sup>13</sup> Department of Transport and Planning, 2023. Accessed from: <https://www.planning.vic.gov.au/guides-and-resources/data-and-insights/victoria-in-future>

<sup>14</sup> Australian Bureau of Statistics, 2021. Accessed from: <https://www.abs.gov.au/statistics/people/people-and-communities/socio-economic-indexes-areas-seifa-australia/latest-release>

<sup>15</sup> Tourism Research Australia, 2019. Accessed from: <https://www.tra.gov.au/en/regional/local-government-area-profiles.html>

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## PART FOUR – EXTREME HEAT MITIGATION IN NORTHERN GRAMPIANS SHIRE

### 4.1 Stakeholders and community partners

#### 4.1.1 Extreme Heat Plan Working Group

The role of the Extreme Heat Plan Working Group (EHP WG) is to:

- Guide the development of the Plan;
- Make recommendations to relevant agencies regarding impacts on the community identified in the Plan;
- Participate in the evaluation and monitoring of the Plan

It is anticipated that the EHP WG will meet for a minimum of twice per year – once prior to the heat season and once following the season.

The EHP Working Group includes representation from the following agencies and organisations:

- NGSC – Municipal Emergency Management Officer
- NGSC – Municipal Recovery Officer
- NGSC – Emergency Management Officer
- Grampians Health (Stawell site)
- Grampians Community Health
- East Wimmera Health Service
- Department of Health (DoH)
- Department of Families, Fairness and Housing (DFFH)
- Victoria Police
- Ambulance Victoria
- Agriculture Victoria
- Stawell Neighbourhood House
- St. Arnaud Neighbourhood House
- St. Arnaud Community Resource Centre

Additional stakeholders may be invited to participate in the EHP WG if necessary.

### 4.2 Action plan

The NGS EHP Action Plan comprises three stages covering the periods before, during, and after a heat event takes place. This section contains a summary of the NGSC Action Plan and its stages. For the full Action Plan, refer to [Appendix B](#).

Key stakeholders and partner agencies are encouraged to maintain and action their own extreme heat plans, including liaising with their own service users.

<b>STAGE 1</b> <b>(BEFORE)</b> Preparation & awareness (Year-round)	<b>STAGE 2</b> <b>(DURING)</b> Extreme heat action (Heat health day / heat event)	<b>STAGE 3</b> <b>(AFTER)</b> Recovery (Immediately post heat event)
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## Stage 1 (Before) - Preparation and awareness

Actions under Stage 1 are of a preparatory nature and are to occur all year round. Key actions include:

- Maintaining internal plans and policies
- Facilitating community messaging related to heat events to support individuals to prepare for heat events
- Engaging with key stakeholders and community members to raise awareness about the risks of extreme heat
- Conduct information sessions on strategies to manage extreme heat risks and impacts using resources from DH and Australian Red Cross
- Identification of vulnerable clients by individual agencies and discussions between responsible agencies and individuals about how best to prepare and what to do in an heat event
- For relevant agencies: updating of the Vulnerable Persons Register and assisting vulnerable clients to plan and prepare for emergencies including heat events

## Stage 2 (During) - Extreme heat action

Actions under Stage 2 occur as a result of a heat health day or heat event (as declared by the Chief Health Officer). This includes heat health warnings (1-2 consecutive days) and heatwaves (3+ days). This stage triggers the activation of the EHP, which includes:

- Disseminating prepared media
- Sharing agency messaging
- Promoting internal policies for relevant agency staff
- Considering modified service delivery
- Communicating with key partners

## Stage 3 (After) - Recovery

Actions under Stage 3 should occur immediately following a heat event. Key actions focus on reviewing the event and associated plans and policies. The EHP Working Group should assess the effectiveness of the EHP as a whole, including communications, internal planning, and stakeholder engagement. The Municipal Recovery Manager has responsibility for facilitating these actions.

### **4.3 Media and communications**

The Action Plan ([Appendix B](#)) details the communications actions of relevant agencies and organisations to community and stakeholders in NGSC before, during and after an extreme heat event.

The following table contains key information sources for media and communications which relate to heat health and heat events.

Source	Communication tool	Website
Chief Health Officer	Email subscription for health alerts and advisories about health issues	<a href="https://www2.health.vic.gov.au/about/news-and-events/healthalerts">https://www2.health.vic.gov.au/about/news-and-events/healthalerts</a>
Better Health Channel	Survive the heat - media kit	<a href="https://www.betterhealth.vic.gov.au/campaigns/survive-heat">https://www.betterhealth.vic.gov.au/campaigns/survive-heat</a>
Department of Health	Extreme heat - community resources	<a href="https://www2.health.vic.gov.au/public-health/environmental-health/climate-weather-and-public-health/heatwaves-and-extreme-heat/heatwave-community-resources">https://www2.health.vic.gov.au/public-health/environmental-health/climate-weather-and-public-health/heatwaves-and-extreme-heat/heatwave-community-resources</a>
Health Translations	Survive the heat - brochure	<a href="https://www.healthtranslations.vic.gov.au/bhcv2/bhcht.nsf/PresentDetail?Open&amp;s=Survive_the_heat_brochure">https://www.healthtranslations.vic.gov.au/bhcv2/bhcht.nsf/PresentDetail?Open&amp;s=Survive_the_heat_brochure</a>
Department of Energy, Environment and Climate Action	Your guide to power outages	<a href="https://www.energy.vic.gov.au/safety-and-emergencies/power-outages">https://www.energy.vic.gov.au/safety-and-emergencies/power-outages</a>
VicEmergency	Incidents and warnings	<a href="https://emergency.vic.gov.au/respond">https://emergency.vic.gov.au/respond</a>

#### 4.4 Heat health warning procedures

A *Health alert: Heat health warning* will be broadcast via email when the Bureau of Meteorology issues a heatwave warning to support the transition of the Department of Health’s heat health warning subscribers to the Bureau of Meteorology heatwave warnings. A heatwave involves three or more consecutive days of extreme heat. The Bureau’s heatwave warnings can also be accessed from the Bureau of Meteorology website (<http://www.bom.gov.au/>) or app.

The Chief Health Officer may also issue a *Health alert: Heat health warning* when forecast high maximum and minimum temperatures do not meet the criteria for a Bureau of Meteorology heatwave warning but the Chief Health Officer considers that a heat health risk exists.

The heat health warning will be sent via email to heat health warning subscribers for the relevant weather district up to four days in advance.

Key emergency management staff within the relevant agencies and organisations should be subscribed to the Chief Health Officer’s heat health warnings.

#### 4.5 Emergency coordination

This plan recognises that an extreme heat event on its own, or in combination with other emergency situations, may be deemed by key emergency management personnel to warrant the coordination and response provided for in the MEMP. If this occurs, the MEMP will be implemented and emergency management staff will follow procedures as directed. For more information on emergency management guidelines refer to the current NGS MEMP.

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## Appendix A - At-risk populations

- People of a certain age or life stage
  - Over 65 years old, especially those living alone
  - Pregnant women and breastfeeding mothers
  - Babies and young children
  
- People with particular health conditions
  - Heart and lung disease, high blood pressure, diabetes, cancer or kidney disease
  - Certain neurological illnesses (eg Parkinson's Disease, Multiple Sclerosis)
  - Mental illness
  - Illness or infection that causes dehydration or fever
  - Conditions that impair sweating including dehydration, skin disorders (including sunburn, prickly heat and extensive scarring from burns), congenital impairment of sweating, cystic fibrosis, quadriplegia and scleroderma
  - Problematic alcohol or other drug use such as amphetamines
  - Cognitive impairments that may limit the ability to identify or communicate their discomfort or need for water
  - Limited mobility (such as those who are bed-bound or in a wheelchair)
  - Overweight or obesity
  - Low cardiovascular fitness
  
- People taking medications that may affect the way the body reacts to heat
  - Allergy medicines (antihistamines)
  - Some blood pressure and heart medicines (beta-blockers and vasoconstrictors)
  - Seizure medicines (anticonvulsants)
  - Thyroid medications (thyroxine)
  - Water pills (diuretics)
  - Antidepressants
  - Antipsychotics
  
- People with particular social or economic circumstances
  - Sleeping rough
  - Low socioeconomic status who may restrict use of, or have limited access to, air-conditioning
  - Living alone or who are socially isolated
  - Non-English-speaking people who may not be able to understand extreme heat alerts and warnings or have reduced access to appropriate health or support services
  
- People outdoors during extreme heat
  - Working or being physically active outdoors (such as gardeners, athletes and labourers).

## Appendix B – NGSC Action plan

Action Plan – including actions for pre, during and after heat events with key responsibilities of individuals and agencies

NGSC	STAGE 1 (BEFORE) Preparation & awareness (Year-round)		STAGE 2 (DURING) Extreme heat action (Heat health day / heat event)		STAGE 3 (AFTER) Recovery (Immediately post heat event)			
			Heat Health Warning (1-2 days)	Heatwave (3+ days)				
<b>RISKS</b>								
<b>Internal risks</b>	Awareness of concurrent heat and fire risk and impact on rural staff capacity.		Bushfire / extended power outage and effects on service delivery, staff OH&S, staff availability.		Bushfire / extended power outage and effects on service delivery, staff OH&S, staff availability.		Internal plans and policies are not reviewed following the event.	
<b>External risks</b>	Designated emergency relief centre sites not capable of supporting community during heat event due to lack of cooling, back-up power etc.		Single heat health warning days can be ignored if common through summer.		Impact on local roads and infrastructure.		Damage to local roads and infrastructure takes longer to repair.	
<b>ACTIONS</b>								
	<b>Action</b>	<b>Responsible position</b>	<b>Action</b>	<b>Responsible position</b>	<b>Action</b>	<b>Responsible position</b>	<b>Action</b>	<b>Responsible position</b>

<b>Internal planning &amp; processes</b>	Maintain Extreme Heat Plan (EHP).	MRM EHP Working Group	Activate EHP following heat health warning trigger and inform emergency management team.	MEMO	Activate EHP following heat health warning trigger and inform emergency management team.	MEMO	Debrief heat event with EHP Working Group.	MRM
	Key emergency management staff within the relevant agencies and organisations should be subscribed to the Chief Health Officer's heat health warnings	MEMO						
	Incorporate heat event risk management and emergency planning into community events held during summer months.	MEMO; Events Officer	Monitor community events scheduled during periods of extreme heat.	MEMO / Events Officer	Monitor community events scheduled during periods of extreme heat.	MEMO / Events Officer		
	Maintain Vulnerable Facilities Register	Emergency Management Officer	Reconsider normal service delivery and modify or cancel services as necessary.	MEMO	Reconsider normal service delivery and modify or cancel services, as necessary.	MEMO		
	Maintain Vulnerable Persons Register	Coordinator – Community Care						
	Incorporate considerations for extreme heat events	Manager Infrastructure						

	into all community infrastructure plans (e.g., water fountains, shade, landscaping, trees).							
	Support clients to complete an emergency plan using the Red Cross Rediplan.	Coordinator – Community Care						
<b>Communications</b>	Maintain extreme heat information on the Council website.	MEMO; Media	Maintain extreme heat information on the council website.	Media	Maintain extreme heat information on the council website.	Media	Review comms strategy and implement improvements.	MEMO
	Promote messaging to inform the community about service delivery changes and other relevant information for extreme heat.	MEMO; Media	Promote messaging to inform the community about service delivery changes and other relevant information.  (e.g. extended opening hours for libraries, SSAC)	MEMO; Media	Promote messaging to inform the community about service delivery changes and other relevant information.  (e.g. extended opening hours for libraries, SSAC)	MEMO; Media		
	Promote key heat health communication materials to the community.	MEMO; Media	Promote key heat health communication materials for the community (share agency messaging).	MEMO; Media	Promote key heat health communication materials for the community (share agency messaging).	MEMO; Media		

	Promote key heat health messages to clients.	Coordinator - Community Care	Promote key heat health messages to clients.	Coordinator - Community Care	Promote key heat health messages to clients.	Coordinator - Community Care		
	Promote key health messages and resources	Coordinator – Early Years	Promote key health messages and resources	Coordinator – Early Years	Promote key health messages and resources	Coordinator – Early Years		
	Promote key heat health messages for pet owners.	Coordinator Community Safety / Media	Promote key heat health messages for pet owners.	Coordinator Community Safety / Media	Promote key heat health messages for pet owners.	Coordinator Community Safety / Media		
	Promote information about extreme heat and business continuity planning for the business community.	Economic Development Officer	Incorporate information about extreme heat and business continuity planning into the Councils publications to the business community.	MEMO; Media	Incorporate information about extreme heat and business continuity planning into the Councils publications to the business community.	MEMO; Media		
	Share heat health messaging with relevant event organisers.	Events Officer	Ensure information is available to people in the community who are not permanent residents.	MEMO; Media	Ensure information is available to people in the community who are not permanent residents.	MEMO; Media		
			Reconsider normal service delivery and modify or cancel services as necessary.	MEMO; MRM	Reconsider normal service delivery and modify or cancel services as necessary.	MEMO; MRM	Reinstate cancelled services as appropriate.	MEMO / MRM

<b>Service delivery (coordinated response actions)</b>	Ensure all council staff are aware of and responsive to the MEMO's responsibility for communication of extreme heat events.	MEMO; Media	Work with key partners to coordinate response for community.	MEMO	Work with key partners to coordinate response for community	MEMO	Review the EHP and recommend improvements.	EHP Working Group
<b>Stakeholder engagement</b>	Continuous review of EHP with stakeholders	EHP Working Group					Debrief with staff to improve the EHP and local procedures.	MEMO



## Appendix C - Stakeholder register

Name	Type	Category	Group	Interests	Expectations	Communication frequency	Communication method
EHP Working Group	Group	External	Advisors	As the group positioned to provide the most relevant external input for the development of the EHP.	That the EHP is a robust plan which reflects the policies and actions of all relevant agencies to mitigate the risks associated with extreme heat events in the Shire.	Annually (for review)	Email Meetings
NGS MEMPC	Group	External	Advisors	As the group responsible for all hazards across the Shire.	That the EHP adequately addresses and seeks to mitigate the risks associated with extreme heat events in the Shire.	Every three years (for approval of new version)	Email MEMPC meetings
EMV (Emergency Management Commissioner)	Organisation	External	Advisors	As the Control Agency for Heat events.	That the EHP adequately links to the State Extreme Heat Sub Plan.	Every three years (for approval of new version)	Email
Northern Grampians Shire Council	Organisation	Internal	Deciders	As the organisation responsible for the development of the EHP.	That the EHP is a robust plan which reflects the policies and actions of council to mitigate the risks associated with extreme heat events in the Shire.	Annually (for review)	Email MEMPC meetings
Grampians Health (Stawell)	Organisation	External	Advisors	As a healthcare provider servicing our Shire.	That the EHP adequately addresses and seeks to mitigate the risks associated with extreme heat events in the Shire.	Annually (for review)	Email MEMPC meetings
East Wimmera Health Service	Organisation	External	Advisors	As a healthcare provider servicing our Shire.	That the EHP adequately addresses and seeks to mitigate the risks associated with extreme heat events in the Shire.	Annually (for review)	Email MEMPC meetings

Grampians Community Health	Organisation	External	Advisors	As a healthcare provider servicing our Shire.	That the EHP adequately addresses and seeks to mitigate the risks associated with extreme heat events in the Shire.	Annually (for review)	Email MEMPC meetings
Ambulance Victoria	Organisation	External	Advisors	As an agency with responsibilities in relation to heat health.	That the EHP adequately addresses and seeks to mitigate the risks associated with extreme heat events in the Shire.	Annually (for review)	Email MEMPC meetings
Agriculture Victoria	Organisation	External	Advisors	As an agency with responsibilities in relation to heat health.	That the EHP adequately addresses and seeks to mitigate the risks associated with extreme heat events in the Shire.	Annually (for review)	Email MEMPC meetings
Department of Health	Organisation	External	Advisors	As an agency with responsibilities in relation to heat health.	That the EHP adequately addresses and seeks to mitigate the risks associated with extreme heat events in the Shire.	Annually (for review)	Email MEMPC meetings
Department of Families, Fairness, and Housing	Organisation	External	Advisors	As an agency with responsibilities in relation to heat health.	That the EHP adequately addresses and seeks to mitigate the risks associated with extreme heat events in the Shire.	Annually (for review)	Email MEMPC meetings
Victoria Police	Organisation	External	Advisors	As an agency with responsibilities in relation to heat health.	That the EHP adequately addresses and seeks to mitigate the risks associated with extreme heat events in the Shire.	Annually (for review)	Email MEMPC meetings
Aged Care Facilities	Group	External	Reviewers	As healthcare providers servicing our Shire.	That the EHP ensures community safety and wellbeing are protected by the responsible agencies during extreme heat events.	Annually (for review)	Email
Disability Services	Group	External	Reviewers	As healthcare providers servicing our Shire.	That the EHP ensures community safety and wellbeing are protected by the responsible agencies during extreme heat events.	Annually (for review)	Email

NGSC Community Care Team	Group	Internal	Reviewers	As a direct care agency and coordinator of the Vulnerable Persons Register.	That the EHP ensures community safety and wellbeing are protected by the responsible agencies during extreme heat events.	Ad hoc	Email
NGSC Staff	Group	Internal	Spectators	As individuals affected by extreme heat events.	That the EHP ensures community safety and wellbeing are protected by the responsible agencies during extreme heat events.	Ad hoc	Employee newsletter
Vulnerable Persons	Group	External	Spectators	As an at-risk population for extreme heat events.	That the EHP ensures community safety and wellbeing are protected by the responsible agencies during extreme heat events.	Ad hoc	Via Positive Aging Team / Direct Care Workers
NGS Community	Group	External	Spectators	As individuals affected by extreme heat events.	That the EHP ensures community safety and wellbeing are protected by the responsible agencies during extreme heat events.	Ad hoc	Website updates Social Media posts Other media as required

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## Appendix D - Acronyms

DHHS	Department of Health and Human Services
EHP	Extreme Heat Plan
HACC	Home & Community Care
MECC	Municipal Emergency Coordination Centre
MEMP	Municipal Emergency Management Plan
MEMPC	Municipal Emergency Management Planning Committee
MERC	Municipal Emergency Response Coordinator
MEMO	Municipal Emergency Management Officer
MRM	Municipal Recovery Manager
NGS	Northern Grampians Shire
NGSC	Northern Grampians Shire Council
SEIFA	Social and Economic Indices for Areas

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## Appendix E - References

Department of Health, 2022. *Health alert: Heat health warnings: information and guidance*, [www2.health.vic.gov.au/public-health/environmental-health/climate-weather-and-public-health/heatwaves-and-extreme-heat](http://www2.health.vic.gov.au/public-health/environmental-health/climate-weather-and-public-health/heatwaves-and-extreme-heat)

Department of Health, 2022. *Heat Health Preparedness Guidance: guidance for community service organisations*, [Planning for extreme heat and heatwaves](https://www.health.vic.gov.au/environmental-health/planning-for-extreme-heat-and-heatwaves) <<https://www.health.vic.gov.au/environmental-health/planning-for-extreme-heat-and-heatwaves>>

- Climate-ready Victoria: Grampians (DELWP, 2015)
- Heat Health Plan for Victoria (DHHS, 2020)
- Heatwave Planning Guide - Development of heatwave plans in local councils in Victoria (Department of Human Services, 2009)
- Heatwave plan review tool (Department of Health, 2011)
- Heatwaves: Hotter, Longer, More Often (Climate Council of Australia, 2014)
- Northern Grampians Shire Municipal Emergency Management Plan
- Northern Grampians Shire Municipal Public Health and Wellbeing Plan 2021-25
- State Emergency Response Plan Extreme Heat Sub-Plan (Emergency Management Victoria, 2017)
- State Health Emergency Response Plan (Emergency Management Victoria, 2017)
- Wimmera Southern Mallee Regional Profile (Infrastructure Victoria, 2019)

### Links for more information

Bureau of Meteorology heatwave warnings

[www.bom.gov.au/australia/heatwave/](http://www.bom.gov.au/australia/heatwave/)

Health alert: Heat health warning

[www2.health.vic.gov.au/public-health/environmental-health/climate-weather-and-public-health/heatwaves-and-extreme-heat](http://www2.health.vic.gov.au/public-health/environmental-health/climate-weather-and-public-health/heatwaves-and-extreme-heat)

Community resources

<https://www.health.vic.gov.au/environmental-health/planning-for-extreme-heat-and-heatwaves#heat-health-planning-guide-for-health-and-community-services>

Survive the Heat campaign material

[www.betterhealth.vic.gov.au/campaigns/survive-heat](http://www.betterhealth.vic.gov.au/campaigns/survive-heat)

### Extreme heat and heatwaves

- [Department of Health – Extreme heat and heatwaves](https://www.health.vic.gov.au/environmental-health/extreme-heat-and-heatwaves) <<https://www.health.vic.gov.au/environmental-health/extreme-heat-and-heatwaves>>
- [Department of Health - Planning for extreme heat and heatwaves](https://www.health.vic.gov.au/environmental-health/planning-for-extreme-heat-and-heatwaves) <<https://www.health.vic.gov.au/environmental-health/planning-for-extreme-heat-and-heatwaves>>
- [Department of Health - Heatwave plan review tool](https://www.health.vic.gov.au/publications/heatwave-plan-review-tool) <<https://www.health.vic.gov.au/publications/heatwave-plan-review-tool>>
- [Department of Health – Extreme heat information for clinicians](https://www.health.vic.gov.au/environmental-health/extreme-heat-information-for-clinicians) <<https://www.health.vic.gov.au/environmental-health/extreme-heat-information-for-clinicians>>
- [Department of Health – Extreme heat community resources](https://www.health.vic.gov.au/environmental-health/extreme-heat-community-resources) <<https://www.health.vic.gov.au/environmental-health/extreme-heat-community-resources>>
- [Better Health Channel – How to cope and stay safe in extreme heat](https://www.betterhealth.vic.gov.au/health/healthyliving/how-to-cope-and-stay-safe-in-extreme-heat) <<https://www.betterhealth.vic.gov.au/health/healthyliving/how-to-cope-and-stay-safe-in-extreme-heat>>

- [Better Health Channel – Heat stress and heat-related illness](https://www.betterhealth.vic.gov.au/health/healthyliving/heat-stress-and-heat-related-illness#prevention-of-heat-related-illness) <https://www.betterhealth.vic.gov.au/health/healthyliving/heat-stress-and-heat-related-illness#prevention-of-heat-related-illness>
- [Better Health Channel – Survive the heat – partner kit](https://www.betterhealth.vic.gov.au/survive-heat-media-kit) <https://www.betterhealth.vic.gov.au/survive-heat-media-kit>
- [Department of Health – Residential aged care services – heatwave ready resource](https://www.health.vic.gov.au/publications/residential-aged-care-services-heatwave-ready-resource) <https://www.health.vic.gov.au/publications/residential-aged-care-services-heatwave-ready-resource>
- [Safe Work Australia – Working in the heat](https://www.safeworkaustralia.gov.au/safety-topic/hazards/working-heat) <https://www.safeworkaustralia.gov.au/safety-topic/hazards/working-heat>
- [Sports Medicine Australia – Extreme heat policy](https://sma.org.au/sma-site-content/uploads/2021/02/SMA-Extreme-Heat-Policy-2021-Final.pdf) <https://sma.org.au/sma-site-content/uploads/2021/02/SMA-Extreme-Heat-Policy-2021-Final.pdf>

## Heatwave and heat health warnings

- [Bureau of Meteorology - Heatwave Service](http://www.bom.gov.au/australia/heatwave/) <www.bom.gov.au/australia/heatwave/>
- [Bureau of Meteorology - Climate outlooks](http://www.bom.gov.au/climate/outlooks/#/overview/summary) <www.bom.gov.au/climate/outlooks/#/overview/summary>
- [Department of Health – Subscribe to heat health warnings](https://www.health.vic.gov.au/environmental-health/subscribe-to-heat-health-alerts) <https://www.health.vic.gov.au/environmental-health/subscribe-to-heat-health-alerts>
- [Vic Emergency Platform](https://emergency.vic.gov.au/prepare/#heat-health-alerts) <https://emergency.vic.gov.au/prepare/#heat-health-alerts>

## Emergency Respite

- Carers Victoria 1800 514 845, Carelink 1800 052 222 (business hours) or 1800 059 059 (after-hours).
- Veterans' Home Care assessment service 1300 550 450 (business hours) (for emergency after-hours respite call Carelink above).
- Annecto Emergency After-Hours Response Service (Victoria) 1800 72 72 80 (5 pm–9 am weekdays, 24 hours on weekends and public holidays). Free short-term personal care, respite crisis management, telephone and in-home support for older people, people with a disability or carers who do not have funded assistance.
- Some local governments may provide respite services.

## Fires

- [Victorian Government – Plan and prepare for fire](https://www.vic.gov.au/plan-and-prepare) <https://www.vic.gov.au/plan-and-prepare>
- [Business Victoria – Plan and prepare for bushfires](https://business.vic.gov.au/business-information/disaster-resilience/deal-with-bushfires/plan-and-prepare-for-bushfires) <https://business.vic.gov.au/business-information/disaster-resilience/deal-with-bushfires/plan-and-prepare-for-bushfires>
- [Department of Health – Emergency preparedness in residential aged care services – natural hazards](https://www.health.vic.gov.au/residential-aged-care/emergency-preparedness-in-residential-aged-care-services-natural-hazards) <https://www.health.vic.gov.au/residential-aged-care/emergency-preparedness-in-residential-aged-care-services-natural-hazards>
- [Department of Health – Bushfires and public health](https://www.health.vic.gov.au/environmental-health/bushfires-and-public-health) <https://www.health.vic.gov.au/environmental-health/bushfires-and-public-health>