

Heat health newsletter

Survive the heat
November 2018

A message from Dr Brett Sutton, Acting Chief Health Officer

As summer approaches, the Bureau of Meteorology is predicting a warmer and drier summer than usual. This means we will continue to see above-average daytime temperatures and a number of hot nights. This means we don't get that much needed reprieve from daytime temperatures. It is important that all Victorians work together to survive the heat this summer. It can, after all, be deadly.

This newsletter reflects on last summer, provides an update on extreme heat-related research and initiatives and information about how you can support efforts to promote health and wellbeing before, during and after extreme heat.



Heat may not receive as much attention as 'traditional' emergencies, but it can have significant and wide-ranging health impacts across the community. The consequences of the heat events of [January 2009](#) and [January 2014](#) in Victoria should be at the front of our minds at this time of the year, informing our planning and preparation for extreme heat. In those months Victoria experienced, respectively, an estimated 374 excess deaths or a 62 percent increase in total all-cause mortality (2009) and an estimated 167 excess deaths representing a 24 percent increase in mortality (2014).

Not only are the direct health impacts of heat very common, but the failure of critical infrastructure and essential services compound these health impacts resulting in increased health and wellbeing risks to individuals and the community. Just think of what it could mean for public transport to fail and getting stuck in extreme conditions.

The Department of Health and Human Services' *Survive the Heat* campaign and general preparedness messaging will run throughout summer, with specific and targeted messaging on days of significant risk. In this newsletter we provide an update on new initiatives for *Survive the Heat* for summer 2018-19 (see page 5).

Survive the Heat has a range of tailored resources, specific to emergency departments, GPs and members of the community (see page 8). It also includes a stakeholder toolkit which is published on our [health.vic](#) website. I encourage you to support the campaign by being aware of these resources, sharing them within your personal and professional circles, and playing your part in planning to ensure that all Victorians – especially the most vulnerable in our community – are healthy and well during periods of extreme heat.

If you would like to provide any comments on the department's public documents, require assistance with planning or resources or would like to provide feedback on the heat health program please email your request to extreme.weather@dhhs.vic.gov.au

Thank you for partnering with the department to reduce the impact of extreme heat on Victorians this summer.

Survive the Heat campaign

The *Survive the Heat* campaign will again run this year, this time with an emphasis on the serious impact extreme heat can have on health.

In addition to the useful tips and tricks that are rolled out through the summer period as part of the digital advertising strategy, this year animated videos will support the message that extreme heat can have a serious impact on health.

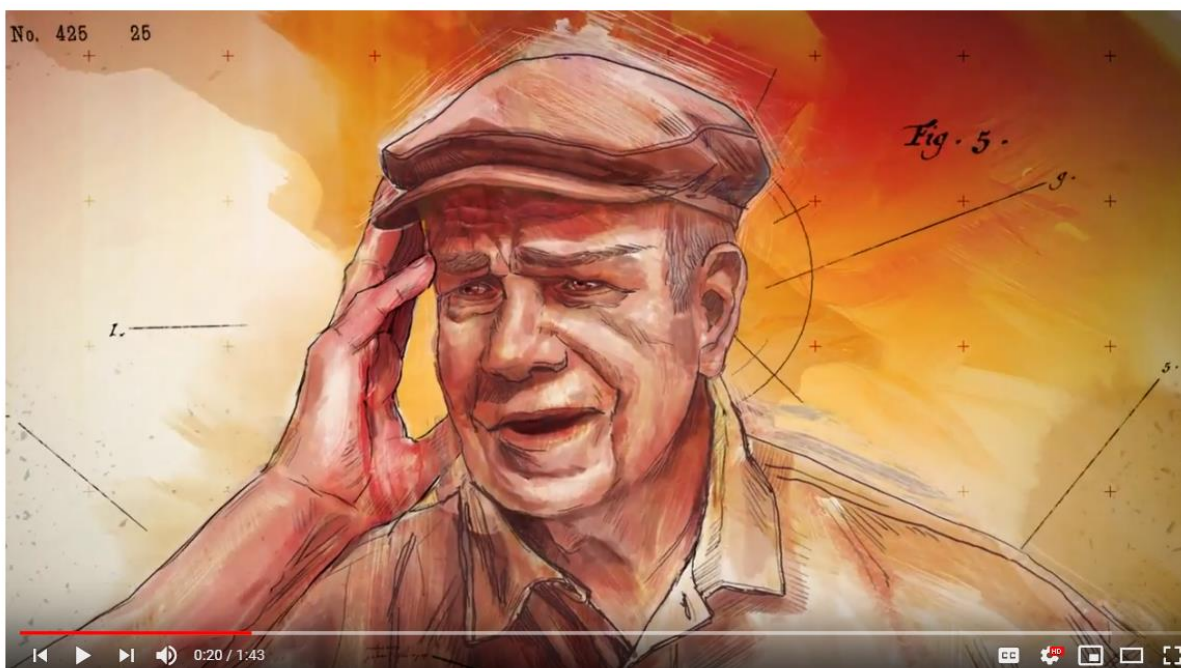
Four videos have been created: one for all Victorians; one that is directed at people with a pre-existing medical condition; one for carers of children and babies; and one for elderly people and their carers.

All of the videos zoom into the body and creatively depict what can happen when organs are affected by the heat.

All of the videos have voiceover and captioned translations in the following languages; Arabic, Cantonese, Italian, Mandarin, Greek, Somali, Turkish and Vietnamese.

The videos are available on the [Better Health Channel YouTube page](#).

If you'd like a copy of the video sent to you, please email us at extreme.weather@dhhs.vic.gov.au.



Preparing for potential power outages

Provided by the Department of Environment, Land, Water and Planning

In the coming months, the Department of Environment, Land, Water and Planning (DELWP) will once again be releasing numerous campaigns about preparation for a potential power outage, energy savings tips and overall safety which are relevant for workers in all industries.

For the aged-care and disability sector, including vulnerable customers, DELWP understands that some people have a special need for uninterrupted power, such as those on life support or with certain health conditions.

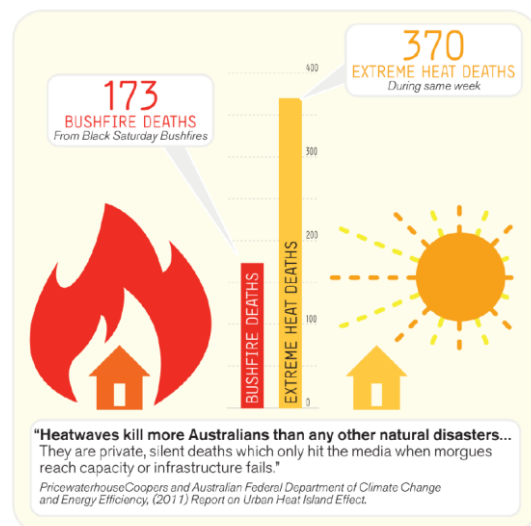
It is important that individuals and organisations have discussed these needs with their electrical retailer (the company who sends the electricity bill) ensuring that the company registers their up-to-date contact details.

For guidance on safety during a power outage and extreme heat conditions visit the Safety and Emergencies section of <https://www.energy.vic.gov.au/>.



Cooling Communities – a Moreland City Council Project

Provided by Kathryn Skidmore, Senior Environmentally Sustainable Design Advisor, Moreland City Council



Source: Cooling Communities Final Report

In 2014 Moreland City Council undertook thermal heat mapping to assess the impact of the Urban Heat Island Effect across our municipality. The heat mapping showed that during summer, Moreland's surface temperature often exceeds 50 degrees in many areas.

Shortly after, Moreland completed the Urban Heat Island Effect (UHIE) Action Plan 2015-2016 – 2025-2026. The Plan collated short-term and long-term actions to transition Moreland to a much cooler, greener, safer municipality over coming years.

This work revealed there are many vulnerable residents in Moreland who suffer during summer. The Cooling Communities project was born as a joint initiative between Moreland City Council and the Moreland Energy Foundation Limited, with funding from the Victorian Government's Climate Change Adaptation 2015 grants. Aiming to explore heat vulnerability in community (not-for-profit) housing, we partnered with two local community housing

organisations: Aboriginal Housing Victoria (AHV) and Housing Choices Australia (HCA).

Over 12 months, we worked closely with both organisations and residents to retrofit housing upgrades specifically aimed at reducing internal temperatures during summertime. Improvements included installing external shading blinds, ceiling fans, extra insulation and solar panels to offset new air-conditioning. The project emphasised working with the residents, including understanding how residents use different areas of their home during warm weather. The project also aimed to understand barriers to similar future upgrades, including a lack of funding mechanisms for community housing providers, lack of knowledge of the UHIE, and deficiencies with the thermal standards of building and planning regulations.

Whilst the project was small (10 properties) it has been considered a great success. Learnings have already been utilised and feedback from residents and AHV and HCA has been extremely positive.

Cooling Communities has been selected as a finalist in the Environmental Justice section of the 2018 Victorian Premier's Sustainability Awards. The awards recognise individuals, communities, organisations and businesses that are leading the way to a sustainable future.

Extreme heat events and an ageing population

Provided by Bridget Tehan, Victorian Council of Social Service

This year's extreme heat across the northern hemisphere highlights the dangers related to our changing climate. Thousands of excess deaths can be attributed to extreme heat and tens of thousands more have suffered from heatstroke-related illnesses. In Quebec, Canada, it was reported that there were over 80 deaths attributed to the extreme heat, despite municipalities having heat plans in place. Those most vulnerable to the heat were found to be elderly men and women living alone in sweltering apartments, and many with underlying health conditions¹.

Between 2001 and 2015 Melbourne recorded almost 1,300 excess deaths following episodes of extreme heat.² Our population is ageing – the number of people aged 65 and over in Australia is projected to grow from 3.8 million to 8.8 million by 2057.³ In addition, we are increasingly living alone. Almost one in four Australian households is a lone-person household, with a median age of 64 for females and 54 years for males who live alone.⁴ While living alone does not necessarily mean being disconnected, we know that older people are at a higher risk of becoming isolated if they live by themselves, and that this isolation can reduce their capacity to protect themselves during a heatwave.



We must work to ensure our public health practices target the growing number of people living alone, who we know are the most vulnerable to extreme heat.

Heatwaves, Homes & Health – a report by RMIT⁵

The RMIT 2017 report *Heatwaves, Homes & Health*, acknowledges that the issues of heat, climate change and rising energy costs aren't going away, are of much interest academically, and important to the community.



The report notes that as more households experience rising electricity prices, householders concerns about energy bills contributes to potentially unhealthy self-rationing, as older householders may underestimate their own vulnerability in extreme heat. Some of the most vulnerable people may also restrict cooling in response to public messaging to reduce electricity use in extreme heat. CALD communities are likely to face additional challenges when navigating extreme heat, cost-reflective pricing and public messaging.

On the other hand, households with infants and pets indicated an increasing reliance on air conditioning. Half of the households with pets said they left the air conditioning on exclusively for their pets.

The report concludes that mitigating the impact of future heatwaves on household health is a complex social problem which calls for cross-sectoral policy attention. Responses should include the electricity sector engaging and collaborating with other relevant sectors and jurisdictions, particularly the housing, urban planning, community development and health sectors. In addition, engagement with households, communities and other sectors should be undertaken to build trust, identify widely acceptable approaches, and build support for, and productive responses to, demand management initiatives to help minimise the impacts of extreme heat.

¹ <https://www.thestar.com/news/canada/2018/07/18/89-deaths-now-linked-to-heat-wave-in-quebec.html>

² Longden T, Measuring temperature-related mortality using endogenously determined thresholds, *Climatic Change*, 2018.

³ AIHW, *Older Australia at a glance*, Cat. no: WEB 194, Australian Institute for Health and Welfare, 2017.

⁴ ABS, *Census of Population and Housing: Reflecting Australia - Stories from the Census*, Australian Bureau of Statistics, 2016.

⁵ Nicholls L., McCann H., Strengers Y. & Bosomworth K. *Heatwaves, Homes & Health: Why household vulnerability to extreme heat is an electricity policy issue*, Centre for Urban Research, RMIT University, Melbourne

2017-2018 Heat health alerts

The Department of Health and Human Services issued heat health alerts for **10** days during the 2017-18 summer. In comparison, heat health alerts were issued for six days during 2016-2017 and 10 days during 2015-2016. We were fortunate not to have heat events as prolonged as those experienced in 2009 and 2014 (Table 1).

Over the 2017-18 summer, heat health alerts were issued for **eight** days in Mallee and North Central; **seven** days in Northern Country; **six** days in Central; **five** days in Wimmera and North East; **four** days in South West; **two** days in West & South Gippsland; and for **one** day in East Gippsland. Heat health alerts were issued at least once for every weather forecast district during the summer of 2017-2018 (Table 2). The Bureau of Meteorology issued four [Special Climate Statements](#) between October 2017 and May 2018 that provide additional context to heat during 2018.

Heat health alerts were issued for **10** days during summer 2017-2018. Note that for some days the actual average temperature was below the threshold for the district. This was often because the overnight temperature was lower than forecast – a ‘cool change’ coming through earlier than expected.

* Colours used in table represent each weather forecast district as per [Heat health alert system: Information and guidance for local government and other stakeholders](#).

Table 1

Year (Nov – March)	Number of days alerts issued	Excess Deaths
2017-18	10	
2016-17	6	
2015-16	10	
2014-15	4	
2013-14*	12	167*
2012-13	10	
2011-12	2	
2010-11	5	
2009-10*	11	374*

*Chief Health Officer reports available for 2009 (January 26 to February 1, 2009) and 2014 (January 14 to January 17, 2014) heat events. Excess death is calculated by comparing data for the same period in the previous year/s.

Table 2

Event date	Weather forecast district(s) & temperature threshold	Actual max & min temperature (°C) reached (as provided by the BoM)	Actual average temp (°C)	Date issued
18 December	Mallee (34°C)	Mildura Max: 40.7 Min: 28.8	34.75	14/12/2017
	Wimmera (32°C)	Horsham Max: 33.8 Min: 22.0	27.9	14/12/2017
	Northern Country (32°C)	Shepparton Max: 35.4 Min: 24.1	29.75	14/12/2017
		Bendigo Max: 34.7 Min: 22.9	28.8	
	North Central (30°C)	Seymour (Mangalore) Max: 34.8 Min: 21.3	28.05	14/12/2017
6 January	North Central (30°C)	Seymour (Mangalore) Max: 41.2 Min: 17.4	29.3	02/01/2018
	Central (30°C)	Melbourne Max: 41.7 Min: 18.7	30.2	04/01/2018
	West & South Gippsland (30°C)	Sale Max: 39.1 Min: 16.5	27.8	04/01/2018
18 January	South West (30°C)	Hamilton Max: 41.0 Min: 16.7	28.85	17/01/2018
	North Central (30°C)	Seymour (Mangalore) Max: 38.1 Min: 15.4	26.75	15/01/2018
	Central (30°C)	Melbourne Max: 40.0 Min: 22.5	31.25	15/01/2018
19 January	Mallee (34°C)	Mildura Max: 44.3 Min: 20.7	32.5	16/01/2018
	Wimmera (32°C)	Horsham Max: 45.1 Min: 16.7	30.9	16/01/2018
	Northern Country (32°C)	Shepparton Max: 42.3 Min: 18.0	30.15	16/01/2018
Bendigo Max: 43.5 Min: 22.0		32.75		

	North East (32°C)	Albury/Wodonga	Max:39.5 Min: 18.3	28.9	16/01/2018
	North Central (30°C)	Seymour (Mangalore)	Max: 42.1 Min: 18.2	30.15	15/01/2018
	Central (30°C)	Melbourne	Max: 40.3 Min: 20.3	30.3	16/01/2018
20 January	Mallee (34°C)	Mildura	Max: 45.1 Min: 23.6	34.35	17/01/2018
	Northern Country (32°C)	Shepparton	Max: 43.4 Min: 20.7	32.05	18/01/2018
		Bendigo	Max: 43.0 Min: 23.4	33.2	
	North East (32°C)	Albury/Wodonga	Max: 41.7 Min: 18.7	30.2	18/01/2018
North Central (30°C)	Seymour (Mangalore)	Max: 43.1 Min: 22.5	32.8	18/01/2018	
21 January	Mallee (34°C)	Mildura	Max: 44.2 Min: 28.2	36.2	17/01/2018
	North East (32°C)	Albury/Wodonga	Max: 43.1 Min: 23.0	33.05	18/01/2018
26 January	Mallee (34°C)	Mildura	Max: 41.5 Min: 22.6	32.05	22/01/2018
	Wimmera (32°C)	Horsham	Max: 35.7 Min: 17.1	26.4	22/01/2018
	South West (30°C)	Hamilton	Max: 31.5 Min: 14.3	22.9	22/01/2018
	Northern Country (32°C)	Shepparton	Max: 38.5 Min: 21.3	29.9	22/01/2018
		Bendigo	Max: 37.8 Min: 20.5	29.15	
	North Central (30°C)	Seymour (Mangalore)	Max: 38.3 Min: 20.4	29.35	22/01/2018
Central (30°C)	Melbourne	Max: 28.4 Min: 21.2	24.8	22/01/2018	
27 January	Mallee (34°C)	Mildura	Max: 42.0 Min:26.6	34.3	22/01/2018
	Wimmera (32°C)	Horsham	Max:37.8 Min: 22.6	30.2	22/01/2018
	South West (30°C)	Hamilton	Max: 36.6 Min: 18.5	27.55	22/01/2018
	Northern Country (32°C)	Shepparton	Max: 35.4 Min: 23.1	29.25	22/01/2018
		Bendigo	Max: 35.9 Min: 22.3	29.1	
	North Central (30°C)	Seymour (Mangalore)	Max: 35.7 Min: 22.6	29.15	22/01/2018
Central (30°C)	Melbourne	Max:33.2 Min: 22.7	27.95	22/01/2018	
28 January	Mallee (34°C)	Mildura	Max: 43.8 Min: 31.4	37.6	22/01/2018
	Wimmera (32°C)	Horsham	Max: 42.4 Min: 25.8	34.1	22/01/2018
	South West (30°C)	Hamilton	Max: 41.3 Min: 21.1	31.2	22/01/2018
	Northern Country (32°C)	Shepparton	Max: 38.0 Min: 23.7	30.85	22/01/2018
		Bendigo	Max: 38.8 Min: 24.4	31.6	
	North East (32°C)	Albury/Wodonga	Max: 36.8 Min: 22.4	29.6	22/01/2018
	North Central (30°C)	Seymour (Mangalore)	Max: 38.8 Min: 25.4	32.1	22/01/2018
Central (30°C)	Melbourne	Max: 38.1 Min: 27.8	32.95	22/01/2018	

	West & South Gippsland (30°C)	Sale	Max:36.2 Min: 21.1	28.65	22/01/2018
	East Gippsland (30°C)	Bairnsdale	Max: 36.0 Min: 23.3	29.65	22/01/2018
8 February	Mallee (34°C)	Mildura	Max: 43.6 Min: 26.1	34.85	05/02/2018
	Northern Country (32°C)	Shepparton	Max: 39.0 Min: 21.4	30.2	06/02/2018
		Bendigo	Max: 39.0 Min: 19.2	29.1	
	North East (32°C)	Albury/Wodonga	Max: 39.4 Min: 25.1	32.25	06/02/2018

Resources

Did you know *you can* order resources directly by placing an order via the [online order form](#)? As well as **Survive the heat** pamphlets and posters which are available in community languages, you can also order, **Smoky outside** and **Smoke from fires** posters as well as **Your Guide to Power Outages and Never leave kids in cars**.

Resources can also be downloaded from the [department's website](#). Smoky outside resources are available from the [Better Health Channel](#). community languages are available from [Health Translations](#).

