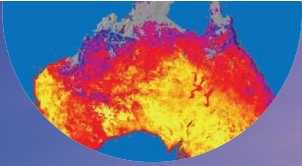


# Heatwave



As we welcome the summer season, we are reminded of the greater risk to our vulnerable communities during heatwaves.

The 13 pilot projects we funded are reaching their final phase and are expected to be implemented this summer. In all, 22 local governments, two PCPs and one Greenhouse Alliance were involved in the pilot projects, whose extensive work will be the foundation for the development of a toolkit, which will be available to all local governments for heatwave planning over the next two years.

A heatwave alert system has been established for metropolitan Melbourne. Thresholds for regional Victoria will be developed over the coming months. The Bureau of Meteorology has commenced Nextgen Forecasting Service, a new system of forecasting that provides 7-day forecasting in 80 sites across Melbourne. Further details are included in this newsletter, and will be useful for those involved in municipal heatwave response.

We look forward to on-going work with local governments, regional staff and other interested organisations and community groups over the next two years as the heatwave program rolls out across Victoria.

Our intention is to produce this newsletter regularly across the coming months to provide you with information about projects, research and resources on heatwaves – locally, nationally and right here in Victoria. We welcome your feedback and suggestions regarding the newsletter so we only provide useful and relevant information.

Enjoy the summer!

**Jan Bowman**  
Assistant Director  
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## Introduction

Climate change is expected to increase the frequency and intensity of heatwaves which are known to cause excess deaths and illness. In Melbourne, it is estimated that heat may contribute to almost 300 deaths per year amongst people aged 65 years and above. Based on climate change scenarios and modelling and projected population changes, heat-related mortality may increase four-fold by 2050.

The Victorian Government identified the need to respond to heatwave in their sustainability action statement released in 2006 which committed to a Victorian Heatwave plan involving communities and local government.

The strategy thus far has included:

- holding the Climate Change and Human Health 2007 conference;
- developing a rudimentary heatwave warning system for Victoria;
- establishing a simple heat alert system for metropolitan Melbourne. Further work is currently underway to develop similar systems for regional Victoria;
- undertaking 13 pilot projects (engaging 22 local governments) to develop heatwave plans integrated into existing local government public health and / or emergency management plans and
- commencing the development of a toolkit based on those pilot projects to assist the Department of Human Services in rolling out and funding heatwave response plans across the remaining 57 local governments over 2008/09 and 2009/10.

## Pilot Heatwave Planning Projects

As part of the Victorian Heatwave Strategy, the Department of Human Services funded 13 pilot projects, involving 22 local governments, to develop heatwave plans integrated into existing municipal planning process, such as the Municipal Public Health Plan and the Municipal Emergency Management Plan. The pilot projects were undertaken across Victoria in each of the department's regions.

Since vulnerable communities such as the aged and frail, people with chronic illness, people with disabilities and mental illness and the socially and economically disadvantaged have greater vulnerability to heatwaves, each of the pilot projects identified different vulnerable communities or situations and how best to engage with and address their particular needs.

The local governments engaged key stakeholders, including council business units, emergency services, community groups and businesses that may contribute to, or be impacted by, heatwave. The information collected inform the development of the heatwave responses for each council.

Each of the 13 pilot projects submitted an expression of interest, a project plan and an interim report; final reports are coming in now. The local governments were expected to record and submit information gathered during the planning process, including:

- Demographic profile and specific vulnerable communities targeted in local community
- Existing community-based interventions concerned with heatwave or targeted vulnerable communities
- Gaps in community-based interventions or strategies that could be implemented in response to heatwave planning
- Where and how heatwave planning can link with existing municipal planning
- Identifying and engaging the project team, external partners and community groups
- Promotion of the project within the organisation and to external partners
- Barriers encountered and strategies to overcome them
- Development of a communication plan, especially addressing vulnerable groups
- Potential staff training

To support the dissemination of the toolkit, the department is intending to hold a forum next year to showcase the outcomes of the pilot projects with all councils.



## Victorian Heatwave Strategy Planning Toolkit

The Department of Human Services is currently finalising the appointment of a consultant to undertake the development of the toolkit.

The toolkit will be based on the findings and outcomes of the 13 pilot projects, which will be understood through interviews and the reports submitted by the local governments. It is envisioned that the toolkit will contain planning advice, case studies and examples from the thirteen pilot projects, planning templates, and guidance about heatwave planning. Likewise, the toolkit will assist local councils in Victoria to develop a heatwave response that includes:

- health, community and emergency service actions and responses to heatwave alert;
- identification of vulnerable communities;
- a communication strategy to initiate alert, response and recovery phases of the plan;
- description of key stakeholder roles and responsibilities;
- a community awareness and education component;
- operational links with other municipal planning processes (for example the response and recovery phase may be managed through the Municipal Emergency Management Plan and the community awareness raising component could be part of the Municipal Public Health Plan).

After consultation with local governments and the department's key regional staff, the toolkit will be finalised and rolled out statewide across two financial years, completed by the end of the 2009/2010 financial year. Funding will be available to support local governments using the toolkit.

## Tender for an Impact Assessment

The Public Health Branch has decided to undertake an impact assessment of climate change on population health and vulnerabilities. The project is being undertaken in two phases. Phase One is the development of a scoping report to provide the Public Health Branch with a robust methodology with which to undertake Phase Two of the project, the actual impact assessment. Tenders for Phase One are currently being assessed with Phase One due for completion by July 2009.

Phase Two will be undertaken using the methodology developed during Phase One and the processes and criteria developed for making, and prioritising, recommendations. It is expected Phase Two will take between 18 and 24 months to complete. The major outcomes of the impact assessment will include a sound policy platform for the department of Human Services to operate from for several years into the future; and a prioritised list of recommendations for the Department to consider in relation to ameliorating the impacts of climate change on the public health of Victorians.



## Heat Alerts

Heatwave action plans are normally activated when temperatures are forecast which are likely to impact on the health of the community. These activation levels are also called 'thresholds'. The relationship between temperature and health is established using epidemiological studies, and can differ between different population areas.

To date, the department has established a heatwave threshold for metropolitan Melbourne of a daily average of 30°C (mean of today's maximum and tonight's minimum temperature or as an overnight temperature of 24°C. In these conditions, mortality rates in people aged 65 years or more increase by 19-21%.

The department is beginning to commission studies to develop heatwave thresholds for regional Victorian areas, which will be completed in time for the 2009/2010 summer period. Thresholds for Wodonga, Bendigo, Westernport, Latrobe Valley and Horsham will be prioritised and completed in the coming months.

Local governments can review meteorological forecasts throughout the summer to determine if heatwave conditions have been predicted. Details of the new forecasting system can be found at <http://www.bom.gov.au/nextgen/>. In summary the Bureau provides 7-day maximum and minimum temperatures along with detailed descriptions for 29 areas in Victoria, and 7-day maximum and minimum temperatures and brief descriptions for a further 51 areas. These can be found at <http://www.bom.gov.au/weather/vic/maps/vic-forecast-map-7-day.shtml#>.

To support the implementation of the heatwave plans this summer, the department will be in touch with each of the pilot projects to finalise the communication components of the heat alert system this summer. This will focus on those councils who have participated in the pilot projects; however other interested councils can contact Christy Boucher if they wish to be part of the alert system.

## National Update

The Commonwealth has established seven new 'adaptation research networks' to foster critical research into the effects of climate change. The networks will be part of the National Climate Change Adaptation Research Facility, hosted by Griffith University. In Victoria, RMIT University will be responsible for Disaster Management and Emergency Services, while the University of Melbourne researches Social, Economic and Institutional Dimensions.

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## Resources for heatwave planning

There are currently several resources available to assist in heatwave planning. These include:

- *Environments for Health*, Department of Human Services
- *Towards Healthy Environments*, Department of Human Services
- *Excessive Heat Events Guidebook*, Centers for Disease Control, USA
- *Queensland Heatwave Response Plan*, Queensland
- *Health Impact Assessment*, Western Australia

## Research and resources

The International Journal of Epidemiology published in article on 18 August 2008 called 'The effect of heat waves on hospital admissions for renal disease in a temperate city of Australia' by Alana Hansen et al. ([http://www.ncbi.nlm.nih.gov/pubmed/18710886?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed\\_ResultsPanel.Pubmed\\_DefaultReportPanel.Pubmed\\_RVDocSum](http://www.ncbi.nlm.nih.gov/pubmed/18710886?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum))

'The Effect of Heat Waves on Mental Health in a Temperate Australian City' by Alana Hansen et al. was published in Environmental Health Perspectives Volume 116 on October 2008. (<http://ehp.niehs.nih.gov/docs/2008/11339/abstract.html>)

The Journal of Public Health December 2008; Vol. 30, No. 4 discusses how public health sector might respond to climate change in the Perspectives section. (<http://jpubhealth.oxfordjournals.org/content/vol30/issue4/index.dtl>)

Kidsafe, Ambulance Victoria and MFB have combined forces to issue a warning to parents over the deadly dangers of leaving children in cars on hot days. For a copy of the fact sheet, please visit <http://www.kidsafevic.com.au/images/stories/pdfs/hotcars.pdf>

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