

Heat Health Alert System 2014-2015

Information and guidance for councils and stakeholders

Introduction

The Department of Health's Heat Health Alert System notifies councils, departmental program areas, hospitals, and health and community service providers of forecast heatwave conditions which are likely to impact on human health.

A heat health alert is issued when mean temperatures are predicted to reach and exceed heat health thresholds. Heat health alert contacts are advised to monitor local conditions and take action in accordance with their own heatwave plans, service continuity plans and occupational health and safety (OH&S) plans.

The Heat Health Alert System will operate from December 2014 to the end of February 2015.

Figure 1: Weather forecast districts and corresponding heat health temperature thresholds

Image adapted from the Country Fire Authority's 'Know your total fire ban district'.

Weather forecast districts

The Heat Health Alert System is based on the Bureau of Meteorology weather forecast districts and boundaries (Figure 1).

Heat health temperature thresholds

The Department of Health has identified heat health temperature thresholds for Victoria, above which heat-related illness and mortality increases substantially.

These thresholds differ across the state to recognise the higher temperatures experienced in northern parts of Victoria. A heat health temperature threshold has been established for each of the nine weather forecast districts as shown in Figure 1.

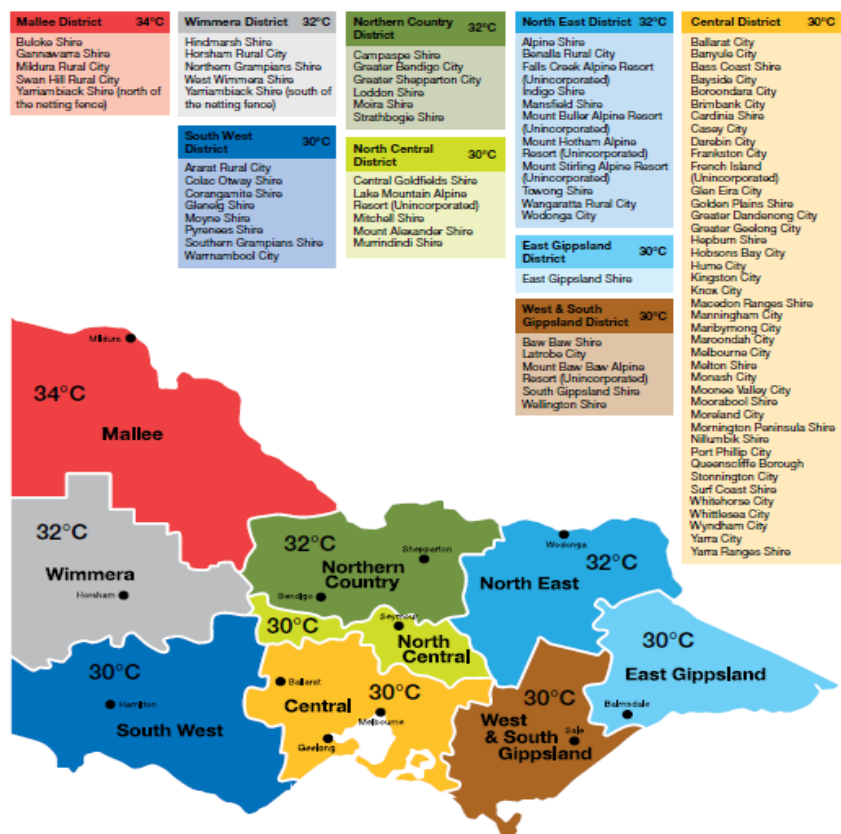


Image adapted from the Country Fire Authority's 'Know your total fire ban district'.

The department will monitor the Bureau of Meteorology forecast daily minimum and maximum temperatures and calculate the daily average temperature for each weather forecast district (Figure 2).

Figure 2: Example calculation of the daily average temperature

Calculating the average temperature

The average temperature is calculated from the forecast **daily maximum** (in this case Tuesday) and the forecast overnight temperature, which is the **daily minimum for the following day** (in this case Wednesday).

An example of this calculation is demonstrated below:

Melbourne

Tuesday	
Min: 20 °C	
Max: 38 °C	
Wednesday	
Min: 25 °C	
Max: 31 °C	

Average calculation for Tuesday

$(38+25)/2 = 31.5^{\circ}\text{C}$

The threshold for Melbourne = average of 30°C.

The temperature forecast indicates that the threshold will be exceeded.

This calculation will be repeated for each of the seven days included in the daily forecast.

The average temperature for any given day is the average of the forecast daily maximum temperature and the forecast overnight temperature (which is the daily minimum for the following day).

When forecast average temperatures are predicted to reach or exceed the heat health temperature threshold for a specific weather forecast district, the department will issue a heat health alert for that district.

Heat health alerts

The department will issue heat health alerts to:

- local government authorities
- emergency services
- health and aged care sector
- government departments and agencies
- departmental program areas
- statewide and major metropolitan service providers
- peak or advocacy groups.

Once a heat health alert is issued, local councils, departmental program areas and health and community service providers should respond in accordance with their heatwave plans.

The department will also be considering other factors that may influence vulnerability, such as very high maximum or minimum temperatures and high temperatures over a prolonged consecutive period. High temperature alerts may be issued in these circumstances even if the average temperature threshold is not exceeded. Prolonged high temperatures below threshold levels can still impact on health services.

Where possible, heat health alerts will be issued 3-4 days prior to forecast heatwave conditions providing recipients with an early warning. Whilst the department will be monitoring forecast temperatures across the state, it is important for councils and other organisations to continue to monitor local conditions. **It may be necessary for councils to activate heatwave plans in the absence of a heat health alert being issued.** Council contacts are encouraged to monitor local conditions using the Bureau of Meteorology at <http://www.bom.gov.au/>

The heat health alerts are available from the Department of Health website <http://www.health.vic.gov.au/chiefhealthofficer/index.htm>.