

Cool Spaces

A cool space is typically an air-conditioned or cooled building that has been designed as a site to provide respite and safety during extreme heat. ¹

Cool spaces are critical during extreme heatwaves. As temperatures continue to rise, the need for cool spaces becomes even more urgent. They can be used to protect vulnerable populations and reduce the health risks associated with extreme heat.

Heatwaves are the deadliest of extreme weather events experienced in Australia. They cause more deaths than all natural disasters combined and are a serious threat to health. Temperatures in the Loddon Mallee region are expected to rise by 2.8 -3.0°C by 2050 posing a serious threat to health in the future. ²

Cool spaces provide short-term refuge from extremely high temperatures for those who cannot avoid the heat in their homes. Having a cool environment for people reduces the risk of heat-related illnesses. It can build long-term resilience and well-being of communities in the face of climate change.

A cool space is different to an emergency response or relief centre, which is generally a centrally located large building that provides immediate basic support and safety in times of an emergency. They are not necessarily airconditioned and functional as a cool space.

Health impacts of extreme heat and heatwaves include an increase in severity of cardiac and respiratory illnesses, heat stroke, physical exhaustion and an increase in falls due to dehydration. Mental exhaustion due to lack of sleep affects both adults and children. As people spend more time in the water, their risk of drowning can increase.

Australian studies say heatwaves result in excess ambulance demand, emergency presentations, hospital admissions and deaths. ³

The largest demographic impacted by heat are the elderly, particularly when living alone, followed by young children, the socio-economically disadvantaged and those with pre-existing health conditions like diabetes, respiratory or heart disease. ⁴

In smaller rural communities, there is a lack of public or private places to seek relief from the heat. This is because there are fewer indoor shopping centres, movie theatres, libraries and no beaches to escape to.

Victoria's Infrastructure Strategy 2021 - 2051 includes a recommendation to develop regional cool spaces (recommendation 90)



Maldon - Photo courtesy of Mt Alexander Shire Council

Locations

Ever-changing and extreme heat events can impact lower socio-economic locations, particularly when people are living in older homes or rental properties that are often substandard or have poor thermal efficiency.⁵ A Sustainability Victoria survey says just over 80% of the Victorian homes built before 2005 had an average energy efficiency star rating of 1.57. This is compared to 2011 where a six star was the minimum standard. This could increase the health risks associated with extreme weather for those living in older homes.⁶

A place-based approach is recommended when choosing suitable facilities or buildings as cool spaces. Rural councils have multiple ageing buildings (assets) that need ongoing maintenance. These buildings may be retrofitted to be a cool space and be utilised as a multi-purpose facility, rather than the more expensive option of new purpose-built facilities. Local councils have the option to utilise air-conditioned local libraries as respite for extreme heat events.

Another option is community or neighbourhood houses. They are a local agency trusted to provide safe and culturally sensitive short-term respite to a smaller number of people. Some services may provide a cool space specifically for their clients such as Aboriginal services. Community health services and waiting areas are used in some communities as a respite in the short term when options are limited, and their home environment does not provide relief from the heat.

An interim consideration is to arrange a community event or activity in an air-conditioned building to provide respite during the peak hours of a heatwave in identified vulnerable communities e.g. free access to swimming pools. There may also be opportunities within the private sector, utilising the facilities and courtesy transport to support community members without transport. Each local area needs to evaluate the effectiveness and utilisation of the space during extreme heat.

Planning for cool spaces

Planning needs to start well in advance of the anticipated extreme hot weather. This includes to:



- collaborate with local stakeholders and community members who share the same goal
- identify your target groups e.g. clients or general population
- identify vulnerable populations or target groups in the local community and where they go during hot weather for relief
- check with your local councils for heat health plans and possible plans to develop cool space models
- identify suitable buildings and facilities to be utilised in times of extreme high heat in local communities
- support communication of heat wave plans, location of cool spaces and heat health advice e.g. newsletters, social media and public meetings
- seek funding opportunities or pooling of resources
- develop monitoring and evaluation plans.

Key requirements of a cool space

Creating a cool and safe space for vulnerable people during a heatwave involves planning, resources, and community engagement. The goal is to provide a comfortable environment that minimises the risks associated with high temperatures. Here are some steps to aim for the 'gold standard'. Interim measures may not be able to include all the key requirements.

Location

- ✓ Centrally located and accessible to all members of the community, including those with mobility or other disabilities
- ✓ Well connected to public transport e.g. trains/buses
- ✓ Located near food outlets for easy access

Operation

- ✓ A governance and operational plan, which details when the cool space is activated, staffing/volunteer model (if required), process to access locked facilities, security procedures and medical assistance processes
- ✓ Hours of operation need to include access on public holidays and weekends
- ✓ Communication plan for stakeholders and the community to provide clear and accessible messaging
- ✓ Provide entertainment or activities to encourage social interaction where possible
- ✓ Provide health and social information resources
- ✓ Training for volunteers in cultural sensitivity, family violence, mental health first aid and basic first aid training
- ✓ Facility and/or organisation insurance coverage

Sustainable


- ✓ Air conditioned with back-up power from solar panels, batteries or a generator to reduce costs or in case of power outages
- ✓ To be a multi-functional facility e.g. an existing facility such as schools, sporting centres, gymnasiums and libraries
- ✓ Budget for smaller community buildings to address any incurred costs

Inclusive

- ✓ Accessible toilet facilities
- ✓ Baby/child friendly spaces that meet safety standards with facilities to provide care
- ✓ Accessible to people with a disability
- ✓ Cross-cultural safety for Aboriginal and Torres Strait Islander Peoples, LGBTQIA+ and Culturally and linguistically diverse community

Facilities

- ✓ Access to facility is free of charge to community
- ✓ Kitchen facilities to prepare and store food, water and medication as needed
- ✓ Capacity for secure space for pets with access to shade and water located close to owners
- ✓ Adequate seating dependant on the community location and population impacted
- ✓ Communication support where possible such as wifi access, charging stations for mobile devices and radio/television for updates of emergency information.
- ✓ Security cameras to support people's safety

For more
information on
heat health, click
here 

Case study

Foster, Mirboo North and Poowong branches of [my community library in Victoria](#) offer 24-hour access to their library facilities to approved applicants. Entry is available with a secure key card so members can use the facility in times of extreme heat. The facilities include an induction process to outline access and safety and have closed circuit security cameras for 24-hour security. A wide variety of free events are routinely organised at each local library for members to participate in.

Campbelltown City Council's South Australia Cool Spaces for Summer 2024 Trial was initiated to respond to the projected intensification of heat in the future. The project aimed to understand whether vulnerable community members wanted to access a cool refuge during times of extreme heat and how current places met their needs. Included is their background information, trial documents and community responses and Cool Spaces Action Plan.



Links & resources

[CVGA Heatwave Help](#)

[Heat Health translations](#)

[Bureau of Meteorology Heatwave Service](#)

[Being prepared for a heatwave booklet to help those with disabilities](#)

[Bendigo Fire, Flood and Heat Safety Refugee Hub](#)

[Department of Health Heat Health Warning](#)



Notes:

¹ S Widerynski et al, 'The Use of Cooling Centers to Prevent Heat-Related Illness: Summary of Evidence and Strategies for Implementation' *Centres for Disease Control and Prevention*, 2024, 4

² Adapt Loddon Mallee, 'Loddon Mallee Climate Ready Plan' *Victorian State Government*, 2024, 11

³ Environment Victoria, 'Victoria, heatwaves & climate change', 2020

⁴ M. Loughnan et al. 'A spatial vulnerability analysis of urban populations during extreme heat events in Australian capital cities Final Report', *NNCARF*, 2013

⁵ J. Lander et al., 'Extreme heat driven by the climate emergency: impacts on the health and wellbeing of public housing tenants in Mildura, Victoria', *Report prepared for Mallee Family Care*, 2019, Sydney

⁶ Sustainability Victoria, 'Energy Efficiency Upgrade Potential of Existing Victorian Houses' *Victorian State Government*, 2015.