Sweltering Cities and Healthy Homes for Renters acknowledge the Traditional Owners of the land on which we work. Sovereignty was never ceded and this land always was, and always will be Aboriginal land. The creation of urban heat islands is a result of the ongoing environmental devastation of colonisation.

In this report we have used the colonial names for all states, territories and cities. These are the names of the capital cities across the country where we have been actively working on promoting the survey and the majority of respondents live:

Naarm (Melbourne)
Warrang (Sydney)
Meanjin (Brisbane)
Ngambri or Ngunnawal (Canberra)
Nipaluna (Hobart)
Tarndanya (Adelaide)
Boorloo (Perth)
Mparntwe (Alice Springs)
Garramilla (Darwin)
Gimuy (Cairns)

Acknowledgement of Country
Contents

04 Executive summary

05 Introduction

06 Method

07 Background

08 Findings

26 Recommendations

27 References
The results of the 2022 Summer Survey make it clear that the health impacts of extreme heat are significant and under-recognised, even during a summer of ‘mild’ temperatures in some states. Two thirds of people reported feeling unwell and 84% have trouble sleeping on hot days or during heatwaves. One in eight respondents reported that they have sought medical care when they felt unwell in the heat.

In this year’s survey we asked people how the covid-19 pandemic had impacted their plans to keep cool and safe in summer. There is a significant overlap between people who are vulnerable to covid-19 and those who are also vulnerable to heat related diseases. Heatwave safety advice often recommends that people go somewhere cool and we have found that over 30% of people leave their homes to go to a cooler location when it’s hot. However more than half of the respondents around the country told us that they feel less comfortable in public spaces during the covid-19 pandemic. As one respondent said "I spend a lot of time outdoors but struggle in hot weather due to lack of shade & shelter. I used to walk in shopping centres when weather was hot or wet, but covid put a stop to that". As climate change worsens there will continue to be overlapping disasters.

One of the most noticeable differences in this year’s report was the frequent descriptions of the severe mental health impacts of extreme heat. When asked to describe health impacts that they have experienced, 70 people said that the heat triggers or exacerbates anxiety and 45 people mentioned depression. People have reported feeling anxious for friends and family, that they fight with their partners, feel isolated and claustrophobic, or find sleeplessness incapacitates them.

Nationally 32.8% of renters have requested upgrades to their homes, but less than 15% of those actually saw improvements to maintain safe temperatures. When we asked what upgrades renters would like to have in their homes, 45% mentioned insulation. Other suggestions included air-conditioning, more trees, better blinds or awnings. Without these improvements, an increasing proportion of renters will be living in unsafe housing during summer.

There was strong support for policies to address heat risks, especially improved standards for new homes and rental housing to make them more energy efficient and safe in the heat. More trees is the most popular intervention to cool suburbs. In April 2022 the NSW Government announced they would not be banning black roofs to address the urban heat island effect, however two thirds of NSW respondents support ‘Lighter coloured roofs, streets and buildings to reflect heat’.

2147 respondents from 695 unique postcodes across every state and territory

Executive summary

The results of the 2022 Summer Survey make it clear that the health impacts of extreme heat are significant and under-recognised, even during a summer of ‘mild’ temperatures in some states. Two thirds of people reported feeling unwell and 84% have trouble sleeping on hot days or during heatwaves. One in eight respondents reported that they have sought medical care when they felt unwell in the heat.

In this year’s survey we asked people how the covid-19 pandemic had impacted their plans to keep cool and safe in summer. There is a significant overlap between people who are vulnerable to covid-19 and those who are also vulnerable to heat related diseases. Heatwave safety advice often recommends that people go somewhere cool and we have found that over 30% of people leave their homes to go to a cooler location when it’s hot. However more than half of the respondents around the country told us that they feel less comfortable in public spaces during the covid-19 pandemic. As one respondent said "I spend a lot of time outdoors but struggle in hot weather due to lack of shade & shelter. I used to walk in shopping centres when weather was hot or wet, but covid put a stop to that". As climate change worsens there will continue to be overlapping disasters.

One of the most noticeable differences in this year’s report was the frequent descriptions of the severe mental health impacts of extreme heat. When asked to describe health impacts that they have experienced, 70 people said that the heat triggers or exacerbates anxiety and 45 people mentioned depression. People have reported feeling anxious for friends and family, that they fight with their partners, feel isolated and claustrophobic, or find sleeplessness incapacitates them.

Nationally 32.8% of renters have requested upgrades to their homes, but less than 15% of those actually saw improvements to maintain safe temperatures. When we asked what upgrades renters would like to have in their homes, 45% mentioned insulation. Other suggestions included air-conditioning, more trees, better blinds or awnings. Without these improvements, an increasing proportion of renters will be living in unsafe housing during summer.

There was strong support for policies to address heat risks, especially improved standards for new homes and rental housing to make them more energy efficient and safe in the heat. More trees is the most popular intervention to cool suburbs. In April 2022 the NSW Government announced they would not be banning black roofs to address the urban heat island effect, however two thirds of NSW respondents support ‘Lighter coloured roofs, streets and buildings to reflect heat’.
Rising temperatures are a public health emergency. Communities in our cities are experiencing the impacts of climate change in hot homes and sweltering workplaces and classrooms. Through the Summer Survey, Sweltering Cities and Healthy Homes for Renters sought to understand these experiences better in order to support communities impacted by extreme heat to secure cooler, more equitable and sustainable cities, with planning and policy that puts people at the centre.

The latest report on climate change mitigation released by the Intergovernmental Panel on Climate Change urges immediate and ambitious actions to reduce emissions across all areas of the economy to limit global warming to 1.5°C. Now is the time to take decisive actions to reduce emissions and cool our cities and homes, to make our communities liveable and healthy.

**Ambitious mitigation efforts for established, rapidly growing and emerging cities will encompass**
1) reducing or changing energy and material consumption,
2) electrification, and
3) enhancing carbon uptake and storage in the urban environment.

IPCC AR6 WGIII Summary for Policymakers 2022

With more than 2,100 respondents, the Survey is the largest survey ever on heat, health and homes in Australia. This year, we had a particular focus on the experiences of renters as an identified vulnerable population. Renters are not able to make changes in their homes that would make them more habitable and healthy. No jurisdiction in Australia has minimum standards for rental homes to ensure safe temperatures in summer.

Improving the quality of our homes and cooling our suburbs will have tangible health, economic, environmental and social benefits to communities across the country.
The Summer Survey was open for submissions from 1 December 2021 to 30 March 2022. The survey was published on Typeform, an online survey tool. The survey was also available as a physical paper form however no respondents used that method.

The questions in the survey cover how people experience the heat at home, how extreme heat affects their health, whether covid-19 has impacted their heatwave safety plans and what policies or local solutions they support. In October 2021 a range of stakeholders, community members and experts were consulted in the development of the survey.

The survey was promoted through partner organisations, community contacts, media coverage, online advertising, posters and fliers in some locations and in local council sustainability newsletters.

The 2020-21 Summer Community Survey was an initiative of Sweltering Cities that engaged 700 people in Sydney. Pilot projects were also run in Melbourne (115 respondents) and Brisbane (35 respondents). You can read the Sydney report here.

Where we refer to ‘extreme heat’ we are referring to temperatures above 35° as per the accepted benchmark for that term. Where it is not stated, respondents could choose all options that applied.

Thank you to our partners and supporters for getting the Summer Survey out into your communities across the country:

ACTCOSS, Anti-Poverty Network SA, Banksia Gardens Community Centre, CANA, Climate Justice Union, CoHealth, Conservation Council SA, Energetic Communities, Energy Consumers Australia, Enliven Victoria, Kimberley Community Legal Services, Jesuit Social Services, Liverpool City Council, City of Melbourne, NTCOSS, Penrith City Council, QCOSS, RAHU, Renew, St Vinnies ACT, SACOSS, Shelter NSW, Shelter SA, Shelter WA, St Vinnies, Sydney Alliance, Tenants Tasmania, Tenants Union ACT, TUNSW, Uniting Communities SA, VC OSS.
Exposure to high temperatures has a significant impact on human health. The greatest cause of heat-related death is cardiovascular issues - the heart experiences increased strain as the body attempts to cool itself down. Respiratory disease and cerebrovascular disease also pose great risk and are significant causes of heat-related deaths. A Brisbane-based study of mortality data found that life-years lost begins to increase as daily mean temperatures exceed just 23°C, even though the population might be accustomed to hot weather. While these effects start at temperatures as seemingly low as 23°C, the risk increases as temperatures rise above 25°C and rises rapidly above 30°C.

Housing can keep people safe from summer heat. However many people in Australia live in low-quality homes that deny them protection from heat. The WHO Housing and Health guidelines note “protection against outdoor heat is a key characteristic of healthy housing”. Homes without external shading, nearby trees, ceiling insulation, ventilation, or access to efficient air-conditioning are failing to protect those who live inside them.

Renters can have a higher risk of heat exposure at home due to a lack of control over housing conditions. This impacts renters’ physical and mental health, with poor quality housing contributing to increasing stress and worsening mental illness.

An Urban Heat Island (UHI) is a region that is hotter than surrounding or rural areas due to human development and activity. UHIs have low green cover, lots of concrete, and dark surfaces that attract the heat. The main contributing factor to UHIs is the physical environment, however, heat may also be produced by energy generation, air conditioners, and vehicles. Most of western Sydney is a large UHI that can be 10° or more hotter than suburbs in the east of Sydney. There are UHI regions across Australia.
2022 Summer Survey Report

Demographics

Location

<table>
<thead>
<tr>
<th>Location</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>1017</td>
</tr>
<tr>
<td>Vic</td>
<td>582</td>
</tr>
<tr>
<td>Qld</td>
<td>200</td>
</tr>
<tr>
<td>ACT</td>
<td>46</td>
</tr>
<tr>
<td>SA</td>
<td>114</td>
</tr>
<tr>
<td>WA</td>
<td>110</td>
</tr>
<tr>
<td>NT</td>
<td>50</td>
</tr>
<tr>
<td>Tas</td>
<td>27</td>
</tr>
</tbody>
</table>

Age

- Younger than 18: 750
- 18 to 24: 500
- 25 - 34: 50
- 35 - 49: 170
- 50 - 64: 90
- 65 - 79: 20
- 80 or older: 5

Living situation

- Own my own home: 46.1%
- Renting through a Real estate agent: 35.5%
- Renting directly from a landlord: 8%
- Renting in public or community housing: 3.3%
- Living with family: 5.7%
- Living with family: 5.7%
- Other: 1.4%

Types of dwelling

- House: 63%
- Apartment: 21.7%
- Townhouse/Duplex/Semi: 12.8%
- Other: 2.6%
When it gets very hot do you leave the house to go to a cooler location? (eg. shopping centre, cinema, library)

30.6%

Do you have trouble sleeping on very hot nights or during heatwaves?

84.1%

“I have an autoimmune disease which makes me get hot flushes. These become debilitating and mean I have to turn on the air conditioning overnight otherwise I can’t sleep.”

“My depression is out of control especially when I can’t sleep. I need to go to one of my kids houses to get some sleep on a hot night. They have air conditioning”

“I find it hard to focus at work, especially when we’ve been working from home and I can’t escape the heat in the daytime either. I become really sluggish and unmotivated in general.”

72% of respondents have air conditioning at home

61.8% said that concerns about cost stop them turning on their air conditioner
How has the Covid-19 Pandemic affected your plans to manage summer heat?

- I’m less comfortable in public spaces: 51.6%
- It’s difficult to work at home on hot days: 36.6%
- There are fewer cool public places for me to go when it’s hot: 30.6%
- Financial stress means I’m worried about paying for cooling at home: 26.7%
- I’m worried about getting very hot at home if I have to isolate: 25.3%
- It hasn’t: 26.8%

“The only aircon is in the shared space of my townhouse, and so I’m worried about passing it on to my housemates if I need to get cool. It’s especially bad when it’s humid. I’ve also avoided taking public transport, but that means getting to work is harder, especially because I ride my bike, which can sometimes be unbearable”
## Are there activities that you avoid during hot days?

<table>
<thead>
<tr>
<th>Activity</th>
<th>National</th>
<th>NSW</th>
<th>Victoria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walking</td>
<td>78.8%</td>
<td>79.9%</td>
<td>74.5%</td>
</tr>
<tr>
<td>Cycling</td>
<td>57.6%</td>
<td>52.4%</td>
<td>63.2%</td>
</tr>
<tr>
<td>Going to the shops/running errands</td>
<td>49.5%</td>
<td>46.2%</td>
<td>58.9%</td>
</tr>
<tr>
<td>Exercise</td>
<td>81.2%</td>
<td>81.2%</td>
<td>82.3%</td>
</tr>
<tr>
<td>Socialising</td>
<td>44.9%</td>
<td>43.2%</td>
<td>48.9%</td>
</tr>
<tr>
<td>Gardening</td>
<td>72.7%</td>
<td>71.2%</td>
<td>73.6%</td>
</tr>
</tbody>
</table>

## How do hot days affect you at work or school?

*Respondents could select one option*

- **They don’t**
  - 24.5%
- **Too hot to work outside**
  - 19.5%
- **I have difficulty concentrating**
  - 29.6%
- **It’s uncomfortable or impossible to commute to work or school in my normal way**
  - 6.7%
- **Uncomfortable heat inside makes it hard to do my job**
  - 13.4%
- **My uniform or work-wear makes me hotter**
  - 6.4%
Health

66.8% of respondents reported feeling unwell on hot days or during heatwaves.

More than 1 in 8 respondents have been to a doctor or sought medical care because they felt unwell in the heat*.

“Physical: I feel lethargic, too hot to cook proper meals, and therefore eat junk food. Try to sleep during the day to make up for lost sleep the previous night.”

“Heatstroke after paid gardening work, dehydration, sunburn, headaches”

“I already have disabilities, and so it causes flare ups if I can’t keep cool (especially with sleep issues). I also find when it’s too hot not being able to go outside negatively affects my mental illnesses as well”

“Mental health has been affected as I don’t want to do activities I would otherwise do in my free time like my usual hobby and even cooking has been impacted as I don’t want to spend time in kitchen feeling hot and increasing heat in an already hot house”

*13.4% of respondents indicated yes to ‘Have you ever been to a doctor or sought medical care because you felt unwell in the heat?’
2022 Summer Survey Report

Renter experiences

- Have you asked your landlord, real estate agent or housing provider about making changes?
- Have any of the changes you asked for happen?

45% of renters said they would like more insulation in their homes

Changes that renters would like to cool their homes:

"Better windows or blinds! The sun rises directly into the apartment and heats it up first thing in the morning. Maybe more airflow too, we don’t have windows that could catch the breeze without letting in the heat/bugs."

"Fill in all the old cracks, gaps and fireplaces. Seal windows properly and have the AC repaired. Better insulation and blinds would be nice too but one of the biggest contributors is the half a foot of water that sits under the house and keeps the house wet for the sun to heat in the walls. This wet summer is the worst in the 4 years I’ve been here."

"New shutters that close properly, New AC units that do not use as much power, seal the floors properly so heat cannot get in through the boards."
Planning and Policy

Do you think that the way your suburb is built:

- Increases heat: 49.5%
- Doesn't make a difference: 14.5%
- Decreases heat: 10.9%
- I’m not sure: 25.1%

Are there changes you would like to see in your suburb to make it cooler or safer?

- More trees: 80.4%
- Lighter coloured roofs, streets and buildings to reflect heat: 62.4%
- Bus shelters and seats for bus stops: 50.5%
- More shady parks: 65.3%
- Shade or shelter on walking routes: 70.1%
- Cool places for people to go to during heatwaves: 64.4%
What do you think governments should be doing to manage heat risk?

- New homes should be built to be cool in summer: 87.6%
- Schools, child care centres and other public buildings should have solar powered air conditioning: 85.8%
- Governments should set minimum standards for rental homes to be kept at liveable temperatures in summer: 86.5%
- Public transport should be powered by renewable energy and accessible in hot suburbs: 74.5%
- Australia should do more to address climate change: 87%
- There should be extra support for people at risk in hot suburbs: 74.3%

Q. Are you concerned that climate change may cause hotter summers?

Yes: 93.8%

"On a small scale, the heat makes me feel unable to live my life normally. On a big scale, my anxiety is exacerbated by the sheer scale of unprecedented climate changes.”
- Caitlin, NT
47% of survey respondents were renters, with more than 92% of renters renting their home privately, as shown in the figure to the right.

Rental homes are often less energy efficient, and the people who rent them have less access to effective cooling options such as ceiling fans and air conditioning. There are currently no explicit requirements in any Australian jurisdictions for cooling in rental homes. As such, temperatures in rental homes are routinely above safe limits which creates unhealthy conditions.

Renters indicated that there are changes that can be made to improve their homes. Respondents would commonly suggest insulation, air conditioning, ceiling fans, double glazed windows, or window coverings as features that would improve heat resilience in their homes.

When asked if they had requested any of these changes, 328 renters indicated they had made requests, but only 48 of those requests were carried out. That is, only 15% of requests for improvements were successful.

"It feels hopeless asking for insulation because the owners haven’t spent any money on the house to make it liveable. Landlords don’t think about what it would be like to live in an uninsulated house with a tin roof with no air con that gets hit with hot afternoon sun. I don’t think they could live through a summer in this place."

"I feel powerless as a renter to ask for better living conditions, because I can’t afford another rent increase. Regardless, I think it is unacceptable for landlords to be selling accommodation in houses that are unsuitable for living 3 months of the year." - Qld
"I offered to buy and pay for installation of a ceiling fan in my rental which was refused by the landlord. We have three portable ACs (from Aldi) for each room on the eastern side as it gets so hot, even with the blinds drawn; easily 28° if it’s above 25° outside. We don’t have fly screens or security grills so we cannot leave the sliding doors open overnight to cool down. Every townhouse that’s owner occupied has AC because it’s unbearable without it; before COVID my partner would work from the food court in a shopping mall when it was hot." - NSW

"Landlords should be legally obligated to implement cooling features in older houses. I’ve literally had heatstroke, and I’ve sat outside at 10 at night because even at 40° outside it was cooler than inside. Tinting windows is cheap, so is providing curtain rails so a tenant can hang UV block out curtains to cover Venetian blinds." - NSW

- 38% of renter respondents are living without air conditioning, compared to 19% of non-renter respondents.
- 47.3% of renter respondents left their homes to find a cooler location compared to just 14.5% of people who said they own their home.
- 81% of non-renters reported having air conditioning compared to just 62% of renters.
- 72% of renters reported that concerns about costs stop them from turning on their air conditioner compared to 55% of non-renters.

<table>
<thead>
<tr>
<th></th>
<th>Renters</th>
<th>Non-renters</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have AC</td>
<td>50%</td>
<td>25%</td>
<td>64%</td>
</tr>
<tr>
<td>Without AC</td>
<td>50%</td>
<td>75%</td>
<td>36%</td>
</tr>
</tbody>
</table>

Number of renters compared to non-renters with air conditioning in their homes
Rising temperatures will make walking, cycling, rolling or even just waiting for the bus difficult or potentially dangerous for people who are vulnerable to heat related diseases. Younger people, older people, people with disabilities and people who don’t drive or have access to a car are particularly impacted when extreme heat makes active or public transport inaccessible.

Anna Campbell, Executive Officer of Queensland Walks

The health and wellbeing benefits from walking are vast, yet we are facing walking environments that are dangerous to our health as a result of heat and sun exposure, particularly in Queensland. It is essential that urban impacts are acknowledged at all levels of government, and that urgent and locally- focused action is taken to cool and shade our cities.

Whether it is sitting at a bus stop, walking along an unshaded path, or waiting at the signalised intersection to cross the road, walkers of all ages are subjected to increasing heat and sun exposure. Walking is a climate-responsive and sustainable transport option, and one that should be encouraged.

Heat and sun exposure as a result of hostile places where we need to walk and wait can be mitigated through better design and good policy. The time to start funding cooler cities is now.
Green infrastructure is one of the keys to cool urban environments and increased tree cover is a consistently popular solution to urban heat. Streets and suburbs with low levels of urban canopy can be 5°C warmer than areas with denser urban canopy. Trees cool streets and homes by providing shade and evaporative cooling. Trees are also proven to have a positive psychological impact.

Unfortunately, and despite a range of government programs, tree canopy levels across hot suburbs are not increasing at the rate needed to alleviate the extreme heat impacting those communities. A report in 2016 found that urban tree cover had decreased in the previous 3–8 years across all urban LGAs. In Australia’s capital cities, Hobart has the highest level of urban canopy cover and Adelaide has the lowest. We found over 3 in 4 respondents in South Australia support more trees to cool their local suburb.

Support for more trees is extremely high in selected Urban Heat Island areas including Western Melbourne at 91% and Penrith in Western Sydney at 85%.

Comments on trees from respondents in the Penrith area

"Trees trees trees! There’s plenty of nature strips in my suburbs but not a single tree on them! Also there should be minimum requirements for green space per suburb."

"Every house needs at least one tree on the footpath. It helps shade neighbouring houses based on the movements of the sun throughout the day as well as shading the road that is dark coloured and very hot."

"More street trees and undergrounding of overhead power lines to allow proper and natural tree growth in existing suburbs."

"Houses around me are surrounded by too much concrete and asphalt and not enough trees. Too hot in summer and too cold in winter"
A report from the Climate Justice Research Centre at the University of Technology Sydney with research conducted in conjunction with the United Workers Union found that:

Exposure to heat in the workplace is not just a matter of daily temperature forecasts. Humidity levels, cooling controls, ventilation, sun protection, and the level of physical exertion required in a job are all relevant factors contributing to an individual’s experience of heat. The ability of workers to rearrange or delay work tasks, take extra breaks, pace themselves, and stop work also determines how they experience and can manage high heat conditions.

Working in high temperatures can be difficult or dangerous. It isn’t just outdoor workers such as gardeners or construction workers who are impacted. Over the 2021-2022 summer, multiple covid-19 testing locations across different states were forced to close on hot days as it became unsafe for nurses to be in the sun wearing extensive PPE.

People working inside can also be at risk of heat related diseases such as dehydration or heat exhaustion. As temperatures rise, more workplaces will become dangerous in summer including offices, factories or warehouses.

Percentage of people who answered that they have difficulty concentrating at work on hot days.
As summers get longer and hotter more of the school term will take place during periods of high temperatures. Already, classrooms are reaching unsafe levels above the optimal temperature for learning. Teachers are working in warm classrooms with students who may be struggling in the heat as they themselves may be at risk of dehydration or worse.

Failure to address extreme heat in classrooms by providing solar infrastructure for air conditioning and building safe climate resilient buildings prepared for rising temperatures may result in inequalities in learning outcomes between students in hot suburbs and classrooms, and students in wealthier schools or cooler suburbs.

“**My child’s school has little shade on or around the oval, and when they are restricted to that area on hot days, they can’t escape the sun and heat. It is also very hot standing in the school pick up line, and I get sunburned.**” - NSW

“I am concerned that hotter summers will damage my child’s health due to less exercise and he gets migraines at school when it’s hot.” - Vic

"**The days are longer when it’s hot and you can’t find solace. I am prone to melanoma and skin cancers so my social life in summer is nonexistent as I can’t go outside during hot daylight hours. Work is difficult as it’s hot getting to work and very hot in the classrooms and playground**" - NSW

Support for ‘Schools, child care centres and other public buildings should have solar powered air conditioning’ by state.
Socio-economic inequality has a huge impact on how people manage exposure to extreme heat and heat related illness vulnerabilities. Many of the communities in our hottest suburbs have the least resources to keep themselves and their families cool. Poorer people will struggle to afford high quality housing, pay for cooling, or travel in the comfort of air conditioned cars. The quality of housing people live in has a significant impact on their ability to keep safe and cool.

Public housing residents experience the sharp intersection of rising temperatures, heat related illness and inequality. They have limited power to upgrade their homes or install air conditioning, are more likely to live below the poverty line and are more likely to be vulnerable to heat related illnesses. Housing is a social determinant of health, yet many of our most vulnerable community members live in unsafe housing without the resources or power to make it safe.

"I don't have air-conditioning and it's not something people in public housing mostly can afford or install. I think that there should be minimum standards for creating housing with natural cooling methods because climate change has caused this warming effect and I don't know how I'll manage as I get older as it's already very difficult right now. There doesn't really seem to be any solutions for people on low incomes and no one seems to care to address it." - NSW

"I would normally go to a public space on hot days, but as the survey has noted, covid makes that hard. Also I got dogs during lockdown and can’t take them to public pools or shopping centres. I worry about turning on the air conditioning as it is expensive but mostly because it adds to the city’s powerload and I am very aware we are at risk of power blackouts on hot days. These have horrific consequences for many people I know with disabilities who rely on power." - Vic
Covid-19 and urban heat

For extended periods of 2021 Australia’s major cities Sydney and Melbourne were in lockdown to reduce the spread of covid-19. In order to better understand the impact of the covid-19 crisis on heat related illnesses we asked survey respondents about how the covid-19 pandemic impacted on their plans to stay safe in the heat.

Financial stress means I’m worried about paying for cooling at home

I’m less comfortable in public spaces

I’m worried about getting very hot at home if I have to isolate

It’s difficult to work at home on hot days

There are fewer cool public places for me to go when it’s hot

It hasn’t

"I broke my lease before summer started because having spent 2 summers in the old place I knew that I couldn't handle a third if the lockdowns continued. I cited the granny flat as unliveable in the heat as my reason for leaving"
Extreme heat has an impact on mental health. During heatwaves, there are more assaults and an increase in the number of emergency presentations for mental health crises. The impact of heat on suicidal behaviour is a growing area of research in Australia, and evidence shows a correlation between higher temperatures and suicide (see reference page for further info.).

We asked respondents to describe how heat impacted their physical and mental health. There was a significant amount of responses talking about anxiety and depression. Some respondents had pre-existing physical and mental health conditions that were worsened by the heat. Other respondents said that the heat caused mental stress. Respondents shared feelings of claustrophobia and feeling trapped in hot homes, and feelings of helplessness that they could not improve their situation. Some said the inability to leave their homes, socialise or exercise and the financial pressure of paying for cooling increased mental distress.

In media coverage of extreme heat we often see images of people enjoying themselves or relaxing at the beach. These representations do not reflect the health impacts or risks to communities during heatwaves.
A selection of responses regarding mental health impacts

“It makes me feel faint and really awful like I might die even though I'm pretty sure I won’t. I also feel my mental health is worse on days I can’t go outside but there is so little shade on our street and I don’t drive so leaving the house means being in heat and burning.” - NSW respondent

“I feel exhausted, start feeling depressed, anxious about the cost of using more electricity. Unable to do regular exercise which affects my mental health.”
- NT respondent

“The heat makes me incapable of functioning, there are days when I have had thoughts of suicide... it often sets off my C-PTSD eg panic attacks and flashbacks.”
- Vic respondent

“I have started taking antidepressants in part because I was unable to handle Summer 2022 Perth heatwave (let alone the next 8-30 Perth Summers); but also my sense of hopelessness, despair and lack of agency as an individual, and that there is ZERO leadership or literacy to the same degree, intent or urgency in Perth as in Melbourne or Sydney on the ground, in the suburbs.” - WA respondent

“I really struggle with summer, I suffer mental illness which I manage quite well but when the heat is extreme not being able to cool down despite having many cold showers in a day can cause me to feel extremely helpless and can largely affect my ability to manage my physical and mental health, when even just doing something simple like cooking myself a decent meal is nearly impossible.” - Qld respondent
National Recommendations

1. New homes should be built for higher thermal and energy efficiency.
2. The National Construction Code should mandate a minimum 7-star rating for new homes with a plan to continue increasing standards in coming years.
3. Simple heat reduction improvements should be quickly adopted, including the banning of black roofing in areas with projected increase in summer extreme heat.
4. Older housing stock should be updated for energy efficiency. Public housing should be the first priority.
5. Cool, safe and healthy homes for renters: Implement and enforce minimum energy efficiency standards in rental homes to ensure all homes can maintain a safe habitable temperature.
6. Workplace safety regulations should be reviewed across all industries in consultation with workers and unions to ensure safe workplaces in high temperatures.
7. Government funding for air conditioning for all hot classrooms and childcare centres, powered by solar infrastructure, is key to providing safe learning environments for students and safe workplaces for teachers.
8. Ambitious targets for green cover across our cities should be supported and funded by all levels of government. Urban heat island and low green cover areas should be a high priority.
9. Comfort and safety for active and public transport should be a priority for all levels of government. Simple improvements include bus shelters and shading on walking routes and pedestrian crossings. Improved infrastructure includes bike paths, extending the public transport system, investing in accessible paths for walking and rolling, and designing new developments for active and public transport.
10. Heatwave emergency plans should be reviewed in every state to ensure effective health and emergency services responses. The media should cover heatwaves as environmental disasters with health risks.
11. Health systems need investment for heatwave responses, community outreach, and safe cool spaces.
References


Where are all the trees, 202020 Vision, https://202020vision.com.au/media/7145/where_are_all_the_trees.pdf
2022 Summer Survey Report

Results detail

When it gets very hot do you leave the house to go to a cooler location? (eg. shopping centre, cinema, library) Yes 30.6%

Do you have air conditioning at home? Yes 72%

Do concerns about cost stop you from turning on your air conditioner? Yes 61.8%

Do you have trouble sleeping on very hot nights or during heatwaves? Yes 84.1%

How has the Covid-19 Pandemic affected your plans to manage summer heat? Respondents could select multiple options

I’m less comfortable in public spaces 51.6%
It’s difficult to work at home on hot days 36.6%
There are fewer cool public places for me to go when it’s hot 30.6%
Financial stress means I’m worried about paying for cooling at home 26.7%
I’m worried about getting very hot at home if I have to isolate 25.3%
It hasn’t 26.8%

Questions for Renters

Have you asked your landlord, real estate agent or housing provider about making changes?

<table>
<thead>
<tr>
<th></th>
<th>National</th>
<th>NSW</th>
<th>Vic</th>
<th>Qld</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>32.8%</td>
<td>33.95%</td>
<td>27.45%</td>
<td>40%</td>
</tr>
<tr>
<td>No</td>
<td>67.2%</td>
<td>66.05%</td>
<td>72.55%</td>
<td>60%</td>
</tr>
</tbody>
</table>

Did any of the changes you asked for happen?

<table>
<thead>
<tr>
<th></th>
<th>National</th>
<th>NSW</th>
<th>Vic</th>
<th>Qld</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>14.68%</td>
<td>11.81%</td>
<td>21.43%</td>
<td>13.64%</td>
</tr>
<tr>
<td>No</td>
<td>85.32%</td>
<td>88.19%</td>
<td>78.57%</td>
<td>86.36%</td>
</tr>
</tbody>
</table>

Activities and Work

How do hot days affect you at work or school? Respondents could only select one option

Too hot to work outside 19.5%
I have difficulty concentrating 29.6%
My uniform or work-wear makes me hotter 6.4%
Uncomfortable heat inside makes it hard to do my job 13.4%
It’s uncomfortable or impossible to commute to work or school in my normal way 6.7%
They don’t 24.5%
**HEALTH**

Do you ever feel unwell on hot days or during heatwaves? Yes 66.8%

Have you ever been to a doctor or sought medical care because you felt unwell in the heat? Yes 13.4% [National, but there are similar number across NSW and Vic]

**PLANNING AND POLICY**

Do you think that the way your suburb is built:
National- Increases heat 49.5%, I'm not sure 25.1%, Doesn’t make a difference 14.5%, Decreases heat 10.9%
Vic- Increases heat 53.44%
NSW- Increases heat 49.46%

Are there changes you would like to see in your suburb to make it cooler or safer?
More trees 80.4%
Lighter coloured roofs, streets and buildings to reflect heat 62.4%
Bus shelters and seats for bus stops 50.5%
More shady parks 65.3%
Shade or shelter on walking routes 70.1%
Cool places for people to go to during heatwaves 64.4%

What do you think governments should be doing to manage heat risk?
New homes should be built to be cool in summer 87.6%
Schools, child care centres and other public buildings should have solar powered air conditioning 85.8%
Governments should set minimum standards for rental homes to be kept at liveable temperatures in summer 86.5%
Public transport should be powered by renewable energy and accessible in hot suburbs 74.5%
Australia should do more to address climate change 87%
There should be extra support for people at risk in hot suburbs 74.3%

Are you concerned that climate change may cause hotter summers? Yes 93.8%
Thank you to all of our partner organisations who supported this project.

Sweltering Cities appreciates the support of the Lord Mayors Charitable Foundation and Liverpool City Council in funding activities that made this project possible.