

2024

Summer Survey Report



Acknowledgement of Country

Sweltering Cities acknowledges the Traditional Owners of the land on which we work and live. 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 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)

Table of Contents



03	<u>Introduction</u>
04	<u>Executive Summary</u>
05	<u>Methodology</u>
06	<u>Background</u>
08	<u>Results</u>
16	<u>NSW</u>
19	<u>Victoria</u>
21	<u>Queensland</u>
23	<u>Renters</u>
24	<u>People with Disability</u>
25	<u>Multicultural Communities</u>
27	<u>Campaign Links</u>
29	<u>Conclusion</u>
30	References
31	<u>Acknowledgements</u>

Introduction



The 2024 Summer Survey is the third iteration of the Sweltering Cities Summer Survey project. Our first survey, conducted over the summer of 2020-21, focused on Western Sydney. The second, in 2021-22, focused on renters and included questions about how the COVID-19 pandemic had impacted how people keep cool in summer. In this third version, we've again attempted to respond to the urgent issues that people are facing right now: a cost of living crisis fuelled by rising housing costs and extreme heat emergencies.

From the time we launched the survey in November 2023, people have shared stories of living under enormous pressure. Too many people are weighing up whether they can afford essentials like groceries or cooling measures like turning on air conditioning or fans. People have told us that they dread the summer as hot weather exacerbates physical and mental health conditions. Renters are at their wits' end and feel despair at not being able to make even minor upgrades to their homes like adding better blinds, shrubs or screen doors.

Communities experiencing multiple disasters are also facing compounding impacts. This summer, WA has faced bushfires and record heat, and Queensland communities have experienced a long humid summer made more difficult with power outages due to storms in areas such as the Gold Coast.

The 2024 survey is the biggest so far, reaching more people across more unique postcodes than ever before. Along with continued engagement from communities in Western Sydney and Melbourne, we've seen a growth in interest in Queensland and strong representation in Western Australia.

We would like to thank all of our partners and supporting organisations who have contributed to the development and distribution of this survey. It could not have been done without their support.

Executive Summary

The results of the 2024 Sweltering Cities Summer Survey demonstrate that extreme heat and the cost of living crisis are impacting the physical and mental health of an increasingly large number of Australians. The majority of respondents reported some heat health impacts; however, the respondents who identified as part of an ‘at-risk group’ reported more severe impacts and were more concerned about how cost of living pressures are impacting their ability to stay safe and cool on hot days.

There were 2313 survey responses from individuals across every state and territory located in over 700 unique postcodes. Respondents ranged from under 18 years old to over 80.

Some key findings include:

- 78% of people reported that they have air conditioning, but 65% of those people said that concerns about cost stop them turning it on – the highest percentage in any of the Summer Surveys
- 85% of people with a chronic illness and 90% of people with disability said that they feel unwell on hot days
- 68% of people reported feeling unwell on hot days or during heatwaves. This is slightly higher than the 66.8% of people who responded ‘yes’ to that question in 2022
- 61% of people say that cost of living increases have impacted their ability to stay cool on hot days. Renters, people from multicultural backgrounds, people with chronic illness and people with disability were all more likely to be impacted by cost of living concerns. Respondents from Queensland and NSW were more likely to say that cost of living pressures were impacting them compared to other states.
- 54% of respondents who are renters said that they live in a low energy efficiency home. Renters in low energy efficiency homes were also less likely to have air conditioning and more likely to say concerns about cost stop them turning it on. They were also more likely to say that they feel unwell in the heat and that the rising cost of living is impacting their ability to stay cool compared to other renters.
- 75% of all respondents said that they have the information to keep themselves safe during heatwaves, but only 63% of people from multicultural communities said so.

When we asked how people manage the heat, over 80% of people said that they either avoid walking or change when they do outdoor activities. As summer temperatures rise and heatwaves get longer and hotter, we can expect that more people will avoid active transport and will re-arrange their days to avoid dangerous heat unless we cool our cities and streets.

When asked what changes they would like to see, respondents shared ideas to tackle heat from the local level (like more public water fountains and shady streets) to national and global solutions (like ambitious climate action and higher national building standards). Many of the most popular responses related to additional protections or support for renters, people who are vulnerable to heat-related health issues, and people on low incomes, even if the respondent themselves didn’t identify as part of that group.

Methodology

The Summer Survey is developed in consultation with partners and community members in order to ensure that it gathers relevant information about current issues and produces data that can be used by organisations working to reduce heat health impacts to inform their work. Stakeholders from across a range of sectors, including health, academia, unions, social services and local government, were consulted about the questions before they were finalised.

The survey was open from the 5th of December 2023 to the 6th of March 2024. The survey was published on Typeform, a survey tool only available online. It was distributed via email and social media by Sweltering Cities and promoted through partner organisations, community networks, media coverage, social media and online advertising, posters, and flyers in some locations and in local council sustainability newsletters.

We gathered select demographic information to gain a deeper understanding of how different demographics are impacted by the heat, and how these impacts vary across different postcodes. The heat-related questions focused on health impacts, cost of living, what support would help people manage extreme heat, and changes people want to see at a local, state and national level. Two questions that we have repeated in each edition of the survey for the purpose of comparison are:

- Do you feel unwell during heatwaves or on hot days?
- Do you have air conditioning? If so, do concerns about cost stop you turning it on?

Survey results were analysed by Sweltering Cities staff and data volunteers. This report was written by Emma Bacon, Vittoria Albanese, Sophie Emdler, Sanaa Shah, Teah Hammet, Shailja Chandra, Kim Vernon, Kim Lu and Yin Tegawa.



Background

Australia is grappling with a **cost-of-living crisis**, placing great strain on low-income households and vulnerable communities susceptible to rising heat and its effects. Housing prices have surged significantly nationwide, especially in Sydney, Canberra, Melbourne, and Brisbane (in descending order). As per the Australian Bureau of Statistics (2023), the median house price in Sydney went up from approximately \$615,000 to about \$1.2 million over the decade leading up to 2023, severely diminishing housing affordability. The housing shortage, exacerbated by the COVID-19 pandemic, has further driven up rental costs. These intersecting factors are substantially hampering people's ability to afford cooling measures on hot days.

Multicultural communities and households from culturally and linguistically diverse (CALD) backgrounds face unique challenges presented by the soaring cost of living and housing expenses. Similarly, individuals with **disability, mental health conditions and chronic illnesses** are disproportionately impacted by these compounded stresses.

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, cross-ventilation, high-performance windows, 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. A report by Better Renting, *Cruel Summers: Renters' diverse experiences of Summer 23-24*, found that monitored homes were above 25°C for 52% of the time in NSW, 20% of the time in Victoria, 87% of the time in Queensland and 67% of the time in WA.

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, impervious surfaces, and dark surfaces that absorb 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.



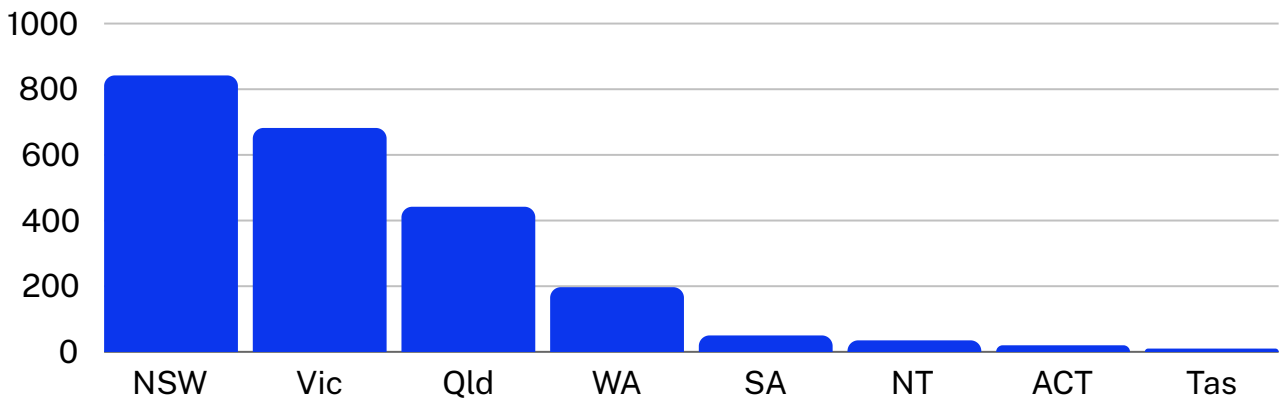
Results

2313

TOTAL RESPONSES

708

UNIQUE POSTCODES
RECORDED



Some people are more at risk of health problems on hot days. We asked respondents to identify whether they fell into specific categories to help us understand how different people feel the heat.

747 live in a low energy efficiency home

727 have a chronic illness

666 are renting

261 come from multicultural backgrounds

243 work outside

177 are carers

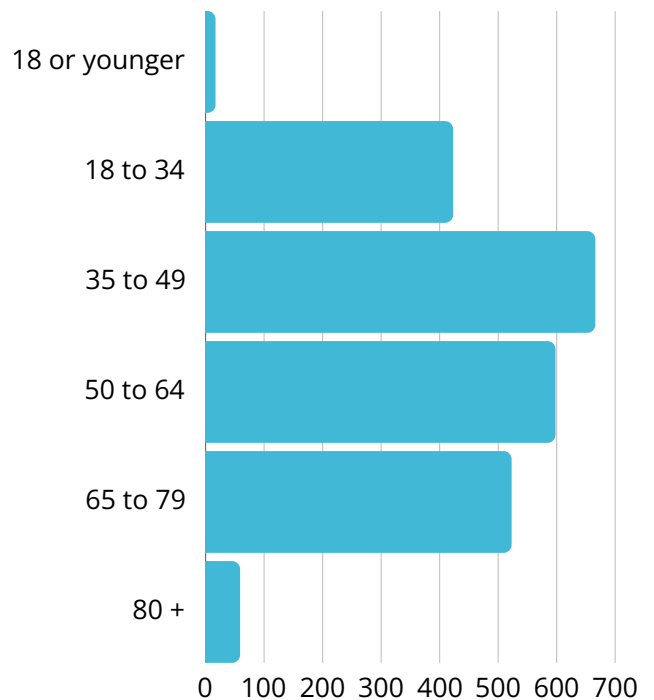
59 live in public housing

40 are Aboriginal and/or Torres Strait Islander

21 are pregnant

17 are experiencing homelessness

AGE DEMOGRAPHICS



68%

OF PEOPLE FEEL UNWELL
ON HOT DAYS OR DURING
HEATWAVES

People from
multicultural
backgrounds

72%



People living in low
energy efficiency
homes

77%



Renters

80%



People with chronic
illnesses

85%



People with
disability

90%



The top heat health issues identified were: exhaustion, physical discomfort, restricted activities, loss of sleep, tiredness, headaches and irritability.

I feel exhausted, dizzy, nauseous. I am unable to leave the house and am confined to one room with aircon.

I also care for my disabled adult daughter and after doing those chores, it is impossible to find strength to prepare meals, so I go without eating.

I get distressed to see my pets suffering. The water restrictions mean the garden suffers too. My brain goes to mush and I can't think clearly. My social life suffers as I sit under the AC all day worrying about the energy it is using. I can't walk the dog. My compression socks and support shoes drive me crazy.

61%

OF RESPONDENTS SAID THAT COST OF LIVING PRESSURES (THE PRICE OF FOOD, ENERGY, HOUSING AND OTHER BASICS) WILL MAKE IT HARDER FOR THEM OR THEIR FAMILY DURING A HEATWAVE OVER SUMMER.

The top issues that people described were being unable to cool their homes, higher energy bills, financial stress, food stress, petrol prices and rental costs. Over 120 people mentioned food stress in some way, with multiple respondents saying that they were balancing between paying for cooling or essentials including food.

Fresh food, petrol and power costs are the main reason I had to look for new work to combat [the] cost of basic needs.

We may choose not to run the aircon due to power prices ... we can't afford to update our insulation issues due to [the] cost of living.

When it's hot, food spoils quicker, [including] food that ordinarily keeps for days at room temperature well such as fruits, vegetables, breads, cereals, even biscuits. All these things perish quicker in hot temps. When its over 30 degrees bread is mouldy within 24-48 hours, bananas rot, cereals, biscuits go soggy. Even refrigerated foods perish quicker and the fridge door is constantly being opened. So milk goes off days before its use-by date, meats, cheeses, even veggies. Food costs a lot of money right now, when it spoils, I can't afford to just replace it. So I go without.

Some people described how expensive it can be to be cool on hot days:

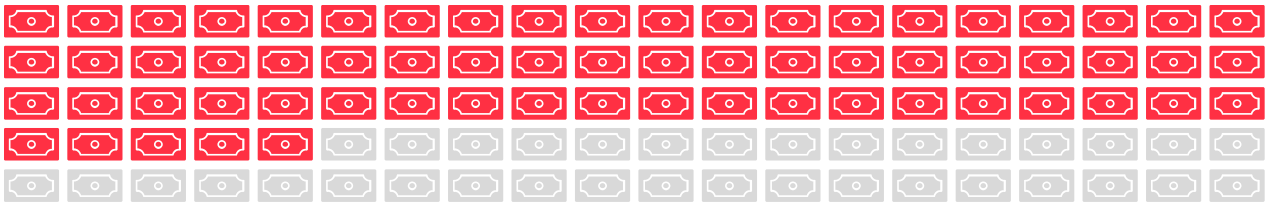
Need to ration use of air conditioner and other electrical appliances like fans. Cost of activities like visiting local swimming centre and the beach a luxury expense.

Less likely to use air con/fans. Unlikely to do activities that would be in air con eg: attend cinema or shopping centre to get out of the heat but would cost money. No money to replace blinds and curtains to keep the heat out.

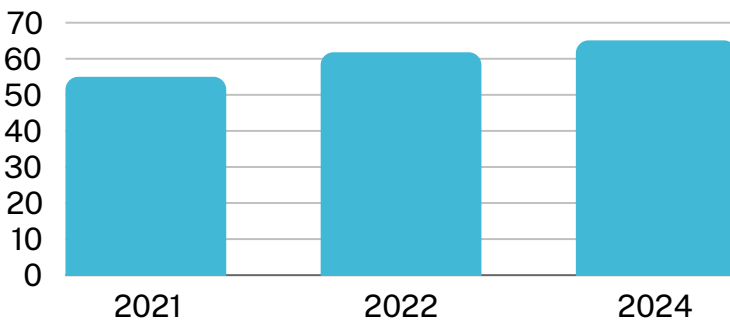
78.2% OF PEOPLE HAVE AIR CON AT HOME



65.1% OF PEOPLE SAID THAT CONCERNS ABOUT COST STOP THEM TURNING ON THEIR AIR CON



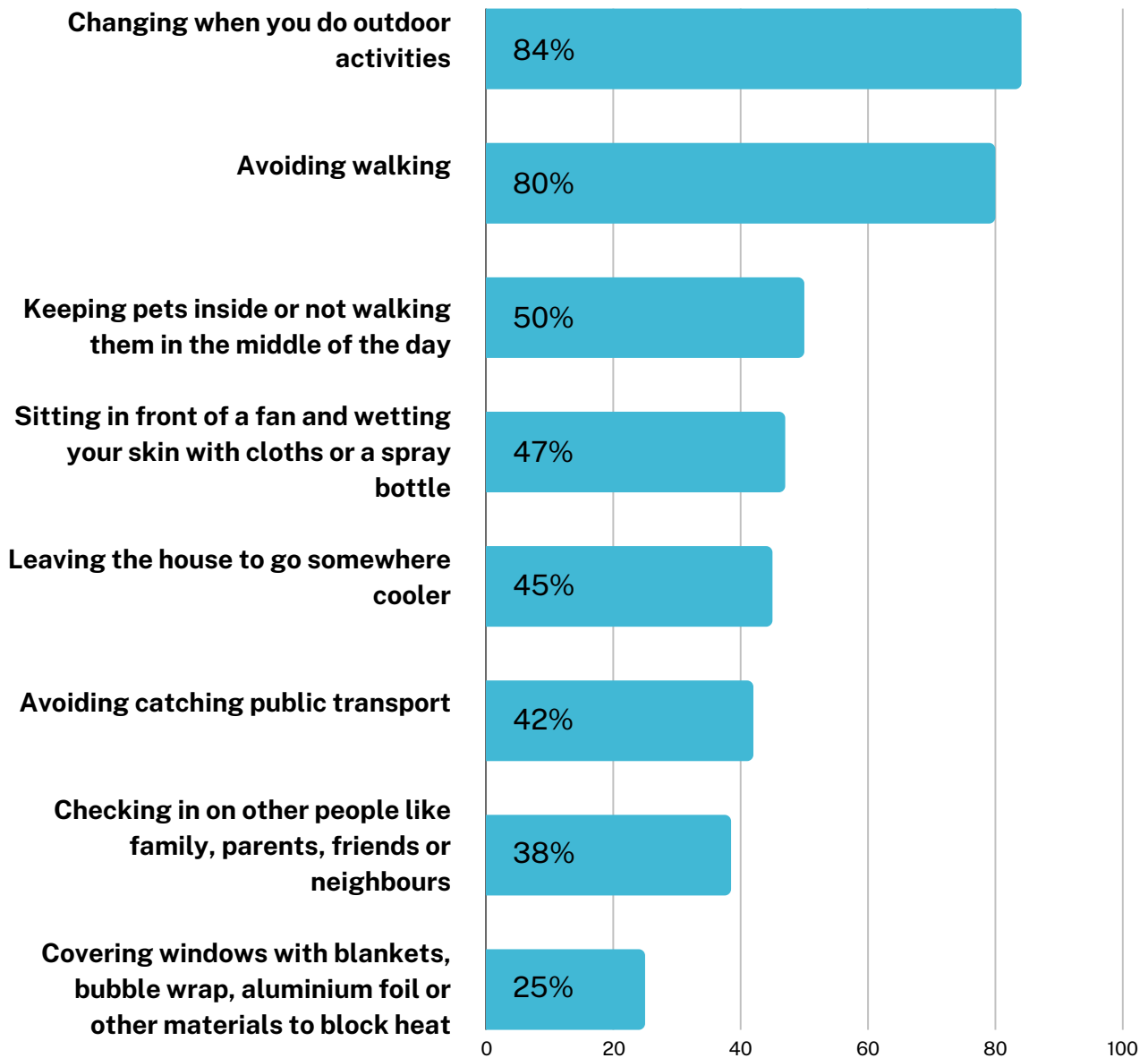
The percentage of people who have said concerns about cost stop them turning on air conditioning has increased over each summer survey (55% in 2021, 61.8% in 2022).



As you try not to use aircon so as to conserve energy, the sweltering heat just gives you no choice, then 3 months later you're struggling to pay the bill. No money to replace blinds and curtains to keep the heat out.



We asked people what they do during a heatwave or on hot days



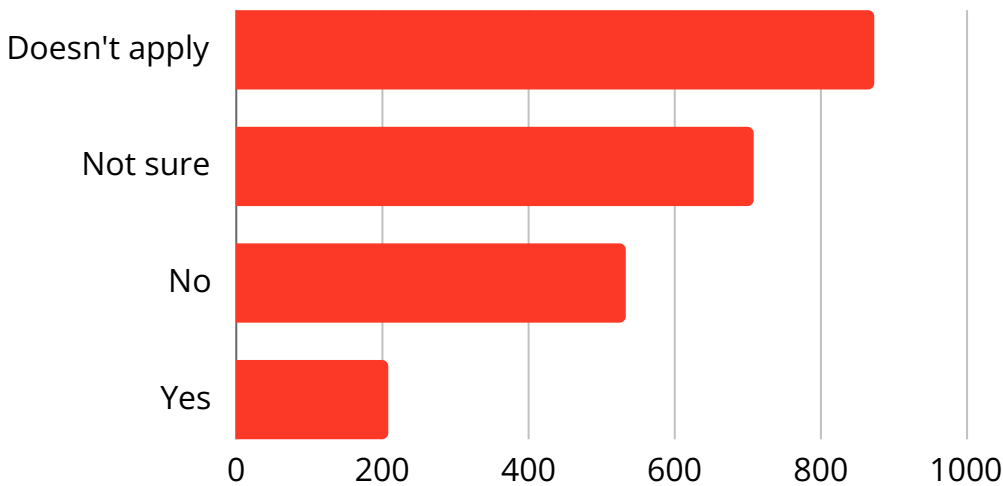
Other comments about what people do in the heat:

Go to a shopping centre or a library to try and find an air conditioned, cooler place to be. I also booked my ageing parents into a hotel that was air conditioned for 3 nights so they could escape the heat for a few days.

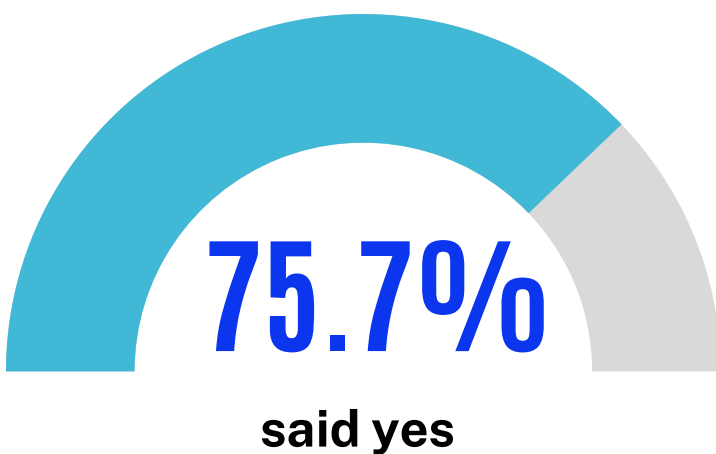
I genuinely don't know. I am on the DSP, I live with my parents who are lower income/on a pension, I don't know what we are supposed to do. There's no money to replace blinds and curtains to keep the heat out.

Does your workplace have a heatwave plan?

Less than 10% of people could confirm that their workplace has a heatwave plan. Heatwave safety at work will become a significant issue for more and more people in different types of jobs. All businesses should be establishing heatwave safety plans and communicating them with employees.



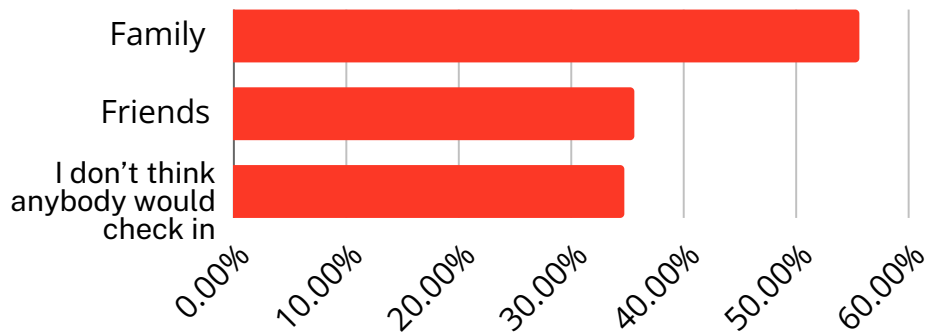
Do you think you have enough information to keep you and your family safe during heatwaves?



My teenage son plays cricket and I am concerned about him or his teammates suffering from heatstroke. The cricket club doesn't seem to have much of a plan for dealing with a heatwave, apart from having more drinks breaks. I think they should change the time that the games are played, so they don't play in the middle of the day.



Is there anyone who you know would check in on you during a heatwave?



Multiple answers were allowed for this question. Other answers people gave included: local government, health services, neighbours, housemates, colleagues and retirement or aged care centre staff.

Sweltering Cities Campaign:

Heatwave Check-In

Advice, tools and info to help you check in on friends, family and neighbours on hot days.



What type of support would you like to receive during a heatwave?

The most popular answers related to lower energy prices, access to cool public spaces, community education on heat stress, community support, better heat standards for housing, more trees and green cover, and more sustainable housing design.

The govt needs to regulate the rental industry to ensure tenants have aircon and need to address fossil fuel use.

Solar power in rentals. Honestly, the amount of rent I pay, on top of electricity and gas and water, I can't do anything to lessen the burden by installing solar power because it's a rental, whereas if I had solar then daytimes would be better managed.

Text messages like bushfires would be useful.

All levels of government should be opening up public spaces during extreme heat events for people to shelter in (even if it occurs on weekends). The government should mandate adequate heating and cooling for all private rental market dwellings.

My wife is disabled and I am her carer. Greater relief from power bills. Double glazing free or at subsidised cost.

Less support during the heatwave and more preventative action! Possibly running free public transport for those in lower socio-economic situations so they can get transport to a cool refuge.

Uninterrupted power supply eg community batteries that provide back up power during grid outages.

What are the things that could be changed in your home, suburb or workplace to make these places safer in a heatwave?

Some of the most popular answers were:

- More trees (mentioned 1166 times)
- Better insulation for homes and mandatory insulation in rentals
- Installing air conditioning in homes and workplaces
- Providing cool spaces for vulnerable populations during heatwaves
- Cool road surfaces and pavements
- Reducing carbon emissions and ending the use of coal and gas for energy
- Creating more shaded areas and shelters at public transport stops
- Promoting the use of reflective or light-coloured roofs
- Increasing access to amenities such as drinking fountains and swimming pools
- Offering financial incentives or subsidies for energy-efficient upgrades
- Improving urban planning regulations to prioritise green spaces and shade

Respondents shared hundreds of excellent ideas. Here is a small selection:

More trees. Shuttle buses to libraries or other cool havens. A map of all the places we can go if it's hot with opening hours.

Better insulation so not having to rely on cooling as much. Houses /apartments designed to keep cool and minimise costs and impact on environment.

Change planning laws to reduce development that contributes to the urban heat island effect and provide incentives for smaller building footprints, heat reflecting rooftops, maintaining existing and planting new canopy trees

A tree cover in as many streets as possible would be a good place to start. All playgrounds should have shade sails and tree cover, every suburb in the council should have a public pool or a swimming hole, all public facilities are to have drinking fountains.

Better solar power rebates, discounted insulation for pensioners and concession card holders, shelters for public transport stops and footpaths, hygienic drinking water fountains in public places and at major public transport hubs/stops.

Give renters more rights to demand repairs to their houses so that they aren't stuck in a rental property that has poor temperature control. Also encourage local governments to increase the number of trees and other plantlife on their footpaths, to help reduce the urban heat effect.

Highlight: NSW

860

NSW RESPONSES

Responses were generally geographically spread across NSW. **The highest number of responses were from Penrith, followed by Marrickville, Earlwood, and Kingswood.**

Western Sydney

Western Sydney is home to 2.6 million people. The region is up to 10°C hotter than coastal suburbs or surrounding rural areas due to factors including the absence of cooling sea breezes and the Urban Heat Island effect. As a rapidly growing area, Western Sydney's green spaces and trees have been cleared to make way for industrial and residential development featuring heat attracting and absorbing surfaces, such as black roofs, dark cement and driveways.



Western Sydney also bears a disproportionate burden of heat-related health impacts and houses populations with higher risk factors, including age, disability, and socio-economic status, which exacerbate the challenges of coping during heat waves.

We need a lot more tree canopy in Canterbury-Bankstown and more parks. I recently moved here from the lower north shore of Sydney and I am shocked by how much hotter it is and how fewer trees there are on the streets.

The experience of summer in Western Sydney doesn't match the image of an Australian beach day. Beaches are a long drive and inconvenient commute away for residents in the West, leaving people with little choice but to swelter in homes not designed to withstand the heat or seek refuge with friends and family, at shopping centres or other public spaces.

This summer saw the opening of Penrith Beach, an accessible lake for residents to cool off. The beach provides a unique opportunity for Western Sydney residents to leisurely enjoy a hot day. However, more needs to be done to protect residents from extreme heat. In 2020, Penrith earned the title of 'hottest place on earth' reaching temperatures of 48.9°C. Under a high emissions scenario, these temperatures could become more common, with Western Sydney projected to experience up to 46 days of extreme heat by 2090 (Australia Institute, 2022).

Respondents from Western Sydney shared their vision for changes that could protect their suburbs during a heatwave. A common theme carried over from last year's Summer Survey was the call for "more trees" from residents in Western Sydney:

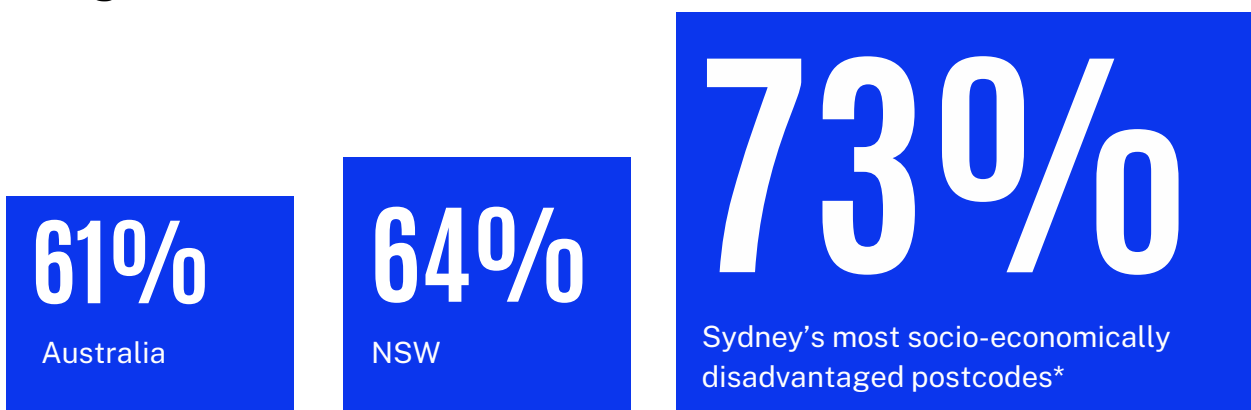
More natural shade (e.g. street trees), water amenities (e.g. Penrith Beach), advocating people work from home if they normally use public transport on really hot days.

More trees and shaded green spaces on our streets, no more black roofs, black driveways, requirements to get rentals up to scratch re energy efficiency.

Cost of living

Across NSW, the cost of living was a major concern. Our survey finds that people across **Sydney's most disadvantaged postcodes expressed a greater level of difficulty in navigating heat waves during the summer due to cost of living pressures.**

Do you think that cost of living pressures (the price of food, energy, housing and other things) will make it harder for you or your family during a heatwave this summer?



*Percentage of responses who indicated 'yes'. Socio-economic disadvantage identified through Socio-Economic Indexes for Areas (SEIFA) scores.

The proportion of respondents concerned about cost of living pressures negatively impacting their ability to stay safe in summer was higher in Sydney's most socioeconomically disadvantaged postcodes. **Census data on average income, employment, and education levels reveals that suburbs as Mount Druitt, Plumpton, Campbelltown, Fairfield and Green Valley experience higher socioeconomic disadvantage than other areas in Sydney. These postcodes, concentrated in Western Sydney, are some of the city's hottest suburbs.**

Respondents from these postcodes shared how cost of living pressures were inhibiting them from turning on the air conditioning and completing daily activities, demonstrating the direct correlation between coping during heatwaves and the measures people can afford to stay cool:

"Whether to be cool or eat, as everything has and the cost will continue to inflate."

"I'm saving on turning on the aircon, and instead I sit in a very hot uncomfortable room. We just can't afford to turn on the cooler during a heatwave."

"It means our family will need to cut back on social activities and home improvements to ensure that the basic necessities are met."



Highlight: Victoria

682

VIC RESPONSES

This year, Victoria has experienced late summer heat and variable temperatures. Despite the majority of the summer months not reaching extreme heat temperatures, **65.5% of Victorians said that they feel unwell on hot days or during heatwaves and 54% are worried that the rising cost of living is making it harder to manage heat.** Overall, the results paint a worrying picture: many Victorians are living in dangerously hot homes, struggling to manage the heat due to chronic illnesses, and are unable to easily leave their homes in hot weather and during heat waves.



80% of Victorian respondents have air conditioning at home.



3 in 5 (61%) are not turning on air conditioning due to concerns about cost.

78%

of Victorian respondents feel like they have enough information to keep themselves and their families safe during heatwaves. This indicates a strong awareness of personal heatwave safety among the majority of respondents, but may not be reflected in the wider community.

Respondents in Victoria who said they are renters mentioned the need for energy efficiency upgrades, regulations for cooling, and the ability to make simple necessary upgrades to their homes. Additionally, renters raised concerns about compliance with rental minimum standards by landlords and real estate agents. Renters also stated the importance of having more green spaces and trees for cooling and as a climate change mitigation measure.

“I have to choose between energy or food. Storage of food becomes problematic. I'm unwelcome in commercial centres if I'm not spending, & council provided free spaces are inaccessible without personal transport.”

“Have to work more than 40 hours a week to live (often in the sun), can't afford to take time off work, unable to afford a rental with air conditioning, reluctant to spend money on transport (fuel, myki fare) to access cooler/air conditioned locations”

88 Victorians said that they were renters and have either a disability or a chronic illness. Their responses demonstrate how little protection rental housing provides for people who are at higher risk of health issues during periods of extreme heat:

- 94% said that they feel unwell on hot days or during heatwaves
- 87% said cost of living pressures were making it harder to keep cool

We know that people with disability experience economic disadvantage and have a lower average income compared to people without disability ([People with Disability Australia](#)). Approximately one third of people with disability in Australia are renters, and people with more severe or profound disability are less likely to own their own home ([Australian Institute of Health and Welfare](#)).

Without additional support or protections, Victorian renters who have a disability or chronic illness will continue to experience painful and stressful summers, and a higher rate of illness and death. The Victorian Government can update the Rental Minimum Standards and subsidise energy efficiency upgrades, solar and air conditioning for renters to reduce the prevalence of heat related health issues in the community.

Public housing tenants are also particularly high risk during heatwaves. 10 Victorian respondents, all of whom were over 50 years old, said that they live in public housing. 100% of those respondents said that they feel unwell on hot days or during heatwaves, and 80% said cost of living pressures were impacting their ability to be cool. Five of the six people with air conditioning said concerns about cost stop them turning it on.

Highlight: Queensland

441

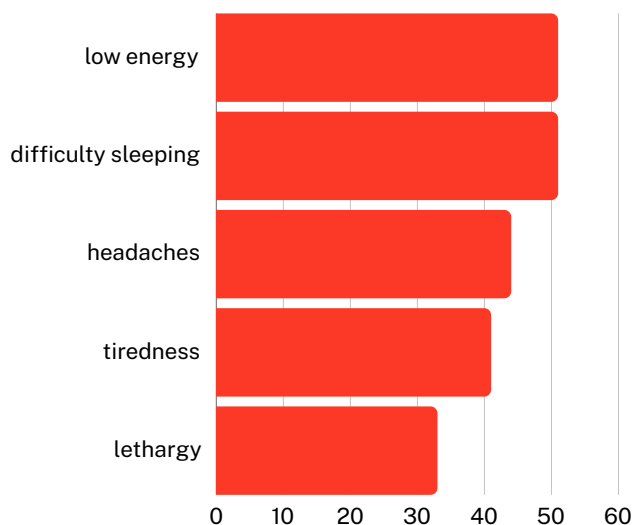
QLD RESPONSES

Queensland had a total of 441 responses from people living across the state, from Far North Queensland to South East Queensland. Respondents lived in and around 11 major cities, predominantly situated along the east coast of Queensland:

Brisbane, Ipswich, Toowoomba, Gold Coast, Sunshine Coast, Bundaberg, Gladstone, Rockhampton, Mackay, Townsville and Cairns

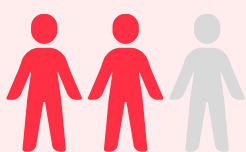


Of Queensland respondents reported feeling unwell on hot days or during heatwaves; compared to the national result of 68%.



64%

reported that they thought cost of living pressures would make it harder for them and their family during a heatwave. The highest proportion of age groups that reported this included people aged 80+ (100%) and people aged 18-34 (78%).



2 in 3 Queenslanders who have an air conditioner reported concerns about the cost stopping them from turning it on. **Queensland had the highest amount of concern for cost of living related to air conditioning expenses nationally.**

“Heat affects me because my body can't regulate temperature normally... Combined with extreme UV, for people like me, it's deadly.”

“For many people with certain types of disabilities and conditions our lives are in danger and these streetscapes are not accessible.”

“My whole life is dictated by the weather.”

34%

reported that they do not think anyone would check in with them in a heatwave

43.5%

of people 50-64 believed they would not receive a heatwave check-in



What do Queenslanders want to address extreme heat across the state?

When asked what they thought could be changed in their home, suburb or workplace to make these places safer in a heatwave, Queenslanders responded with the following suggestions:

SHADE

TREES

**BETTER
PUBLIC
SPACES**

**BUBBLERS
PUBLIC TRANSPORT
POOLS**

**MANDATORY
INSULATION**

AIR CON

SOLAR POWERED AIR CONDITIONING

More large shade trees and shade structures in public places. More publicly available water fountains especially cooled water- the ones around are often broken need more maintenance and checks. Private spaces like shopping centre or library not move on people sitting in the cool (often target certain people in a discriminatory manner eg homeless). Public and registered boarding housing need to include ceiling fans to be compliant as well as functioning windows with security eg crimsafe screens so can be left open at night .

Highlight:

Renters

78%

of renters said that as the cost of living rises, dealing with heat waves will be harder for them and their families.

66%

of renters have air conditioning at home

80%

avoid turning on air con due to high costs

54%

of renters live in a low energy efficiency home

These findings emphasise the multiple challenges people are facing during heatwaves and make it clear that more support is needed to reduce the health and financial impacts of extreme heat.

Renters across the country stressed the importance of energy-efficient housing and subsidies to afford cooling. This is important, as renters are at higher risk of heat health issues due to lack of access to cooling systems and housing retrofits.

We can't afford to keep our home cool. We need to turn our fridge off overnight to cut costs etc. Food costs so much, salad and cooler foods to eat are very very expensive and out of our reach.

Heating and cooling is expensive. As a renter I can't afford, nor do I have the autonomy to, make changes to my home to make it more energy efficient.

Tenants living in public housing told us about the difficulties they have staying safe during the summer.

My aircon broke down in August and I'm still waiting for it to be fixed. [I] miss meals to pay exorbitant electricity bills.

I can't afford the types of food required for my medical conditions and pay my electricity bills etc as well. The supermarkets NEVER cut prices on healthy food only junk food.

Highlight:

People with Disability

People with disability are at an increased risk of heat-related illnesses and complications during hot days. **243 people who did the Summer Survey said that they have a disability and 90% said that they feel unwell on hot days.** People with disability experience extreme heat impacts in a huge variety of ways, from physical discomfort, complications with medications, worsening of symptoms, increased fatigue or chronic pain, and reduced mobility. Some of these impacts are driven by high temperatures, but are exacerbated by dangerously hot homes or hostile public spaces with inaccessible transport or infrastructure. A 2022 study of heatwave fatalities in Australia from 2001 to 2018 found that 89 per cent of fatalities had a disability or multiple disabilities ([read more here](#)).

“My disability is impacted by temperature extremes, and I struggle to self-regulate my body temp (e.g. perspiration or shivering). It means I get flare ups in times of extreme weather events.”

“Chronic pain patient so heat intensifies pain, affects sleep, physical activity reduced to being bed bound. Going outside is impossible.”

“I have Multiple Sclerosis and I lose my vision when it gets hot. It's called Thermoregulatory Dysfunction. When I get hot, I stay hot for much longer than other people.”

“Can fully physically incapacitate me- frequent extreme pain from subluxations, poor sleep, heat reduces the effectiveness of various medications.”

Heatwaves can also make catching public transport to get to cooler spaces difficult. Results suggested many people living with disabilities experienced isolation as a result of being confined indoors having a negative impact on their physical and mental health.

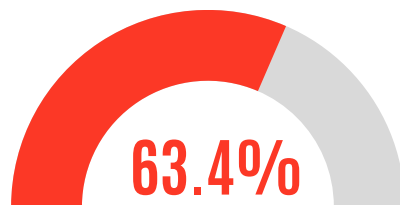
“Summer is unbearable, I'm trapped inside mostly, but I still have to somehow get my kids to and from school, and get to medical appointments. Spending time in nature is so important for my mental health and living with my illness, but during heatwaves I can't be outside at all. Bushfire smoke also exacerbates my symptoms.”

Results have emphasised the need for decision makers to consider people with disability in their policies, plans and funding for adaptation, mitigation, and emergency management. The NDIS programs and criteria can be updated to better support people managing the impacts of extreme heat.

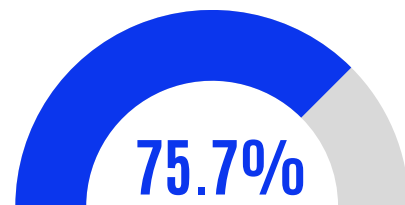
Highlight: Multicultural Communities

Respondents who identified as being from multicultural backgrounds expressed that they were less likely to have enough information to keep them and their family safe during heatwaves, and were also more impacted by cost of living pressures.

Do you think you have enough information to keep you and your family safe during heatwaves?



Multicultural communities



All respondents

A study conducted by [Hansen et al. \(2013\)](#) finds that subgroups within CALD communities face heightened challenges when navigating Australia's extreme heat, which can differ from the heat experienced in their countries of origin. Older migrants, recent arrivals, and low-income individuals lacking proficiency in English are particularly vulnerable to impacts of heatwaves in Australia.





These findings emphasise the need for implementing accessible, multilingual communication strategies to address heatwave risks and promote safety measures.

There is also a necessity for simple and practical measures to improve health literacy in CALD communities enabling them to read and, more importantly, understand and act on safety and other support information. Information about energy efficiency upgrades or funding for household solar may be inaccessible, so local community organisations and leaders should be given the resources to help people access these programs.

Our interview with Summer Survey respondent Anjana, a teacher from Western Sydney's intensive language centre, sheds light on the strategies employed within the education system to ensure that newly arrived students are adequately informed and supported during heatwaves:

Our school has more cases than normal of students getting heat stroke because students who are newly-arrived to Australia are often not aware of heatwave risks in Australia. As teachers, especially in a school like mine, it's crucial that we communicate heatwave safety measures to students as best as possible so that they can stay protected during the summer.

Our Campaigns

All Sweltering Cities campaigns are rooted in the experiences and ideas shared by people living in hot homes and suburbs. **Community stories empower our campaigns.**



Busted Bus Stops

Better shade provision in public spaces, including near bus stops, was a common response to changes that people would like to see to make their suburbs safer in a heatwave:

“My suburb does not have enough trees or sheltered bus stops which would make it safer to move between cool places in summer, especially for older people.”

“Improving all bus stops by providing adequate shelter; most stops with existing shelters are so exposed that they don't actually provide adequate shelter for significant portions of the day. Existing shelters are positioned very close to the road without tree cover because the commuter is required to keep an eye out and then flag down a bus that is often not running on time.”

Bus stop mapping has found an uneven distribution of bus shelters across Sydney. Compared to the east, Western Sydney severely lacks bus shelters, seats, and shading.

These campaign findings were presented at the [Parliamentary Inquiry into current and future public transport needs in Western Sydney](#). We urge the NSW Government to direct greater funding to shaded bus stops to mitigate the social and health impacts of waiting at an unsafe stop.

Heatwave Check-In

Heatwaves kill more people in Australia than all other environmental disasters combined. Isolation can be deadly for older people, people who live in hot homes, young children, people with disability and chronic illnesses.

Our Heatwave Check-In campaign calls for communities to check in on friends, family and neighbours. Through advice, tools and information to help communities initiate heatwave check-ins.





Building Cooler Suburbs

Banning dark roofs across new housing developments is one planning measure that could significantly reduce the urban heat island effect. This was also indicated by some of our responses:

“The world is heating up fast. We don't have 30-40 years to change the building codes! Ban black roofs and have architects and developers sell the beauty of white roofs (follow Bermudas example on white roofs).”

“The first thing I would like is to see a ban on all dark building materials which absorb the heat. Our suburb is full of dark brown/ dark grey houses with dark roofs”

In partnership with academic and health experts, Sweltering Cities conducted a citizen science project to measure roof cavity, indoor and outdoor temperatures across different homes in Sydney. Our preliminary results already reveal stark differences between the temperatures in houses with light and dark coloured roofs.

Renters - Heatwave Safe Homes

Renters are baking in dangerously hot homes every summer, and it's getting worse. Accelerated by rents skyrocketing and the quality of housing declining.

Renters across the country are calling for mandatory cooling and insulation in rental standards. Renters are living in dangerously hot, poorly built and inefficient homes without proper cooling or insulation, and we know that these changes could save lives and reduce heat-related illnesses and deaths in our communities.

Our Heatwave Safe Homes campaign, currently focused in Victoria is calling for the following actions:

- Introduce insulation standards for rentals
- Include cooling in the minimum standards
- Landlords have to action heat related complaints within 24 hours



More campaign information: <https://swelteringcities.org/>

Join our mailing list to stay updated on campaign developments.

Conclusion

The findings from the 2024 Sweltering Cities Summer Survey paint a vivid picture of the widespread impact of extreme heat and the interconnected challenges of cost of living pressures on Australians. With responses pouring in from diverse demographics and geographic locations, it's clear that no corner of the country is immune to the effects of scorching temperatures.

From the stark realities faced by at-risk groups to the financial barriers hindering access to cooling solutions, the survey underscores the urgency of addressing heat-related health concerns and socioeconomic inequalities. It's alarming to note that while a significant proportion of respondents possess air conditioning, concerns about affordability prevent many from turning it on.

The correlation between chronic illness, disability, and heightened vulnerability to heat stress underscores the imperative of targeted support for these communities. Furthermore, the disproportionate impact of cost of living increases on renters, multicultural communities, and low-income individuals highlights the need for systemic interventions to ensure equitable access to cooling measures.

As we confront the escalating threat of heatwaves and their cascading effects, the insights gleaned from this survey serve as a call to action. From local initiatives such as shaded streets and public water fountains to broader policy measures like ambitious climate action and enhanced building standards, the demand for tangible solutions is resounding.

Looking ahead, it's imperative that we prioritise the voices and needs of those most affected by addressing the causes of vulnerability and transitioning urgently away from fossil fuels to turn off the oven that is baking our homes and cities.

Our recommendations are:

- Introduce national rental standards to protect from environmental disasters including heatwaves
- Upgrade our planning and built environment regulations to ensure we're building homes and infrastructure that is safe in a future climate and helps us reach net zero carbon emissions
- Increase green cover and trees across the country to cool streets and suburbs
- Bring together stakeholders and community voices to better understand how our food systems are impacted by rising temperatures and how we can improve food security
- Provide solar, energy efficiency upgrades and air conditioning for social housing tenants across the country
- Ensure people on Job Seeker who are required to complete mutual obligations don't get their payments cut off during heatwaves

Acknowledgements

Thank you to everyone who filled out this year's Summery Survey. The personal experiences of extreme heat that were shared in this survey, including the different visions for a heatwave safe future, underpins all of our current and future campaigns.

The photo on the cover and on page 3, 5, 7, & 25 was captured by Alex McClintock. See more of Alex's compelling work at <https://alexmclintock.net/>. Keiran Adair played an instrumental work in the analysis of the Survey's data. Thank you both for all of your efforts.

We would also like to thank and acknowledge all of our partner organisations that helped develop and promote this survey. A massive thank you to our supporters and respondents who agreed to be followed-up and shared the survey within their networks, allowing us to reach over 2000 respondents nationwide.

The survey report was written by Vittoria Albanese, Sanaa Shah, Teah Hammet, Sophie Emdler, Kim Vernon, Shailja Chandra, Kim Lu and Yin Tegawa and Emma Bacon.