

BUILDING THE SEVERE WEATHER AND DISASTER RESILIENCE OF THE HOMELESS COMMUNITY

RESEARCH FINDINGS



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Poverty, health and housing are inextricably linked to people's ability to adapt to and mitigate the effects of extreme weather. Where people live, how well their house supports their health and protects them from fluctuating environmental conditions, and whether they can purchase emergency supplies are key factors which shape disaster risk. The health, social and economic disparities of poverty and homelessness creates clusters of vulnerabilities. Together these compound people's risks in severe weather and reduce their ability to adapt to or mitigate these risks.

The main purpose of this report is to identify a) the impacts of severe weather on the homeless community, both people experiencing and at risk of homelessness, and homeless services and b) best practice for mitigating these impacts through policy, agency and individual-level approaches.

The arguments presented in this report are supported by the research findings of the Homelessness and Disaster Resilience survey and case studies; a project funded by the National Emergency Management Plan through the Attorney General's Department.

The research identified that all weather, severe and 'non-severe', significantly shapes the daily experiences of people living homeless or at risk of homelessness. People are adept at adapting where they sleep and eat and what they do, yet this adaptation conceals considerable hardship – soaked bedding which can't be dried and must be abandoned leaving people exposed to the wet and cold, food that spoils and can't be kept leaving people hungry, cold that seeps through floors and windows affecting people's respiration, no showers leaving people sweaty and dirty and hot.

Severe weather events – heatwaves, extreme cold, floods, cyclones, bushfires and earthquakes – have even greater impacts. The primary impacts are losing shelter and worsening and new mental health issues from natural hazards. Exposure to severe weather led to trauma for a third of the homeless community. For 19% of people, an extreme weather event was a factor in their pathway to homelessness.

Only 50% of homeless service users received emergency warnings. Those least likely to receive warnings are people who are sleeping rough in more isolated locations, who have few social or service connections, or who experience a hearing impairment or do not speak English as their first language. The majority of people received warnings through an outreach service.

The majority of people living in or at risk of homelessness are not well prepared physically or emotionally for protecting themselves from the economic, social and health effects of weather. The top three challenges preventing people from preparing are social isolation, mental health issues which create anxiety, and lack of money to purchase emergency gear.

It costs services up to \$5,000 to respond to discrete weather events (like heatwaves or storms) and over \$20,000 to assist people in more extensive weather events (floods and bushfires). Homeless services experienced damage to key infrastructure including office buildings, client accommodation and vehicles. The greatest cost and impacts were on staff. Yet agencies are only able on average to spend \$1,000 on preparing for extreme weather, with the majority reporting they don't have access to suitable educational material for the homeless community.

The key resilience factors for responding to extreme weather – access to appropriate knowledge, safety and shelter, physical and psychological wellbeing and connection – are also key elements for increasing resilience across people’s lives.

The recommendations to build resilience to reduce the impacts from extreme weather encompass:

- **Building knowledge: Appropriate information on risks and responses**
 - Increasing the availability and accessibility of preparedness and emergency information for the homeless community
 - **Co-developing preparedness education and information** with the homeless community to ensure these are relevant and accessible and reflect people’s existing strengths and survival skills
 - Taking it to the people by delivering emergency and preparedness information through **outreach** by both peers and service workers
 - Presenting information through **role-play, visuals, orally and stories** in the places where people gather
 - Creating **portable access to emergency information** e.g. through portable cards, phone apps, ongoing outreach
 - Responding to high levels of anxiety and reducing psychological impacts
 - **Incorporating Trauma-Informed care principles** of hope, calm and self-efficacy, together with values, strengths and harm-minimisation into the design of messaging, information and education programs.
 - Presenting severe weather as **a problem to solve using positive messages** about people’s ability to prepare for and respond to it well.
- **Building security: Shelter, safety and wealth**
 - Making physical preparedness possible in the face of poverty
 - **Accessible short, medium and long-term accommodation**, together with seasonally available shelters, is a priority for mitigating many of the social, economic and health impacts of homelessness, and is also key to building resilience to extreme weather
 - **Drop-in centres** which offer laundry and shower services and which can be utilised seasonally to provide out-of-hours emergency shelter in severe and ‘non-severe’ weather
 - **Stocks of protective items** that are weather-proof and support people to take temporary shelter and stay clothed, fed and hydrated, and have access to information (e.g. phones).

- **Evacuation plans and centres** which can include pets, support for substance use and safe spaces, and that respond to the local demographic make up of the homeless community (e.g. a higher proportion of men, or of young homeless people)
 - **Seasonally-responsive interagency emergency plans** which respond to weather events which may affect the homeless population earlier or more extensively because of greater exposure (e.g. opening a shelter during a storm)
 - Increasing visibility and accessibility and reducing physical impacts
 - Homeless services have excellent knowledge of people’s locations and situations. Developing and using this knowledge **through collaborative and inclusive interagency planning and information sharing** increases both the resilience of services and clients.
 - Capacity building: Helping agencies weather the weather
 - Assisting agencies to develop individual **Business Continuity Plans** through regular meetings, mentoring, and simulation exercises as done in the City of Sydney
 - **Bringing emergency and community services together** to develop interagency plans
- **Building wellbeing: Psychological health and coping ability**
 - Responding to anxiety and reducing the high psychological impacts of severe weather
 - Embedding psychological preparedness for emergencies in programs to develop resilience in all areas of life through connecting, being active, taking notice, keeping learning, and giving, such as the **Red Cross RediPlan**
 - Basing psychological safety skills (i.e. ways to manage anxiety in stressful situations) in a **Trauma-Informed model of care** emphasising hope, resilience, strengths and skills development.
 - Motivating preparedness through **conversations about values and valuable people and possessions**, ‘what are the precious things that people want to stay safe for’.
 - **Practicing skills for responding to stressful situations** that are applicable to a number of domains (e.g. greater situational awareness of exits is also important for physical safety).
- **Building connection: Social capital and connection to place**
 - Responding to social isolation through inclusion in emergency planning and community education
 - **Including homelessness** in climate change adaptation plans, emergency plans and emergency exercises
 - **Community outreach, engagement and education** both within larger organisations such as Councils and with local businesses and organisations to include

homelessness in planning decisions, expand the places where people can go and not be moved on and mobilise wider community support for emergency responses

- Developing **extreme weather plans which cohere with and build upon existing emergency management plans**
- Developing plans which can respond to large and significant, as well as smaller, events
- Developing extreme weather responses in **collaboration with people with lived experience of homelessness**
- Creating **temporary shelter options during extreme weather which also emphasise connectedness** (e.g. having food and activities available during extreme weather sheltering)

INTRODUCTION

Poverty, health and housing – where and how we live – is fundamentally linked to our ability to survive and recover from severe weather and natural disasters. Historically the emphasis has been on how securely housed populations prepare for, respond to and recover from severe weather. However, this has meant that the preparedness, response and recovery of people experiencing homelessness remains undocumented and unknown. Homelessness is a cluster vulnerability and multiple health, social and economic disparities compound people’s risks and reduce their ability to adapt to or mitigate these risks. Although there is some emerging work on this in the US, there is still limited work in Australia.

This report, utilizing a nation-wide survey and in depth case studies, does two things. Firstly, it identifies the social, health and economic impacts of disasters on people at risk of and experiencing homelessness, including factors that may mitigate these, such as existing shelter options and disaster plans. Secondly, the report considers how these risks can be managed at the policy, agency and individual level. The report explores best practice for preparing for and responding to extreme weather with the homeless community.

Specifically, the research asked:

Impacts of extreme weather on people and agencies

1. What vulnerabilities and adaptations, both individually and structurally-based, shape risk for the homeless community?
2. What are the physical and mental health impacts of severe weather and natural disasters on the homeless community, including on trauma and as a cause of homelessness?
3. What are the economic and staffing costs to agencies for responding to and recovering from severe weather?

Responding to extreme weather: resources and preparedness

4. What current resources are available for responding to extreme weather and are these appropriate for the homeless community?
5. How prepared are agencies and individuals for extreme weather?
6. What are the emerging best practices for agencies and clients to build resilience to extreme weather?

METHOD

DATA COLLECTION

We collected quantitative and qualitative data: 1) a survey distributed online and in hard copy to all housing and homeless services; 2) interviews with service providers and consumers in five locations at risk of storms, floods, heatwaves, extreme cold and bushfires; and 3) two workshops with homeless service providers and service users on homelessness and extreme weather.

Survey

Australian and New Zealand (Christchurch and Wellington) service providers were invited to participate in the survey via an email sent to all agencies with available email addresses, and through a Facebook page and key industry newsletters and blogs (e.g. the Red Cross, VCOSS, Council for Homeless Persons, Homelessness Australia). The Australian emails were followed up with phone calls. The survey was also mailed in hard copy to all housing and homeless agencies in Australia with a return stamped addressed envelope. The various recruitment methods contacted approximately 500 services. We received 163 responses, a return rate of 32%.

The survey (Appendix 1) asked 32 closed and open-ended questions: demographics including type of weather experienced; the severity and physical and psychological impacts of the weather on clients and services; costs of responding to emergency events; and current levels of preparedness.

Case studies

The quantitative data gathered through the survey was complemented by in-depth one-on-one and group interviews with emergency and homeless service providers and people experiencing homelessness or in vulnerable renting circumstances, and two large workshops of service providers. The first author interviewed forty-five people from Adelaide, Sydney, the Northern Rivers in NSW, the Blue Mountains, and northern Tasmania. The interviews covered people's experiences in all types of weather, how they responded and what weather means for their sense of connectedness, safety, health and wellbeing. Approximately 60 service providers attended two workshops in Sydney and Melbourne. The workshops included presentations by key researchers and agencies working in the area of homelessness and severe weather, and the Sydney workshop included scenario-based discussions for responses to extreme weather.

PARTICIPANTS

Survey

One hundred and sixty-three organisations participated in the survey. Of the 161 who indicated their location, 159 were from Australia and 2 from New Zealand.

The client groups with which agencies work are diverse. The organisations provide assistance to a culturally, linguistically, sexually and age diverse population (Aboriginal and Torres Strait Islander people (79%), refugees and migrants (65%), LBTQI community (58%), young people (63%)) and to people experiencing a spectrum of homeless situation (supported housing (77%), sleeping rough (75%), domestic violence (71%), vulnerable renters (67%) and people living in caravans (54%).

The survey participants included small, medium and large services. The majority of organisations (46.2%) provided services to over 500 people per year.

Case studies

Forty-five people from Adelaide, Sydney, the Blue Mountains, the Northern Rivers and Launceston were interviewed for the study. Homeless services in the area were contacted either prior to the fieldwork via email, or in person during fieldwork, to request an interview. Participating agencies allowed the first author to share lunch with service users and/or to volunteer at the agency for a time to facilitate familiarity with the research. Service staff informed people about the scope of the research and what it was for, and this was also covered by the researcher at the beginning of her conversations with people. People interested in sharing their stories were invited to talk to me (the first author) once getting to know me and the project. We met either in a group while sharing a meal, or in a quiet place within the service grounds. Interviews with people experiencing or at risk of homelessness were not audio recorded. Participating agencies received 5 \$20 Woolworths vouchers to distribute as they needed.

Interviewees came from a diverse range of services and diverse experiences of homelessness, including drop-in centres, homeless health services and hospitals, accommodation providers, and people sleeping rough, living in temporary accommodation or supported housing. Emergency services personnel included people working in evacuation centres, bushfire and emergency services, and police.

The large groups in Sydney and Melbourne included homeless service providers and service user representatives. The Sydney forum was a gathering of service providers organized by the City of Sydney Council to inform, discuss and develop business continuity plans for disaster scenarios. The Melbourne forum, held by the National Climate

Change Adaptation Research Forum, included presentations of research findings across Australia on homelessness, poverty and climate change, and group discussions about challenges and solutions to assisting clients in extreme weather.

ANALYSIS

The survey results are presented in frequencies (e.g. the percentage of people who had access to brochures about severe weather) or averages (e.g. the proportion of clients experiencing trauma). The qualitative data from the open-ended survey questions, interviews and groups were analysed thematically (e.g. what patterns are there in the barriers people identified to warning clients – geographic, social, language, physical).

FACTORS SHAPING RISK: VULNERABILITY AND ADAPTATION

In this section, we identify the biophysical and social contexts – both those that increase vulnerability and those adaptations and modifications that mitigate it – which shape natural hazard risks for people experiencing or at risk of homelessness. We explore these factors across the four domains of resilience identified by the Red Cross: knowledge (appropriate information on risk and responses), security (shelter, safety and wealth), wellbeing (physical and psychological health and coping ability) and connection (social capital and connection to place) (Richardson 2014).

The list below is developed from previous research on poverty, homelessness and disasters, primarily from the US but including the available Australian studies, together with findings from the current research. There is little research on adaptations, resilience and strengths but we have included the small amount that has been done below, together with findings from the current study.

This list is useful both for understanding the social and individual contexts which shape risk, and also the factors which any messaging, education or emergency planning needs to take into account to be most effective. We use this list and the findings presented in the rest of the report to develop recommendations to increase the resilience of the homeless community. These recommendations are presented in the final chapter of the report.

BIOPHYSICAL VULNERABILITY: KNOWLEDGE AND SECURITY

1. **Limited or no access to housing** that can be temperature-controlled or structurally modified to increase safety thus exposing people to the elements more often and with less ability to modify their environment (Barnett et al., 2013; Jacobs & Williams, 2009; Ramin & Svoboda, 2009).

I've been living on the streets on and off since I was 16. I've seen a lot of changes over that time – this place [a drop-in centre] wasn't here then. But we had more places to stay – those keep getting closed down. There's nowhere to go. (Man experiencing homelessness in a cold, wet climate).

If my people are housed its in housing with no airconditioning and very poor insulation so extremely hot. (Homeless service provider during a heatwave)

...a lot of the public housing particularly – even in [the] private rental market as well, unfortunately when they built homes X amount of years ago they didn't have the green star energy rating so hence, no insulation... if you're trying to keep a home warm, particularly if you've got sick children and this time of the year you get rising dampness, you get mould and I have often had people come in and complain about mould in their homes and just the difficulty to keep the house warm. (Homelessness service provider responding to cold climates)

2. **Land use policies, laws and negative social attitudes** can push people out of public areas, making them harder to reach, less trusting of authority figures, and reducing their access to safe public spaces from which to shelter from severe weather as they are continually moved on (Edgington 2009; Lynch & Stagoll, 2002; Jewell, 2001; AHRC 2003).

One of the biggest issues we face is around rangers and police fining and moving people on. Most people are sleeping, this is crown lands, then you've got the council lands. So, a lot of people sleep in the dunes. (Homeless service provider)

These structural factors of housing and land use push people into transience and living in high risk locations

- a. **Less visible, inaccessible and changing locations** which cannot be easily reached by emergency

services personnel (Every 2015). People living unsheltered may be particularly vulnerable because encampments tend to be located on less desirable and more hazard-prone land (Gin et al. 2016). People who are less visibly homeless, such as young people couchsurfing or people at risk of homelessness who are moving regularly between liminal housing options, are also vulnerable. Lack of familiarity with one's surroundings is a significant risk factor – people new to an area or moving frequently are often unaware where to go, or of alternative options should they not be able to reach suitable shelter (Drabek 1999).

Not only do they [emergency services] not know where to find them ... because people obviously they're not just in town, like in the streets or behind shops, they're out along the river and in a lot of places that even a standard car wouldn't be able to reach so they all come in, and ... most of our clients don't carry ID on them. They don't often have any next of kin or significant others that would actually know if they were or weren't okay or dead (Homelessness service provider)

How do I let them [the fire service] know that family didn't have a car so it is a 40 minute walk up that winding, winding road, back up to ____? (Homelessness service provider).

- b. **Living in high-risk locations** such as riverbanks or beds, bushland, urban areas with high heat radiance. These offer both protection and privacy from authority and from violence and discrimination, but may allow access to necessary services. However, they can also increase people's exposure to natural hazards.

Bush fires in and around H two years ago caught many of our rough sleepers unaware. There was little direction to them about having a 'bush fire' plan in place; they often slept in different or remote locations so as to avoid detection. The current floods...place many rough sleepers at risk and if anything were to happen to them as a result, who would notify the police that they could be a missing person? Many of these people are commonly transient and no one would make comment if they were not seen again. (Homeless service provider).

Temperatures within the CBD area can be up to 7°C higher than in less urbanised environments due to the urban heat island effect. According to the Victorian department of Health: The 'urban heat island' (UHI) effect occurs in urbanised environments where built areas become warmer (particularly at night) than the surrounding rural areas. This is due to common construction materials absorbing and retaining more of the sun's heat (City of Melbourne, 2014, p. 3).

3. **Limited or no access to transport** to be able to evacuate from threats or hazards or reach safe meeting points in time to receive shelter (Edgington, 2009; Enarson, 1999; Fothergill & Peak, 2004; Morrow, 1999). This is particularly the case for those in regional and rural areas. Limited or no transport leads to longer exposure and greater physical risk to weather-related hazards (Settembrino, 2013).

I was in ____ and needed to get back to my place in _____. There was a big storm coming, and the power went down so the train wasn't running. I had to walk. It started snowing, I was in minus twenty degrees and it was a 20k walk. (Man experiencing homelessness on extreme cold)

I think anybody that is just out there camping I would be concerned about really. Certainly in town, you can get them from A to B but it is those people [living remotely in the bush and in the campgrounds] and how do we get all those people if we need to? I have only got a 7-seater van...(Homeless service provider in a bushfire zone).

Equally, public transport has often failed, or is impacted during extreme weather events, particularly extreme heat (Koestse & Rietvald, 2009).

4. **Limited or no access to extra resources for reducing risk** such as protective gear, radios, extra food and clothing, and maps (Fothergill & Peak, 2004).

Our service experienced an influx in homeless clients who had had their tents washed away on the river bank area where many homeless people stay in the area. We had a client who needed shoes as they had been lost and issued more tents, blankets and general necessities at this time. (Homeless service provider in a flood).

The majority of our houses don't have cooling. Access to heating and cooling (heaters/fans) in such times of crisis would be beneficial rather than directing people to drink water and stay cool (Homeless service provider).

This lack of essentials can mean that people stay in dangerous areas in order to protect what belongings they have.

I was just speaking to one of the guys. [...]. He was just saying, all my stuff's just about to flood so I've got to go and just move it. That idea of, you've just got to pick up and move and hope their property doesn't get damaged and if it does then...It can get stolen also... they turn up here. We try and replace what we can. In terms of having anywhere to go in these events, there's nowhere. Nothing. (Homeless service provider).

5. **Limited or no access to mainstream communication devices** for receiving emergency alerts and early warnings (Edgington 2009). Early warnings, and the ability to understand and act upon them, are crucial for people to make good decisions about the actions that they take.
6. **Limited and fluctuating funding for community services** that people rely upon for daily needs as well as in emergencies, but are also potentially underprepared for extreme weather and natural disaster, particularly in their ability to continue to provide services to cope with the surge in demand following a disaster (VCOSS 2016, Mallon 2013). Agencies' survival is often precarious. Fluctuating funding affects their ability to resource themselves for daily work, and thus also reduces their ability to prepare for severe weather.

you know, we're having to fight for funding every year. Every year. It's just – it's quite horrible to think about that we're in that position. We can't focus on things like BCPs [Business Continuity Plans] or incident response or disaster management because we're too busy trying to secure funding through ministers and all sorts of stuff (Homeless service provider).

Existing resources are overstretched by extreme weather, which can limit access to support, particularly opportunities for temporary accommodation such as caravan parks or to be re-housed (QCOSS 2011).

The long term homeless in this area know their local area well but are often too far away from shelter of any sort. There was no time to access help from service providers and many service providers were severely affected as well with much damage to buildings resulting in services not being able to operate as usual. (Homeless service provider).

7. **Agencies and clients not yet consistently included in conversations and planning for severe weather** which reduces awareness of the needs of the homeless community in emergency planning, and also reduces community services' awareness of emergency service planning.

The emergency response was good and coordinated by Government departments and the Red Cross but no one gave thought to rough sleepers or homeless people in the initial lead up, conversations and preparation for this event. A coordinated and consistent approach is needed. (Homeless service provider responding to storms and blackouts).

8. **Limited response and recovery services suitable for homeless populations.** Settembrino (2013) notes, following Hurricane Sandy in the US, that not all homeless people in the area went to the shelter, either the homeless shelter or the evacuation shelter, because they were avoiding substance withdrawals. Drabek (1999) also found that people experiencing homelessness were not accepted into shelters, and were more likely to seek temporary shelter on their own which could not provide adequate protection.

SOCIAL VULNERABILITY: WELLBEING AND CONNECTEDNESS

9. **Low literacy or proficiency in English** for accessing written preparedness information, warnings or recovery assistance (Every 2015). In our research, low literacy levels weren't universal – literacy levels (and people's acknowledgement of difficulties with reading and writing) differed depending on people's individual circumstances. Agencies working with people from Aboriginal and Torres Strait Islander backgrounds, or from CALD backgrounds, noted that not all these clients were proficient in English.

We actually sat down for three months, did a real in-depth look at it and I think we were a little bit shocked that 70 to 75% basically couldn't read and write properly. (Homeless service provider)

10. **Pre-existing physical, mental and emotional conditions** that make understanding and remembering information difficult, heighten the impacts of a disaster and lead to poorer recovery (Edgington, 2009; Fothergill & Peak 2004; Settembrino 2015). People experiencing homelessness often suffer from chronic, comorbid illnesses such as respiratory infections, gastro-intestinal problems, musculo-skeletal problems and poor dental health (Martins 2008; Moore et al. 2011) During extreme weather, people with chronic health conditions are at particular risk of developing heat and cold related illnesses including heat stroke, dehydration, cardiovascular and renal and respiratory events (Cusack et al. 2013). Unplanned substance use or prescribed medication withdrawal because of extreme weather can result in death (Cusack, de Crispigny & Athanosos 2010).

And with the heat we looked at the fact that a lot of our clients have got comorbid disease so their drug and alcohol, mental health, physical health needs are quite different to what yours and my health would be. (Homeless service provider on extreme heat).

We also found [in a survey with the local homeless community] some key indicators that around 25 per cent of people reported having asthma. If the air quality is poor that's going to be a major problem. We know that 15 per cent of people reported having a liver disease or cirrhosis. Again dehydration, continued and chronic alcohol abuse in very hot weather that's going to really put us at risk. (Homeless service provider on health and extreme weather).

Research estimates that between 50% (Tansley 2008) to 88% (O'Donnell et al., 2014) of people who are homeless in Australia experience mental health issues, including PTSD, depression, alcohol and substance abuse and dependence and psychosis (O'Donnell et al. 2014).

Seventy-two per cent [in our survey of the local homeless community] reported having a substance abuse issue and so of those another 64 per cent said well I've got a mental health issue and a

substance abuse issue so it can become very challenging for a person to get themselves to a safe place. (Homeless service provider)

Ninety-eight percent of people experiencing homelessness have been exposed to traumatic events, both chronic ongoing events beginning in childhood such as physical abuse and discrete events such as witnessing a violent crime (O'Donnell et al., 2014). This pre-existing trauma can be triggered in extreme weather and natural disaster events by loud noises, chaotic and disorganized surroundings, and lack of privacy and small spaces if a person is in an emergency shelter (VCOSS 2016). Positive health capacity helps people cope with the impacts and stresses of the events (Richardson, 2014).

11. **Coping with social hazards** can leave little emotional, intellectual or economic resources for coping with and preparing for natural hazards. People experiencing homelessness face adversity not only from natural hazards (which occur more rarely and with less predictability) but also a variety of social hazards, including unemployment, crime, and interpersonal violence (O'Donnell et al., 2014). It can be difficult to think about severe weather (which may or may not occur) events when daily life itself is fraught with social hazards that require all people's coping resources.
12. **Missing a stable connection to a network of friends, family and the community.** People experiencing homelessness often experience low levels of social support and significant social exclusion (Sanders & Brown, 2015). A UK survey of 506 homeless service users found that 6 out of 10 identified as 'lonely', three times the proportion of over 52s in the UK, a group most associated with being most lonely. Over a third of service users reported 'often' feeling isolated and lacking companionship. In an emergency only a quarter could call on a friend (Sanders & Brown 2015). Connection is a key support from which people can draw resources for responding to extreme weather (Richardson, 2014).
13. **Companion animals** are an important relationship in the lives of people experiencing homelessness (Irvine 2013). Approximately 10% of people who are homeless are companion animal guardians (Pets of the Homeless 2012). However, in extreme weather or disaster, companion animals require special consideration in individual preparedness and structural responses, such as extra food and shelters that accommodate these.

Our research also highlighted the role of companion animals in people's decisions about when and where to go, and their experiences during an evacuation. A woman evacuated from supported accommodation couldn't find her cat when she was leaving. She was distraught that he may be hurt or wouldn't come home "*he was the best cat*". He did, thankfully, return after the flooding, but the memory of his potential loss still brought her to tears.
14. **Gender, ethnicity, age and sexual orientation** intersect with homelessness to create unique vulnerabilities. Settembrino (2013) notes that homelessness is a social position in which vulnerability factors cluster – i.e. people are not simply vulnerable by virtue of their lack of a permanent safe home, but because of health, gender, sexuality and ethnicity-related vulnerabilities. Homelessness and disaster resilience is different for a single man living in a rural area with a chronic health condition in an improvised dwelling; a woman with young children moving in between temporary accommodation escaping domestic violence; and a young person who identifies as LGBTQ experiencing discrimination and violence.

EXISTING ADAPTIVE CAPACITIES, RESILIENCE AND STRENGTHS

As there is little written about this, in the survey and interviews we asked people about the strengths and resources the community draws upon. These findings are reflected below.

1. **Social networks.** Although there is evidence of social dislocation and exclusion in the homeless community, our research and that of Settembrino (2013) in the US also highlights that people are able to mitigate risks by drawing on social networks. Support from each other, family and friends, as well as local shopkeepers and neighbours were noted as important resources which people drew on before, during and after extreme weather.

We tell each other. If you meet someone new, you tell them about this place, about where to go to eat and when. (Man experiencing homelessness on social networks)

I took my dogs to the RSPCA, they looked after them for me. They know me. (Homeless service user on looking after animals in a flood)

2. **Connections with place and nature.** Although there is substantial evidence for people's connections to place being disrupted by land use policies, there remains a strong and abiding relationship with land and nature which many people spoke about as one of their sources of joy, beauty and strength. A love of nature and a rejection of development activities which change landscapes, shaped where people chose to live and return to.

It's a healing place here. You can leave the demands of an expensive lifestyle here. (Homeless service user on responding to the changing seasons).

I've lived on the river for most of my life. It's really special. And the animals. [A second interviewee: I looked after all the animals down there]. (Interview with homeless service users on 'home').

3. **Community service providers.** Links with existing services were a key factor in mitigating the impacts of natural hazards. Services alerted people of oncoming weather, undertook outreach to contact more isolated clients, stayed open longer to provide shelter for people.

My client sought assistance through the Housing Support Program to find other transitional accommodation to move to as he was concerned about being caught in the burning off period. [...] He had no other support in the community and did not really want to move from the bush. (Homeless service provider).

A. was here when we heard about the flooding. I took her home to pack and then drove her to her friend's house. (Homeless service provider).

4. **Survival skills.** People with longer experience of homelessness developed important survival skills which were also useful in mitigating the risks. These ranged from using locally available materials to create shelter, such as a tunnel in a playground, to finding water in the bush.

I drive to different places depending on the weather. I can just get in my car and sleep anywhere. If its wet, sometimes you can use a piece of plywood to block up the end of a tunnel [in a park] and sleep tucked down in there. (Homeless service user living in their car and rough sleeping)

I've watched the bush for years, I know where to find water, I know where to go on the lee of the hill when its hot and dry, its still wet there. I'm part of it (Homeless service user living in a bush camp)

5. **Knowledge of the area.** Those who have been living homeless in an area for an extended period of time had an extensive knowledge of places to go for shelter, both formal such as hostels, and informal such as the lee of the local church. This type of knowledge is also shared amongst people living in the homeless community. Those living homeless for some time were very familiar with weather patterns and had significant environmental awareness. They adapted where they slept in response to weather conditions.

Clients access public facilities such as swimming pools, library etc. (Homeless service provider on responding to heat).

People go to libraries and go to Maccas and other fast food places, any business where you can kind of blend in any train stations, waiting rooms, certain drop in centres, a crisis centre, friends of friends, they're extremely resourceful they know the places they can go, have a nap, chill, have some water, a lot of them do not all of course (Homeless service provider).

KEY POINTS

The natural hazard risks of people experiencing or at risk of homelessness are increased by structural factors stemming from poverty: limited weatherproof accommodation and land use policies push people into high-risk locations with little access to funds for emergency supplies or to transport; people rely on community services that are themselves vulnerable to the impacts of natural hazards. Natural hazard risks are also increased by the individual impacts of poverty: low literacy or language proficiency, physical and mental illness, and social isolation. Factors cluster together, with clients facing multiple challenges, and intersect shifting risk depending on factors such as gender, age, ethnicity and sexuality.

Despite these challenges, many people are adept at surviving all manner of challenges, drawing upon social networks, connections to place and nature, service providers, survival skills and knowledge of their area.

IMPACTS OF SEVERE WEATHER ON PEOPLE EXPERIENCING AND AT RISK OF HOMELESSNESS

The types of impacts people experience are similar to those of the securely housed: shelter and mental health are most affected. However, there were also impacts unique to the homeless community, especially the early impacts from weather that may not affect the securely housed population (e.g. wet weather for rough sleepers; cold for vulnerable renters). The findings also support the findings of the Trauma and Homeless Initiative (2015) of links between stressful, disruptive events like severe weather trauma and homelessness.

WHAT WEATHER HAVE PEOPLE EXPERIENCED

The most common weather events affecting the homeless community reflect the patterns of severe weather and natural disasters in the Australian climate. The most common experiences are severe storms and extreme heat. Over half of the agencies are located in areas in which clients have experienced floods, and almost half in areas affected by extreme cold and bushfires.

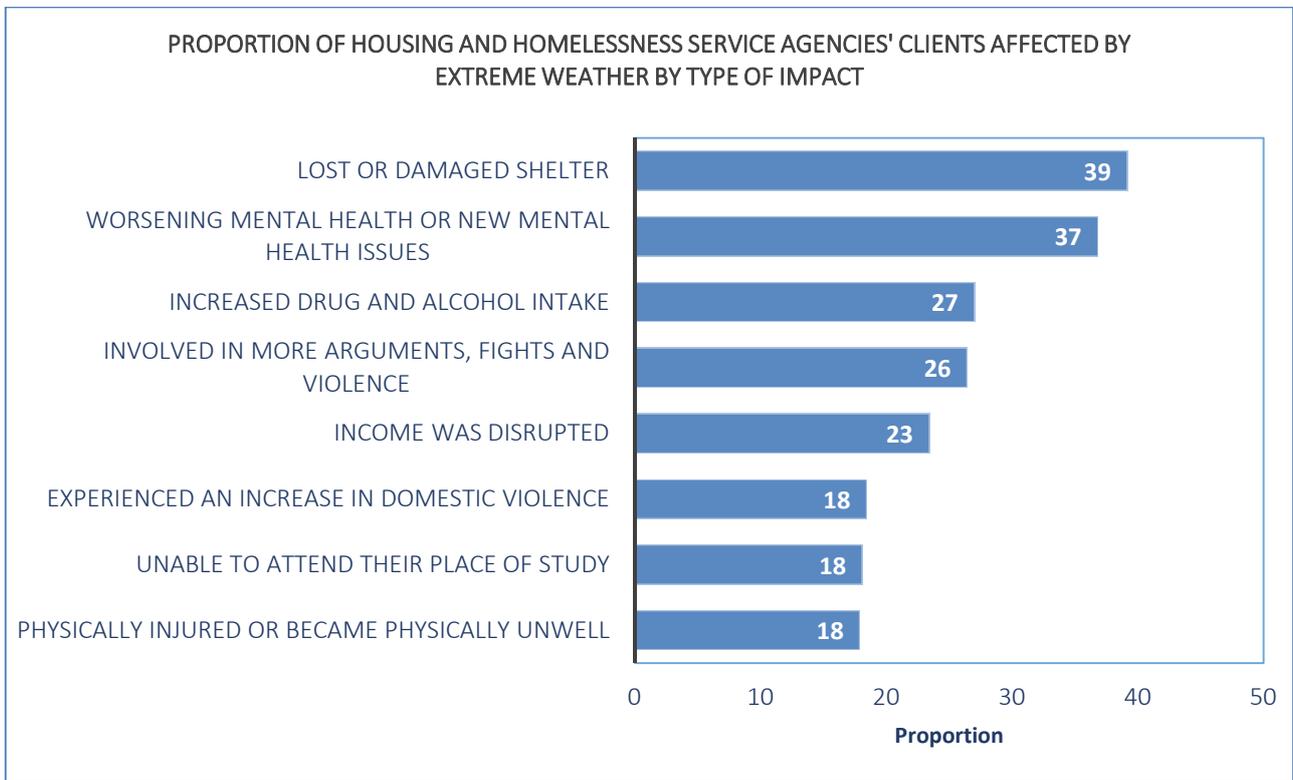
Percentage of Clients Who Have Experienced Extreme Weather Events and At Risk in Future Weather Events

	Previously experienced	At risk in future
Severe storm (including hail storm, electrical storm, dust storm or flash flood)	81.8%	68.7%
Extreme heat/heatwave	79.8%	62.7%
Extreme cold	45.5%	50.0%
Bushfire	40.9%	46.7%
Cyclone	27.8%	25.3%
Flood	51.5%	54.0%
Earthquake	6.6%	19.3%
Tsunami	3.5%	12.7%

For agencies, in any given weather event, just over half of their clients (57%) are, on average, affected. However, for some agencies more than 90% of their clients were affected, depending on who they worked with (e.g. rough sleepers) or the type of event (e.g. widespread flooding). This means that, during extreme weather, services can be working with 50 to 90% of clients who are impacted.

PHYSICAL AND EMOTIONAL IMPACTS

People experiencing or at risk of homelessness most commonly lost their shelter or their shelter was damaged in severe weather. The homeless community was also significantly impacted by worsening or new mental health issues, together with other impacts on mental health such as increased substance use and conflict.



Physical impacts

The impacts on shelter included loss of both physical items and safe places. Although loss of shelter is common for the homeless community during extreme weather, this loss hasn't been counted before in official loss or rapid impact statistics of the disaster or severe weather. This may reflect common definitions of 'home'.

When is a home a home: Counting impacts on shelter

People experiencing homelessness who were affected by severe weather report losing tents, caravans, temporary structures (e.g. shipping containers, cardboard shelters) and bedding in sleeping areas (e.g. blankets and sleeping bags in dunes, river banks and parks). "Loss of shelter" for the homeless community also included losing a sleeping area which was flooded out, both during and after the wet weather – until the area dried out it was no longer suitable for sleeping.

Less obvious impacts relating to shelter also include people changing their routines in response to bad weather. Outdoor sleeping areas are no good during the wet, cold or heat. People sought out shelter in the lee of buildings like churches, or utilizing existing structures such as public toilets to sleep in.

Young people experiencing homelessness and sleeping rough during severe heat and storm situations. Young people will access shopping centres during the day to avoid heat. Young people sleeping in public toilets during significant storms in order to stay dry. (Homeless service provider)

Mental health impacts

The impacts of severe weather on mental health range from low mood "you just feel a bit down you know, there's not much to do, you can't move around like you normally do" to tension from taking shelter in a confined space such as a service drop-in centre "I've noticed that people get on each other's nerves, it gets tense and tempers flare, everyone together in a small space not made for that many people, but sheltering from the rain" to trauma (set out in the section on this below). Mental health effects can also arise from the impact of the weather on medication, particularly extreme heat.

A lot of [clients] are on heat sensitive medications and so these medications become deactivated when it gets

too hot so you have to keep them at a certain temperature. (Homeless service provider on responding to extreme heat).

So anybody [is at risk] that's taking medications that interfere with sweating (tricyclic antidepressants, antihistamines, beta blockers for cardiac conditions)...they're not going to be able to thermos-regulate the way the rest of us will. Other interference is a lot of our antipsychotic medications (all prescription medications as well as things like MDMA, cocaine). People with substance abuse are going to be affected even more by extreme heat. People who take Thyroxin for hypothyroidism. Medications that can affect your perception of thirst (ACE inhibitors for heart conditions, haloperidol and droperidol for mental illness) ... they may not be rehydrating themselves. People who are on diuretics and people who are on fluid restrictions need to be monitored to make sure that they're adequately rehydrating without having electrolyte imbalances. (Homeless service provider on extreme heat and medications)

Mental health effects were also linked with homelessness and trauma.

Natural hazards: A factor contributing to homelessness

The survey and interviews identified extreme weather as one of the factors which can push people at risk of homelessness into primary and secondary homelessness (rough sleeping, overcrowding and couchsurfing)

For 19.19% of clients, extreme weather was a factor contributing to homelessness. Extreme weather as a step on the pathway to homelessness was also highlighted in the qualitative data.

We had one fellow who was living as a caretaker on a farm. This was [230 kilometres away] ... [He lost his accommodation because of the bushfires] and because there ... wasn't the capability of providing homelessness services for him [there] he walked down to Adelaide and stayed down at the park for a few days until the police here connected him with us. (Homelessness service provider on bushfires and homelessness)

The largest event to hit was the flood event of January 2013 which impacted over 30 tenancies we managed as well as 100's elsewhere in the town. 100's of homeless people were also affected as common areas for sleeping outside were near the river or in low lying areas affected by the flood. This event immediately impacted the customers and continued to have impact over 18 months later with countless numbers still couchsurfing or living in overcrowded situations as a result of loss of housing or camping areas. (Homeless service provider on flooding and homelessness)

Trauma and natural hazards

Extreme weather was also linked with trauma. The Trauma and Homelessness Initiative defines trauma as “experiences or events that by definition are out of the ordinary in terms of their overwhelming nature. They are more than merely stressful – they are also shocking, terrifying, and devastating to the survivor, and often result in profoundly upsetting feelings of terror, fear, shame, helplessness, and powerlessness” (O’Donnell et al, 2014, p. 6). Trauma can be chronic, beginning in childhood, or a single discrete incident such as a natural disasters (O’Donnell et al. 2014).

O’Donnell et al.’s study, currently one of the most comprehensive on the links between trauma and homelessness, identified that 98% of their participants had experienced single incident trauma, and over 97% had experienced more than four of these. Trauma was often identified as a precipitating factor to becoming homeless. Homelessness also drives trauma – the frequency of trauma exposure escalates when people lose stable accommodation (O’Donnell et al. 2014).

O’Donnell et al. (2014) found that 11 of their 15 interviewees had experienced more than one natural disaster, and

42 (37%) of the 115 people surveyed had experienced a natural disaster and 14 (12%) had witnessed this type of event. The Australian community average for exposure to or witnessing a natural disaster is 17%, compared with 49% of the homeless population.

Our research found that 35.32% of clients had previous experience of similar severe weather events, that is, they had been exposed to severe weather events more than once.

We also found that 30.05% of clients experienced trauma as a result of the severe weather. This included existing trauma being triggered by the event, and the loss of friends and community:

I have a long history of PTSD. When the bushfire went through I was sitting at the back of a school. I felt really anxious when I heard the sirens and saw the smoke. Then the electricity went. I was worried when I saw where it was going – I was worried about the people I knew up there. One of the people who lost their house is in my church. (Man experiencing homelessness talking about bushfire).

Given the links between trauma, homelessness and severe weather, Trauma-Informed Care may be a useful model for emergency preparedness, response and recovery as well as in other areas of health and wellbeing. The model identifies three circles of individual, psychosocial and wider system principles to inform work with people experiencing or at risk of homelessness (O'Donnell et al., 2014). The key principles are a focus on hope, safety, calm, connectedness and self-efficacy. These are very similar to the resilience factors identified by the Red Cross for responding to severe weather and natural disasters (see e.g. Richardson 2014).

When is a disaster a disaster: the impacts of 'non-severe' weather

The interviews also highlighted that when impacts of extreme weather are measured for securely housed populations, we are missing the early and more extensive impacts of weather on those who are experiencing homelessness. That is, if we measure based on whether a housed person has been impacted, we don't count the myriad impacts that wet, cold, dry, hot and windy weather have on people who are exposed to these on a daily basis. The interviews identified impacts from not only 'notable' weather events, but the kind of weather that many people would respond to by putting on a jumper or closing the windows. These included impacts on sleep (from losing bedding to wet weather to being kept awake by wind), skin (from not being able to wash to wearing wet shoes for prolonged periods), nutrition (from food spoiling to not being able to access shops) and mood (from being more isolated to the greater effort it takes to be dry/warm/cool).

People were sleeping at the local showground in their tents. A severe weather event happened & most if not all of these people lost all their belongings due to the torrential rain & strong winds. They had nowhere to seek shelter during the weather event. All their belongings & they themselves were drenched & had to sit the night out in a grandstand trying to keep out of the weather. Any food they had was spoilt by the weather. (Homeless service provider)

Each season brings another issue that they have to deal with for their own wellbeing. Working with the homeless I have found that cold, heat, flood and storms definitely impact on their lives. The need for a new blanket or clothing during cold periods as their articles are wet or soiled or not warm enough. Carrying a blanket with you during summer months is [not] feasible. Extra baggage. The need for free washing services which are difficult to find. During floods and storms they have to vacate areas leaving their stuff behind which is often before the winter when they need all that will ensure they are warm during the winter months. The heat is also an issue when living on the streets, having to cope with high temperatures and humidity, with not enough money to buy toiletries or places they can go to find showers or wash the limited clothing they are able to carry. During these periods which can last up to three months, they have to search and find free resources which are often not available. (Homeless service provider)

Think about having wet feet for 24 hours. So there's skin issues. Obviously if it's cold you may be at risk of

developing some sort of illness, a mild hypothermia, pneumonia, flu-type, cold-type situations. If you're exposed to wind you can get windburn. You might get hit by debris which creates scratches and skin - again. So if it's extreme weather and you get hit by obviously worst case scenario massive floodwater and that you can die. So broken bones, it creates different accidents. If there's a torrent of water coming down that has got debris you can get hit by something, you could get cut. Yeah, so there's all those factors. (Homeless service provider)

So being wet all the time and that from an emotional and psychological perspective if you're prone to depression it could make you feel really sad and more depressed, feel heavy and flat. When is this going to stop? (Homeless service provider)

KEY POINTS

People experiencing or at risk of homelessness face both physical and emotional impacts from severe weather. The primary impact is on shelters – tents, makeshift shelters, caravans and bedding - although these impacts are not often counted when tallying infrastructure damage after disasters. The second highest impact is on psychological health, with 37% of people suffering worsening or new mental health issues.

Severe weather is linked with trauma: 30% of clients exposed to severe weather experience trauma. Severe weather is also linked with homelessness: it was a factor tipping 19% of clients into primary and secondary homelessness.

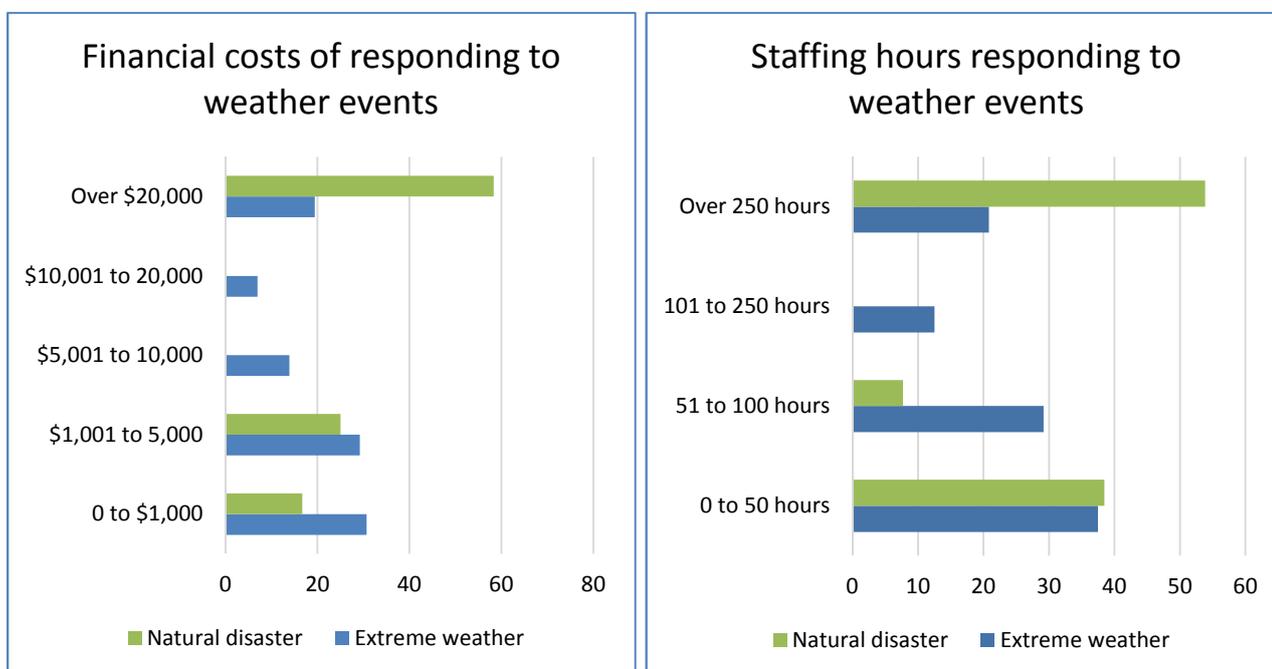
Even 'non-severe weather' has impacts on people's physical and emotional health – each season brings challenges affecting people's skin, sleep, nutrition and mood.

IMPACTS ON HOMELESS SERVICES

The significant impacts outlined above on clients also mean significant impacts for homeless services in terms of their expenditure and staff time. Which then increases the impacts on clients. One of the strengths that people rely upon during extreme weather, noted in the section above on vulnerabilities and adaptations, is community services. However, previous research by ACOSS and VCOSS have identified the significant impacts of extreme weather on services and their ability to continue to provide those essential services during and after an event. ACOSS report that 25% of services may not be able to open again after a natural disaster (Mallon et al. 2013). In this section, we look at the financial and staffing impacts of extreme weather.

FINANCIAL AND STAFFING COSTS OF EXTREME WEATHER

The majority of agencies affected by extreme weather (storms, extreme heat and cold) (60%) spent up to \$5,000 assisting their affected clients, and up to 50 hours of staff time (37.5%). However, almost a fifth (19%) spent over \$20,000. The more severe the event, the greater the costs. For those agencies in areas affected by extensive flooding, bushfires, cyclones and earthquakes, the majority (58% and 54%) spent over \$20,000 and 250 hours of staff time assisting their clients.



Some of the incurred costs were for damage to physical infrastructure, including to vehicles and buildings. There were also costs associated with electricity (as shelters stayed open longer and tried to keep clients warm/cool depending on the weather), food, bedding and temporary shelters (e.g. tents and swags).

However, the most significant costs were in relation to staffing in response to the increased demand. Staff worked extra hours to support existing and new consumers created by the extreme weather, to clean weather-affected accommodation, and to meet needs for shelter, bedding, food and emergency supplies. As some staff were unable to access work (because of blocked roads, they themselves being affected by the disaster, or being called upon in an emergency services role), agencies either recruited fill in staff (where this was possible), or those staff who were available simply worked more hours.

...extreme weather stretches our already disproportionate response to need.

Massive impact on staff, who deliver wide-ranging services, from roads, to drainage to warning to evacuation centres. During the immediate aftermath, 24/7 operations were provided for several weeks. Massive amounts of overtime were incurred.

if it's been a particularly wet weekend for example then we're going to be busy on the washing machines. Or we're going to have a lot of requests for people to replace gear that they've lost which again means [more staff]...they might be accessing more clothes from our shops.

at short notice plans were made to provide immediate safety for those sleeping rough-staff that had worked their normal 8.30-4.40 shift offered to work on through the night under extreme circumstances, no lighting, very limited candles, no hot food.

Most agencies do not have funding for such emergency responses in their existing funding agreements. Some agencies received funding for this work through funding agreements developed either before or in the aftermath of the severe weather, however others did not.

increased demand without increase in resources

Service continued to provide support services. Increase in demand and required operation outside of funded service agreement to meet needs of all people requiring assistance.

Depending on the policies in place in a particular area in relation to homelessness, even providing small necessities could be beyond the funding capacity of organisations.

(IV1) Today all I wanted to be able to give out was some brollies. It was as simple as that. (IV2) I gave mine away. (IV3) I gave mine away last week. (IV1) Just a waterproof swag. Imagine. I don't know if you've seen them. They're these amazing swags. They turn into little waterproof tents, little tiny tents. (IV2) [A] jacket as well. It would be great. The guys today were just drenched. I was just going, we need to get some ponchos to put down there. Just get little plastic ones. It's just something. That's where we're at, as basic as that. (Three homeless service providers facing prolonged wet weather without services)

Staff stress in response to this increased workload was significant. For some staff, this stress was compounded by the situations they personally faced, both conditions affecting clients and affecting their family, friends and community.

Massive amounts of exposure to very challenging situations for staff.

I was so surprised at what a state it was all, really. It was my first experience. I found it quite frightening. I was supposed to go to visit family in the UK that day. I couldn't get down the mountain and I couldn't get around the mountain that way. So I cancelled my trip, so it was pretty full on.

Staff also reported stress the stress of feeling left out of the emergency. They felt unsure as to what to do or where to seek help, and that they were responsible for taking on an emergency role for which they had no support.

that is why I wanted to have that bit of a forum too to discuss how we could do the next fire better. Other than my just being on the phone to the people that I know and being available to go pick up people that I knew, but what about everybody else?... I would have thought that there would be a lot more in place than there was and I was actually really surprised at what... it was a real shemozzle actually and I think people were very uncertain about what they were supposed to do and that was really hard

Everybody makes us responsible.

The service most affected by severe weather was outreach. Damage to roads and mobile phone towers meant that services to outlying clients, and those unable to access the service because of infrastructure damage, were

suspended for a time. This is particularly significant, as the best way of informing and supporting clients during extreme weather is through outreach, which we discuss in the next section on responses.

We were unable to conduct our usual home visits to provide support due to poor road conditions. We contacted each of our clients by phone to check on how they were coping.

Communication with customers was difficult during the period of the emergency as mobile phone towers had been ravaged by the fire.

KEY POINTS

Homeless service providers play an important role in assisting clients every day. Their workload is significantly increased by severe weather. Those services who are already under-resourced struggle even in 'non-severe' weather.

Services typically spend up to \$5,000 assisting clients during discrete weather events such as heatwaves, but, depending on the severity, can spend over \$20,000 responding to natural disasters. These costs include damage to infrastructure, but are primarily related to staffing.

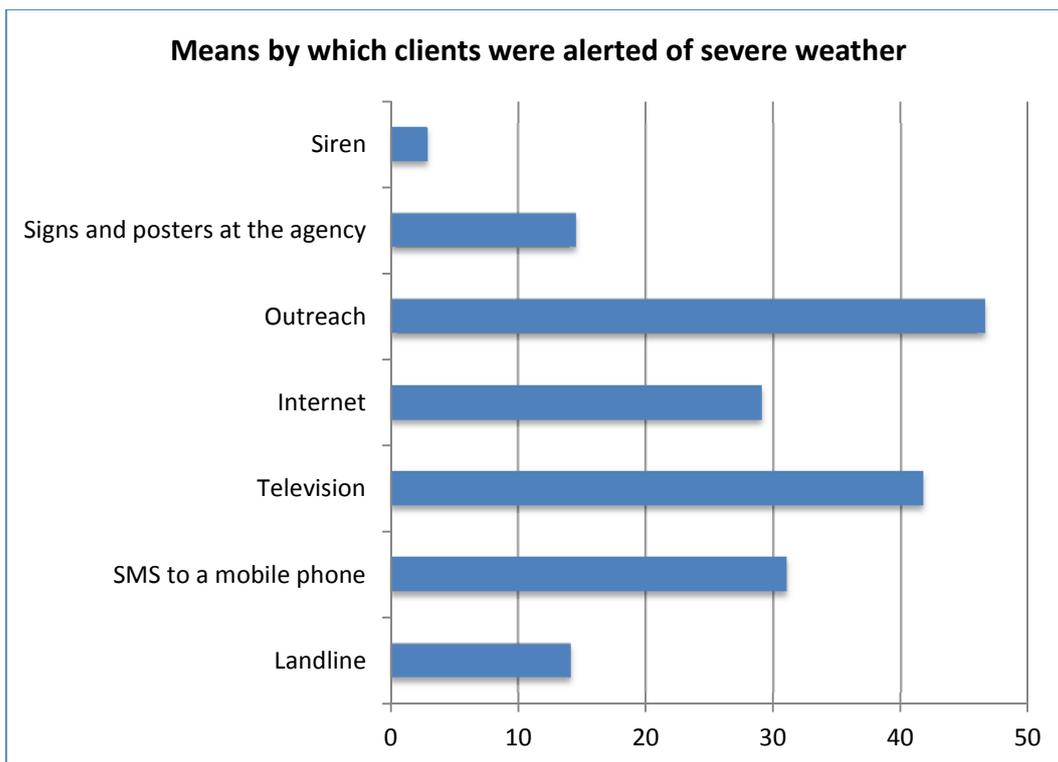
Staff work extra hours in difficult conditions, may be affected by disasters themselves, and may not be aware of what to do in the situation.

The service most impacted by severe weather is outreach. Outreach is also the most effective way to reach clients to warn them about emergencies and to assist them to respond. More restricted outreach impacts on client's safety during severe weather.

EMERGENCY WARNINGS

A key issue in emergency planning and response with vulnerable groups is how communicate emergency warnings and preparedness information. Four of the key risk factors for the homeless community – social isolation, low literacy, transience/being hard to reach and not having access to mobile phones or the internet – influence how and when people access information, increasing their natural hazard risk.

The survey results reflect the importance of emergency warnings which do not heavily rely on mobile or landline telephones. Outreach (48.91%) and television (42.39%) were the most relied upon sources for warnings and information about the upcoming weather.



The importance of outreach for communicating emergency warnings and information about what to do was also highlighted in the interviews. Particularly for those agencies working with people who are camping, or those sleeping rough, outreach was their key method of communication. This meant that even clients who rarely engage with a service like a drop-in centre, who are isolated from peer and other social networks, or who have limited mobility due to illness, can still be informed about the upcoming weather. This greater reach wasn't across the board – the next section outlines the barriers to reaching more remote or transient clients – however it was useful for reaching many in the service's client base. Additionally, given the limited access to transport or to materials such as weatherproof clothing, outreach also allows staff and peer support workers to assist people to respond effectively. This included taking people to hospital if they were suffering physical effects (e.g. to heat) or a nearby shelter or evacuation centre, or providing water or food or protective items to warm up/cool down/keep dry.

Another suggested method of conveying warnings to people who are more isolated is sirens. Although sirens are not used in all emergency situations across Australia, several respondents noted the need for a universal warning system that does not rely on outreach or a device, for those who are difficult to reach or who can't be reached because of damage to powerlines, internet and mobile towers.

I'm still a very strong advocate of going back to the old days of using a siren. ... at least that also then

informs if anyone is living rough and still not aware of what's going on. Say they're in a cave and they're not seeing the smoke, that there's something happening.

Sirens are also a good way of communicating emergencies to those who speak a language other than English.

A lot of our clients also come from refugee backgrounds and they're used to sirens being a sign of 'get out' or you know, 'be alert'.

Mobile phones are accessible and used by a significant proportion of the homeless community, however this depends on people's individual circumstances. Mobile phones were used to receive emergency warnings and other weather information – just over a third of people found out about the upcoming weather through an emergency alert on their phone. Where these can be supplied or supported by agencies, they are increasingly becoming part of the communication networks for the homeless community. This has resulted in some agencies utilising smartphones specifically for this purpose:

we decided was that we, as agencies, would promote the Fires Near Me app on smartphones I haven't really come across many homeless that don't have a smartphone nowadays and they are so cheap as well.

For those people who use services more regularly, drop-in centres were a key place where they accessed information, both through their peer networks and through staff. In many cases, people found out about the upcoming severe weather while they were visiting the drop-in centre, and staff then assisted people to evacuation shelters or safe places.

And places like [drop-in centre] here, they become an information exchange centre as well as a place of social inclusion. (Homeless service provider)

One of our clients was living under the bridge. He was in here when we saw the weather warnings. I drove him to the evacuation centre and he was placed in a hotel for the night as part of the evacuation arrangements. (Homeless service provider)

For those more socially connected, networks within the homeless community itself are a strength which the community draws upon during severe weather, including as a way to communicate and pass on information. This was captured by the old concept of the grapevine “[which] works wonderful”. However these too have their benefits and limitations:

if they're in town, word of mouth is pretty good. They let each other know as much as possible, but sometimes if someone hasn't come in, and if they're also a new homeless person to the area, they might not know. Because there are some that are not from this area because they're moving around.

Transience, disconnection from services and being new to the area or to homelessness are gaps in information sharing through a network. These and other factors were significant barriers to communicating emergency warnings, outlined further in the section below.

Barriers to emergency warnings

Less than fifty percent of clients (49.46%) received emergency warnings.

Open-ended survey responses and interviews highlighted particular challenges for communicating emergency warnings to:

- 1) rough sleepers outside of the metro area
- 2) those who are highly transient and do not utilize services
- 3) people who are hearing impaired

- 4) people from CALD communities
- 5) some people with a mental illness
- 6) people who are new to an area

Some of the more geographically, linguistically and socially isolated people could not be accessed by any means, including outreach.

Living in a regional area with clients in isolated places who were less trusting of authority made communication particularly challenging:

[It] was difficult to warn rough sleepers as it is not like metro areas where a large majority congregate together. In our country region they are spread out and lots of locations are not known due to fear of police etc (Homeless service provider)

There were also systemic barriers to accessing emergency warnings – those living in areas where there are no specific communications plans for reaching people who are homeless or in vulnerable housing, or where these have been established but may be no longer available because of funding. Outreach, which the survey and interviews identified as the most reliable method of communicating warnings is limited by the number of staff the service has available.

We don't have the workers to cover contacting all the people living in private and public rooming houses, public housing do have some cool rooms in older person estates. Local Office of Housing have a protocol of calling residents 75+ however this misses all the people between 50-74 yrs who have complex and prematurely ageing health conditions. Council's HACC services have to this summer been involved in protocol of contacting all their HACC clients but in next 12-18 months Council may be withdrawing involvement due to Age Care reform process (Homeless service provider).

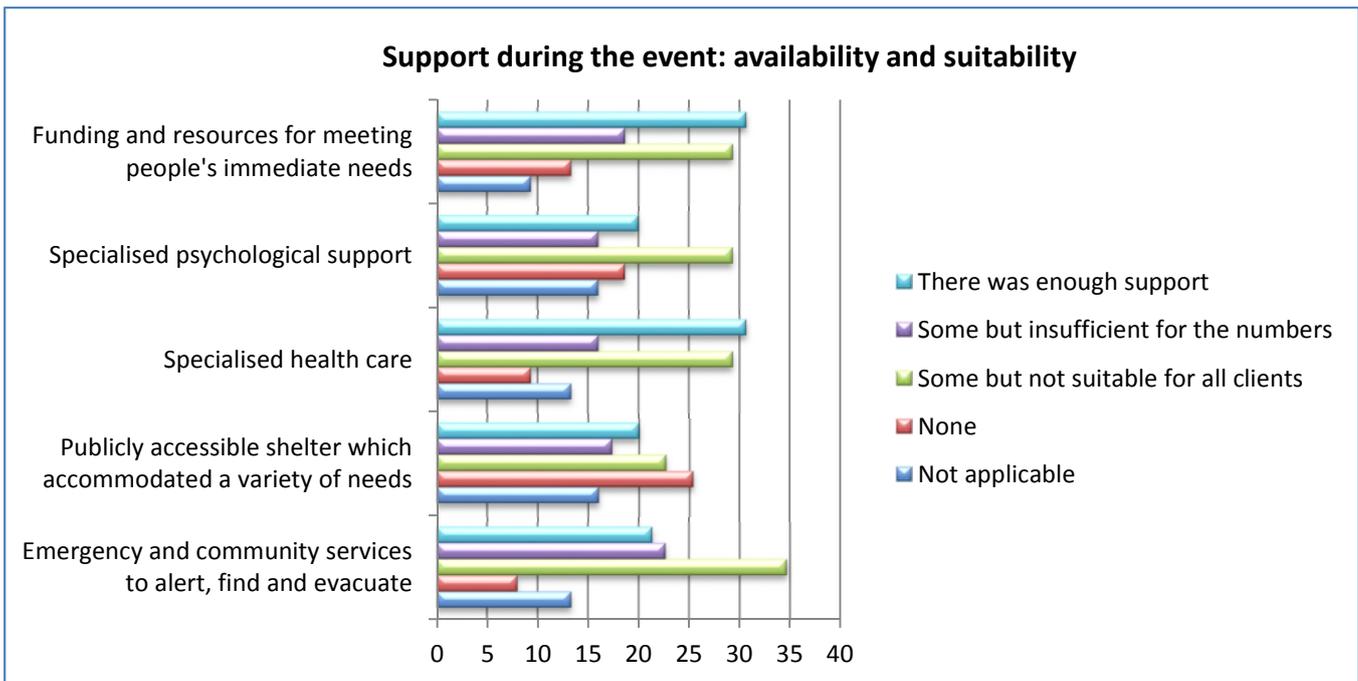
Those new to homelessness are also less likely to know what to do in response to extreme weather:

A lot of people new to sleeping rough who would be completely bamboozled and really terrified if they were to be living on the street during a heat wave event, and one of the things we have reflected on is how can our communications plan do its best to get to those people, particularly those who aren't already using a service. And that's what the police as the lead control agency for a heatwave event and other emergency services become really important. (Homeless service provider).

SHELTERS, SERVICES AND SUPPORT

There were varied experiences of support during the event. For example, whilst 30.66% of agencies felt there was enough support to meet people's immediate needs, 29.33% found there was some support, but not enough to meet the needs of all the affected clients. This may reflect where the agencies are located and where they're at in terms of preparing for emergencies. The influence of place and policy was highlighted in the open-ended survey responses and interviews. Some services were already thinking about and planning for emergencies in their area, whereas others were facing considerable challenges to gain funding and provide even for regular services and thus were able to divert few resources to emergency planning.

However, there were two notable gaps identified by most agencies which stand out in the survey findings: the amount and suitability of service personnel to alert, find and evacuate people, and the availability of publicly accessible shelter. Thirty-five percent of agencies report that whilst there was some ability to alert, find and evacuate people, this was not suitable for all clients. The second gap consistently observable across the responses was in relation to publicly available shelter. For 25.33% of the services, there was no shelter for clients to use.



The interviews also highlighted challenges in relation to shelter. These ranged from providing small necessities to the absence of temporary shelter services such as drop-in centres which people could use, to the challenges of accessing and staying in evacuation centres.

Evacuation centres

Members of the homeless community accessed evacuation centres in Launceston and the Northern Rivers during the prolonged rain and flooding of the 2016 East Coast Lows. In the Northern Rivers, the evacuation centre was primarily utilized by homeless people whose river-bank dwellings and sleeping areas were washed away, or who were evacuated from supported accommodation. There were no adverse experiences, in fact, people highlighted the cooperation and camaraderie of the people staying in the shelter. However, people noted that more severe weather events with greater numbers of people being evacuated and which require people staying in evacuation shelters longer require attention to a) support for people with substance abuse disorders b) providing safe spaces (being able to accommodate people who experience behavioural challenges, or to separate genders)

It was only open for two nights so I don't think there was that issue but I imagine that if the floods were much worse and if they were open for a month or so and access to alcohol and those sorts of things were difficult you'd have people who were really badly detoxing and that can actually put people at risk as well because of the hallucinations and things that can come with that. So that's a risk for community as well as to that person (Evacuation centre worker).

Having the ability to provide separate spaces for people who were experiencing behavioural challenges and different genders was an important consideration for evacuation centres responding to large-scale weather events. Whilst this is less of an issue for shorter and smaller events, which may open accommodation which suits the demographics of the area, it is important to consider and plan for larger events as well.

82 per cent of respondents [to a local survey of homelessness] were men with an average of 42. So if we're thinking about setting up a shelter and we're thinking about well where are we going to triage people and are we going to mix genders or are we going to segregate genders we probably wouldn't be honest. We didn't think about it too much the night we did the shelter. But [in a larger event] maybe we need to. Maybe there's going to be a massive volume. Maybe we'll have 400 people and then we need to think about yes we

need to have a safe space for people who want that and so what does that look like? How is that separated? Is that by gender or is it just about by quiet space and what does that actually end up like? (Homeless service provider)

Getting to evacuation shelters was also noted as an issue, given that many people experiencing homelessness do not have access to a car. In Tasmania and the Northern Rivers, people either walked to the evacuation centres, or were driven by service staff, both homeless and emergency services. However, for those living in areas with long distances to cover, this was more challenging:

I think anybody that is just out there camping I would be concerned about really. Certainly in town, you can get them from A to B but it is those people; even the ones in the...campgrounds and how do we get all those people if we need to? I have only got a 7-seater van (Homeless service provider)

KEY POINTS

Fifty percent of the homeless community did not receive warnings of severe weather events. Those who could not be reached were more likely to be sleeping rough and socially isolated, and to speak English as a second language or have a hearing impairment.

Those who did receive warnings were most likely to be through outreach or television. However, of concern given its central role in disseminating emergency warnings, was that existing outreach services were often limited in their capacity to reach clients because of staffing or lack of funding.

The suitability and accessibility of support services for clients during weather events depended on where agencies were located – the types of support offered and its usefulness varied considerably. However, the most significant and consistent gaps were in relation to shelter and alerting services. 25% of agencies identified there was no publicly available shelter for their clients. And 35% indicated there whilst there was some ability to alert, find and evacuate people, this was not suitable for all clients.

People experiencing homelessness heavily relied upon evacuation centres and upon shelters opened specifically for the community during severe weather. Considerations for evacuation shelters for longer events are ways to support people experiencing substance disorders and behavioural challenges, and to create safe spaces.

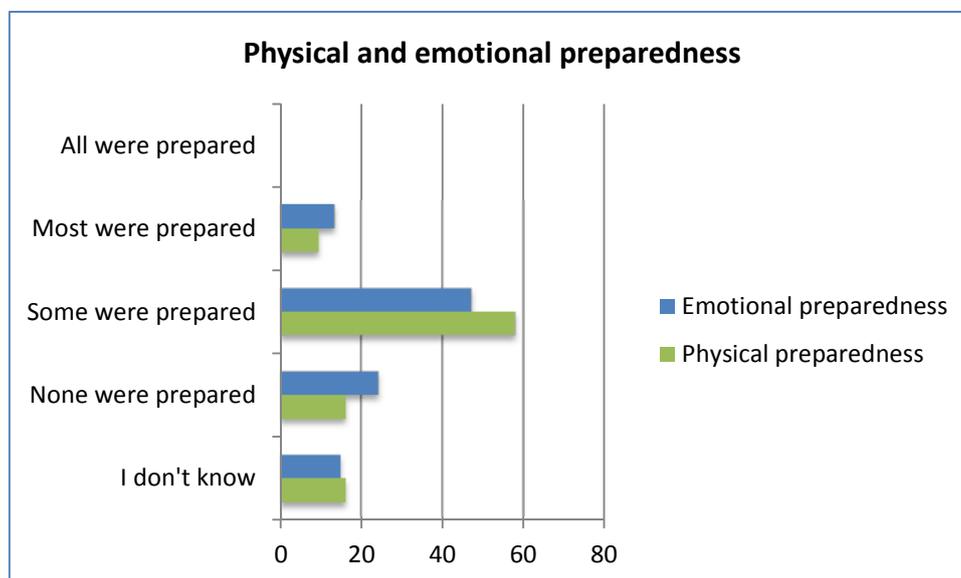
SEVERE WEATHER PREPAREDNESS

Although preparedness has focused on people in secure housing, there is a growing recognition that preparedness is not only possible, but vital for, vulnerable communities as well. It may not look the same as preparedness for those who are housed or able-bodied or without physical and mental illness, and is likely to involve, to a far greater extent than the securely housed population, community services personnel, but individual preparedness can ensure that, when a disaster or extreme weather strikes and emergency and community services are not available, people are better able to protect themselves and others in their community and minimize the impacts on them. Pre-event information can help people understand and act safely upon emergency warnings.

There are significant challenges posed by poverty and mental health for individual preparedness, and the level of possible preparedness will vary because of this. However, the strengths and resilience that people experiencing homelessness highlighted in the research suggests that personal and community preparedness is not only possible, but also empowering and positive. Importantly, emergency preparedness is one facet of developing resilience to anything that life throws at us, big or small (RediPlan, 2016). The key facets of emergency preparedness - building knowledge, safety, coping and connection – are also key elements of resilience to many other stressful situations.

CURRENT LEVELS OF PREPAREDNESS

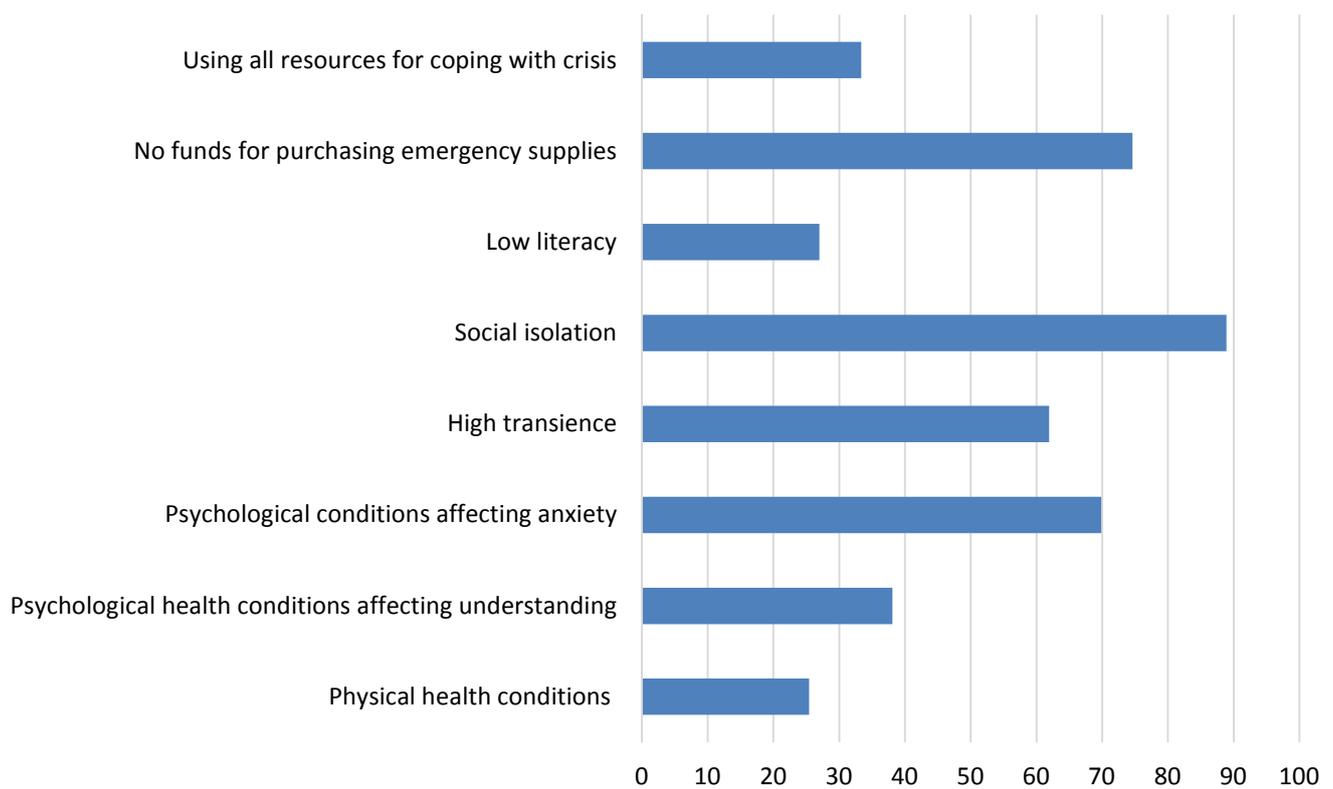
The majority of services report that at least some of their clients are physically and emotionally prepared for severe weather. As for the wider population, levels of emotional preparedness (the ability to anticipate, recognize and manage stress and anxiety triggered by severe weather) were different physical preparedness (ability to limit impacts on physical self and property) (see Every et al 2015). Services were more likely to indicate that none of their clients were emotionally prepared, and fewer indicated that some of their clients were emotionally prepared compared with physical preparedness.



CHALLENGES FOR PREPAREDNESS

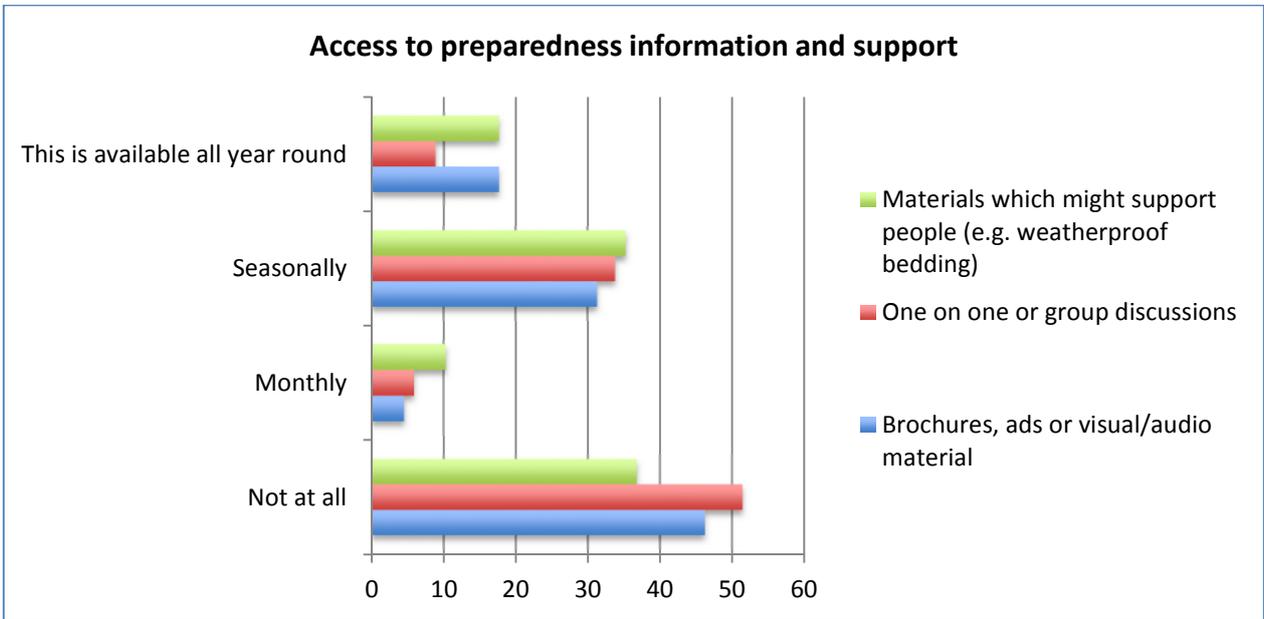
Services saw social isolation, lack of funds for purchasing emergency supplies and existing levels of anxiety and stress as the three biggest challenges for clients to prepare for severe weather.

Challenges to preparedness for clients



CURRENT ACCESS TO PREPAREDNESS MATERIALS

As well as the challenges created by poverty, mental illness and isolation, agencies and clients report being under-resourced in the information they have available on responding to severe weather events. The majority of agencies reported that their clients have no access to any written material or to community group style preparedness information. Agencies were least likely to have access to discussion-style preparedness material but more likely to have access to materials which may support people (e.g. bedding), at least seasonally.



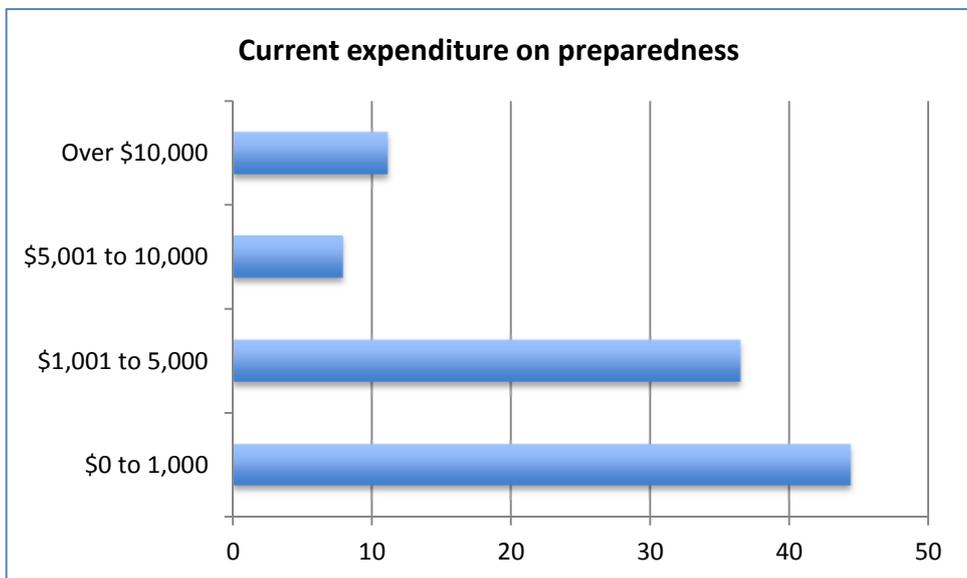
Limited physical resources to prepare, low emotional preparedness and little knowledge of what to do in an emergency was linked with actions and behaviours which were not in people’s best interests.

Clients received information via their 'phone to evacuate the area, however there were no specific directions as to where they should go or how they should get there. Many clients do not have transport. When the power outage occurred, clients panicked -- food from supermarkets was purchased in ridiculous quantity, clients didn't have lighting, or any form of cooking facility to prepare meals. Most did not own a battery operated radio and often clients were without phone credit to contact anyone. (Homeless service provider).

Tailored, available and accessible preparedness information and education can alleviate this issue by helping people a) know where to find good information and b) better interpret and respond to that information.

CURRENT EXPENDITURE ON PREPAREDNESS

Currently, most agencies spend up to \$1,000 each year to assist people to prepare for severe weather.



This is in contrast to the costs of recovery which agencies face following severe weather events. As noted above, costs range from up to \$5,000 for less severe events to over \$20,000 for more extensive disasters. More expenditure at the preparedness stage could potentially reduce the impacts and thus the costs of responding to severe weather.

WHAT IS NEEDED TO IMPROVE PREPAREDNESS

The list below, developed from the survey and interviews, highlights accommodation, protective items, staff training, outreach and service collaboration as structural and service-level initiatives.

- a) Access to shelter, both long-term and short-term.
- b) Access to dry, warm drop-in centres with showers and laundry facilities

It (a local drop-in centre) helped me when I was going through a hard time. When I was camping and it was flooding – to come in and have a hot shower and clean clothes...it was brilliant for me. (Woman experiencing homelessness on support services for extreme weather).

- c) Material supports that are designed for different weather conditions – e.g. weatherproof swags – and emergency kits, as well as basic items of clothing and for managing temperature
- d) Transport support, e.g. more community buses to call upon
- e) Equipping agencies with emergency infrastructure (e.g. sprinklers on the roof in bushfire areas) so they could be activated as an emergency centre
- f) Staff training in emergency preparedness and how to communicate this to clients
- g) Connections with emergency services particularly in a group discussion format where they can share their knowledge
- h) Support for maintaining and expanding outreach services

Some respondents also highlighted individual level preparedness strategies that might be included in preparedness information and education. Those that did identified increasing client's knowledge of where to go and who to contact for information, increasing the accessibility of information and messaging using visual material, and working with high risk clients to develop health plans which include specific actions for responding in an emergency, e.g. letting someone know where you are.

KEY POINTS

Only some people experiencing or at risk of homelessness are prepared for weather events. Homeless service users are more likely to be physically than emotionally prepared.

The three biggest challenges for preparing for emergencies are social isolation, mental health conditions which increase anxiety, and a lack of funding to purchase emergency supplies.

Respondents highlight structural and service-level actions to increase preparedness particularly: accommodation, protective items, transport and outreach.

The majority of agencies can spend up only to \$1,000 on preparedness, and more funding was highlighted as a key factor which would support preparedness.

STRATEGIES FOR BUILDING RESILIENCE

Building resilience is a multi-level, multi-pronged strategy for all communities. Mitigation occurs at a structural, organizational and individual level. Throughout the survey and interviews, people highlighted that resilience for the homeless community relies on structural and organizational initiatives. Changing access to shelter and funding and support for agencies to plan for disasters were highlighted throughout the research as key to building resilience. However, individual-level initiatives in relation to education and information can add another important element to preparing and responding better to severe weather. For different clients and client groups, the emphasis may be more on structural and agency mitigation than individual mitigation, particularly for those clients who are highly dependent, however for other client groups there may be opportunities to use existing skills and create new ones to respond to weather events.

The next sections cover government, service and also individual level strategies to build capacity across the four domains of resilience: knowledge, security, wellbeing and connectedness.

KNOWLEDGE: APPROPRIATE INFORMATION ON RISKS AND RESPONSES

The research demonstrated that appropriate information on emergencies and how to prepare and respond to them is currently lacking for homeless service users. The research also highlighted that increasing individual preparedness through appropriate information on risks and responses may be challenging. People experiencing or at risk of homelessness live in a variety of circumstances which can greatly restrict their ability to respond in the same way as those who are securely housed and without physical or mental illness. Appropriate information on risks and responses needs to reflect and respond to these differences. Thus, it must be accessible to people who have limited access to funds and transport, are often transient and invisible, and who live in a diversity of environments from tents to rooming houses; and respond carefully to the needs of physical and mental illness particularly trauma and high levels of anxiety. It would also build upon people's survival skills, knowledges, and existing connections to people and place.

Below, we make some recommendations for developing preparedness information and education for people experiencing and at risk of homelessness which address these challenges and draw upon the strengths

Principles for developing appropriate information on risks and responses

Co-develop materials with the homeless community

Addressing diverse experiences

Drawing on people's knowledge and survival skills

To make materials that matter, these must be co-designed with the homeless community who will use them.

<p>Taking it to the people</p> <p>Addressing transience, visibility and isolation</p> <p>Building on the strength of connection to place</p>	<p>Education programs don't need to be solely based in an urban area or even in the service centre – they can be adapted for delivery in parks, campgrounds and shelters.</p>
<p>Tailored information</p> <p>Addressing diverse experiences</p> <p>Building on survival skills and knowledge</p>	<p>Responding to emergencies successfully doesn't require people to live where they don't want to, or to stop hanging out in the park, or taking shelter in abandoned buildings. It can reflect the real circumstances people are in. An education program would be based on a respect for people's life choices, their existing circumstances such as mobility, and a harm minimization approach.</p>
<p>Problem-solving positive focus</p> <p>Responding to mental health, anxiety and trauma</p> <p>Building on survival skills and knowledge</p>	<p>Extreme weather events don't need to be presented solely through a threat narrative. One supported method is to present extreme weather and our responses to it as a problem to be solved, providing positive messaging of people's ability to develop these skills. This draws upon social psychological research on the relationship between anxiety and messaging, and also on Trauma-Informed principles of hope, safety and calm.</p>
<p>Strengths-based</p> <p>Responding to mental health, anxiety and trauma</p> <p>Building on survival skills and knowledge</p>	<p>Responding to extreme weather events can be presented in terms of skill enhancement and development, potentially reducing people's anxiety. An education program would draw upon the community's existing knowledge and experience of survival in incredibly adverse circumstances, and apply and extend this to the severe weather context.</p>
<p>Providing both information and protective items</p> <p>Responding to poverty</p>	<p>Preparedness for the homeless community is not only talk, but also about providing material supports. As people experiencing homelessness lack the resources necessary for surviving disasters, education needs to be complemented with the provision of protective items (e.g. water, life jackets, tents)</p>
<p>Delivery for low literacy</p> <p>Addressing accessibility</p>	<p>Preparedness information can be built with practice and in conversation, rather than only through written materials. Information can be delivered through story-sharing and visuals rather than primarily text-based.</p>

Delivered through trusted relationships

Addressing isolation, anxiety and trauma

Building on the strength of community and service networks

Delivery through outreach by trusted people – not only service providers but also peers – is more motivating and more likely to reach people.

Content of education programs

The ideas in this section are people's suggestions for what to include in education and awareness-raising programs for those clients who may benefit from them. They reflect community services' knowledge and experience in running education programs for people who are homeless and other vulnerable communities, emergency services' knowledge of preparedness and response, and the skills and knowledges of people experiencing or at risk of homelessness.

Many of the ideas are adapted from five existing programs which interviewees discussed: Streetwise First Aid, RediPlan, Vulnerable Groups Fire Education, together with an education/awareness raising program in the US called Dialogues. The Streetwise First Aid program and model of delivery, developed by the Red Cross, uses storytelling and yarning to bring accredited first aid training to the homeless community (Australian Red Cross, 2015). RediPlan, also developed by the Red Cross, is an all-hazards national household preparedness program which raises awareness about disaster resilience through group conversations about what we value and what gives our lives meaning. RediPlan has already been adapted for seniors and for people with a disability. Recent research demonstrates that this program increases people's knowledge of disaster risks and their preparedness in the nine months following the RediPlan delivery (Torrens Resilience Institute, 2013). Vulnerable Groups Fire Education, developed for urban and rural fire safety, uses both visual materials for group talks as well as training for home care workers to deliver fire safety to vulnerable groups including people with a disability, the elderly and the CALD community. The Surviving Severe Weather Dialogue is a US based program which brings together people who are sleeping rough and emergency management personnel to share stories of what its like to live on the streets in bad weather. It is a strengths-based program which draws upon people's existing survival skills and is designed to both enhance the official's knowledge of homelessness and allow them to share the most up to date safety knowledge (National Health Care for the Homeless Council, 2015).

1. Risk and disaster information.

Most existing education programs for disaster awareness and preparedness include risk and disaster information, which can be specific to one disaster (e.g. fire) or use an all-hazards approach.

For people experiencing homelessness, an all-hazards approach was felt to be most useful, with a specific focus on the risks most relevant to an individual, depending on where they lived (e.g. flooding for those in flood plains, outdoor fires for people hanging out in the parklands, indoor fires for those in supported accommodation).

In an all-hazards approach, identifying where to go for more information was an important aspect of education.

2. Physical safety.

As for the above, an all-hazards approach was preferred, with a particular focus on local risks and individual circumstances. Suggestions for specific content included:

- basic first aid
- basic health
- learning how to identify 'safe' spots such as higher ground (for floods), sound structures (for earthquakes), and clear areas (for fires)
- learning safe behaviours, e.g. for a heatwave staying in the shade, using fans and wet cloths to keep cool, drinking water
- learning harm minimization strategies e.g. the minimum number of steps between a fire and hazardous or flammable material to reduce the risk of outdoor or indoor fires
- who and how to connect with a trusted person/s in an emergency (e.g. how to call 000, calling fire, contacting support worker)
- a way of marking the location of their camp site (for those in rural and remote or difficult to access areas)

Some services are very creative in the supports they provide for communicating. One agency whose clients live in isolated camps on the river bed asks clients to make a mark at the entrance to their campsite, such as a mark on tree bark or a piece of material. This can help them locate people in an emergency.

Some examples of general practical advice and support for *rough sleepers*:

- How to protect your belongings (e.g. putting them in a plastic bag)
- Where to get food
- Ways to stay hydrated: e.g. where to fill water bottles
- How to store extra food and water without someone stealing it
- How to access money if there was an opportunity to purchase food/petrol
- Where to keep cool/warm e.g. where to stay
- Letting people know where you are "Have you notified a family member, friend or service that you are in an area of extreme weather"
- What are the whole of community plans for severe weather

Some specific examples of practical advice and support for people *living along riverbanks*:

- For a fire, to move close to the water's edge, and take refuge there if necessary
- Providing life jackets and a 'life straw' – a technology that allows people to drink any kind of water
- Establishing triggers to leave. For example, "in flood they should set a river height level for when they should leave."

And in storms:

- Knowing where the nearest building capable of withstanding wild weather is located.
- Mapping out how to get there on foot

3. Situational awareness.

Situational awareness in relation to emergencies and disasters is particularly important for people who are transient and often find themselves in new and unfamiliar places. It may be especially important for young people who are couchsurfing or squatting in potentially dangerous places such as abandoned buildings. Situational awareness training could include:

- Identifying the nearest exit/s

Understanding how to get out of the place they're in because if they're in a different place every day, and they don't know what doors are locked (Emergency Services Provider)

- Sharing knowledge about signs and symbols that indicate danger, such as hazardous chemicals, fire danger ratings
- Environmental cues relevant to the area, e.g. what do the different colours of smoke tell us about the type of fire

4. **Psychological safety**

As outlined elsewhere in the report, Trauma-Informed care principles could provide a useful model for ways to increase people's psychological preparedness – that is their ability to manage anxiety in stressful situations. Key messages emphasizing hope, resilience, strengths and skills are as important for managing stress from severe weather as they are for other stressful situations.

One way of doing this is to incorporate the stories of people who themselves have experienced severe weather. Sharing what happened, what they did, and how they felt is a particularly useful way of sharing knowledge and skills. For people experiencing homelessness, these should feature the disaster experiences of people who are also homeless.

The best thing is when people have their own personal experiences and they are kind enough to bring those to the table. That is when people actually learn something, it is not me standing here preaching. (Emergency Service Provider)

Another way to do this is to link preparedness to values. This is a key principle of RediPlan. RediPlan seeks to engage participants in conversations about people, places and objects which feature strongly in their lives, and which they would wish to preserve or keep safe.

Engaging people through reminding them of these treasures is a positive, life-affirming approach to disaster preparedness. A focus on individual's values was seen as an important focus for both the participant and for presenters.

In the end it is about the life, it is about the person and what makes that person... what makes that person. Sometimes it is the things, other times it's the photos or the experience or the medal. (Emergency Services Provider working in community education)

Format of emergency and preparedness information

To be most widely accessible materials should be primarily visual in content, with supporting text, or alternatively, if forms of communication such as outreach are being used, verbal.

Thus, for example, emergency messages might be most accessible when they include a picture that captures the meaning of the text. An image of a phone if people are to call for further information, or an image of taking shelter if they are to move from the area they are in. It was also suggested that any messages include a reminder to call a caseworker or support person.

Information should also be easily portable.

For cold and hot weather it would be great to share information in a way that is accessible for people with low levels of literacy around places that they can go. Nice, easy to navigate maps with main streets on it or something like that and a big star at the bus shelter and Royal Adelaide Hospital or wherever else. I mean

that could be again, sent out via smart phone. So the app - we used Google maps and you can identify where you are and let's say you look at emergency accommodation, it pops up all the places with emergency accommodation and can help you track where you need to get to for there. (Homelessness Service provider)

Delivering education programs

The three key points participants made in relation to delivering education and awareness raising programs were:

1. Use materials which are accessible by everyone
2. Utilize existing trusted relationships
3. Integrate and embed delivery into existing programs

WHERE: In people's environment, e.g. in the parklands, riverfront, residence, at the service provider's premises. This enhances comfort and trust, and helps keep the information relevant to the immediate context in which people live.

WHEN: At times when people can be most easily engaged e.g. on a pop-up basis for there are rough sleepers and letting people know they are offering the program today. This reflects the day-to-day, rather than future, focus of the participants.

WHEN: During an existing point of service or outreach: e.g. as part of the transition to a new supported tenancy, as part of outreach welfare checks, embedded in buddy and mentor programs

HOW: Verbally and visually, using storytelling and yarning.

Information should be presented verbally, and may illustrate points using engaging stories and develop a dialogue or yarn with the client.

I think brochures could work but if you have people with low levels of literacy, they'll be disengaged and often there's a stigma associated with that and shame associated with it and people might not tell you. I might say "here's a brochure, can you read it?" "Yeah, yep, yep, I can read it, I'll go read it at home" but it might as well be in hieroglyphics. Face-to-face will always work best. (Homelessness service provider)

Any supporting material should use bullet points, clear headings and illustrations which clearly match what is being suggested in the accompanying text. This assists both those who are literate and those who are illiterate to clearly understand disaster preparedness information.

WHO: Conducted by people known or relatable to the participants, both staff and peers. This increases trust and rapport, and also ensures the information is relevant and targeted and delivered in an easily accessible format.

Everything here, all the outcomes that we get here are leveraged through relationships, everything is through relationships. ... there's a whole spectrum of what that means and it could mean me building trust with that fellow quickly just by listening to his story empathetically and then responding to his needs. There is the start of a relationship there. That's really, really important so it would be I think – leveraging existing relationships to deliver this information (Homeless service provider)

WHO: Include emergency services personnel in a dialogue with participants. This is of two-way benefit. Emergency service personnel can provide accurate information about likely risks in the area, and also understand more about what it's like to survive on the streets during severe weather and other emergencies. Their inclusion ensures that the information is individualized rather than generalized, and the personnel can look out for and correct any incorrect beliefs people may already have about disaster responses, as well as increasing community connections between emergency services and the homeless.

WHO: Include people within the person's social and service network. This is particularly important for those people who suffer memory loss or have difficulty retaining information, as it is their networks who will be key in assisting them during a disaster, and can act as an ongoing reminder of emergency information.

WHAT: Focus on a small number of key messages targeted to the person's immediate environment or the immediate risks (e.g. top ten life saving tips). This ensures that the program is designed to embed key messages that people can easily retrieve, and is applicable to their circumstances.

WHAT: Practical information and material support see above.

Ongoing information and reminders

A particular challenge for emergency and disaster education is providing ongoing resources for people to refer to after a session. In mainstream disaster education, this is achieved through brochures, fridge magnets and DVD's. However, these are less appropriate for those in the homeless community

Because obviously a lot of clients they don't have a wallet, they don't have a fridge to put something on when they're rough sleeping (Homelessness service provider)

There were three proposed solutions providing ongoing reference material that is relevant and accessible:

- For the agency or the individual worker to convey information about physical safety and disaster responses on an ongoing basis, with a particular emphasis on this being part of all meetings during a high-risk season (e.g. during bushfire season, or storm season).
- Tailored mobile phone apps for those who live within metro or rural areas with coverage (see section 3 on communication for more details on this).
- Small laminated cards with emergency information printed on them which can be printed cheaply and widely and often distributed whenever they are needed. An example of this is the Z-Card being developed in the Blue Mountains

[that's where] the [idea of the] Z-Card came out. So the idea of here's the information about all hazards, police stuff with a PAL line or the Police Assistance Line rather than 000. Fire rescue had some ideas about looking while cooking, so if you are in shared accommodation you've got that space. We'd obviously do our bushfire stuff about camping and stuff. And SES do their storm and tempest stuff. The other side would be all the health stuff...So we've got the key messaging about if you want to shower every Tuesday here, if you need to check your emails, the library's available at this address, this time, it's free. And it's designed to fit in behind a phone. So it's the size of a credit card so it's designed to actually be able to put it in here. (Emergency service provider).

KEY POINTS

Having access to appropriate knowledge about risks and responses increases resilience. Currently, there are few resources specific to the homeless community which address people's diverse circumstances, and the financial, health and social challenges which shape people's lives.

Principles for developing appropriate resources are:

- **co-developing materials with people with a lived experience of homelessness,**
- **delivering information by trusted peers and workers where people gather,**
- **using a strengths-based, problem-solving, positive focus in messaging, and**
- **developing accessible formats using story-telling, role play and visuals**

Psychological safety is an important aspect of extreme weather preparedness, and was particularly low for people with a lived experience of homelessness. Anxiety was one of the top three challenges people face in preparing effectively. Psychological safety can be embedded in existing resilience-building activities using a Trauma-Informed care model. Encouraging people to think about what is valuable to them is a positive life-affirming motivation for preparedness used effectively with other vulnerable community groups.

Including emergency services in discussions about responding to extreme weather connects people into a wider network and shares important information for both sides.

Mobile phone apps and small pocket-sized cards can be a portable way to access emergency information at any time.

SECURITY: SHELTER, SAFETY AND WEALTH

The importance of access to shelter, both permanent accommodation, temporary shelter people can use in 'non-severe' weather and that specifically for emergencies, was a consistent theme throughout the research. The most significant and most often experienced impact on people from extreme weather is losing their shelter, and one of the top three challenges people face is the lack of funds for purchasing emergency supplies such as waterproof shelters like swags. Mitigating the impacts of all types of weather on the homeless community is inextricably linked to well-built accessible housing. Another is access to emergency supplies. Protective items ranging from weatherproof swags to tents, shoes to ponchos, torches to TVs, are needed.

These findings highlight that two key ways to increase people's resilience through enhancing security is:

- a) Greater access to appropriately modified/modifiable housing for short, medium and long-term accommodation

- b) Funding for agencies to stockpile weatherproof protective items which they can distribute when needed

The provision of housing and material needs is also the wider objective of homeless services. These are key to improving people's lives through their social inclusion, employment, connection and wellbeing, as well as for increasing resilience to extreme weather.

Together with accommodation and funding to build security, two other ways to build security were highlighted in the research:

- 1) The co-development of extreme weather response plans specifically for the homeless community
- 2) The capacity of agencies to mitigate impacts on their infrastructure and staff

Building security: Existing plans for responding to extreme weather

Responding to the specific needs of people with a lived experience of homelessness in extreme weather benefits from formalized plans. Below are two case studies of plans developed by a) a group of agencies and b) a single agency, for responding to extreme weather. These plans, the extreme heat response developed by the Inner City Health Program (ICHP) in St Vincent's Hospital, Sydney and the flood and bushfire response in rural South Australia, emphasise:

1. Assertive outreach to reach the most vulnerable and high risk clients
2. Information and material support
3. Interagency collaboration between homeless services and between homeless and emergency services
4. Protecting staff from the effects of severe weather
5. Increasing community support for extreme weather responses for the homeless community
6. Sharing information between homeless and emergency services

Sydney: Inner City Health Program (ICHP, St Vincent's Hospital) extreme heat procedure

Responding to extreme weather has been part of the work of the patrols and outreach service in Sydney for some time, but hadn't been formalized prior to the development of the ICHP Extreme Heat Procedure. One impetus for formalizing the response was the observable increases in hospital admissions from the homeless community during heat events because of their greater vulnerability. An ICHP survey of 59 services users during a heat event found that 58% were affected by the heat. Eighteen percent needed treatment from a GP, and 8% were admitted to the emergency department.

The extreme heat procedure, which is a collaborative interagency response to extreme heat, includes pre-event heat risk assessments and individual health plans for high risk clients in heat events. The health plan includes: contact numbers, fan check, ensuring 1 week's water supply and food storage/delivery and 2 week's supply of medication, a plan by the service worker to notify monitor and follow up, and developing individual strategies for heat management such as locating nearby cool places.

In the lead up to potential heat events, weather is monitored by agencies, with a chain of information sharing and liaison with other key agencies e.g. the Health Emergency Management Unit in the hospital.

The heat response is triggered by algorithms for a single day heat event and a heatwave:

minimum temperature plus your maximum divided by two and if it is greater than 27.8° that's when we have our [activation] - And then any three more days greater than 24.6 – that doesn't sound very hot at all but it's actually not the day time temperatures it's the night time temperatures that don't dip. So to get to a mean of 27.8 it is actually really hot.

Once triggered, the response is both in-house and via outreach. Outreach is a key part of the program to ensure the

most vulnerable are contacted and supported.

These homeless people that we're doing outreach with are invisible. You never see them.

Outreach reaches those who would not otherwise seek assistance, or who are unable to access key supports because of heat effects. The client survey showed that 55% of those affected by the heat did not seek assistance, and the majority affected (41%) were unable to attend appointments or get medication (8%).

In-house and outreach services provide information, supplies and assistance: hot weather safety information, passing on warnings to all clients, assertive follow up and monitoring of high risk clients and those who miss appointments, and distributing protective items (water, hats, sunscreen). The importance of providing material supplies as well as information was highlighted by the ICHP survey. The most valued assistance was the provision of bottled water (61%) and information and weather warnings (34%).

In-house and outreach workers monitor clients for heat effects:

To make it easy if you're interacting with people on a very hot day the quickest way to find out whether they're adequately hydrated is to ask them what colour their wee is. If you wee is dark and yellow you need to drink more water. If it's looking almost like water your kidneys are working perfectly and you are drinking enough. But it's quite a funny thing to ask somebody "what colour is your wee" but when we're talking about extreme heat events this is something that you need to be asking people that you're looking after because it's going to be the easiest way to know how their health is in relation to heat.

The response also includes procedures to protect outreach workers from the effects of extreme heat: appropriate attire, water, mobile phones, risk management of area and client – de-escalation and conflict management skills.

Life Without Barriers Bushfire Preparedness Assertive Outreach

Below are the key features of a hazard plan developed by a National not-for-profit operating in a rural South Australian location preparing for fires, floods, storms and heat.

Prior to an event support workers are:

- Completing a risk assessment specific to the client and their environment
- Providing a copy of a pocket card of Emergency, Service and Support numbers
- Providing basic advice in relation to emergency responses (e.g. keeping close to water during fire season)
- Raising awareness in the community about homelessness and the impacts of severe weather to increase social connections and access community assistance

And the other thing is also I spend time giving presentations to community service groups, so Lions and Rotary for example, knowing again that they're often the people that pull together in rough times for assisting one way or another.

In the lead up to the event they are:

- Monitoring of alerts and warnings
- Increasing welfare checks to seven days a week during high risk weather
- Assertive outreach using four wheel drives and boats to access all rough sleepers in the area

- Support workers on outreach to:
 - Reassure clients and remain calm and grounded
 - Provide clothing and water and other necessities, including supports such as life jackets
 - Re-provide support numbers and basic advice

And on an ongoing basis the service is:

- Developing a database of de-identified GPS coordinates to share with emergency services to help alert and assist people during emergencies

we've now since that time [a recent bushfire] introduced actually logging GPS coordinates ... we can use that information and get help accordingly but also in those extreme conditions with bushfire or flood, again without giving over confidential or private information, we can at least give basic demographics for people knowing [they] may need to be assisted to get out in a rather small time frame.

Building security: Business Continuity Planning and homelessness services

Emergency planning for community services is critical, but without experience in this, or resources, many agencies struggle. Seeing this, ACOSS, following their comprehensive research on the impacts of severe weather on the community sector (Mallon et al. 2013) developed their Resilient Community Organisations' Tool (<http://resilience.acoss.org.au>). This interactive online tool assists community services to identify their risks and vulnerabilities and develop emergency plans which can mitigate these risks and reduce the impact of severe weather on their essential services.

The City of Sydney Council is also addressing the resilience of services and, by extension, their clients, through their new interagency collaboration to increase the understanding and capacity of the sector to respond to an emergency and to ensure the continuity of essential services. As one part of the broader policy framework of the Emergency Response for Rough Sleepers, which is a collaboration headed by St Vincent's Hospital, the City of Sydney and FACS, is supporting the development of Business Continuity Plans for individual community services.

The process to support the development of interagency emergency plans and individual continuity plans features:

1. Bringing together emergency and community services to share information annually
2. Developing Business Continuity Plans using
 - a. a simulated scenario/s
 - b. mentoring of agencies new to continuity planning by those who have more experience
 - c. follow up evaluation and advice
3. Testing plans annually and once every two years using a major simulation exercise to practice plans

We outline their program below as a case study on building security through building agency resilience.

Extreme weather response plan: City of Sydney

The initiative to formalise a response to extreme weather was inspired by the experiences of the 2014 April storms.

In the severe 2014 April storms, the premier advised everyone in the CBD to return home. But for those who don't have a home, where do they go? Those experiencing homelessness were freezing, and many had sat in the rain all day, not knowing where to go. The City of Sydney, together with NEMI and Mission Australia opened a community centre which sheltered 70 people for 2 days during the worst of the storms. ...We

wanted to make sure that those residents who are homeless are better protected in the future for extreme weather.

The resulting Extreme Weather Response plan is led by the city and FACS with support from all health services including St Vincent's Inner City Health Mission Beat, Way2Home, Salvation Army, NEMI and Matthew Talbot. As part of the plan, each agency develops its own individual Business Continuity Plan, whilst also contributing to the development and review of the overarching Response. To do this, a series of workshops was set up, the first of which was run in 2016.

This first workshop focussed on fostering relationships between community and emergency services, developing a coordinated response, and information-sharing. It did this through:

- a) including a diversity of speakers who shared information on their role and on emergency planning and homelessness,
- b) sharing information on the Response Plan, and
- c) using a simulated exercise to kick-start thinking for developing Business Continuity Plans.

The workshop included speakers from the police and emergency responders, as well as health and homeless services, occupational health and safety, and business development. The diversity of speakers, the emphasis on sharing information on their role and how emergency responses work, and the creation of regular formal meetings, emphasised that effective emergency responses are all about building good pre-event connections. *"If we meet regularly and get used to working with each other, then it's just normal business".*

The workshop emphasised learning and developing a coordinated response. It thus featured information about the Emergency Response plan itself, including definitions of alerts, how information about the weather is gathered and disseminated, and what steps follow from different alerts (e.g. 'yellow' is preparation and monitoring, 'orange' is a response that doesn't need a shelter such as street-based outreach, 'red' is a triage centre). It was an opportunity for collaborating partners to share information to help build knowledge of the capacity of each one to contribute in an emergency *"In an emergency, if we know each other and we know what resources we have, we can help each other out. If one service closes because of bad weather, does a nearby service have available beds? We can support each other through the relationships we build."*

The second half of the workshop focussed on individual agency planning for extreme weather and working towards developing individual Business Continuity Plans.

The Business Continuity Plan is a comprehensive plan for services who may be affected by extreme weather, a natural disaster or person-made emergency. It's a list of actions in response to an escalating emergency situation – who to call and when, where to get information, how to assist clients, and how to ensure staff are safe and well – at the prevention, alert, response and recovery stages of an emergency. It addresses what to do if you lose access to your building, staff absenteeism, disruption to an internal support service (e.g. internet) or an external support service (e.g. food delivery).

The emphasis on pre-planning was particularly highlighted because of its impact on shortening response time and potentially decreasing stress.

The reason why we've got preparation up there is because by preparing you actually cut through the confusion a lot faster. If you haven't done any preparation then when you're under stress it's going to take a lot longer to get yourself organised.

Using a table-top exercise of a scenario of an escalating extreme heat event, beginning with high temperatures and developing into a bushfire, services who were already familiar with, and involved in, emergency procedures and/or

had developed business continuity plans shared their responses. For example:

We've got a little bit of warning, its Friday and the BoM has issued their [heat] warning...can you tell us [Health service] what does this mean for you? I'd give M a call to let him know that we need to start planning for certain heatwave plan activation, get together our stocks of bottle water, sunscreen...we'd look at our service provision through the Emergency Department because with the heatwave we're going to have an increase in presentations...[City] what would you do?...I'd be thinking what existing patrols do we have on, its Friday so most people are finishing up work that day, most services are not operating over the weekend to full capacity...we might use existing services on the Sunday to check on the welfare of people...

Using this information and a written template of an existing plan as a touchstone, other services could begin to develop their own Business Continuity Plan using 8 key questions:

1. Identify how your service may be impacted by an emergency or disaster (e.g. by loss of infrastructure, supporting services and staff)
2. Identify priority services that you need to deliver and extra services which you may need to provide

you've all got services that you absolutely must continue, day-to-day stuff. So you can document in there what are the things that I really must continue doing. ... Now if in the context of an emergency ... you're actually expected to do more things then think about the things that you might actually need to do more of.... So public communications is typically something that every organisation has to do more of. Outreach work during an emergency event, a disaster event, is something you typically need to do more of so you might to do more of that.

3. Identify the resources (internal, external and staffing) you need to deliver these

So staffing levels you've got what do you currently have, what do you need on day one to match up with the services you said you needed to deliver on day one [of the extreme weather event]?

4. Establish an alternate location for your organisation in an emergency

somewhere you can go to if you have to leave your building for say three to five days. ...we actually encourage centres to set up a buddy system with another centre so if they have to leave they've got a reciprocal arrangement to say I can't use my building...So that's one of the opportunities for them both, they have a chat with each other and talk about hey if we get kicked out of our building for any reason can we come and work with you for a little while just till we get set up?

5. Establish a crisis management team
6. Establish a contact list and phone tree to activate the plan
7. Establish alternate methods of communication

So an option of mobile phones is to have a land line conference call facility. The other thing people rely on for their mobile phones is to have their contact numbers in there. So we have a contact card which is easy enough to put together which has key contacts for business continuity there and has my crisis management team and the rest of the executive on there. It also has the conference call details on the card. The other thing that we also use is radios. We've got a two-way radio network. Again we're a well-resourced organisation so we've got access to those. So what you need to think about in your plan is if I haven't got mobile phones then I can land lines but at some point I want everyone charging in and so you might need to resort to runners, people who actually go in and speak to other people. You might need to get people and say "listen I need you to go and do this and

tell this person this."

8. Identify critical support services, systems and supply chains which may be disrupted, and how you can respond to these disruptions
9. Identify processes for work, health and safety of support workers

complete a risk assessment if they haven't done so already or to review what they've done previously, and to take into consideration the temperature that we're going to have, the type of work that's going to be performed, do we actually need to do it on that day. And really asking them if we can eliminate the risks, so if your staff don't need to be out there during this heatwave don't send them out, but if we do need to continue that service, to put in controlled measures to enable them to work safely.

To maintain and further build capacity, ongoing the process will include:

1. Mentoring services through the BCP, including follow up phone calls, help from experienced BCP developers
2. Annual meeting with table-top exercises
3. Every second year doing a major simulation exercise

KEY POINTS

Access to secure shelter is the most significant factor shaping people's disaster risk. Forty percent of people lose their shelter in extreme weather. For 25% of agencies there was no alternative publicly accessible shelter for their clients during extreme weather. Lack of protective items was one of the three biggest challenges for preparedness. Building resilience thus requires long and short term shelter options, including drop-in centres with laundry and shower facilities, and accessible emergency accommodation which can support safe spaces and substance withdrawal.

Security is also increased by emergency plans which respond to the particular needs of people experiencing homelessness. Effective existing plans use assertive outreach to inform people, provide protective items and assistance before and during extreme weather. They also build community awareness and support for people experiencing homelessness during extreme weather, and safety protocols for staff.

One of the key protective factors for the homeless community are service providers. However, providers are also impacted by extreme weather. Building service capacity through Business Continuity Planning can protect essential services. To support this, continuity plans can be developed with emergency services and other agencies, using mentors more experienced in continuity planning to guide, support and evaluate plans. Simulation exercises help keep plans practical and stimulate thinking.

Psychological health, particularly that affecting people's anxiety, was one of the top three challenges for preparing for bad weather. Worsening or new mental health issues was also the second highest impact of severe weather for members of the homeless community. For thirty percent of people, extreme weather resulted in trauma and for 19% in homelessness. However, emotional preparedness (the ability to anticipate, recognize and manage anxiety in an extreme weather event) was lower than physical preparedness.

These findings suggest three important foci for increasing resilience through building wellbeing:

- a) Developing and including a psychological preparedness component in preparedness education
- b) Using Trauma-Informed Care as a basis for this and any other components of preparedness education with the homeless community
- c) Drawing on existing physical and psychological preparedness materials which build resilience in all areas of life.

Trauma-Informed Care is: "a strengths-based framework that is grounded in an understanding of and responsiveness to the impact of trauma, that emphasizes physical, psychological and emotional safety for both providers and survivors, and that creates opportunities for survivors to rebuild a sense of control and empowerment" (Hopper, Bassuk & Oliver, 2010: 82). It has positive outcomes for mental health symptoms and housing stability. This model hasn't yet been applied to developing materials for and responding to extreme weather.

However, an existing physical and psychological preparedness program which focuses on strengths, values, and connectedness, using similar principles to Trauma-Informed care, is the Red Cross RediPlan. We look at this in our case study below.

Psychological preparedness: Red Cross RediPlan

The Red Cross RediPlan is a preparedness toolkit available online, in a hard copy booklet, and through community education sessions given by trained Red Cross community educators. The approach emphasizes personal preparedness for managing disruption and stress from small to the large emergencies. Personal preparedness includes knowing the risks in your area, identifying sources of information about those risks, identifying people in your network who could assist you in an emergency, and packing a kit. It also includes preparing your mind, also known as psychological preparedness.

Psychological preparedness is the ability to anticipate, identify and manage stress and anxiety in disruptive and scary events. In the RediPlan booklet this is supported by these activities:

- 1) Anticipate: What might you feel during a stressful event – how do you think you might react?
- 2) Identify
 - a. What are my stress triggers
 - b. How do I know when I'm experiencing negative stress (thoughts, feelings, sensations)
- 3) Manage
 - a. Develop a plan to counter negative stress and manage: uses 5 ways to wellbeing from the new economics foundation – connect, be active, take notice, keep learning, give (shown in the diagram below from Australian Red Cross RediPlan 2016, p. 25)
 - b. Use calming techniques e.g. mindfulness
 - c. Reframing less helpful stress thoughts



Existing research shows that RediPlan can reach members of the public who do not attend emergency service public education sessions. The community education sessions increase people’s awareness of risks, where to find emergency information and the importance of developing a plan. It also increases the likelihood of people including a wider network of people than self and family as a source of emergency assistance (Torrens Resilience Institute, 2013). There is as yet, however, no specific research on the effectiveness of the psychological preparedness component of RediPlan, nor of its effectiveness with people experiencing or at risk of homelessness. Anecdotally, the success of the community education RediPlan forums in reaching isolated groups (e.g. through partnering with Meals on Wheels) or people who have more limited cognitive function such as people with a brain injury, and those with physical limitations such as the elderly, suggest it could be adapted for use with the homeless community. Also, its coherence with trauma-care principles such as connections and strengths suggest it may be usefully adapted.

KEY POINTS

Worsening or new mental health issues affected 37% of people who experienced a severe weather event. Anxiety was one of the top three barriers to preparedness. However, psychological preparedness (the ability to anticipate, identify and manage stress during extreme weather) was lower than physical preparedness.

Incorporating ways to build psychological safety during extreme weather is a key resilience-building tool. One way this could be done is by embedding extreme weather resilience into existing Trauma-Informed activities – building safety, confidence, hope and skills. Another is to draw upon the psychological preparedness material in RediPlan, which builds wellbeing through connecting, being active, taking notice, learning and giving.

The research identified social isolation as one of the biggest challenges facing people experiencing and at risk of homelessness. This affected both their ability to prepare, and also agencies ability to warn them of coming emergencies and to engage them in preparedness education. The research also identified that for those people who had social networks, these are invaluable for sharing information about upcoming weather and what to do/where to go.

One way that social isolation may be addressed through enhancing the relationships between homeless services, homeless users and emergency services and planning. A consistent theme throughout the research was the benefits that these relationships can bring in terms of sharing knowledge and resources, although they are not without their challenges. A multi-sector effort has also been highlighted in the US as a key action which could strengthen resilience (Gin et al. 2016).

Another way to address social disconnection is through community awareness to increase people's safe access to public space. Social isolation is an outcome of wider attitudes towards homelessness which shape people's willingness to share public spaces. These attitudes, enshrined in policies, often result in people being 'moved on', leading to higher transience, staying in dangerous places, and greater exposure to weather.

The Heat and Homeless plan of the City of Melbourne seeks to respond to and overcome these disconnections to mitigate the effects of extreme heat on the homeless community. The plan's development, activation and future emphasises:

1. Building relationships with emergency management and tapping into existing plans and resources
2. Developing heat responses in conversation with peer support workers and other people with a lived experience of homelessness
3. Creating Memorandums of Understanding with partners, e.g. to create cool places which open during heat events
4. Temporary shelter which also emphasizes connecting with others through including activities, access to peer and other support workers, and food
5. Improving relationships with local businesses and public space stakeholders to open up people's options for sheltering from extreme weather in public spaces

The case study below of Melbourne's comprehensive response to heat highlight how these three themes can be incorporated into planning to reduce people's exposure to extreme weather.

Melbourne heat and homelessness program

This program was developed to respond to extreme heat following the 2009 heatwave and bushfires. That year highlighted that communicating with vulnerable communities was a gap in extreme weather responses.

one of the things that was identified as a real missing link was the communications, a live practical plan that could actually enact some of the things that these plans had talked about. So yes we knew that a threat was imminent, we began and try to disseminate the information different areas of the organization but where that information ended up was often really not that well known, and whether or not it got to the most vulnerable in the community is something that really people couldn't give us a clear answer to

The plan was developed in collaboration with homeless agencies across Melbourne, with people with a lived experience of homelessness, and with emergency services. The plan is coherent with the larger emergency management response to heat events.

The heatwave subplan and operational communications strategy has really provided us with a hook to hang our homelessness-specific planning on. ... if we did just a little bit of work early on to develop those relationships there was actually a huge amount of synergy between the crisis homelessness service and some of us working in crisis in an activation planning capacity. There were really early benefits in having conversations with our emergency management team.

In particular, there were real benefits in developing a clear communication strategy and sharing knowledge and resources.

The BOM has developed a very clearly defined comms strategy. It goes through the Department of Health. Its disseminated through local governments and then goes through local governments to local networks. And we're able to use that info to disseminate to the local homelessness services. But we've also taken a local services collaboration approach which has allowed us to work with existing emergency planning to develop a plan which is in line with their existing approach. And I think that is the thing which after speaking to lots of organisations that we've had the chance to work with has been the thing that they've found most useful - that they're not having to reconstruct their own heatwave plans that they're not having to develop a whole set of new programs, that they're actually able to tap into an existing infrastructure which has the right sorts of access to decision making to unlock a whole range of resources.

The engagement initiatives between homeless and emergency services have been two ways, with knowledge also moving bi-directionally.

The homeless engagement work that our colleagues in emergency management are doing... They ran a scenario called Black Swan which invited all the homelessness agencies along with other agencies. These guys run these all the time [to practice things like] how do you borrow resources from the City of Yarra, the City of Port Phillip, if the substations are down and you need to quickly house 3,000 people? Historically these haven't included the homelessness service system. A really simple inclusion into an existing process which has resulted in some really basic learnings for the emergency management centre. Knowing who the outreach teams are, knowing who the mental health teams are, something that they didn't previously know.

The plan includes both communicating warnings and also providing resources to assist people to manage the heat. The resources include:

- a) a tap map: a map of all the cool places across the city, green areas, canopy cover, and also hospitals, police stations, libraries, publicly accessible open space such as malls and shopping centres with air conditioning
- b) a helping out booklet to build community awareness for people who are homeless
- c) generic information on heat health (e.g. stay hydrated, stay in shade, go to air con)
- d) distribution of pool passes and movie tickets

The movie passes were more effective than the pool passes. Many people felt uncomfortable about their bodies and being in togs in a public pool, whereas movies felt less exposed. The movie passes are means tested as they are expensive, but the response from people who received them was positive. People said they went to the "longest, crappiest movie". The response was also positive from workers, who saw them as a good engagement tool.

[from a worker] Extreme conditions 100% contribute to exacerbating mood and chronic conditions of our clients. They might already be substance affected. You can feel it in the air. Its already a miserable day. Hot or cold. But you get that sense that the clients are already heightened they seem to be interacting differently on those days. The pool passes, movie vouchers etc was a good engagement tool for us to work with, we might have a difficult client lacking in trust that those vouchers offered a positive engagement mechanism.

However, the initiatives which include sharing public spaces like pools and movie theatres also highlighted an issue with community attitudes and a need for community education. This issue is broader than emergency responses,

although it can affect these as well as the response to the pool and movie passes demonstrated. Two of the ways the City of Melbourne is addressing the effects of community knowledge on the homeless community is through 1) an internal outreach role acting across council, and 2) engaging with local businesses.

We appointed an internal outreach role which looks to work across the business of the City of Melbourne to try and ensure that we're all aware of what's going on. So we have someone who can connect with our engineering team when they're developing a drainage plan and they can think about who's living in the local area - do we have any rough sleepers there? We can have someone who can work with our compliance team. We can also educate those areas of the organization who might know nothing about homelessness, like our customer service staff, but who get hammered every day with questions about people sleeping rough. That's really begun to show that there's clear benefit on organizational and community education on homelessness generally and poverty more broadly.

Business engagement – we get a lot of calls from businesses who are really upset about what's occurring both on a personal front and to their business. This project tries to provide an alternative set of steps to calling the police. Through speaking with people with lived experience of homelessness they can get a more in-depth understanding of this. An example of how this has worked is a large shopping centre which has had a history of people sleeping rough and [feeling] really frustrated and not really knowing how to respond. [As a result of this program they] very quickly began to address some of those attitudes. It gave them a chance to ask questions which they were afraid to put forward and has resulted in some new work happening in that centre and also freeing up places where people could go during extreme weather because they're less likely to ask people to leave.

Community awareness raising was also a key aspect of the South Australian rural service's response to extreme weather outlined in the previous section. It helped mobilized wider support for people during extreme weather from community organisations.

The City of Melbourne response also includes Memorandums of Understanding with two homeless services to activate after hour cool relief centres. The centres have support power, can accommodate pets, have outreach capacity, and access to nurses. They offer activities, food and access to peer and other support workers.

KEY POINTS

People experiencing homelessness are often socially isolated. They may live in inaccessible and high risk areas to avoid being 'moved on'. When people do access public spaces for shelter they face negative attitudes and misunderstanding. Homelessness services and clients have not traditionally been included in emergency management. Both of these issues expose people to more extreme weather.

A comprehensive plan to address exposure to extreme weather includes building relationships between homeless service, people with a lived experience of homelessness, and emergency services. Plans which build upon existing plans and resources improve people's and service's safety. These relationships share information both ways – increasing community service's knowledge of and access to emergency information and emergency services knowledge of homelessness.

Building community awareness can also improve people's access to public spaces. Engaging with local businesses can reduce people being 'moved on' from air-conditioned or heated public spaces.

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HOMELESSNESS, SEVERE WEATHER AND NATURAL DISASTERS

A National Survey

Building the severe weather and natural disaster resilience of people at risk of and experiencing homelessness

This research is a joint undertaking by Central Queensland University and the Australian Red Cross. It is funded by the National Emergency Management Projects (NEMP), Attorney-General's Department.

WHO IS THIS SURVEY FOR?

All staff, paid and volunteers, who work in any area of the housing and homelessness sector, and who are over 18 years of age. This survey includes both previous and future experience of severe weather and disasters.

WHAT IS THIS SURVEY FOR?

Every year in Australia, severe storms, heatwaves and extreme cold, bushfires, floods, cyclones and sometimes earthquakes affect thousands of people. It is expected that severe weather and disasters will become more frequent and more devastating as we experience the impacts of climate change.

People working in the housing sector have highlighted that those experiencing homelessness or in vulnerable housing circumstances (e.g. caravans, women's shelters) are affected first and worst by severe weather events and natural disasters. However, there is currently no empirical research that identifies how the homeless community are and will be adversely affected by extreme weather and disasters.

THE AIMS OF THIS SURVEY ARE TO IDENTIFY:

1. How prepared are people at risk of or experiencing homelessness for severe weather and disasters
2. The social, economic and health impacts of extreme weather and natural disasters on people at risk of or experiencing homelessness
3. What support, resources and information is needed to increase people's resilience to severe weather and natural disasters

IS THIS SURVEY CONFIDENTIAL AND PRIVATE?

Yes, absolutely. Your participation is completely anonymous. Whilst the survey includes questions asking for the location and postcode of your organisation and how many clients access your service no identifying information (such as names or addresses) is collected. Individual responses to multiple choice and scaled questions are collated for statistical analyses. Individual responses to open-ended questions are collated into themes. Any individual direct quotes from these open-ended questions that are included in any reports, papers or conference presentations will not be identifiable (i.e. if there are any references to names or specific locations in someone's answer, these will

be removed prior to inclusion).

The anonymous data from this survey will be stored for 7 years on a password locked computer that only the lead researcher (Danielle Every, contact details below) can access.

FEELING OK?

People who experience severe weather or a natural disaster, and those who assist others through this either personally or professionally, can be deeply affected by that experience. If, in completing this survey, you're not feeling as okay as you'd like to, there are places to go and resources to read which may help.

The Australian Psychological Society has helpful information on recovering from a natural disaster, which you can find here: <https://www.psychology.org.au/topics/disasters/> Through this site, you can also find and access psychologists in your area who specialize in trauma arising from natural disasters.

The Australian Red Cross also offers specialist assistance in this area. You can find psychological and emotional recovery resources here: <http://www.redcross.org.au/emergency-resources.aspx>.

You can contact the Red Cross office in your state to talk to their emergency services department.

For immediate assistance, please call Lifeline on 13 11 14.

QUESTIONS AND FURTHER INFORMATION

If you have any questions about the survey, or you would like to be interviewed as part of the study, please contact Danielle Every at CQUniversity: d.every@cqu.edu.au or 08 8378 4521 or 0434 217 883.

Please contact CQUniversity Office of Research if you have concerns about the nature and/or conduct of this research project (Tel: +61 7 4923 2603), email: ethics@cqu.edu.au

YOUR ORGANISATION

In which country is your organisation located? (If more than one, please give the country where you are currently working)

- Australia
- Other (please specify) _____

In which postcode is your organisation located? (If more than one, please give the postcode for where you are currently working) _____

How many people does your service assist each year?

- 0 - 50
- 51 - 100
- 101 - 500
- over 500

Which client groups does your organisation work with? (You can choose more than one)

- People sleeping rough
- Women and children leaving domestic violence
- Young people experiencing homelessness
- People in social housing or supported accommodation
- Vulnerable renters
- People living in caravans
- Aboriginal and Torres Strait Islander people
- People from a migrant and/or refugee background
- LGBTQI community

Which of the following severe weather events/natural disasters a) impacted your clients or b) are your clients at risk of? Please tick all the options that apply.

Type of weather event	Previously experienced	At risk of in the future
Severe storm	<input type="radio"/>	<input type="radio"/>
Extreme heat/heatwave	<input type="radio"/>	<input type="radio"/>
Extreme cold	<input type="radio"/>	<input type="radio"/>
Bushfire	<input type="radio"/>	<input type="radio"/>
Cyclone	<input type="radio"/>	<input type="radio"/>
Flood	<input type="radio"/>	<input type="radio"/>
Earthquake	<input type="radio"/>	<input type="radio"/>

EXPERIENCES OF EXTREME WEATHER

The following questions are about emergency warnings and alerts, people's responses to the extreme weather, the impacts of it on their wellbeing, and their preparedness. Your answers will help us to evaluate who is most affected, as well as how, when and why. They will also help to quantify the social and economic impacts of extreme weather. If your clients have been affected by more than one severe weather event, please use the most severe as the basis for your answers.

THE EVENT ITSELF

As a beginning question, it would help us to know more about the event/s – the when and where of it all – as well as the how bad and how long. Below, can you describe what happened?

How severe was this weather event? (e.g. in terms of its intensity, duration and the number of people affected?)

Not at all severe

The most severe

0 10 20 30 40 50 60 70 80 90 100

WEATHER AND EMERGENCY WARNINGS

What proportion of your clients were alerted to the coming severe weather/natural disaster?

None were alerted

All were alerted

0 10 20 30 40 50 60 70 80 90 100

How were clients alerted? (you can choose more than one)

- Landline emergency warning
- SMS to a mobile phone
- Television
- Internet e.g. through emergency authority's websites
- Outreach by your or other service providers
- Signs and posters at your agency
- Siren or alarm
- Not applicable - no clients were alerted

Who didn't receive any warnings or alerts and why?

RESPONSES

When the extreme weather began, how did your clients respond?

For each of the statements below, please show the proportion of clients who responded in this way. You can also tick as 'not applicable'

<i>Not applicable</i>	<i>None</i>											<i>All</i>				
___ Denial, continued on as normal	0	10	20	30	40	50	60	70	80	90	100					
___ Strong fear and anxiety that froze or paralyzed	0	10	20	30	40	50	60	70	80	90	100					
___ Acted unsafely e.g. drinking, not answering the phone				0	10	20	30	40	50	60	70	80	90	100		
___ Waited to see how bad it would get before taking action	0	10	20	30	40	50	60	70	80	90	100					
___ Sought more information e.g. the weather bureau	0	10	20	30	40	50	60	70	80	90	100					
___ Moved from the unsafe area or sought appropriate shelter	0	10	20	30	40	50	60	70	80	90	100					
___ Sought to connect with others such as their case worker, health services, or other support networks					0	10	20	30	40	50	60	70	80	90	100	

What strengths, capabilities and resources were your clients able to draw upon in responding to the severe weather?

THE SOCIAL, ECONOMIC, PHYSICAL AND PSYCHOLOGICAL IMPACTS

What proportion of clients were impacted by the severe weather event?

None

All

0 10 20 30 40 50 60 70 80 90 100

What proportion of clients experienced the following impacts?

<i>Not applicable</i>	<i>None</i>	<i>All</i>
____ Physically injured or became physically unwell	0 10 20 30 40 50 60 70 80 90 100	
____ Worsening or new mental health issue	0 10 20 30 40 50 60 70 80 90 100	
____ Increased drug and alcohol intake	0 10 20 30 40 50 60 70 80 90 100	
____ Lost or damaged shelter	0 10 20 30 40 50 60 70 80 90 100	
____ Their income was disrupted	0 10 20 30 40 50 60 70 80 90 100	
____ Unable to attend their place of study	0 10 20 30 40 50 60 70 80 90 100	
____ Experienced an increase in domestic violence	0 10 20 30 40 50 60 70 80 90 100	
____ Involved in more arguments, fights and violence	0 10 20 30 40 50 60 70 80 90 100	

For how long did these experiences and impacts last?

- The effects were short term and ended when the extreme weather ended
- The effects were medium-term, lasting up to 6 months since the extreme weather ended
- The effects have been longer-term, lasting up to a year since the extreme weather ended
- The effects are ongoing

What proportion of your clients who were in housing stress or at risk of homelessness prior to the extreme weather, became homeless as a result of the extreme weather?

None 0 10 20 30 40 50 60 70 80 90 100 *All*

What proportion of your clients experienced trauma as a result of this extreme weather?

None 0 10 20 30 40 50 60 70 80 90 100 *All*

Was there enough support for people experiencing homelessness during the extreme weather?

	Not applicable	None available	Some, but unsuitable for all clients	Some, but insufficient for the numbers needing support	There was enough support
Emergency and community services to alert, find and if necessary evacuate people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Publicly accessible shelter which accommodated a variety of needs (e.g. people with pets, people with substance abuse disorders)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Specialised health care to treat physical conditions	<input type="radio"/>				
Specialised counselling and psychological support	<input type="radio"/>				
Funding and financial resources for meeting people's immediate needs (e.g. for water, clothing, food)	<input type="radio"/>				

Was there enough support for people experiencing homelessness after the extreme weather?

	Not applicable	None	Some, but unsuitable for all clients	Some, but insufficient for the numbers needing support	There was enough support
Ongoing community service support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shelter options available to suit all clients (i.e. shelter which respected the wishes of the people, ranging from a new house to a restored campsite)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Specialised health care for physical conditions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Specialised counselling and psychological support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Available funding and financial resources for rebuilding possessions and shelter to the pre-emergency level or better level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What impacts did the extreme weather have on your agency and your ability to provide services?

How much do you estimate it cost your agency to assist people affected by this extreme weather?

- \$0 to \$1,000
- \$1,001 to \$5,000
- \$5,001 to \$10,000
- 10,001 to 20,000
- Over \$20,000

How many hours do you estimate it cost your agency in staff time to assist people impacted by this extreme weather?

- 0 to 50 hours
- 51 to 100 hours
- 101 to 250 hours
- Over 250 hours

PREPARING FOR SEVERE WEATHER

The next section asks about prior to the severe weather – how did your clients and your agency prepare?

Below is a preparedness checklist, borrowing from the idea of checklists for the housed population, but the items have been specifically designed for people experiencing homelessness.

Please rate the proportion of your clients who were prepared in these ways, using 0 as none at all to 100 as all clients. You can also choose not applicable.

Not applicable

<input type="checkbox"/>	Know the safest option is to leave the area early and planned how and when to leave	
	0 10 20 30 40 50 60 70 80 90 100	
<input type="checkbox"/>	Know the shortest and quickest route to an evacuation or other shelter	
	0 10 20 30 40 50 60 70 80 90 100	
<input type="checkbox"/>	Collected extra food and water supplies, or know where to access these in an emergency	
	0 10 20 30 40 50 60 70 80 90 100	
<input type="checkbox"/>	Protective clothing, shoes and shelter	
	0 10 20 30 40 50 60 70 80 90 100	
<input type="checkbox"/>	Have an emergency first aid kit	
	0 10 20 30 40 50 60 70 80 90 100	
<input type="checkbox"/>	Have a radio, mobile phone or access to the internet to receive emergency alerts	
	0 10 20 30 40 50 60 70 80 90 100	
<input type="checkbox"/>	Expect to feel anxious and unsettled, and have skills for coping with this	
	0 10 20 30 40 50 60 70 80 90 100	
<input type="checkbox"/>	Protected most important possessions from heat/cold/wet	
	0 10 20 30 40 50 60 70 80 90 100	
<input type="checkbox"/>	Have a working battery-operated radio and torch	
	0 10 20 30 40 50 60 70 80 90 100	
<input type="checkbox"/>	Have food and water for companion animal/s and can secure them with a lead if needed	
	0 10 20 30 40 50 60 70 80 90 100	
<input type="checkbox"/>	Moved a sleeping area to a safer place	
	0 10 20 30 40 50 60 70 80 90 10	

Is there anything important in relation to preparedness checklist items for a person experiencing homelessness that

we've missed? Let us know below what else you would include in a preparedness checklist.

How would you rate client's preparedness overall?

	I don't know	No clients were prepared	Some clients were prepared	Most clients were prepared	All clients were prepared
Physical preparedness (ability to limit the impacts on physical wellbeing and property)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Emotional preparedness (ability to manage stress and anxiety and draw upon positive coping skills, such as social networks)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What were the 3 biggest challenges your clients face which affects their preparation? (Please rank your choices from 1 to 3)

Biggest challenges
<input type="checkbox"/> Physical health conditions that require special preparations (e.g. gathering medication; limited mobility)
<input type="checkbox"/> Psychological health conditions which make it difficult to understand or remember information
<input type="checkbox"/> Psychological health conditions which affect people's level of anxiety and stress
<input type="checkbox"/> Being highly transient so there's little time to know the area or ability to carry extra resources
<input type="checkbox"/> Being socially isolated so that they don't access important information
<input type="checkbox"/> Low literacy affects people's ability to use written information
<input type="checkbox"/> No funds for purchasing special clothing, bedding or supplies
<input type="checkbox"/> Being in and using all their resources for coping with crisis

What proportion of the conversations between clients, and between yourself and clients, are about responding to extreme weather?

None All

0 10 20 30 40 50 60 70 80 90 100

	Not at all	Monthly	Seasonally	All year round
Brochures, ads or visual/audio material on severe weather/natural disasters and how to prepare	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
One on one or group discussions about how to prepare for severe weather/natural disasters	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Materials which might support people during severe weather/natural disaster (e.g. a card with emergency numbers, extra food supplies, a waterproof tent)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other [please specify]	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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How often are your clients able to access the following:

How much do you estimate it costs your agency each year to assist people to prepare for extreme weather?

- \$0 to \$1000
- \$1,001 to \$5,000
- \$5,001 to \$10,000
- Over \$10,000

How much staff time do you estimate is devoted each year to assist people to prepare for extreme weather?

- 0 to 50 hours
- 51 to 100 hours
- 101 to 250 hours
- Over 250 hours

In the previous questions we've asked about what is already being done in relation to preparedness. In this question, we'd like to consider future possibilities. If you were able to implement any programs you wanted, what would you

like to be able to do to support people to prepare?

What resources (educational, staffing, infrastructure, financial) would you need to do this?

How much do you estimate it would cost to implement these better preparedness programs?

- 0 to \$1000
- \$1,001 to \$5,000
- \$5,001 to \$10,000
- Over \$10,000

Thank you for completing this survey ☺ Your answers will help to develop better preparedness, response and recovery support for people at risk of and experiencing homelessness.

You can return the survey to Dr Danielle Every using the stamped addressed envelope provided.

And have a wonderful day ☺

