

## ABSTRACT

Community service providers deliver vital services to vulnerable populations. In the wake of a disaster, community service providers go beyond their normal service offerings to meet the added needs of clients. Research to date indicates that 25 per cent of community service providers effected by a disaster would not be able to reopen after a disaster, reducing the access to vital services. This paper discusses the disaster impacts on service providers for people experiencing homelessness and the possible ways to mitigate severe effects. To investigate the effects of disasters and barriers to preparedness, a survey was conducted and completed by 161 homeless service providers in Australia. A further 45 interviews were conducted. The results indicated that these service providers experience greater client demand for services and are heavily burdened during stressful and traumatic times. An increase in client presentations puts financial pressure on these organisations as well as on staff workload and staffing demands. Identifying these stresses and limitations, homeless service providers identified five initiatives to be better prepared. Initiatives include increased funding; training for staff, volunteers and clients; funds for identified infrastructure recovery; material support for clients and good inter-agency collaboration.

# Disaster preparedness: services for people experiencing homelessness and the pressure-cooker response

Elizabeth Osborn<sup>1</sup>, Dr Danielle Every<sup>1</sup> and John Richardson<sup>2</sup>

1. Central Queensland University, Adelaide, South Australia.
2. Australia Red Cross, Melbourne, Victoria.

Submitted: 2 August 2018. Accepted: 2 September 2018.

## Introduction

When disaster strikes, community service providers deliver vital services for the safety and wellbeing of vulnerable people (Edgington *et al.* 2014). Severe weather events can cause injury, death and psychological trauma that endures long after the event (Baum, Flemming & Davidson 1983). The effects of disaster events are now understood to be dependent on an individual's exposure to risk, their preparedness and their ability to recover within their social, political and economic situation (Peek & Stough 2010). In particular, marginalised populations (i.e. children, the elderly, people with a mental illness, people with addictions and people experiencing homelessness or poverty) rely on daily support from community service providers and require significant and particular support after a disaster (Vickery 2015a, Ritchie, Tierney & Gilbert 2008). Marginalised populations are particularly vulnerable to the physical and psychological effects of disaster events due to a number of risk factors including low literacy rates, lack of material resources (i.e. adequate shelter, access to services and transport) and few social resources (Edgington *et al.* 2014, Fothergill & Peek 2004). Together, these factors restrict an individual's coping capacity and increases their need for support during a disaster. In addition, negative attitudes held within the community may lead homeless people being denied access to conventional means of support at these critical times (Vickery 2015a). Further, extended exposure to extreme weather conditions means individuals experiencing homelessness are subject to health complications, increased mental health pressures and possible illness and death (Martins 2008, Moore, Manias & Gerdtz 2011, Cusack *et al.* 2013).

Chamberlain and MacKenzie (1992) define primary homelessness as having no fixed address and no current accommodation. However, homelessness can also include transient living, being threatened with the loss of accommodation, living in temporary accommodation and living in adverse conditions such as overcrowded housing (Chamberlain & Johnson 2001).

Community service providers undertake other activities including food and rental assistance, employment pathways, health services and human services such as counselling, daily living skills and case management (Ritchie, Tierney & Gilbert 2008, Chikoto, Sadiq & Fordyce 2013, Tierney 2013). These organisations are usually stretched to meet the everyday needs of clients in areas of case management, food distribution and emergency accommodation (Vickery 2015a). These services are often delivered on limited government funding (Tierney 2013, Mosley 2012). Consequently, disasters produce additional stress and workload particularly for underprepared and under-resourced community service providers that may be ill-equipped to deliver disaster preparedness and response programs (Tierney & Gilbert 2008, Tierney 2013).

Community service providers are a vital lifeline for people experiencing homelessness and are considered a trusted source of information. Individuals experiencing homelessness are more likely to seek support from these service providers than from more mainstream community channels (Ritchie, Tierney & Gilbert 2008, Eisner 2010, Edgington 2009). It is estimated that client presentation to service providers increases by 30 per cent due to disaster events (Mallon *et al.* 2013). The call on these services during disasters can far exceed their normal functions, resources and funds (Gin *et al.* 2015).

While it is recognised that community service organisations provide vital services to marginalised groups, the emerging literature in the US and in Australia reveals significant impacts on operations and gaps in knowledge that can hamper the effective return to normal after disaster events. In Australia, Mallon and colleagues (2013) investigated how extreme weather and climate change impacts on community service providers, including homeless service providers. Barriers to their preparedness were identified as a lack of financial resources and specialised knowledge and skills (Mallon *et al.* 2013).

Vickery (2015a) investigated the effects of disasters on homeless service providers after the Colorado floods in 2013 and found that inter-agency and client communication was reduced; impacting on the quality of service and support to clients. The research showed there was an increase in demand for staff and an increased need for advocacy to meet client needs. Gin and colleagues (2015) identified that service providers were constrained by time, funding and sufficient training and resources to adequately prepare for a disaster.

These US studies are useful to understand the effects and barriers experienced, however, they are limited in application to the Australian context due to their relatively small samples ( $n=14$  and  $n=12$ , respectively) and focus on one disaster in a confined area in the US. Australia and the US have marked differences in service provision models and government funding structures. As such, this study investigated the gaps in disaster preparedness of service providers in Australia by considering two specific research questions:

- How do disasters in Australia impact on homeless service providers?
- What do staff of homeless service providers believe is needed to help improve their organisations' preparedness capabilities?



A simple storm can cause physical and psychological damage for people experiencing homelessness.

Image: Reproduced with permission, Hutt Street Centre, Adelaide

## Method

This research used a mixed-method approach that combined a quantitative survey of homeless service providers with qualitative data. Interviews were conducted with emergency services personnel, volunteers, homeless service providers and a number of their clients. Survey and interview was approved by Central Queensland University Human Research Ethics Committee (H16/02-025 and H16/03-046).

## Data collection

Quantitative and qualitative data were collected through two sources:

- a survey available online and in hard copy to all housing and homeless services in Australia
- interviews with service providers, clients and emergency services personnel in five geographic locations that had recently experienced extreme weather events.

## Survey

Approximately 500 invitations to participate in the survey were sent to Australian service providers via emails and follow-up phone calls, a Facebook page, mailed invitation (with return stamped envelope) and industry newsletters and blogs (e.g. the Red Cross, Victorian Council of Social Service, Council for Homeless Persons and Homelessness Australia). A total of 163

responses was received; a response rate of 32 per cent. An invitation via email was also sent to a selection of homeless service providers in New Zealand. Due to the low response rate (n=2), these were later removed from analysis.

The survey included 32 closed and open-ended questions. Topics included:

- the type of weather and disaster risks in the area
- the physical and psychological effects of the weather on clients and services
- the costs of responding to emergency events as well as levels of physical and emotional preparedness.

This paper reports on one part of the data collected in the survey; the six questions related to impacts on services and resources needed to respond effectively.

## Interviews

The quantitative data gathered through the survey were complemented by in-depth, one-on-one and group interviews with emergency and homeless service providers. A total of 45 people were interviewed (15 people experiencing homelessness, 20 homeless service providers and 10 emergency services personnel). Locations were Adelaide, Sydney, the northern rivers area and the Blue Mountains area of New South Wales and areas in northern Tasmania. Each of these locations had experienced severe weather events in the previous six months.

Homeless service providers in each area were contacted prior to the fieldwork via email or in person during fieldwork to request interviews with staff. Participating agencies and their clients provided informed consent. Participating agencies received five \$20 Woolworths vouchers to distribute as needed.

Interviews with homeless service providers drew out their experiences during extreme weather, how they prepared, who they helped and how, what was challenging, what worked well and what they needed for their clients for future events. Similarly, interviews with emergency services personnel included how they worked within homelessness communities, what they observed during the recent events, the challenges to providing support as well as any future directions in the planning, response and recovery phases.

## Results

### Cost of extreme weather

Of the respondents, 46 six per cent of service providers indicated that responses to extreme weather events cost each agency up to \$1000 to assist clients. Further, 38 per cent of service providers indicated that assisting people effected by extreme weather required up to 50 hours of extra staffing and support. The survey results

**Table 1: Descriptive data for service providers for extreme weather preparedness and management.**

Categories	Percentage	N
<b>How much do you estimate it cost your agency to assist people affected by this extreme weather?</b>		
\$0 to \$1000	31	20
\$1,000 to \$5000	31	20
\$5001 to \$10,000	12	8
10,001 to 20,000	6	4
Over \$20,000	20	13
<b>Total</b>	<b>100</b>	<b>65</b>
<b>How many hours do you estimate it cost your agency in staff time to assist people impacted by this extreme weather?</b>		
0 to 50 hours	38	25
51 to 100 hours	31	20
101 to 250 hours	9	6
Over 250 hours	22	14
<b>Total</b>	<b>100</b>	<b>65</b>
<b>How much do you estimate it costs your agency each year to assist people to prepare for extreme weather?</b>		
\$0 to \$1000	46	27
\$1001 to \$5000	36	21
\$5001 to \$10,000	8	5
Over \$10,000	10	6
<b>Total</b>	<b>100</b>	<b>59</b>
<b>How much staff time do you estimate is devoted each year to assist people to prepare for extreme weather?</b>		
0 to 50 hours	59	35
51 to 100 hours	20	12
101 to 250 hours	9	5
Over 250 hours	12	7
<b>Total</b>	<b>100</b>	<b>59</b>

N=number of participants.

Figures have be rounded to whole numbers.

showed that 82 per cent of services required up to \$5000 to implement disaster preparedness programs.

## Qualitative data

### Research question 1: Impacts of disaster on homeless service providers

The survey confirmed that there was a significant financial burden on homeless service providers during disasters. The interviews and open-ended questions in the survey highlighted the increase in demand for client support.

*We were very busy and couldn't keep up with the demand for dry shoes and clothes, trying to dry enough towels for showers. [There was] nowhere to send people for accommodation.*  
(Service provider staff)

As with other studies (Mallon *et al.* 2013), homeless service providers operate well beyond their funding capacity and normal scope of services.

*[Our] service continued to provide support services (i.e. emergency relief, counselling, accommodation). [The] increase in demand required operation outside of [our] funded service agreement to meet [the] needs of all people requiring assistance.*  
(Service provider staff)

Homeless service providers indicated that the increase in demand for services and support lasted long after the disaster had occurred.

*Increased demand for services required extra funding from state government, for one day per week for 12 months. [The] services [required] included personal counselling and visiting schools.*  
(Service provider staff)

Similarly, as client demand increased, so did the need for staff to meet client need and staff worked longer hours to compensate. Managers and colleagues indicated that extra calls on resources had to be balanced with the emotional drain on staff.

*There was a 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. Massive amounts of exposure to very challenging situations for staff.*  
(Service provider manager)

Homeless service providers struggled to provide the extra staff hours as the extreme weather event prevented staff from attending work sites and performing their job role.

*So in terms of staffing, on those days you'll probably have an increased need for staff but probably have less staff turning up for work. So that's one thing to*

*think about; back-filling staff.*  
(Service provider manager)

Mallon and colleagues (2013) highlighted the increased need for staffing during an extreme weather event. They found that organisations would only function at full capacity for one day with limited staffing.

Homeless service providers' outreach and communication activities were also affected. The implications for clients can be long lasting, especially if compounded by the loss of infrastructure or forced suspension of service provider operations.

*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.*  
(Service provider staff)

*Communication with customers (clients) was difficult during the period of the emergency as mobile phone towers had been ravaged by the fire.*  
(Service provider staff)

In some cases, services that marginalised populations relied on remained affected for up to a year.

*[We] closed our service for four months and we're opened but trading at half capacity. A year later we were back to full operational capacity.*  
(Service provider)

## Inter-agency sharing

Sharing up-to-date information and response planning is critical among community service providers. A National Disaster Resilience Roundtable Report (Australian Red Cross 2014) indicated that disaster and extreme weather events requires strong inter-agency collaboration between stakeholders from government, academia and not-for-profit organisations. The report recognised the role of community service providers in disasters. Service providers advocated for open dialogue between stakeholders to support collaboration, accountability and effective breakdown of responsibility and roles based on the needs of the community (Australian Red Cross 2014).

The desire for greater inclusion in emergency planning and greater inter-agency preparedness and communication was also prominent in this study.

*To activate a plan you should pull together your own crisis management team or response team and these are the key people that you would get together to plan how you're going to respond.*  
(Service provider staff)

The lack of information became a source of anxiety for both service providers and their clients.

*People are not so sure ...[they are] feeling anxious about certain things, because of evacuation stress...*

*also workers can have high levels of anxiety because it's not something that we do on a regular basis.*  
(Service provider staff)

Systemic issues arose when trying to work with other service providers without the necessary facilities to use the resources provided for disaster response.

*Without power it was impossible to service our clients adequately. Food and petrol vouchers could not be distributed because the stores could not process them. Banks could not dispense cash. In fact, most stores closed their doors because they could not service the customers. Food was offered at random to clients as it thawed. Phones went flat. Night time came. No power. Some people had candles but these can be dangerous. Most people rely on electricity for cooking. If clients are homeless they don't have access to gas barbecues.*  
(Service provider staff)

Improved preparedness by service providers relies on meeting and connecting with other agencies. Edgington and co-authors (2014) indicated that preparedness for extreme weather events was dependent on effective inter-agency collaboration and communication. Collaboration enables distribution of roles in order to coordinate and mobilise disaster management and preparedness plans (Australian Red Cross 2014). In support of this, the US research found that pre-existing connections between service organisations proved helpful during and after the floods to identify client needs and find sources of shelter for the homeless community (Vickery 2015b). In the US, a network of agencies is established to oversee and maintain disaster preparedness and recovery plans (Edgington *et al.* 2014). Participants in this research, particularly community service providers, indicated this would be beneficial.

*[I think we should] arrange a community engagement action group made up of people who have experienced homelessness and who are prepared to focus on systemic change. This could be championed via peak bodies.*  
(Service provider)

The need for service providers to work with each other and with emergency services organisations was highlighted by the lack of knowledge about how to prepare for disasters. The burden placed on homeless service providers to respond to the everyday needs of clients and their capacity to learn and adequately inform clients about disaster preparedness is significantly reduced. Inter-agency collaboration can reduce the burden on service providers and clear roles and responsibilities can be established prior to events (Australian Red Cross 2014)

## **Research question 2: What resources are needed to increase homeless service provider's disaster preparedness?**

Preparedness can reduce the negative effects of disasters on homeless service providers. Respondents indicated a need for many resources to adequately

prepare for disasters. The majority indicated more funding was required to design and implement disaster preparedness plans and extreme weather management. In order to plan and implement disaster preparedness programs (planning committees, educational programs, training), 32 per cent of service providers indicated they required up to \$5000 of additional funding per service.

In order to action preparedness plans within services, additional financial assistance was required alongside training and support for both staff and clients. As such, 59 per cent of homeless service providers required up to 50 additional staffing hours in order to create and implement effective disaster preparedness plans.

*The financial support to assist, training and time in the field would also be beneficial.*  
(Service provider)

*Extra staffing would be required.*  
(Service provider)

*Good training and equipment for staff to educate and assist clients who might experience disasters.*  
(Service provider)

It is also important to provide education for volunteers. Volunteers are a valuable source of support for community service providers in the daily delivery of many programs that support individuals experiencing homelessness. These include second-hand stores, soup kitchens and administration support (Millette & Gagné 2008). Volunteers can also make up the majority of disaster response teams.

*[We need] volunteers to assist when needed, training materials and info and time to attend training. Experience[d] trainers to deliver training.*  
(Service provider)

As well as training for staff, training is also an effective way to help vulnerable groups prepare for disasters (Baker & Cormier 2013). Survey respondents indicated that delivering such programs to the homeless community is critical. Training programs for homeless communities raise awareness for managing risks and accessing support, mitigating the negative consequences of exposure to natural disasters

*[For people experiencing homelessness] training, educational brochures, pamphlets, water bottles, towels, socks, singlets, etc. [All] would be of great practical use.*  
(Service provider)

*Prepare people for extreme heat and cold and bushfires, provide drop in sessions leading into summer and winter with information and supply emergency kit items as our clients can't afford to buy them.*  
(Service provider)

During disasters, there is an increased call for material goods to provide to clients. Community service providers often rely on donations to meet day-to-day client needs. However, funding is needed to provide clothing, linen (blankets, towels and sheets), temporary shelters (tents

and swags), food (hot food and water) and safety items (raincoats, covered shoes, hats and sunscreen).

*Have emergency packs containing battery radios, candles, food, water, etc.*  
(Service provider staff)

Times of disaster heighten the need for communication to alert clients of danger and provide services, even when prevented from being physically present because of damage to infrastructure. People who are homeless may not have the ready access to mobile phones nor the capacity to contact others.

A high priority is adequate infrastructure, without which clients and staff are exposed to extreme weather for longer (Mallon *et al.* 2013). These include dedicated safe and culturally appropriate spaces for clients as well as for pets, that are both short- and long-term solutions to the housing crisis.

*Have a dedicated appropriate space for people which is also culturally appropriate.*  
(Service provider staff)

*Better access to appropriate and affordable crisis, medium term and long-term housing.*  
(Service provider staff)

Additionally, service providers identified having alerting systems to reach those who don't have access to conventional means of contact.

*Radio alerts, text messaging and signage in areas where homeless people congregate.*  
(Service provider staff)



People experiencing homelessness can lose all their possessions and need immediate material assistance.

Image: Reproduced with permission, Hutt Street Centre, Adelaide

## Conclusion

Community service providers deliver vital services to vulnerable people and, in the wake of a disaster, they go beyond service provision agreements to meet the needs of clients so that safety and wellbeing is maintained. Gaps in current research warranted investigation into the effects of disasters on homeless service providers in Australia.

Homeless service providers indicated five ways to implement disaster preparedness plans:

- Financial support for additional staffing hours for disaster planning and response, as well as material (e.g. clothing, food and protective gear) and staff training for emergency response.
- Training for staff, volunteers and clients:
  - Staff and volunteers: disaster response protocols at state and local levels; developing and implementing a preparedness plan, business continuity plan as well as the effective communication of plans to clients; managing communication losses to continue to provide services for clients (e.g. to use outreach services when there is no phone access).
  - Clients: understanding warnings; identifying safe places in a disaster (e.g. higher ground for those in flood zones); on-foot evacuation planning; keeping medications safe; staying in touch with others and where to go for help and support.
- Material support for clients including emergency packs, mobile phones, swags, water and food.
- Infrastructure that is specific for homeless people in evacuation centres (e.g. trauma care, connections with homeless service providers, substance-withdrawal support); alternative alerting systems for people without phones or televisions (e.g. siren) and transportation to move people to safety.
- Inter-agency communication and collaboration:
  - Augmenting existing formal channels of communication where these exist (e.g. where homeless service providers are included on emergency planning committees) or establish these and other homeless service partnerships if they do not; foster informal channels of communication (e.g. emergency services personnel attending a community conference to ask people about their experiences and share their knowledge).
  - Championing emergency planning committees by peak bodies in the homeless sector to include representatives from homeless service providers to draw on knowledge (e.g. include homelessness in emergency plans and information about where people experiencing homelessness are located to assist in their evacuation).
  - Developing cross-agency business continuity planning and disaster planning to share resources and coordinate actions to create clear roles for each organisation when a disaster occurs.

People experiencing homelessness have particular vulnerabilities. During a disaster, homeless service providers deliver vital services that mitigate a number of negative consequences of exposure to extreme weather including increased mental health symptoms, illness and death. Disasters negatively compound the pressure-cooker situation that homeless service providers manage on a daily basis.

This research highlights specific impacts and barriers to services preparing and managing the impacts of extreme weather. Adding to the body of knowledge specific practical applications to mitigate these risks. Indeed, these applications can be realised through close collaboration between individuals, services and government that encourages and supports preparedness.

## References

- Australian Red Cross 2014, *Beyond the Blanket: The role of not-for-profits and non-traditional stakeholders in emergency management. 2nd National Disaster Resilience Roundtable Report*. Melbourne, Australia. At: [www.redcross.org.au/getmedia/e93ca7b3-efa5-4874-b75d-8b62a7fa908e/2014-Disaster-Resilience-Roundtable-report\\_1.pdf.aspx](http://www.redcross.org.au/getmedia/e93ca7b3-efa5-4874-b75d-8b62a7fa908e/2014-Disaster-Resilience-Roundtable-report_1.pdf.aspx) [7 June 2018].
- Baker LR & Cormier LA 2013, *Disaster preparedness and families of children with special needs: a geographic comparison*. *Journal of Community Health*, vol. 38, pp.106–112.
- Baum A, Fleming R & Davidson LM 1983, *Natural disaster and technological catastrophe*. *Environment and Behavior*, vol. 15, pp.333–354.
- Chamberlain C & Johnson G 2001, *The debate about homelessness*. *Australian Journal of Social Issues*, vol. 36, pp.35–50.
- Chamberlain C & Mackenzie D 1992, *Understanding contemporary homelessness: Issues of definition and meaning*. *The Australian Journal of Social Issues*, vol. 27, pp.274.
- Chikoto GL, Sadiq A-A & Fordyce E 2013, *Disaster mitigation and preparedness: Comparison of nonprofit, public, and private organizations*. *Nonprofit and Voluntary Sector Quarterly*, vol. 42, pp.391–410.
- Cusack L, Van Loon A, Kralik D, Arbon P & Gilbert S 2013, *Extreme weather-related health needs of people who are homeless*. *Australian Journal of Primary Health*, vol. 19, pp.250–255.
- Edgington S 2009, *Disaster planning for people experiencing homelessness*. Nashville: National Health Care for the Homeless Council, Inc. At: [www.nhchc.org/disasterplanning.pdf](http://www.nhchc.org/disasterplanning.pdf) [1 June 2018].
- Edgington S, Canavan D, Ledger F & Erasing RL 2014, *Integrating homeless service providers and clients in disaster preparedness, response, and recovery*. *National Health Care for the Homeless Council. September 2014*. At: [www.nhchc.org/](http://www.nhchc.org/) [02 June 2018].
- Eisner R 2010, *Building disaster resilient organizations in the non-government sector*. *Journal of disaster research*, vol. 5, pp.503–508.
- Fothergill A & Peek LA 2004, *Poverty and disasters in the United States: A review of recent sociological findings*. *Natural Hazards*, vol. 32, pp.89–110.
- Gin JL, Kranke D, Saia R & Dobalian A 2015, *Disaster preparedness in homeless residential organizations in Los Angeles County: Identifying needs, assessing gaps*. *Natural hazards review*, vol. 17, pp.1–8.
- Mallon K, Hamilton E, Black M & Beem B 2013, *Adapting the community sector for climate extremes*. *National Climate Change Adaption Research Facility, Gold Coast*. At: [www.nccarf.edu.au](http://www.nccarf.edu.au) [2 June 2018].
- Martins DC 2008, *Experiences of homeless people in the health care delivery system: a descriptive phenomenological study*. *Public Health Nursing*, vol. 25, pp.420–430.
- Millette V & Gagné M 2008, *Designing volunteers' tasks to maximize motivation, satisfaction and performance: The impact of job characteristics on volunteer engagement*. *Motivation and Emotion*, vol. 32, pp.11–22.
- Moore G, Manias E & Gerdtz MF 2011, *Complex health service needs for people who are homeless*. *Australian Health Review*, vol. 35, pp.480–485.
- Mosley JE 2012, *Keeping the lights on: How government funding concerns drive the advocacy agendas of nonprofit homeless service providers*. *Journal of Public Administration Research and Theory*, vol. 22, pp.841–866.
- Peek L & Stough LM 2010, *Children with disabilities in the context of disaster: A social vulnerability perspective*. *Child development*, vol. 81, pp.1260–1270.
- Ritchie L, Tierney K & Gilbert B 2008, *Disaster preparedness among community-based organizations in the City and County of San Francisco*. *Natural Hazards Center, Institute of Behavioral Science, University of Colorado, Boulder, CO*. At: <https://hazards.colorado.edu> [1 June 2018].
- Shinn M 2007, *International Homelessness: Policy, Socio Cultural, and Individual Perspectives*. *Journal of Social Issues*, vol. 63, pp.657–677.
- Tierney K 2013, *A Frayed Safety Net: Community-Based Organizations and Disaster Vulnerability*. *Annual meeting of the Society for Applied Anthropology, Denver, March, 2013*. At: <https://hazards.colorado.edu> [6 June 2018].
- Vickery J 2015a, *Compounded vulnerability: Homeless service organizations during disaster*. *PHD thesis, Sociology Graduate Theses and Dissertations, University of Colorado at Boulder*.
- Vickery J 2015b, *Every day is a disaster: Understanding the challenges faced by homeless service organizations in disaster planning and response*. *Natural Hazards Observer. Natural Hazards Center, University of Colorado, Boulder, Colorado*, vol. XL, pp.10–13.

## About the authors

**Elizabeth Osborn** is a research assistant at the Appleton Institute, Central Queensland University. She has considerable experience working within the homeless sector and has worked in youth work, outreach case management and counselling.

**Dr Danielle Every** is a senior lecturer at the Appleton Institute, Central Queensland University. Her research explores community experiences of bushfires, climate change and disasters, particularly with people who are homeless.

**John Richardson** is the National Coordinator, Preparedness for Australia Red Cross. He established Emergency RediPlan and the Red Cross household preparedness program. He is an Honorary Fellow of the University of Melbourne as part of the Beyond Bushfires Research Team.