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HOMELESSNESS AND SEVERE STORMS AND FLOODS: A CASE STUDY OF THE JUNE 2016 EAST COAST LOW

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ABSTRACT

Historically, emergency planning for severe weather and natural disasters has focused on the housed population. However, people who do not have a house – people rough sleeping, living in their cars, couchsurfing or staying in shelters – are uniquely impacted by severe weather. There is as yet no Australian research documenting the homeless community's preparation for, response to and recovery from an event like the 2016 East Coast storms and floods that can be drawn on for emergency planning. Using interviews with homeless service providers and clients, this research documents the homeless community's experience of those storms in two locations. Interviews highlighted that long-term wet weather is felt to have the greatest impact on people's physical and mental health and on services' ability to provide bedding and shelter. The main impacts were loss of temporary dwellings, bedding and possessions, anxiety and isolation, and ability to look after pets when evacuated. Evacuation shelters were heavily relied upon by those experiencing homelessness and people presenting here required medical and psychological for mental health issues and substance use withdrawals and also areas for pets. However, existing homeless services are already under-resourced, and many struggled to provide the extra support needed during and after the storms. Few services report having a relationship with emergency services, and in some areas any potential relationship was complicated by broader punitive policies and misperceptions about homelessness. A framework for increasing the resilience of the homeless community includes creating mutually beneficial relationships between emergency and homeless services that could facilitate greater understanding of homelessness and natural hazards.



BACKGROUND TO THE EVENTS

The June 2016 East Coast storms were the result of a rapidly developing low-pressure trough: an East Coast Low (ECL) or 'extra-tropical cyclone'. On average, ECL's occur seven times a year on the east coast of Australia during the cooler winter months (Pepler & Alexander 2015). They include storm force winds, heavy widespread rainfall leading to flash or major river flooding and rough seas and heavy swells (BOM 2007). The June 2016 ECL first affected central and southern Queensland on 3 June, then Brisbane, the Gold Coast, the Northern Rivers, Sydney, Canberra and Launceston and northern Tasmania over the next 3 days (Weatherzone, 2016). Three people died and hundreds were evacuated, including 500 in Lismore in the Northern Rivers. The damage in Queensland and NSW was estimated at \$38 million (ABC 2016).

Climate models suggest that the conditions necessary for ECL's to form may decline by up to 40%, and they are expected to become less frequent (Pepler 2016). However, heavy rainfall in summer is already intensifying and is expected to continue to do so. Therefore, future flood risk is likely to shift, with some areas experiencing reduced risk in the winter season and others increased risk in the summer months (Zheng, Westra & Leonard, 2015). Rising sea levels are also likely to increase the impact of storm damage from ECL's along the coast (da Silva, 2016).



CURRENT KNOWLEDGE AND RESEARCH OBJECTIVES

Disaster risk – death, injury, economic loss, psychological damage – is not random, but rather its distribution maps onto existing social inequalities. These inequalities include access to health care, political representation, and economic capital, as well as liveability (or existence) of a home and environment, and lower quality of life (Cutter, Boruff & Shirley, 1990; Tierney 2006; Wisner et al. 2004).

A group who are particularly vulnerable to disasters, but have been less often considered in research and disaster risk planning, are people experiencing homelessness. Mainstream efforts to promote preparedness typically focus on people who are housed and have the resources to stockpile food and supplies and shelter in place. However, few communities have adequately identified disaster preparation and support for people with limited resources, such as people experiencing homelessness.

HOMELESSNESS: DEFINITION AND PREVALENCE

There are currently 105,237 people in Australia who are homeless. This represents 0.5% of the population (ABS, 2012).

People experiencing homelessness are people who do not have a permanent home and who are:

- sleeping outdoors or in improvised dwellings,
- sleeping in specialist homelessness shelters and boarding houses,
- living in supported accommodation,
- living in severely crowded conditions,
- staying with different friends, relatives and acquaintances (Homelessness Australia 2012).

These groups include the three levels of homelessness: primary (sleeping outdoors), secondary homelessness (couch surfing, temporary shelters) and tertiary homelessness (supported accommodation) (Chamberlain and MacKenzie, 1992).

Although the popular images of people experiencing homelessness generally depict an older man, in fact the majority of homeless people in Australia are under 35 years of age. There are also 17,845 children under 12 who are homeless, including 400 children who are sleeping rough. There is also a high proportion of homeless people who are Indigenous (ABS, 2012; AIHW 2012). Families account for 26 percent of the homeless population in Australia, particularly women and children who have experienced domestic violence (Gibson & Johnstone, 2010).

The homeless community is diverse and uniquely impacted by severe weather and natural disasters.



RESEARCH OBJECTIVES

Using the June 2016 East Coast Low as a case study, this research evaluates the preparedness, impacts of, and response to from these storms and floods for the homeless community in Northern Tasmania and Northern New South Wales.

These two areas were both significantly affected by the East Coast Low. The effects in the Launceston CBD were contained by the flood levee through the town, but residents in Invermay, close to the river, were warned to prepare to evacuate, and the northern areas of Tasmania including Devonport were affected by flood and storm damage. The Northern Rivers area is historically affected by repeat flooding events from East Coast Lows in the winter and the tropical cyclones further north in the summer.

Both of these areas both have significant homeless populations, and also populations at risk of homelessness (Homelessness NSW 2014; Shelter TAS 2016).

This research asked:

1. What are the risk perceptions of the homeless community, the service providers and the emergency services in relation to homelessness
2. How did people and services respond
3. What were the physical and psychological impacts on those affected by the storms and floods, and by prolonged wet weather more generally
4. What recovery services were available to people and how effective were these



METHOD

This qualitative research project gathered data on the preparedness, response, impacts of, and recovery from the ECL through interviews with:

- 15 homeless service staff and clients
- 5 evacuation shelter staff (including hospitals, housing support and agencies such as the Red Cross)
- 5 emergency services personnel (including local government and non-government emergency managers)

in two areas affected by the June 2016 East Coast Low: 1) Launceston and northern Tasmania, and 2) the Northern Rivers area of New South Wales (Lismore, Byron Bay and Tweed Heads) and at two time periods: 1) in the two weeks following the ECL (using the BNHCRC Quick Response Fund grant) and 2) in the three months following the ECL (using NEMP funding for an ongoing project on homelessness and severe weather). This allowed for data to be collected on immediate and longer-term impacts and recovery.

The semi-structured interviews were between 30 and 90 minutes. They focused on: the physical and mental impacts of extreme weather in general and the June 2016 ECL in particular; people's experiences and challenges in evacuation shelters; perceptions of risk for storms and flooding; communicating emergency warnings; and accessing assistance after the storms.

The interviews, supplemented with newsletters, news stories, brochures (e.g. how to stay safe in floods) and reports (e.g. on levels of homelessness in the area), were used to identify the specific needs of the homeless community at three stages of the emergency management cycle – preparedness, response and recovery.



FINDINGS

RISK AWARENESS AND PERCEIVED RISK

In the Launceston CBD, perceived risk of flooding was lower because of the town's levee banks, and because fewer people stay along the river banks, preferring higher ground because of the cold. In the Northern Rivers, perceived risk was higher because of the greater frequency of flooding, people's recurring experience of storms and floods, and the significant number of people living either on or near the river.

Both homeless services and clients noted that the heightened risk to their community was due to limited shelter options. There is a severe shortage of long-term housing options, but also of temporary shelter and supports like laundries and showers provided by drop-in centres. During the prolonged wet weather, there were few safe, dry places for people to go, and some services were seriously stretched during and after the storms. Most were unable to stay open for longer hours or provide extra space, food and clothing for an influx of people. Heightened risk was also created by punitive policies and attitudes towards homelessness. In places where police and rangers regularly 'sweep through' homeless communities and throw out all their belongings to move them on, people were greatly exposed to severe weather.

Weather plays a major role in homeless people's daily lives, and many dreaded prolonged wet weather. Wet weather means wearing wet clothes and staying in wet bedding. Wet weather also means boredom and isolation. To stay dry, people need to stay in one spot, making it more difficult to stay active and connected with their community.

Community services keep up to date with weather events as part of their work. During wet seasons, they are mindful of the increased need for temporary shelter, and for tents and waterproof clothing and food, although they may not always be able to provide these. They are also aware of the impacts that weather events in neighbouring areas can have on their case load, as people displaced from one area access neighbouring services. This knock-on effect was a real concern for services already at and over capacity.

There were few established relationships between homeless service users, community services and emergency services. This lowered the perceptions of risk for the emergency services, as they were not always aware of the potential impacts on the homeless community, but heightened risks for the community services, who were less well informed about emergency management plans but felt a significant responsibility for assisting affected clients. In places where there were closer ties between emergency and community services, the two sectors shared information to facilitate rescues, evacuation and recovery. However, this was sometimes a difficult relationship. Community and emergency services both seek to serve their community, but do so from quite different and often opposing world views, knowledge and organizational structures. Emergency services in some areas were constrained by broader, more punitive policies towards, and misperceptions of, homelessness.



EMERGENCY WARNINGS

The homeless community was aware of the oncoming storm and the risks of the rivers flooding, though the warnings weren't accessed through official mainstream channels. People experiencing homelessness were informed about the coming storm and potential floods through:

- A service provider if they were attending the service that day
- Door knocking in areas which were evacuated
- Their own community grapevine
- For those who had been homeless for a long time and were long term residents, their knowledge of the local weather and rivers
- A heightened awareness because of the heightened activity in the area (e.g. helicopters)
- Television and smart phones

Using sirens was an important option for emergency warnings. A siren could reach anyone within hearing distance, and was particularly important for communicating with people who may be isolated without community connections or phones. However, service providers noted that there does need to be pre-emergency education about the siren – when it will be used, and what it is asking people to do – as some people connect the sound with traumatic past events.

IMPACTS

There were contained impacts from the Launceston flood. Those living on the riverbanks or in public or assisted housing in the suburb of Invermay and in east Devonport were most affected. People living on the riverbanks evacuated the area and lost their temporary dwellings and possessions (tents, caravans, bedding, food) and were displaced from their safe places until the area dried out. People living in assisted accommodation in Invermay were evacuated and had some flood damage to their properties, and those in east Devonport lost access to essential services whilst the ferry landing was being repaired.

The flooding in the Northern Rivers was more extensive and sudden. More of the homeless community was affected by the flooding there, as many have safe places along the river banks, particularly under the bridge. They lost bedding, temporary dwellings including tents, and some were rescued by emergency services when the waters rose rapidly and they were unable to get out. Those living in supported accommodation near the river were evacuated for one night. People at risk of homelessness, e.g. living in more marginal areas like the local caravan park, were also affected. People with chronic physical and mental health conditions who had lived in the local caravan park for a long time were evacuated. They were supported by local services to move medical equipment and remember medication.

RESPONSES: EVACUATION SHELTERS

Most homeless people in areas worst affected by flooding sought refuge in the evacuation shelters. Those who were affected by the prolonged wet and cold



weather, but not the flooding, went to places where they knew they could stay for a few days and keep dry, like the back of churches.

In Launceston, approximately a third of people attending the evacuation shelters were homeless or in assisted supported housing. They sheltered for one to two days. Some people were transported to the evacuation shelters or to friends' homes by service providers, but most walked.

In the Northern Rivers, all except two of the people attending the shelter were homeless. They were from the nearby shelter which had evacuated and from the river where some had been rescued from rising flood waters. People stayed at the evacuation shelter for up to two nights.

There were no issues for centres, but this was because of the short-term nature of the evacuation. Future issues for longer events included: providing for substance abuse withdrawal (requiring access to medications, trained hospital staff and social workers, separate areas and protected bedding); and providing safe, potentially separate, spaces for people experiencing mental or physical illness. For longer events, separate facilities for gender (important for women who are homeless because of domestic violence) is important. Future shelter options should include ways to provide separate sleeping areas.

RECOVERY

In both Tasmania and the Northern Rivers, homeless people affected by the floods could access initial emergency relief funding, though few did so. Most went to their local service provider for assistance in replacing bedding and tents, and for food. However, some services in the worst affected areas struggled to provide suitable new bedding and tents for people. In particular, they didn't have enough waterproof bedding, umbrellas and raincoats as they relied almost solely on donated goods.

Members of the homeless community who were affected by storms and floods had the same anxieties as those who are housed – they worried about what had happened to their safe places, to their friends, and when they could return to their home. They worried about companion animals.

Many people had survived homeless for many years and were pragmatic in their approach to life's challenges. They were innovative and creative in solving problems, and had at least one good connection with another person or with a service. However, they were also frustrated by the lack of safe places to shelter from severe weather and felt worn down by the constant battle for survival. Extreme events like flooding take an emotional and physical toll, one that was part of an ongoing struggle to stay warm, dry and sane that took most of their psychological and physical resources.

The weather, the uncertainties of evacuation and being separated from familiar spaces and companion animals exacerbated the distress of people with a mental illness or intellectual disability. For some people affected by the floods, the disruption and loss still affected them deeply 3 months after the storms.



There were, however, also some positive outcomes after the storms. The severe weather provided new opportunities for service providers to assist members of the homeless community. The floods highlighted the ongoing need for more and better services for clients overall, and they opened the way for one-on-one assistance for individual clients. One older person who had been living on the river for many years was housed in new accommodation because of the flood damage.



FUTURE USE OF OUTCOMES

The outcomes of this study, funded by the BNHCRC Quick Response Fund and the National Emergency Management Program, are useful for emergency managers, community services and the homeless community to plan for severe weather from storms and floods.

The findings support increasing resilience through:

- a. Tents, waterproof bedding, clothing, and umbrellas for services to distribute before, during and after severe weather.
- b. More shelter options for the homeless community, including drop-in centres with laundries and showers where people can dry wet clothes and bedding and get warm and clean.
- c. Coordinated agency-level plans for temporary shelter options which can be opened during wet weather (e.g. local sports stadiums, community centres and town halls).
- d. Evacuation shelter planning to include separate spaces for men and women, physical and psychological supports for substance use and people experiencing heightened anxiety from mental illness or intellectual disability.
- e. Relationships between emergency and community services to:
 - i. Share their respective expertise in relation to emergency responses and working with vulnerable people
 - ii. Co-plan for emergency responses which include the homeless community, for example
 1. Earlier triggers for action than those for the housed community
 2. Transport options for people on foot
 3. Multiple channels of communication, including sirens which can reach almost everyone (and education for the community on what the siren means)
 4. Safe places to stay with companion animals
 5. Separate spaces for men and women in shelters
 - iii. Change misperceptions of the homeless community (e.g. understanding the role of trauma in the pathway to homelessness and in people's actions and behavior).



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