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The *Australian Journal of Emergency Management* is Australia's premier journal in emergency management. Its format and content are developed with reference to peak emergency management organisations and the emergency management sectors—nationally and internationally. The Journal focuses on both the academic and practitioner reader. Its aim is to strengthen capabilities in the sector by documenting, growing and disseminating an emergency management body of knowledge. The Journal strongly supports the role of the Australian Institute for Disaster Resilience (AIDR) as a national centre of excellence for knowledge and skills development in the emergency management sector. Papers are published in all areas of emergency management. The Journal encourages empirical reports but may include specialised theoretical, methodological, case study and review papers and opinion pieces. The views in the Journal are not necessarily the views of the Australian Government, AIDR or AIDR's partners.

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The series publishes peer-reviewed research papers and news and views articles as independent publications that are consistent with the objectives and themes of the *Australian Journal of Emergency Management*.

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Foreword

Helen Riseborough, Women's Health In the North

On behalf of partner organisations I am privileged to write this Foreword to the Diversity in Disaster Conference Monograph. It reflects the depth and breadth of the sectors represented at the inaugural Australian Diversity in Disaster Conference, held in Melbourne in April 2018.

The conference was a key milestone in the endeavour to promote gender and diversity issues in emergency management. It brought together the emergency management sector, state, territory and local government, academic and community sectors, to examine how disasters affect people differently and how this impact can be reduced.

Presentations highlighted women, men, people of diverse gender and sexual identities, Aboriginal groups, culturally and linguistically diverse groups, faith-based groups, people with disability, young people, the elderly, the homeless, migrant and refugees, and rural communities.

Designed to enhance resilience and raise awareness of the needs and strengths of all in the community, the conference engaged emergency management practitioners and community services leaders with the latest research on disaster resilience.

Over 340 participants heard from more than 100 researchers, policymakers and people with lived experience from across Australia and New Zealand.

Keynote speaker Professor Maureen Fordham from the University College of London and the International Gender and Disaster Network spoke to the importance of building gender awareness to strengthen community resilience.

Associate Professor JC Gaillard, from the University of Auckland in New Zealand, spoke about developing participatory tools for disaster risk reduction and involving minority groups in disaster-related activities with an emphasis on ethnic and gender minorities, prisoners and homeless people.

The conference was the culmination of months of work by Women's Health In the North (WHIN) and partners from the GAD Pod (Women's Health Goulburn North East and Monash University Disaster Resilience Initiative), Victorian Council of Social Service and Resilient Melbourne.

The extensive conference program reflects the efforts of many people.

I would like to thank the Steering Group of this conference, made up of a broad range of organisations

and individuals, including people with a lived experience of disaster and of discrimination and disadvantage.

This conference was funded with a seeding grant from the Australian Government in partnership with the Victorian Government under the National Partnership Agreement for National Disaster Resilience. We are very appreciative of this seed funding through our successful submission in 2017 to the Natural Disaster Resilience Grants Scheme.

Australia is a wonderfully diverse population which we celebrate in so many ways —culture, age, religion, sexuality, gender diverse, all abilities —people defining themselves as they choose and being proud of who they are and the communities they belong to.

The experience of disaster differs for individuals and groups, and an 'all communities, diversity and inclusion' approach is increasingly recognised, as evidenced by the National Strategy for Disaster Resilience and Victoria's *Emergency Management Diversity and Inclusion Framework – Respect and Inclusion for All*.

At the Diversity in Disaster Conference we were cautioned by some of our scholars to not lose sight of the underlying structured inequalities that leads diverse communities and individuals to experience discrimination and abuse. There was acknowledgement of the importance of taking an intersectional approach to disadvantage and to its driver – privilege.

While we value and celebrate diversity, we are not all equal. We need to ensure social equity.

I am sure you will gain insights, understandings and knowledge from the offerings in this monograph. I sincerely thank the authors and contributors for this legacy of the conference.

Helen Riseborough
CEO, Women's Health In the North
Chair, Diversity in Disaster Conference Steering Group

For more offerings from the conference proceedings, presenters and panels visit: www.genderanddisaster.com.au/diversity-in-disaster-conference

Diversity in Disaster Conference: executive summary of issues paper

Alyssa Duncan^{1,2}, Debra Parkinson^{3,2,1}, Frank Archer³ and Emma Keech¹, with thanks to the Diversity in Disaster Collaborative

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Purpose

Ground-breaking research with marginalised groups in Australian disasters is rarely communicated directly with the emergency management sector. In 2018 a national conference was scheduled with leading researchers and practitioners who explored identified needs amongst marginalised communities. The Diversity in Disaster Conference was held in Melbourne on 17-18 April 2018. This Executive Summary Issues Paper is a snapshot of issues that were presented.

The conference is an initiative of the Gender and Disaster Pod (Women's Health In the North, Women's Health Goulburn North East and Monash University Disaster Resilience Initiative), Victorian Council of Social Services and Resilient Melbourne. It was funded by the Australian Government in partnership with the Victorian Government under the National Partnership Agreement for National Disaster Resilience.

Guiding documents

Demands on the emergency management (EM) sector are increasing in frequency and complexity. As climate change increases the potential for more extreme weather events grows, exacerbating inequality in readiness and preparation. In order to manage competing demands on time and resources and serve all communities, an efficient EM approach needs to apply the latest research into policy and action, and reflect the lived experience of people in the community.

International

Internationally, key documents such as the *Sustainable Development Goals*, the *Hyogo Framework for Action* (2005-2015) and its successor, the *Sendai Framework* (2015-2025) outline and uphold the understanding that a whole-of-society, multi-sectorial response that engages all stakeholders is required to effectively respond to the emerging challenges. Further, the United Nation's 2017 Climate Change Conference developed a *Gender*

Action Plan and Local Communities and Indigenous People's Platform (2017). The Australian Government is party to these frameworks and goals, which affirm the importance and timeliness of the Diversity in Disaster Conference.

The risks posed by natural hazards and climate change must be considered in relation to intersections with other issues (poverty, gender inequality, environmental degradation etc.). The poor and the vulnerable, however defined, face disproportionate risks during disasters. This conference is positioned to identify constructive strategies to reduce inequalities and increase resilience across our communities.

Australia

Extensive work around Australia has examined the needs of people who may be vulnerable in emergencies, but significant work is required to put these findings into practice. This includes:

- The ANZEMC report, *Vulnerable Sections of Society* (an emergency management perspective) (2015)
- *National Strategy for Disaster Resilience: Community Engagement Framework Handbook*
- The current review of the Australian Disaster Resilience's Handbook Collection.

The Victorian context is given as an example of the endeavours of one state of Australia.

- The Victorian Bushfire Royal Commission (2010)
- The Victorian Department of Health and Human Services' 'Review of the vulnerable people in emergencies policy' (2017)
- Emergency Management Victoria's (EMV) *Diversity and Inclusion Framework* (2016)
- Victorian Council of Social Services' *Disaster and Disadvantage* (2014) and *Building Resilient Communities* (2017)
- The Bushfire and Natural Hazard's *Diversity and inclusion: building strength and capability* (2017)

- Previously, over the period 2014-2016, EMV hosted the nationally unique Gender and Disaster Taskforce co-chaired by the EMV commissioner, Mr Craig Lapsley, and Executive Officer of Women's Health Goulburn North East, Ms Susie Reid, with additional funding, including from the Australian Attorney-General's Department under the NEMP scheme for national gender and emergency management guidelines.

Defining key concepts

Resilience is a contested term. One definition, proposed by 100 Resilient Cities is 'the capacity of individuals, communities, institutions, businesses, and systems [within a city] to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience'.

Terms related to community – including 'community-led', 'community-based' and 'community-centric' – are common but represent no shared understanding either philosophically or practically. There is willingness by the sector to think about the concept, however, this sits alongside reluctance to relinquish power. International Association for Public Participation (IAP2's) public participation spectrum, and other frameworks, seek to define the community leader/EM interface.

Introduction and cross-cutting issues

In every society, there are power dynamics, and groups that may experience exclusion, making them more vulnerable to hazards and other threats.

Turnbull & Moriniere, 2017, p. 6

Australia faces particular risks, with one in three residents having had direct disaster experience in their lifetime. Disasters heighten inequalities, marginalisation is increased, and risk factors are multiplied. At each stage—from preparation, response and recovery, reconstruction and reformation of affected communities—disasters' impacts are different depending on circumstances and positioning within structurally unequal relations of power. Post disaster, decision-making voids and power vacuums are created, commonly leading to centralised 'top down, power-over', and inevitably, conflict. Factors such as gender, socio-economic status, mobility, age, disability, location, and English language skills play a central role in determining the outcomes for individuals in, and following, disasters. These can be considered as the social determinants of disasters.

Gender

A cross-cutting differential is that the impact of disasters on people is gendered. Firefighting has historically been perceived as a masculine pursuit, and as such, brings prestige. Yet, men are vulnerable

through risk-taking, over-confidence, loss of a sense of control, reluctance to seek help, and failure to live up to expectations of them as 'protector' during the disasters, and 'provider' in the aftermath. Women are vulnerable through notions that women and children are protected in disasters, through the caring role assigned to women, through lack of autonomy in decision-making; and exclusion from bushfire survival education. There is compelling evidence that violence against women increases following large-scale disasters around the world—including in developed countries such as Australia and New Zealand. People of diverse gender and sexual identities people may face specific vulnerabilities with disruption to both formal and informal social support along with increased discrimination and loss of safe spaces. Despite the research cited above, a gender 'lens' is rarely used when studying the sociological aspects of disasters and crises. In considering gender, this conference applies such a lens.

The *Gender and Emergency Management (GEM) Literature Review, GEM Guidelines* and *GEM Action Checklist*—collaboratively developed and informed by gender experts and over 350 EM personnel nationally—aim to provide a gender-sensitive approach to planning and delivery of disaster planning, relief and recover. Broad distribution of these guidelines is still in its infancy, awaiting the launch of the GEM Guidelines at this conference.

Violence

Extreme weather events may inflame conflict in communities and families and can disturb relationships, as a higher rate of marriage breakdown is evident after disasters and during prolonged drought.

Men's violence against women increases following large-scale disasters around the world—including in developed countries such as Australia and New Zealand. After the 2010 and 2011 Christchurch earthquakes, innovative strategies were implemented involving multi-agency collaborations, and in Australia, some local governments and country fire authorities wrote policies and plans to incorporate awareness of family violence into EM planning and recovery.¹ Specific training has been developed by Women's Health Goulburn North East for the EM sector. However, in most jurisdictions, emergency workers are likely to be unaware of the need to incorporate awareness of family violence into emergency planning and recovery.

Poverty

The Sendai Framework calls for further action on tackling underlying disaster risk drivers, such as the consequences of poverty and inequality. One of the main sources of vulnerability to a disaster is poverty and this is reflected for most of the groups discussed below.

¹ The terms 'domestic violence' and 'family violence' are reluctantly used in this report reflecting their various use by participants, workers, authors and in different states and countries. These terms are euphemistic and infer an equal level of violence by men and women which is unsupported in crime statistics (VicHealth, 2011).

Excluded groups

Older people

- Post-disaster community breakdown may particularly affect the elderly who rely on informal social support.
- In the year following Hurricane Katrina, the health of elderly survivors declined at a rate of four times the national average for older adults not affected by the disaster.
- Policies encouraging the elderly to remain living at home pose EM issues in disasters.
- The elderly may have valuable knowledge of local place and past disaster events, or experience in dealing with adversity to contribute to EM.

Children and young people

- Children are not little adults but have specific needs in disasters.
- There is potential in including children and young people to bring fresh thinking and action to EM.
- Guidelines for children in EM were published in 2013. This national survey showed children were largely neglected in current planning.

People with animals and pets

- Animal ownership (in two-thirds of Australian households) both increases vulnerability and can improve general resilience and recovery post-event.
- Pet and livestock owners may have no access to private vehicles or transportation equipment such as floats and crates in an evacuation.
- Some may rely on their pets, e.g. people with visual impairments, with autism, and those with mental health needs. Both children and adults may rely on animals as sole companions, including amongst the elderly living alone, the homeless, and socially isolated people.
- Examples exist of community-led approaches to motivate and support communities to advocate for animals to be included in preparedness and planning, response, and recovery.

Rural and remote communities

- The agricultural industry is vulnerable to extreme weather, as farmers risk losing the source of their livelihood in times of disaster.
- In contrast, privileged groups perpetuate environmentally destructive norms and practices.

People who are homeless

- Homeless people become more vulnerable during extreme weather, as many lose their shelter (tents, safe sleeping spaces or temporary structures), experience increased or new mental health issues, and lack access to early warning systems and educational resources.

Migrants, refugees and asylum seekers

- Lack of experience with bushfire (and flood) creates vulnerability.
- New refugees may not have access to, or understanding of, critical preparatory and emergency risk communication information.
- Mainstream and translated messaging do not account for new arrivals' discrete socio-cultural contexts and communication needs.
- These vulnerabilities are amplified where there is a lack of social support—people who can act as translators, or 'sense-makers', of preparatory and emergency messages.
- The lived experience of life-threatening incidents often means that some refugees may seem to take unwise and unpredictable initiatives in disasters. Others, already traumatised by previous life events, may freeze.
- In contrast, while refugees may be thought to be at higher risk in a disaster, resilience and leadership can be found in those who have already survived disasters.
- A kit for *Risk communication planning with CALD communities* was published in 2015.

People with a BMI over 40

- Without appropriate consideration, people with BMI over 40 face may be exposed to disproportionate and potentially avoidable risk. It may be the only difference between being rescued or being left behind.
- Fear of blocking evacuation routes or difficulty in carrying stretchers down stairwells meant obese hospital patients were left until last in Superstorm Sandy.

People with mental illness

- People experiencing a mental illness face particular challenges in preparing, responding and recovering from natural disasters.
- While previous experiences of trauma may worsen disaster experience, people with lived experience of mental illness can offer strength and expert guidance to others in their community for whom it is a new experience.

People with a disability and those with a chronic health condition

- People with disability are twice-to-four times more likely to be killed or injured in natural disasters than the general population.
- They are the first to be left behind and the last to be rescued, and their rights to protection and safety are often denied.
- Limited mobility, compromised health, reliance on equipment, and difficulty with seeing or hearing emergency bulletins can all contribute to vulnerability in emergency situations.

- They may have limited access to early warnings and lifesaving information and procedures. Assuming persons with disabilities can access such information, they may not be able to act on this information in times of emergency, such as independently evacuate.
- Community health and disability support providers have not been integrated into the emergency management system as a resource for community resilience.
- After the Christchurch earthquakes and aftershocks, some vision impaired adults lost a sense of independence over time. Disrupted schedules, changed terrain, damaged homes and the risks of Post-Traumatic Stress Disorder (PTSD) emerged. Older vision impaired participants reported difficulties post-disaster in reduced access to medications, use of chemical toilets, hygiene in evacuation centres and wellbeing of Guide Dogs.
- The gaps in school disaster and EM planning for children with disabilities are wide. Children using wheelchairs, on ventilators, those who do not speak English or who are non-verbal, those with autism, blindness, hearing impairments and other disadvantages could benefit from careful planning for individualised safety plans in the event of natural or man-made disasters and emergencies.
- The risks of separation from parents and caregivers, illness, disease, malnutrition, abuse, and abandonment make careful disaster planning for disabled children crucial.
- The disability-inclusive disaster risk reduction (DIDRR) NSW guidelines identify four principles of DIDRR: (a) accessibility; (b) participation; (c) collaboration; and (d) non-discrimination. The DIDRR framework presented in the guidelines offers actionable tools for local emergency managers to apply DIDRR principles in their practice.

Indigenous knowledge and practices

- There are complex systems of accountability and care that support disaster resilience in Aboriginal communities in the greater Darwin region.
- Narratives of previous cyclones keep alive strategies for caring for friends and family. Such strategies include ensuring sound knowledge of all services – including police, local Indigenous night patrols, and other EM services.
- Networks of communication are central to disaster planning and response, as is knowledge of safe sites, both formal and informal, and shelters preferred by particular clan groups.
- The extent to which Aboriginal and Torres Strait Islander knowledge is drawn upon by the EM sector across Australia is unclear, however there is considerable interest in the collaborative development of disaster management strategies by many Indigenous groups.
- In New Zealand, a recent review recommended that clearer arrangements with iwi (the largest social units in Māori society) are required in protocols, coordination and planning structures.

Online tools

A key area of interest for increasing disaster resilience across all communities is knowledge and information transmission, including the use of online tools. A range of resources will be showcased that addresses, e.g. person-centred planning to include people with disabilities and chronic health conditions; the critical success factors and challenges for community-based initiatives; and embracing diversity and inclusion in EM through various communication platforms.

Conclusion

A key area of interest for increasing disaster resilience across all communities is knowledge and information transmission, including the use of online tools. A range of resources will be showcased that addresses, e.g. person-centred planning to include people with disabilities and chronic health conditions; the critical success factors and challenges for community-based initiatives; and embracing diversity and inclusion in EM through various communication platforms.

The need for effective disaster risk management is greater than ever and demands a change in the way we work. As agreed in the Sendai framework for disaster risk reduction 2015 2030, we must go beyond preparedness and response, so that people do not remain in a vicious cycle of poverty and disaster. We must be inclusive and prioritize the needs of the most vulnerable. We must empower communities to plan and drive change, and reinforce governments' responsibility to provide their people with a protective and enabling environment.

Turnbull & Moriniere, 2017, p. 3

GAD Pod site: www.genderanddisaster.com.au

Table 1: Diversity in Disaster Conference Steering Group.

Organisation	Name
GAD Pod	Frank Archer, Director Monash University Disaster Resilience Institute Helen Riseborough, CEO Women's Health In the North Susie Reid, CEO Women's Health Goulburn North East Debra Parkinson, Manager, GAD Pod
Victorian Council of Social Service	Bridget Tehan, Victorian Council of Social Service
Resilient Melbourne	Toby Kent, Chief Resilience Officer Maree Grenfell, Networks and Learning, Resilient Melbourne
Emergency Management Victoria	Lisa Jones, Executive Officer to the Emergency Management Commissioner, Andrew Wilson
DHHS	Shane Robertson, Acting Manager Strategic Policy, Emergency Management Branch, Corrine Waddell
Australian Red Cross	Kate Siebert, State Manager Emergency Services
Australian Institute for Disaster Resilience	Amanda Lamont, Director Engagement and Projects
Metropolitan Fire Brigade	Steve O'Malley, Multicultural Liaison Officer/Leading Firefighter
SES	Susan Davie, Manager Community Connections
City of Melbourne	Christine Drummond, Emergency Management Coordinator
Arts House/Refuge	Catherine Jones, General Manager Arts House
Lord Mayor's Charitable Fund	Harriet McCallum, Program Manager Healthy & Resilient Communities
Ngwalla Willumbong Co-op	Dan Laws
Council to Homeless Persons	Jason Russell, Member Peer Education Support Program
Common Cause Consulting	Naomi Bailey, Evaluator
Community representatives	Daryl Taylor Andrew Wilson-Annan Tricia Hazeleger Jodie Thorneycroft
Conference Organising Group	Deb Parkinson, GAD Pod Bridget Tehan, Victorian Council of Social Service Ineke Neeson, Resilient Melbourne Stephen O'Malley Lee-Anne Wilson – Event Co ordinator

Diversity in Disaster Conference: issues paper

Alyssa Duncan^{1,2}, Debra Parkinson^{3,2,1}, Frank Archer³ and Emma Keech¹, GAD Pod

1. Women's Health In the North, WHIN, Victoria.

2. Women's Health Goulburn North East, WHGNE, Victoria.

3. Monash University Disaster Resilience Initiative, MUDRI, Victoria.

Disclaimer: This Paper has synthesised information from a number of sources. It does not seek to be comprehensive or fully representative of the issues in the sector. It is based on notes and references provided by many of the presenters at the conference. The writing team has relied on the expertise and academic rigour of the contributors. Nevertheless, this approach could lead to some misinterpretation. The writing team apologises if this occurs.

Preface

This Issues Paper is designed to give an overview of issues to be presented at the conference to those in the emergency management sector, state and local government, academic and community sectors.¹

The National Strategy for Disaster Resilience (Council of Australian Governments, 2011) encourages increased understanding of diversity within communities – including the needs, strengths and vulnerabilities of particular groups, stating:

A disaster resilient community is one that works together to understand and manage the risks that it confronts. Disaster resilience is the collective responsibility of all sectors of society, including all levels of government, business, the non-government sector and individuals.

(Council of Australian Governments, 2011, p. 5)

As ground-breaking research with marginalised groups in Australian and New Zealand disasters is rarely communicated directly with the emergency sector, a national conference with leading researchers and practitioners will identify and explore needs amongst marginalised communities.

This Issues Paper draws on the key points from many of the proposed presentations at the *Diversity in Disaster* Conference to be held in Melbourne on 17-18th April, 2018. The Paper offers a snapshot of current issues, and aims to stimulate delegates' curiosity and increase understanding prior to their attendance. It will assist delegates to select sessions to meet professional needs and interests.

Introduction

Demands on the emergency management sector are increasing in frequency and complexity, as climate change increases the potential for more extreme

weather events – and exacerbates inequality.² One in six Australians are estimated to be exposed to disasters in their lifetime (McFarlane, 2005) and a more recent Australian national survey in 2010 indicated an even higher figure of one in three having had 'direct disaster experience' in their lifetime (Reser, Bradley, Glendon, Ellul, Callaghan, 2012, p. 15). Disaster provides a different context for violence against women. It is essential to understand what this context is, and how it affects men, women and children. Southern Australia is expected to see an increase in the length and intensity of droughts and harshness of fire weather, while extreme rainfall and coastal flooding will be more frequent and severe across the country (The Climate Council, 2017). In Victoria, for example, Melbourne's urban-rural fringe residents are among the most vulnerable in the world to bushfire hazards (Buxton, Haynes, Mercer, & Butt, 2011). Victoria comprises only 3% of the landmass of Australia, yet two-thirds of civilian deaths and half of economic losses in the context of disasters have occurred in the state (The Climate Council, 2017). In order to manage competing demands on time and resources, an efficient emergency management approach needs to apply the latest research into policy and action. Building relationships between operational roles, research, policy development, and programme development will build increased capacity to meet the needs of modern Australasia.

Experience of disaster differs for individuals and groups, and an 'all communities' 'diversity and inclusion' approach is increasingly recognised. The National Strategy for Disaster Resilience articulates ways in which the diverse composition of Australian communities influences specific vulnerabilities and strengths. Factors such as gender, socio-economic status, mobility, age, disability, location, and English language skills play a central role in determining the outcomes for individuals in, and

1 While recognising that the terms disaster and emergency refer to different phenomena, the terms are both used in this document due to differing language in papers, policies and organisational titles.

2 This paper focuses on climactic disasters rather than terrorism.

following, disasters (Attorney-General's Department, 2011); and indeed in the ability of individuals to plan and prepared for disasters. These can be considered as the social determinants of disasters. Consequently, certain communities may need tailored advice and support when preparing for, or experiencing acute shocks, particularly as everyday risk factors for vulnerability are exacerbated in times of disaster. Disasters pose health risks for women, men, girls and boys, and people of diverse sexual and gender identities, especially those with limited personal and financial resources or existing physical and mental health conditions (Brumby, Chandrasekara, McCoombe, Kremer, & Lewandowski, 2011; UNAIDS, 2012). Disasters heighten inequalities, marginalisation is increased, and risk factors are multiplied. At each stage – from preparation, response and recovery, reconstruction and reformation of affected communities – disasters' impacts are different depending on circumstances.

How can the needs of these diverse groups be most effectively considered and incorporated into disaster planning, response and recovery – within resource limitations?

How can the particular skills and knowledge of different groups be harnessed to build more disaster-resilient communities?

Background

International

The prevailing international policy documents on disaster management recognise a broad cycle of disaster that includes planning, response and recovery. The most prominent of these documents are the Hyogo Framework for Action (2005-2015) and its successor, the Sendai Framework (2015-2025). These documents outline and uphold the understanding that a whole-of-society, multi-sectorial response that engages all stakeholders is required to effectively respond to the emerging challenges. While the particular challenges faced in each region are different, these documents prioritise building resilience and recognising the needs and vulnerabilities of diverse groups, including women (Spencer, Bailey, Muir, Majeed & McArdle, 2016, p. 6).

Disaster risk reduction requires an all-of-society engagement and partnership. It also requires empowerment and inclusive, accessible and non-discriminatory participation, paying special attention to people disproportionately affected by disasters, especially the poorest. A gender, age, disability and cultural perspective should be integrated in all policies and practices, and women and youth leadership should be promoted. In this context, special attention should be paid to the improvement of organized voluntary work of citizens.

(Sendai Framework, 2015-2025; Para 19 (d)).

The broad-reaching and ambitious Sustainable Development Goals³ also consider the risk of disasters,

mentioning them specifically in five of the seventeen goals (1, 11, 13, 15, 17). The Sustainable Development Goals (SDGs) have been endorsed by Australia and apply in this country. It is clear that the risks posed by natural hazards and climate risk must be considered in relation to intersections with other issues such as poverty, gender inequality, and environmental degradation etc.⁴ The poor and the vulnerable, however defined, face disproportionate risks during disasters. By addressing the SDGs and building the capacities of these vulnerable groups, it is possible that disaster resilience is increased across the board, reducing generic vulnerability and improving outcomes of disasters.

The United Nation's 2017 Climate Change Conference continued to emphasise the importance of engaging with all actors. Alongside increased financing for a number of initiatives to protect the environment, it developed a 'gender action plan', as well as establishing a 'Local Communities and Indigenous People's Platform' (UNFCCC, 2017). This reflects the way in which diverse communities must be considered and empowered in order to face the increase in extreme weather events that will accompany climate change.

While disaster management is a national, state and local issue, the Sendai Framework represents the international consensus on best-practice emergency management and, together with the Sustainable Development Goals, indicates the importance of the topic of the *Diversity in Disaster* Conference. The Australian Government is party to these frameworks and goals, and has begun taking steps to improve emergency management, but much work needs to be done. This Conference is positioned to identify constructive strategies to reduce inequalities and increase resilience across our communities.

How does the international policy consensus relating to disasters influence domestic policy?

How can Australia better align with the internationally recognised policy consensus relating to disasters?

Australia

Extensive work around Australia has examined the needs of people who may be vulnerable in emergencies, but significant work is required to put these findings into practice. The Victorian Bushfire Royal Commission's *Final Report* into the causes and circumstances of the 2009 bushfires stated that the Victorian government, municipal councils and families should recognise in their emergency planning the specific needs of vulnerable people who might need early warning, assistance or separate consideration (Teague, McLeod, & Pascoe, 2010).

3 See <http://www.un.org/sustainabledevelopment/sustainable-development-goals/>.

4 Climate risk includes regular weather conditions, seasonal patterns, climate variability and longer term climate changes.

The report from the Community Engagement Sub-Committee (CESC) of the Australia-New Zealand Emergency Management Committee (ANZEMC), *Vulnerable Sections of Society (an emergency management perspective)* states that ‘...although there has been significant investment in a range of initiatives targeting those in the community who are most vulnerable, the emergency management sector needs to rethink the way in which it approaches this issue whilst gaining an appreciation and understanding of the complexities and factors that lead to vulnerability’ (ANZEMC, 2015, p. 6). The Queensland Government developed the People with Vulnerabilities in Disaster policy which aids emergency service workers to identify people with vulnerabilities and plan effectively for them during disasters (Department of Communities, Child Safety and Disability Services, 2016). In December, 2017, the Victorian Department of Health and Human Services’ Emergency Management Branch released a discussion paper entitled, *Review of the vulnerable people in emergencies policy*. The Victorian Department of Health and Human Services’ with a view to developing a framework to better meet their needs throughout all phases of emergencies. Amongst the broad-ranging review, the document points to current challenges:

Events such as Epidemic Thunderstorm Asthma and the Bourke Street tragedy are indicative of the changing face of emergencies and the changing faces of communities. Not all communities will be grounded by a common thread such as geographical location, or a shared interest such as sport or a cultural belief system.

(Victorian Government, 2017, p. vi)

A commitment to more comprehensively involve and reflect ‘the community’ is evident in the Victorian Emergency Management *Diversity and Inclusion Framework: Respect and Inclusion for All* (2016), which notes the importance of ‘current intelligence and evidence, not simply anecdote, assumption and past experience’ (Emergency Management Victoria (EMV), 2016, p. 13). It identifies an opportunity for emergency management services to play a leadership role in promoting resilience among vulnerable communities, and notes that ‘understanding the diverse needs, capabilities and expectations of different communities is imperative for ensuring their safety and strengthening their resilience’ (EMV, 2016, p. 4). The authors state:

In recent times, the prevalence of gender inequality in society and its impact has received increasing attention. Mental health issues are being more openly discussed. Measures to enable those with disabilities to participate more fully in work and recreational activities are expanding and becoming more common. The voice of young people and older people is more frequently sought and acknowledged. Pride in sexual orientation and gender identity is more widely celebrated. The momentum towards embracing diversity is building but it will still take committed leadership for widespread acceptance of diversity in all its forms to become the norm.

(EMV, 2016, p. 3)

Previously, over the period 2014-2016, EMV hosted the nationally unique Gender and Disaster Taskforce co-chaired by the Emergency Management Commissioner, Mr Craig Lapsley, and the EO of Women’s Health Goulburn North East, Ms Susie Reid, with additional funding, including from the Australian Attorney-General’s Department under the NEMP scheme for national gender and emergency management guidelines.

Such approaches urge an evidence-based understanding of what constitutes vulnerability, and in-depth knowledge of how to communicate effectively with diverse communities. Clearly, a focus in 2017 in the emergency management sector has been on understanding diversity, capability and building resilience. In addition, the Australian Institute of Disaster Resilience has reviewed a number of manuals, ensuring issues such as gender and family violence⁵ are incorporated (Lamont, 2016).

The Victorian Council of Social Service (VCOSS) released a report in 2014, *Disaster and Disadvantage*, outlining how emergencies and disasters can impact people unequally. VCOSS has also released its report, *Building Resilient Communities* which examines ways that emergency services can use the networks and strengths of community sector organisations to develop community resilience (VCOSS, 2017).

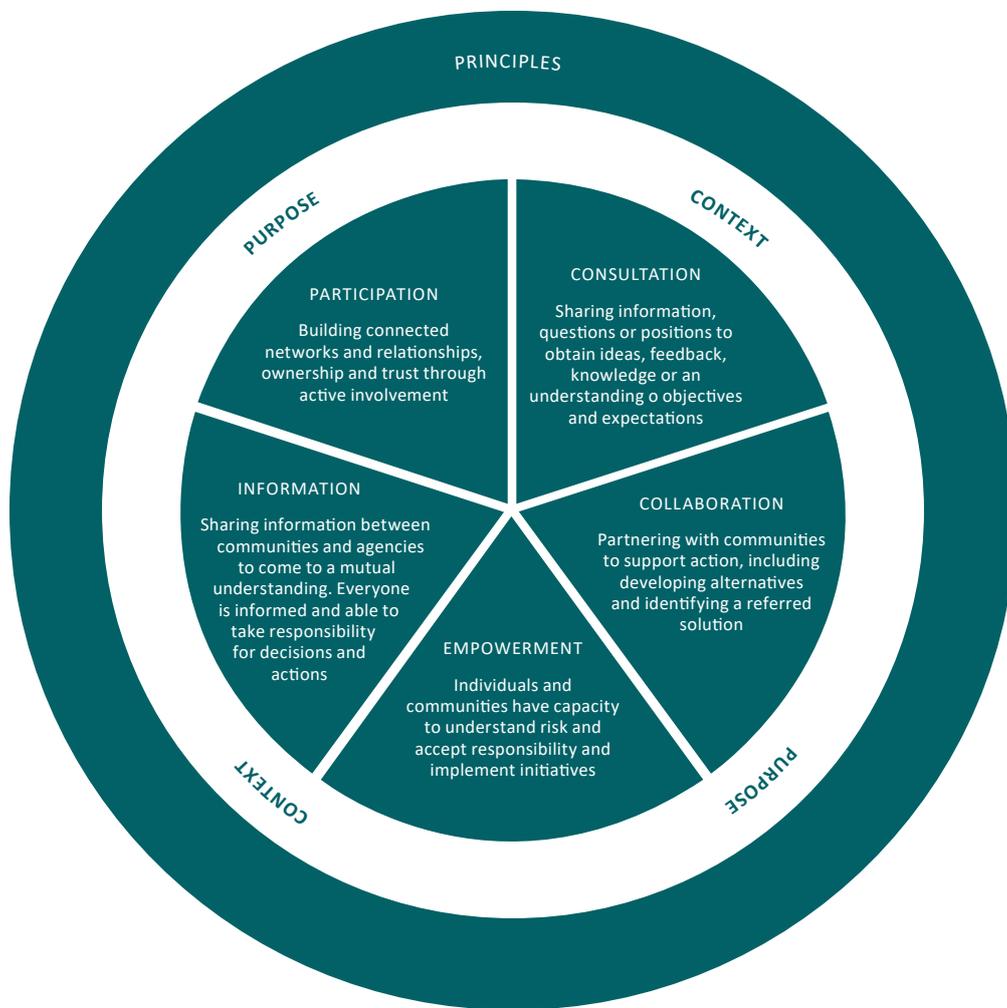
Currently, a new research study by the Bushfire and Natural Hazards CRC will examine ‘what effective diversity and inclusion is and how this can be measured’ in the emergency management sector (Young & Rasmussen, 2017). It aims to create a practical framework for emergency management to improve management of diversity and inclusion programs.

The nature of emergency management is such that demands on time are more acute than in many other sectors, and opportunities for translation of research into practice can be limited. A number of articles have highlighted the (historic) lack of connections between research and policy. Wiseman (2010) demonstrates that public sector policy makers and university-based researchers operate in ‘parallel universes’ which has an impact on how academic work is (or is not) translated into policy practice.

New Zealand

New Zealand has just released its Strategic Planning for Recovery document which outlines their program for recovery (Ministry of Civil Defence & Emergency Management, 2017). An important conference was held prior to this, in 2016. The *People in Disasters* conference was held to consider social issues following the Christchurch earthquakes some five years earlier. Like the *Diversity in Disaster* conference, the *People in Disasters* conference produced a statement of learning outcomes (Hedlund, 2016) and future directions afterwards (Deely & Ardagh, 2016).

⁵ The terms ‘domestic violence’ and ‘family violence’ are reluctantly used in this report reflecting their various use by participants, workers, authors and in different states and countries. These terms are euphemistic and infer an equal level of violence by men and women which is unsupported in crime statistics (VicHealth, 2011)..



Defining key concepts

Defining resilience is complex. One definition has been proposed by 100 Resilient Cities. Pioneered by the Rockefeller Foundation, this is a global program designed to help build urban resilience in an increasingly urbanised world. This program defines resilience as ‘the capacity of individuals, communities, institutions, businesses, and systems [within a city] to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience’.

The concept of resilience is recognised as an emerging practice where community connection is understood to be fundamental to preparing for whatever comes our way. This definition has also been adopted by the Victorian Government. The interplay between shocks and stresses is particularly important when we think about diversity, both generally, and specifically in relation to disasters. Resilient Melbourne and Resilient Sydney are part of the 100RC network, both committed to delivering actions and embedding resilience within their partner organisations and communities.

What do you understand resilience to be?

Why is it a contested word in the emergency management sector?

Definitions of community are similarly elusive (Owen, 2018). While the national trend is to consider more centrally the role of community, the concept of ‘community’ is an evolving part of the discourse in emergency management. Terms – including ‘community-led’, ‘community-based’ and ‘community-centric’ – are common in documents, policies and frameworks within the field, yet there is no agreed understanding of what these terms mean.

While ‘community-led’ is used in the National Principles for Disaster Recovery,⁶ the term and what it implies is contested within emergency management. There is willingness by the sector to think about the concept, however, this sits alongside reluctance to relinquish power. ‘Community-centric’ seems to be the most commonly used term across Australia. It reflects a focus on first understanding affected communities and their needs and strengths in an emergency or disaster context. IAP2s 2014 Public Participation Spectrum developed a conceptual framework for this direction (IAP2 International Federation, 2014).

The IAP2 spectrum underpins the Australia’s 2011 National Strategy for Disaster Resilience (COAG, 2011). Under the terms of the National Strategy for

⁶ https://www.communityservices.act.gov.au/__data/assets/pdf_file/0013/212314/The-National-Principles-for-Disaster-Recovery-designer-version.pdf.

Disaster Resilience, ANZEMC sponsored work to develop a specific community engagement policy and model for emergency management based on the IAP2 framework. The Community Engagement Framework is an emergency management specific model, replacing the general IAP2 model (Australian Emergency Management Institute, 2013).

The model includes the element of 'participation' to reflect that building connected community networks and partnerships are vital for recovery. The model is circular rather than linear highlighting that different forms of engagement may be appropriate at different times and are not necessarily part of a progression. The model acknowledges the many different types of communities and notes communities of place, interest, belief and circumstance.

Prior research has been conducted into community dynamics after a disaster. Commonly, decision-making voids and power vacuums are created, disempowering and disabling key disaster recovery stakeholders (Taylor & Goodman, 2015). Following Black Saturday, in the absence of authorising environments and sufficient empowerment of citizens, disaster dynamics emerged which included organisations using 'social defence' mechanisms⁷ and 'dominator politics'⁸. Despite best efforts, the absence of authorising environments and sufficient empowerment of citizens, service provider organisations, and local government authorities, and too much centralised 'top down, power-over', meant inevitably, unresolvable and bitter conflicts arose.

Who is excluded from decision-making in disaster contexts?

What do the 'voids' and 'vacuums' allow post-disaster?

How can communities prepare for the windows of opportunity that disasters create?

The concept of 'community' itself equally requires defining. The principle of 'Inclusion of all social groups in the community' (Turnbull & Moriniere, 2017, p. 6) is defined as 'equitable access by all members of a community—regardless of their social group—to information, resources and decision making opportunities about how to strengthen their resilience'. The authors go to say:

In practice, this means ensuring that the most marginalized and vulnerable are fully involved, either through direct participation or accountable representation, because the same barriers that cause their marginalization and vulnerability in society may stand in the way of their participation in DRM. These barriers may range from not knowing that the process is happening, or not feeling welcome due to exclusion from community governance structures, to not being able to afford to take time out from their livelihood activities, or not being physically able to attend meetings. In every society, there are power dynamics, and groups that may experience exclusion, making them more vulnerable to hazards and other threats. (Turnbull & Moriniere, 2017, p. 6)

The National Strategy for Disaster Resilience Community Engagement Model states the first principle of effective engagement with communities is understanding a community's capacity, strength and priorities (Australian Emergency Management Institute, 2013). This conference offers an opportunity for the emergency management and community sectors to gain insight into the factors that lead to vulnerability and, equally, to build on existing strengths within the community. It gives voice to under-represented groups and foregrounds the importance of community in reducing disaster risk and enhancing resilience.

What sections of the EM sector have access to new research and knowledge? Who misses out?

How does new knowledge influence policy?

How effectively does policy determine action?

How is lived experience to be documented?

How can it influence policy and practice?

Cross-cutting issues

Gender

The impact of disasters on people is gendered. The cultural conception of disasters is that men behave with authority, stoically, and heroically to defend the family and community (Eriksen, 2014b; Kahn, 2011). Men, mateship and heroism, dominate disaster imagery (Eriksen, Gill, & Head, 2010; Livingston, 2011; Phillips & Morrow, 2008) and the actions of women pass unrecognised and unrewarded. The myth of 'women and children first' persists despite evidence to the contrary. After examining 18 disasters over three centuries, Mikael Elinder and Oscar Erixson (2012) instead conclude that in disasters, it is 'every man for himself' (Elinder & Erixson, 2012; see also Whittaker, Eriksen & Haynes, 2016). Reporting of 'passive' women in disasters is equally misleading, resulting from inaccurate reporting and

⁷ The concept of 'social defence' was first proposed by Elliott Jacques (1955) and was developed by Isabel Menzies Lyth in her study of the nursing system in a London teaching hospital. The main idea is that individuals (or groups, or a set of procedures – various forms of social structures) can become bound together and 'institutionalised'. Whatever the form taken, it operates in order to defend against anxiety. Such defences are typically operating at an unconscious level, are deeply ingrained, hard to change, and often operate to as a 'shield', and become maladaptive. A state department's system of intensive proceduralism may be maladaptive, fail to see difference, and be a defence against the anxiety of 'not knowing' how else to proceed. The human suffering faced in disasters make a ripe 'ground' for the operation of social defences. See Gabriel (1998), Hoggett (2010), Jacques (1955) and Menzies (1960).

⁸ The phrase 'dominator politics' is phrase which brings together two words – politics: the activities associated with the governance of a country or area, especially the debate between parties having power and to dominate – to have power and influence over (Oxford Dictionary). These meanings are brought together here to describe a phenomenon which research participants gave voice to, as individuals, representing different 'points' along a vertical access of 'power'. When the higher power sought to exercise that power (example Commonwealth over State, and so on 'down' the line), acting by using their force, this sometimes meant that individuals thus impacted upon 'down the chain', could not carry out their role as they had understood their responsibilities. In the recovery environment, these differences were keenly felt. While experienced at the individual level, the idea arises from structural determinants. .

cultural valuing of masculine traits and abilities (Scanlon, 1997, 1998).

Gender shapes our world, and in Australia as in the rest of the world, the consequences of climate risks and disasters hit women harder than men (Alston, 2013). Women are vulnerable through notions that women and children are protected in disasters, through the caring role assigned to women, through lack of autonomy in decision-making; and exclusion from bushfire survival education (Parkinson, Duncan, & Weiss, 2014; Eriksen, 2014a). The poorest suffer the most in disasters, and most of the poor are women (Alston, 2013; Austin, 2008). It is society, rather than biology, that determines women's inequality and greater vulnerability to disasters (Enarson, 2012).

In a catastrophic disaster, it is frequently impossible for men to meet the standards required of stereotypical manhood and there are costs to men in terms of health, wellbeing and career (Pease, 2014; Zara, Parkinson, Duncan & Joyce, 2016). Hyper-masculinity, or the acting out of exaggeratedly masculine characteristics, can emerge in response to these feelings of inadequacy (Austin, 2008). Men are vulnerable through risk-taking, over-confidence, loss of a sense of control, reluctance to seek help, and failure to live up to expectations of them as 'protector' during the disasters, and 'provider' in the aftermath (Eriksen & Wait, 2016; Parkinson & Zara, 2016; Zara, et al., 2016).

Fire fighting has historically been perceived as a masculine pursuit, and as such, brings prestige (For example, Connell, 2003, 2005; Pease, 2014). A number of recent studies in Australia and the US refer to the masculine culture of fire fighting and subsequent barriers to women attempting to assume positions either on the front line or in senior roles (AFE, 2016; Delaine, Probert, Pedler, Goodman, & Rowe, 2003; Eriksen, Waitt and Wilkinson, 2016; Pacholok, 2013; Parkinson, Duncan & Hedger, 2015; Reimer, 2017). The barriers were documented in a Victorian Study in 2015 – as of 2014, only 20% of leadership roles in fire and emergency roles in the Department of Environment, Land, Water and Planning (DELWP) and the NEO agencies (Parks Victoria, VicForests, and Melbourne Water) were filled by women. Of the study's female respondents, more than a third (37%) felt they had faced barriers to leadership roles and only 26% did not see gender as a limitation to their career prospects (Parkinson et al., 2015).

People of diverse gender and sexual identities have not traditionally been considered as having particular needs in emergencies and disaster planning and response. Increasing research in Australia, New Zealand and around the world shows that people of diverse gender and sexual identities face very specific discrimination and vulnerabilities during and after disasters that are not experienced by others in society. (Dominey-Howes, Gorman-Murray, & McKinnon, 2014; Gorman-Murray, McKinnon, & Dominey-Howes, 2014, 2016; Gaillard, Gorman-Murray & Fordham, 2017; Gorman-Murray, Morris, Keppel, McKinnon, & Dominey-Howes, 2014, 2016; McKinnon, Gorman-Murray, & Dominey-Howes, 2016). For example, individuals found planning for disasters to be focussed on a heteronormative family,

witnessed discriminatory remarks being made by emergency service personnel, and were forced to present to be heterosexual to access counselling support. These groups have generally experienced a lifetime of discrimination and have less trust in agencies or institutions. Yet policies, practices and responses by governments, emergency management agencies and other organisations during and after disasters can be indifferent to their needs. At the same time, people of diverse gender and sexual identities and their communities also demonstrate resilience that can act as models for other marginalised groups. Ideally, the emergency management sector would work cooperatively with people of diverse gender and sexual identities to increase the resilience of all, through inclusion.

Despite the research cited above, a gender 'lens' is rarely used when studying the sociological aspects of disasters and crises (Eriksen et al., 2010). In considering gender, this conference applies such a lens.

What does consideration of gender mean in an emergency or disaster context?

How could a gender lens help in emergency management planning and recovery for women and men?

How are the experiences and outcomes of disasters different for people of diverse gender and sexual identities?

How can a gender analysis be standardised as part of effective disaster-related policy making?

How do gendered expectations determine the experience of disaster and its aftermath?

How might gendered expectations of behaviour influence individual responses to disasters?

Why are men particularly reluctant to seek help in the aftermath of disasters?

In response to identified gender issues, the *Gender and Emergency Management (GEM) Literature Review*, *GEM Guidelines* and *GEM Action Checklist* were collaboratively developed and informed by gender experts (<http://www.genderanddisaster.com.au/info-hub/national-gem-guidelines>). The Guidelines resulted from consultation with 350 emergency management personnel nationally and aim to provide a gender-sensitive approach to planning and delivery of disaster planning, relief and recovery. They outline practical steps that can be taken to support gender equity in disasters, particularly examining the needs of people of diverse gender and sexual identities, communication strategies and addressing domestic violence. Broad distribution of these guidelines is still in its infancy, awaiting the launch of the GEM Guidelines at this conference.

Violence

Extreme weather events may inflame conflict in communities and families (McCoy, Montgomery,

Arulkumaran, & Godlee, 2014; Rohr, Hemmati, & Lambrou, 2009; Strazdins, S, McMichael, Butler, & Hanna, 2011) and can disturb relationships, as a higher rate of marriage breakdown is evident after disasters and during prolonged drought (Alston & Whittenbury, 2013; Phillips & Morrow, 2008; Shaw, Unen & Unen, 2012).

There is compelling evidence that violence against women increases following large-scale disasters around the world – including in developed countries such as Australia and New Zealand (Campbell & Jones, 2016; Henrici, Helmuth, & Braun, 2010; Houghton, Wilson, Smith, & Johnston, 2010; Parkinson, 2017; Parkinson & Zara, 2013). The first Australian research to capture women’s experience of domestic violence after catastrophic disaster led to the development of ‘Identifying Family Violence after Disaster’ training, by Women’s Health Goulburn North East. Since 2012, this training has been delivered to police, local government, emergency services staff and volunteers to begin to address domestic violence in the planning, response and recovery phases of emergencies.

For organisations involved in emergency management and aware of prevention of domestic and family violence, the research contributed to the development of Local Government and Country Fire Authority policies and plans. For example, the Macedon Ranges Shire Council’s ‘Municipal Emergency Management Planning Committee’ established a ‘Prevention of Violence Against Women in Emergencies Subcommittee’, which then produced an action plan. This demonstrates commitment and action with regard to gender and violence after disasters in emergency management planning and is a practical example of how to include gender as a key consideration.⁹

In New Zealand, catastrophic disasters highlight the importance of, and provide the catalyst for, strengthening connections with stakeholders to explore new ways of thinking, working and responding to the complex issue of family violence. It was within this context that the Canterbury Family Violence Collaboration emerged in New Zealand. The aftermath of the 2010 and 2011 Christchurch earthquakes provided compelling reasons for the establishment of multi-agency collaborations in recovery and reconstruction, and the implementation of innovative and evidence-based strategies (Campbell & Jones, 2016).

However, these examples of award-winning work are not yet widespread, and in most jurisdictions, emergency workers are likely to be unaware of the need to incorporate awareness of domestic and family violence into emergency planning and recovery.

Why is pre-existing domestic violence a risk factor in disasters?

Why don’t women seek help for domestic violence after disaster?

How can emergency organisations and service providers incorporate knowledge of violence post-disaster to provide more effective support?

How might women experiencing domestic violence face particular challenges (such as with housing, transport and finances) during and after disaster?

Poverty

The Sendai Framework calls for further action on tackling underlying disaster risk drivers, such as the consequences of poverty and inequality (Sendai Framework, 2015-2025; Para 6). One of the main sources of vulnerability to a disaster is poverty and this is reflected for most of the groups discussed below.

Climate risks disproportionately affect disadvantaged communities, with more extreme weather events leading to a higher incidence of illness, injury and mortality. Those of low socio-economic status tend to be forced into cheaper peri-urban areas of metropolitan cities, many of which face higher disaster risks, and have inadequate housing. Due to poverty, they have fewer resources to escape and recover from disasters (Neumayer & Plümper, 2007; Dasgupta, Siriner & Partha, 2010, Hansson, 2007). For example, the health impacts of extreme heat were higher for the elderly and those with few economic resources. Climate risk strain the healthcare system, leading to reduced access to healthcare for those with few resources. Unemployment and economic insecurity intersect with extreme weather events and will create health issues and reduce health outcomes, especially for those outside Australia’s cities (Climate and Health Alliance, 2013, 2017).

Excluded Groups

Historically, emergency management has excluded a number of groups from planning, response and recover. Exclusion is sometimes based on age, location, physical and mental health, ethnicity, language, homeless or, pet or livestock ownership.

Older people

Socio-economic factors play a decisive role in determining disaster responses and outcomes. Low socioeconomic status can exacerbate other vulnerabilities, and this is particularly so for older people. The breakdown of community that sometimes follows disaster may particularly affect those older people who rely on informal social support. Boon, Cottrell & King (2016, p. 98) write that, ‘In the year following Hurricane Katrina, the health of elderly survivors declined at a rate of four times the national average for older adults not affected by the disaster’. The vulnerability – and the resilience – of older adults was evident during evacuations in the 2011 and 2013 floods in Brisbane (Miller & Brockie, 2015). Associate Professor Evonne Miller used the creative methodology of poetic inquiry to create poems (or poem-like prose) from interview

⁹ <http://www.mrsc.vic.gov.au/Live-Work/Fire-Emergencies/Emergency-Planning/Emergency-Management-Plans>.

transcripts. The poems highlight the different social resources older people have to draw on, especially during a crisis (Miller & Brockie, 2015). The challenge can be to understand that to many older people being prepared is a process, not a one-off activity, and not to assume what older people need, want or are capable of doing in an emergency (Cornell, 2015). It is also important to recognise that ageing healthily in remote disaster prone areas poses significant emergency management issues, particularly in the face of policies that encourage the elderly to remain in their own homes, reliant on in situ community care (Astill, 2017). Many varied emergency event types and life experiences influence meaning, and advice may be for older people or those with disabilities to accept *limitations* as distinct from *vulnerability*. It is important to note that older people may have important insights to contribute from their life experience, such as knowledge of local place and past disaster events, or experience in dealing with adversity. Feeling mentally able to cope is key to resilience (Cornell, 2015).

How can we empower older people to better prepare and remain safe in times of disaster?

How can older people bring their life experiences to inform emergency management and community behaviour?

What are the risk factors faced by older people in disasters?

How might social isolation play a role in risk for older people? - What kind of support systems could be implemented to ensure older people have access to the help and information they need in a disaster?

Children and young people

Children and young people tend to be overlooked in emergency planning (Davie, 2013). There is an emerging focus on how to support their increased resilience, but limited evidence exists on effective approaches (Masten, 2014; Ronan, et al., 2015). Over recent years, however, there has been a growing recognition that children have unique vulnerabilities and special needs in disasters (Anderson, 2005; Bonnanno, 2010). At the same time, awareness of the contributions children and young people can make to emergency preparedness and recovery is emerging (Peek, 2008).

Following the 2009 Black Saturday bushfires in Victoria a six year study involving over 1000 participants was conducted by The University of Melbourne. The Beyond Bushfires: Community Resilience and Recovery study (final report) contains recommendations that focus on the needs of children and also recognises that children should be involved in decision-making in age-appropriate ways in the emergency recovery phase (Gibbs, Bryant, Harms, Forbes, Block, et al., 2016). Providing children and young people the opportunity to actively contribute to all phases of emergency management planning has the potential to bring fresh and innovative thinking and action into emergency management activities. Allowing children to have a voice is an important action that can

be undertaken by the emergency management sector to increase diversity in emergency management in both age diversity and with new and forward-thinking ideas that can find unique solutions to the challenges of climate change.

When children have the opportunity to be involved in emergency management not only will this increase diversity, it will also help Australia to meet responsibilities outlined in the *Sendai Framework for Disaster Risk Reduction and meet obligations of the Convention of the Rights of the Child*.

What considerations need to be in place to plan for children's unique needs?

What type of educational programs could be implemented to build disaster resilience in children?

What programs could be implemented in the post-disaster context to build resilience?

What actions can emergency management planners take to give children and young people a voice in emergency management planning?

People with animals and pets

Pet and livestock owners as a group require a level of special consideration, as animal ownership both increases vulnerability and can improve general resilience and recovery post-event (Taylor, McCarthy & Bigelow, 2017; Thompson et al., 2014). Those who have animals – including household pets, exotic animals, assistance animals, horses, pet livestock, livestock – require additional assistance in planning for their animals to ensure that they are able to protect them in an emergency, as well as themselves and their households.

Approximately two-thirds of Australian households include pets (Taylor, et al., 2017). Some may be at increased risk particularly when they have fewer resources to manage their animals, e.g. lower community connectedness, greater dependence on others or community services, and no access to private vehicles or transportation equipment such as floats and crates. This can be an issue in evacuation situations, particularly when the importance of animals to many individuals and families may be underestimated. Some may have a greater emotional attachment or dependence on their animals. An example is people who rely on support animals, such as people with visual impairments, children with autism, and those with mental health needs. Children can have close bonds with animals, and adults may rely on pets or animals as sole companions, including amongst the elderly living alone, the homeless, and socially isolated people.

Although animal ownership can be considered a risk factor in emergencies, it is also important to note that animals can be a conduit to encourage preparedness (Thompson, et al., 2014) and can be the 'glue', providing additional ways to connect communities. The concept of the 'Animal Ready Community' (or ARC) will be discussed at the conference. The ARC model is a community-led

approach to build networks to motivate and support communities to advocate for animals to be included in preparedness and planning, response, and recovery (Taylor, et al., 2017). To achieve this, greater community engagement with animal owners by the emergency management sector (particularly response agencies) will enable local solutions to animal emergency management challenges.

How does pet or animal ownership increase disaster risk?

How can emergency planning more effectively consider animals and their owners?

Rural and remote communities

Rural areas are at a 'higher risk of floods, storms and bushfires, and the impacts that follow such extreme weather events and disasters are deeper as a result of the decades' long rural economic decline' (Parkinson, Duncan & Weiss, 2014, p. 19). Socio-economic factors are particularly acute in rural areas where there is often a direct link between poverty and disaster resilience). The agricultural industry is vulnerable to extreme weather, as farmers risk losing the source of their livelihood in times of disaster (Alston, 2013; Boon, 2016). Amongst people living in disaster prone regions or where there is economic instability, the risks associated with climate change have an impact on mental health (Clarke, 2010; Fritze, et al., 2008). In contrast, it has been theorised that privileged groups with substantial economic resources perpetuate environmentally destructive norms and practices (Enarson & Pease, 2016; Pease, 2016). The concept points to the reproduction of privilege without concern for the costs of their ecological irresponsibility. This is yet to be costed and fully acknowledged.

How could the financial strain and stressors be eased for those in rural and remote communities in times of disaster?

The research focus is often on those who are disadvantaged. What is the role of the privileged classes in perpetuating climate change and its disproportionate impacts?

People who are homeless

Findings from the first Australian study on homelessness and extreme weather revealed those experiencing homelessness become more vulnerable during extreme weather, as many lose their shelter (tents, safe sleeping spaces or temporary structures), experience increased or new mental health issues, and lack access to early warning systems and educational resources (Every & Richardson, 2017).

How can homeless support services be better equipped to cope during extreme weather events?

What strategies have been employed to keep homeless people safe?

Migrants, refugees and asylum seekers

Lack of experience with bushfire (and flood) creates vulnerability, and this has been noted in regard to newcomers to rural areas (Boon, Cottrell & King, 2016). Asylum seekers and new refugee arrivals (those still in the settlement phase) may not have access to, or understanding of, critical preparatory and emergency risk communication information. Research (Hanson-Easey, Hansen & Bi, 2015) suggests that this group is particularly vulnerable in emergencies and disasters because mainstream and translated messaging do not account for their discrete socio-cultural contexts and communication needs. This vulnerability is amplified if new arrivals lack social supports (social capital) – people who can act as translators, or 'sense-makers', of preparatory and emergency messages.

The lived experience of life-threatening incidents often means that some refugees and asylum seekers may seem to take unwise and unpredictable initiatives in cases of emergencies. Others, already traumatised by previous life events, may freeze. In contrast, while refugees and asylum seekers may be thought to be at higher risk in a disaster, resilience and leadership can be found in those who have already survived disasters (Asquith, Bartkowiak-Théron & Roberts, 2017; Bartkowiak-Théron & Asquith, 2012; Lakhina & Eriksen, 2017). If professionals are not alert to the wide-ranging scope of reactions to disasters, including the possibility that some people have more experience of emergencies than they do (but not necessarily the ability to communicate it) then risks may rapidly escalate (Asquith, et al., 2017).

How can the specific needs of migrants, refugees and asylum seekers be included in disaster planning, response and recovery?

How could technology or different communication channels be used to reduce the barriers to information for those with a language other than English?

How can emergency management draw on the life skills of refugees and migrants in a disaster?

People with a BMI over 40

Groups with particular health-related vulnerabilities may be disproportionately affected by disasters. People with a Body Mass Index of 40 and above (BMI >40) are not presently considered in the disaster literature or policies (Gray & MacDonald, 2016). Those with BMI >40 are over-represented in those groups known to be at increased risk in disasters, such as women, ethnic

minorities, people with chronic health conditions, and people with low socio-economic resources. Without appropriate consideration, people with BMI >40 face may be exposed to disproportionate and potentially avoidable risk (Gray, 2017). It may be the only difference between being rescued or being left behind, as documented in several studies, where fear of blocking evacuation routes meant obese hospital patients were left until last (Gray & MacDonald, 2016). The difficulty in carrying stretchers with obese patients down darkened stairwells was noted, along with a case where one woman was indeed left behind during Superstorm Sandy. It was documented that she was too wide for the evacuation sled and there were 15 flights of stairs (Gray & MacDonald, 2016).

What are the risks faced by those with a BMI over 40 in times of disaster?

What are the costs to the health system of not considering the needs of people with a BMI over 40?

What are the implications for first responders when assisting people with a BMI over 40?

People with mental illness

People experiencing a mental illness face particular challenges in preparing, responding and recovering from natural disasters (Every, 2015; Every, et al., 2016). Around half the Australian population will experience a mental illness in their lifetime (Every, 2015). Research from the US and Australia has examined psychological preparedness and decision-making and their relationship with anxiety, depression, trauma and life stressors (Every, 2015; Every, et al., 2016; See also, Gordon, 2007). Depending on the nature and characteristics of the mental illness, emergency planning and response are impacted by fewer economic and social resources, stereotypes and misunderstandings. People are less likely to have the necessary supplies for a disaster or may experience new or recurrent symptoms afterwards. Several sets of guidelines for assessing mental health in disasters have been published in recent years (Australian Psychological Society, 2013). In contrast, it has been observed post Black Saturday that people with lived experience of mental illness drew on their knowledge of the system to offer strength and expert guidance to others in their community. While formal support services often missed the mark in relating to people's mental state after this catastrophic disaster, people who knew about mental illness at a personal level were of great benefit to their communities (D. Taylor, Personal Communication, 17/1/2018).

In what way could disaster resilience be built among those with existing mental health concerns?

Disaster experience is a stressor which could exacerbate existing mental health concerns – how can we ensure that these people have access to the help they need after disasters?

What support systems are already in place, and how can these be improved?

People with a disability and those with a chronic health condition

A study after the Japanese earthquake in 2011 found that people with disability are twice-to-four times more likely to be killed or injured than the general population (UNESCAP, 2015). It has been found that they are the first to be left behind and the last to be rescued, and their rights to protection and safety are often denied (Villeneuve, 2015). Australians living with disability or chronic health condition are more at risk in disasters such as heatwaves, floods and bushfires (Villeneuve, 2015; 2017). Limited mobility, compromised health, reliance on equipment, and difficulty with seeing or hearing emergency bulletins can all contribute to vulnerability in emergency situations. They may have limited access to early warnings and lifesaving information and procedures; and/or, they may not be able to act on this information in times of emergency, such as independently evacuate (Robinson & Kani, 2014).

Given the variability, complexity, and available resources for people with disability and chronic health conditions who live in the community, preparing for emergencies requires a multifaceted approach. Leveraging existing local resources can extend the preparedness system's reach to the whole community (Levin, Berliner & Merdjanoff, 2014). Disaster planning should therefore incorporate the functional needs of people with disability and chronic health conditions (Kailes & Enders, 2007). Home health and community-based disability support providers are optimally placed to enhance the preparedness of people with disability and chronic health conditions because they may be one of the few resources that understand the functional needs of their clients and the capabilities of their clients in their local community context (Levin et al., 2014). As yet, community health and disability support providers who are on the front line of community care and support for people with disability and chronic health conditions have not been integrated into the emergency management system as a resource for community resilience (Villeneuve, 2017). Typically, neither are they adequately prepared for disasters themselves (Villeneuve, 2017).

Those who live with vision impairment and blindness have also been found to be excluded from the disaster planning process, and can be particularly at risk during times of crisis and forgotten in the rebuilding and recovery phases after disasters and emergencies (Good & Phibbs, 2017; Good, Phibbs & Williamson, 2016; Good, 2016). In research following the 2010-2011 Christchurch New Zealand earthquake series (Good, Phibbs &

Williamson, 2016) researchers interviewed participants who were blind and vision impaired and highlighted the importance of communication and technology, personal and agency support, orientation and mobility skills, health and hygiene, rebuilding independence, rehabilitation, coping and resilience. Participants demonstrated creative problem-solving abilities, resilience and community spirit. Results indicated that older vision impaired persons are vulnerable in disasters and more needs to be done to prepare communities, agencies, families and individuals for potential disasters. Older vision impaired participants also indicated that there were major health and safety concerns after the earthquakes related to access to medications, safe use of chemical toilets, hygiene in evacuation centres and health and well-being of Guide Dogs. Blind and vision impaired adults reported an erosion of their sense of mastery and independence over time, since the aftershocks went on for many months. The practicalities and inconveniences of disrupted schedules, changed landmarks and terrain, damaged homes and the risks of post-traumatic stress emerged in this research.

Other research (Good, 2016) explored the impact of disasters on school children who have impairments. Few disabled children have individual safety plans, which could prevent the exacerbation of disability, save lives and reduce the risk of displacement during rapid evacuations and slow reunification with families following a disaster. The gaps in school disaster and emergency planning for children with disabilities are wide. Children using wheelchairs, on ventilators, those who are non-verbal, those with autism, blindness, hearing or other disabilities could benefit from careful planning for individualised safety plans in the event of natural or man-made disasters and emergencies. More attention needs to be directed to the needs of disabled children in the aftermath of a disaster. The risks of separation from parents and caregivers, illness, disease, malnutrition, abuse, and abandonment make careful disaster planning for children with disabilities crucial. When disabled children and adults are integrated well and included in their communities, they stand a better chance of survival and resilience during and after disasters and emergencies, as it is those who have day-to-day contact with them prior to disasters that are most helpful (Good, 2016; Boon & Pagliano, 2014).

How do different disabilities affect the disaster experience?

How can emergency services plan for individuals and families living with disability and chronic illness?

Disability-inclusive disaster risk reduction (DIDRR)

A collaboration between the Centre for Disability Research and Policy and the Natural Hazard's Research Group, the University of Sydney produced Local Emergency Management Guidelines for Disability Inclusive Disaster Risk Reduction in NSW (Centre for

Disability Research and Policy and Natural Hazards Research Group, 2017).

These guidelines support the emergency management sector to work in collaboration with community service organisations that support people with disability and their families in the community – to ensure that the needs and voices of people with disability are included in disaster risk management. The guidelines identify four principles of DIDRR: (a) accessibility; (b) participation; (c) collaboration; and (d) non-discrimination. The DIDRR framework presented in the guidelines offers actionable tools for local emergency managers to apply DIDRR principles in their practice. The guidelines recognise that there is not one distinct starting point for engaging in DIDRR, that developing local knowledge for DIDRR requires emergency management and disability sectors to engage together – developing agile systems of partnership that remove structural barriers that compromise the participation of people with disability in emergency preparedness. The guidelines promote community service organisations, particularly those with disability expertise, as key community resources for emergency managers to engage in DIDRR.

Privileged Groups

In the previous section of this report, people's positioning in various social divisions is noted in relation to levels of risk for experiencing environmental disasters. In addition to focusing on vulnerabilities to disasters and the exclusion of disadvantaged groups from emergency management responses, we need also to consider the perpetuation by privileged groups of environmentally destructive norms and practices which cause most disasters (Kajiser and Kronsell 2015). When privileged groups engage in unsustainable practices, they represent the norm of the 'good life' and become an aspirational lifestyle model for other groups.

It is also important to illustrate how people in privileged groups construct their denial about the levels of risk associated with global warming which is at the heart of many disasters. We need to learn more about how members of privileged groups distance themselves emotionally from the consequences of disasters. Why do so many privileged people ignore the threats posed to the environment from global warming? (Norgaard 2012).

To explore these issues, it is necessary to examine the ways in which environmental privilege is exercised. Environmental privilege refers to the ability of privileged groups to keep environmental amenities for themselves and to exclude less privileged groups (Pellow 2017). Most scholarly work on diversity and disasters focuses on the experiences of people who are structurally disadvantaged. Consideration needs to be given to the experiences of privileged people who gain benefits from environmental disasters. For example: How does whiteness inform diversity work in disaster contexts? (Jensen 2011). How does hegemonic masculinity and male privilege shape emergency management responses to disasters (Pease 2014).

Knowledge dissemination

In line with the international Sendai Framework and the Focus of the 2017 UNISDR International Disaster Reduction Day which examined decreasing the number of people affected by disaster, the following sections consider how disaster research is collated and shared. Specifically, it looks at including Indigenous practices and consolidating disaster resources with online tools to reach broader audiences.

Indigenous knowledge and practices

Research from Darwin reveals there are complex systems of accountability and care supporting disaster resilience in housed and homeless Aboriginal communities in the greater Darwin region (Spencer, Christie & Wallace, 2016). Narratives of previous cyclones keep alive strategies for caring for friends and family. Such strategies include ensuring sound knowledge of all services – including Police, Local Indigenous Night Patrols, and other emergency services. Networks of communication are central to disaster planning and response, as is knowledge of safe sites, both formal and informal, and shelters preferred by particular clan groups (Spencer et al., 2016; Emergency Management Australia, 2007).

The extent to which Aboriginal and Torres Strait Islander knowledge is drawn upon by the emergency sector across Australia is unclear (Eriksen & Hankins, 2014), however there is considerable interest in the collaborative development of disaster management strategies by many Indigenous groups (Emergency Management Australia, 2007).

Examples of traditional fire management can be found here:

<http://news.cfa.vic.gov.au/news/traditional-cool-burn-a-revelation.html>

<http://news.cfa.vic.gov.au/news/d14-receives-book-to-inspire-action-for-nrw.html>

<http://news.cfa.vic.gov.au/news/traditional-burning-learning-in-gobur-and-merrijig.html>

In New Zealand, a Ministerial review released by the Minister of Civil Defence concluded that emergency management practice in the last 15 years has not matched the intention of the original *Civil Defence and Emergency Management Act*, resulting in variations in practice and capability across New Zealand (Ministry of Civil Defence & Emergency Management, 2018). The review supports continuing joint committee governance and recognises that clearer arrangements with iwi (the largest social units in New Zealand Māori society)¹⁰ are required in protocols, coordination and planning structures:

Iwi need to have a major role in regionally based arrangements. Currently the resources, capability, and social capital of iwi to assist in emergency response is not recognised in legislation, and specific needs of Māori, whanau, hapū, and iwi are often not recognised in Group plans. We found a compelling

case for iwi to be represented at all levels of the Group structure from our meetings with iwi and our reading of submissions received. As a result, we recommend clearer protocols with iwi, and full participation of iwi in coordination and planning structures. (Ministry of Civil Defence & Emergency Management, 2018, p.3)

What Indigenous skills or knowledge may be useful for building disaster resilience?

How can Indigenous knowledge of country be better incorporated into disaster planning?

How is New Zealand incorporating Indigenous expertise in disaster management?

Online tools

A key area of interest for increasing disaster resilience across all communities is knowledge and information transmission, including the use of online tools. In seeking to embrace diversity and inclusion in planning for, responding to and recovering from emergencies and disasters, EMV aims to increase capacity by reaching out to excluded groups in a range of ways to incorporate diverse skills, experience and perspectives to emergency management. A range of channels are now used to increase access to information and warnings by more community members, such as websites, apps, social media, community alert sirens, hotlines, mobile and fixed-line phones through the national Emergency Alert, radio and television broadcasters, media conferences with AUSLAN interpreters. The Red Cross' developed RediPlan and its supporting mobile application in 2015 (Red Cross, 2016). It is increasingly being adopted nationally.

Online learning resources offer new possibilities for community-based providers to develop their person-centred planning for emergency preparedness and extend to people with disabilities and chronic health conditions (Norris, Stevens, Pfefferbaum, Wyche & Pfefferbaum, 2008; Villeneuve, 2017). Disability support and community health providers may not be adequately prepared for disasters nor well integrated into the emergency management system. Online tools may

leverage their role and help them contribute to emergency preparedness of people with disability and chronic health conditions. One such tool, PREPARE NSW is currently in development (Villeneuve, 2017).

The Compendium of Victorian Community-based Resilience Building Case Studies shares examples of resilience-building activities from people across sectors, councils and community groups (Monash University Disaster Resilience Initiative & Emergency Management Victoria, 2017). It provides the data for analysing challenges and critical success factors for community-based initiatives. This enables the replication of

¹⁰The Māori language word iwi means "people" or "nation", and is often translated as "tribe", or a confederation of tribes. (<https://en.wikipedia.org/wiki/Iwi>).

successful outcomes and best practices while avoiding duplication. Interestingly, the compendium notes that women represent an 'unaligned force' within community strengthening initiatives across the State of Victoria (Goode, Spencer, McArdle, Salmon, & Archer, 2015). It is anticipated that the Compendium may evolve to an online resource, thereby enabling Australia-wide access to this rich resource.

What type of online tools would be most useful during disasters?

How can these tools be designed to be accessible for all groups – including the elderly, those with disability, those speaking a language other than English – and encourage their participation in emergency management?

How can these tools be optimised/be made more widely used?

Conclusion

This Issues Paper outlines the main themes that will be presented at the *Diversity in Disaster* Conference to be held in Melbourne on 17-18th April, 2018. The Paper raises topical issues and aims to spark delegates' curiosity prior to attendance.

It outlines the needs and vulnerabilities in times of disaster identified by specific groups. Equally, it recognises the strengths and capabilities of marginalised communities, and considers how they can be supported to contribute to their own and others' safety and resilience. The Conference will address how to reach out to marginalised groups in a manner that is meaningful to them – via channels they readily use – so that they are able to contribute their skills, experience and perspectives to emergency management.

At this conference, people will speak of their own experiences of disasters and the emergency management sector. They will speak both from within and from outside, both those with power and those denied power. Others will speak *on behalf of* particular groups, having captured their experience with consent and authorisation through ethical research. Some will speak as practitioners in a range of emergency management roles. Some will speak on the experiences of slightly more than half the population. What is said will be welcomed by some, rejected by others, and may challenge many.

At the forefront is a shared aim to assist the emergency management sector in achieving its goal of better reflecting and connecting with the community it serves (EMV, 2016). Achievement of this aim will lead to inclusion of the needs and contributions of diverse groups into disaster planning, response and recovery – within resource limitations.

“The need for effective disaster risk management is greater than ever and demands a change in the way we work. As agreed in the Sendai framework

for disaster risk reduction 2015 2030, we must go beyond preparedness and response, so that people do not remain in a vicious cycle of poverty and disaster. We must be inclusive and prioritize the needs of the most vulnerable. We must empower communities to plan and drive change, and reinforce governments' responsibility to provide their people with a protective and enabling environment.
(Turnbull & Moriniere, 2017, p. 3)

References

- AFE. (2016). Position Paper: Sexual Harassment and Gender Discrimination in Wildland Fire Management Must be Addressed. Association for Fire Ecology. Retrieved from <https://fireecology.org/page-1807009>
- Alston, M. (2013). Gender and climate change in Australia. *Journal of Sociology*, 47, 53-70.
- Alston, M., & Whittenbury, J. (2013). Does climatic crisis in Australia's food bowl create a basis for change in agricultural gender relations? *Agriculture and Human Values*, 30, 115-128.
- Anderson, W.A. (2005). Bringing Children into Focus on the Social Science Disaster Research Agenda. *International Journal of Mass Emergencies and Disasters*, 23(3), 159-175.
- ANZEMC. (2015). *Vulnerable Sections of Society (An Emergency Management Perspective)*. Barton, ACT: AG Dept.
- Asquith, N.L., Bartkowiak-Théron, I. & Roberts, K. (2017). *Policing Encounters with Vulnerability*. Cham, Switzerland: Palgrave MacMillan.
- Astill, S. (2017). Ageing in remote and cyclone-prone communities: geography, policy, and disaster relief: Ageing in remote and cyclone-prone communities. *Geographical Research*, 1-13. doi:10/1111/1745-5871.12228
- Attorney-General's Department. (2011). *National Strategy for Disaster Resilience*. Retrieved from: <https://www.ag.gov.au/EmergencyManagement/Documents/NationalStrategyforDisasterResilience.PDF>
- Austin, D. W. (2008, July 31). Hyper-Masculinity and Disaster: Gender Role Construction in the Wake of Hurricane Katrina. Paper presented at the annual meeting of the American Sociological Association Annual Meeting, Boston. Retrieved from http://research.allacademic.com/meta/p_mla_apa_research_citation/2/4/1/5/3/p241530_index.html
- Australian Emergency Management Institute. (2013). *National Strategy for Disaster Resilience: Community Engagement Framework, Handbook 6*. Attorney-General's Department: Australian Government. Retrieved from: <https://knowledge.aidr.org.au/resources/handbook-6-community-engagement-framework/>
- Australian Psychological Society. (2013). *Psychological First Aid: An Australian guide to supporting people affected by disaster*. Australian Psychological Society & Australian Red Cross. Retrieved from: <http://www.psychology.org.au/Assets/Files/Red-Cross-Psychological-First-Aid-Book.pdf>
- Bartkowiak-Théron, I. & Asquith, N. L. (Eds.). (2012). *Policing Vulnerability*. Annadale: Federation Press.
- Bonanno, G.A., Brewin, C.R., Kaniasty, K., La Greca, A.M. (2010). Weighing the Costs of Disaster: Consequences, Risks, and Resilience in Individuals, Families, and Communities. *Psychological Science in the Public Interest*, 11(1), 1-49.
- Boon, H. (2016). Perceptions of climate change risk in four disaster-impacted rural Australian towns. *Regional Environmental Change*, 16(1), 137-149.

- Boon, H. J., Cottrell, A., and King, D. (2016). *Disasters and Social Resilience: a biocological approach*. Routledge Explorations in Environmental Studies. London: Taylor & Francis.
- Boon, H.J., and Pagliano, P.J. (2014). Disaster education in Australian schools. *Australian Journal of Environmental Education*, 30(2), 187-197.
- Brumby, S., Chandrasekara, A., McCoombe, S., Kremer, P., & Lewandowski, P. (2011). Farming fit? Dispelling the Australian agrarian myth. *BMC Research Notes*, 4(89). doi: 10.1186/1756-0500-4-89
- Buxton, M., Haynes, R., Mercer, D., & Butt, A. (2011). Vulnerability to bushfire risk at Melbourne's urban fringe: The failure of regulatory land use planning. *Geographical Research*, 49, 1-12.
- Campbell, L., & Jones, S. (2016). An Innovative Response to Family Violence After the Canterbury Earthquake Events: Canterbury Family Violence Collaboration's Achievements, Successes, and Challenges. *Australasian Journal of Disaster and Trauma Studies*, 20, 89-100. Retrieved from https://www.massey.ac.nz/~trauma/issues/2016-2/AJDTs_20-2_Campbell.pdf
- Centre for Disability Research and Policy and Natural Hazards Research Group. (2017). *Local Emergency Management Guidelines for Disability Inclusive Disaster Risk Reduction in NSW*. University of Sydney: New South Wales.
- Clarke J. (2010). *The Health Impacts of Climate Change and Drought on Women in Loddon Mallee Region*. Bendigo: Women's Heath Loddon Mallee.
- Climate and Health Alliance. (2013). Briefing Paper No. 1: Climate change is a health issue. Retrieved from http://www.caha.org.au/briefing_papers
- Climate and Health Alliance. (2017). National Consultation regarding a National Strategy on Climate, Health and Well-being for Australia. Retrieved from https://d3n8a8pro7vhm.cloudfront.net/caha/pages/27/attachments/original/1496018461/CAHA_Final_Consultation_Report_May_2017_FINAL.pdf?1496018461
- Connell, R. W. (2003, October). The Role of Men and Boys in Achieving Gender Equality. Paper presented at the Division for the Advancement of Women (DAW) in collaboration with International Labour Organization (ILO), Joint United Nations Programmes on HIV/AIDS (UNAIDS), United Nations Development Programme (UNDP) Expert Group Meeting, Brasilia, Brazil. Retrieved from <http://www.un.org/womenwatch/daw/egm/men-boys2003/Connell-bp.pdf>
- Connell, R. W. (2005). *Masculinities* (2nd ed.). Berkeley and Los Angeles, California: University of California Press.
- Cornell, V. (2015). What do older people's life experiences tell us about emergency preparedness? *Australian Journal of Emergency Management*, 30(1), 27-30.
- Council of Australian Governments. (2011). *National Strategy for Disaster Resilience*. Retrieved from <https://www.ag.gov.au/emergencymanagement/documents/nationalstrategyfordisasterresilience.pdf>
- Dasgupta, S., Siriner, I., & Partha, S. D. (Eds.). (2010). *Women's Encounter with Disaster*. London: Frontpage Publications.
- Davie, S. (2013). Don't leave me alone: Protecting Children in Australian Disasters and Emergencies. Government Report Card on Emergency Management Planning. Victoria, Australia: Save the Children Australia.
- Deely, J. & Ardagh, M. (2016). People in Disasters Special Issue, *Australasian Journal of Disaster and Trauma Studies*, 20(2), 55-134.
- Delaine, D., Probert, J., Pedler, T., Goodman, H. & Rowe, C. (2008). *Fiery Women: Consulting, designing, delivering and evaluating pilot women's bushfire safety skills workshops*. Paper presented at the Australasian Fire and Emergency Services Authorities Council (AFAC), Adelaide, South Australia.
- Department of Communities, Child Safety and Disability Services. (2016). *People with vulnerabilities in disasters – A framework for an effective local response*. Brisbane: Queensland Government.
- Dominey-Howes, D., Gorman-Murray, A., & McKinnon, S. (2014). Queering disasters: On the need to account for LGBTI experiences in natural disaster contexts. *Gender, Place and Culture*, 21(7), 905-918.
- Elinder, M., & Erixson, O. (2012). Gender, social norms, and survival in maritime disasters. *Proceedings of the National Academy of Sciences*, 109, 13220-13224.
- Emergency Management Australia. (2007). *Keeping Our Mob Safe: A National Emergency Management Strategy For Remote Indigenous Communities*. Attorney-General's Department: Australian Government. Retrieved from: <http://unpan1.un.org/intradoc/groups/public/documents/apcity/unpan029412.pdf>.
- Emergency Management Victoria. (2016). *The Emergency Management Diversity and Inclusion Framework*. Retrieved from <http://files.em.vic.gov.au/EMV-web/Emergency-Management-Diversity-and-Inclusion-Framework.pdf>.
- Enarson, E. & Pease, B. (Eds.) (2016). *Men, Masculinities and Disaster*. London: Routledge.
- Enarson, E. (2012). *Women confronting natural disaster: From vulnerability to resilience*. Boulder, Colorado: Lynne Rienner Publishers, Inc.
- Eriksen, C. & Hankins, D.C. (2014). The Retention, Revival and Subjugation of Indigenous Fire Knowledge through Agency Fire Fighting in Eastern Australia and California, USA. *Society & Natural Resources*, 27(12), 1288-1303.
- Eriksen, C. & Waitt, G. (2016). Men, Masculinities and Wildfire: Embodied Resistance and Rupture. In Enarson, E & Pease, B. *Men, Masculinities and Disaster* (pp. 69-80). New York: Routledge.
- Eriksen, C. (2014a). Gendered Risk Engagement: Challenging the Embedded Vulnerability, Social Norms and Power Relations in Conventional Australian Bushfire Education. *Geographical Research*, 52(1), 23-33.
- Eriksen, C. (2014b). *Gender and wildfire: Landscapes of uncertainty*. New York: Routledge.
- Eriksen, C., Gill, N. & Head, L. (2010). The gendered dimensions of bushfire in changing rural environments. *Journal of Rural Studies*, 26, 332-342.
- Eriksen, C., Waitt, G. & Wilkinson, C. (2016). Gendered Dynamics of Wildland Firefighting in Australia. *Society and Natural Resources*, 29(11), 1296-1310.
- Every, D. (2015). Different but also the same : mental illness and bushfire planning, preparation and response. *Australian Journal of Emergency Management*, 30(4), 37-40. Retrieved from <https://ajem.infoservices.com.au/items/AJEM-30-04-10>
- Every, D., & Richardson, R. (2017). *Building the Disaster Resilience of the Homeless Community*. Report prepared by CQUniversity and the Red Cross in collaboration with VCOSS, NCCARF and ShelterSA for the National Emergency Management Project.
- Every, D., Reynolds, A., Clarkson, L., Bearman, C., Matthews, R., Haigh, L., & Dawson, D. (2016). *Capturing community experiences in the 2015 Sampson Flat fire: Report for the South Australia Country Fire Service*. Melbourne, Victoria. Retrieved from: <https://www.bnhrcr.com.au/publications/sampsonflat>
- Fritze, J. G., Blashki, G. A., Burke, S. & Wiseman, J. (2008). Hope, despair and transformation: Climate change and the promotion of mental health and wellbeing. *International Journal of Mental Health Systems*, 2(13). doi: 10.1186/1752-4458-2-13
- Gabriel, Y. (1998). Psychoanalytic contributions to the study of the emotional life of organizations. *Administration & Society*, 30(3), 292-315.

- Gaillard, J.C., Gorman-Murray, A. & Fordham, M. (2017). Sexual and gender minorities in disaster. *Gender, Place & Culture*, 24(1), 18-26. Retrieved from <http://dx.doi.org/10.1080/09663636.2016.1263438>
- Gibbs, L., Bryant, R., Harms, L., Forbes, D., Block, K., Gallagher, H.C., Ireton, G., Richardson, J., Pattison, P., MacDougall, C., Lusher, D., Baker, E., Kellett, C., Pirrone, A., Molyneaux, R., Kosta, L., Brady, K., Lok, M., Van Kessel, G. & Waters, E. (2016). *Beyond Bushfires: Community Resilience and Recovery Final Report: 2010-2016*. Melbourne, Victoria: University of Melbourne.
- Good, G.A., & Phibbs, S. (2017). Disasters and disabled people: Have any lessons been learned?. *Journal of Visual Impairment and Blindness*, 111(1), 85-87.
- Good, G.A., Phibbs, S., & Williamson, K. (2016). Disoriented and Immobile: The experiences of people with visual impairments during and after the Christchurch, New Zealand, 2010 and 2011 Earthquakes. *Journal of Visual Impairment & Blindness*, 110(6), 425-435.
- Good, G.A. (2016). Emergency plans in schools: Individualised disaster planning for students with impaired vision. *Journal of the South Pacific Educators in Vision Impairment*, 8(1), 17-28.
- Goode, N. K., Spencer, C., McArdle, D. F., Salmon, P. M., & Archer, F. L. (2015). Characteristics of a disaster resilient Victoria: consensus from those involved in emergency management activities. *The Australian Journal of Emergency Management*, 30(3), 42-47.
- Gordon, R. (2007). Thirty Years of Trauma Work: Clarifying and Broadening the Consequences of Trauma. *Psychotherapy in Australia*, 13(3), 12-19.
- Gorman-Murray, A., McKinnon, S., & Dominey-Howes, D. (2014). Queer domicile: LGBT displacement and home loss in natural disaster impact, response and recovery. *Home Cultures*, 11(2), 237-262.
- Gorman-Murray, A., McKinnon, S., & Dominey-Howes, D. (2016). Masculinity, sexuality and disaster: Unpacking gendered LGBTI experiences in the 2011 Brisbane Floods, Queensland, Australia. In E. Enarson & B. Pease (Eds.), *Men, Masculinities and Disaster* (pp. 128-139). New York: Routledge.
- Gorman-Murray, A., Morris, S., Keppel, J., McKinnon, S., & Dominey-Howes, D. (2014). The LGBTI community in the 2011 Queensland floods: Marginality, vulnerability and resilience. *LES Online*, 6(1), 4-20.
- Gorman-Murray, A., Morris, S., Keppel, J., McKinnon, S., & Dominey-Howes, D. (2016). Problems and possibilities on the margins: LGBT experiences in the 2011 Queensland floods. *Gender, Place and Culture*, 24(1), 37-51.
- Gray, L. (2017). Social Determinants of Health, Disaster Vulnerability, Severe and Morbid Obesity in adults: Triple Jeopardy? *International Journal of Environmental Research and Public Health*, 14, 1452-1462.
- Gray, L., & MacDonald, C. (2016). Morbid obesity in disasters: Bringing the "conspicuously invisible" into focus. *International Journal of Environmental Research & Public Health*, 13(10), 1029.
- Hanson-Easey, S., Hansen, A. & Bi. P. (2015). Risk Communication planning with culturally and linguistically diverse communities (CALD). Report for the South Australian Fire and Emergency Services Commission and the Attorney General's Department.
- Hansson, S. O. (2007). *Gender issues in climate adaptation*. Stockholm, Sweden: Swedish Defence Research Agency.
- Hedlund, K. (2016). People in Disasters Conference 2016: Learning Report, Christchurch, 24-26 February 2016. Retrieved from: https://www.massey.ac.nz/~trauma/conference/PID_Learning_Report_2017.pdf
- Henrici, J. M., Helmuth, A. S., & Braun, J. (2010). *Women, disasters, and Hurricane Katrina*. Washington. Retrieved from <https://iwpr.org/publications/women-disasters-and-hurricane-katrina/>
- Hoggett, P. (2010). Government and the Perverse Social Defence. *The British Journal of Psychotherapy*, 26(2), 202 - 212.
- Houghton, R., Wilson, T., Smith, W., & Johnston, D. (2010). "If there was a dire emergency, we never would have been able to get in there": Domestic violence reporting and disasters. *International Journal of Mass Emergencies and Disasters*, 28, 270-293.
- IAP2 International Federation. (2014). *IAP2s Public Participation Spectrum*. Retrieved from https://www.iap2.org.au/Tenant/C0000004/00000001/files/IAP2_Public_Participation_Spectrum.pdf
- Jaques, E. (1955). Social systems as a defence against persecutory and depressive anxiety. In: Klein, M., Heimann, P. & Money-Kyrle, R. (Eds). *New Directions in Psychoanalysis* (pp. 478-98). London: Tavistock.
- Jensen, L. (2011) 'The Whiteness of Climate Change.' *Journal of the European Association of Studies of on Australia* 2 (2): 84-97.
- Kahn, J. S. (2011). Feminist therapy for men: challenging assumptions and moving forward. *Women and Therapy*, 34, 59-76.
- Kailes, J.I. & Enders, A. (2007). Moving beyond "special needs": A function-based framework for emergency management and planning. *Journal of Disability Policy Studies*, 17(4), 230-237.
- Kajiser, A. and Kronsell, A. (2015) 'Climate Change Through the Language of Intersectionality.', *Environmental Politics* 23 (3): 417-433.
- Lakhina, S. J. & C. Eriksen. (2017). Resilient Together: Engaging the knowledge and capacities of refugees for a disaster-resilient Illawarra. In Guadagno, L., Fuhrer, M. & Twigg, J. (Eds.). *Migrants in Disaster Risk Reduction: Practices for Inclusion* (pp. 32-35). Geneva: United Nations. Retrieved from https://publications.iom.int/system/files/pdf/migrants_in_drr.pdf
- Lamont, A. (2016). New handbooks for the Handbook Collection. *Australian Journal of Emergency Management*, 32(4), 24-25.
- Levin, K.L., Berliner, M., Merdjanoff, A. (2014). Disaster planning for vulnerable populations: Leveraging community human service organisations direct service delivery personnel. *Journal of Public Health Management Practice*, 10(5), S79-S82.
- Livingston, M. (2011). A longitudinal analysis of alcohol outlet density and domestic violence. *Addiction*, 106, 919-925.
- Masten, A.S. (2014). Global Perspectives on Resilience in Children and Youth. *Child Development*, 85(1), 6-20.
- McCoy, D., Montgomery, H., Arulkumaran, S., & Godlee, F. (2014). Climate change and human survival. *British Medical Journal*, 348(2351). doi: 10.1136/bmj.g2351
- McFarlane, A. (2005). Psychiatric Morbidity Following Disasters: Epidemiology, Risk and Protective Factors. In Lopez-Ibor, J. J., Christodoulou, G., Maj, M., Sartorius, N. & Okasha, A. (Eds.). *Disasters and Mental Health* (pp. 37-64). West Sussex, England: Wiley.
- McKinnon, S., Gorman-Murray, A., & Dominey-Howes, D. (2016). 'The greatest loss was a loss of our history': Natural disasters, marginalised identities and sites of memory. *Social and Cultural Geography*, 17(8), 1220-1339.
- Menzies, I.E.P. (1960). A case-study in the functioning of social systems as a defence against anxiety: A report on a study of the nursing service of a general hospital, *Human Relations*, 13, 95-121.
- Miller, E. & Brockie, L. (2015). The disaster flood experience: Older people's poetic voices of resilience. *Journal of Aging Studies*, 34, 103-112.
- Ministry of Civil Defence & Emergency Management. (2017). *Strategic Planning for Recovery Director's Guideline for Civil Defence Emergency Management Groups. (DGL 20/17)*. New Zealand: Civil Defence Emergency Management.

- Ministry of Civil Defence & Emergency Management. (2018). Ministerial Review - Better Responses to Natural Disaster and Other Emergencies. New Zealand: Civil Defence Minister Kris Faafoi.
- Monash University Disaster Resilience Initiative & Emergency Management Victoria. (2017). Disaster Resilience Initiative and Emergency Management Victoria: Compendium of Victorian Community-Based Resilience Building Case Studies. Melbourne, Australia. Retrieved from https://www.monash.edu/_data/assets/pdf_file/0004/514462/Compendium_201703.pdf
- Neumayer, E. & Plümpner, T. (2007). The Gendered Nature of Natural Disasters: The Impact of Catastrophic Events on the Gender Gap in Life Expectancy, 1981-2002. *Annals of the Association of American Geographers*, 97(3), 551-66.
- Norgaard, K. (2012) 'Climate Denial and the Construction of Innocence: Reproducing Transnational Privilege in the Face of Climate Change.' *Race, Gender and Class* 19 (4): 506-522.
- Norris, F.H., Stevens, S.P., Pfefferbaum, B., Wyche, K.F. & Pfefferbaum, R. L. (2008). Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. *American Journal of Community Psychology*, 41, 127-150. doi: 10.1007/s10464-007-91-56-6
- Owen, C. (2018). How can governments enable and support community-led disaster recovery?. *The Australian Journal of Emergency Management*, 33(1). Retrieved from <https://knowledge.aidr.org.au/resources/ajem-jan-2018-how-can-governments-enable-and-support-community-led-disaster-recovery/>
- Pacholok, S. (2013). *Into the fire: Disaster and the remaking of gender*. Toronto: University of Toronto Press.
- Parkinson, D. & Zara, C. (2016) 'Men Reveal the Emotional and Personal Costs of the Black Saturday Bushfires in Victoria, Australia' in Enarson, E. & Pease, B. (Eds.) *Men, Masculinities and Disaster*. London: Routledge.
- Parkinson, D. (2017). Investigating the increase in domestic violence post-disaster: An Australian case-study. *Journal of Interpersonal Violence*, March 2017. Retrieved from <http://journals.sagepub.com/doi/abs/10.1177/0886260517696876>
- Parkinson, D., & Zara, C. (2013). The hidden disaster: domestic violence in the aftermath of natural disaster. *Australian Journal of Emergency Management*, 28, 28-35.
- Parkinson, D., Duncan, A., & Hedger, E. (2015). Women in fire and emergency leadership roles: How can we improve the gender balance? A research report commissioned by the Department of Environment, Land, Water and Planning. Retrieved from https://www.ffm.vic.gov.au/_data/assets/pdf_file/0020/21278/Summary-Report-Vol-1-Final.pdf
- Parkinson, D., Duncan, A. & Weiss, C. (2014). The impact on women's health of climatic and economic disaster position paper In *Australian Women's Health Network* (Ed.). Drysdale, Victoria: AWHN. Retrieved from <http://bit.ly/2aenVa4>
- Pease, B. (2014). Hegemonic Masculinity and the Gendering of Men in Disaster Management and Response. *Advances in Social Work and Welfare Education*, 16(2), 60-72.
- Pease, B. (2016). Masculinism, climate change and "man-made" disasters: toward an environmental profeminist response. In Enarson, E. & Pease, B. (Eds.) *Men, Masculinities and Disaster*. London: Routledge.
- Peek L. (2008). Children and Disasters: Understanding Vulnerability, Developing Capacities, and Promoting Resilience - An Introduction. *Children, Youth and Environments*, 18(1), 1-29.
- Pellow, D. (2017) 'Environmental Justice.' In K Korgen (ed.) *The Cambridge Handbook of Sociology*. Cambridge: Cambridge University Press.
- Phillips, B. D. & Morrow, B. H. (Eds.). (2008). *Women and Disasters: From Theory to Practice*. USA: Xlibris.
- Red Cross. (2016). *Emergencies Happen: Protect What Matters Most*. Retrieved from: <https://www.redcross.org.au/getmedia/b896b60f-5b6c-49b2-a114-57be2073a1c2/red-cross-rediplan-disaster-preparedness-guide.pdf.aspx>.
- Reimer, R. (2017). *The Wildfire Within: Firefighter perspectives on gender and leadership in wildland fire* (MA Thesis, Royal Roads University, Canada). Retrieved from https://viurrspace.ca/bitstream/handle/10170/1054/Reimer_royalroads_13130_10411.pdf?sequence=1&isAllowed=y
- Reser, J., Bradley, G., Glendon, A., Ellul, M., Callaghan, R. (2012). *Public Risk Perceptions, Understandings, and Responses to Climate Change and Natural Disasters in Australia and Great Britain*. Gold Coast: National Climate Change Adaptation Research Facility.
- Robinson, A., & Kani, S. (2014). Disability-inclusive DRR: information, risk and practical ction. In Shaw, R. & Izumi, T. (Eds.), *Civil society organisation and disaster risk reduction: the Asian dilemma* (pp 219-236). Springer: Tokyo.
- Rohr, U., Hemmati, M., & Lambrou, Y. (2009). Towards gender equality in climate change policy: Challenges and perspectives for the future. In E. Enarson & P. D. Chakrabarti (Eds.), *Women, Gender and Disaster: Global Issues and Initiatives* (pp. 289-202). New Delhi: Sage.
- Ronan, K.R., Alisic, E., Towers, B., Johnson, V.A., Johnston, D.M. (2015). Disaster Preparedness for Children and Families: a Critical Review. *Current Psychiatry Reports*, 17, 58-66.
- Scanlon, J. (1997). Human Behaviour in Disaster: The Relevance of Gender. *Australian Journal of Emergency Management*, 11, 2-6.
- Scanlon, J. (1998). The Perspective of Gender: A Missing Element in Disaster Response. In E. Enarson & B. H. Morrow (Eds.), *The Gendered Terrain of Disaster: Through Women's Eyes* (pp. 45-55). London: Praeger.
- Shaw, C., Unen, J. V. & Unen, J. V. (2012). Women's voices from the floodplain. *Security4Women*. Retrieved from <https://www.security4women.org.au/boosting-womens-economic-security/disaster-roundtable-report/economic-impact-on-women-in-disaster-affected-areas-in-australia>
- Spencer, M., Christie, M., & Wallace, R. (2016). *Disaster Resilience, Management and Preparedness in Aboriginal and Torres Strait Islander Communities in Darwin and Palmerston*. Charles Darwin University. Retrieved from www.cdu.edu.au/centres/groundup/docs/DRMPReport.pdf
- Strazdins, L., S, F., McMichael, A., Butler, S. W., & Hanna, E. (2011). Climate Change and Child Health in Australia: Likely Futures, New Inequities?. *International Public Health Journal*, 2, 493-500.
- Taylor, M., McCarthy, M., & Bigelow, J. (2017) Building an animal-ready community: A community-led initiative to improve preparedness, planning, and safety for animals and their owners. *Australian Journal of Emergency Management*, 32(4), 17-19.
- Taylor, D. & Goodman, H. (2015). *Place-Based and Community-Led: Specific Disaster Preparedness and Generalisable Community Resilience*. CatholicCare Bushfire Community Recovery Service. Retrieved from http://www.vcross.org.au/documents/2015/03/Place-Based-and-Community-Led_Specific-Disaster-Preparedness-and-Generalisable-Community-Resilience.pdf.
- Taylor, D. (17/1/2018). In a phone conversation, D. Taylor described this information to one of the authors.
- Teague, B., McLeod, R., & Pascoe, S. (2010). 2009 Victorian Bushfires Royal Commission Final Report: Summary. Retrieved from <http://www.royalcommission.vic.gov.au/Commission-Reports/Final-Report.html>
- The Climate Council. (2017). *Cranking up the Intensity: Climate change and Extreme Weather Events*. Retrieved from <http://www.climatecouncil.org.au/uploads/1b331044fb03fd0997c4a4946705606b.pdf>

Thompson, K., Every, D., Rainbird, S., Cornell, V., Smith, B. & Trigg, J. (2014). No Pet or Their Person Left Behind: Increasing the Disaster Resilience of Vulnerable Groups through Animal Attachment, Activities and Networks. *Animals*, 4, 214-240. doi:10.3390/ani4020214.

Turnbull, M. & Moriniere, L.C. (Eds.) (2017). Guide to facilitating community-led disaster risk management. Baltimore, MD: Catholic Relief Services. Retrieved from <https://www.crs.org/sites/default/files/tools-research/guide-to-facilitating-community-led-disaster-risk-management.pdf>

UNAIDS. (2012). Impact of the global economic crisis on women, girls and gender equality. Geneva: UN. Retrieved from http://www.unaids.org/sites/default/files/sub_landing/files/JC2368_impact-economic-crisis-women_en.pdf

UNESCAP. (2015). Disability-inclusive disaster risk reduction. Retrieved from: [https://www.unescap.org/sites/default/files/pre-ods/E_CDR\(4\)_INF4.pdf](https://www.unescap.org/sites/default/files/pre-ods/E_CDR(4)_INF4.pdf)

United Nations. (2005). Hyogo Framework For Action 2005-2015. Retrieved from <https://www.unisdr.org/we/inform/publications/1037>

United Nations. (2015). Sendai Framework for Disaster Risk Reduction 2015-2030. Retrieved from http://www.preventionweb.net/files/43291_sendaiframeworkfordren.pdf

United Nations Framework Climate Change Conference. (2017). UN Climate Change Conference – November 2017. Retrieved from: http://unfccc.int/meetings/bonn_nov_2017/meeting/10084.php

Victorian Council of Social Service. (2014). Disaster and Disadvantage. Melbourne: VCOSS. Retrieved from http://vcoss.org.au/documents/2014/06/VCOSS_Disadvantage-and-disaster_2014.pdf

Victorian Council of Social Service. (2017). Building Resilient Communities. Melbourne: VCOSS. Retrieved from <http://vcoss.org.au/documents/2017/05/Building-Resilient-Communities.pdf>

Victorian Government. (2017). Review of the Vulnerable people in emergencies policy. Discussion Paper. Melbourne: Department of Health and Human Services.

Villeneuve, M. (2015, March 15). People with disability should be included as equal partners in disaster planning. The Conversation. Retrieved from <https://theconversation.com/people-with-disability-should-be-included-as-equal-partners-in-disaster-planning-38718>

Villeneuve, M. (2017). PREPARE, NSW: Co-designing a CPD resource for community health and disability support providers on person-centred emergency preparedness. Retrieved from <http://collaborating4inclusion.org/prepare-nsw>

Whittaker, J., C. Eriksen, and K. Haynes. (2016). Gendered responses to the 2009 Black Saturday bushfires in Victoria, Australia. *Geographical Research*, 54(2), 203-215.

Wiseman, J. (2010). Dancing with strangers: Understanding the parallel universes of academic researchers and public sector policy makers. Occasional Paper No. 11. Melbourne, The Australia and New Zealand School of Government.

Young, C., & Rasmussen, B. (2017). Diversity and inclusion: building strength and capability. Retrieved from <https://www.bnhrcr.com.au/research/hazard-resilience/3392>

Zara, C., Parkinson, D., Duncan, A. & Joyce, K. (2016). Men and Disaster: Men's experiences of the Black Saturday bushfires and the aftermath. *The Australian Journal of Emergency Management*, 31(3). Retrieved from <https://ajem.infoservices.com.au/items/AJEM-31-03-15>

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Introducing new national Gender and Emergency Management (GEM) Guidelines to support more inclusive disaster risk reduction work

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Abstract

It is widely recognised by emergency sector leaders that a new approach is key to increasing capability as climate change ramps up extreme weather events. Emergency services are seeking ways to understand the diverse communities they serve. Drawing on an extensive literature review and iterative consultation with 350+ emergency management (EM) personnel over two years, this article presents the new Gender and Emergency Management (GEM) Guidelines, and why they are essential to modern practice in this sector. The research, methods and final documents were guided by an Advisory Group. The authors' own research and international research find that gender issues compound the damaging effects of disaster on survivors. The concept of gender on which this article is based considers both the normative discrimination of men against women, as well as discrimination against people with diverse gender and sexual identities. Gender is a cross-cutting issue, and the three-part GEM Guidelines take readers on a journey to increase understanding of the complexities. The Guidelines themselves focus on three areas: gender equity and diversity; gender-sensitive communication; and domestic violence in disaster. The Guidelines and Checklist provide an accessible way for EM personnel to assess the inclusiveness of their practice. If effectively implemented, this will lead to a nationwide understanding of the critical importance of a gender lens on policies and practice; changed practices for improved disaster planning, response and recovery; and a national capacity to respond to gendered issues. Accessible

online (<https://www.preventionweb.net/publications/view/50289>), the GEM Guidelines were funded by NEMP.

Introduction

Emergencies and their attendant disasters are on the rise due to a variety of global change processes. It is increasingly recognised by emergency management (EM) sector leaders, that a new approach is key to increasing capability. Emergency services are seeking ways to understand the diverse communities they serve. Drawing on an extensive literature review and consultation with over 350 emergency management personnel, this article presents new *Gender and Emergency Management Guidelines* (GEM) developed in Australia, and states why they are essential to modern practice while also being relevant globally.

Australia, like many countries, has committed to the improvement of EM policy and strategy. These commitments include the *National Strategy for Disaster Resilience*, and the *Sendai Framework for Disaster Risk Reduction 2015-2030* (United Nations 2015). While EM positions are overwhelmingly held by men, the Sendai Framework states that a gender perspective should be integrated into all disaster policies and practices, and leadership by women and people with diverse gender and sexual identities, should be promoted and facilitated.

The purpose of the GEM guidelines is to enable a gender-aware approach to emergency contexts. The sector can do better than continue a gender-blind, equal service

approach, which leaves many affected by emergencies without help and without hope.

The lack of visibility of much gender discrimination—especially when demands are high in emergencies—leads many in the EM sector to be oblivious to the needs and risks faced by women and people of diverse gender and sexual identity.

Background

Our research, combined with an expanding international literature on this topic (Enarson 2012, Eriksen 2014, Ferris, Petz & Stark 2013, Houghton, Wilson, Smith & Johnstone 2010, Roeder 2014), finds that gender issues compound the damaging effects of disaster on survivors. The concept of gender on which this article is based considers both the normative discrimination of men against women, as well as discrimination against people with diverse gender and sexual identities. Gender is a cross-cutting issue, and the guidelines take readers on a journey to increase understanding of the complexities, focusing on three areas: gender equity and diversity, gender-sensitive communication and domestic violence in disaster. This opinion piece is a snapshot of the GEM guidelines trilogy, which includes the Guidelines themselves, the Literature Review that informs them, and the Action Checklist. They are available at AIDR's Knowledge Hub: <https://knowledge.aidr.org.au/resources/national-gender-and-emergency-management-guidelines/>

Supporting gender equity and diversity

All people, regardless of their gender or sexual identity, require specific support with their responsibilities and circumstances. Women's escape from disaster can be hampered by their caring responsibilities and in disasters' aftermath, women can face increased violence from male partners. Men are frequently reluctant to seek help during and following an emergency and are sometimes isolated from support services and social networks. For many LGBTI people, disclosure of their gender and sexual identities is selective, and their homes are considered their places of safety. Public interaction in a relief centre or emergency shelter has the potential to expose their identities, increasing personal vulnerability and risk.

A key principle underpinning this guideline is that people have the right to their own expression of gender identity and have the right to behave in ways that do not fit with the traditional masculine and feminine expectations. Powerful actions may include:

- seeking out and targeting opportunities to include people with gender and sexual identities expertise in emergency management
- involving women, and everyone of diverse gender and sexual identities in all aspects of emergency management to reflect the society we live in and gain the advantages of diverse skills and contributions.

Gender-sensitive communication and messaging

Communications for emergency management planning, relief and recovery can unintentionally marginalise, ignore or neglect the specific needs of women, men, and everyone of diverse gender and sexual identities. Communications are generally non-gender-specific and often lack an awareness of when gender considerations are appropriate.

A key principle underpinning this guideline is EM communications should avoid gender stereotypes and expectations, attending to the needs of women, men and everyone of diverse gender and sexual identities. Powerful actions may include:

- choosing spokespeople for media messages who are women and people from diverse gender and sexual identities and investigate ways to have an equal voice in emergencies
- using effective wording to prevent harmful gender stereotypes in messaging and communication, for example: 'You don't have to stay and defend property just because your mate is' and 'Everyone has the right to leave early.'

Addressing domestic violence in emergency contexts

In Australia, Victorian police statistics have demonstrated that domestic violence is gendered, with approximately 80 per cent of perpetrators being male and approximately 80 per cent of victims being female. People of diverse gender and sexual identities are as likely to experience domestic violence as the general population. Along with women and children, transgender and intersex people have a heightened vulnerability in disasters. For women with violent ex-partners, the risk level can increase following a disaster. For example, evacuation may expose them to renewed violence, with intervention orders being difficult to enforce in evacuation centres and relief centres.

A key principle underpinning this guideline is that everyone has a right to live free from violence. Powerful actions may include:

- drawing on existing expertise and consider the inclusion of domestic violence workers in recovery efforts and community recovery committees
- supporting training of emergency management employees to look for opportunities to identify, record, and report on domestic violence.

Conclusion

The Guidelines and Action Checklist provide an accessible way for EM personnel to assess the inclusiveness of their practice. If effectively implemented, this will lead to a nationwide understanding

of the critical importance of a gender lens on policies and practice; changed practices for improved disaster planning, response and recovery; and a national capacity to respond to gendered issues.

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References

- Enarson E 2012, *Women confronting natural disaster: From vulnerability to resilience*. Boulder Colorado, Lynne Rienner.
- Eriksen C 2014, *Gender and wildfire: Landscapes of uncertainty*. New York Routledge.
- Ferris E, Petz D & Stark C 2013, *Disaster Risk Management: A Gender-Sensitive Approach is a Smart Approach The year of recurring disasters: A review of natural disasters in 2012*. London: The Brookings Institute.
- Houghton R, Wilson T, Smith W & Johnston D 2010, 'If there was a dire emergency, we never would have been able to get in there: Domestic violence reporting and disasters. *International Journal of Mass Emergencies and Disasters*, 28, 270-293.
- Roeder LW 2014, *Issues of Gender and Sexual Orientation in Humanitarian Emergencies*: Springer.
- United Nations 2015, *Sendai Framework for Disaster Risk Reduction 2015-2030*. At: http://www.preventionweb.net/files/43291_sendaiframeworkfordrren.pdf

Findings from the first Victorian study of the experiences and needs of LGBTI communities in emergencies

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Introduction and methodology

In 2016, the Victorian Government commissioned the Gender and Disaster Pod¹ and Gay and Lesbian Health Victoria (GLHV) at ARCSHS² to conduct research on the experiences and needs of lesbian, gay, bisexual, transgender and intersex (LGBTI) people in Victoria before, during and after an emergency. The project was prompted by the Victorian Government's interest in the development of LGBTI-inclusive public services and the lack of research on LGBTI people's access to emergency services.

The final report was launched at the Diversity in Disaster Conference on 18 April 2018.³ It documents LGBTI people's experiences of accessing a range of emergency services as well as the knowledge and attitudes of emergency management (EM) personnel in working with LGBTI people and communities. The report's findings confirm those of the limited number of similar studies conducted in Australia and overseas and highlight LGBTI people's reluctance to access emergency services because of historic or anticipated bias and discrimination from service providers (Dominey-Howes, Gorman-Murray, McKinnon, Itaoui, & Keppel 2016, Gorman-Murray, McKinnon & Dominey-Howes 2016).

The research relied on both quantitative and qualitative methods. It consisted of two online, state-wide surveys; one of EM sector employees (N=157), the other of LGBTI people (N=12).⁴ The survey questions asked participants about their knowledge of the specific needs of LGBTI people before, during and after an emergency; whether they believed that the EM sector, including faith-based delivery organisations, was currently meeting LGBTI people's needs; and to what degree LGBTI communities are marginalised by current EM organisations and procedures. The report was circulated at a workshop for senior EM leaders where they were presented with preliminary findings from the report and draft recommendations for developing LGBTI-inclusive practice within the EM sector.

Outcomes

The LGBTI survey found that the historical and current discrimination against LGBTI people may result in their reluctance to approach institutions, including faith-based organisations. This reluctance intensifies during a time of crisis when people may feel more vulnerable and exposed. For some LGBTI people, a fear of the consequences of disclosing their sexual orientation or gender identity can lead to them going without the emergency services they need.

The EM survey showed that while there was limited LGBTI training and education in the EM sector, a significant proportion of employees were open to considering the needs of LGBTI people in emergencies. It showed that some EM services had already begun to consider ways of making their services more LGBTI-inclusive, from policy reform to staff training. However, the survey also revealed a deep hostility on the part of a proportion of employees to the survey and to any actions that addressed the specific needs of LGBTI people. Clearly, these attitudes and practices need to be addressed if EM services in Victoria are to accommodate the needs of the different communities that make up the Victorian population.

EM respondents discussed the role of strong leadership in changing organisational culture and systems and the need for cultural change to support bystander interventions to address LGBTI discrimination.

1 Women's Health Goulburn North East, Women's Health In the North and Monash University Disaster Resilience Initiative. www.genderanddisaster.com.au

2 GLHV is an independent, Victorian Government funded LGBTI health resource, policy and training unit that sits within the Australian Research Centre in Sex, Health and Society, La Trobe University. www.glhv.org.au

3 The report is available from <http://www.genderanddisaster.com.au/living-lgbti-during-disasters/>

4 The low LGBTI response rate is similar to the response rates documented in other studies. It may reflect, in part, LGBTI people's experiences of institutional discrimination, their lack of trust in large mainstream organisations and their fear in completing even anonymous surveys

Recommendations from EM respondents included: training, peer support, charters, regular statements of management commitment, and policy based on knowledge and evidence. These support the recommendations developed in the workshop and presented as part of this report.

Recommendations from EM respondents included: training; peer support; charters, regular statements of management commitment; and policy based on knowledge and evidence. These support the recommendations developed in the workshop, and presented as part of this report.

An important theme is the belief, held by many EM personnel, that 'same needs' and 'we treat everyone the same' constitute good professional practice. One in two respondents (51 per cent) had no agreement or limited agreement with the statement that their working environment encourages quality emergency service provision to LGBTI people. Comments indicate that some EM respondents believe that there is no difference between LGBTI people and the population at large and that there is no reason why EM services should develop LGBTI-inclusive practices. This demonstrates a lack of awareness of the impact of discrimination and abuse on LGBTI people's lives and how this affects their experiences of disaster and particular service needs. This lack of awareness may explain the resistance some EM personnel display to learning about the LGBTI community's needs. It is crucial to address this misunderstanding to improve EM professional practice and begin the process of cultural change.

Recommendations from the report

The recommendations are intended to assist Victoria's EM sector promote culture change and develop LGBTI-inclusive services.

1. Increase awareness amongst EM personnel of the needs and experiences of LGBTI people in emergencies

1.1 Source and offer LGBTI inclusive training to the emergency management sector, including staff at all levels and volunteers

1.2 Promote and share strategies for LGBTI inclusive practice within the sector

1.3 Increase recognition that equal treatment fails to meet the diversity of community, client and staff needs

2. Strengthen LGBTI inclusion in EM systems

2.1 Review organisational policies and procedures including codes of practice to ensure they are LGBTI inclusive

2.2 Identify areas where LGBTI people and issues need increased visibility, including diversity policies and procedures, anti-discrimination policies, privacy and confidentiality issues, and training and professional development

2.3 Recognise and promote the strengths that LGBTI people bring to emergency management

3. Demonstrate organisational commitment to working with and meeting the needs of the LGBTI community in service delivery

3.1 Promote emergency service organisations as diverse and inclusive, with specific messages targeting LGBTI communities

3.2 Review existing complaints procedures to better support LGBTI people to feel safe and supported when raising concerns about EM service delivery and that they can be sure these complaints will be taken seriously

3.3 Educate on – and expect – bystander interventions to prevent or stop discriminatory (homophobic, biphobic and transphobic) discussion and behaviours

3.4 Provide LGBTI inclusive relief services, referral networks and other services for people affected by emergencies

4. Increase participation of LGBTI people in EM

4.1 Value and affirm difference within emergency organisations by being more inclusive of people with diverse sexual orientations, gender identities and intersex variations

4.2 Identify and work to address barriers to LGBTI people's participation in emergency services as staff and volunteers

4.3 Develop strategies for increasing LGBTI people's participation in emergency services and ways of measuring the success of each measure

4.4 Address discrimination, including providing leadership pathways for LGBTI employees and volunteers and developing LGBTI recruitment strategies

5. Support resilience amongst LGBTI communities

5.1 Increase engagement and build trust with LGBTI communities

5.2 Engage the LGBTI Taskforce to work with the EM sector to effect change

5.3 Attend and increase visibility of emergency service organisations in LGBTI events

5.4 Publicise emergency management organisations' efforts to address LGBTI inclusion through LGBTI and mainstream media

6. Continue to build an evidence base

6.1 Conduct further research on the experiences and needs of LGBTI communities to inform the ongoing development of diverse, inclusive practice and service provision within the EM sector.

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References

Dominey-Howes, D., Gorman-Murray, A., McKinnon, S., Itaoui, R. & Keppel, J. (2016). Emergency management response and recovery plans in relation to sexual and gender minorities in New South Wales, Australia. *International Journal of Disaster Risk Reduction*, 16, 1-11.

Gorman-Murray, A., McKinnon, S., & Dominey-Howes, D. (2016). Masculinity, sexuality and disaster: Unpacking gendered LGBTI experiences in the 2011 Brisbane Floods, Queensland, Australia. In E. Enarson & B. Pease. (Eds). *Men, masculinities and disaster* (pp. 128-139). New York, NY: Routledge.

Victorian Compendium of Community-Based Resilience Building Case Studies: an online tool to help communities build resilience

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A key tenet of the *Victorian Compendium of Community-Based Resilience Building Case Studies* promotes the compiling and sharing of resilience building activities to help people and communities before, during and after unexpected emergencies. The online compendium provides free access for anyone wanting to help community members build expertise, reduce program duplication and save valuable resources.

The developing story

In 2009, the Monash University Disaster Resilience Initiative (MUDRI) started a series of forums to address the changing needs of the emergency sector following the Black Saturday Fires. Informed by the 2011 *National Strategy for Disaster Resilience*, the MUDRI team recognised a need to begin a conversation about resilience, specifically in the emergency sector. To inform the sector about forthcoming changes, from 2012, the first forum each year explored contemporary trends and challenges. The second forum focused on identifying and promoting community-based resilience activities that could strengthen capacity. Sharing ideas was key to this forum while the design of the third forum sought to challenge the gradual reform of 'disaster risk reduction' from 'disaster' to 'resilience'. These three annual events proved successful, and what emerged from the second forum was the extent to which community-based activity had increased towards building and strengthening resilience.

Perhaps one explanation for this increased activity was how MUDRI promoted the *National Strategy for Disaster Resilience* at all its forums. Importantly, the strategy stated that the 'application of a resilience-based approach is not solely the domain of emergency management agencies; rather, it is a shared responsibility between governments, communities, businesses and individuals.' Indeed, the purpose of the strategy was, and remains today 'to provide high-level guidance on

disaster management to federal, state, territory and local governments, business and community leaders and the not-for-profit sector.' One interpretation might be that this message resonated with people living in high-risk communities and people seized the opportunity to step-up and applied the resilience-based approach to build capacity within their community.

Evidence of increased activity revealed itself at the mid-year community-based resilience forums. Four notable presentations in 2015 were, Be Ready Warrandyte - Living with Bushfire Risk, Emerald Centre of Resilience, the Rivers and Ranges Community Leadership Program, and the Community Emergency Plan for Whittlesea Township and its Surrounds. Not only were each of these activities outstanding examples of people stepping-up to connect with the community, but also the outcomes demonstrated how communities could build community capacity and resilience to strengthen their ability should they need to respond to crises or adapt to unexpected events. Likewise, these dedicated community members extolled the virtues of their enormous commitment of time, energy, resources and stamina needed to bring such projects to fruition.

The upshot of such innovative programs was that forum attendees, working to either develop or create similar programs, had no knowledge of these innovations, and were indeed dismayed that they had no means of connecting with program innovators. Many people, who were starting to create or had created a program,

quickly realised that unwittingly people were duplicating work and resources and asked the question 'is there a better way to do this?' This time, MUDRI staff seized the opportunity to create and produce a compendium like those produced in the Pacific regions and by the United Nations. Following three unsuccessful grant applications for a sophisticated online portal, Emergency Management Victoria (EMV) provided seed funding to start the ball rolling for the current online collection of resilience activities contained in the *MUDRI Compendium of Victorian Community-based Resilience Building Case Studies*.

With gratefully received seed funding, the compendium began to take shape, with a MUDRI and EMV steering group providing oversight. Between 2012 and 2016, we invited community groups to submit Expressions of Interest (EOI), to present and share their activities and expertise and describe how they overcame challenges or discovered unexpected learnings at the annual community-based resilience forum. Each year, a committee selected fifteen community groups to present their resilience activities. Successful presenters were invited to submit their presentation, using a standard online template, for possible inclusion into the compendium. Over five years, the committee received 123 EOIs with 72 authors invited and accepting invitations to present at the Forum. Subsequently 35 accepted their invitation to submit their activity for consideration for the compendium. The compendium, launched in November 2015, comprises 29 cases studies with several more in the pipeline.

The compendium represents an Australian first in compiling a comprehensive resource to enable communities to network, share and learn from each other. As noted previously, a key tenet of the compendium exemplifies the need to share resilience-building activities to help people and communities in unexpected emergencies. Importantly, sharing brings people and communities together, reducing program duplication and saving valuable resources. It endorses achieving more with less and promotes budget-saving policies. The compendium enhances other Victorian resilience initiatives such as the Rockefeller funded '*Resilient Melbourne Strategy*' and people can assess it via the Monash website or the Australian Institute of Disaster Resilience Knowledge Hub.

To date, we have learnt that compiling resilience-building activities requires a significant time commitment that necessitates patience from both the MUDRI team and those submitting their activities. Negotiating successful submissions, preparing diverse activities that reflect a consistency of content across the compendium structure without upsetting the original intent of the submission, and approval processes between different organisations absorb considerable time.

The valuable learnings of people who created unique resilience-building activities included having:

- a clear statement of common purpose
- an activity aligned with State/National Strategies
- a strong planning process and staying focused
- a paid facilitator and local government support

- a community development approach to traditional emergency response culture
- stamina
- a celebration of success.

Feedback from previous Forums and the continued evolution of the compendium has resulted in a strong, statewide, network of community-based resilience leaders driving and advancing development activities to support their communities. This Network provides a valuable opportunity for the broadest range of people engaged in developing community-based resilience.

Following two reviews, the compendium in its current format offers considerable opportunity either for further developments to make it national or with the right funding support to replicate within Australian states and territories. In Victoria, Resilient Melbourne and EMV will provide ongoing input to widen the scope of the compendium. MUDRI continues to lead and grow the network, the forums and the compendium.

The *MUDRI Compendium of Victorian Community-based Resilience Building Case Studies* can be found at: monash.edu/compendium

Strengthening women as an investment in community resilience

Mary Farrow, Emerald Community House Manager, Centre of Resilience Director, Melbourne

The time has come in emergency management reform for embedding new partners in the shared responsibility vision enshrined in the aspirational COAG National Strategy for Disaster Resilience. Women are the largest elementary group in population diversity. What is their potential impact on community resilience capacity? Is there a link between strengthening women in society and the beneficial outcomes of emergency management goals?

The challenges for women in their everyday lives, coupled with domestic violence and financial disadvantage pose a threat to their wellbeing in disasters. There is a compounded risk of negative outcomes in urban disasters with a dense population for women and those who may be in their care. Because gender inequality negatively impacts women, the application of gender equity and inclusion has the potential to improve the broader wellbeing outcomes for women, their children and their families in disaster risk reduction. This in turn can strengthen the community's ability to absorb stresses and raises collective resilience overall to better manage adverse events in the short and long term.

Current statistics, government practice, social culture and local customs still reflect a nagging imbalance between emergency management strategies and the roles of women working in the community services sector - a key interface for disaster management. How can emergency management benefit from inclusion of community organisations which are often managed by a majority of women as recognised and authorized partners?

Benefits of strengthening women

It is widely recognised that women and their children are more likely to die than men according to the United Nations Development Program. The United Nations Office for Disaster Risk Reduction has identified that cultural restrictions, lack of appropriate skills and less physical strength contributes to women and girls becoming disproportionate victims of disasters. Traditional roles and responsibilities often present obstacles for women in participating in decision-making or gaining access to resources even in progressive countries. Perhaps we need to view the demographics

of men and women as two diverse cultures to get to the next step.

Inclusion, empowerment and investment in community service groups and organisations that are strengthening women can contribute to the success of long-term sustainability and socio-economic development whether or not a disaster ever happens. It is readily understood in the humanitarian sector that economic empowerment and education of women in between disasters delivers benefits to men, families and their community by stimulating inclusive economic growth across the board.

Inclusive thinking on the roles of women in the management of disasters continues to be challenging due to the resistance from traditional opinions, gender inequity and socio-economic barriers. With the role of gender being a pivotal element in a resilient society, it is important to understand the influences and provide the necessary resources required to maximize women's involvement, empowerment and diversity across the disaster management spectrum. In managing the impacts of actual or potential disasters, how can the emergency management sector embrace community development practitioners and the community service sector which is largely operated by women? Where are the existing opportunities?

Australian opportunities

Women contribute to disaster resilience and community strength by combining care skills acquired through personal and professional development, working with families, neighbourhoods and communities. Australian community services and community development practitioners support the wellbeing of communities across Australia every day as their core business. And that business is growing according to current

employment projections. According to the Australian Bureau of Statistics, workers and volunteers in the community sector provide care services for priority groups which are considered to be vulnerable, isolated or marginalised people. These workers can also be some of the same people who are disproportionately at risk in mass casualties during emergencies and disasters. Shouldn't we be including their needs, connections and experiences in disaster planning?

Victoria's new thinking

Monash University Disaster Resilience Initiative has played a significant role in developing new thinking through its community-based disaster resilience forums and Resilience Compendium. Initially, these forums attracted a large following of predominantly emergency services uniformed personnel who were focused on disaster event management. Six years later, attendance at these forums has transformed into a healthy mix including local government, community service groups and community development representatives in civilian practice, with a large representation of women focused on disaster consequences and community resilience. Emergency Management Victoria and the fire services are also encouraging more women to join their ranks to improve their diversity.

Emerald Community House, one of over 400 centres across Victoria is overwhelmingly run by women and has engineered resilience capacity into their core business practice as 'community continuity' through their Centre of Resilience (CoR) strategy. Community-led resilience capacity is resident in their programs, funding applications, partnerships and services. More community groups should be building community resilience capacity, placing this vision at the centre of their ethos to increase collective community strength.

If women are the most adversely impacted demographic when a disaster strikes, then achieving gender equity and representation has the potential to improve the outcomes for women and those in their care in disaster events as well as everyday life. By consulting with women in resilience building capacity, the community benefits as a whole.

Behavioural change is still required not only amongst community members but at all levels of business and government especially in emergency services agencies and local government. Inclusion strategies for women are beginning to appear but are not always welcome.

Disaster events can often provide an opportunity to advance gender equity and the roles and responsibilities of women in managing disaster impacts as well as advancing health outcomes for all. But women need a seat at the planning table. Empowering and strengthening women in the communities where they live in between disaster events is where the longer-term benefits lie, building community resilience for all.

Surviving disasters: what happens next time?

Penny Egan-Vine, Murray Valley Sanctuary Refugee Group and Isabelle Bartkowiak-Théron, University of Tasmania

The language of emergency management often focuses on the vulnerability of people, regardless of the scope of their vulnerability. Here, we address various factors at play between emergency professionals and people of refugee background in response to critical situations.

In the public mind, a refugee is a person fleeing danger and seeking safe haven elsewhere. The image of isolated, damaged and needy people, with limited comprehension and struggling to adjust to a new culture, is often set against an image of predatory manipulators who know exactly what they are doing and will put their own needs ahead of others. Neither image is accurate. Refugees are individuals with a range of skills and vulnerabilities comparable to anyone else.

Vulnerable people are perceived as living with a form of disadvantage. In the circumstances of emergency management, it behoves us to acknowledge the resilience of those who have fled disasters or chaos in the first place. Refugees are first and foremost survivors, with prior experiences of disaster. They can contribute tactics, communication strategies, advice, that will make preparations easier, more targeted and more suitable to a specific audience.

Refugees can be particularly vulnerable because of the potential fragility of their sense of safety. Their prior experience of life-threatening incidents and living in situations of protracted danger can create a hyper-alertness to danger and uncertainty, alongside finely tuned skills at surviving. Their efforts, in a disaster, to re-establish safety can appear unwise and unpredictable. For some, when exposed to danger and when already traumatised by previous life events, the response may be to freeze or to run. Yet again others, when experiencing major disruption, will step forward to comfort and help others.

There are compounding issues in disaster management. One is the influence of public opinion and stereotyping about refugees. Another is the lack of personal experience of diversity among emergency management personnel, which can result in 'othering'. Third, the unpredictable nature of refugee resettlement experience is magnified in unpredictable emergency circumstances.

The dynamics of disaster management involve the need for prompt, non-negotiable action, usually directed by law enforcement or emergency personnel using clear and authoritative language. The refugee experience is usually of unstructured escape, in the opposite direction to danger, and often in the opposite direction to threatening, uniformed and abusive figures of authority.

The severity of the refugee experience of figures of authority must never be downplayed. Some refugees will draw on their experience of state-sanctioned violence to decide on a course of action, instead of responding to orders shouted at them. Confusion and hesitation, or an action opposite to what is being directed, may be the result. Risks may rapidly escalate if professionals are unaware of the wide-ranging scope of reactions to disasters, including the possibility that some people have more experience of emergencies than they do.

Another compounding factor is the multi-agency nature of disaster management. Trust influences performance and understanding and, in circumstances of uncertainty and chaos, where people become reliant on others for information and decision-making, trust is essential. Yet, it is recognised that organisations do not always share the same vocabulary and work done to ensure sustainable relationships among various organisations includes language sharing. This disparity in 'disaster-language' also applies to service recipients, especially in those communities experiencing structural or systemic disadvantage.

Emergency response teams are often formed of strangers, from different government organisations, with a specific role to play. The concept of 'swift trust', grounded in the recognition of roles (as opposed to individuals), is a central factor in disaster response. 'Role clarity' is an important element of swift trust. However, the concept of 'role' may go astray in the refugee experience of fleeing chaos. Whilst role-clarity is essential in terms of agency collaboration and at strategic levels, in the field it does not compute for those

whose past experience is of escaping abusive figures of authority. Being confronted with various figures of uniformed authority, coming from different areas of government, can add to confusion and distrust and make dissemination of information or assistance problematic.

Swift trust also works in direct contradiction to current wisdom on trust development with new communities, where the focus is on individual relationships. It is set in contrast to 'conversations on trust' with vulnerable community members, which can take a long time. A pre-emptive effort to build trust before chaos happens can start to inform a different view of authority figures. Instead of relying solely on swift trust of a role in times of disruption, work is needed on building trust over time, and through specific community liaison officers. They are in the right place to facilitate a conversation between emergency personnel and community members. Strategies built from the ground up will include people's previous experience, explore different forms of proactive engagement, and reconcile expectations.

However, as scholars in law enforcement and emergency management, we owe government organisations some cautious advice on how to address the message to those who have previously, and quite wrongly, been called 'hard-to-reach' communities. The literature is rife with documentation where vulnerable populations do not like to be pigeon-holed into categories of disadvantage, and where they would rather be seen as 'differently abled'.

Considering diverse communities as part of a whole, where experiences of vulnerability and resilience can be found across the whole community, can contribute to building a discourse from the ground up. Seeking out ideas that are based on the whole community's experience can promote communication during chaotic situations. It is not a question of 'who knows best', but a question of 'who has done what, how, and in what conditions'.

Refugees can contribute their experience of fleeing in the middle of the night, with a merely few minutes to prepare. Victims of domestic violence can contribute their experience of preparing, or not preparing, to flee an abusive partner. This knowledge can then be reconciled in the broader context of emergency management needs and issues.

Local government action to prevent violence against women in emergencies: achievable and effective

Kerry Haby and Karen Dunstan, Macedon Ranges Shire Council

Macedon Ranges Shire Council led the development of Australia's first *Prevention of Violence Against Women in Emergencies Action Plan* in 2015 with support from fellow subcommittee members of the Macedon Ranges Municipal Emergency Management Planning Committee.

Local government plays a vital role in supporting emergency response and is the lead agency in relief and recovery at the local level. Local government is also a key partner in the prevention of family violence and violence against women.

The *Prevention of Violence Against Women in Emergencies Action Plan* was our practical response to Australian and international research findings that violence against women can increase after an emergency. The plan aimed to prevent violence before it occurs in the context of emergencies; while also addressing family violence before, during and after an emergency. Priority groups included residents directly or indirectly impacted by an emergency as well as volunteers and staff working in emergency response, relief and recovery.

Little evidence existed about successful strategies for local action in the largely uncharted area where violence prevention and emergency management intersect, so we drew on best practice primary prevention strategies for addressing gender inequality such as challenging beliefs in rigid gender roles and stereotypes; men's control of decision-making; and behaviours that condone violence.

Action

We are now in our third annual plan. Over the last three years we have raised awareness of the probability of increased family violence after natural disasters—an increase in severity for women already experiencing violence; but for some women it can occur for the first time.

We reviewed our Accommodation, Relief and Recovery Centre subplans and widely distributed a 'wallet' card

with information about the different forms of family violence and where to get help.

We mentioned the probability of increased family violence at community meetings after the Lancefield-Cobaw fires in October 2015. We have since developed a brief script for agency representatives leading community meetings, debriefs and after-action reviews to keep the message clear and consistent.

We have trained staff working in outreach as well as relief and recovery centres to recognise and respond appropriately to family violence. After the Gisborne fires in February 2014 which affected more than 400 properties, one woman was referred to family violence support. Just over 18 months later, after the Lancefield-Cobaw fires which affected approximately 110 properties, trained staff referred four women to family violence support.

In March 2016, four and a half months after the Lancefield-Cobaw fires, we asked response and recovery staff and volunteers about their experience of the incident. The purpose of the survey was to examine people's experiences and observations during and after the Lancefield-Cobaw fires through a gender lens—to identify the potentially different ways men or women might be impacted. Most respondents did not experience or observe any different treatment, opportunities or barriers due to gender; however, this was not the case for all respondents. More than one respondent observed there were more men in operational and decision-making roles; more women in administration roles. A male respondent commented that a fellow male crew member ignored specific instructions from a female crew leader, putting the whole team at risk. A female SES volunteer mentioned the SES overalls were made so 'men could urinate without having to remove the overalls and weren't modified for female use'; she had bought herself a 'she-wee' which she was trialling.



Image: The Women's Chainsaw Club, a Macedon Ranges Shire Council initiative teaching women valuable skills

While the overall response rate was good, the declining response rate as people progressed through the survey suggests they either lost interest or didn't understand the questions or their purpose. Several respondents stated they felt the survey was a waste of time and irrelevant. The delayed timing may have resulted in many recording 'don't know' in response to questions as they couldn't remember or weren't aware of other people's experiences. However, the high number of 'don't knows' recorded may support the notion of a lack of awareness within the broader community of gender equality and its link to family violence particularly in the context of disaster response and recovery.

We set up a panel of family violence and women's health specialists to review and refine our work including the post-incident survey tool; the script to raise awareness; family violence protocols for Emergency Relief and Recovery Centres; a poster to raise awareness; and our current action plan.

We have successfully advocated for funding for related projects such as the Macedon Ranges Shire Council-led Rural Challenge Gender Equality Leadership Program, which empowers Country Fire Authority brigades and football netball clubs to be more gender-equal and family-friendly; and the first Women's Chainsaw Club program which included sessions on chainsaw use and safety; emergency preparedness; and chainsaw carving. There is a huge appetite for this type of education –the first participants were selected from over 100 expressions of interest—Macedon Ranges Shire Council will be looking at how this program be funded to run again in the future.

Recommendations

Macedon Ranges Shire Council have learnt since the first plan and would recommend councils:

- involve family violence and women's health specialists from the beginning
- capitalise on the ability of local government to facilitate and lead action
- keep it simple: be realistic about the number and complexity of actions selected given the limited availability of response and recovery agencies during the fire danger period
- choose actions that are achievable, measurable and informed by new research findings, information and practices
- invest time in strengthening partnerships to build commitment of agencies to working together and leading at least one partnership action
- allocate resources to the work – both staff time and a budget; the greater the resources the deeper the impact
- acknowledge that working in primary prevention of violence against women takes time and action often starts with response/referral
- build understanding of the link between gender inequality and family violence as the gendered nature of violence does not appear to be well understood
- make use of existing tools and resources including the National Gender and Emergency Management Guidelines.

Our action plan is simple, but has proven to be effective in raising awareness about the increased potential for family violence after emergencies and could easily be replicated across other local government areas.

Opioid substitution treatment and disasters: perspectives from Aotearoa New Zealand

Denise Blake, Joint Centre for Disaster Research, Massey University, New Zealand

In Aotearoa New Zealand, disaster risk management (DRM) aspires to protect the lives and livelihoods of people and places. It does this by encouraging people and communities to be disaster ready, while ensuring reduction of potential and actual harm from a disaster, responding immediately and directly following a disaster, and recovering so that there is ongoing regeneration and resiliency for the people and communities impacted by a disaster (Ministry of Civil Defence & Emergency Management, 2016).

Opioid Substitution Treatment (OST) is also a harm reduction approach that aims to minimise risks associated with illicit drug use, such as prevention of blood-borne diseases and criminal activity. OST medications such as suboxone and methadone need to be consumed every day to prevent uncomfortable physical and psychological withdrawals from occurring. Physical withdrawal symptoms present as uncomfortable flu-like symptoms, such as aching muscles, nausea and diarrhoea (Berry *et al.* 2010). Psychological and emotional withdrawal symptoms, which for some are more challenging than the physical symptoms, involve agitation, anxiety and obsessive and reoccurring thoughts of using the drug. People are only able to access OST by registering at an authorised clinic and being accepted into a programme. As controlled substances, OST medications are highly regulated, and people on OST have little agency with dosing amounts and takeaway regimes (Berry *et al.* 2010; Ministry of Health 2014). Access to OST is necessary for the health and wellbeing of people on OST, and their families and broader communities.

Being reliant on medications that support health and wellbeing needs to be understood as a vulnerability that requires specific DRM strategies during and after a disaster (Blake & Lyons 2016). While people who have vulnerabilities can prepare, respond, cope and adapt to a disaster, this ability is often based on social relationships and context. A plethora of literature argues that people who are vulnerable are worse off during and following a disaster (see Baker & Cormier 2015, Hoffman 2009, Luna 2009). Research specifically on OST highlights that in the immediate aftermath of a disaster, obtaining OST is problematic because of limited access to OST

dispensing services, such as OST clinics and pharmacies with critical infrastructure damage and drug resourcing issues. To illustrate, research following Hurricane Katrina in 2005 (Bloodworth, Kevorkian, Rumbaut, & Chiou-Tan 2007, Maxwell, Podus, & Walsh 2009) and Sandy in 2011 (McClure, Mendoza, Duncan, Rotrosen, & Hansen 2014) found that contact with OST treatment providers was difficult, dose amounts for people on OST were unavailable and stock levels were low. Similarly, a media report following Hurricane Harvey in 2017 outlined that people were still unable to access OST medications a week after the event (Hersher 2017). With no access to opioid treatment, some people use street drugs to avoid OST withdrawals. Using street drugs carries the risk of drug overdose, blood-borne disease and crime.

With very little knowledge about emergency planning and approaches for OST in the readiness, reduction and response phases of a disaster in Aotearoa New Zealand, this study interviewed 22 emergency management and health professionals and 21 people on OST to understand how they understood and practised DRM in the OST space. The professionals included hospital-based emergency managers, community-based emergency managers, pharmacists, OST staff, general alcohol and other drug staff and people from the Ministry of Health. The people on OST were on both suboxone and methadone and had been on a programme for between one and thirty years.

Drawing on thematic analysis to represent themes across participants' narratives, findings highlighted that the emergency management and health professionals were concerned for the health and wellbeing of people on OST after a disaster. Some considered that survival

would be severely hindered because people might not be able to walk to safety or access food without their medication. There was also concern about co-existing mental health disorders and access to other medications such as benzodiazepines because these drugs have life-threatening withdrawal symptoms. The professional group talked about the need to ensure there would be enough OST stock after a disaster, especially if main arterial routes were closed. Emergency management plans need to include ways to verify dose amounts and obtaining opioid medication prescriptions from medical officers. At the time of the interviews, many of the OST services were yet to complete a comprehensive emergency plan, and many reported that it was difficult to make plans because of a wide-ranging number of potential disaster scenarios. All the health professionals expressed care for the health and wellbeing of people on OST.

The key themes to emerge from the narratives of people on OST included being fearful of the effects of withdrawal and how that would impact on their ability to get to safety and care for their children, or other people after a disaster. One OST client noted, 'it's not a case of someone just coming in and saying I need drugs, it's someone saying, I need a chance to survive'. All participants on OST questioned how they would access their medications if OST clinics and pharmacies were inoperable, while most of them reported that they would do whatever necessary, such as 'knocking over a doctor's [surgery and] taking their script pads' to make sure they had a way to access opioid drugs. People also said they would rob pharmacies or go to a hospital emergency department. Participants expressed a desire to be informed about emergency management planning by their clinics or pharmacists. All but one participant had not received any information on OST emergency planning, with one person saying that having information would 'be so much more reassuring if there was a plan'. They were further worried about the impact of stigma on the way emergency management people would treat them. People on OST, even though medically prescribed, experience social stigma which can have implications for people's sense of themselves and how they engage with others (Conner & Rosen 2008, Earnshaw, Smith, & Copenhaver 2013, Luty, Kumar & Stagias 2010). One participant on OST said 'I'd be worried about the [emergency managers]... taking me seriously' (OST client).

This research aimed to give voice to the unique needs of people on OST following a disaster. By doing this and encouraging the emergency management field to recognise the specificity of OST it will enable inclusive DRM practices that support the safety and wellbeing of marginalised groups in a disaster scenario. Reducing vulnerability is important, as is producing preparedness plans that minimise harm to all people, their families and the broader community. OST is a successful harm reduction approach that makes a difference in the lives of people who are on the treatment; we must support them to have access to their OST in what are already chaotic and unsure disaster contexts.

References

- Baker LR & Cormier LA 2015, *Disasters and vulnerable population: Evidence-based practice for helping professions*. New York, NY: Springer Publishing Company.
- Berry R, Townshend P, Pooley S, Deering D, Nixon L, & Vince K 2010, *National opioid substitution treatment providers training programme*. Wellington: Ministry of Health.
- Blake D & Lyons A 2016, *Opioid substitution treatment planning in a disaster context: Perspectives from emergency management and health professionals in Aotearoa/New Zealand*. *International Journal of Environmental Research and Public Health*, 13(1122), 2-14. doi:10.3390/ijerph13111122
- Bloodworth DM, Kevorkian CG, Rumbaut E & Chiou-Tan FY 2007, *Impairment and disability in the Astrodome after Hurricane Katrina: Lessons learned about the needs of the disabled after large population movements*. *American Journal of Physical Medicine & Rehabilitation*, 86(9), 770-775. doi:10.1097/PHM.0b013e31813e0439
- Conner KO & Rosen D 2008, "You're nothing but a junkie": Multiple experiences of stigma in an aging methadone maintenance population. *Journal of Social Work Practice in the Addictions*, 8(2), 244-264. doi:10.1080/15332560802157065
- Earnshaw V, Smith L & Copenhaver M 2013, *Drug addiction stigma in the context of methadone maintenance therapy: An investigation into understudied sources of stigma*. *International Journal of Mental Health and Addiction*, 11, 110-122. doi:10.1007/s11469-012-9402-5
- Hersher R 2017, *Houston methadone clinics reopen after Harvey's flooding*, NPR. At: <https://www.npr.org/sections/health-shots/2017/09/06/548819207/houston-methadone-clinics-reopen-after-harveys-flooding>
- Hoffman S 2009, *Preparing for disaster: Protecting the most vulnerable in emergencies* University of California Davis Law Review, 42, 1491 - 1547.
- Luty J, Kumar P & Stagias K 2010, *Stigmatised attitudes in independent pharmacies associated with discrimination towards individuals with opioid dependence*. *The Psychiatrist*, 34, 511-514. doi:10.1192/pb.bp.109.028951
- Luna F 2009, *Elucidating the concept of vulnerability: Layers not labels*. *International Journal of Feminist Approaches to Bioethics*, 1(2), 121-139.
- Maxwell JC, Podus D & Walsh D 2009, *Lessons learned from the deadly sisters: Drug and alcohol treatment disruption, and consequences from Hurricanes Katrina and Rita*. *Substance Use & Misuse*, 44, 1681-1694. doi:10.3109/10826080902962011
- McClure B, Mendoza S, Duncan L, Rotrosen J & Hansen H 2014, *Effects of regulation on methadone and buprenorphine provision in the wake of Hurricane Sandy*. *Journal of Urban Health*, 91(5), 999-1008. doi:10.1007/s11524-014-9904-5
- Ministry of Civil Defence & Emergency Management 2016, *The 4Rs: Reduction, readiness, response and recovery*. At: <http://www.civildefence.govt.nz/cdem-sector/cdem-framework/the-4rs/>
- Ministry of Health 2014, *New Zealand practice guidelines for opioid substitution treatment*. At: <https://www.health.govt.nz/system/files/documents/publications/nz-practice-guidelines-opioid-substitution-treatment-apr14-v2.pdf>

Emergency preparedness pathways to disability inclusive disaster risk reduction

Michelle Villeneuve, University of Sydney

People with disability have been excluded from community preparedness activities which has created inequitable disparities in survival. People with disability are at higher risk of injury or morbidity than the general population in disasters (Garlick 2015, Hisamatsu 2013, Tatsuki 2012, Villeneuve, Robinson, Pertiwi, Kilham & Llewellyn 2017). They are the first to be left behind and the last to be rescued, and their rights to protection and safety are often denied (Gray & MacDonald 2016, Stough & Kang 2015).

Quality data on disability and disasters is limited. Results of the first-ever UN global survey concerning disability and disasters revealed that people with disability are rarely consulted about their needs. A concerning 85.57 per cent of respondents from 137 countries stated that they have not participated in community-level disaster management (UNISDR 2014). Importantly, only 20 per cent of respondents with disabilities reported being able to evacuate effectively in an emergency. Their ability to evacuate safely rises to 38 per cent if appropriate information is available (UNISDR, 2014). Global attention is now on the exclusion of people with disability from emergency preparedness decision-making and planning processes as the key reason for the disproportionate impact of disaster events on people with disability (Hisamatsu 2013, Stough & Kelman 2018), regardless of where they live (UNISDR 2014).

As a signatory to the *Sendai Framework for Disaster Risk Reduction 2015–2030* (UNISDR 2015), Australia has committed itself to ensuring that the needs and voices of people with disability are included in disaster risk management and removing the barriers that stop people with disability engaging with disaster risk reduction activities. Yet, pathways to achieving this and their feasibility remain unclear. Emergency managers recognise the importance of shifting from traditional emergency preparedness to strengths-based and resilience-oriented approaches (Madrigano, Chandra, Costigan & Acosta 2017) that include the whole community (COAG 2011) but they lack the tools and inclusive community engagement processes to make this shift.

An alternative approach, which brings to the fore the requirements of Article 32 of the Convention of the Rights of Persons with Disabilities (United Nations 2006), ensures that people with disability lead pre-planning efforts (Centre for Disability Research and Policy & Natural Hazards Research Group 2017). Referred to as Disability Inclusive Disaster Risk Reduction (DIDRR), this approach directs attention to the person with disability, their skills and support needs in interaction with the environment and structural factors which create or restrict capabilities around emergency preparedness and action during a natural hazard emergency. DIDRR requires removing the barriers that stop people with disability engaging with disaster risk reduction activities through principles of accessibility, participation, collaboration and non-discrimination (Centre for Disability Research and Policy & Natural Hazards Research Group 2017).

The Centre for Disability Research and Policy and the Natural Hazards Research Group at the University of Sydney partnered in research on DIDRR in Australia from 2015 to 2018 and in Indonesia from 2013 to 2015. The research asserts that survival for people with disability crucially depends on emergency preparedness in their community. Effective emergency preparedness relies on local emergency managers and community organisations working together with people with disability to withstand devastating disaster impact (Twigg 2014). It argues that there has been insufficient attention to engaging with people with disability about their functional capabilities and support needs in emergency situations. Learning from people with disability about their experiences of managing their support needs in everyday life is a key starting point for recognising and addressing factors

that increase their risk in an emergency. This is best achieved using strengths-based frameworks that enable consideration of the functional capabilities of individuals, rather than their diagnosis or impairments (Kailes & Enders 2007). The research focuses on developing new tools that enable emergency managers and communities to make the shift from deficit-based understandings that perpetuate views of people with disability as passive recipients of care to recognising their role as active participants in disaster risk reduction. This research has emphasised cross-sector collaborative actions for engaging together with people with disability (CDRP & NHRG 2017) to understand what they can do for themselves to prepare and what their specific support needs are in an emergency situation (Villeneuve, Sterman & Llewellyn 2018).

Together with stakeholders from the emergency management, health and disability sectors in NSW, Australia, we have co-designed the Person-Centred Emergency Preparedness (PCEP) process tool and framework (Villeneuve *et al.* 2018). The PCEP responds to the call for collaborative partnerships between emergency managers and community organisations (COAG 2011) to enable whole-of-community resilience to disaster. The PCEP capitalises on the routine interactions that community health and disability support providers have with their clients with chronic health conditions and disability in the community (Whyte-Lake, Claver, Dalton & Dobalian 2015). The theoretical foundation for this approach comes from the Capability Approach (Nussbaum 2011), aligning with the conceptualisation of person-centred planning, which begins with individual aspirations and capacities to collaboratively identify priorities for forward planning and decision-making (Mansell & Beadle-Brown 2004). When there is investment in developing individuals' capabilities for disaster planning and response, mortality and morbidity are reduced (Crozier & Dee 2016, Tanaka 2013). Moreover, self-determination, agency, choice and control have specific, tangible and positive repercussions for better outcomes in times of emergency (Stough & Kelman 2018). Enabling self-sufficiency and social connectedness reduces the need for external assistance, placing fewer demands on the emergency system before, during, and after a disaster (COAG 2011). PCEP offers a new approach for emergency managers to develop partnerships with community stakeholders who have not traditionally been included in community-level disaster risk reduction but who are optimally positioned to share in the responsibility of enabling whole-of-community resilience to disaster.

To date, we have field tested the PCEP, developed a User Guide (Villeneuve *et al.* 2018), and PCEP instructional videos (www.collaborating4inclusion.org/prepare-nsw/). The PCEP is an evidence-based and practice-informed toolkit that takes an all-hazards approach to enabling preparedness in others by structuring client-led identification of functional capabilities and support needs to direct preparedness decision-making. Using principles of person-centred planning and DIDRR, the PCEP:

- is a strengths-based process tool and framework to increase the inclusion of people with disability in emergency preparedness
- supports people with a disability to be equal partners in the self-assessment of their functional capabilities and support needs in eight capability areas (communication, management of health, assistive technology, personal support, assistance animals, transportation, living situation, and social connectedness)
- leverages routine interactions that community-based service providers have with their clients to develop emergency preparedness through targeted actions and advocacy relevant to an individual's unique support needs.

PCEP is the first capability-focused planning tool designed to enable inclusive emergency preparedness with people with disability in their community. It realises the important role for community-based service providers in the health and disability sector for enabling community-level disaster risk reduction.

The PCEP has relevance for all Australians, while attending to the unique needs of people with disability in a disaster. The research shows when we get it right for people living with disability and chronic conditions, we get it right for everybody (Stough & Kelman 2018). For example, the PCEP offers broad advantage to disaster risk management with diverse populations with different functional capabilities and support needs such as people with temporary disabilities, chronic illness, families with young children, people from culturally and linguistically diverse populations, pregnant women, and older adults.

For more information and to provide feedback that will inform our future development of the PCEP toolkit visit: <http://sydney.edu.au/health-sciences/cdrp/projects/PREPARE-NSW.shtml>

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References

- Centre for Disability Research and Policy & Natural Hazards Research Group 2017, *Local Emergency Management Guidelines for Disability Inclusive Disaster Risk Reduction in NSW*. Sydney, NSW.
- COAG 2011, *National Strategy for Disaster Resilience: Building our Nation's Resilience to Disasters*. Canberra: Commonwealth of Australia. At: <https://www.homeaffairs.gov.au/emergencymanagement/Documents/national-strategy-disaster-resilience.pdf>

- Crozier M & Dee M 2016, *Critical literature review: Disaster support and the resource needs of marginalised children and young people with disabilities from diverse cultural backgrounds*. At: https://eprints.qut.edu.au/107587/1/CEDMQUT_Literature_Review_FINAL_DRAFT.1.pdf
- Garlick D 2015, *The Vulnerable People in Emergencies Policy: Hiding vulnerable people in plain sight*. *Australian Journal of Emergency Management*, 30(1), 31–34. At: <https://knowledge.aidr.org.au/resources/ajem-jan-2015-the-vulnerable-people-in-emergencies-policy-hiding-vulnerable-people-in-plain-sight/>
- Gray L & MacDonald C 2016, *Morbid Obesity in Disasters: Bringing the "Conspicuously Invisible" into Focus*. *Int J Environ Res Public Health*, 13(10). <http://doi.org/10.3390/ijerph13101029>
- Hisamatsu M 2013, *Panel discussion on disaster resilience and disability: Ensuring equality and inclusion*. In Co-organized by UNDESA, UNISDR in collaboration with Indonesia and Norway and the Nippon Foundation. UN Headquarters, New York. At: http://www.un.org/disabilities/documents/reports/iddr2013_%20panelreport.pdf
- Kailes JI & Enders A 2007, *Moving Beyond "Special Needs."* *Journal of Disability Policy Studies*, 17(4), 230–237. <http://doi.org/10.1177/10442073070170040601>
- Madrigano J, Chandra A, Costigan T & Acosta JD 2017, *Beyond disaster preparedness: Building a resilience-oriented workforce for the future*. *International Journal of Environmental Research and Public Health*, 14, 1563; doi: 10.3390/ijerph14121563
- Mansell J & Beadle-Brown J 2004, *Person-centred planning or person-centred action? Policy and practice in intellectual disability services*. *Journal of Applied Research in Intellectual Disability*, 17(1), 1–9. <https://doi.org/10.1111/j.1468-3148.2004.00175.x>
- Nussbaum M 2011, *Creating capabilities*. Cambridge, MA: Harvard University Press.
- Stough LM & Kang D 2015, *The Sendai Framework for Disaster Risk Reduction and Persons with Disabilities*. *International Journal of Disaster Risk Science*, 6(2), 140–149. <http://doi.org/10.1007/s13753-015-0051-8>
- Stough LM & Kelman I 2018, *People with Disabilities and Disasters*. In *Handbook of Disaster Research* (pp. 225–242). Cham: Springer.
- Tanaka S 2013, *Issues in the support and disaster preparedness of severely disabled children in affected areas*. *Brain and Development*, 35(3), 209–213. <http://doi.org/10.1016/j.braindev.2012.09.008>
- Tatsuki S 2012, *Challenges in Counter-disaster Measures for People with Functional Needs in Times of Disaster Following the Great East Japan Earthquake*. *International Journal of Japanese Sociology*, 21(1), 12–20. <http://doi.org/10.1111/j.1475-6781.2012.01158.x>
- UNISDR 2014, *Living with Disability and Disasters*. At: https://www.unisdr.org/2014/iddr/documents/2013DisabilitySurveyReport_030714.pdf
- UNISDR 2015, *Sendai framework for disaster risk reduction 2015–2030*. Geneva. At: http://www.wcdr.org/uploads/Sendai_Framework_for_Disaster_Risk_Reduction_2015-2030.pdf
- United Nations 2006, *Convention on the rights of persons with disabilities*. *Treaty Series*, 2515, 3. Retrieved from <http://www.un.org/disabilities/>
- Villeneuve M, Robinson A, Pertiwi PP, Kilham S & Llewellyn G 2017, *The Role and Capacity of Disabled People's Organisations (DPOs) as Policy Advocates for Disability Inclusive DRR in Indonesia*. In G. A. K. Surtiari, R. Djalante, N. J. Setiadi, & M. Garschagen (Eds.), *Disaster Risk Reduction in Indonesia: Progress, Challenges and Issues* (pp. 335–356). Cham, Switzerland: Springer. <http://doi.org/10.1007/978-3-319-54466-3>
- Villeneuve M, Sterman J & Llewellyn G 2018, *Person-Centred Emergency Preparedness: A process tool and framework for enabling disaster preparedness with people with chronic health conditions and disability*. University of Sydney, NSW 2006.
- Wyte-Lake T, Claver M, Dalton S & Dobalian A 2015, *Disaster planning for home health patients and providers: A literature review of best practice*. *Home Health Care Management & Practice*, 27(4), 247–255, doi:10.1177/1084822314567536.

Gather My Crew: an innovative approach to building supportive communities around those experiencing crisis

Kate Clayton and Susan Palmer, Gather My Crew Health Consulting

When crisis strikes, humans are motivated to assist those in need. However, without the existence of a fit-for-purpose communication and coordination tool, a family who has experienced a crisis rarely activates their personal network in the most advantageous way. This can contribute to those experiencing crisis feeling unsupported or under-supported.

Gathering the practical support needed in a crisis is challenging and time consuming—and it requires a thorough understanding of what families need. With the right tools, family and friends can play a greater supportive role in facilitating the recovery of those touched by disaster and crisis.

Abstract

Gather My Crew is a free online rostering tool that has been clinically developed to build supportive communities around people going through crisis (such as accident, serious illness, natural disaster, stroke).

Although it is widely recognised that (i) breakdown often occurs between those able to help and those in need of help, and (ii) feeling unsupported or under-supported correlates with negative outcomes such as depression, anxiety, distress and family breakdown, there is little that community care agencies can do to facilitate change within an individual's personal network.

Gather My Crew works to empower people experiencing a crisis to identify the help they need, coordinate their own support, control who they ask for help and directly build a community of support around them.

Based on clinical evidence, Gather My Crew pre-emptively identifies current and future needs with pre-prepared task options. Gather My Crew supports the user to actively ask for and coordinate help from willing supporters to meet their needs. This serves to foster

stronger coping and ameliorate the stress inherent in these crisis situations.

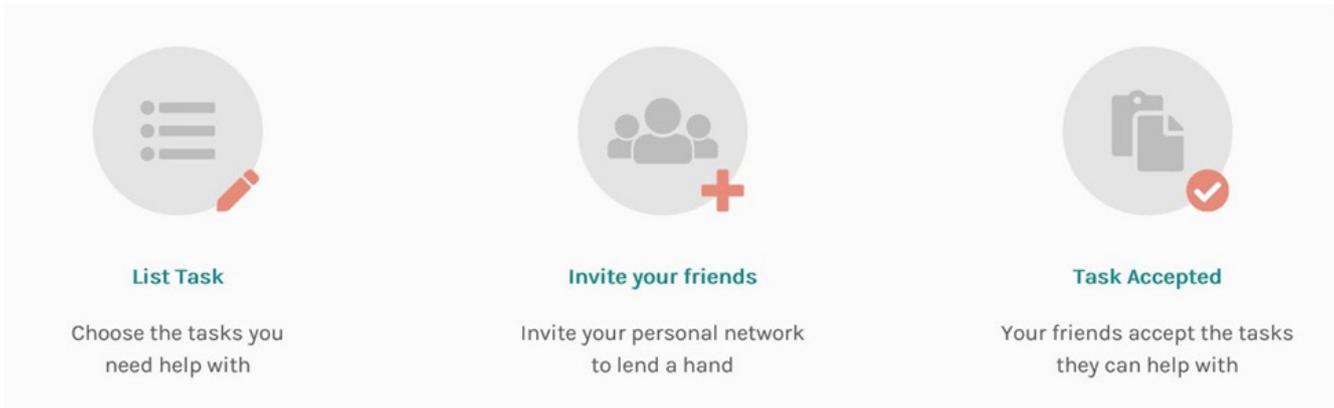
With Gather My Crew, normal life can go on. Everyone experiencing crisis can feel supported by their friends and family and access the practical support they need to move through a difficult time.

The development of the Gather My Crew concept and technology, along with insights from the first eight months will be discussed.

Identifying the problem

The concept of Gather My Crew (GMC) was born in 2015 after Dr Susan Palmer, a registered psychologist and clinical researcher, tried to coordinate help for a friend undergoing back surgery. With over 30 people offering to help and a list of over 100 tasks needing to be done to support the family and their young twins over a six-week period, the role of producing spreadsheets, coordinating and communicating through this process became overwhelming. The greatest frustration was knowing that the care and support needed was available, but that the act of coordinating it was just too difficult.

The idea of creating a digital solution to this problem followed 12 months of research conducted by Dr Palmer. She used her expertise to 'deep-dive' into the issue and discussed the problem in detail via interviews with survivors of crisis, the families who supported them, and the clinicians who guided them throughout their journey.



Gather My Crew: an innovative approach to building supportive communities around those experiencing crisis.

Image: Kate Clayton and Susan Palmer

Through this research, three defining problems were identified that acted as barriers to people in need receiving the help they needed from their own community.

1. People in crisis are often too overwhelmed to know what help they need and how to ask for it.
2. Friends and family feel helpless when watching someone they care about go through a crisis. They do not know how they can best help and don't want to 'intrude' by providing unwanted help.
3. The actual task of coordinating meaningful help in any ongoing way is onerous and time consuming.

The solution - Gather My Crew

GMC is a digital solution to overcome these barriers. It uses technology to support the mobilisation of personal networks during times of disaster and crisis.

Using evidence-based research, GMC pre-emptively identifies areas of unmet need that are linked to poor outcomes such as depression, anxiety, stress, distress, and family breakdown. It then encourages those in need to reach out to their friends and family and invite them to 'lend a hand'.

GMC supports and encourages people in need to build a community of support around them. By increasing the practical and emotional support from family and friends in the early stages of disaster and crisis, both short and long-term psychological outcomes for individuals and families are improved.

How does it work?

Central to the GMC solution is the pre-populated needs list. This list has been developed based on clinical interviews and research. It includes the 84 most common needs identified by people experiencing a crisis and are represented by the following categories: home; food; children; transport; pets; medical; social; miscellaneous. These needs are presented as 'click and select' task options so that the person creating the

account does not have to think about what help they need.

Once tasks are entered, the personal community (the Crew) of the family in need is invited to help (e.g. friends, neighbours, school groups, sporting teams, church groups and work colleagues). The Crew can log in and select the tasks they are happy to help with. Additional needs can be added to the rostering tool as they come up.

This entire process (see image 1) can be set up in as little as 15 minutes, either by the family in need or someone acting on their behalf, leaving the family knowing that they are not alone and will be well supported through the crisis.

What are the outcomes?

Since its official launch in July 2017, more than 4000 people have registered with GMC and over 13,500 help requests have been created to support people in need. The most popular requests include cooking dinner, washing clothing, visiting, taking a person to a medical appointment, walking the dog, child minding, give a carer a break, and school transport.

Users are assisting on issues dealing with; cancer treatment, sudden death, managing a child with a disability, surgery, car accident and stroke. Each of these events represents a personal crisis that requires a community support response. Our data tells us that the average size of the community created via GMC is nine people and the community gathers around the person in need for an average of 53 days.

User feedback tells us that people who would not normally ask for help are able to do so through our technology solution as it has 'depersonalised' the difficult act of asking people for help. Through the Gather My Crew solution, more people are asking for help and more people are able to offer help as it can be scheduled around their own busy lives via the GMC calendar.

The below testimonials are examples of the feedback we receive;

- “Being able to use this tool was life changing. I don’t know how I would have coped over these past months without it.”
- “This website is a ‘godsend’ for us.”
- “Gather My Crew is exactly what I need. I am both excited and relieved that my team will be in place and active when I need it.”
- “We are using Gather My Crew to support my wife through her chemotherapy treatments. Thank you for your wonderful site.”
- “This is a great service and was really useful when my friend had surgery. I’ll certainly recommend it to others.”

What is next for Gather My Crew?

One of the strengths of the GMC concept is knowing the problem we are working to solve—and then creating a specific solution. We are a digital resource for organisations supporting people in need and for those in need themselves.

Since launch, GMC has been working with a range of non-profit community support organisations and advocacy groups to reach those in need. Organisations currently referring clients and patients to GMC include; Cancer Council Australia, Very Special Kids, Heart Foundation Victoria, Stroke Foundation, Kidney Health Australia, YoungCare, Ovarian Cancer Australia, Breast Cancer Network Australia (BCNA), RedKite, Camp Quality Victoria, Life’s Little Treasures and many more.

We welcome partnerships with other organisation working with people in crisis and encourage those interested to reach out to us for further information.

ABSTRACT

The capacities and vulnerabilities of people with extreme obesity have yet to be explored in disaster risk reduction literature. Whilst people have been impacted in disasters in relation to their size, shape and weight, the literature is 'conspicuously invisible' on this topic and where guidance exists, people's own accounts are missing. Through autoethnography, the authors relate what was entailed in self-evacuation for a super-plus size person in advance of Hurricane Irma making landfall at Sarasota in September 2017. The article identifies and discusses issues that impact on the ability of people with extreme obesity to prepare and respond in disasters.

Peer-reviewed article

My grab bag is two suitcases: an autoethnographical view of a super-plus size self-evacuation from Hurricane Irma

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Introduction

Hurricane Irma formed on the 30th August 2017 and devastated parts of the Caribbean on its path to Southern Florida. By the time it made landfall in Sarasota County on September 10th the category 5 hurricane had reduced to a category 1 (Sarasota County 2017). Damage totalling at least \$64.8 billion and 134 fatalities (including at least 80 people across Florida) are associated with Hurricane Irma (Cangialosi, Latto & Berg 2018).

Accounts of previous hurricanes have shown that people with extreme obesity (body mass index of 40 and above) present unique challenges for emergency management, including rescue transportation, equipment, shelter and clothing (Baggett 2006, Saunders 2007). However, the literature has not specifically considered extreme obesity in disaster risk reduction (DRR), despite reports of people being left behind during disasters because of their body size, shape or weight (Gray & MacDonald 2016, Gray 2017).

Three of the authors met in Sarasota, Florida in July 2017 to discuss DRR in relation to people with extreme obesity and identified that whilst the County had plans in place for assisting people with extreme obesity, for example in the case of falls (Sarasota County 2015), no specific DRR plans were in place regarding this population. This is not unusual. While there are accounts of people with extreme obesity having been impacted in disasters (Ramme, Shaleen & McLaurin 2015, Fink 2013), the research literature is 'conspicuously invisible' on this topic (Gray & MacDonald 2016). Some practical guidance and toolkits refer to such populations (Baggett 2006, Ringel *et al.* 2009, ASPR n.d.) but individual accounts are missing. This article addresses that gap.

Method

The authors apply the qualitative method of autoethnography which involves the researcher(s) retroactively and selectively writing about experiences



Image: July 2017 visit to Sarasota Emergency Operations Center: Lynn McAfee, Chief Edward J McCrane.

and reflecting on those experiences (Maréchal 2010). Autoethnography 'offers a way of giving voice to personal experience to extend sociological understanding.' (Wall 2008 pp.38). The second author is a person who describes herself as super-plus sized. She has lived in Sarasota for 8 years.

On the run

With hurricane Irma scheduled to make a direct hit on Sarasota I decide to make a run for it.

I knew if it was a category 4 or 5, I wouldn't be able to ride it out in my house, I would need to go to a shelter for an unknown number of days. If it was a lesser hurricane, and I was only in a shelter overnight, I would have stayed. The fact that I had access to a vehicle and can drive and that I had someplace to go and stay was also a factor. I would have to evacuate from Sarasota myself. If I stayed, how I would be able to get around by myself? A lot of the roads would be flooded and there was no way I was going to be able to get out of my car and walk anywhere. My mobility is just too limited. The local, narrow two-lane roads routinely flood in the rainy season. I could be stuck in a shelter for days until the waters recede.

Packing the car was a physically-draining nightmare. I already had a file of important papers to take with me but I was totally unprepared for how much emotional and physical work it is to evacuate by myself. The trunk of my car had my bariatric manual wheelchair; my walker went in the back seat. I packed a bag with essentials I would need in my two nights in a hotel – hygiene tools, medication, my BiPAP (Bilevel Positive Airway Pressure machine), soothing book to read, two sets of clothes for the rest of the trip, water, protein bars to eat in case there were no restaurants to deliver food or drive-thru. I took a toilet riser to use in hotel rooms, my hygiene tools (Ample sponges, long-handled spatula to apply ointments in places I could not reach).

Clothing was a special issue. I can't go into any regular store and replace any article of clothing. Everything is

mail-order and expensive. So I picked out what I thought would be irreplaceable or would take weeks to replace. Armfuls of clothes were too dangerous for me to carry so I ended up using my wheelchair to transport the clothes to the car, making many trips in the one day I had before I felt I really had to evacuate or the traffic would be unbearable. I was physically exhausted.

About 1.00am, eight hours before I was due to leave, I slipped and fell, hitting my head against a bookcase. I was lucky it did not fall on me – it would be somewhat ironic for a bibliophile to be literally killed by her books! I lay on the floor for a while I think, kind of out of it, but finally was able to use my cell phone to call for help. The rescue people were amazing. They calmed me down, we talked about our options to get me upright; they were very respectfully 'in charge'. They had dealt with people my size before and they knew what they were doing but they listened to me and dialogued. They asked if I wanted to go to the hospital but I said no but in retrospect I probably should have gone. The next day, instead of leaving I slept late and pattered around the house with a very sore forehead and a spectacular headache that lasted 48 hours.

The news that evening talked about how many people were evacuating and clogging the roads. I went out at 9.30 pm to get gas and was shocked at the long lines at the pump. No one was available to pump my gas; they were all busy directing traffic. The gas station closed before I could get gas, so I had to get it the next morning. There was news on the TV about how places were running out of gas and this was only Wednesday. The storm wasn't due until Saturday night or Sunday morning. I knew I had to get on the road early Thursday morning to have enough time to outrun the storm.

The first hour of my trip was fine. No traffic jams at all until I got through Tampa. Then traffic just stopped. I mean, really stopped. It was like that for the next seven hours – stop, start, go slow, stop. I spent eight hours on the road to get to a place that's usually only two hours away. I had to stop and pump gas several times because idling in traffic was killing my gas mileage, plus the news

reported widespread gas shortages. Some gas stations were closed and I had to scabble around for a few exits to find one that had gas. Seriously stressful. One of the worst things about the drive was my bladder problems. I am 100% incontinent - urge, stress and functional incontinence. Incontinence is one of the problems that would make my stay in a shelter difficult.

I stopped after eight hours to get a hotel room. Despite Florida having heaps of hotels it was not easy to get a room. I struggled to get myself from car to registration desk at four hotels before finding a place at an expensive and not very nice place. They did not have a room suitable for my needs, but at that point I didn't care. My whole body felt swollen; unusually my ankles and feet were tremendously swollen. I could barely move my right ankle. My arthritis was hurting everywhere, especially my hands, shoulders and feet. I began to strategise scenarios in case I could not drive all the way to my planned destination. What was the shortest distance I could drive to get away from the hurricane? Would I have enough money to stay in a hotel for a few days until I could drive again? The hotel I was in was still in the hurricane's projected path: I felt trapped, alone and scared.

Thankfully, the next morning the swelling had gone down and I medicated for arthritis pain. There was considerable traffic for the first hour, then the highway branched and I went east while it seemed most people went west. Without having to hit the brake all the time, my feet and ankles did not swell up much. It felt like a miracle, a sign I should just keep driving. So I did.

One thing is certain: another hurricane will come, and next time it will probably not be a category 1. Evacuating or going into the shelter is always going to be a difficult decision. The major factor in deciding whether to evacuate or go to the shelter is that the accommodation is being sold, so I will not be able to evacuate to that property to ride out the storm there. Staying in a hotel will not be financially feasible, so although I would prefer to evacuate I won't be able to leave. I think that I will ride out a category 1 or 2 in my house. For category 3 and above I will go to the shelter. I hope the shelter will be able to accommodate my needs.

Discussion

Hurricane Irma's relatively long lead-in period allowed Sarasota residents time in which to prepare, pack and leave. Emergency management organisations routinely encourage people to have a small 'grab bag' (or go bag or getaway bag) containing essential items such as water and snacks, shoes, warm clothing, medications, copies of important documents, radio and torch. Yet there is evidence that large proportions of populations living in areas prone to natural hazards are not prepared (Colmar Brunton 2016, p.14).

Lynn's grab bag comprised two suitcases and a fully loaded car. Many of these items were indispensable aids to daily living. Apart from mobility aids, such as her bariatric wheelchair, Lynn needed items related to her size, such as appropriate clothing and hygiene items to clean and dry between skin folds.

Clothing is a significant issue for people with extreme obesity. In disasters the public are routinely asked not to send donations of clothing. It can be expensive and time-consuming for people with extreme obesity to acquire appropriate clothing; a challenge that is amplified in a disaster situation. Lynn recalled:

'When Hurricane Katrina hit New Orleans, there was a picture of a woman wearing taped together trash bags because she had no clothes. Several of us volunteered some of our clothing, and one woman tried, without success, to find a place to send it.'

Recognising the predicament of super-plus sized people following Hurricane Katrina, the National Association to Advance Fat Acceptance (NAAFA) coordinated the collection and distribution of appropriately sized clothing. Requests for plus sized clothing were received following Hurricane Harvey in Texas and items were sent to the Virgin Islands and Puerto Rico following Hurricane Irma (NAAFA 2017).

Lynn's experience highlights how size, shape and weight impact on a person's ability to produce a practical emergency 'grab bag'. The range and size of required items means preparing a small, portable 'grab bag' is not realistic for a super-plus sized person. The contents of Lynn's 'grab bag' also illustrate how her needs as a super-plus sized person go beyond issues related to disability and mobility. Lynn had self-registered with the Sarasota County Emergency Operations Center (SCEOC) as a person with special needs (PSN). She was pleased to see that the PSN form had space to indicate if your wheelchair was regular or wide. A new form was introduced in April 2018, following lessons learned from Hurricane Irma in conjunction with Health Department partners. The name was changed from special needs to medical needs because many people (800) registered as PSN in the four days leading up to the hurricane and most were identified as appropriate to go to a general population shelter. The wheelchair width question has disappeared and question relating to weight is now included. Decisions should not be made on weight alone as width and girth are significant factors in the ability to fit into chairs, cots, and through doorways. As was found in Superstorm Sandy the patient's weight and width were factors informing decisions not to attempt evacuation down the stairwell (Ramme, Shaleen & McLaurin 2015). Anyone completing the form is contacted and needs verified by staff at SCEOC. Lynn did receive a call from SCEOC before she left asking if she was planning on going to a shelter. While Lynn felt that it was good that they followed up and tried to help, her decision to evacuate to a shelter was influenced by several factors related to her size, not just her mobility. 'I would need to go to a shelter for an unknown number of days. If it was a lesser hurricane, and I was only in a shelter overnight, I would have stayed.' A significant consideration for Lynn was the shelter sleeping arrangements. 'Where would I sleep? I can't fit on a cot!'

The use of regular military cots in shelters following the 2004 Florida hurricanes (Baggett 2006) was problematic. Because the cots were close to the ground, very large people required assistance getting on and off them. Staff found this task difficult and physically stressing (Baggett 2006). Florida Health's guidance for vulnerable

populations details shelter requirements including cots with adequate dimensions and suitable weight capacities (Florida Health 2013). Six larger sized cots were deployed to Sarasota Memorial Hospital and three deployed to each special needs shelter. Lynn had read that some disaster planning documents advocated the use of two beds or cots to accommodate big people.

'Are they kidding?? I'd put one butt cheek on each bed and they would immediately open up a space between the beds I can conveniently use to fall right onto the floor, where I can't get up without the help of, literally, six people.'

Lynn was also concerned about shelter bathroom facilities. Florida Health recommend easy access and secure mounting of toilets with the capability to support increased weight (Florida Health 2013). In practice it is not likely that many shelters could accommodate people with extreme obesity.

The needs of people with extreme obesity are not routinely considered when discussing chronic conditions or disability in disasters (Gray 2017). For example, a recent Australian guide concerning the needs of people with chronic conditions in disasters references weight and obesity once as a lifestyle factor (Australian Diabetes Educators Association 2015). Convention is that extreme obesity does not mean someone is disabled, however certain conditions associated with extreme obesity including diabetes or limited mobility may be disabling. Walking, stair climbing, and chair rise ability may be especially compromised with extreme obesity (Vincent, Vincent & Lamb 2010). To be a super-plus sized person with disabling conditions presents unique challenges and represents not only the double jeopardy of disaster and disability (Maja-Shultz & Swain 2012) but the prospect of triple jeopardy involving disaster, disabling conditions and excess size, shape, and weight (Gray 2017).

Lynn's evacuation decisions were also influenced by her expectation that she would experience weight stigma in a shelter.

'For many super-plus size people, this is a key issue. People will sometimes avoid even looking at you when they think you might make eye contact, although sometimes they will just stare, open-mouthed. I imagine kids running around and pointing to me, hollering "Mama, look at the fat lady. She's so fat!" This is not unrealistic; it happens to us all the time.'

While Lynn had access to alternative accommodation and transport, the process of packing to evacuate was 'a physically draining nightmare.' Her lack of mobility impacted on her decision to evacuate or shelter-in-place. 'If I stayed, how would I get around? A lot of the roads would be flooded and there was no way I was going to be able to get out of my car and walk anywhere. My mobility is just too limited.' Even in non-disaster situations fear of falling is greater in people with higher body mass (Friedman et al. 2002, Neri et al. 2017). If Lynn had no transport she would be reliant on the County. Military transportation is often used for mass evacuation in disasters (Baggett 2006), however such options are not always appropriate for people with extreme obesity. Difficulties boarding and disembarking trucks and buses

and weight restrictions on helicopters and small aircraft mean that the evacuation of people with extreme obesity may be, at best, delayed.

Conclusion

Vulnerable populations have been identified as being at increased risk of negative outcomes during and following disaster (Ringel et al. 2011, Wisner, Gaillard & Kelman 2015, Wisner et al. 2004). To-date the literature has not included people with extreme obesity (Gray & MacDonald 2016). Lynn's experience highlights that to be a super-plus-sized person with disabling conditions presents unique challenges which may not be routinely addressed when considering 'disability' aspects alone. Yet, the disability and DRR literature is silent on the added dimension of extreme obesity and the prospect of triple jeopardy this raises (Gray 2017).

Lynn's needs went beyond issues related to disability and impacted on the decisions she made and on her ability to prepare and respond in the face of impending disaster. Having a simple grab bag of 'essential' items to aid a quick get-away is not a realistic option for a super-plus-sized person like Lynn. The range and size of the items she needed complicated and pro-longed her evacuation. Her decision to evacuate or shelter-in-place was influenced by concerns about adequate sleeping, seating and bathroom facilities, as well as fear of encountering 'fat stigma'. While Lynn had her own transport, this will not be the case for all people with extreme obesity, and common mass evacuation transport options are frequently unsuitable for this population.

In the wake of Irma, SCEOC have the opportunity to review planning and preparedness arrangements, in particular for 'vulnerable' groups. The current Sarasota County Comprehensive Emergency Management Plan (2015) does not contain any DRR considerations for people with extreme obesity. However SCEOC intend to add information relating to people with extreme obesity to the health and medical annex of the plan. Organisations involved in DRR activities are urged to specifically consider the circumstances of people with extreme obesity that may impact on their ability to prepare and respond in disasters.

This paper provides valuable insight from the perspective of a super-plus sized person who self-evacuated in the face of an impending disaster. Further research is needed to better inform DRR with respect to this population.

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References

- Australian Diabetes Educators Association 2015, *The Needs of People with Diabetes and Other Chronic Conditions in Natural Disasters: A guide for emergency services, local councils and the not-for-profit sector*. pp. 1-52. Australia: ADEA.
- ASPR n.d, *Planning Considerations for the Extremely Obese in Disasters and Public Health Emergencies*. At: <http://www.phe.gov/Preparedness/planning/abc/Documents/obesity.pdf> [7 May 2018].
- Baggett J 2006, *Florida disasters and chronic disease conditions. Preventing Chronic Disease* vol. 3, no. 2, pp. 1-3.
- Cangialosi JP, Latta AS & Berg R 2018. *National Hurricane Center Tropical Cyclone Report. Hurricane Irma*. At: https://www.nhc.noaa.gov/data/tcr/AL112017_Irma.pdf [9 May 2018].
- Colmar Brunton 2016, *New Zealand Civil Defence Disaster Preparedness Survey 2016*. At: <https://www.civildefence.govt.nz/assets/Uploads/public-education/Civil-Defence-Report-17Oct2016.pdf> [16 May 2018].
- Fink S 2013, *Five Days at Memorial: Life and Death at a Storm-Ravaged Hospital*. New York: Atlantic Books Ltd.
- Florida Health 2013, *Vulnerable Population: Individuals with Extreme Obesity*. At: http://www.floridahealth.gov/programs-and-services/emergency-preparedness-and-response/healthcare-system-preparedness/access-functional-needs/_documents/vp-obesity.pdf [16 May 2018].
- Friedman SM, Munoz B, West SK, Rubin GS & Fried LP 2002, *Falls and fear of falling: which comes first? A longitudinal prediction model suggests strategies for primary and secondary prevention. Journal of the American Geriatrics Society*, vol. 50, no. 8, pp. 1329-35.
- Gray L 2017, *Social Determinants of Health, Disaster Vulnerability, Severe and Morbid Obesity in adults: Triple Jeopardy? International Journal of Environmental Research and Public Health*, vol. 14, no. 12, p. 1452.
- Gray L & MacDonald C 2016, *Morbid Obesity in Disasters: Bringing the 'Conspicuously Invisible' into Focus. International Journal of Environmental Research and Public Health*, vol. 13, no. 10, p. 1029.
- Maréchal G 2010, *Autoethnography*. In: Mills AJ, Durepos G & Wiebe E (Eds.), *Encyclopedia of case study research*, vol. 2, pp. 43-45. California: Sage Publications.
- Maja-Schultz T & Swain B 2012, *Disabled Adults in Adult Care Facilities Facing Disasters in New York City: An Aggregate Assessment. Care Management Journals*, vol. 13, pp. 67-74.
- National Association to Advance Fat Acceptance 2017, *October Newsletter*. At: <http://archive.benchmarkemail.com/NAAFA/newsletter/October-2017-NAAFA-Newsletter#article4> [8 May 2018].

Neri SGR, Gadelha AB, Correia ALM, Pereira JC, Safons MP & Lima RM 2017, *Association between obesity, risk of falls and fear of falling in older women. Revista Brasileira de Cineantropometria & Desempenho Humano*, vol. 19, no. 4, pp. 450-458.

Ringel JS, Chandra A, Williams M, Ricci KA, Felton A, Adamson DM, Weden MM & Huang M 2011, *Enhancing Public Health Emergency Preparedness for Special Needs Populations: A Toolkit for State and Local Planning and Response. Rand Health Quarterly*, vol. 1, no. 3. At: https://www.rand.org/pubs/technical_reports/TR681.html [7 May 2018].

Ramme AJ, Shaleen V & McLaurin TM 2015, *Superstorm Sandy's Forgotten Patient: A lesson in Emergency Preparedness in Severe Obesity. Obesity*, vol. 23, no. 2, pp. 253-254.

Sarasota County 2015, *Comprehensive Emergency Management Plan 2015*. Not available to general public.

Sarasota County 2017, *Sarasota County Hurricane Irma After-Action Report/Improvement Plan*. At: <https://www.scgov.net/home/showdocument?id=31511> [16 May 2018].

Saunders JM 2007, *Vulnerable populations in an American Red Cross shelter after hurricane Katrina. Perspectives in Psychiatric Care*, vol. 43, pp. 30-37.

Vincent HK, Vincent KR & Lamb KM 2010, *Obesity and mobility disability in the older adult. Obesity reviews*, vol. 11, pp. 568-579.

Wall S 2008, *Easier said than done: Writing an autoethnography. International Journal of Qualitative Methods*, vol. 7, no. 1, pp.38-53.

Wisner B, Blaikie P, Cannon T & Davis I 2004, *At Risk: Natural Hazards, People's Vulnerability and Disasters*. London: Routledge.

Wisner B, Gaillard J & Kelman I (Eds) 2015, *Disaster Risk*. London: Routledge.

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'We help each other': stories and experiences of disaster management and preparedness in Aboriginal communities in Darwin

Michaela Spencer and Michael Christie, Northern Institute, Charles Darwin University

Introduction

In 2015, the NTES funded a research project¹ which consulted housed and homeless Aboriginal people in Darwin, learning about their experiences of severe weather, cyclones and other emergency events. The research was initiated as a partnership project between the Australian Red Cross and Larrakia Nation Aboriginal Corporation (the local traditional owners of Darwin); two organisations with responsibilities for keeping people safe during emergency events in Darwin.

The aim of this research was to provide NTES with stories and background information which would help them to evaluate and improve their current policies and practices for populations within Darwin who may respond to emergency events, and emergency management practices, differently to mainstream populations. A collaborative research design, was developed with the Ground Up research team at the Northern Institute, Charles Darwin University, and Aboriginal researchers, consultants and community leaders.

What we did

Initial consultations were carried out with housed Aboriginal people living in each of Darwin's seven Aboriginal Communities, as well as with homeless Aboriginal people living rough in the Long Grass. While population numbers can vary radically, at any given time there are likely to be around 7000 Aboriginal people living in government owned housing in Town Communities in Darwin (Australian Government 2010). Housing in these communities is often managed by local housing corporations, who connect with, but are not responsible for, emergency management procedures. Population numbers also fluctuate amongst Darwin's Long Grass population, with several thousand people likely to be sleeping rough in temporary or semi-permanent camps each night. Many of these people are from remote Aboriginal communities and are very comfortable

ABSTRACT

In 2015, the Northern Territory Emergency Services (NTES) funded a research project concerned with the strategies employed by housed and homeless Aboriginal people in Darwin when responding to emergency situations. These groups represented vulnerable populations which were catered for within existing Territory based Emergency Management Plans, but had not previously been consulted about their experiences of cyclones or other emergency events. This paper details some of the outcomes of this research as it was carried out by the Ground Up team at the Northern Institute in partnership with the Australian Red Cross and Larrakia Nation Aboriginal Corporation. It focuses on stories and experiences of living with cyclones and other emergency events as told by Indigenous project participants, as well as on policy and service delivery implications for government and non-government organisations. Drawing on these accounts, we suggest it is productive to recognise resilience as a collective achievement, which arises in appropriate forms of partnering and collaboration between local Indigenous people and NT Emergency Services.

¹ This project was funded through the Northern Territory Natural Disaster Resilience Program For further information see <https://dcm.nt.gov.au/supporting-government/natural-disaster-resilience-program>.

sleeping under the stars in a place where it is never cold. Homelessness in this situation has a somewhat different meaning in Darwin compared with other Australian cities (Pollard et al. 2017), but of course these Long Grassers may be particularly vulnerable during severe weather or cyclones. It was for this reason that NTES were interested in hearing their stories.

During these project consultations, we worked with Aboriginal community leaders before consultations were carried out with residents living in Darwin's Aboriginal Town Communities and in the Long Grass. An Indigenous researcher always initiated discussions, which, where possible, were carried out in Aboriginal languages. Those we spoke to told stories of emergency events they had experienced in the past, and explained how they had managed during these times—working together with friends and family, as well as with government agencies and service providers.

A Ground Up approach

The Ground Up² research process takes seriously the Aboriginal knowledge production and agreement-making practices made clear over many years of collaborative work with Yolngu Aboriginal Elders from north-east Arnhem Land. In one rendering of such processes, originally written in a Yolngu language and then translated and closely analysed, a hunting metaphor is mobilised to explicate research (see Garnngulkpuy & Lawurrpa 2005). It begins with the right people sitting properly in the right place. A lot of talking needs to precede action, reminding us of where we have come from, our rights, roles and accountability, and our strengths and callings. Decisions are made together as to who should do what, in which direction they should go before returning. When everyone has undertaken their agreed task according to ancestral rule, and returns to share what they have procured, they discuss the different subtle flavours and tell their stories and make plans for an even more successful collaboration sometime soon. Such careful, in-place sharing of authority and capacity must characterise research. (For a more detailed discussion of metaphysical commitments underlying such Indigenous practices, see Garnngulkpuy 2002).

From a Western methodological point of view, this approach could be said to use Kathryn Pyne Addelson's (2002 p.123) notion of 'participants in collective action'. Read through this lens, disaster resilience and effective emergency management emerges as an outcome of diverse forms of collective action, including various means by which organisers, policy-makers, academics, Aboriginal participants and others, differently enact resilience and preparedness. Our research in this area, assumes that both Aboriginal people and emergency management organisations can and should be the end users of research, and that the development of collaborative theoretical and practical approaches to disaster resilience will benefit by engaging with differences.

Research in Town Communities and the Long Grass

At the outset of the project, NTES (and other government departments within the emergency management area) were concerned that Town Community residents, and people living in the Long Grass did not understand how emergency services work, or how they could be engaged. However, through this research it became apparent that these groups knew quite precisely the nature of emergency response services, including the role of police, NTES and the Larrakia Nation Night Patrol (an early intervention service supporting Darwin's Aboriginal populations³). They had stories to tell of their understanding of how NTES, Night Patrol and police services could be mobilised. They were confident of their rights, and of the value of these services. They were also able to articulate very reasonable strategies around how they might connect with these services in the event of an emergency, depending on where they happened to be at the time.

Those in the Town Communities told stories of ways that they had organised themselves and others in their communities during previous emergency events - collecting food, alerting neighbours and either preparing to remain in their houses, or organising private and community vehicles to transport themselves and others to shelters. There were some camps where Larrakia Nation vehicles were welcome, and others where NTES vehicles were generally deployed to support emergency management activities. Residents were clear about this distinction and what could be expected from these respective organisations. In speaking with Long Grassers, we found that people were generally very appreciative of the support that they received from Emergency Services organisations during adverse weather events. The work of the Police and Night Patrol assisting people at these times was highly valued, as were the efforts of government agencies and service providers assisting people with food, shelter, bedding, and medical attention following a cyclone or other emergencies.

Reporting on these discussions, comments below have been roughly arranged to correspond with the key principles of emergency management which are mobilised in the Northern Territory Emergency Plan: Preparedness, Response and Recovery (NT Emergency Management Council, 2016).

Preparedness

We asked people if their communities had formal plans or procedures to follow in event of a cyclone. While some people could describe personal strategies for managing cyclones that they had enacted in the past, no community reported having a pre-prepared cyclone plan, but many people mentioned that community leaders often provided information and guidance prior to and during bad weather or other emergency events.

2 For further information on Ground Up projects, visit <http://groundup.cdu.edu.au>.

3 For more information see: <http://larrakia.com/cause-view/night-patrol>.

Very early on in our consultations housing emerged as a key issue. This was around the number of cyclone coded houses available to residents and clarifying responsibilities for housing maintenance. People in the Town Communities were often worried that their houses were not adequately coded or maintained, at the same time as describing themselves as feeling safer in their homes and preferring to stay there during extreme weather events. The importance of involving Yilli Rreung Aboriginal Housing Corporation as a key stakeholder in cyclone safety discussions was reiterated on several occasions. Residents were not always clear which houses in their communities were cyclone coded or safe given structural and other deterioration.

NTES were interested to know the best ways of informing people of an impending cyclone. The Long Grassers had access to quite profound environmental knowledge of the weather; they were very good judges of impending weather events, and had very impressive networks of communication which were opaque to outsiders. Primary mainstream sources of information for people in Town Communities were their elders, TV, Radio and direct contact with the police or Night Patrol. Frequently Town Community leaders took on the role of monitoring media reports, and making decisions around suitable actions or evacuation procedures for other residents. There was no mention of social media as a current source of information.

When asked how they are informed about bad weather, Long Grassers talked about remaining connected within networks of family and friends. Many were in constant contact with relatives who would keep tabs on their health and safety and update them with important information—such as approaching storms and cyclones. Sometimes specific local hubs, were significant to remaining safe. For example, those we spoke to in a popular beachside suburb, also said that the people in the general community, such as the staff at the bottle shop would tell them when very bad weather was coming. Royal Darwin Hospital has long been a meeting place for Aboriginal visitors to Darwin, and was also identified by people camping nearby as a cyclone proof venue, where people felt safe to congregate and be close to their relatives who were in hospital. If bad weather was coming, people talked about all moving into the hospital so they could see the news on the TV.

Some participants used traditional environmental knowledge:

'First of all if all the bird sounds go silent, if you listen and there is not a single sound, then you know the cyclone is coming. After that the wind will come. Blow and stop. Blow and stop. Then everyone knows the cyclone is coming.'

Response

Transport was raised as a significant issue at the Town Communities we visited. There were various strategies mentioned for making do with available vehicles, as well as requests for better transport services to be provided. In the Darwin Town Communities it was very common for people to recall being picked up by the police or Night Patrol.

'The Emergency Services people have a bus to pick people up. They come here, not the Night Patrol (Note: some communities are not serviced by Larrakia Nation) but the NT Emergency Services. They ask if people want to be picked up.'

However, this was not the case in all Town Communities, particularly those at a distance from the CBD. Some residents talked about ways that they organised their own transport or missed out.

'I took people to the Nightcliff shelter in the church bus. We could use the church bus. There were loads of people to be taken. I just kept going back and forth. Then I came back and stayed here in my house.'

'Most of us mob have cars. Here the community supports each other; we give all the kids a lift. Northern Territory Emergency Services come here, we haven't seen the police or Night Patrol.'

However, it was notable that many people we spoke to were very comfortable being picked up by police and Night Patrol, and described strategies of either calling police vehicles to come and pick them up, or arranging their movements so as to come into contact with Night Patrol or NTES vehicles they knew would be patrolling certain areas. Being able to connect with these services was a part of the narrative account of emergency management provided by those we consulted, and the significance of maintaining stability in these services became very clear.

People living in the Long Grass in particular were appreciative of these transport services and could frequently recount times in the past when they had been taken to shelters by police, NTES or Night Patrol vehicles.

'Night Patrol know where we are, at Casuarina, other places. They come and get us.'

Some people also talked about the strategies they had developed to help these services find them and pick them up in the event of a cyclone.

'When very bad weather comes, straight away we pick up all our things, and we go over there to that toilet block [pointing]. We all crowd in there, wait for the police or Night Patrol. We get to the shelter, wait to be picked up.'

There was some recognition that Town Community and Long Grass residents felt more comfortable engaging with Indigenous staff and volunteers around emergency events (i.e. during preparations, and at shelters and recovery centres), and that employing Indigenous staff to liaise between Indigenous communities and official agencies may help limit distress and cross-cultural miscommunication at these times (Spencer et al. 2016, p. 26).

Recovery

Following a cyclone or severe weather event, the recovery stage is generally more significant for Town Community residents than Long Grassers who will not have experienced damage to housing or community infrastructure⁴. Town Community residents spoke about

clean-ups as the primary means by which they could work together and help things to get back to normal.

'Afterwards we check our house, put rubbish on the road, assess damage, move trees – work together.'

There was a general interest in greater involvement in preparations and management of emergencies; both in relation to general maintenance to be carried out year-round, and in the event of an emergency. They all agreed that the Night Patrol and other Larrakia Nation outreach services play a crucial role in supporting Darwin and Palmerston's Indigenous communities and play a very significant role in the management of emergency events.

There was also a clear agreement that increased levels of support around current emergency management practices would help improve safety and well-being in times of crisis. Specifically, assistance with clean-ups and increased levels of general housing maintenance in the Town Communities, increased availability of transport to shelters, and earlier and more localised access to shelters for those in the Long Grass.

Policy and Service Delivery Recommendations:

In many of the Town Communities we visited, residents sought further collaborative engagement with Emergency Services on the development of future disaster management strategies and service provision. Continued engagement with elders and prominent community members was a respectful practice, and an appropriate way to negotiate emergency management responses in the future.

Continued commitment to information and knowledge sharing between Indigenous communities government and service providers was seen as important by most of the Indigenous participants. In relation to Town Communities in particular, it was clear that these communities have viable social and political structures and leadership, and developing a formal role for emergency management within the community was seen as a promising way for NTES to be able to access and appropriately engage these structures.

Development of Safety Leader positions in interested Town Communities

In all communities we visited, there was clear support for this initiative which was proposed by the Indigenous researchers working on the project. Such a position would couple employment and capacity building within Town Communities with a commitment to culturally appropriate disaster response and good working relationships between Town Communities and emergency management organisations. The proposal was that any action in this direction should be undertaken on a trial basis and may only be undertaken in a few pilot communities in the first instance. It would involve clear identification of the role and its responsibilities, training programs and appropriate institutional support from Larrakia Nation Aboriginal Corporation and one or more other organisations.

These Safety Leaders would be a point of contact for NT Emergency Services, service providers, and community members. These ideas were very clearly articulated. These

safety officers could be offered a clearly defined paid role, which would include a uniform (e.g. hi-vis vest with 'Safety Leader' printed on the back), and involve formal training, and a mobile phone before and during emergency events. In the first instance this role may be offered on a 3 month trial basis, and it may be offered to more than one person in each community. Duties may include: community education, monitoring and maintenance of hazards outside of emergency events, transport coordination during emergency events, responsibility for distribution of cyclone packs, responsibility for upkeep of community signage, familiarity with social media as a means of receiving up-to-date information during emergency events.

Collaborative development of emergency management strategies in Town Communities where a need has been identified

The focus of this project has been on hearing stories and learning about the experiences of Indigenous people in greater Darwin during emergency events. It has not been on the negotiation of community-based strategies for disaster management. However, in several communities this has presented itself as a possible next step. The development of these strategies would take place in the Town communities themselves and would differ considerably from community to community. The focus of this work may not necessarily be to seek the close integration of Town communities and Northern Territory Emergency Services systems of operation, but may offer communities the opportunity to focus on their own ways of managing emergency events, and how they may seek to productively connect with services or assistance able to be offered by external organisations. This work may be connected to the appointment and development of Safety Leader positions, and would require the involvement of Larrakia Nation.

Prioritise working through existing Larrakia Nation Aboriginal Corporation outreach programs to support those living in the Long Grass during the wet season

Indigenous people living in the Long Grass come from many different tribal groups in the NT are most often well connected to family in the area and their remote communities, and are collectively aware of how and where to access shelter in event of a cyclone. They also believe firmly that the Larrakia people are the traditional owners of Darwin and therefore have significant authority. Those who are not able to seek shelter with family at these times do remain reliant on transport provided by Larrakia Nation Night Patrol, or NTES and police vehicles. Larrakia Nation staff maintains constant contact with Long Grass communities through their outreach programs and have an up-to-date sense of where people are camping and their particular vulnerabilities at any point in time. This

⁴ Some Long Grassers expressed some concern that after an emergency event they may lose their camping spot, or their clothes and bedding become wet and may need replacing. However, recovery activities were not discussed or mentioned in terms different to the management of other everyday life challenges.

knowledge, and these face-to-face relationships, are a great resource for any external agencies seeking to work in the Long Grass, particularly around assessing and supporting preparedness prior to severe or extreme weather events. Any further work supporting awareness and preparedness in the Long Grass should also support and operate through, or in connection with, existing Larrakia Nation programs.

Conclusion

Emerging in each of the sites of this research project have been stories and descriptions of ways in which people have continue to manage bad weather events and other emergencies, and how management and preparedness may be carried out as a collaborative practice to build community. What did not emerge in any of these accounts was an understanding of emergency management as something that was imposed on or offered to a community as a means of managing or ameliorating existing social or other problems. Rather, disaster resilience was seen as emerging out of appropriate collaborative practice between Indigenous people and various government and non-government service organisations.

This is a significant reversal of conventional ways of seeing resilience as either ontologically prior to the work of emergency management, or as contingent on high levels of self-reliance (Gaillard 2007; Manyena et al. 2011). In the consultations carried out as part of this project, disaster resilience seems more appropriately conceptualised as an outcome of the already ongoing work of maintaining appropriate relationships of practice and authority in Aboriginal communities, whilst also extending these to include other emergency services people and practices.

This again entails an understanding of disaster resilience as – in Addelson’s terms – as emergent in collective action. The Yolŋu philosophers in our collaborations enlisted a metaphysics akin to that of Dewey’s (1927) *The Public and Its Problems* in which the public, here as safe and resilient communities, is constituted by the problem of working together to explore and enhance practices of care and concern that go beyond, but remain consistent with, the bonds and accountabilities of ancestral kinship networks. This entails a commitment on the part of non-Indigenous organisations to working collaboratively with community elders to build community and keep traditional accountabilities of care and concern strong.

For this reason, emergency management organisations and their managers should beware of committing to practices that reflect a top-down way of thinking about and constituting resilience. To avert such undermining practice, elders and safety officers should be recognised as crucial hubs and advisors, not as volunteers. As with all authoritative work within traditional society, their work with government and non-government organisations needs to be recognised and valued. Then, sensitive and respectful young Aboriginal Australians, under the guidance and authority of local elders, can contribute to the constitution of more resilient and diverse forms of social life.

References

- Addelson KP 1994, *Moral Passages: Toward a collectivist moral theory*. New York: Routledge.
- Australian Government, Community Profile – Darwin, 1st edition 2010. At: https://www.rahc.com.au/sites/default/files/documents/community_profiles/Darwin%20Community%20Profile.pdf [13 May 2018].
- Buthimang, T 2008, *Garmak gularriwuy: Gularri water*. At: www.cdu.edu.au/centres/yaci/pdf/Buthimang_Gularri.pdf [13 May 2018].
- Christie MJ 2013, *Generative and 'Ground Up' Research in Aboriginal Australia. Learning Communities: International Journal of Learning in Social Contexts*, vol. 13, pp. 3-12.
- Gaillard JC 2007, *Resilience of traditional societies in facing natural hazards. Disaster Prevention and Management*, vol. 16, no. 4, pp. 522–544.
- Garnggulkpuy J 2002, *Yolngu Balandi-watangumirr: Yolngu with ancestral connections*. At: http://www.cdu.edu.au/centres/yaci/pdf/Garnggulkpuy_Balandi.pdf [13 May 2018].
- Garnggulkpuy J & Lawurrpa E 2005, *Methodology for Yolngu Research*. At: www.cdu.edu.au/centres/yaci/pdf/Garnggulkpuy_Lawurrpa_Methodology.pdf [13 May 2018].
- Manyena B, O'Brien G, O'Keefe P & Rose J 2011, *Disaster resilience: a bounce back or bounce forward ability?. Local Environment: The International Journal of Justice and Sustainability*, vol. 16, no. 5, pp. 417-424.
- NT Emergency Management Council 2016, *Northern Territory Emergency Plan*. At: <http://www.pfes.nt.gov.au/~media/Files/Emergency/Volunteer-Portal/Administration/Territory%20Emergency%20Plan%20Approved%20Feb%202016.ashx> [25 April 2018].
- Pollard K, Smith C & Ralph J 2017, *Contested spaces: the 'long-grassers', living private lives in public places. The Conversation*. At: <http://theconversation.com/contested-spaces-the-long-grassers-living-private-lives-in-public-places-72199> [13 May 2018].
- Spencer M, Michael C, Lee A & Wallace R 2016, *Helping and caring, not only our family: NT Indigenous perspectives on volunteering, Final Report Charles Darwin University*. At: http://www.cdu.edu.au/sites/default/files/the-northern-institute/arc_ntvolsservices_reporttr_dpg_final_4.pdf [25 April 2018].

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ABSTRACT

Until recently, little attention examined the experiences and needs of members of sexual and gender minorities, including lesbian, gay, bisexual, trans and intersex (LGBTI) people, in relation to disasters – communities who have, and continue to experience, varying forms of social and political marginality. Further, little analysis focused on the capacities of emergency service and government response organisations to meet the needs of LGBTI communities, nor on the policy frameworks that influence preparedness, response and recovery arrangements. This paper provides a synthesis of a three-year Australian Research Council funded project looking at LGBTI experiences of disasters in Australia and New Zealand and places this work within the wider, limited literature. We provide an overview of key findings from our research in relation to the negative experiences that exacerbate marginality and vulnerability, such as harassment in homes, emergency shelters and public spaces, and uncertain access to relief services and funds. We also identify elements of resilience and resistance within LGBTI communities that build upon social capital, and also of attentive and capable emergency management practice, that recognise and include LGBTI communities and their needs. We finish by providing suggestions to assist LGBTI people to take responsibility for enhancing their resilience and preparedness, as well as for governments and emergency response and recovery organisations to better meet the needs of LGBTI individuals, families and communities. We conclude by referring to the impact this project has begun to have in Australia.

Peer-reviewed article

On the disaster experiences of sexual and gender (LGBTI) minorities: insights to support inclusive disaster risk reduction policy and practice

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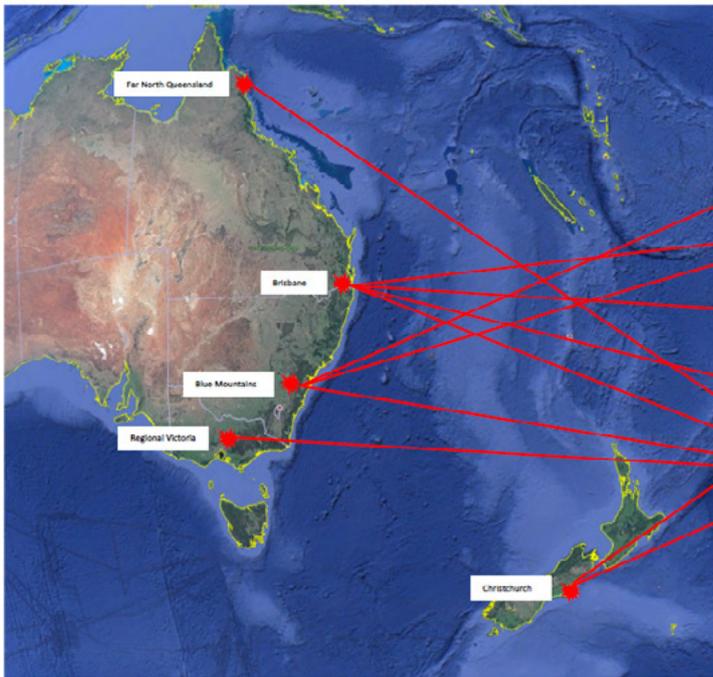
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Introduction

Whatever their cause, disasters devastate individuals, families and communities. Numerous planetary processes are impacting local places, including global environmental and climate change, land degradation, urbanisation, human displacement and conflict. Consequently, as the Anthropocene arrives, 'disasters' are arguably becoming more common and intense than before (Dominey-Howes 2018, Dominey-Howes & Drozdowski 2016, Drozdowski & Dominey-Howes 2015).

Disaster impacts on people vary between different social groups, spatially and temporally. Further, due to the factors that shape vulnerability and resilience of social groups, disaster impacts are neither distributed, nor experienced evenly (Finch *et al.* 2010, Dominey-Howes *et al.* 2014). Consequently, and as we noted previously (Dominey-Howes *et al.* 2014), the United Nations Strategy for Disaster Risk Reduction (UNISDR) argues that social differences be acknowledged, and that the specific needs and capacities of all social groups, including minorities, be considered within disaster risk reduction policy, planning and responses. This need has been further articulated within the Sendai Framework for Disaster Risk Reduction 2015 – 2030 (UNISDR, 2015).

In recent years, a very limited, but slowly expanding body of research has sought to explore, understand, report and 'make visible' the experiences of sexual and gender minorities that include lesbian, gay, bisexual, trans and intersex (LGBTI) people (Balgos *et al.* 2012, Caldwell 2002, Cianfarani 2012, D'Ooge 2008, Gaillard 2011, IGLHRC/SEROVie 2011, Leap *et al.* 2007, Pincha 2008, Pincha and Krishna 2008, Richards 2010) – a collection of communities for which little work had been undertaken prior to 2005 (Gaillard *et al.* 2017). What work has emerged is a consequence of: (1) the occurrence of events such as Hurricane Katrina impacting New Orleans and its LGBTI communities;



Case Study Locations and selected Publications arising
(see Table 1 for summary details and text of main article)

- Dominey-Howes *et al.*, (2016)
- McKinnon *et al.*, (2016)
- Gorman-Murray *et al.*, (2017)
- McKinnon *et al.*, (2017)
- Gorman-Murray *et al.*, (2018)

Figure 1: Location of key case study locations and publications emerging from those studies (cross referenced to the details shown in Table 1)

and (2) the recognition that LGBTI communities had been largely ignored in relation to disasters, their impacts and management (Gaillard *et al.* 2017, Yamashita *et al.* 2017).

In 2013, two of us (DD-H and AG-M) came together, bringing our respective expertise in disaster risk reduction (and geography) and sexuality (and geography). We began a project to explore the experiences of LGBTI 1 individuals, families and communities in Australia and New Zealand. On securing pilot funding from Western Sydney University and then funding via an Australian Research Council funded Discovery project entitled “Queering disasters in the Antipodes: investigating the experiences of LGBTI people in natural disasters”, we were joined by a Research Fellow (SM).

The purpose of this paper is to provide a synthesis of this project including a summary of the key findings in relation to policy and practice contexts, and experiences that perpetuate and exacerbate marginality and vulnerability. We also identify elements of resilience and resistance within LGBT communities – that utilise social capital – and of attentive and capable emergency management practice, that recognised and included LGBT communities and their needs. These data are used to make suggestions to assist LGBTI people to take responsibility for enhancing their resilience and preparedness, as well as for governments and emergency response and recovery organisations to better meet the particular needs of LGBTI minorities.

Description of this project, our approach and methods

Our original project objectives were fourfold: (1) to interview and survey LGBTI people about their experiences of recent Antipodean disasters caused by specific natural hazard events and to examine their vulnerability and resilience; (2) to determine any specific needs of LGBTI populations during and after disasters; (3)

to understand relations of social cohesion between LGBTI populations and their wider social settings in disasters, and determine how social, cultural, political, economic and familial linkages were affected; and (4) to understand similarities and differences in the experiences and needs of LGBTI populations across different disasters, as differentiated by national, political, social and legal geographies, and intersections of gender identity, class, ethnicity, race, age and disability.

We adopted a case study approach, and generated data using qualitative and quantitative mixed methods. In our original plan, our principle case studies were Brisbane, Queensland, Australia, following the January 2011 floods; the general region known as Far North Queensland (also in Queensland) that had been affected by several tropical cyclones between 2005 and 2013; regional Victoria, Australia, which had been affected by several floods and bushfires; and Christchurch, New Zealand, following the February 2011 earthquake. We selected these case studies in order to understand the particular experiences of LGBTI people in a variety of settings (urban/suburban to rural/regional) and from disasters triggered by different types of hazards. Data included an online survey on LGBTI experiences at all sites; semi-structured interviews with LGBT people in Brisbane, Christchurch and the Blue Mountains (located in New South Wales, Australia - see following paragraph for the explanation for inclusion of this additional case study location) and analysis of LGBTI and mainstream media coverage in Brisbane and Christchurch. Interviews and surveys were collected from 2013 to 2015. To add to our own dataset, we developed a partnership and data sharing agreement with The Queensland Association of Healthy Communities (QuAC) who had independently conducted a survey on LGBT experiences during and after the 2011 floods in Queensland.

Recruitment for surveys and interviews at the Brisbane and Christchurch case study sites was not difficult. However, recruitment at the Victorian and North Queensland sites in 2013 was more problematic, possibly due to participant burnout through over-research. We did

include these two case study sites in our survey work, but could not obtain further interviewees. To provide further case study material, we introduced a new site – the Blue Mountains, New South Wales, Australia, in the wake of bushfires in 2013; and because logistically, it was easy to access. This new site yielded both survey and interview data, and became the third significant case study.

In addition to the surveys and interviews, we also undertook an analysis of legislation, policies and plans in New South Wales in relation to their inclusivity of LGBTI people.

Results

Our total data set included: online survey responses comprised $n = 200$ (including $n = 73$ from Australia and $n = 127$ from New Zealand); the online survey responses were supplemented by an additional $n = 48$ obtained from the QuAC survey; 31 semi-structured interviews with LGBT people in Brisbane ($n = 8$), Christchurch ($n = 19$) and the Blue Mountains ($n = 4$); and a total of $n = 68$ news media articles (comprising $n = 6$ mainstream news media articles in Christchurch (and zero for Brisbane) and $n = 41$ LGBTI news media articles in Christchurch and $n = 21$ LGBTI news media articles in Brisbane). To our knowledge, this represents the largest study of the experiences of members of the LGBTI communities undertaken anywhere in the world. Here, we cannot provide an exhaustive summary of all our research findings, rather we compare our data against the existing international literature that was referred to in Dominey-Howes *et al.* (2014) and draw out the key messages from our data. For a comprehensive overview of the project results, interested readers should refer to Dominey-Howes *et al.* (2016), Gorman-Murray *et al.* (2014a, b, 2016, 2017, 2018) and McKinnon *et al.* (2016, 2017a, b).

Table 1 provides a ‘quick-look’ overview of some of the key publications, including information on the demographic and geographic foci of each study; the methods used; the theories and concepts used; the key findings; the key contributions to knowledge; and the implications of the findings for emergency management policy, planning and practice. Publications arising from the study are also cross-referenced with the case study locations, which are shown in Figure 1.

Discussion

Comparison of our project results with the available international literature and key take home messages arising

Findings about the experiences and needs of LGBT people and families from our study, as well as the challenges faced by emergency service providers, reflect (that is, were the ‘same’) as the wider literature available at the start of the project, and which has emerged since. The following five key messages emerge from the findings of our study and reinforce the wider available literature.

Message 1 – heteronormative policy settings further marginalise and exclude LGBTI people from disaster risk reduction activity

Government policy settings are either directly exclusionary/discriminatory or ‘accidentally blind’ by failing to explicitly make reference to the needs of LGBTI people in disaster planning, response and recovery. Critically, where faith-based organisations have been granted tax-payer funds to provide response and recovery services to community members, those same organisations have sought and been granted power to ‘potentially’ withhold services from LGBTI people. Even if they do not, the fact that they can do so (at their will) is known by LGBTI people and concerns them greatly. LGBTI people face discrimination and hatred perpetuated in the name of faith as faith-based organisations and some people of faith blame and victimise LGBTI people in the aftermath of disasters. LGBTI people do not always feel safe or secure in seeking shelter in response and recovery centres. They feel exposed and vulnerable to perceived or actual abuse perpetuated in the close, impersonal, non-private confines of shelter spaces.

The heteronormative policy settings marginalise and exclude LGBTI people from post-disaster response and recovery arrangements must change and leadership comes from the top. Our view is legislation should change but until it does, plans and practices can change faster to be more inclusive. Policies, plans and practices should explicitly articulate the need to cater for LGBTI people, and agencies and organisations that receive tax-payer funds to provide services to communities after disasters have occurred should not be allowed to discriminate on the basis of faith or any other ideology.

Message 2 – LGBT people exhibit a range of complex vulnerabilities

Overall, LGBT people, their families of choice and communities are ‘more’ vulnerable than the wider population due to a range of contextual reasons. For example, the mental and emotional wellbeing of LGBT people may be more at risk as their otherwise private lives are made bare and visible in spaces such as evacuation shelters. This increases their perceived and actual stress associated with ‘inappropriate stares, verbal comments and insults or even threats to their wellbeing’.

Critically, LGBTI people should not be considered as a singular group – they are diverse and have many different challenges and needs. For example, trans people experience more vulnerability during disasters and have specific needs. Emergency management processes such as shelter registration are heteronormative in style and assume gender binary norms (e.g. gender registration documents that only allow female/male notification), which complicates the experiences of non-binary gendered people registering at emergency shelters. Emergency shelters are especially problematic for trans and intersex people with their tendency to only provide ‘female’ and ‘male’ toilets and wash room facilities. Again, these binary female/male facilities are extremely problematic for trans and intersex people, as well as genderqueer individuals (i.e. those who identify as ‘non-binary’, and not exclusively ‘man’ or ‘woman’). Some trans

people also require continued access to complex hormone or drug therapy regimes and may be managing on-going gender affirmation processes including surgical recovery.

Message 3 – the media fails to include the impacts of disaster on LGBTI people

The media broadly reports disasters as heterosexual events impacting ‘heterosexual couples and their families’. The wider media is generally silent on LGB experiences and certainly non-inclusionary of trans and intersex experiences. Even the LGBTI media tends to give preference to the experiences of (white) gay men over others and, again, is quieter on the experiences and needs of lesbians, bisexuals, trans and intersex people.

Message 4 – LGBT people, their families and communities demonstrate a wide range of resilient capacities and adaptive strategies

There is remarkable resilience, social capital and adaptive capacity within LGBT communities and networks and these might act as ‘models’ that can be employed and deployed by other groups in society. Some LGBT individuals, couples and families build and then rely upon ‘families of choice’ and networks (thus, their social capital) to provide practical, material and emotional support in times of disaster – rather than relying on governmental and community support specifically. Moreover, LGBT people have and do find ways of navigating an either hostile environment or one perceived to be less supportive of their lives. We found that some LGBT people have resilient capacities as part of a specific community, which include: access to social capital and emotional support from within their communities and social networks, including friends and support organisations; provision of alternative forms of material support by LGBTI organisations and businesses such as emergency shelter, housing, financial relief and referral services. Building up these resources and ensuring they are widely communicated can help to speed up recovery processes for LGBTI people.

Message 5 – emergency service organisations and individuals demonstrate sensitive and inclusive behaviour

At a broad level, organisations, agencies and others providing emergency management planning, response and recovery services are not overtly discriminatory in their approaches. In fact, they seek to ‘treat everyone equally’, but often indicate they feel overwhelmed by the expectation to ‘provide special services’ to an ever-increasing number of minority groups (e.g., LGBTI people) and lack specialised training on the needs of such minorities, guidelines on what to do and resources to act.

However, there were shining examples of leadership, sensitivity and inclusiveness of emergency service organisations and personnel who worked with LGBT people in their homes after disaster in ways that were entirely unexpected. These positive examples can be built upon by overtly recognising, celebrating and empowering those paid and volunteer emergency service people – who also importantly, include LGBTI people.

Returning to a key aspect of our introduction, different social groups experience disasters in different ways. It is therefore important to understand social and cultural differences in relation to disaster impacts. This is not simply a matter of addressing the imperative of social justice and inclusion, as important as that is. Rather, understanding the diversity of disaster impacts on different populations will enable Federal and State policy-makers and emergency services to better plan for disaster response and recovery – that is, to develop a more targeted approach to planning and implementation of emergency services. This will make emergency services and distribution of resources more efficient, and thus arguably save both money (more efficient distribution of resources) and lives (through anticipating the specific needs of different social groups – in this case, LGBTI people).

Recommendations and impact of the project

Many positives have merged from the project and here we point towards a set of recommendations for better engagement between governments and their emergency services and LGBTI people and their representative organisations. We recommend:

- the endogenous capacity within LGBTI communities could be leveraged by emergency services and better supported by government provisions, including funding, to enhance the efficiency of disaster response and recovery;

- paid and volunteer staff of emergency management agencies and organisations tasked with assisting response and recovery activity could receive training to increase their understanding of and sensitivity to LGBTI issues;

- emergency service organisations could seek to identify, empower and champion its own LGBTI staff and volunteers (where they are happy to be visible) in order to showcase their own LGBTI talent – helping to foster a greater sense of inclusion;

- governments and post-disaster service providers should consider how to better include non-traditional households (e.g. group, multi-family and single households) in disaster response and recovery services and arrangements;

- thinking should be given to providing sensitive and specific health/medical needs of LGBTI people (e.g., trans medical requirements, HIV support and LGBTI mental health);

- think about the provision of gender-neutral toilets and wash room facilities in emergency shelters;

- consider revising registration documentation at emergency shelters to be more inclusive and sensitive around gender identities; and whilst the Sendai Framework 2015 – 2030 is attentive to gender as an explicit issue to be carefully considered and addressed, it appears to narrowly conceive gender as a binary female/male issue. We strongly recommend the Sendai

Framework to go further, and more explicitly conceive of and advocate for gender diversity. Further, the Sendai Framework is entirely silent on sexual diversity and this must change.

Last, we report that our project has had some positive impacts already. Following its completion, we were invited to work with the Gender and Disaster POD (GAD Pod), (an initiative of the Women's Health Goulburn North East, Women's Health In the North and Monash University Injury Research Institute). Established in 2015, it promotes understanding of gender issues in survivor responses to disaster and embeds these insights into emergency management practice (with funding from State and Federal governments and agencies). Our involvement with GAD Pod has sought to advance understanding of LGBTI issues and needs in disaster. Our research contributed to a literature review that has informed new National Gender and Emergency Management Guidelines (see Parkinson et al., this issue), which provides strategic guidelines to Federal and State emergency management services for integrating LGBTI-sensitive approaches to planning and delivery of disaster relief and recovery. The literature review is available here: <http://www.genderanddisaster.com.au/wp-content/uploads/2017/05/GEM-Literature-review-V2.pdf> and the Guidelines here: <http://www.genderanddisaster.com.au/wp-content/uploads/2016/08/Gender-and-Emergency-Guidelines.pdf>

Further, to advance LGBTI-inclusive disaster planning and emergency management, the GAD Pod collaborated with Gay and Lesbian Health Victoria (GLHV) and the Victorian Department of Premier and Cabinet to conduct further research on LGBT experiences of disaster and emergency management in Victoria - informed by our project. The GAD Pod also collaborated with GLHV to produce a training package 'to broaden the understanding of the impact of being LGBTI in the delivery of effective emergency management services and to assist services to develop strategies to address inequalities' (<http://www.genderanddisaster.com.au/info-hub/education-training/>). The training package includes facilitators' and participants' manuals and a disaster evaluation form and are available here: <http://www.genderanddisaster.com.au/info-hub/education-training/>). These materials are supplemented by videos produced to highlight the training and encourage participation that are available here: <http://www.genderanddisaster.com.au/being-lgbti-during-disaster/>.

Conclusions

In relation to the occurrence of disasters, the experiences and needs of sexual and gender minority communities, including lesbian, gay, bisexual, trans and intersex (LGBTI) people have not generally been researched. This is a significant omission because right around the world, members of these communities experience ongoing forms of social and political marginality that combine to influence their vulnerability and resilience to disasters. Further, little analysis has explored the capacities of emergency service and government response organisations to meet the needs of LGBTI communities, nor the policy frameworks that influence preparedness, response and recovery arrangements. This paper has sought to

advance our understanding of some of these issues by summarising the findings of a three-year project that explored the experiences of LGBTI people in a range of disasters in Australia and New Zealand and benchmarking against the latest international literature on this topic. In an effort to support more inclusionary disaster risk reduction planning and practice, we have highlighted a series of recommendations to assist LGBTI people and support organisations engage in preparedness planning and response. We make similar recommendations for governments and emergency management organisations.

LGBTI people and their families and support organisations are embedded within our communities. Great opportunity exists for collaborative partnership to facilitate more inclusionary policy and practice. Via the development of new Australian National Gender and Emergency Management Guidelines, a roadmap for moving forward has been launched – one we strongly encourage the adoption, deployment, testing and enhancement of.

Notes:

In our project we set out to include the voices and experiences of LGBTI people. However, despite our best efforts, we were not able to recruit any individuals who identified as intersex. Consequently, in this paper we generally refer to LGBTI individuals but in terms of describing and discussion our results, we can only speak to LGBT experiences and needs. We acknowledge considered and careful work needs to be undertaken to identify the experiences, needs and capabilities of intersex individuals.

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References

- Balgos B, Gaillard JC & Sanz K 2012, *The Warias of Indonesia in disaster risk reduction: the case of the 2010 Mt Merapi eruption*. *Gender and Development*, vol. 20, pp. 337-348.
- Caldwell J 2006, *This is home*. *The Advocate*, September 12, pp. 32-40.
- Cianfarani M 2012, *Integrating diversity in to disaster risk reduction (DRR): a literature review*. *International Association of Emergency Managers Bulletin*, vol. 29, pp. 26-27.
- Dominey-Howes D 2018, *Natural hazards and disasters in The Anthropocene: some critical reflections for the future*. *Geoscience Letters*, vol. 5, no. 7. At: <https://doi.org/10.1186/s40562-018-0107-x>.
- Dominey-Howes D & Drozdweski D 2016, *Preparing researchers to manage traumatic research*. *NatureBlogs*. September 23. At: <http://blogs.nature.com/naturejobs/2016/09/23/preparing-researchers-to-manage-traumatic-research>.

Dominey-Howes D, Gorman-Murray A & McKinnon S 2014, *Queering disasters: on the need to account for LGBTI experiences in natural disaster contexts*. *Gender, Place and Culture*, vol. 21, no. 7, pp. 905-918.

Dominey-Howes D, Gorman-Murray A & McKinnon S 2016, *Emergency management response and recovery plans in relation to sexual and gender minorities in New South Wales, Australia*. *International Journal of Disaster Risk Reduction*, vol. 16, pp. 1-11.

D'Ooge C 2008, *Queer Katrina: gender and sexual orientation matters in the aftermath of the disaster*. In: Willinger W (Ed) *Katrina and the women of New Orleans*, pp. 22-24. Tulane University. At: <http://tulane.edu/nccrow/publications.cfm>.

Drozdowski D & Dominey-Howes D 2015, *Research and trauma: Understanding the impact of traumatic content and places on the researcher*. *Emotion, Space and Society*, vol. 17, pp. 17-21.

Gaillard JC 2011, *People's response to disasters: Vulnerability, capacities and resilience in Philippine context*. Angeles City, Pampagna: Centre for Kapampangan Studies.

Gaillard JC, Gorman-Murray A & Fordham M 2017, *Sexual and gender minorities in disaster*. *Gender, Place and Culture*, vol. 24, no. 1, pp. 18-26.

Gorman-Murray A, Morris S, Keppel J, McKinnon S & Dominey-Howes D 2017, *Problems and possibilities on the margins: LGBT experiences in the 2011 Queensland floods*. *Gender, Place and Culture*, vol. 24, no. 1, pp. 37-51.

Gorman-Murray A, McKinnon S & Dominey-Howes D 2014, *Queer domicile: LGBT displacement and home loss in natural disaster impact, response and recovery*. *Home Cultures*, vol. 11, no. 2, pp. 237-262.

Gorman-Murray A, McKinnon S, Dominey-Howes D, Nash C & Bolton R 2018, *Listening and learning: giving voice to trans experiences of disasters*. *Gender, Place and Culture*, vol. 25, no. 2, pp. 166-187.

Gorman-Murray A, Morris S, Keppel J, McKinnon, S & Dominey-Howes D 2014, *The LGBTI community in the 2011 Queensland floods: marginality, vulnerability and resilience*. *LES Online: Digital Journal on Lesbian Issues*, vol. 6 no. 1, pp. 4-20. At: <http://www.lespt.org/lesonline/index.php?journal=lo>.

Gorman-Murray A, McKinnon S & Dominey-Howes D 2016, *Masculinity, sexuality and disaster: unpacking gendered LGBT experiences in the 2011 Brisbane floods in Queensland, Australia*. In: Enarson E & Pease B (Eds). *Men, masculinities and disaster*, pp. 128-139. Oxford: Routledge.

IGLHRC/SEROVie 2011, *The impact of the earthquake, and relief and recovery programs on Haitian LGBT people*. At: <http://www.iglhrc.org>.

Leap W, Lewin E & Wilson N 2007, *Queering the disaster: A Presidential session*. *North American Dialogue*, vol. 10, pp. 11-14.

McKinnon S, Gorman-Murray A & Dominey-Howes D 2017, *Disasters, queer narratives and the news: how are LGBTI disaster experiences reported by the mainstream and LGBTI media?* *The Journal of Homosexuality*, vol. 64, no. 1, pp. 122-144.

McKinnon S, Gorman-Murray A & Dominey-Howes D 2017, *Remembering an epidemic during a disaster: Memories of HIV/AIDS, gay identities and experiences of disaster*. *Gender, Place and Culture*, vol. 24, no. 1, pp. 52-63.

McKinnon S, Gorman-Murray A & Dominey-Howes D 2016, *The greatest loss was a loss of our history: natural disasters, marginalised identities and sites of memory*. *Social and Cultural Geography*, vol. 17 no. 8, pp. 1120-1139.

Parkinson D, Duncan A, Archer F, Dominey-Howes D & Gorman-Murray A, *Gender and Emergency Management (GEM) Guidelines*. *Australian Journal of Emergency Management*, vol 33, No 3.

Pincha C 2008, *Indian Ocean tsunami through the Gender lens: Insights from Tamil Nadu, India*. Mumbai: Earthworm Books. At: http://www.gdnonline.org/resources/Pincha_IndianOceanTsunamiThroughtheGender%20Lens.pdf.

Pincha C & Krishna H 2008, *Aravanis: voiceless victims of the tsunami*. *Humanitarian Exchange Magazine*, vol. 41. At: <http://www.odihpn.org/report.asp?id.2975>.

Richards G 2010, *Queering Katrina: Gay discourses of the disaster in New Orleans*. *Journal of American Studies*, vol. 44, pp. 519-534.

United Nations Strategy for Disaster Risk Reduction (UNISDR), 2015, *The Sendai Framework for Disaster Risk Reduction 2015 – 2030*. The United Nations, pp 37. At: https://www.unisdr.org/files/43291_sendaiframeworkfordrren.pdf

Yamashita A, Gomez C & Dombroski K 2017, *Segregation, exclusion and LGBT people in disaster impacted areas: Experiences from the Higashinohon Dai-Shinsai (Great East-Japan Disaster)*. *Gender, Place and Culture*, vol. 24 no. 1, pp. 64-71.

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Table 1: 'Quick-look' overview including information on the demographic and geographic foci of each study; the methods used; the theories and concepts used; the key findings; the key contributions to knowledge; and the implications of the findings for emergency management policy, planning and practice.

Publication	McKinnon et al., (2016). 'The greatest loss was a loss of our history': natural disasters, marginalised identities and sites of memory	Gorman-Murray et al., (2017). Problems and possibilities on the margins: LGBT experiences in the 2011 Queensland floods.	Dominey-Howes et al., (2016). Emergency management response and recovery plans in relation to sexual and gender minorities in New South Wales, Australia.	McKinnon et al., (2017). Disasters, queer narratives, and the news: how are LGBTI disaster experiences reported by the mainstream and LGBTI media?	Gorman-Murray et al., (2018). Listening and learning: giving voice to trans experiences of disasters
Who, where and how?	Gay men and lesbians Brisbane and Blue Mountains Interviews	Gay men, lesbians, bisexuals and trans people Brisbane and Ipswich, SE Queensland Online questionnaire with closed and open questions	Lesbians, gay men, bisexual people, trans and intersex people New South Wales (whole State) Policy analysis and content analysis of State legislation, plans and practice	Lesbians, gay men, bisexual people, trans and intersex people Brisbane (floods) and Christchurch (earthquake) Content analysis of media reports; media discourse	Trans people, partly in comparison with gay, lesbian and bisexual people Brisbane (interview, survey) and Christchurch, Blue Mountains, regional Victoria and Far North Queensland (survey) Interview, and online survey with closed and open questions
Contributions to knowledge	Increased understanding of the intersection of space, sexuality, memory and identity How loss of memory (including its sites and objects of formation) impact identity and sense of belonging and contribute to increased exclusion and marginalisation Importance of the home (to physical, emotional wellbeing)	How existing forms of social and political marginalisation underpin and enhance LGBT experiences of disaster How LGBT people already used to exclusion, navigate a heteronormative set of policy settings to access resources	Official legislation and anti-discrimination exemptions provided to faith-based organisations perpetuate marginalisation and have the potential to deny service in disaster response and recovery settings to LGBTI people	How media presents disasters; which stories are included; the power of media to shape community perceptions of 'victims' and 'survivors'; capacity of media to elicit governmental and community response and recovery support	Specific trans needs and concerns in disasters, which may differ not only from the general population, but also from gay, lesbian and bisexual people Trans experiences of disasters are linked to concerns about compromising or maintaining bodily integrity and spatial comfort

Key findings

<p>Lesbian and gay places, spaces and neighbourhoods (as well as 'mnemonic anchors') are important for underpinning memory, identity, empowerment, a sense of belonging and inclusion - all of which can be lost when disaster occurs. These may be overlooked during recovery and rebuilding activities</p> <p>Disasters impact sites of memory including possessions, environments, places and material networks leading to enhanced feelings of social marginality and of exclusion from wider discussions about the disaster</p> <p>Lesbian and gay men experienced significant stress at having strangers (volunteers) in their homes during clean up/repair processes</p>	<p>Increased vulnerability of LGBT people occurred based on social and political marginality</p> <p>Loss of identity occurred</p> <p>Discrimination on the basis of sexual and gender identity occurred</p> <p>Individuals experienced inhibited access to post-disaster resources</p> <p>LGBT people experienced increased fear, stress, anxiety and depression</p> <p>LGBT people were fearful of public spaces such as evacuation and recovery shelters</p> <p>Evacuation and recovery shelters failed to provide resources necessary to meet LGBT people's needs</p> <p>LGBT people experienced religious vilification</p> <p>The margins could be a source of strength and solidarity too: LGBT people demonstrated remarkable resilience, self-reliance and accessed networks of social capital and demonstrated strong adaptive capacity</p>	<p>New South Wales Emergency Management legislation, policy and plans in relation to disaster planning, response and recovery are 'blind to the difference' of experience of LGBTI people in disasters and are silent on the need to explicit meet the needs of LGBTI people</p> <p>The New South Wales State government has outsourced response and recovery services (using tax-payer funds) to third party, faith based (Christian) organisations</p> <p>Faith-based organisations have successfully applied for and been granted exemptions under anti-discrimination laws to 'potentially' withhold service to LGBTI people and deny employment and volunteer opportunities to LGBTI people in pre- and post-disaster contexts</p>	<p>Mainstream news media in Brisbane/ Queensland completely ignored experiences of LGBTI communities and businesses (invisibility)</p> <p>Mainstream news media in Christchurch carried some LGBTI focused stories on families and businesses</p> <p>Strong heteronormative focus on construction of disaster events with some homo/transphobic coverage</p> <p>Even within LGBTI online news coverage, reporting of disaster events on LGBTI communities dropped off fairly rapidly</p> <p>The majority of (even) LGBTI media news coverage focused on the experiences of white gay men to the exclusion and visibility of other "sexually and gender diverse" people</p>	<p>Trans people reported less pre-disaster place attachment and comfort, and more recent experiences of harassment, than gay, lesbian and bisexual people</p> <p>Trans people were apprehensive to access emergency services and disaster recovery services, fearing insensitivity and even intolerance</p> <p>Trans people living in group households were concerned about how they and their households would be treated by emergency and recovery support services</p> <p>The loss of home, as a safe and secure space, was particularly traumatic for trans people, who feel especially scrutinised and out-of-place in public space</p> <p>Trans people expressed specific concerns about loss of bodily integrity in disaster contexts, especially if displaced from home. This included concerns about access to hormone replacement therapy and medical support, as well as the ability to maintain a legible gendered appearance</p> <p>Interpersonal trans and queer networks at home, at work and in the community provided social capital and important material and emotional support during and after the disaster</p>
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Theories and concepts used to approach study and data	<p>Drew upon theories of disaster, marginality and sexuality (and their intersection)</p> <p>Explored how memory and space are linked to personal and collective identities (via objects, places and spaces)</p>	<p>Specifically used theory of 'marginality' but linked it with vulnerability and resilience</p>	<p>A 'queer lens' on emergency and recovery plans, and its intersection with concepts of vulnerability and resilience, and by default, marginalisation</p>	<p>Vulnerability, resilience and marginalisation (and its intersection with concepts of 'invisibility' and 'silencing' and 'representation')</p>	<p>Geographical approaches to trans lives (i.e. relations between trans people and place), intersecting with marginality, vulnerability and adaptive capacity in disasters</p>
Implications	<p>Necessity to work with sexual and gender diverse communities on what needs to be preserved and included in rebuilding efforts to maintain memory and identity and enable connections of spaces, places and networks between the past, present and future</p>	<p>LGBTI people can where possible, join as volunteers for a range of emergency service and humanitarian organisations helping to build diversity, respect and capacity</p> <p>LGBTI organisations can step up and develop roles in the emergency management response and recovery sectors that bring their unique skills, capabilities, networks and capacities to act as a bridge between LGBTI communities and mainstream disaster risk reduction professionals and organisations</p> <p>Organisations and agencies providing disaster response and recovery arrangements can adopt and use (and develop further) new emergency management guidelines on inclusive policy, practice and planning</p> <p>LGBT venues might be adapted to serve as safe emergency and recovery shelters</p>	<p>Policy-makers should consider changing legislation to prevent faith-based organisations withholding tax-payer funded services to LGBTI in post-disaster response and recovery settings based upon religious faith</p> <p>LGBTI-oriented faith-based organisations as well as other LGBTI representative organisations could play a role in providing services (funded by the tax-payer) to LGBTI people through new arrangements and partnerships between government and community</p>	<p>LGBTI media can act as a valuable source of information about LGBTI community disaster preparedness, response and recovery arrangements</p> <p>LGBTI media sources can help to balance the heteronormative construction of disasters</p> <p>Work is needed to capture a wider set of voices and experiences of disaster that go beyond white gay men and lesbians (to a lesser degree) – that includes those of trans and intersex people and bisexuals who are consistently under represented</p>	<p>Training of personnel (involved in emergency and recovery work) in sensitivity to trans issues and transphobia</p> <p>Consideration of how to include non-family and non-traditional households (group, single) in disaster response and recovery</p> <p>Sensitivity to the health and medical needs of trans people, and also others requiring ongoing health and medical attention, such as older people and people with disabilities</p> <p>Reflection on how disaster planning and funding might be used to enhance endogenous capacities within and across diverse social groups and solidarities, including trans and queer communities</p>

What's so hard about writing a fire plan? The central role of gendered expectations in bushfire planning

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Introduction

The Victorian Bushfires Royal Commission (VBRC) and subsequent emergency management policies recommend having a fire plan. Despite the proven risk of not having one, only five per cent of people have a written fire plan, an increase of three per cent since the 2009 Black Saturday bushfire¹ (McLennan 2015). Even for people who lived through this event, there is equivocation and uncertainty.

Understanding gender dynamics is essential to encouraging households to write a fire plan. Drawing on two research projects after Black Saturday, this paper challenges our understanding of gendered behaviours in catastrophic bushfire and provides evidence of the harms that emerge from stringent stereotypical gender roles. It contributes to the knowledge base by examining the accounts of those who barely survived Black Saturday. The effect is to highlight inaccuracies in perceptions of what men and women do in disasters and to call into question the gendered terminology used in disaster analyses.

Agreement on a plan is almost impossible when there are competing priorities at the outset of a fire plan discussion based on gendered responsibilities. Men as 'protector and provider' prioritise defending the home, and women in their role as 'nurturer' prioritise the safety of children and partners. Acknowledgement of this difference, is an important step in addressing the low numbers of households with a written and practised fire plan.

Methodology

The primary data for this paper are drawn from qualitative research conducted after Black Saturday from 2009 -12 by Women's Health Goulburn North East (WHGNE) with 30 women, 47 workers (Parkinson 2012, Parkinson

¹ In the Bushfire CRC findings relating to Black Saturday, 26% reported having written down some important things to do and remember (women 28% and men 22%), while 69% reported having a 'firm' plan for what they would do, with 78% having discussed what they would do with other household members (Whittaker, et al., 2013, p. 844).

ABSTRACT

This paper draws on research after the 2009 Black Saturday bushfires to identify the ways gender influenced experiences of escaping or fighting the 2009 bushfires, and the link between gender roles and heterosexual couples' avoidance of fire plan discussions.

In Australia, perceptions of men having greater bushfire mortality risk are overestimated (40% 1958- 2008 were female). Most female deaths are attributed to leaving too late. Alignment of gender roles with bushfire behaviour reflects social conditioning that denotes men as 'protectors/providers' and women as 'nurturers'. Gendered expectations have high costs, and despite the proven risk of not having a fire plan, few have written one.

Ethics approval was granted for qualitative research with 109 participants, using modified grounded theory. Data showed gendered expectations are harmful and were exacerbated on Black Saturday. Women escaped alone or with children, often in terrifying circumstances, or had limited autonomy, while it was men who were predominantly in fire trucks or refusing to leave. Terminology in attributing cause of death is highly gendered - women/passivity, men/action. This not only does not align with participants' accounts, but also has implications for household bushfire planning.

This study contributes to scarce research. Awareness of gender dynamics is essential to encouraging households to write fire plans, and the first step towards individual behaviour change and systemic change. Understanding gender will demystify women's and men's motivations for wanting to stay and defend, or leave, and may allow logical examination of priorities in fire planning.

& Zara 2011) and 32 men (Zara & Parkinson 2013). Ethics approval was granted for interviews with people aged over 18 who were fire-affected in the shires of Mitchell and Murrindindi. Theoretical sampling was used, with recruitment through advertising, flyers at community venues, and through WHGNE networks. Participants self-selected and contacted WHGNE.

In the first research project, *The Way He Tells It: Relationships after Black Saturday*, 30 women had individual interviews and 47 workers were interviewed individually or in small groups. Of the 30 women, 27 fought or escaped the fires, with 24 believing they would die; 13 were alone, seven with children. For, *Men on Black Saturday: Risks and Opportunities for Change*, 32 men were interviewed individually. Two researchers conducted the semi-structured, in-depth interviews, which were digitally recorded and transcribed. Participants were invited to approve or amend their transcription.

Modified grounded theory (Glaser & Strauss 1967, Spradley 1980) guided analysis. Coding was assisted with NVivo V.10 software, and validity enhanced by independent coding from both researchers and participant checks.

A note about gender

While gender includes people of diverse gender and sexual identities, this paper will focus on heterosexual couples and fire plans. It recognises the constraints on women's autonomy evident in our patriarchal society where gender is the central organising framework, and the structural discrimination of men against women, e.g. in pregnancy, childcare, the pay gap, objectification of women and violence.

Women's descriptions of what they do in bushfires are rare. In highlighting their courage, this paper takes nothing from the extraordinary role men often took.

Women and men acted with courage, persistence, and selflessness, and in equal measure they spoke of their uncertainty, regret and terror. They reacted to life and death situations as individuals, however, gendered expectations did shape their risk, ability and legacy.

Background

When you're bred for mastery, when you're trained to endure and fight and suppress empathy, how do you find your way in a world that cannot be mastered?
(Tim Winton)

Writing a fire plan means confronting exactly this question. If you're a man, it also means working out what kind of man you want to be – or appear to others to be. Before 2009, the Victorian policy was to 'Prepare, Stay and Defend or Leave Early' ('Stay or Go'). It urged residents to be prepared to respond without assistance (Whittaker *et al.* 2013). After Black Saturday, the VBRC found that this policy did not account for 'ferocious' fires (Whittaker *et al.* 2013, p. 847). The advice is now to 'Leave and Live'.

Men are stated as being considerably more likely to die in a bushfire (Handmer, O'Neill & Killalea 2016). Yet, women and girls die in Australian bushfires at a rate of 40%. This high rate is surprising given that firefighters are mostly men. In Victoria in 2016, women were only 22% of Department of Environment, Land, Water and Planning (DELWP) firefighters, and three to four per cent of Metropolitan Fire Brigade (MFB) and Country Fire Authority (CFA) firefighters (CFA 2016). A Victorian Equal Opportunity and Human Rights (VEOHRC) report found 'everyday sexism' and a 'hyper-masculine culture' in the MFB, and other 'significant reviews have also shown serious cultural and diversity issues' (McKenzie, Tomazin & Baker 2018). Our own report into barriers for women is further evidence that women are not welcomed as firefighters (Parkinson, Duncan & Hedger 2015).

So, what is happening that makes women this vulnerable to dying in bushfires? Why is this not a key question for fire planning? This article argues that gendered roles and expectations are responsible for the female deathrate and equally for increased risk for men. A 2010 report into fatalities on Black Saturday found:

There is evidence of disagreements as the fire approached. In virtually all cases this was between women who wanted to leave and take the men with them, and men who either wanted to stay and defend or who felt they had to support others in that role.
(Handmer *et al.* 2010, p. 22)

Other researchers agree that 'conflict most often stemmed from men's reluctance to leave' (Whittaker, Eriksen & Haynes 2016, p. 209), noting that more women (54%) than men (35%) left within an hour of the fires arriving, with over half believing they left late (57% women and 53% men) and that it was dangerous (80% men and 78% women). Reflecting on Black Saturday (forthcoming research), a research participant spoke of what he and his wife would do in a future fire, as 'a bloody impossible question':

The risk [my son and I] perceived with my wife was that halfway through the [fire] she would say, "We need to go" and she would be so forceful that she would ... get us in the car ... [We] both said to my wife, "Get whatever you want together, take the dog [and leave]" ... My son felt obligated to stay with me ... I put him in danger and ... when you sit back and reflect it's "hmmm". [My wife] point blank refuses to leave again ... which then puts a bit of pressure on us for next time, because I won't go ... We haven't worked our way right through it ... I don't know what we're going to do. I really don't.
(Warren)

Warren and others reveal that the lack of an agreed and written fire plan is not through ignorance or inattention, but rather through heightened awareness of the conflict inherent in planning as a heterosexual couple, and the impossibility of matching the competing priorities of men and women in their socially constructed roles.

Society carefully monitors gender roles, especially in disaster. Historically, writing women out of disasters – except as victims – has been blatant. Samuel Henry Prince, known as 'the first scholar in the field of sociology



Figure 1: The cycle of gendered expectations, reporting, mythologising in opposition to “Leave and Live”

of disaster’ rewrote an unpublished history of the 1917 Halifax explosion, omitting ‘all the positive references to women and the negative references to men’ (Scanlon 1997, p. 4). Society defends a gender schema that enshrines ‘needy women’ and ‘strong men’ (Enarson 2006), editing out women’s competence (Scanlon 1997).

Affirming the connection between masculinity with staying, femininity with leaving, researchers Tyler and Fairbrother write of ‘the heavily gendered nature of bushfire response in this country’ (Tyler & Fairbrother 2013, p. 117). There is barely a dent in the notion that one act (staying, defending) is courageous, and the other (leaving) is easy – that it is men who are heroic, women protected. Swedish researchers analysed 18 disasters over three centuries and concluded that ‘women and children first’ is a myth (Elinder & Erixson 2012, Rivers 1982).

In escaping bushfires, women and children are often alone (VBRC 2010, Eriksen 2014, Parkinson & Zara 2011). This happened in terrifying circumstances on Black Saturday and for many children, their mum was their saviour. Yet, for the women who saved lives driving out, reports continue to allude to fleeing, and leaving late. For example:

While men have been most often killed outside while attempting to protect assets, most female and child fatalities occurred while sheltering in the house or attempting to flee.
(Haynes et al. 2010, p. 185)

There were no awards for women and no ‘hero’ status. There are few accounts of women fighting bushfires or escaping them. Instead, hegemonic masculinity

that seeks to dominate nature is rewarded; a meta-analysis of 150 studies writes of gendered risk-taking as a socially instilled and highly valued masculine tendency (Byrnes, Miller & Schafer 1999, p. 368). In our research, participants spoke of hyper-masculine behaviour – a ‘boy’s own adventure’ – and of some men unnecessarily putting themselves in the way of danger. Other researchers point out that firefighters are keen to fight fires as this is the very thing that allows them to demonstrate their masculinity (Pease 2015).

Findings and discussion

The findings provide answers for why so few heterosexual couples have written fire plans. There is pressure on men to demonstrate masculinity by staying and defending, and the actions of many men align with these expectations. Men’s achievements in surviving and protecting property are reported and amplified to reinforce stereotypical gender roles. Awards are selectively given to men for typically masculine, ‘heroic’ behaviour (but rarely to women, who are written out of heroic roles). This reinforces stereotypical gender roles. It’s a cycle that sits in opposition to government evidence-based policy of ‘Leave and Live’. See Figure 1.

The circumstances on Black Saturday meant 27 of the 30 women interviewed fought or escaped the fires through necessity rather than choice or preparation, and 24 women thought they would die in the fires. This cohort were able to describe their actions, their motivations and the immediate consequences. Thirteen women were alone for significant parts of

this experience, seven with dependent children. These accounts have much to offer emergency planning. A prepared and resilient community relies on learning from the past and, equally, from a gendered analysis. To do this, we return to Black Saturday.

Preparing

Women's ability to defend property and lives in a bushfire is seen as lower than men's, and women are often unable to influence men (Eriksen 2013). A participant recalled her preparations on Black Saturday, and her husband saying:

'You're being stupid' and I said, 'Okay, could you just get [the pump] out?' ... I had everything ready and he was ... 'Oh you're being this, you're being that'.
(Kristin)

I called him all day and asked him to come home and he's like, 'Don't be silly' ... He made it home I think 10 minutes before they actually shut the road.
(Nina)

We tried to convince [my husband] that maybe he should leave too. He didn't. I talked to my neighbour, told her to leave with her young kids, tried to convince her husband when he returned that it was actually serious and not a joke, and then I left.
(Mia, 7-months pregnant with a 2-year old)

The hierarchical gender schema is reinforced through gendered language and media images and this is writ large in disasters. Men are in uniforms and in authority, juxtaposed with community imagery of 'sooty faced heroic men' and women with babies as victims.² Women's evacuation appears limited by concessions to partners (some of them controlling) and by deliberate actions by violent men. A domestic violence crisis-line worker took a call from one woman the night before Black Saturday:

She told me the history of abuse from her partner ... Then she told me that people in her town were enacting their bushfire plans ... She said that her plan was always to leave early, but tonight, after abusing her, her partner took the keys to the car and said, "I hope there IS a bushfire tomorrow and I hope you die in it." And then he took the car and left.
(Cooper, 2012, Identifying the Hidden Disaster Conference, Melbourne)

Evacuation is challenging for women who have no freedom to act and are trapped in unsafe home environments (Enarson 2012). In a country where one woman a week is murdered by her intimate partner (Our Watch 2017), attention has not been given to the role domestic violence plays in preventing women from enacting a fire plan.

Evacuating

The VBRC's Lessons Learned volume refers to Ash Wednesday in 1983, noting:

Most people died during late evacuations and the majority of those were women and children, whereas

most of the men killed had been defending property.
(VBRC 2010, p. 336)

Although on Black Saturday, of the 173 people who died, only 14% were fleeing - 4% in vehicles and 10% on foot (Handmer 2010 et al. p. 23), versions of the old depiction of men and women in bushfires continue to be stated:

Most female and child fatalities occurred while sheltering in the house or when fleeing, usually too late, men are most often killed outside while attempting to protect the home and other assets.
(Bradshaw & Linneker 2017 in Kelman, et al. 2017, p. 219; See also Whittaker, et al., 2012)

This depiction is countered by narratives of women who believed they would die on Black Saturday; women who, like men, were actively working to protect assets and people. Women were getting petrol, getting kids to safety, moving trucks, and checking on or saving others:

[There were] big ... plumes of smoke that just filled up the entire sky ... [My friend] Cheryl had ... turned right up our drive, so I think that's a real act of bravery ... She came up to warn us [then] did a u-turn and took off.
(Elise)

You could see flames ... We had two interstate trucks [which were our livelihood] ... and both were home... [My husband] rang me ... and said, 'Get the trucks out because the wind's changed and it's blowing the fires towards us'.
[And she did.]

The term 'evacuate' sounds benign, but the women described thick smoke and seeing enormous fireballs catching up behind. Powerlines and trees were down or on fire, with embers falling all around, often on roads that were mountainous and dangerous at any time.

It was terrible. There were horses stuck on fences, animals over the road ... We recognised cars from friends who had crashed and didn't know whether they were alive or dead ... I couldn't even get out onto the road, there were so many cars ... We looked over and the fire was there. ... I had four lives that I was responsible for, and my own. I shook uncontrollably ... I drove with the masses - 140 Ks per hour ... It was windy [and dark]... we couldn't breathe the air, it was just too thick with smoke. Everyone was running for their own life.
(Ruby)

Such courageous efforts were mostly unremarked and unrewarded, leading to misconceptions of women's roles in catastrophic bushfires. Men often left only a few minutes after their family. Suddenly alone in dangerous and terrifying circumstances, men drove out separately. If women and men are not aware of the risk, how can fire planning be realistic?

² Nick McKenzie, Fairfax journalist, speaking at Diversity in Disaster conference, 18/4/2018.

Staying and defending

On Black Saturday, even those with well-established fire plans were challenged (VBRC 2010), and any sense of control was soon lost.

We had our tank of air, generators ... hoses inside ... The plan was to be inside when the fire went over... To see the enormity of the smoke, it was like an atom bomb, the way it grew... I've got a tiny house, and that first instinct when we've run in ... I've turned around and just looked at my house and thought, 'What were we thinking, we are going to die.'
(Nina)

Of those who died, 69% were said to have been 'passively sheltering' (VRBC 2010). The term itself was called into question by the VBRC (2010). In our research, women and men told of hours spent urgently safeguarding homes, while hearing other houses exploding, people screaming, birds dropping from the sky. It was sheer hard work in increasingly desperate circumstances:

It was blowing a gale ... We could see comets of fire ... You had to wet everything as soon as it came in ... it became really difficult to breathe. The kids were sheltering under wet towels and ... we'd take it in turns. One would go upstairs [to extinguish embers] and the other would go ... with the kids ... My son was screaming, 'Mummy, I need you', and 'Mummy, are we going to be dead?'
(Ellen)

*[My grandson] was on the couch huddled up in the foetal position ... stinking hot but he's in a blanket saying, 'Nanna, the house is gonna burn down'. I ... said, 'It will not burn down, ... I kept running inside every five or 10 minutes to the kids and so did my daughter. We'd take it in turns so they weren't panicking ... When I thought we were going to die was when finally Caitlyn got through to 000 ... She said, 'We just need to let you know to look for six people'.
(Gina)*

Gender roles are central to fire planning and risk. We burden women with responsibilities that hamper escape (children and pets), encourage acquiescence to men's authority, encourage dependence and skills of domesticity rather than firefighting skills, limit access to firefighting roles and resources (money, cars), and affirm sacrifice of their own safety and livelihoods for the good of the family.

Men are better resourced to survive with greater access to training, equipment, cars, money. Growing up, boys are more likely to learn about engines, chain saws, generators and mechanical equipment – skills that enhance bushfire survival. Yet, expectations of heroic masculinity set them up for failure:

[Men] felt an immense responsibility to protect – they're the men of the house. To protect their family – that's a massive responsibility ... The role that they took on that day – not willingly.
(Community worker)

Eriksen writes that 'societal pressure sees men attempt to perform protective roles when the fire threatens that many have neither the knowledge nor ability to fulfil safely (Whittaker, et al. 2015, p. 205). The expectations of men are clear:

We never had a fire plan. You thought he'd be here, my fire plan was him.
(Sophie)

A worrying 2013 statistic is that intentions to stay and defend remain unchanged for men despite Black Saturday while women's intentions dropped 20% (Whittaker et al. 2016, p. 213). These statistics relate directly to society's expectations. Women were judged on how well they cared for their family during and after Black Saturday, and men on how well their behaviour matched expectations of protecting, providing, and heroic masculinity. The effect is to fortify the gendered roles, stereotypes and expectations we know are harmful to both women and men.

Recommendations

1. Reduce gender stereotyping. Change the language used in the EM sector to more accurately reflect the reality of women's and men's behaviour in and after disaster. Mitigate the harms from stringent gender roles by broadening the range of acceptable behaviours for women and men; diversify the ESO workforce by drawing on more than 50% of the population.
2. Reduce vulnerability of ESO workers and other first responders. Increase awareness of harm from strict gender roles through training in ESOs and incorporate a gender lens in disaster planning, response, recovery, and reconstruction.
3. Improve individual support for survivor physical, mental and emotional health. Change the culture of ESOs to reduce hyper-masculinity from the workplace and increase accessibility of support available to staff, ensuring its confidentiality.
4. Offer equal opportunities and respect to all disaster survivors. Value the contribution of women and cut the nexus between hyper-masculinity and heroism. Recognise complementary skill sets and team work.³
5. If 'Leave and live' is to gain traction, awareness of gendered expectations must be acknowledged and addressed in fire planning: Specific recommendations are therefore:
 - Overtly recognise and communicate the complications of writing an agreed bushfire plan. Educate fire authorities who assist with fire planning to recognise the power relations within couples that make fire planning conflictual. Name this.

³ For more details see the full recommendations in *The Way He Tells It and Men on Black Saturday*. Further strategies are enumerated in the *Workplan of the Gender and Disaster Taskforce*.

- In messaging, have men equally responsible for children.
- Engage with journalists to improve the accuracy of reporting.
- Encourage women in family violence situations to have a plan – refer to 1800 RESPECT.
- Prioritise all adults leaving with children as vulnerable.
- Equally reward preventative actions and women's role in bushfires.

The Gender and Emergency Management Guidelines checklist offers additional ways to shift these into actions to break-down outdated gendered expectations and save lives.⁴

Conclusion

Previous research finds that women are not intrinsically at greater risk in disasters through biology. They are made 'vulnerable' in several socially constructed ways, including through the myth of women and children first; expectations of women as the primary carer; lack of autonomy in decision-making; men's violence against women; and exclusion from bushfire survival education. Men are made 'vulnerable', through risk-taking, over-confidence, loss of a sense of control, reluctance to seek help, and failure to live up to expectations of 'protector' during the fires, and 'provider' in the aftermath.

As gendered expectations shape women's and men's risk, ability and legacy, this reality must be explicit in household fire planning. Implementing the recommendations from the research and incorporating a gender lens in fire planning will increase community preparedness, survival and resilience.

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References

Byrnes JP, Miller DC & Schafer WD 1999, *Gender differences in risk taking: A meta-analysis. Psychological Bulletin*, vol. 125, no. 3, pp 367-383.

CFA (Country Fire Authority) 2016, *Letter from CFA Board to United Firefighters Union* At: <http://news-cfa-stage.data-solutions.com.au/attachments/article/7508/20160605%20Ltr%20to%20UFU%20from%20CFA%20Chairman.pdf>.

Cooper J 2012, *Hypothetical Panel Member. Paper presented at the Identifying the Hidden Disaster*, Melbourne.

Elinder M & Erixson O 2012, *Gender, social norms, and survival in maritime disasters. Proceedings of the National Academy of Sciences*, vol. 109 no. 33, pp. 13220-13224.

Enarson E 2006, *Women and Girls Last: Averting the Second Post-Katrina Disaster*. At: <http://understandingkatrina.ssrc.org/Enarson/>.

Enarson E 2012, *Women confronting natural disaster: From vulnerability to resilience*. Boulder, Colorado: Lynne Rienner Publishers, Inc.

Eriksen C 2014, *Gender and wildfire: Landscapes of uncertainty*. New York: Routledge.

Glaser B & Strauss A 1967, *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago: Aldine.

Handmer J, O'Neil S & Killalea D 2010, *Bushfires Final Report: Review of fatalities in the February 7, 2009*. Melbourne: Centre for Risk and Community Safety RMIT University & Bushfire CRC.

Haynes K, Handmer J, McAneney ?, Tibbits A & Coates L 2010, *Australian bushfire fatalities 1900–2008: Exploring trends in relation to the 'Prepare, stay and defend or leave early' policy. Environmental Science & Policy*, vol. 13, pp. 185-194.

Kelman I 2017, *Linking disaster risk reduction, climate change, and the sustainable development goals. Disaster Prevention and Management: An International Journal*, vol. 26 no. 3, pp. 254-258.

McKenzie N, Tomazin F & Baker R 2018, *The report the firefighters' union did not want you to see. The Age*. At: <https://www.theage.com.au/politics/victoria/the-report-the-firefighters-union-did-not-want-you-to-see-20180305-p4z2xy.html>.

McLennan J 2015, *Capturing community bushfire readiness: Post-bushfire interview studies 2009-2014. Hazard Note, 4, Our Watch. (2017). Facts and figures*. Melbourne: Bushfire and Natural Hazards CRC. At: <https://www.ourwatch.org.au/understanding-violence/facts-and-figures>.

Our Watch 2017, *Facts and figures*. At: <https://www.ourwatch.org.au/understanding-violence/facts-and-figures>.

Parkinson D 2012, *The Way He Tells It: Relationships After Black Saturday*, vol. 1. Wangaratta: Women's Health Goulburn North East.

Parkinson D, Duncan A & Hedger E 2015, *Women in Fire and Emergency Leadership Roles: How can we improve the balance? Vol. 2. A Research Report commissioned by the Department of Environment, Land, Water and Planning*. At: <http://www.genderanddisaster.com.au/wp-content/uploads/2016/03/FINAL-Vol-2-20160216.pdf>.

Parkinson D & Zara C (Eds.) 2011, *Beating the Flames*. Wangaratta: Women's Health Goulburn North East. At: www.whealth.com.au/environmentaljustice.

Parkinson D, Lancaster C & Stewart A 2011, *A numbers game: Women and disaster. Health Promotion Journal of Australia*, vol. 22, no. 3, pp. 42-45.

Pease B 2014, *Hegemonic Masculinity and the Gendering of Men in Disaster Management: Implications for Social Work Education. Advances in Social Work and Welfare Education*, vol. 16 no. 2, pp. 60-72.

Rivers J 1982, *Women and Children Last: an essay on sex discrimination in disasters. Disasters*, vol. 6 no. 4, pp. 256-267.

Scanlon J 1997, *Human behaviour in disaster: The relevance of gender. Australian Journal of Emergency Management*, vol. 11, pp. 2-7.

⁴ Available from the Gender and Disaster Pod at genderanddisaster.com.au.

Tyler M 2013, *Fighting and dying: blokes and bushfire in Australia*. *The Conversation*. At: <http://theconversation.com/fighting-and-dying-blokes-and-bushfire-in-australia-11552>.

Tyler M & Fairbrother P 2013, *Bushfires are 'men's business': the importance of gender and rural hegemonic masculinity*. *Journal of Rural Studies*, vol. 30, pp. 110-119.

Victorian Bushfires Royal Commission (VBRC) 2010, *The lessons learnt Volume 1: The Fires and the Fire-Related Deaths*. Melbourne: Victorian Government.

Whittaker J, Eriksen C & Haynes K 2016, *Gendered responses to the 2009 Black Saturday bushfires in Victoria, Australia*. *Geographical Research*, vol. 54 no. 2, pp. 203-215.

Whittaker J, Haynes K, Handmer J & McLennan J 2013, *Community safety during the 2009 Australian 'Black Saturday' bushfires: an analysis of household preparedness and response*. *International Journal of Wildland Fire*, vol. 22 no. 6, pp. 841-849.

Whittaker J, Handmer J & Mercer D 2012, *Vulnerability to bushfires in rural Australia: A case study from East Gippsland, Victoria*. *Journal of Rural Studies*, vol. 28, pp. 161-173.

Whittaker J, Haynes K, McLennan J, Handmer J & Towers B 2009, *Victorian 2009 Bushfire Research Response: household mail survey*. Melbourne: Bushfire CRC.

Zara C & Parkinson D 2013, *Men on Black Saturday: Risks and Opportunities for Change*. Wangaratta: Women's Health Goulburn North East.

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Silent, silenced and less-heard voices in disaster risk reduction: challenges and opportunities towards inclusion

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Introduction and background

In emergency management and disaster risk reduction (DRR), policy documents are typically phrased in generic terms, referring to 'people', 'nation' or 'community'.

The unspoken intention is to be inclusive – all people, everyone in the nation, the whole community. However, when policy is translated into practice on the ground, much of the implied inclusivity may be lost because implementers and practitioners fail to recognise specific needs and interests. This lack of recognition is sometimes a conscious attempt to avoid possible bias and discrimination through the prioritising of one group over another; sometimes it is an inability to see beyond the experience and worldview of the dominant decisionmakers, which are traditionally white males.

There has been over a generation of research and civil society advocacy concerning social groups whose needs, rights and concerns have not been seen or heard in emergency management and disaster risk reduction. An early case was made to recognise 'the poor', most often in the context of less wealthy countries, as experiencing a higher level of impacts and slower recovery potential (e.g. Wisner *et al.* 1976, Hewitt 1983). A significant constituency has been active since the early 1990s to redress the invisibility of women and the absence of their voices (e.g. Kafi 1992, Enarson and Morrow 1998), which builds on extensive feminist scholarship and action since the 1960s. Similarly, race and ethnicity, indigenous groups, culturally and linguistically diverse (CALD) communities, people with disabilities, children and older individuals (among others) have gained degrees of recognition at different times and places over the past three decades (e.g. Peacock *et al.* 1997, Wisner *et al.* 2012).

An exploratory review of dominant terms in use during the past three decades in policy frameworks, literature and practice conducted by the Gender and Disaster Network in contributions to the UNISDR 2017 Global Platform for Disaster Risk Reduction in Cancun, Mexico,

reveals increasing inclusion of socially progressive terms. From the dominance of 'natural' and 'man-made' in the 1990s, to 'gender sensitive' and 'women's participation' in the 2000s, to the inclusion of 'Women's Leadership', 'LGBTQI' and 'Men & Masculinities' in the 2010s. Although the inclusion of new terms does not mean the earlier ones are replaced but rather may lose some salience.

Some of the terms might simultaneously be fully accepted in the academic literature, emerging in the disaster and development practice or grey literature, and yet entirely absent from the policy and legislative realms. The words are not free lexical choices but loaded concepts redolent of specific and often fixed worldviews and political positions. These comments are included in the context of the agenda-setting role of global policy framework documents and how they reflect relative power differentials which result in the presence, absence or obstruction of key DRR policy words, concepts and interests, and the constituencies they represent.

On categories and intersectionality

Naming, labelling and framing while sometimes serving practical functions, are nevertheless expressions of power relations (Moncrieffe and Eyben 2007). They reflect or create how categories of people will be recognised and understood, which issues will be presented and how they will be problematised. Social categories come to appear natural, but the naming conceals the social and historical contexts and struggles behind them. To be unnamed is to be invisibilised and be undeserving of, or a low priority for, attention (Moncrieffe and Eyben 2007). Conversely, whilst presence on a list may mean a social group is 'on the radar' to a degree, it does not ensure that their voice will be heard or that meaningful action and progress will result.

How do we deal with multiple disadvantages and intersecting inequalities? Somewhat ironically, given the

degree of advocacy in recent years to avoid the generic term 'people' and make visible specific vulnerabilities and interests, it is important to consider the whole person rather than defining a person as a single manageable identity ('woman', 'elderly', etc). The challenge is to do so without depoliticising and invisibilising marginalised interests and experiences. The emergence of intersectionality (Crenshaw 1989) offers one way of grasping this dynamic complexity. Intersectionality recognises that intersecting marginalisations create 'an interlocking prison from which there is little escape' (Hancock 2007: 65). Compounded biases and prejudices mean, for example, that a woman of colour, may be denied recognition for her situation because each category of concern (gender and race) has been regarded as a single issue and dismissed; i.e. there may be little evidence of discrimination against 'white' women or against black 'men' but 'black women' may experience considerable concealed levels of injustice, as Kimberle Crenshaw demonstrated so ably several decades ago (Crenshaw 1989).

However, while interest in intersectional approaches is growing (Cho *et al.* 2013), its practical application remains a challenge and the visibility enjoyed by some social categories over others reflects power differentials that gives presence and voice to some but not all. Furthermore, the proliferation of fractionalisation processes may mean that solidarity is threatened in favour of the maintenance of single strategic interests as the sheer number of interest groups and factions appears unmanageable for practitioners to process.

On categories and power relations

The increasing presence of some of these silent, silenced or less-heard voices in many international and national policy documents is an achievement advocacy groups should be proud of. However, the very advocacy of these groups representing women, people with disabilities, children, older persons, etc., whereas crucial, has often been an isolated process. Isolated in the sense that many of these groups have advanced the agenda of the people they represent rather than an integrated one for all silent, silenced and less-heard voices. This largely stems from the importance for advocacy groups, especially NGOs, to secure their own funding niches associated with the need to meet the requirements of national and international policies. In short, the different NGOs and other international stakeholders that have managed to get eight groups explicitly stated in the Sendai Framework for DRR (SFDRR)¹ can now expect that there will be funding from international donors to support their work in collaboration with national governments to meet the expectations of the framework. Those groups who have not made it to the SFDRR will surely receive much less attention in the 15 years to come.

Indeed, as soon as a list is compiled, it necessarily authorises some interests and neglects others. If you are not identified, then you risk becoming invisibilised and silenced (Moncrieffe and Eyben 2007). Paradoxically, focused solidarity and political effectiveness gained through a single identity category may put you in competition with others and reduce the possibilities for inclusive solidarity with others.

The challenge with this competitive, attention-driven approach to advocating for silent, silenced and less-heard voices in emergency management and DRR is twofold. Firstly, it tends to market people's vulnerability and make it a resource to stir attention. Secondly, it somehow fosters exclusion rather than inclusion. Indeed, it is frequent to observe initiatives geared to foster the participation of, let's say women or older persons for the sake of example, in emergency management and DRR that only involve women or older persons. This is an issue because these groups most often know about their own vulnerabilities and capacities (e.g. Chambers 1983). The challenge is to get these recognised by those with more power in society so that the latter 1) grant access to means of protection in dealing with natural hazards, and 2) transfer part of the power they hold in making decisions that matter to silent, silenced and less-heard voices. This cannot happen if emergency management and DRR are considered in a silo. Inclusion is ultimately about addressing the skewed power relations that underpin marginalisation and neglect in emergency management and DRR as well as in other dimensions of societies. It is not about silent, silenced and less-heard voices in isolation.

Labelling people: pros and cons

Should we ultimately name and label groups in policy and practice for disaster risk reduction? Naming affords affirmation but this is not a question of recognition for recognition's sake but rather because 'recognition issues have distributive subtexts' (Fraser 2000: 118); along with recognition comes (potentially) fair access to, or denial of, resources. This is fundamentally a question of distributive justice. According to Nancy Fraser (2000: 114), to be denied recognition 'constitutes a form of institutionalised subordination, and thus a serious violation of justice'. However, while recognition of difference across social categories at an individual scale is necessary, partly to humanise policy setting and interventions, it is the larger frame of structural inequality which demands our primary attention. Social, political, economic and cultural institutions structure our understanding and expectations regarding gender, race, dis/ability, and other social collectivities. And these structures can lead to systemic disadvantage that is resistant to change and manifests itself in disaster contexts in sometimes subtle ways.

As Wood (2017: 19) points out, '...the interesting question is not whether we label and categorize' [but] 'which and whose labels prevail, and under what contextual conditions?'. For example, it is common to see in the disaster and development literature an equating of women, children, older persons or people with disabilities with the status 'vulnerable'. This denies them agency. Thus, the inclusion of the label will not necessarily lead to positive change but may reinforce cultural stereotypes.

Labelling can stigmatise when appropriated for political ends such as in the case of Muslims whose religious affiliation is all too frequently tied uncritically to Islamist violence. On the other hand, self-identification can re-appropriate former stigmatizing labels and reclaim them such as in the case of persons identifying as queer. This is an example of where 'malevolent labelling can lead, unexpectedly, to productive outcomes where, over time,

people use these adverse labels as a basis for making claims and gaining political space' (Moncrieff 2017).

Labelling 'affects the categories within which we are socialised to act and think' (Wood 1985: 347). It is inevitable and ubiquitous but what is lacking is a critical engagement with the labelling process and its sometimes unintended consequences. Taking a reflective and reflexive attitude to our use of labelling is a good place to start.

Is inclusion culturally ethical?

One who overcomes the challenge of categories and labels then faces an ultimate dilemma. Is it always ethical to foster inclusion in emergency management and DRR? Indeed, in many instances, encouraging the participation of silent, silenced and less-heard voices may require challenging existing cultural norms and values. Yet, the same international and national policies, e.g. the SFDRR, that foster inclusion also emphasise that culture and more specifically traditions and local knowledge should be of paramount importance in emergency management and DRR (Shaw *et al.* 2009, Mercer *et al.* 2010).

For example, including women in emergency management and DRR in India or Nepal requires to deal with the caste system. Local women may spontaneously advocate for their own rights and desires, which reflects a genuine and grounded momentum. However, when such momentum is encouraged by outsiders, especially Western stakeholders, this may become a challenge. Why should Western values and norms prevail over local culture? One may argue that the inclusion of silent, silenced and less-heard voices in emergency management and DRR builds upon evidence that these groups are disproportionately affected in disasters and that they therefore deserve particular attention. Such an approach often refers to human rights as the ultimate framework for justifying inclusion in emergency management and DRR. Yet, human rights may also be seen as a tool to advance a Western imperialist and diffusionist agenda across the world (de Sousa Santos 2002, Donnelly 2007).

Such situation is obviously complex and context-specific, and this is, of course, not our intention to argue that silent, silenced and less-heard voices should not be included in emergency management and DRR. The point is that such issues need to be carefully thought through when advancing a genuine inclusion agenda that recognises underlying unequal power relations in society. This is true at both the international and national levels, in the so-called Global South as much as in the West. Australia is, in fact, an excellent example of such challenges in a wealthy country. Fostering inclusion of women amongst Aboriginal communities may, for instance, require a challenge to the knowledge and power of traditional owners of the land, whom, at the same time, are increasingly recognised as key stakeholders of local development.

There is no straightforward solution to this challenge. Nor are there any to make emergency management and DRR inclusive rather exclusive. However, a common principle seems to underpin all context-specific and genuine approaches to inclusion. They open up a dialogue between, on the one hand, silent, silenced and less-heard

voices and, on the other hand, those with more power in society.

Fostering inclusion in disaster risk reduction

A dialogue between silent, silenced and less-heard voices and more powerful groups in society is therefore essential to:

- ensure the latter recognise the unique vulnerabilities and capacities of the former
- Build rapport and trust so that silent, silenced and less-heard voices' contribution to emergency management and DRR be recognised and eventually included in policy and practice.
- Address the unequal power relations that underpin everyday marginalisation and neglect of silent, silenced and less-heard voices; not only in emergency management and DRR but also in everyday life.
- make inclusion culturally-relevant and acceptable to all sectors of society.

A genuine dialogue between silent, silenced and less-heard voices and those with more power requires an appropriate institutional space. One that allows for such dialogue to occur in the first place without breaking any laws nor local cultural norms and values. There also need to be appropriate tools to foster such dialogue. Tools that allow for all stakeholders to come together and talk openly about the same issues at the same time.

Ultimately, fostering such dialogue requires appropriate social and political spaces. On the side of the silent, silenced and less-heard voices it often necessitates consciousness. In that perspective, the silo approach taken by many stakeholders of emergency management and DRR constitutes a valuable first step but only a first step. On the side of those with power it requires openness and commitment. Encouraging inclusion of silent, silenced and less-heard voices in emergency management and DRR indeed entails that those with power share that power. Hence, inclusion through genuine participation is often a conflictual process. It means challenging and transforming how societies are structured. This is most often a long and winding journey that goes much beyond specific international and national policies.

References

- Chambers R 1983, *Rural Development: Putting the Last First*. London: Longman.
- Cho S, Crenshaw KW & McCall L 2013, *Toward a field of intersectionality studies: theory, applications, and praxis*. *Signs: Journal of Women in Culture and Society*, vol. 38, no. 4, pp. 785-810.
- Crenshaw K 1989, *Demarginalizing the intersection of race and sex: a black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics*. *The University of Chicago Legal Forum*, vol. 1989, no. 1, pp. 139-167.
- De Sousa Santos B 2002, *Toward a multicultural conception of human rights*. In: Hernández-Trujol BE (ed.) *Moral Imperialism: A Critical Anthology*. New York: New York University Press, pp. 39-60.

Donnelly J 2007, *The relative universality of human rights*. *Human Rights Quarterly*, vol. 29, no. 2, pp. 281-306.

Enarson E & Morrow B (eds.) 1998, *The Gendered Terrain of Disaster: Through Women's Eyes*. Westport: Praeger.

Fraser N 2000, *Rethinking recognition*. *New Left Review*, vol. 3, pp. 107-120.

Hancock A-M 2007, *When multiplication doesn't equal quick addition: examining intersectionality as a research paradigm*. *Perspectives on Politics*, vol. 5, no. 1, pp. 63-79.

Hewitt K (ed.) 1983, *Interpretations of Calamity from the Viewpoint of Human Ecology*. Boston: Allen & Unwin Inc.

Kafi S 1992, *Disasters and Destitute Women: Twelve Case Studies*. Dhaka: Bangladesh Development Partnership Centre.

Mercer J, Kelman I, Taranis L & Suchet-Pearson S 2010, *Framework for integrating indigenous and scientific knowledge for disaster risk reduction*. *Disasters*, vol. 34, no. 1, pp. 214-239.

Moncrieffe J & Eyben R 2007, *The Power of Labelling: How People are Categorized and Why it Matters*. London: Earthscan.

Moncrieffe J 2007, *Introduction – Labelling, power and accountability: how and why 'our' categories matter*. In: Moncrieffe J & Eyben R (eds.) *The Power of Labelling: How People are Categorized and Why It Matters*. London: Earthscan, pp. 1-16.

Peacock WG, Morrow BH & Gladwin H 1997, *Hurricane Andrew: Ethnicity, Gender and the Sociology of Disasters*. New York: Routledge.

Shaw R, Sharma A & Takeuchi Y 2009, *Indigenous Knowledge and Disaster Risk Reduction: From Practice to Policy*. New York: Nova Science Publishers.

United Nations International Strategy for Disaster Reduction 2015, *Sendai Framework for Disaster Risk Reduction 2015-2030*. Geneva: United Nations.

Wisner B, Westgate K & O'Keefe P 1976, *Poverty and disaster*. *New Society*, vol. 37, no. 727, pp. 546-548.

Wisner B, Gaillard JC & Kelman I (eds.) 2012, *Handbook of Hazards and Disaster Risk Reduction*. Abingdon: Routledge.

Wood G 1985, *The politics of development policy labelling*. *Development and Change*, vol. 16, no. 3, pp. 347-373.

Wood G 2017, *Labels, welfare regimes and intermediation: contesting formal power*. In: Moncrieffe J & Eyben R (eds.) *The Power of Labelling: How People are Categorized and Why It Matters*. London: Earthscan, pp. 17-32.

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ABSTRACT

The Diversity in Disaster Conference was held in Melbourne, Australia, 17-18th April 2018. It brought together a community of 237 delegates representing 136 organisations including government, academics, community members, Non Government Organisations (NGOs), policy makers, volunteers and professionals working on emergency management. An additional 107 presenters and facilitators attended from across Australia, New Zealand and the United Kingdom. A number of in-conference events highlighted pioneering work being done in Australia, including: the launch of the Gender and Emergency Management Guidelines; the presentation of the Mary Fran Myers Award to the Gender and Disaster (GAD) Pod; and the launch of the *LGBTI Experiences of Disaster* report. Over the two days, delegates and presenters considered diversity, disaster and resilience with a focus on the Australian context.

Diversity in Disaster Conference: outcomes statement

Naomi Bailey, Diversity in Disaster Collaborative
Diversity in Disaster Conference, Melbourne, Australia.
17th and 18th April, 2018.

Informants who contributed to the Outcome Statement are listed at the end of the document.

This Outcomes Statement summarises the strategies and practical steps to improve inclusive emergency management (EM) that emerged during the conference. It is shaped by an informant method. Thirteen informants with experience in diversity and/or disaster attended the conference. In a post-conference workshop, their insights were combined with a conference artefact, which recorded real-time responses from delegates, into a document with over 450 data points that shaped the outcome statement¹. The Statement, reviewed by the Conference Steering Committee, is one of a series of legacy documents available from the GAD Pod website², which include: the Issues Paper; Full Program; Monograph (published by the *Australian Journal of Emergency Management*) and the external evaluation. The Outcomes Statement should be read in conjunction with these documents.

The conference was funded under the National Disaster Resilience Grants Scheme which operationalises many of Australia's international obligations under the United Nations' *Sendai Framework for Disaster Risk Reduction 2015-2030*.³ The Sendai Framework usefully sets out definitions, guiding principles, priorities and stakeholder roles for action on reducing disaster risk and increasing resilience.⁴ 'Disaster' includes acute shocks like floods, fires and terrorist attacks; slow-burn disasters like climate change; and underlying chronic stressors inherent in a community like poverty and discrimination.⁵ While the conference adopted the Resilient Cities definition of resilience, during the conference resilience and disaster in the Australian context were linked to marginalisation, privilege and community. It was noted that, while we each have our roles in disaster, individuals have the right to privacy, and services providers, emergency management professionals and communities have critical impact in fostering equity of opportunity to plan, survive and recover from disasters.

1 Two or more informants attended each conference session and, using a standardised insights document, recorded proceedings. The conference artefact collected delegates' insights across the two days. The resultant 450+ data points inform this outcomes statement.

2 www.genderanddisaster.com.au.

3 United Nations, The Sendai Framework, viewed on 24 May 2018 at : <https://www.unisdr.org/we/inform/publications/43291>.

4 It is noted that Australia will report on its obligations under the *Sendai Framework* in 2019.

5 'Disaster' is used synonymously with 'emergency' in this statement.

Defining concepts: resilience, marginalisation and vulnerability, privilege and whole-of-community

1. **Resilience** is an organising concept in contemporary emergency management. It shapes thinking about, and action for, better outcomes. The conference committee adopted the Resilient Cities definition of resilience: “[t]he capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience”. Delegates drew on a number of other definitions and critiques, including the United Nations (UN) and Australian Council Of Social Service (ACOSS) definitions, and plenary session presentations during the Conference, to shape their understanding of disaster and resilience.

As an organising concept, resilience provides a powerful language and way of thinking about the work of emergency management and communities in planning for, responding to and recovering from disasters. It is noted that this language does not focus on the loss, grief, trauma or distress that many people and communities experience.

2. The experience of disaster is embedded in the fabric of our world and some resilient systems are not necessarily positive – specifically structures of privilege that condition disproportionate outcomes. Those who are discriminated against, **marginalised and vulnerable** before disaster are disproportionately impacted during and after disaster. Currently, while there are some promising areas of practice, those with ‘underlying vulnerabilities’ experience increased risk of death, injury, violence, economic and social hardship and a lack of access to resources. Promising practice includes examples where community occupies a central role. Definitions of resilience are strengthened by recognising that the conditions, dynamics, relationships and networks that structure our world before disaster play a role in creating and determining experiences of acute shocks and chronic stresses.

3. The corollary of marginalisation and vulnerability in disaster is **privilege**: one cannot exist without the other. A conversation focussed on ‘marginalisation and vulnerability’ looks only at the disproportionate impacts of disaster and not the causes. Responding to the impacts of marginalisation and vulnerability includes recognising and acting to mitigate historic and institutionalised discrimination. Linking vulnerability and marginalisation to privilege unpacks the ways in which current systems produce the conditions that create some disasters and exacerbate the ways in which some people (and not others) are impacted by disaster.

4. The Conference heard that actions taken to address privilege, marginalisation and vulnerability reduce risk and increase **whole-of-community** resilience. Communities can lead response and recovery, self-organising in a complex web of existing and emergent relationships; and community can also play a critical role in collaborating with emergency management in all phases to shape preparedness, response and recovery. A position attributed to Mr Craig Fugate, former Administrator

of FEMA, USA, portrays the view that Emergency Managers have the responsibility to plan for a ‘Whole-of-Community’ context. Any group within a community that is not included in the plans is, as a consequence, marginalised and made more vulnerable.

Practical Steps for conceptualising: resilience, marginalisation and vulnerability, privilege and whole-of-community

- The conference reiterates the need, captured in the *Sendai Framework*, to promote the collection, analysis, management and use of relevant disaggregated data and practical information and to ensure its dissemination, taking into account the needs of different categories of users.
- The *Goals and Targets of the Sendai Framework*, to which Australia is a signatory, also relate to WHO’s *Health Emergency & Disaster Risk Management (H-EDRM)* program and synergise with the *UN Sustainable Development Goals Agenda 2015 - 2030*. A number of communities demonstrate the application of the principles of community development in community-based Centres of Resilience which is one strategy to address the chronic stresses in a community and underpin greater resilience to the inevitable acute shocks with the expectation of improved outcomes.
- Adopting a definition of resilience that acknowledges the link between privilege, marginalisation and vulnerability is one step toward a whole-of-community approach.
- Many communities demonstrate promising practice in fostering resilience. Existing online knowledge-hub platforms, eg the *AIDR Knowledge Hub*, and the *MUDRI Compendium of Community Resilience CaseStudies*, have the capacity to capture and champion promising practice to increase diversity in disaster. These knowledge hubs benefit from the contribution of users and their feedback about usefulness, navigation and content.

6 Rockefeller Foundation, 100 Resilient Cities, definition of resilience viewed on 25 May, 2018 at: <https://www.100resilientcities.org/resources/>.

7 Resilience is defined as: “The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions”, United Nations Office for Disaster Risk Reduction (UNISDR), ‘2009 UNISDR Terminology on Disaster Risk Reduction’, Geneva, May 2009 (<http://www.unisdr.org/we/inform/terminology>).

8 Australian Council of Social Service, national parent of VCOSS, defines resilience as “[t]he ability of individuals, communities, organisations, or countries exposed to disasters and crises and underlying vulnerabilities to: anticipate, reduce the impact of, cope with, and recover from the effects of adversity without compromising their long-term prospects”. Viewed on May 24 at <http://resilience.acoss.org.au>.

9 The Sendai Framework and associated documents can be found at: <https://www.unisdr.org/we/inform/publications/44983>.

10 The WHO’s H-EDRM documents can be found at: <http://www.who.int/hac/techguidance/preparedness/en/>.

11 The UN’s Sustainability and Development Goals can be found at: <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>.

12 The AIDR Knowledge Hub can be accessed at: <https://knowledge.aidr.org.au>.

13 MUDRI’s Compendium can be accessed at: <https://www.monash.edu/muarc/research/research-areas/home-and-community/disaster-resilience/view-the-compendium>.

Strategies and Practical Steps for Diversity in Disaster

A. Gender and Disaster

5. Gender has a critical impact on every person's experience of disaster. The research, lived experience and practice knowledge show that disaster risks are gendered. Gender roles and gender stereotypes cast men as protectors and heroes and women as less physically capable, the providers of care, with domestic responsibilities. These stereotypes do not reflect the facts of women's and men's roles and responsibilities in disaster. Women experience increased risk of death due to incomplete emergency planning; increased violence, including domestic and family violence and sexual assault; and greater financial hardship following disaster. Men experience increased health risks through attempting to embody hegemonic masculinity, resulting in, for example, increased risk-taking, drug and alcohol use, mental health issues and suicidal ideation. The National Gender and Emergency Management Guidelines contain strategies for addressing direct and indirect impacts.

6. Women are underrepresented in emergency response services, at both front-line and leadership levels. Women are also underrepresented at a leadership level in many bodies involved in emergency management including government, community initiatives, NGOs, health and social services. The underrepresentation of women in leadership roles has particular consequences for the delivery of emergency management including: reinforcing gender stereotypes and compromising the ability to plan for or respond to the needs of women and their children. It is noted that many emergency response services are currently engaged in formal review processes to increase gender equity and address sexism in their organisations, which are expected to produce recommendations, policy and procedures. Gender equity is a preventative strategy that reduces violence against women and their children.

7. One clear example of gendered experiences of disaster is the increase in domestic and family violence and sexual assault during disaster. Both men and women experience domestic and family violence and sexual assault. The figures show that women are more likely to experience, with one in four women experiencing domestic and family violence and one in five experiencing sexual violence.¹⁴ Violence against women increases at times of disaster, with consequent increase in risk of death, injury and abuse. Gendered disaster risks include direct impacts and indirect impacts. Direct impacts include: an abusive husband partner or boyfriend purposefully endangering life by, for example, compromising an evacuation plan; and changed risk in disaster contexts such as the increased exposure to perpetrators in evacuation processes and during recovery; new experience of domestic violence from a male partner who was not violent before the disaster; and a community reluctant to acknowledge 'heroes' or suffering men as perpetrators of violence against women and children. Further, services may be reduced or non-existent in a post-disaster context, and women are less likely to report because of the fear of repercussions or the belief that their needs are less

important. Indirect impacts include the push back on gender roles that places the care of children with women and creates barriers to re-engaging in employment with consequent social and economic impacts.

Practical steps for women and men's safety in disaster

- Embedding the National Gender and Emergency Management Guidelines in emergency management practice.
- The collection and analysis of gender-disaggregated data (man, woman and other) to ensure robust evidence for policy and planning.
- Incorporating into emergency management existing national, state or territory strategy, policy and practice to reduce and respond to violence against women.
- Adoption of strategy, policy and practice to reach gender equity in emergency management services.
- Undertaking Lessons in Disaster training – to be found on the GAD Pod at www.genderanddisaster.com.au/info-hub/educations-training

B. Learning from Aboriginal People and Torres Strait Islanders

8. Aboriginal people and Torres Strait Islanders' sovereignty and caring for Country reflect stewardship of this land for more than 60 thousand years. The Diversity in Disaster Conference explicitly acknowledges climate change as a chronic emergency impacting on the Australian context. The conference sought ideas, insights and partnerships to achieve better outcomes. Knowledge of Country and cultural continuance demonstrate resilience in the face of colonial impact and climate change. This knowledge speaks directly to integrated responses as we face the slow-burn disaster of climate change and acute shocks like catastrophic fire and flood. Embedding a respectful exchange around land and stewardship calls on emergency management stakeholders to engage in authentic partnerships and collaboration, built over time with Aboriginal and Torres Strait Islander people, and the devolution of power to Aboriginal and Torres Strait land owners.

Practical steps for learning from Aboriginal and Torres Strait Islander people

- Relationship building with local Aboriginal and Torres Strait Islander nations and representative bodies.
- Responsiveness to existing work on caring for Country like the Uluru Statement from the Heart, and reconciliation action like the Closing the Gap policy.
- Organisational knowledge of obligations under any state or local treaty.

¹⁴ Cox, P. (2015) *Violence against women: Additional analysis of the Australian Bureau of Statistics' Personal Safety Survey 2012*, Horizons Research Report, Issue 1, Australia's National Research Organisation for Women's Safety (ANROWS), Sydney; and Woodlock, D., Healey, L., Howe, K., McGuire, M., Geddes, V. and Granek, S. (2014).

- Training for cultural competency and cultural safety is widely available and can be accessed by EM services as a step toward ensuring inclusive emergency management.

C. Practising diversity in disaster

9. **Migrants, refugees and asylum seekers** are integral to our community and serve in our response services, the emergency management sector and at all levels of government, business and community. These communities draw on a broad range of capabilities that may include strong resourceful community networks, bi-cultural practice, language skills, and prior experiences of emergencies and disaster. As for all people, planning and preparation require thoughtful consideration in the crafting of a plan. For people from migrant, refugee or asylum seeker backgrounds, a number of factors may impact on this planning.

Engaging with local migrant refugee and asylum seeker communities in the planning phase of emergency management ensures that responses incorporate relevant considerations. Making information about emergency and disaster available in relevant languages, on relevant platforms, and in relevant styles – including content that meets literacy levels – reduces barriers. It is noted, however, that **cultural competency and cultural safety** includes more than language. Consultation and collaboration are needed to ensure safe spaces in evacuation centres and in the provision of housing and social services during recovery.

While many community groups find the Australian emergency, justice and service systems frustrating at times of disaster, migrants, refugees and asylum seekers are more likely to have experienced these systems as adversarial and punitive. Traumatic experiences of emergency and disaster are also to be expected in refugee and asylum seeker communities. As a result, barriers to accessing services during disaster are likely to include stress, confusion and fear.

There are a number of practical steps that increase equity of opportunity for migrant, refugee and asylum seeking communities to plan and survive.

Practical steps for cultural safety in disaster

- Training for cultural competency and cultural safety is widely available and can be accessed by EM services as a step toward ensuring inclusive emergency management.
- Implementation of trauma-informed service delivery.
- Promising practice in this area includes recruitment of members from these communities to volunteer services like the State Emergency Services and the Country Fire Authority.
- It is noted that culture is not an excuse for violence or abuse, and protocols, training and information already exist for accountability of male perpetrators, as well for the delivery of services for the safety of women and children in a culturally competent manner.

10. **Lesbian Gay Bi-Sexual Trans-sexual and Intersex (LGBTI) people are an integral part of our community**, serving in our response services, contributing as emergency management professionals at all levels of government, NGOs and the private sector. LGBTI communities face specific risk at times of disaster. These risks are direct and indirect and impact on the equity of opportunity to plan for and survive emergency. Direct risks include things like heterosexism in emergency management workplaces and the refusal of service provision during disaster. It is noted that service refusal is legal for those faith-based NGOs that have been granted exemptions to non-discrimination law. These NGOs tender for and are granted government money to deliver emergency services to the Australian community. Indirect discrimination includes a lack of planning for safe spaces for LGBTI people and families and ablution blocks that equate sex and gender. It is noted that LGBTI people have the right to privacy, and should not be forced to disclose their sexuality or gender identity in order to receive services, rather it is the responsibility of services to ensure accessibility.

Practical steps for LGBTI safety in disaster

- Embedding the National Gender and Emergency Management Guidelines in emergency management practice.
- Implementation of the recommendations in *Living LGBTI in Disaster* which can be found at www.genderanddisaster.com.au/living-lgbti-duing-disaster/
- Services working in any element of emergency management are Rainbow Tick accredited.
- The provision of gender-neutral toilets and showers at EM centres and in EM workplaces.

11. While a broad range of **health issues impact on experiences of disaster and emergency**, the Outcome Statement reflects the conference, which focussed on the experiences of people with obesity, disabilities including mental illness, dementia, age-related physical impairment and access to opiates. It is noted that the integration of good practice in public health into emergency management is critical for the safety of individuals and emergency management staff. Evacuation-planning that considers mobility, stress and capacity, and access to medical and home-based care essential to health in recovery, poses a complex challenge. Two critical areas were identified as having significant impact on risk: the built environment and the role of actors who have regular contact and/or a caring role to assist with planning.

People with disabilities, including mental illness, are part of our community and serve in our response services, in emergency management, at all levels of government, business and community. Disability is not always obvious, however, people with disabilities face particular risks in emergency. As for all people, planning and preparation require thoughtful consideration and the crafting of a plan for action during and after disaster. For people with disabilities, crafting a plan can be affected by a number of factors including: lack of accessible information, social isolation, increased risk related to the built environment and decreased access to essential medical care. At the

same time, people with disabilities have unique knowledge of the service system, including available services and navigation. This knowledge may include previous trauma and can be a vital resource for others in the community unaware of the personal impact of trauma and possibilities for support.

Australia has comparatively high rates of obesity. People with a BMI over 40 are an integral part of our community and serve in our response services, in emergency management, at all levels of government, business and community. People with a BMI over 40 face particular risks in emergencies and, as for all people, planning and preparation require thoughtful consideration and the crafting of a plan for action during and after disaster. A number of things impact on this community's equality of opportunity to plan for and survive disaster. Direct risks include barriers to evacuation, the particular impact of extreme weather events, and access to essential health services.

Opiate users face particular challenges at times of disaster. Opiate use includes both legal and illegal drug use. As a drug of addiction, lack of access to opiates has health impacts including withdrawal and the return of underlying conditions like chronic pain. In addition, because of the relationship between legal and illegal drug provision, the acquisition of opiates during disasters carries risk. Planning for the consequences of opiate scarcity, and the provision of services to people transition from opiates is of concern during disaster and recovery.

Older people are integral part of our community and serve in emergency management, at all levels of government, business and community. Older people hold generations of knowledge about disaster. Their experiences of past emergencies and the changed environmental and social condition of emergency are invaluable in understanding the context of current practice. Older people face particular risks during disaster and, as for all people, planning and preparation for emergency require thoughtful consideration and the crafting of a plan for action during and after disaster. A number of things impact on older people's equality of opportunity to plan for and survive disaster. Accessible spaces and information increase ability to evacuate and to make timely decisions. Due to retirement, a significant number of older people are more likely to experience emergency in the home or an institution. When older people are in an institution, the onus rest on that institution to properly plan for evacuation, including for people with dementia. Where older people live alone, social isolation and the digital divide require particular attention to ensure information about emergencies gets through.

Practical steps for health in disaster

- Services providers whose client groups are likely to have a disability, permanent or temporary impairment, have an obligation to address 'whole-of-community' inclusive emergency planning in their service provision.
- Health information about planning for extreme weather events that particularly address audiences with a BMI over 40, a disability, older people, and people with drug dependency is needed.

- Universal design of buildings and public spaces increases the opportunity for people with a disability, permanent or temporary impairment to evacuate. Where the built environment pre-dates universal design, evacuation planning requires attention to the capability of people with a disability, a permanent or a temporary impairment.
- Universal design of content increases access to information and, consequently, opportunities to make informed timely decisions. The federal government's *WCAG Specifications* catalogues accessible design techniques.
- Some actors have a greater impact on survival. Institutions, like hospitals and social housing, bear the onus of inclusive planning for evacuation.
- The inclusion of Psychosocial First Aid, Mental Health First Aid and trauma-informed principles of practice in all training for EM staff increases capacity to respond effectively.
- The inclusion of planning for drug dependency in emergency management.
- Practical steps for health in disasters is widely available in the *2015 Sendai Framework*, and in the *Technical Guidelines of the WHO's Health Emergency & Disaster Risk Management (H-EDRM) program*, both are useful considerations for emergency planners and community leaders.

12. Children and young people are particularly vulnerable to disaster. Children rely on others to listen to and respond to their needs. Children are, however, quite capable of participating in these processes. Research and evidence suggest that while disasters have profound impacts, children are resilient and often contribute critically to their own and their families' survival. School-based activities including evacuation drills and participatory or experiential planning have demonstrated positive outcomes for child preparedness and wellbeing. Ensuring that education is maintained in recovery is critical for protecting whole-of-life opportunity. Child-centred opportunities to contribute, talk about and reflect upon disaster experiences have also shown positive outcomes for child wellbeing.

Practical steps for children's safety in disaster

- Appropriate inclusion of children in emergency planning, response and recovery, fosters resilience and supports growth in the aftermath of disaster.
- Child-centred opportunities for reflection upon disaster are positive for child wellbeing.
- The provision of safe places for children in EM response and recovery centres.
- Protection of access to education for children during recovery.

13. Rural and remote communities are characterised as being resilient. These communities are disproportionately impacted by slow-onset disasters, like drought and climate change, due to their economic and cultural links to the land. The impacts of acute shocks like floods or fire occur in a context where there are fewer emergency management resources, including response and recovery services. On the other hand, rural and remote

communities are often deeply committed to place and activate pre-existing networks quickly and efficiently at times of disaster. The knowledge held in rural and remote communities is of great benefit in predicting things like weather patterns, knowing the safest and fastest routes to take to evacuate in changing conditions or when responding to disaster, and understanding local community dynamics, issues and strengths. This local knowledge is valuable to emergency management. While the loss of home can mean geographic displacement, those who live in rural and remote communities face the increased likelihood of having to move great distances away, altering their connection to place and community.

Practical steps for rural and remote communities in disaster

- Partnering for recovery with rural communities recognises their distinct strengths and vulnerabilities, including the immediate and long-term impacts of strong local networks and a lack of local service systems.

14. People with animals and pets face particular risks during disaster and emergency. People with pets and animals may stay behind to provide care or protection and may be delayed in actioning evacuation plans. On the other hand, in the recovery phase pets are a strong protective factor against social isolation and animals may be a vital source of income.

Practical steps for people with pets and animals in disaster

- Planning for pet and animal evacuation increases owners' opportunities to evacuate, and pets and animals can be a positive influence in recovery.

15. **For people who are homeless, disasters unfold in a context of an absence of home.** While not all planning for emergencies happens around or from the home, the presumption is that affected communities are either planning to survive in place, trying to return home or recovering in the context of a lost home. This makes homeless people vulnerable to particular types of emergencies and disasters. Extreme weather events impact on homeless people disproportionately as they have fewer ways to mitigate impacts. Homelessness can also be a consequence of emergency. The loss of home can lead to temporary displacement from community, financial hardship and loss of social connection, and may lead to longer-term homelessness.

Practical steps for the safety of homeless people in disaster

- Plan for the provision of safe cool places and water to homeless people in extreme heat events, and safe warm places to homeless people in extreme cold events.
- Plan for homelessness, which includes the impacts of the grief, loss and trauma of losing home, as a result of emergency and disaster.

Strategies for diversity and resilience in disaster

16. **Diversity and resilience are linked to power and privilege and the use of that power over time to shape access to resources.** A model that acknowledges the impacts of multiple forms of power and privilege is preferable to a model that denies difference, and the impact of distinct forms of power is often related, interconnected and complex. Intersectionality¹⁵ has emerged as one way to frame the interplay of multiple forms of privilege, oppression and marginalisation. Intersectional approaches acknowledge that, in any given time or context, different forms of privilege may be more or less impactful. During conference proceedings, a number of strategies emerged to combat exclusion. These include consultation, leadership and communication strategies. These strategies have the potential to significantly impact on outcomes by: recognising the strengths and capacities of communities experiencing disaster; and acknowledging and mitigating the power imbalance between actors.

17. **Consultation, partnerships and collaboration are processes for cultivating diversity in disaster.** They occur between community and agencies, across community and between agencies. Consultation, partnerships and collaboration can impact on risk and increase resilience by ensuring that communities have a voice in determining outcomes that impact upon them. However, these processes can also expose participants to further marginalisation, tokenism or discrimination. Consultation, partnerships and collaborations that increased resilience were characterised by authentic, respectful relationships, the devolution of power and the realisation of stakeholder influence over outcomes. When partnerships and collaborations worked, they often achieved economies of scale, improved knowledge transfer and exchange efficiencies, and allocated work effort efficiently between actors.

18. **Change requires leadership. Leadership for diversity in disaster occurs in many places and spaces. It can be an individual, a group, an organisation, agency or a community.** It can be spontaneous, sustained and/or organised. Leadership for diversity within EM agencies, including response agencies, was characterised by a willingness to listen to community, to engage with research on diversity in disaster, to acknowledge hegemonic culture, and to hold staff accountable to policy and procedures for addressing inequity. Leadership in communities, particularly leadership in the 'voids' and 'vacuums' that emerged in the aftermath of disaster, was characterised by creativity, connection to and care for people, knowledge of local issues, resilient navigation of service systems, hope and frailty. Thought-leadership occurred in academia, government, community and the private sector and was characterised by authentic consultation, partnerships and collaboration. All leaders

15 Crenshaw, Kimberle (1989) "Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics," *University of Chicago Legal Forum*: Vol. 1989, Article 8.

risk a 'leadership tax' that manifest as the personal cost of confronting the impacts of disaster, privilege and power. This cost includes 'burn out', vicarious trauma, post-traumatic stress disorder/injury, and/or demotion, firing or work place bullying.

19. Communications about diversity in disaster have an impact on risk and resilience. There is currently a lack of integrated, thoughtful, specific communication tools and strategies that support diversity in disaster. A number of elements are missing, these elements include: language used to communicate about risk and resilience that is appropriate to the user and respectful; communication strategies that accurately frame the problems of disaster risk and recovery; media coverage that includes images and content representative of communities and gender roles; and the design of tools, online platforms and approaches to ensure the reduction of barriers to information. All these elements of a comprehensive communications strategy can either perpetuate privilege or support inclusive planning, response and recovery, however, particular attention is required to address the language of 'marginalisation', 'vulnerability' and 'minorities'. This language fails to adequately capture the lived experience of disaster, risks casting some actors as victims and further stigmatises communities who experience inequity of access to resources, decision-making and power.

20. An increased profile in monitoring and evaluation frameworks became apparent during the Conference. Driven by the need to improve the evidence-base of interventions in this sector and by the international imperative for greater accountability by all actors in meeting the identified needs of the beneficiaries in disaster, a number of frameworks provide direction for both EM and community leaders in this sector. Specifically, the *Australian Disaster Resilience Index*,¹⁶ the *Rockefeller Cities Resilience Index*,¹⁷ the *National Recovery Framework and Indicators*¹⁸ and the *National Vulnerability Profile*¹⁹ are national practical steps to guide the future collaborative activities of this sector.

Practical Steps for Partnership, Leadership and Communication

- Soon after this Melbourne Conference, the Federal Government announced the establishment of a new *National Resilience Task Force*, to be located within the Ministry and Department of Home Affairs. The focus of this new Task Force is to develop and implement a National Disaster Mitigation Framework. Whilst the new Task Force was not known to the Conference participants, many sessions reinforced the importance of prevention, mitigation and disaster risk reduction in the Australian setting. This Outcomes Statement will be forwarded to the Director of the new Task Force with the offer of providing an avenue for continued dialogue.
- Establishing a national emergency management and recovery group to: share the diverse work happening in the emergency space, especially the work of communities; to create a platform for reporting to stakeholders; and to consolidate learning from community consultation. The aim of

this working group would be to increase visibility of community and disasters, to increase accountability in emergency management, catalyse work effort and encourage transparency.

- Adoption of the National Gender and Emergency Guidelines by emergency management services.
- Implementation of the recommendations in Living LGBTI in Disaster which can be found at <http://www.genderanddisaster.com.au/living-lgbti-duing-disaster/>
- The activation of existing national government strategies including the National Strategy for Disaster Resilience Community Engagement Model, and the National Principles for Disaster Recovery.
- Leadership programs for diversity in disaster can come at a personal cost. It is therefore important to have appropriate support mechanisms in place for leaders working on diversity in disaster.
- The development of a communications toolkit for diversity in disaster using a co-design approach. This co-design approach would include representatives from the communities identified above and might include:
 - A review of language to ensure respect and accessibility.
 - Key messages for people most at risk.
 - Forging constructive working relationships with journalists and other media professionals.
 - Developing social media policies and presence to directly communicate risk and recovery messages.
- The inclusion of strategies for diversity in monitoring evaluation and learning frameworks to measure impact and improve practice.

Conclusion

The Diversity in Disaster conference brought together actors from emergency management, academia and community to generate ideas, exchange information and insights into the problem of disproportionate disaster impact. These insights provide valuable information for future planning. The definition of resilience as an organising concept in emergency management was strengthened by recognising that the conditions, dynamics, relationships and networks that structure our world before disaster, play a role in creating and determining experiences of acute shocks and chronic stresses. This acknowledges the interplay between vulnerability and privilege. The role of gender in shaping disaster experiences and consequences, and learning from Aboriginal and Torres Strait Islanders for land

¹⁶ The Australian Disaster Resilience Index, <https://www.bnhcrc.com.au/research/hazard-resilience/251>.

¹⁷ The Rockefeller Cities Resilience Index, <https://www.rockefellerfoundation.org/report/city-resilience-index/>.

¹⁸ The National Recovery Framework and Indicators <https://knowledge.aidr.org.au/resources/national-recovery-monitoring-and-evaluation/>.

¹⁹ The National Vulnerability Profile .

management and resilience, cut across much of the thinking about diversity in disaster. Strategies for increasing diversity include: consultation and partnership, communication, creativity, authentic leadership and devolving power to knowledgeable stakeholders. The adoption of these strategies has flow-on effects that increase the equity of opportunity for all members of the community to plan for and survive disaster and to thrive in recovery.

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