



Diversity

in Disaster

Issues Paper

January 2018



Diversity in Disaster Issues Paper

Diversity in Disaster Collaborative

Writing team: Alyssa Duncan, Debra Parkinson, Frank Archer and Emma Keech
GAD Pod (WHIN, WHGNE, MUDRI)

Contributing authors are listed at the end of the Issues Paper.

<http://www.genderanddisaster.com.au/diversity-in-disaster-conference/>
© Women's Health In the North, Thornbury, Australia.

30/1/2018

Suggested citation:

Duncan, A., Parkinson, D., Archer, F. & Keech, E. (2018). Diversity in Disaster Issues Paper.
Thornbury: Women's Health In the North. Available at
genderanddisaster.com.au/diversity-in-disaster-conference and knowledge.aidr.org.au

Executive Summary also available from 30/9/2018:

Duncan, A., Parkinson, D. Archer, F. & Keech, E. (2018). Diversity in Disaster Issues paper –
Executive Summary. *Diversity in Disaster; Australian Journal of Emergency Management,*
Monograph No. 3, 2018. Available at knowledge.aidr.org.au.

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

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.

(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 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.

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.



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).

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*

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).

Disaster conference, the *People in Disasters* conference produced a statement of learning outcomes (Hedlund, 2016) and future directions afterwards (Deely & Ardagh, 2016).

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?

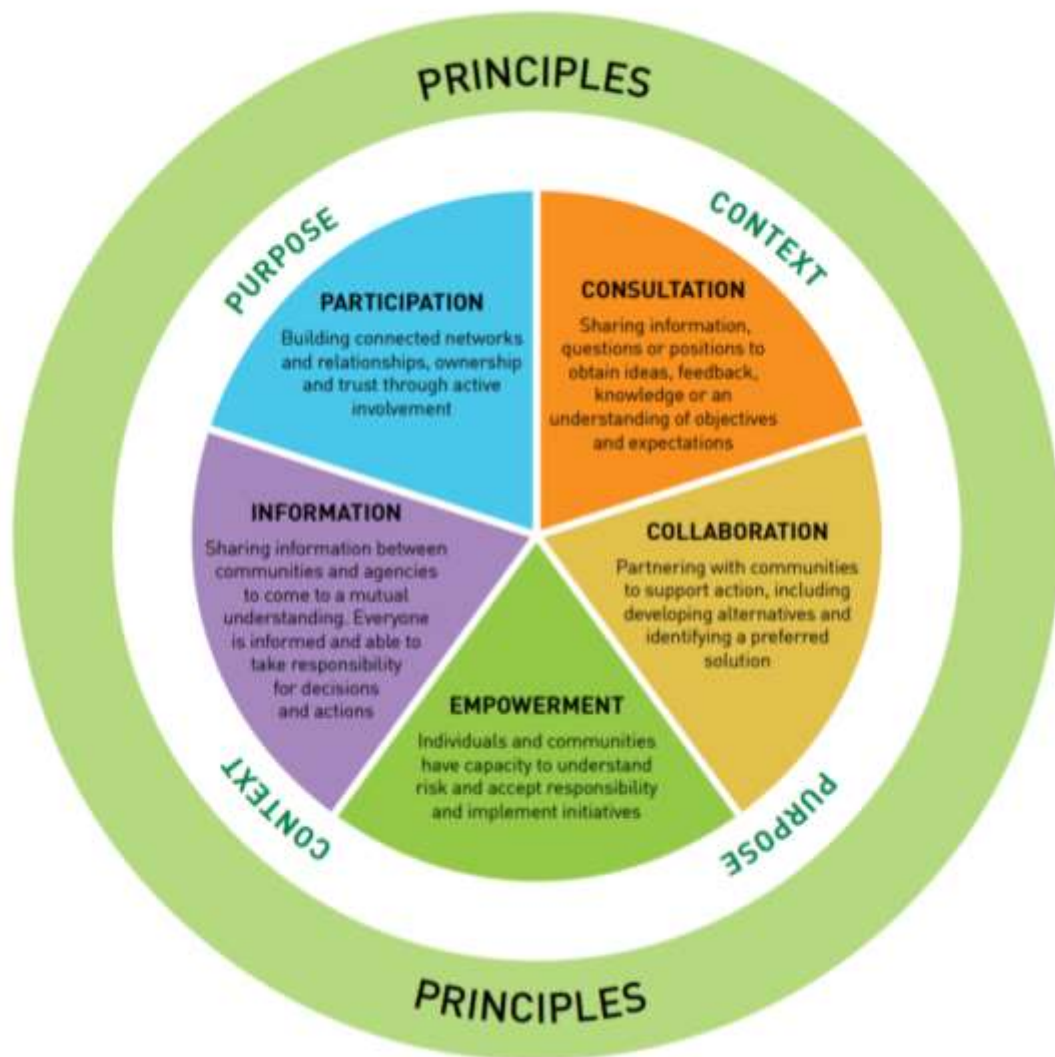
Why is it a contested word in the emergency management sector?

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 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):

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



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

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.

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 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.

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



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 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; Bonnano, 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 (Kaijser 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

¹⁰ The 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>)

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 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 bioecological 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 Health 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://d3n8a8pro7vnmx.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.bnhcrc.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/10.1080/0966369X.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 Participaton 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.
- Kaijser, 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). Spinger: 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). *Placed-Based and Community-Led: Specific Disaster Preparedness and Generalisable Community Resilience*. CatholicCare Bushfire Community Recovery Service. Retrieved from http://www.vcooss.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_sendaiframeworkfordrren.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://vcooss.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://vcooss.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.bnhcrc.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>

Writing Team:

Alyssa Duncan, Research Assistant, GAD Pod

Dr Debra Parkinson, Manager, GAD Pod (Women's Health In the North, Women's Health Goulburn North East, Monash University Disaster Resilience Initiative)

Emma Keech, Research Assistant, GAD Pod

Contributions from conference partners:

Amanda Lamont, Director Engagement & Projects, Australian Institute for Disaster Resilience

Andrew Wilson-Annan, CFA Volunteer

Prof Bob Pease, Deakin University and University of Tasmania

Bridget Tehan, Senior Policy Analyst - Emergency Management, VCOSS

Dr Caroline Spencer, Monash University Disaster Resilience Initiative

Dr Christine Eriksen, Senior Research Fellow, University of Wollongong

Dr Colin Gallagher, Senior Postdoctoral Fellow, Networked Innovation Group, Centre for Transformative Innovation

Dr Danielle Every, Senior Research Fellow, CQUniversity Adelaide

Dale Dominey-Howes, Professor of Hazard and Disaster Risk Sciences, Sydney University

Daryl Taylor, Director of Coaching & Community & Organisation Development at Integralevolution

A/Prof Evonne Miller, Director QUT Design Lab, Creative Industries Faculty, Queensland University of Technology

Fiona Armstrong, Executive Director, Climate and Health Alliance

Emeritus Prof Frank Archer, Director, Monash University Disaster Resilience Initiative

Dr Gretchen Good, Senior Lecturer in Rehabilitation, Massey University

A/Prof Helen Boon, Head of Education: Curriculum and Pedagogy in Education, James Cook University

Helen Goodman, Health Services Professional

Helen Riseborough, CEO, Women's Health In the North

Jill Karena, Manager of Community and Culture, Macedon Ranges Shire Council

Jonathan Abrahams, World Health Organisation

Lesley Gray, Senior Lecturer, University Of Otago School Of Medicine

Dr Leslie Campbell, Director, Lebern & Associates, New Zealand

Liam Leonard, Director, GLHV@ARCSHS, La Trobe University

A/Prof Lisa Gibbs, Director, Jack Brockhoff Child Health & Wellbeing Program, University of Melbourne

Lisa Jones, Executive Officer to the Emergency Management Commissioner, Emergency Management Victoria

Martina Baumer, University of Queensland

Maree Grenfell, Resilient Melbourne Networks and Learning Manager, City of Melbourne

A/Prof Margaret Alston, Monash University

Mary Sayers, Deputy Chief Executive Officer, VCOSS

Prof Maureen Fordham, Professor of Gender & Disaster Resilience, University College London and the Gender and Disaster Network

Dr Melanie Taylor, Occupational Psychologist. Macquarie University

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

Dr Michaela Spencer, Post-Doctoral Fellow, Charles Darwin University

Dr Michelle Villeneuve, University of Sydney

Penny Egan-Vine, AM, M.B. B.S.

Rachael Mackay, Trainer, Women's Health Goulburn North East

Robyn Molyneaux, Research Fellow, Jack Brockhoff Child Health & Wellbeing Program, University of Melbourne

Dr Sandra Astill, Research Assistant, University of Tasmania

Dr Scott Hanson-Easey, Research Fellow, The University of Adelaide

Susan Davie, Manager Community Connections, Victoria State Emergency Service

Susie Reid, Executive Officer, Women's Health Goulburn North East

Victoria Cornell, Postdoctoral Research Fellow, The University of Adelaide