

Climate Health WA Inquiry Submission by Australian Red Cross

September 2019

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Introduction

Australian Red Cross welcomes the *Climate Health WA Inquiry* and the opportunity to share our insights from the work we undertake in disaster response and risk reduction in Australia and internationally. Our perspectives on the impacts of a changing climate on the health and wellbeing of the people with whom we work are intended to help inform the Inquiry's terms of reference in relation to:

- Identifying and recommending a program of work to manage the implications of climate change for health in WA, which will:
 - o Protect the public from the harmful health impacts of climate change; and
 - Strengthen the preparedness and resilience of communities and health services against extreme weather events, with a focus on the most vulnerable in the community;
- Recommending the terms of reference, scope and preferred methods for:
 - Undertaking a climate change vulnerability assessment for the health sector; and
 - o Developing a Climate Change Adaptation Plan for the health sector.

Australian Red Cross is part of the world's largest humanitarian organisation with a network of millions of volunteers operating in 192 countries. Established in Australia more than 100 years ago, we have extensive experience in disaster risk reduction, response and recovery across Australia and the Asia Pacific region. Through our extensive branch and volunteer networks, we are deeply connected to local communities and those experiencing vulnerability.

Australian Red Cross has a comprehensive understanding of the long term and complex health and wellbeing impacts of disaster. One of our key strategic goals is to help three million Australians prepare for and recover from disasters, and to respond to disasters and other significant emergencies 100 percent of the time. We have also worked closely with the Federal Government on the National Framework for Disaster Risk Reduction.

As we push for greater investment in climate smart disaster mitigation and preparedness activities at home, we are also supporting the engagement of the Red Cross and Red Crescent Movement in key international forums on climate action, which include the Global Commission on Adaptation, the UN Climate Summit (NYC, September), and the UNFCCC COP25 (Chile, December). The Movement's focus on the health impacts of climate change was recently reflected at a conference marking the Centenary of the foundation of the International Federation of Red Cross and Red Crescent Societies (IFRC), where it was recognised as one of the biggest global challenges we will have to confront as a network.¹

Helping to steer this work globally and regionally is the Red Cross Red Crescent Climate Centre (a specialist reference centre of the IFRC), which supports this submission as part of a collective goal to reduce the impacts of climate change and extreme weather events on vulnerable people.

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¹ https://media.ifrc.org/ifrc/2019/04/18/ifrc-centenary-climate-health-conference-cannes-call-inspiration-resolve-leadership/



Context: changing climate

'Climate change has a direct impact on almost all human societies across the globe and complicates most human endeavours, including disaster response and humanitarian aid'.²

We acknowledge the following projections from CSIRO for Australia:³

- Hot days will become more frequent and hotter (very high confidence)
- Sea levels will rise (very high confidence)
- Oceans will become more acidic (very high confidence)
- Snow depths will decline (very high confidence)
- Extreme rainfall events are likely to become more intense (high confidence)
- The time in drought is projected to increase over southern Australia (high confidence)
- Southern and eastern Australia are projected to experience harsher fire weather (high confidence)
- Tropical cyclones may occur less often, but become more intense (medium confidence).

Against these climate projections, we also acknowledge that:

- By 2050, disasters will cost Australia an estimated \$39 billion a year. 50% of this is the social cost associated with dislocated livelihoods, families, education and communities. The costs to the Western Australian Government of disaster impacts is likely to grow to \$2.4 billion a year by 2050.⁴ This analysis was done without taking into account the impact of climate change. Therefore they are conservative.
- Every dollar spent on disaster risk reduction in Australia can save between \$3 and \$8.5
- Currently 91% of disaster funding is spent on response and recovery, with only 9% on mitigation.⁶
- In 2017, 200 million people were affected by disasters worldwide, and 2 in 5 disasters occurred in Australia and Asia Pacific.⁷
- Those particularly at risk include people who are socially isolated, with a disability, are experiencing mental illness, are housebound, frail, recovering from an illness or accident, or have an ongoing illness, such as diabetes or a heart condition, or experiencing financial hardship or homelessness, who live in remote communities or work primarily outside. In our experience, this often places migrants, elderly, and Aboriginal and Torres Strait Islander peoples at greater risk.

²IFRC, *Trends & transformations: Climate & disasters:* https://future-rcrc.com/2018/05/03/natural-disasters-climate-change-and-depletion-of-resources/ (based on consultations with Red Cross & Red Crescent national societies & external experts).

 $^{{}^3\}underline{\text{https://www.csiro.au/en/Research/OandA/Areas/Oceans-and-climate/Climate-change-information}}\\$

⁴ Deloitte Access Economics & Australian Business Roundtable (ABR) for Disaster Resilience & Safer Communities, 2017, *Building resilience to natural disasters in our states and territories:* https://www2.deloitte.com/au/en/pages/economics/articles/building-australias-natural-disaster-resilience.html

⁵ Ibid.

⁶ Ibid.

⁷ International Federation of the Red Cross and Red Crescent (IFRC), 2018, *World Disasters Report*: https://media.ifrc.org/ifrc/world-disaster-report-2018/.



The compounding impact of climate change on disasters therefore calls for greater investment and better preparedness. This was reflected in the Productivity Commission's Review of Disaster Funding and the recommendation that investment in disaster mitigation be raised to \$200 million, annually, a recommendation that the Federal Government is yet to act on. Natural disasters and extreme weather events have affected more than nine million Australians in the past 30 years, and one in three of us is expected to be affected by a disaster or the threat of one in our lifetime. Currently in Australia we are facing more frequent and intense disasters all over the country, which pose some very serious challenges that we expect will only be exacerbated by climate change.

Recommendations

Recognising climate change as a force multiplier for many of the existing challenges faced by the humanitarian sector, and noting that more resilient communities are a vital component of strengthening our health security against these threats, we recommend the following:

Generally:

- **1.** A further increase nationally in spending per annum on preventing and reducing the risks of disasters, including:
 - a. The emergency management sector needs to invest in enhanced agility, capability and flexibility to effectively address the challenges that climate change will bring. Volunteer resourcing models will need to adapt to these challenges.
 - b. Long-term and sustained funding is needed to achieve necessary change in the balance of emergency management, from response and recovery to preparedness and prevention.
 - c. A stronger focus is required on community based disaster risk reduction and more anticipatory action ("early warning, early action").
- 2. Greater federal-state government collaboration on climate change adaptation, including measures for health and wellbeing such as public education, practical guidance and programs.
- **3.** Appropriate risk and vulnerability assessment and planning to ensure fit-for-purpose support for the most vulnerable including remote communities, Aboriginal and Torres Strait Islander peoples, migrants and diaspora communities.
- **4.** Benchmarking research into what the longer-term impacts of cumulative or repeated disasters, in particular heatwaves and drought, might be on health and wellbeing.

Relating to extreme heat:

5. Collective action to scale up early warning systems for extreme heat.

⁸ Deloitte Access Economics & ABR 2017, op cit. Note the findings of this report include earthquakes among the disasters taken into account.

⁹ Glasser, R, 2019, 'Australia needs a national plan to face the growing threat of climate disasters', *The Conversation:* http://theconversation.com/australia-needs-a-national-plan-to-face-the-growing-threat-of-climate-disasters-113107



- **6.** Greater public awareness of the impacts and risks of heat stress, along with health service measures (primary, secondary, aged care, welfare, NDIS) including home modification.
- 7. Urban heat-related policies which recognise that different parts of the same city may witness heat waves with different thresholds depending on the local land use pattern and extent of vulnerability and exposure of the people living in different areas. For example by incorporating tactics such as green spaces into plans for growth or retrofit them in built areas.
- **8.** Risk and vulnerability assessments and risk planning to reflect those most impacted by heatwaves due to their circumstances and livelihoods, for example recognising that women and men may be differently and disproportionately affected by heatwaves.
- **9.** Reference to the Red Cross Red Crescent Movement's recently released *Guide to Heatwaves*¹⁰ to complement the in-depth work already being done in WA by the State Government's Department of Health in its role as the Hazard Management Agency for heatwaves.¹¹

Relating to epidemics as climate change interacts with a wide variety of diseases:

- **10.** Recognition that epidemics begin and end in communities promotion of stronger community-based roles in prevention, detection, response and treatment.
- 11. Linkages between community and national level health security planning and activities.
- **12.** Collective action (cross-sectoral, regional, global) promoting the inclusion of community health perspectives in Australian regional health security dialogues, policy and programs.
- **13.** Engagement of communities in regional health security dialogues and fora (e.g. World Health Organisation; Asia Pacific Strategy for Emerging Diseases).

The following pages of this submission provide insights and evidence to support these recommendations.

We also recommend the inquiry to refer to the recent publication from the Global Health Alliance Australia, *From Townsville to Tuvalu*, and keep in mind the forthcoming multidisciplinary series of papers on heat and health to be published in *The Lancet* next year. In addition, Australian Red Cross is looking at the health implications of the intersections of climate, climate risk, conflict and cross-border displacement, all of which are topics that sit outside the scope of this inquiry but may be relevant to subsequent discussions.



¹⁰ Red Cross Red Crescent (RCRC) Climate Centre, 2019, *Guide to Heatwaves*. This resource is intended to help city-based staff take the first steps to understanding the heat risks they face, develop an early-warning system, work with partners to consolidate heat-action plans, and adapt urban-planning practices. https://www.climatecentre.org/downloads/files/IFRCGeneva/RCCC%20Heatwave%20Guide%202019%20A4%20RR%20ONLINE%20copy.pdf

¹¹Government of WA: https://ww2.health.wa.gov.au/Articles/F I/Heatwave



Humanitarian impacts of extreme weather events

Among the health impacts of climate change and extreme weather events, Australian Red Cross is familiar with the following:

Heatwaves

Severe and extreme heatwaves kill more people in Australia than any other natural hazard. ¹² The contribution of human-induced climate change to heatwaves is reiterated by the Intergovernmental Panel on Climate Change (IPCC), which reported recently on the links between climate change and global scale increases in the frequency and intensity of daily temperature extremes since the mid-20th century. It also suggested that human influence has more than doubled the probability of occurrence of heat waves, namely in large parts of Europe, Asia and Australia. ¹³

With the hotter days, more extreme and frequent heatwaves, and intense fire weather, comes an increase in adverse health outcomes including heat-related mortality and morbidity, especially in populations experiencing vulnerability. These include older adults, very young children, pregnant and lactating women, those with pre-existing medical conditions (e.g. cardiovascular and respiratory conditions, obesity, mental illness), people living alone (i.e. socially isolated), and people working outside or cooking indoors in informal settlements. ¹⁴ This is expected to place greater stress on health services (primary, secondary and tertiary), as well as aged care support and school welfare services among others.

Australian Red Cross highlights the following concerns:

- **Social isolation:** Extreme heat exacerbates social isolation with vulnerable people tending to remain indoors and avoiding outings when the weather gets too hot.¹⁵ During times of extreme heat, visits by friends, neighbours and family, the delivery of social services, such as home and community care, and the organisation of social outings for the elderly, frail and disabled may be reduced or cancelled, further exacerbating the experience of isolation.¹⁶
- Urban populations: Those living in urban areas (particularly those experiencing financial hardship and/or homelessness) are among the hardest hit when a heatwave occurs in Australia this applies to more than 90 percent of the population. Poorly insulated housing can exacerbate the experience of extreme heat particularly in some of the more densely populated parts of cities. The IPCC's Special Report on Global Warming concluded that rising temperatures will intensify the urban heat island effect and lead to more health-related problems.¹⁷

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¹² Risk Frontiers (natural hazards research centre, Australia): https://riskfrontiers.com/risks/heatwave/. Note the heatwave that preceded the Black Saturday Bushfires in Victoria claimed the lives of 374 people (see References: Carnie 2009).

¹³ Intergovernmental Panel on Climate Change (IPCC), 2018, *Summary for Policymakers, Global Warming of* 1.5°C – This report focuses on the impacts of global warming of 1.5°C above pre-industrial levels, where human influence on climate change is considered evident from the increasing greenhouse gas concentrations in the atmosphere, positive radiative forcing, observed warming, and understanding of the climate system.

¹⁴ RCRC Climate Centre 2019, op cit.

¹⁵ Klinenberg 2002, Wolf et al 2010: see Supporting References.

¹⁶ Miller 2014: see Supporting References

¹⁷ IPCC 2018, op cit.



- Energy poverty: The interaction between extreme heat and energy poverty is another issue of concern considering the growing cost of electricity. Inequality and poor access to affordable cooling options in Australia can add to heat vulnerability, as people are unable (or unwilling) to use their air-conditioners. Impacts on critical energy and transport infrastructure are also apparent during heatwaves and may have a disproportionate impact on those facing mobility constraints, disabilities and ill health.¹⁸
- People experiencing homelessness: People experiencing homelessness are also at greater risk during heat waves. It is common for them to have pre-existing mental and physical health conditions, which may be compounded by the added exposure to extreme heat.¹⁹
- Impacts on social cohesion and productivity: Heatwaves often trigger the activation of extreme heat policies that can limit or reduce communal activities, such as outdoor sport. In addition to the potential health and wellbeing impacts, this can undermine the sense of social cohesion normally associated with these sorts of activities.

Outdoor workers, including construction workers and delivery riders may also be affected, and if they are part of a casualised workforce, there will be livelihood impacts.²⁰ Globally, there were 157 million more people exposed to heatwaves in 2017 (compared with the numbers in 2000) and 153 billion hours of labour were lost due to heat.²¹

Drought

Against the backdrop of an extensive drought that is now affecting the eastern seaboard and pockets of Western Australia, we are seeing farming families and communities face severe financial difficulty. These difficulties (and their effects on people's health and wellbeing) can cascade when families are unable pay for food and utilities or engage in social activities.²². Fuel is used sparingly for only the most critical farming tasks, so social isolation is also made worse. ²³ And family violence can intensify.²⁴

In addition, our program staff working on drought issues are informing us that physical exhaustion on farms resulting from the ongoing handfeeding of stock is leading to increased accidents and injuries.

Learnings from the Millennium Drought suggest that it is important to assist individuals and communities through existing support services. We know that social connection is an important contributor to health and wellbeing, and is important to maintain during drought.²⁵

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¹⁸ Miller 2014, op cit.

¹⁹ Every & Richardson 2017: see Supporting References.

²⁰ Examples: http://theconversation.com/heatwaves-threaten-australians-health-and-our-politicians-arent-doing-enough-about-it-107793 and

https://www.mja.com.au/system/files/issues/209 11/10.5694mja18.00789.pdf

²¹ Watts et al 2018: see Supporting References.

²² Edwards et al 2018: see Supporting References.

²³ Alston 2006: see Supporting References.

²⁴ See References at end of submission document: Parkinson & Zara 2013.

²⁵ Drought Policy Review Expert Social Panel, 2008: see Supporting Resources.



Epidemics

Climate change interacts directly and indirectly with a wide variety of diseases, ultimately acting as an amplifier for many of the existing challenges faced by the global public health community. 26 Vector-borne diseases, in particular, are expected to increase given that "climate change will radically widen the liveable range for mosquitos and thus exacerbate the risk and burden of the viruses they transmit." 27

Of relevance to Western Australia is the notion that increasing temperatures, inter-annual variations in climatic and environmental conditions, and tidal variations associated with global climate change all favour an increased incidence and geographic distribution of Ross River fever²⁸ –one of the state's most common notifiable mosquito-borne diseases.²⁹

In addition, severe storms with high winds have the ability to move and disseminate vectors and the diseases they carry, so any increase in the frequency of weather events characterised by high winds poses the threat of trans-boundary impacts. This is especially true for more closely located landmasses and is exemplified by the possible introduction of Japanese encephalitis from Papua New Guinea to Australia, by way of islands through the Torres Strait.³⁰

This threat of geographic expansion of a virus vector (and disease) is intensified by increasing human mobility and globalisation. And in situations where the immunity of that migrating population is undermined by climate change, the exposure to and spread of disease becomes even greater. ³¹

According to the Global Health Alliance Australia, it is this increased risk of disease transmission that will "threaten the core tenets of the global health security regime." ³²

While our experience in helping communities prepare for, respond to and recover from epidemics is primarily internationally focused, the insights gained from this work are universally resonant:

- The Red Cross Red Crescent Movement has been at the forefront of local, community-led responses to epidemics. These include Ebola outbreaks in Africa (2013-2016 and current), measles and dengue in the Philippines (current), polio in Papua New Guinea (2018), dengue in Vanuatu (2017), the Plague in Madagascar (2017), cholera in Somalia (2017) and Zika in Panama (2016).
- We see the overarching strategic direction of improved epidemic response as being grounded in strengthening resilience and building capacity at all levels, from individuals and



²⁶ Watts et al 2018, p2487: see Supporting References.

²⁷ Global Health Alliance Australia (GHAA) 2019, From Tuvalu to Townsville: Climate Change Impacts on Health in Australia and the Asia Pacific Policy advice for Governments in Australia, p17: http://glham.org/from-townsville-to-tuvalu/

²⁸ Parise 2018: see Supporting References.

²⁹ Government of WA: https://ww2.health.wa.gov.au/Articles/N_R/Notifiable-infectious-disease-report?report=ross river virus

³⁰ Mavian et al 2019: see Supporting References.

³¹ Parise, op.cit.

³² GHAA 2019, op.cit. p17.



communities to national, regional and global infrastructures; the latter reinforced by the Global Health Security Agenda³³ and International Health Regulations.³⁴

Australian Red Cross aligns its epidemic preparedness work to the Movement's global initiatives – such as the Humanitarian Pandemic Preparedness Program (H2P) and the USAID-funded Community Epidemic and Pandemic Preparedness Program (CP3) – and supports the current development of a comprehensive and coordinated approach to epidemics built on: prevention and preparedness; early detection, early action; and public health human resource surge capacity.

Deepening vulnerabilities of affected populations

Australian Red Cross is deeply connected to our local communities and those experiencing vulnerability. In our experience, those at greater risk to the health impacts of climate change will include the following:

Remote communities

People living in remote communities experience increased challenges in accessing resources (including health and emergency services) compared with those in urban areas. Furthermore, due to their remoteness, they are more isolated and particularly in times of disaster this can hamper their access to food and water.

Hazard risk may become so extreme that insurance companies, which constitute the risk management strategy of many people, may withdraw insurance from high risk areas (as an example, this happened in Charleville, St George and Emerald in Queensland after multiple flood events in 2010 and 2011). Recovery may need to deal with issues such as acceptance of increased risk in areas, and if the risk is unacceptable, help people adjust the abandonment or relocation of settlements, such as the Grantham community relocation in the wake of the 2011 Lockyer Valley floods in Queensland.³⁵

Aboriginal and Torres Strait Islander Peoples in Remote Communities

In many Aboriginal and Torres Strait Islander communities there are issues of land ownership, kinship and other cultural, language and relationship factors³⁶ that need to be given careful consideration to inform the design and implementation of disaster management plans. This includes the allocation of roles and resources; the management of evacuations and evacuation centres; and any activities that may disrupt community life, particularly in remote communities. In this context, Aboriginal and Torres Strait Islander people are more likely to live with financial hardship and in overcrowded conditions and so may be more vulnerable than other households.

³⁶ Of the 63,800 people who speak an Australian Indigenous language at home, 15% do not speak English well. This needs to be considered in the design of any communications.



³³ The *Global Health Security Agenda*, or GHSA (2014), was endorsed by the G7. Through a partnership of nearly 50 nations, international organisations, and non-governmental stakeholders, GHSA is facilitating collaborative, capacity-building efforts to achieve specific and measurable targets around biological threats, while accelerating achievement of the core capacities required by relevant global health security frameworks.

³⁴ The *International Health Regulations*, or IHR (2005), represent an agreement between 196 countries including all WHO Member States to work together for global health security – this includes capacity building

to detect, assess and report public health events.

35 Coates, L, 2012, 'Moving Grantham: Relocating flood prone communities is not new', *The Conversation*: https://theconversation.com/moving-grantham-relocating-flood-prone-towns-is-nothing-new-4878



Migrants and diaspora communities

Australian Red Cross provides a range of humanitarian support services to migrants, particularly those who may be in a situation or at risk of vulnerability. Like the rest of the population, migrants who settle in Western Australia may be exposed to an increase in hazard risks, including bushfires and heatwaves. However, migrants may not be familiar with these weather and disaster-related hazards, and the health implications of these effects may be experienced by migrants differently to others. Migrants, refugees and asylum seekers may not have access to information, community networks and financial resources, and they may not have the capacity to prepare for an emergency or have the resources to recover from an emergency.

Our work in Australia

In Australia our response to the health impacts of climate change and extreme weather events is focused on psychosocial support. Examples of this work are as follows:

- We continue to work closely with governments to implement the National Disaster Risk Reduction Framework (NDRRF).³⁷ The intention of the framework is to guide an increase in and more efficient use of disaster resilience spending, in line with recommendations of the Productivity Commission Inquiry into Natural Disaster Funding 2015. In WA we sit on the State Emergency Management Committee's Recovery and Community Engagement sub-committee. We are also co-leads on a sub-committee-sponsored project to develop a WA Disaster Resilience Framework, which will include elements of the NDRRF and the National Strategy for Disaster Resilience.
- The Telecross REDi service³⁸ (presently in South Australia only) supports people by calling them daily during declared heatwaves. It is activated by the South Australian Department of Human Services when an extreme weather event is declared. Volunteers from the Australian Red Cross call pre-registered clients to check on their wellbeing. The callers ask people how they are coping and remind them of important measures that will help them through the extreme weather. If a call goes unanswered, or if someone is in distress, an emergency procedure is activated to ensure the safety and wellbeing of the client. People in the community who are at risk during extreme weather events and require telephone support during this time are encouraged to register for the service. This includes people who live alone, have a disability, are experiencing mental illness, are housebound, frail, aged, recovering from an illness or accident, or have an ongoing illness such as diabetes or a heart condition.
- Community-based education on emergency preparedness includes household adaptation tools, such as 'RediPlan' that focus on reducing the consequences of emergencies. Into the future, this program will need to expand. RediPlan's generic messaging about reducing the impacts of disaster, and the importance of social connection, is well placed to help individuals and communities adapt to climate change. These messages are available via the Get Prepared mobile app³⁹ and include guidance on emergency plans, emergency kits, conversation starters with family and neighbours, and personal wellbeing.

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³⁷ https://www.homeaffairs.gov.au/emergency/files/national-disaster-risk-reduction-framework.pdf

³⁸ https://www.redcross.org.au/get-help/community-services/telecross/telecross-redi

³⁹ https://www.redcross.org.au/get-help/emergencies/preparing-for-emergencies/get-prepared-app



- Our 'Climate-Ready Communities'⁴⁰ and 'Climate Ready Champions'⁴¹ initiatives support communities (presently in South Australia) to convene conversations about the impacts of climate change and what they can do to address them.
- The 'Pillowcase Project' is a schools-based disaster risk reduction program that focuses on helping children prepare for the psychosocial consequences of emergencies.

In WA, a 'whole-of-community' approach has been adopted to implement a range of activities in three local government areas (Shire of Nannup, and Cities of Swan and Rockingham) including the Pillowcase Project, preparedness sessions for youth and community service organisations, Rediplan, and preparedness outreach. All activities are guided by a multi-agency steering committee for each location. In addition, we are about to launch a three-year project with the Cities of Swan, Kalamunda and the Shire of Mundaring.

- Our 'Let's Talk' program is a successful drought support project in Western NSW that has local Red Cross members encouraging drought-affected community members to come together to engage in social support activities, which we know from the evidence is critical in maintaining good mental health.
- Our provision of Farm First Aid training for farmers, which also acts as an opportunity to
 introduce psychosocial support messaging, is receiving positive feedback. Consultation in
 Western NSW is highlighting gaps in health and wellbeing support for young people, and
 potential support is being explored through sporting clubs.
- The \$11.5 million "Help Aussie Farmers" drought appeal, conducted in July 2018, provided some short-term financial relief for farming household expenses, which freed up other sources of income for important social, health and wellbeing activities.
- Through the generous support of the BHP Foundation, we are now in the process of
 implementing a longer-term psychosocial drought support program that will encourage social
 connection and psychosocial support, as well as look to understand the potential adaptation
 challenges people may face if they are no longer able to farm. We are currently gathering
 intelligence and assessing the role Red Cross can play to address the gaps in existing support.
- We are implementing the ACOSS/Red Cross Resilient Community Organisations package⁴², which supports small and medium-sized community organisations to become climate ready and more resilient to the impacts of emergencies.
- Through our 'Out of the Storm' project we are working with people experiencing homelessness in the Adelaide CBD to identify places of shelter from extreme weather.

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⁴⁰ https://www.redcross.org.au/getmedia/b5b004b5-e572-4d9d-a1a1-c8fb5d1be5e3/climate-ready-communities-a-guide-to-getting-started.pdf.aspx.

⁴¹ https://www.redcross.org.au/get-help/emergencies/resources-about-disasters/resources-for-communities/changing-climate-what-can-i-do.

⁴² https://resilience.acoss.org.au/about.



- We are supporting refugees, asylums seekers and migrants in the community many of whom
 are already experiencing vulnerability to understand the hazards in their communities and take
 action to build disaster resilience.⁴³
- We continue to engage in comprehensive research such as our work with the University of Melbourne, which highlighted the significance of the mental health consequences of the Black Saturday Bushfires in Victoria (21 percent of research participants after five years reporting a diagnosable mental health condition, such as PTSD and depression).⁴⁴

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⁴³ https://www.redcross.org.au/news-and-media/news/reaching-out-to-those-hardest-to-reach.

⁴⁴ Bryant et al 2018: see Supporting References.



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