

Submission to the Royal Commission into Victoria's Mental Health System

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Healthy planet, **healthy people.**

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Royal Commission into Victoria's Mental Health System.¹

Doctors for the Environment Australia (DEA) is an independent, self-funded, non-Government organisation of medical doctors in all Australian States and Territories. Our members work across all specialties in community, hospital and private practices. We work to prevent and address the diseases - local, national and global - caused by damage to our natural environment. We are a public health voice in the sphere of environmental health with a primary focus on the health harms from pollution and climate change.

DEA Recommendations:

1. That climate change is recognised as a major trigger for mental illness.
2. That resources are spent developing policies and actions to support adults, strengthen family systems and strengthen communities to improve resilience in the face of extreme weather events so they are better able to address their needs before during and after such events.
3. That resources are spent strengthening mental health care systems to cope with the increased rates of mental illness in both adult and child populations due to the impacts of climate change.
4. That resources are spent supporting and educating mental health care professionals in preparing for and reacting to impacts of climate change.
5. Effective government-led climate change mitigation and adaptation measures.

Climate change is widely regarded as the biggest threat to health in the 21st century.^{2, 3}

"The human symptoms of climate change are unequivocal and potentially irreversible, affecting the health of populations around the world." The Lancet, 2017.⁴

The World Health Organization warns that “the severity of impacts of change on health are increasingly clear and threatens to undermine the last 50 years of improvements in health.”⁵

Climate change is no longer a looming threat, but a destructive and costly reality, and an extensive body of literature outlines its health impacts now and into the future. However, most research and communications have emphasised physical health, e.g. heat-related and extreme weather-related morbidity and mortality, increases in vector borne diseases, respiratory illnesses, effects of food and water insecurity and progressive sea level rises.

Until recently, there has been less emphasis on how climate change will affect the mental health of Australians. It is particularly pertinent that climate change has not even been considered in the Terms of Reference of the Victorian Royal Commission into Mental Health, despite the Commission’s clear objective of prevention and support for those affected by mental illness.

An expanding body of research literature describes the links between climate change and mental health.^{6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17} Extreme weather events have serious, long-term and complex impacts on mental health, and extreme weather events are more frequent, intense, and complex under a changing climate.^{18, 19, 20, 21, 22, 23} Climate change also accentuates the inequities within our society, and vulnerable groups are disproportionately affected by mental health impacts.²⁴

For those directly and indirectly involved, bushfires, heatwaves, floods, storms and droughts present obvious challenges to individual’s psychological health. Acute trauma and stress can produce disabling emotions that impair our ability to function in the immediate aftermath.²⁵ While many people show resilience and recover well, adverse mental health outcomes can be triggered in others by trauma and illness, damage or loss of personal property (e.g. home), loss of pets and livestock, disruption of families and communities, displacement, the disruption of goods and services, uncertainty regarding employment and loss of livelihood, disruption of education and the risk of further natural disasters. Whether experienced indirectly or directly, stressors can also trigger underlying or latent mental health issues.^{26, 27, 28, 29, 30}

Within the general adult population there is well established evidence that extreme weather events result in increased rates of stress, depression, anxiety, post- traumatic stress disorder (PTSD), alcohol and substance abuse, aggression and violence, suicide, elevated risk of abusing children, triggering of underlying mental health problems, strained community relationships and reduced productivity.^{31, 32, 33, 34, 35, 36, 37} All produce major long-term effects on personal, family and community function.

Vulnerable groups

The impacts of climate change are not distributed equally amongst groups within Australian society.

1. **Children** are vulnerable as their ongoing brain development makes them more susceptible to emotional trauma, and their mental distress tends to last longer and can be much worse than the direct physical effects.³⁸ Children are also vulnerable because they exist in a system where they have little power.³⁹ There is clear evidence to suggest that children experience increased rates of anxiety-related disorders following acute extreme weather-related events. For example, children surveyed six months after the 2003 Canberra bushfires showed much higher rates of behavioural and emotional problems compared to the baseline rate in Australia, with nearly half showing symptoms of PTSD.⁴⁰ Moreover, such children suffer long-term learning difficulties, compared to their non- or less-bushfire exposed peers.⁴¹

McDermott (2014) found that 1 in 5 primary school children and 1 in 12 secondary school children reported cyclone-related PTSD symptoms at the moderate to severe level 18 months following Queensland's cyclone Yasi.⁴² Young people appear especially vulnerable to developing PTSD-like symptoms.⁴³ These studies were consistent with research which examines acute weather events such as Hurricanes Sandy and Katrina in the US.^{37, 44, 45, 46,}

A US study looking at incidence rates of paediatric presentations to hospital with non-accidental brain injuries showed a 5-fold increase in the 6 months following a severe hurricane, indicating that parents were not coping in the aftermath of the disaster.⁴⁷

As global warming continues it is likely that the frequency of these events will increase, with more people exposed over time. Young people today will be disproportionately affected by climate change as they will live through the next 50-70 years of global warming.

2. **Australian indigenous communities** whose way of living is inextricably linked with the natural environment, and who have close ancestral ties to the land are on the front line of environmental change and extreme weather events. They risk losing both cultural heritage and vital connections between individuals, communities and the natural world.^{48, 49}
3. **Farmers** and those dependent on the land rely on a stable climate and water security for their livelihood, and for many their way of life and identity. Prolonged droughts have a negative effect on mental health for individuals and for those within farming communities. Personal and community interactions can be source of individual

conflict and stress and can affect community well-being.^{50, 51} There are increased rates of suicide among male farmers in Australia during periods of prolonged drought⁵², and reports of aggression, interpersonal difficulties, and job-related difficulties.⁵³ The more severe the drought, the worse the effects on mental health and wellbeing.⁵⁴ Stain et al. (2011) found that people living in a drought-affected area who had also recently experienced another adverse life event were more likely to experience a high degree of anxiety about the ongoing drought conditions.⁵⁵

4. **Occupational groups**, such as first responders, emergency workers and others involved with responding to extreme weather-related disasters are at increased risk for mental health consequences both in the short and long term.^{32, 56}

Other susceptible groups who may experience climate-related impacts to a greater extent include those living in areas vulnerable to climate impacts, those with chronic mental or physical health issues, the elderly, communities and individuals of lower socio-economic status, those economically disadvantaged and the homeless.⁵⁷

Heatwaves

Increased duration, frequency and severity of heatwaves is especially important in the Australian context. It is well established that with increased heat, rates of aggression and violence is increased in both adult and paediatric populations.^{58, 59} Field-based surveys have demonstrated a causal relationship between heat and aggression.^{60, 61} In addition, there are greater rates of mortality, homicide and suicide.^{62, 63, 64} Heat can have a negative effect on cognitive function, which may reduce the ability to resolve a conflict without violence.⁶⁵

The 2007 Adelaide heatwave saw increased rates of hospital admissions for mental health and behaviourally related disorders within the adult population,⁶⁶ and there is other evidence that increases in mean temperature are associated with increased use of emergency mental health services.⁶⁷

Ecological grief and solastalgia

There is emerging literature about the impact of environmental change, the lack of global action, our apparent inability to improve the situation and its relationship to mental illness. Elevated rates of depression, anxiety, suicidal ideation, post-traumatic stress, and a host of negative emotions including anger, hopelessness, despair and a feeling of loss, avoidance, fatalism, fear, helplessness and resignation are growing within

communities. Climate change and its effects are leading to a phenomenon labelled 'ecological grief'.^{68, 69} These responses are preventing us from properly building and supporting psychological resiliency.

Solastalgia describes a form of mental or existential distress caused by environmental change. Loss of place is not a trivial experience. Many people form a strong attachment to the place where they live, finding it to provide a sense of stability, security, and personal identity.⁷⁰ A sense of loss regarding one's personal or occupational identity can arise when treasured objects are destroyed by a disaster or place-based occupations are disrupted by climate change.⁷¹

Grief and mourning are natural responses to the scale of ecological loss we're living through. Research shows that the sixth mass extinction is underway, with irreversible loss of many species that will bring about profound changes in our ecosystems.

Conclusion

As global warming continues the frequency of extreme weather events will increase, with more people exposed over time. Adversity is not a new phenomenon for humanity, but it is likely that without action that significantly addresses climate change such adversity will become more widespread. The impact of this will be felt disproportionately by the most vulnerable, including children who will bear the brunt of climate change in the future.

DEA urges the Royal Commission to recommend policies that build resilience and capacity to manage the mental health impacts of climate change. It is vital that the Royal Commission acknowledges and addresses the challenges of our changing climate for the sake of future generations.

References

DEA has written extensively on the physical health impacts of climate change in Australia:

Climate change and health in Australia Fact Sheet

<https://www.dea.org.au/climate-change-and-health-in-australia-fact-sheets/>

Bushfires and health in a changing environment Fact Sheet

<https://www.dea.org.au/bushfires-and-health-in-a-changing-environment-fact-sheet/>

Severe storms, floods and your health Fact Sheet

<https://www.dea.org.au/severe-storms-floods-and-your-health-fact-sheet/>

Heatwaves and health in Australia Fact Sheet

<https://www.dea.org.au/heatwave-fact-sheet/>

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[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(15\)60931-X/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)60931-X/fulltext)
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<https://health2016.globalchange.gov/>
- ⁴ [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(17\)32464-9/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(17)32464-9/fulltext)
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