



## WA Climate Health Inquiry submission: Climate change and expected impacts on older Western Australians

### WA Aged Care Network Expert Reference Group

Climate change is a term used to describe the long-term and global alteration of weather patterns and temperature. Climate change can be caused by natural processes or be human-induced. Most of the global heating detected since the mid-twentieth century has been determined to be caused by the burning of fossil fuels releasing heat-trapping carbon dioxide into the atmosphere<sup>1</sup>.

The unmitigated impacts of the current accelerated rate of global heating associated with human-induced climate change include:

- Increased temperatures, particularly in the continental interiors;
- Increased frequency of heatwaves associated with increased temperatures;
- Increased wet season rainfall in some areas and extended drought in others;
- Increased sea-level rise; and
- Potentially increased severity of tropical cyclones<sup>2</sup>.

In terms of human health, the impacts of climate change are expected to include:

- Significantly raised risk of heat-related mortality<sup>3</sup>;
- Increased rates of direct physical injury during extreme weather events<sup>4</sup>;
- Increased rates of infectious diseases following widespread flooding or prolonged drought<sup>5</sup>;
- Increased rates of cardiovascular and respiratory diseases due to heat-waves and air pollution<sup>6</sup>; and
- Increased rates of mental health issues related to post-traumatic stress, anxiety and depression<sup>7</sup>.

Frail older Western Australians are likely to be more highly at-risk of experiencing the health-related impacts of climate change than other population cohorts. Older people are already more vulnerable to negative health and wellbeing outcomes from heatwaves, extreme weather-events and exposure to infectious diseases<sup>8</sup>.

While Western Australia is a wealthy, well-developed region with comparatively robust systems to manage these negative outcomes, it is likely that more research and greater focus on adaptive

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<sup>1</sup> The science of climate change; Australian Academy of Science, 2019.

<sup>2</sup> *ibid*

<sup>3</sup> Climate change effects on human health: projections of temperature-related mortality for the UK during the 2020s, 2050s and 2080s; Hajat, S., et al. 2014

<sup>4</sup> Direct and indirect health impacts of climate change on the vulnerable elderly population in East China; Kinay, P., et al. 2019

<sup>5</sup> *ibid*

<sup>6</sup> Health impact of climate change in older people: An integrative review and implications for nursing; Leyva, E., et al. 2017

<sup>7</sup> *ibid*

<sup>8</sup> *ibid*

strategies is required to prepare older people, the health and aged care systems and the WA community more broadly for the expected impacts of climate change.

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