

# Healthy Environments and Lives (HEAL): Australian research network in human health and environmental change

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## Abstract

**Background** The HEAL Network aims to strengthen the Australian health system and community resilience to climate change, extreme events, and environmental degradation. This resilience is achieved by stimulating collaborative research that will improve our understanding of the interactions between climate, the natural and built environment, public health, and the benefits and trade-offs of adaptation and mitigation action aiming to reduce the health impacts of environmental change. HEAL is embedding systematic codesign processes with First Nations people on environmental change preparedness, capacity and capability building, and mitigation and adaptation solutions.

**Methods** HEAL is addressing capacity and capability gaps in human health, climate and environmental change, and credibility gaps in interactions between policy makers, practitioners, industry, and communities. The HEAL Network is regionally distributed and includes multiple communities of practice, comprising researchers, environmental and health practitioners, community organisations, and policy makers. On the basis of initial gap analyses and stakeholder consultations, we have established ten interdisciplinary research themes (Indigenous knowledge systems; data and decision support systems; science communication; health system resilience; bushfires and extreme events; food, soil, and water security; biosecurity and emerging infectious diseases; urban health; rural and remote health; and at-risk populations and life course solutions) and a range of research capacity and capability strengthening activities that will support investigators, local services and communities.

**Findings** The HEAL Network is developing the skills needed to formulate priorities, codesign projects, and translate and implement research findings into policy and practice. New interdisciplinary collaborations emerging from HEAL have led to development of participatory action research, such as facilitating Aboriginal community-led climate adaptation plans based on traditional knowledge and environmental, climate, and health data.

**Interpretation** HEAL identifies evidence gaps and prioritises research capacity and capability needs and local action with community-led codesign of environmental change adaptation and mitigation solutions. This network and related programme of work will lead to more effective national, regional, and local policies to protect and improve planetary health and reduce inequities within and across communities and generations.

**Funding** The HEAL National Research Network has been awarded funding from the Australian Government National Health and Medical Research Council Special Initiative in Human Health and Environmental Change.

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### Contributors

SV is the Director of the HEAL National Research Network, which has been codesigned by all authors. SV and DEO accessed and verified the data.

### Declaration of interests

We declare no competing interests.

Published Online  
October 31, 2022

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