

# Climate change and Indigenous Health

**Date** Wednesday 11 November 2020, 12.30pm AEST  
**Presenters** Mr Daniel Kelly  
Dr Timothy Senior  
Dr Nassim Ghosni

*This activity has been developed in partnership with Aboriginal Health & Medical Research Council of NSW and NSW Health*



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# Acknowledgement of Country

We recognise the traditional custodians of the lands and seas on which we live and work.

We pay our respects to Elders past and present.



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# Presenters



**Mr Daniel Kelly**

*Project Officer*

*WNSWLHD Aboriginal Health Leadership Team  
Aboriginal Health Practitioner  
Brewarrina Multi Purpose Health Service NSW*



**Dr Nassim Ghosni**

*Forensic Engineering Manager  
Engineering Ingenuity Pty Ltd*



**Dr Timothy Senior**

*GP at Tharawal Aboriginal Medical Service  
and Medical Advisor, RACGP Aboriginal  
and Torres Strait Islander Health*



# Learning Outcomes

By the end of this webinar, participants will

- Understand impacts of climate change for Aboriginal and Torres Strait Islander people and their communities
- Identify strategies to lessen some of the risks associated with climate change and Aboriginal and Torres Strait Islander health

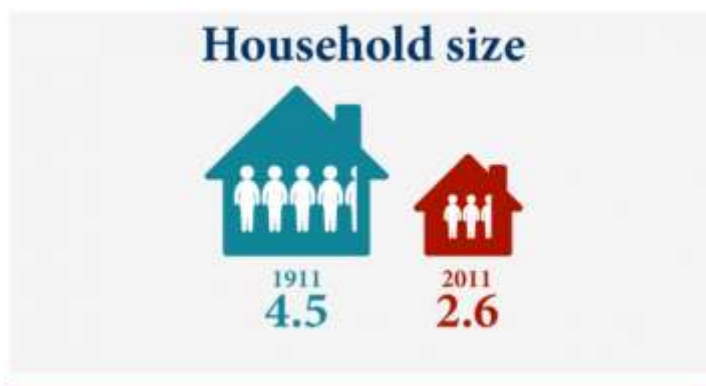


## *Impacts of climate change*

- Local experiences
- Health consequences, risk to health
- Connection to country
- What can we expect?

## *No-one experiences the average...*

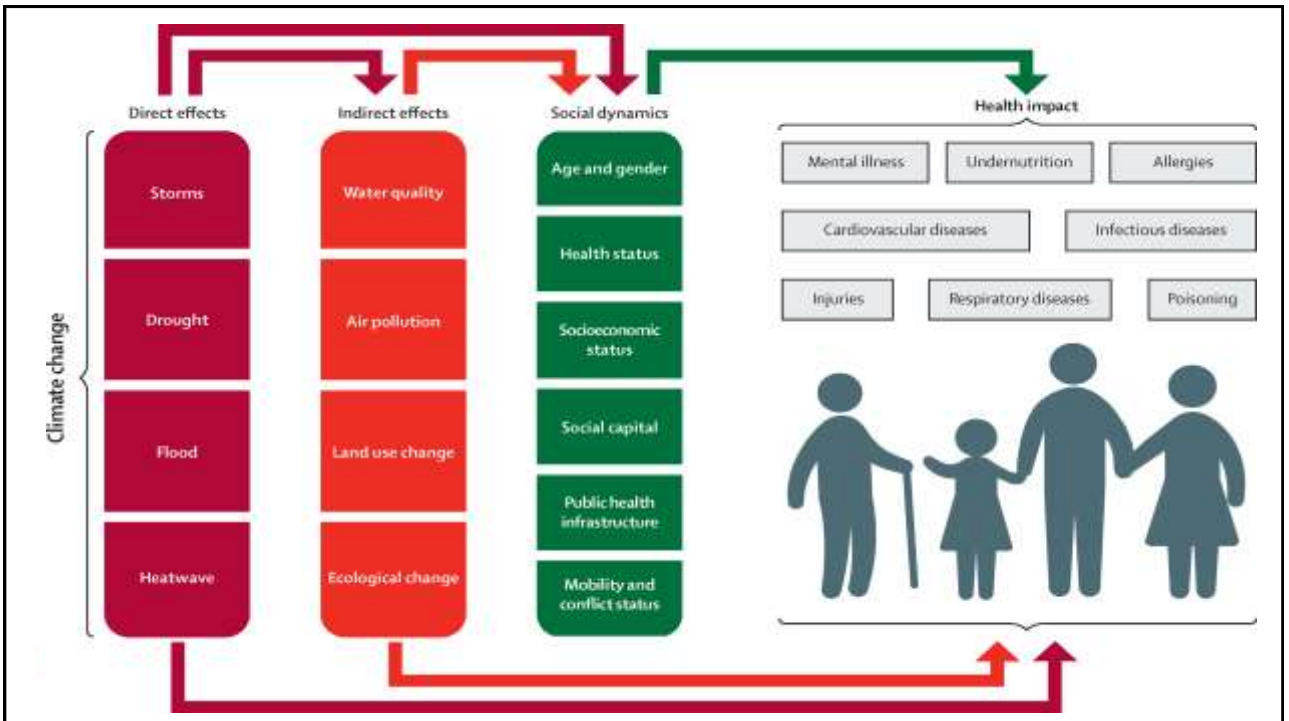
Households in Australia





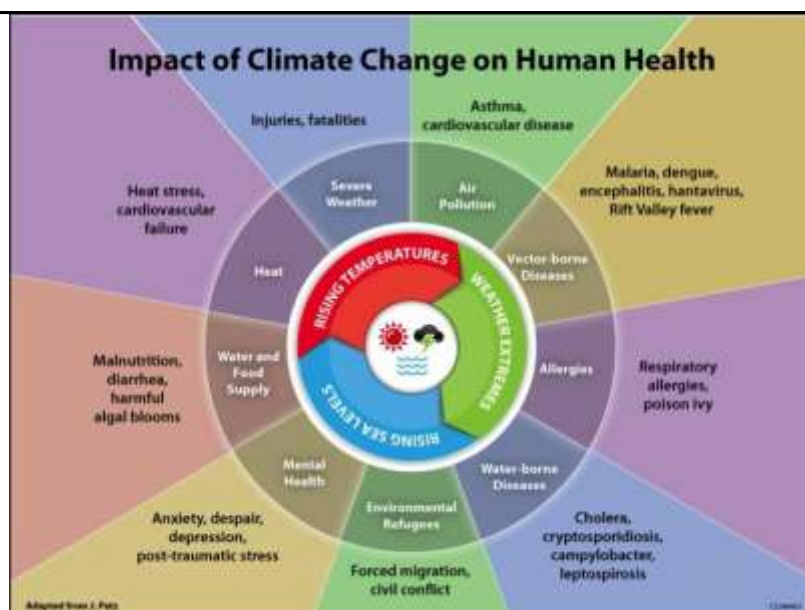


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#### What is thunderstorm asthma?



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## Original Article

# If the land's sick, we're sick:\* The impact of prolonged drought on the social and emotional well-being of Aboriginal communities in rural New South Wales

Colin Wayne Rigby,<sup>1,2</sup> Alan Rosen,<sup>1,3,4</sup> Helen Louise Berry<sup>1,5</sup> and Craig Richard Hart<sup>1</sup>



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### Key messages

- In the UK, improvements in household energy efficiency could have net benefits for health, mainly through improved indoor temperature and air quality
- In low-income countries, the products of incomplete combustion in traditional solid fuel stoves create various heart and respiratory problems
- National programmes offering low-emission stove technology for burning local biomass fuels in poor countries could, over time, avert millions of premature deaths, and constitute one of the strongest and most cost-effective climate-health linkages

### Key messages

- Transport-related greenhouse-gas emissions are increasing, especially in countries of low and middle income
- Meeting targets to reduce greenhouse-gas emissions will require more walking and cycling and less motor vehicle use, which will bring substantial health benefits, including from reduced cardiovascular disease, depression, diabetes, and dementia
- Although reducing motor vehicle use would decrease the injury risk for existing pedestrians and cyclists, if many more people walked and cycled there may be an increase in the number of injuries, since more people would be exposed to the remaining risk

<https://www.thelancet.com/pb/assets/raw/Lancet/stories/series/health-and-climate-change.pdf>



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### Key messages

- Changing methods of electricity generation to reduce CO<sub>2</sub> emissions would reduce particulate air pollution and deaths. The effect would be greatest in India and lowest in the EU
- The cost of these changes would be significantly offset by reduced costs of death from pollution, especially in China and India

### Key messages

- The food and agriculture sector contributes 10–12% of total global greenhouse-gas emissions, with additional contributions from land use change
- Demand for animal source foods is increasing
- Achieving a substantial cut in greenhouse-gas emissions will depend on reducing the production of food from livestock and on technological improvements in farming
- A reduction in consumption of animal source foods could have great benefits for cardiovascular health

<https://www.thelancet.com/pb/assets/raw/Lancet/stories/series/health-and-climate-change.pdf>



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### Key messages

- In the atmosphere, a combination of sulphate and black carbon seems to signal a significant risk factor for cardiovascular mortality. Evidence is growing that ozone too can cause death. Reduction of atmospheric concentrations of all three will benefit health
- There is little evidence that sulphate particles, which are climate cooling, are less harmful to health than are undifferentiated particles, and some evidence that they are more harmful. Measures needed to protect health could, in this case, be at odds with measures needed to tackle climate change
- Because of their short lifetimes in the atmosphere, a reduction in the emissions of black carbon and ozone precursors will offer almost immediate benefits

### Key messages

- Measures to restrict our output of greenhouse gases may also result in benefits to public health
- These co-benefits will offset at least some of the costs of climate change mitigation, and should be taken into account in international negotiations
- The co-benefits to health arising from action on climate change are not widely appreciated. A greater awareness might sweeten the otherwise bitter taste of some climate change policies

<https://www.thelancet.com/pb/assets/raw/Lancet/stories/series/health-and-climate-change.pdf>



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# *Aboriginal communities and climate change*

- **Drought impact on community**

- Connection to environment
- Seasonal change
- Impact on bush tucker and other native foods available – hunting for wildlife, access to plant food, e.g. bush oranges, quondong (native peaches), etc.
- Vehicle needs vs. walking



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# *Aboriginal communities and climate change*

- **Health impacts**

- Cotton farm spraying pre-environmentally friendly sprays
- Cut-off from access to services



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## Short-term solutions



### Drought awareness

- How drought affects the individuals and community
- How we can be prepared?
- What is the impact on our physical, social, cultural and emotional well-being?

### Education

- Provide courses to educate 5-10 members of each community (depending on the community size) on drought related health issues and how to act.
- Prepare a detailed plan of action for each community



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## Short-term solutions

### Survival Packages

- First aid kit and manual
- Essential medications, prescriptions for heat attack
- Counselling / Mental Health First Aid

### Drinking Water Supply

- Filter water resources in towns

### Communities

- Designing and building community centres prepared for extreme drought and heat



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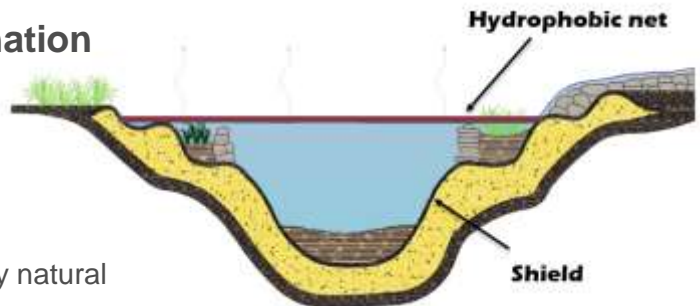
## Long-term solutions

### Preserving Water & Desalination

- Filter water to drinking water
- Water recycling
- Water Desalination

### Resilient Agriculture

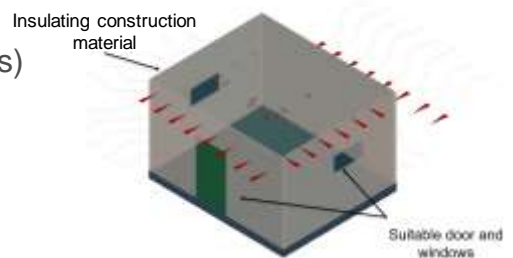
- Improving the condition of key natural water assets on farms
- Improving the condition of farm dams
- Improving the condition of watercourses
- Improving solar farm technologies



## Long-term solutions

### Housing

- Incorporating special architectural designs to create ventilation and keep the temperature
- Using construction material which are Insulating ( Walls, Roof, Windows, Doors)



### Dust suppressants

- Environmentally friendly suppressants
- Prevention of airborne lung disease

## *Long-term solutions*

- Role of the health sector and GPs
- Increasing accessibility and ownership by Aboriginal communities
- Preventative



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## *Useful resources*

- Future Drought Fund: Drought Resilience Research and Adoption Program - Drought Resilience Adoption and Innovation Hubs grant Opportunity  
Close Date & Time: 23-Dec-2020 11:00 pm (ACT Local Time)  
<https://www.grants.gov.au/Go/Show?GoUuid=b853be4a-c431-4c11-b9c7-24e9f26ab654>
- RACGP Clinical and practice management: The impact of climate change on human health  
<https://healthinonet.ecu.edu.au/learn/determinants-of-health/environmental-health/climate-change/>
- Australian Indigenous Health *InfoNet*  
<https://healthinonet.ecu.edu.au/learn/determinants-of-health/environmental-health/climate-change/>



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*Any questions....*

