

## This is the published version:

Capetola, Teresa, Patrick, Rebecca and Nuttman, Sonia 2009, Climate change in the kitchen and on the public health agenda, *Health issues*, no. 99, Winter, pp. 16-18.

## **Available from Deakin Research Online:**

http://hdl.handle.net/10536/DRO/DU:30028644

Reproduced with the kind permission of the copyright owner

Copyright : 2009, Health Issues Centre

## Climate change in the kitchen and on the public health agenda

TERESA CAPETOLA, REBECCA PATRICK AND SONIA NUTTMAN

This photo of a bowl of burnt fruit is testimony to the fact that climate change has entered the Australian kitchen as well as the Australian lexicon. Notwithstanding the personal trauma and subsequent hardship experienced by many communities following the Black Saturday fires (February 2009), the burn marks on this fruit were not the result of bushfire. The scorch marks are a result of the 40°C+ days Victoria experienced during February this year. The bowl of burnt fruit symbolises how temperature extremes, as a result of climate change, impact on our everyday life. Numerous studies and reports have projected the likely outcomes for human populations of extreme weather events and increasing global warming. These climatic changes will have significant local and regional

consequences for social, economic and environmental outcomes including:

- Health (e.g. injury, heat, disease, respiratory problems, stress and anxiety)
- Infrastructure (e.g. housing, transport, energy, water)
- Agriculture and food security
- Economic development, income and employment
  Community resilience, connectedness and
- sustainabilitySocial vulnerability, exclusion and inclusion
- Social vulnerability, exclusion and inclusion (Fritze et al. 2009:9).

Impacts of climate change will translate as either direct or indirect consequences for all population groups, but will be most severe for those populations that are vulnerable as a result of low income, chronic illness, being elderly, and having poor access to essential services such as good housing and adequate fresh water. Other vulnerable groups are those whose economic prosperity depends heavily on climatic conditions and who do not have sufficient resources and capacity to adapt (Rowe & Thomas 2008:14).

Increasing average global temperatures and extreme weather events (droughts and floods, storm surges, etc.), in addition to exacerbating the direct and indirect causal pathways for ill health, will also influence the social, economic and environmental determinants of health. This poses particular challenges for the public health and health promotion sector. As arguably the most serious threat to human health and wellbeing in the 21st century, how is public health, and the health promotion sector, positioned to address the myriad of consequences-direct and indirect-of climate change? The World Health Organization estimates that climate changes over the past 30 years have led to the loss of over 150,000 lives and approximately five million DALYs (disability-adjusted live years) per year throughout the world (DHS 2006). Climate change exacerbates existing health inequities and disproportionally affects already vulnerable populations, such as the elderly, children, people with chronic illnesses, urban poor, rural communities etc. For example, the European heatwaves of 2003 claimed over 35,000 lives; those most vulnerable were those



with restricted mobility and the elderly, particularly those who lived alone (Horton et al 2008:7). Recent bushfires in Victoria also provide evidence on the vulnerability of rural communities to increasing severe weather events (extreme temperatures) and changing weather patterns (decreased precipitation rates) resulting from climate change.

Experienced both directly (e.g. an increase in the number of cases of heatstroke and subsequent hospitalisations as a result of heatwaves) and indirectly (e.g. a decrease in rates of physical activity as result of hotter summers, increased pollution and decreased green spaces), the health impacts of climate change insinuate themselves in all facets of life and represent a significant challenge to public health systems and the field of health promotion.

In the School of Health and Social Development, Deakin University Victoria, a research team is working on several fronts to address the challenges to health and wellbeing presented by climate change. First, research has been undertaken with industry, government and non-government representatives to establish likely population impacts of climate change on health, in particular on those communities least able to adapt to the direct and indirect consequences of climate change. The research also explores likely outcomes of the implementation of government policies aimed at both adapting to and mitigating climate change for the health of vulnerable populations. For example, the federal government's key mitigating policy for climate change will be the Carbon Pollution Reduction Scheme,

WINTER 2009

HEALTH 1990ES



currently under review in the Senate. This emissions' trading initiative represents a major challenge to Australia's economic system and signifies both a domestic and global commitment to addressing serious climate change. However, carbon pricing in whatever form is regressive and will have a disproportionate impact on low income and disadvantaged households (Brotherhood of St Laurence et al. 2007:3). This will have direct bearing on the broader determinants of health (increased cost of utilities, food, housing etc.) and presents specific challenges for the public health and health promotion sector.

The study also questions what skills and knowledge are required of health professionals to address the complex challenges presented by climatic variations, and government policies developed to mitigate and adapt to climate changes

Preliminary analysis of findings from the study indicates that 'new' jobs will be required and old jobs will be modified, if they have not already done so, to address climate change issues. Questions requiring further analysis include whether the new jobs constitute new positions in organisations or new Position/ Job Descriptions for existing positions. Research findings also identified that a combination of generic and specific skills will be required to address climate change challenges. Calls were repeatedly made by participants in the study for 'community' development principles' in the suite of generic skills and knowledge. Clearly, policy-makers need to consider workforce issues in order to prepare for the predicted health impacts of climate change and begin to implement long-term adaptive health policies (Blashki et al. 2007: 988). Second, the research team is also involved the development of an interdisciplinary curriculum for sustainability delivered as a pilot program to approximately 100 undergraduate third-year Deakin University students. This collaborative project, involving all four faculties (Business and Law, Health, Medicine, Nursing and Behavioural Sciences, Science and Technology, Arts and Education) across Deakin University is currently under way to produce an innovative teaching and learning module that emphasises environmental literacy (such as understanding sustainability, social equity and justice, issues of peak oil consumerism and and resilience in the face of change) as well as civic engagement and responsibility. Students representing all faculties will participate in an interdisciplinary 'learning community', drawing on the strengths of their respective disciplines. Students will voyage to 2030 in order to identify the necessary steps that need to be taken in 2009 to secure a sustainable future. It is hoped that the findings of this project will support a future proposal for a university-wide common unit on sustainability for all undergraduate students. The findings of this pilot study will be available later in the year.

The research team, in conjunction with the Australian Health Promotion Association (AHPA [Vic Branch]), also presented a professional development session on climate change and population health to over 50 AHPA members in December 2008. The session was conducted at Victoria's first sustainable commercial building—60L (60 Leicester Street, East Melbourne). Specific concerns were raised by the members from regional and rural Victoria regarding: the impact of drought; increasing incidence of depression and mental illness in farming

- 1. Southern Grampians and Glenelg Primary Care Partnership's publication of a framework for local action for climate change adaptation based on the Ottawa Charter. The identification of five issues associated with the direct impact of climate change: household energy; household water use; transport; affordable food supply; and, community strength and resilience—and their translation into the Ottawa Charter five key action areas : build healthy public policy; create supportive environments; strengthen community action; develop personal skills; re-orient health services—is testimony to both the resilience of the public health/health promotion workforce sector AND an argument for investing in professional development for the sector on climate change (Rowe & Thomas 2008).
- 2. North Yarra Community Health Centre's foray into developing a sustainable workplace is an exemplar of: 'actions speak louder than words'. Documenting the gradual process of 'greening' the health centre's several sites in inner Melbourne has given courage to other aspiring green services. In developing strategies for sustainable transport, energy use and waste disposal, North Yarra CHC also discovered the necessity for adapting service processes to accommodate sustainability principles. This is seen nowhere more clearly than in the centre's scheduling of meetings, which takes into account the time it takes for staff to cycle between sites on service bicycles.

communities; a discernible lack of departmental leadership; co-ordination and policy; and a need for increased skills and knowledge to address the pressing needs in regional and rural Victoria. This observation adds weight to the argument that climate change has disproportionate impacts for vulnerable population groups, including rural communities, and that the public health/health promotion workforce sector is seeking direction, as well as skills and knowledge, to broaden their capacity to meet climate change challenges.

In addition, earlier this year a presentation focusing on 'advocacy and climate change' was conducted for AHPA members at VicHealth. It was argued that if policy was love gone public enshrining in the public realm those services and structures that support people to live productive, useful and meaningful lives—and one of the most important ways of influencing policy is advocacy, then, advocacy was spreading the love (Baum 2008:550).

Presentations (PowerPoint) and readings from both events are available on AHPA's website: http://healthpromotion.org.au/branches.html

In an often bleak context of climate change scenarios and health impacts, it is a welcome relief to have the words 'climate change' and advocates 'spread the love' in the same sentence. There are numerous and notable examples of advocates for climate change adaptation and mitigation. See box on left for two examples from the health promotion sector.

The bowl of burnt fruit in the kitchen serves as a reminder that while other public health challenges and crises may be left at the workplace or community centre, climate change and its impacts is everywhere and everyone's business. Our research, professional engagement and curriculum development have identified a strong need for increased skill and knowledge development in the public health/health promotion sector. It has affirmed that a resilient substructure is also present in the sector:

We are all engaged in the creation of our future. The future is not somewhere we are going, but something we are creating. We take decisions everyday that make some futures more probable and others less probable. It should be a goal to make our future a sustainable one. This will involve some big changes. (Lowe, 2005 cited in Baum, 2008: p. 389).

Rebecca Patrick, Teresa Capetola, Sonia Nuttman and Mardie Townsend are members of the Climate Change Research Cluster team at Deakin University.

## References

Blashki, G., McMicheal, T., & Karoly, D. 2007, Climate change and primary health care, *Australian Family Physician* 36, No. 12.

Brotherhood of St Laurence, Catholic Social Services Australia and National Welfare Rights Network 2007, Joint Submission to Prime Ministerial Task Group on Emissions Trading.

Department of Human Services 2006, Climate change and health: An exploration of challenges for public health in Victoria. Victorian Government Department of Human Services, Melbourne, Victoria.

Fritze, J., Williamson, L., & Wiseman, J. 2009, *Community Engagement and climate change: benefits, challenges and strategies*. Report for the Department of Planning and Community Development, Victorian Government.

Horton, G., McMicheal, T., & Doctors for the Environment, Australia 2008, Climate change health check 2020, Report for Climate Institute of Australia.

Rowe, R., & Thomas, A. 2008, Climate change adaptation: A framework for local action. Southern Grampians and Glenelg Primary Care Partnership. *Policy Signpost No. 3*, The McCaughey Centre, University of Melbourne.