Extreme heat and rural health: perspectives from health service providers

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Introduction: Climate change and the projected increase in extreme heat present new challenges for rural health in Australia. Extreme heat can lead to heat-related illness and mortality, particularly among vulnerable groups. The adverse health effects of heat are largely preventable. A combination of physiological, social and contextual factors can influence these outcomes, and an understanding of these factors at a community level can direct the development of locally appropriate heat emergency and adaptation plans. There has been limited research on these factors in rural Australia.

Aim: The aim of this study was to explore how rural communities in South Australia experience extreme heat and the factors that limit or enhance their capacity to adapt to this challenge.

Methods: A qualitative study was undertaken, using interviews with rural health service providers to explore their views and experiences in relation to extreme heat. Thirteen participants from 11 locations across the state were interviewed by phone, between March and June 2012. The interviews were transcribed and a thematic analysis undertaken. Themes were assigned to five domains according to a social ecological framework: individual characteristics, interpersonal networks, community characteristics, organisational issues and the natural environment.

Results: A common narrative was that rural residents are experienced, independent and aware of extreme heat and modify their behaviour accordingly. However the elderly were considered to be a vulnerable group. The key barriers for managing the heat were the cost of power and the reluctance of elderly residents to use air-conditioning routinely. These issues may be compounded in rural communities by a higher proportion of transportable or thermally inefficient housing. There are fewer available cool refuges, and their access can be restricted by limited transport and travel distances. There are also potential social consequences of extreme heat, as daily interactions are diminished and activities and sport are cancelled. Participants suggested this could lead to social isolation and diminished quality of life during these times. The service provided by many rural community health providers covers a large footprint, and extreme heat and related bushfire risk was a common concern in relation to travel. The conflicting requirements of maintaining client support while managing risks was a salient issue among participants.

Conclusions: Locally appropriate, low-cost strategies to mitigate the effects of extreme heat will be needed to assist rural communities adapt to a warmer climate.