

Bushfire smoke and public health: what information is available in Victoria?

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Introduction

Bushfires and prescribed burning can produce copious quantities of smoke that often disperses over long distances depending on the climatic conditions, topography and vegetation and as a result, smoke may impinge on communities not directly affected by fire. The population health impacts associated with smoke from bushfires are not well defined but are known to have adverse effects on respiratory and cardiovascular systems and so are important considerations for public health, emergency and environmental agencies.

An important component of public health education is to provide appropriate, accurate, accessible and useful information that guides people toward mitigating potential effects of bushfire smoke on their health without raising undue concerns.



Methods

Investigation of the type and content of information relating to bushfire smoke and public health was undertaken by (1) web-based searches and collation of published and grey literature for bushfire-related public health information; (2) interviewing representatives of organisations and agencies responsible for land management or public health about (i) requests for information from the public regarding bushfire smoke; (ii) development and dissemination of public health information; (iii) strategies, protocols or plans for developing or disseminating public health information regarding bushfire smoke, and (iv) awareness of other agencies or organisations that develop or disseminate public health information; and (3) comparing the public health information and strategies against research currently available and international public health advice for bushfire smoke.



Results and Discussion

If bushfires become more frequent and severe, as is predicted with climate change modelling, then there is the possibility of increased adverse health events which will impact on quality of life and the delivery of health services. Recent studies suggest that there may be an increased risk of hospital attendances for respiratory conditions due to bushfire smoke (e.g. Tham *et al.* 2009). This would indicate a need for better community knowledge and understanding of the mitigation measures that can be undertaken to reduce exposure to bushfire smoke.

The range of bushfire smoke public health information available in Victoria appears to be limited to information sheets developed by the Department of Human Services (DHS). Content review of these information sheets indicates that the advice provided is consistent with advice developed and disseminated in the US and by the World Health Organisation. Evidence is currently not available that would indicate the need for a different approach to mitigation methods in Australia. Importantly, we found that DHS review information disseminated prior to each bushfire season and consult with relevant fire and environmental agencies to ensure the information is still current.

Tham R, Erbas B, Akram M, Dennekamp M, Abramson MJ (2009) The impact of smoke on respiratory hospital outcomes during the 2002-2003 bushfire season, Victoria, Australia. *Respirology* 14, 69-75.

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