Interventions to reduce exposure to air pollution from landscape fires: The Healthy-Air Project

Vardoulakis, S., Goodman, N., Joshy, A., Borchers Arriagada, N., Matthews, V., Cameron, D., Laachir, K., Saini, B., Jones, P., Sargent, G., Brain, M., Campbell, S., Walsh, E., Johnston, F.

Air pollution from bushfires, wood heaters, and other sources can trigger symptoms and distress in people with asthma. As highlighted by the 2019/20 bushfires, there remains a critical lack of accessible tools, resources and advice empowering people with asthma to effectively reduce their air pollution exposure.

AIM

To synthesise, translate and disseminate the best available scientific evidence on the effectiveness of air pollution exposure reduction measures and health protection advice for people with asthma.



AIR POLLUTION EXPOSURE REDUCTION **SOLUTIONS**

Participatory Action Research

Translation into Policy & Practice

Improved Outcomes

METHODS

This project will take place in three-phases:

Phase 1

Task 1.1. Evidence **Synthesis**

- Systematic mapping of interventions
- Cost-effectiveness analysis
- Health equity analysis

Task 1.2. Consumer **Engagement**

- Roundtable discussions
- Interviews (story telling / yarning)
- Focus Group Discussions

Phase 2

Task 2.1. Communication Tools

- Content development
- Cultural / Linguistic adaptation (Aboriginal & Arabic)
- Online Information hub

Task 2.2. Educational Resources

- Online short course on air pollution and health
- Factsheets for GPs, Aboriginal health workers, pharmacists

Phase 3

Task 3.1. Dissemination

- Integration with media campaigns
- Community outreach

IMPACT Health benefits for people with asthma, particularly those in bushfire smoke affected areas, & socioeconomically marginalised communities.

Task 3.2. Policy Advocacy

- Policy briefing
- Editorials & publications
- Launch event

IMPACT Culturally appropriate communication tools & Innovative educational materials.

OUTCOMES

- Systematic mapping and cost-effectiveness analysis of interventions
- Consumer engagement reports targeted to Aboriginal and Arabic communities
- Factsheets, podcasts and infographics in English and culturally / linguistically adapted for Aboriginal and Arabic audiences
- Scoping of health messaging on asthma for the AirRater app.
- An information hub co-designed to host all resources
- An online course on air pollution and health for the public

ACKNOWLEDGEMENTS

We gratefully acknowledge support from Asthma Australia and Dyson (Australia and New Zealand)



Personal protective equipment



Air purification



Technology and communications

REFERENCES

Johnston, F.H., et al., Exposure to bushfire smoke and asthma: an ecological study. Medical Journal of Australia, 2002. 176(11): 535-538; Vardoulakis, S., et al., Bushfire smoke: urgent need for a national health protection strategy. Medical Journal of Australia, 2020. 212(8): 349.









