

**From:** Raina MacIntyre <r.macintyre@unsw.edu.au>  
**Sent:** Wednesday, 1 November 2023 17:08  
**To:** cleanair@cleanairtas.com  
**Cc:** DVCR RECS Human Ethics  
**Subject:** Bushfire study

Dear Mr Stott

Thank you for your input into the BREATHE study. You raise very important concerns. The reason we are doing the RCT is that there is no clinical trial evidence on the use of interventions to prevent adverse events of bushfire smoke. This has led to different recommendations in different countries and jurisdictions within Australia. This is in contrast to the use of masks and respirators for infection, for which there are multiple RCTs – and even so, policy is often conflicting.

Before starting the study, we did a survey to inform this study, which showed that in the black summer of 2019 people did, indeed, use surgical masks during the 2019/2020 bushfires. The survey showed there is little understanding in the community on differences between respirators and surgical masks, and that cost of respirators is also a barrier for some people. We applied for a grant in January 2020 in response to a call for research to inform evidence gaps in the prevention of adverse health effects of bushfires, and this was the reason the study was commenced. We are meeting a clear gap in evidence to inform better guidelines and policy on an increasing problem facing Australia. We did get cross-over in the trial (that is, people allocated to one intervention using something else), and did not stop any participant availing themselves of any protection they wished to use during smoke exposure. In fact, in 2020 and 2021, the pandemic and mask mandates meant we had a large amount of cross-over in trial arms, for example people in the outdoor air avoidance needing to use masks. We simply documented what they used.

I would like to also clarify that we are not subjecting any participant to smoke exposure, but simply asking them to keep a diary documenting smoke exposure. You point out the importance of hazard reduction burns in causing health effects. In the study, we are indeed measuring smoke exposure outside of the summer months and during hazard control burns. Participants are given information on how to check on planned hazard reduction burns and asked to document smoky days using an air quality App or the visual method developed in the Victorian Department of Health.

I completely agree that the larger problem is the increasing risk of bushfires. Unfortunately, our research is not addressing solutions to that, as that is outside of our expertise in health. However, we are seeking to find level 1 (RCT) evidence to protect people from the adverse effects of smoke exposure during any kind of fire, whether it be a bushfire or hazard burn. As an asthmatic myself and living on the edge of a national park where I am frequently subject to smoke exposure, this research is very important to me. This summer will be the last year of the study, and we hope to have data to inform policy after this. The study will finish around April 2024. I would be happy to have a discussion with you on the phone if you would like to discuss further. Thanks again for raising your important concerns.

Regards

Raina

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