

## Research Summary

### Longer-term community wellbeing after the Hazelwood mine fire.

January 2024



## Background

The fire in the Morwell open cut brown coal mine adjacent to the Hazelwood Power Station blanketed the town of Morwell and the surrounding area in smoke and ash for six weeks in February and March 2014. The smoke event was recognised as one of the most significant air quality incidents in Victoria's history. It caused considerable concern within Morwell and the broader community. In response to these concerns, and following extensive community consultation, the Hazelwood Health Study was established to examine the impacts of the mine fire. The Hazelwood Health Study involves multiple research streams targeting different health outcomes and different vulnerable groups.

### Analysis aims

The aims of this analysis were to assess longer-term community wellbeing in Morwell and how it has changed since the 2014 Hazelwood mine fire, from the perspectives of community members exposed to the event. The analysis also explored what influences demographic, social, and health factors, as well as smoke exposure during the mine fire, variously had on perceptions of community wellbeing.



### What we did

Between December 2019 and early March 2020, 585 Morwell residents, who had previously participated in the 2016-2017 Adult Survey, completed a Mental Health and Wellbeing Follow-up Survey. As part of the survey, we measured people's current sense of community wellbeing and how it had changed in Morwell since the 2014 Hazelwood mine fire. We examined how participants' responses regarding community wellbeing were associated with levels of smoke exposure during the mine fire, and with a variety of important personal circumstances such as age, health history, social support, education, employment, and experiences of other trauma and stressful life events.

### Meet the team

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## What we found

Overall, participants reported being somewhat dissatisfied with community in Morwell at the time of the 2019-2020 follow-up survey and that community wellbeing was perceived to have declined since the mine fire. The community's social, economic, and environmental conditions were particular points of dissatisfaction, whilst feeling a sense of connection to place was the most positively regarded aspect of community life. Appraisals of community wellbeing were typically lower among participants who were younger, had experienced recent stressful events, or who were more bothered by health complaints. Participants' perceptions of community wellbeing and its direction since the mine fire were not dependent on how much smoke they had been exposed to during the event.

A detailed paper describing the findings from this analysis can be found at <https://hazelwoodhealthstudy.org.au/study-findings/publications>



## Considerations

There were some limitations to this research. Health information which is self-reported in surveys is not always accurate and the experiences and perspectives of the participants may not necessarily reflect those of the rest of the community. The retrospective measure of change in community wellbeing since the mine fire was devised for the study and was not robustly tested; so may be susceptible to biases.




## Where to from here?

The Hazelwood Health Study has conducted a further, more recent follow-up survey to monitor long-term health and wellbeing outcomes after the mine fire. The measure of current community wellbeing was repeated in this survey, which also included assessments of the impacts of the 2020 Black Summer bushfires and the COVID-19 pandemic. Analyses of this additional data will enable us to further understand the progression of community wellbeing in Morwell after the mine fire within the context of other significant events.

The HHS is led by Monash University with collaborators from Menzies Institute for Medical Research, Federation University, The University of Adelaide, and CSIRO.

The research was funded by the Department of Health.

Website: [www.hazelwoodhealthstudy.org.au](http://www.hazelwoodhealthstudy.org.au)

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