

## Children's perspectives on the impact of the Hazelwood mine fire and subsequent smoke event Research Summary

### Analysis aims

The primary aim of this study was to understand the immediate and ongoing impacts of the mine fire event on the social, emotional and academic well-being of young people. The study also investigated the coping strategies used by young people and their suggestions about what would be helpful in future events.

### Meet the team

Dr Emily Berger

Dr Matthew Carroll

Professor Darryl Maybery



### 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, with the concentration of smoke contaminants reaching high levels.

The smoke event caused considerable community concern within Morwell and the broader community. In response to these concerns, and following extensive community consultation, the Hazelwood Health Study (HHS) was established to examine the impacts of the mine fire. The HHS involves multiple research streams targeting different health outcomes and different vulnerable groups.



### What we found

The interviews revealed that the fire and subsequent smoke left a strong impression on most of the participants, with students talking about the unpleasant smell, how the ash felt in their throat and got into their home and school. In addition to being an unpleasant event, the interviews revealed that the event impacted on some children's social, emotional and academic wellbeing, while other children appeared to have experienced little impact from the event. While a number of students talked about difficulties coping at the time, including anger, stress and anxiety, most indicated that these effects had abated. Some, however, reported still being more alert to cues for fire events. In addition, some students remarked on the educational impacts including change to school routines, absences from school, and the impact of relocation (either at the family or school level).

Looking beyond themselves, some reported on the emotional and physical impact of the event on their parents, family and community, including short and long-term health outcomes, impacts on friendships and increased family conflict. Students also talked about how they attempted to minimise these impacts through helping to protect the family home or keeping family members safe at the time of the fire and smoke.

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A copy of the pre-print version of this article is available at [www.hazelwoodhealthstudy.org.au/publications](http://www.hazelwoodhealthstudy.org.au/publications)



## What we did

Sixty-nine children and adolescents from seven schools in Morwell and one school in Traralgon were interviewed approximately 1 ½ years after the mine fire. The majority of students were in grade 3, followed by grade 5, year 7 and then year 9. The interviews lasted approximately 30-40 minutes and were conducted face to face with a researcher at the child's school. A semi-structured interview was used to allow for both the researcher and the children to direct the conversation. The interview asked children about the perceived impact of the fire and smoke on them and others, their views on management of the fire and how they coped at the time, as well as whether they experienced any changes at home or school during or following the fire.



## Where to from here

This research comprises one aspect of the HHS Psychological Impacts stream. Future activities for this stream include analysis of a second round of surveys and interviews with students conducted almost four years after the mine fire, and reporting on the impacts for other vulnerable groups including older adults.



## Considerations

Although a close to representative sample of male and female students from government and independent schools were involved in the interviews, less than one third of parents consented for their child to participate. Therefore the results may not necessarily reflect the experiences of all children and adolescents following the 2014 Hazelwood mine fire.

The Hazelwood Health Study is a collaborative program of research led by the Monash University Schools of Public Health and Preventive Medicine and Rural Health in partnership with Federation University, the Menzies Institute for Medical Research at the University of Tasmania, the University of Adelaide and the CSIRO.

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