

# Community Mental Health Following the 2019-20 Bushfire Season in the Australian Capital Territory

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## BACKGROUND AND AIM

The 2019–20 bushfire season in south-eastern Australia was one of the most severe in recorded history. In the Australian Capital Territory (ACT) over 86 000 ha of bushland was burnt, and hazardous levels of smoke-related air pollution persisted for prolonged periods between December 2019 and February 2020. Bushfire smoke directly challenges human health through effects on respiratory and cardiac function, and can negatively impact mental health, wellbeing and quality of life. Mental health impacts of direct fire exposure can be long-lasting but the impacts of smoke, separate from fire have not been well explored.

This work aimed to take identify the effect of the 2019-20 bushfire season on ACT community members' mental health and wellbeing by taking a snapshot of levels of distress shortly after the 2019-20 bushfire season.

## METHODS

An online survey captured information from 2,084 adult participants (40% male, median age 45 years) about their experiences during the 2019-20 bushfire season. It included questions on demographics, self-reported health, and validated mental health scales (DQ5, DASS21; Batterham et al., 2016, Henry and Crawford 2005). Data was analysed to examine the prevalence of mental health symptoms and psychological distress in the period following the bushfire season. Factors that were associated with higher mental health burdens were identified.

## PRELIMINARY FINDINGS

Over 55% of respondents self-reported symptoms of anxiety (45.3%) and/or feeling depressed (21.4%) as a result of the smoke (Rodney et al., 2021). When assessed using validated scales :

- 31.9% of people (19.0% men and 10.0% women) reported elevated levels of psychological distress (DQ-5>14),
- 10.5% of people (7.8% men and 11.8% women) reported clinical levels of depression (DASS depression score ≥21)
- 14.3% of people (10.8% men and 16.2% women) reported clinical levels of anxiety (DASS anxiety score ≥15).

Levels of distress were more elevated in specific groups, including women, those with existing physical or mental health conditions or poorer self-rated health, renters, and those directly affected by fire (current or previous seasons).

## CONCLUSIONS AND IMPLICATIONS

This study demonstrated the substantial effects of bushfire and smoke on mental health and wellbeing at a community level during the acute phase of the bushfire event and identified groups within the community at greater risk. Previous research has shown that at a population level, most community members will not have long-lasting effects of their mental health once the event was over, provided actual fire impact was low, though for some the impacts can be long-lasting. Further work is needed to explore the long-term effects of smoke exposure on physical and mental health trajectories, separate from fire, in order to identify groups within the community that may need extra support during these periods.