AMA submission to the Senate Finance and Public Administration
References Committee inquiry into lessons to be learned in relation
to the Australian bushfire season 2019-20

Senate Finance and Public Administration References Committee
PO Box 6100
Parliament House Canberra ACT 2600
Email: fpa.sen@aph.gov.au

As the peak professional organisation representing medical practitioners in Australia, the
Australian Medical Association (AMA) welcomes the opportunity to provide input into this
inquiry into the lessons to be learned in relation to the preparation and planning for, response
to and recovery efforts following the 2019-20 Australian bushfire season.

This submission will respond specifically to Terms of Reference d), g) and h), as well as raising
several additional concerns and recommendations.

Background

The 2019-2020 bushfire season in Australia was catastrophic from both an environmental and
a public health perspective. Approximately 21% of forested areas of the Australian mainland
was burnt, over 2000 homes were destroyed, and more than 30 lives were tragically lost.

Researchers from the ANU reported that 78.6% of Australians were either directly or indirectly
affected by the bushfires. Community concerns about the health of Australia’s environment,
and the impacts this has on human health, increased dramatically over the months of the fire
season. As Australia’s peak medical organisation, the AMA frequently provided media
commentary on the health implications of the bushfires. The AMA’s media commentary
included providing information on the health effects of exposure to bushfire smoke, and the
role of General Practitioners (GPs) in disaster management.
AMA members were involved in providing frontline health care in affected communities, as well as treating patients affected by smoke and other health concerns related to the bushfires in our urban centres.

d) the adequacy of the Federal Government’s existing measures and policies to reduce future bushfire risk

The AMA has previously commented on bushfire risks as a threat to human health, and made recommendations for actions to reduce this threat. The AMA’s Position Statement, Climate Change and Human Health – 2015, first released in 2004, notes that increased fire activity and intensity are direct effects of climate change. The Position Statement recommends reducing greenhouse gas emissions within an Australian carbon budget, including by actively transitioning to renewable energy sources from fossil fuels, in order to address this. The AMA recommends that the Federal Government could pursue emissions reduction more ambitiously to reduce future fire risks, and related health effects.

The AMA’s 2015 Position also calls for a National Strategy for Health and Climate Change. To date, the Federal Government has not implemented or indicated they will consider this. The AMA considers a National Strategy is vital for addressing future health risks from bushfires because it would include a comprehensive and broad reaching adaptation plan to ensure the health sector is adequately resourced to meet the significant demands of bushfires and their associated health effects.

Similarly, the AMA’s 2013 submission to the Senate Inquiry into ‘Recent trends in and preparedness for extreme weather events’ notes the likely health effects of increasingly severe bushfires, including smoke inhalation, burns, air pollution, water contamination, and mental health problems. To address these potential outcomes, the submission recommended that the Federal Government commission quantitative modelling of the health impacts and costs associated with extreme weather events, including identification of highly vulnerable groups and regions. While this would not reduce the risk of fires themselves, taking action to model health impacts of fires would be an important step in ensuring appropriate health system disaster responses and capacity building.

As another risk reduction measure, the AMA’s Position Statement Involvement of GPs in Disaster and Emergency Planning - 2016 called on all levels of government to incorporate GPs into emergency response, and disaster planning models, including in short and long-term recovery efforts. The AMA considers that health professionals, including GPs, are not currently sufficiently consulted in disaster management planning. Where responses span across states, the Federal Government must ensure that General Practitioners remain included in planning and response. The involvement of GPs in disaster response, especially where GPs are local and understand community contexts, is vital in community healthcare and rehabilitation, and reducing the risk of long-term health problems.

h) an examination of the physical and mental health impacts of bushfires on the population, and the Federal Government’s response to those impacts

Mortality
Mortality is the most apparent and significant health consequence of bushfires. The Australian bushfire season 2019-2020 had a death toll of 33 people – 25 in NSW, five in Victoria and three in South Australia. In terms of death toll, this makes the 2019-20 bushfire season the deadliest since the 2009 Black Saturday bushfires, in which 173 people were killed. In 2019-20, the majority of individuals who died were killed defending homes or personal property, although a significant number were killed while working or volunteering.

The AMA has previously emphasised the risk of deaths resulting from predicted increases in bushfire frequency and intensity. In our submission to the 2013 Senate Inquiry into Extreme Weather, we noted that “large scale loss of life and injury” could result from increasing bushfire risk.

Smoke Exposure

Despite the tragic death toll, perhaps the most significant health effect of the 2019-20 bushfires was the exposure of large swathes of the Australian population to harmful levels of bushfire smoke. The scale, longevity, and intensity of the bushfires made this smoke exposure more widespread, persistent and dense than in previous seasons. Many rural towns, multiple regional centres, as well as the major cities of Sydney, Canberra, and Melbourne, all saw smoke pollution exceed hazardous levels during the bushfire season.

Other than those in the immediate vicinity of fires, Canberra residents in particular faced unprecedented exposure – experiencing 56 days of smoke pollution above healthy levels, 12 days of hazardous-level exposure, and pollution on the worst day (1st January) reaching 23 times the hazardous rating. The AMA has previously indicated that climate change was likely to increase the intensity of bushfires, with smoke exposure being a likely health consequence of this. The AMA’s 2015 Climate Change Position Statement notes that increased particulate matter “is also likely to lead to increased asthma exacerbations, respiratory medication use, and hospital admissions for asthma and other respiratory conditions”.

The main health concerns associated with bushfire smoke are related to exposure to small particulate matter (PM2.5), which has a range of negative health impacts. As noted in the AMA’s 2013 submission to the Senate Inquiry into ‘Impacts on health of air quality in Australia’, even short-term exposure to PM2.5 is known to exacerbate existing conditions such as asthma and cardiorespiratory diseases; decrease lung function; and cause upper respiratory tract infections, premature mortality, and adverse birth outcomes. These effects are felt most prominently in children and elderly people. Although the short-term impacts of exposure are generally minor in healthy adults, it is important to acknowledge that, as the AMA submission notes, “there is no lower limit of exposure to particulates below which there is no impact”.

These health impacts were observed during the 2019-20 bushfire season in Australia. During peak PM2.5 exposure on 14th January, Ambulance Victoria reported a 66% increase in calls related to breathing conditions. Even regularly healthy tennis players exerting themselves at the Australia Open experienced breathing difficulties while exposed to bushfire smoke. At least two Australians, an elderly woman and a teenage asthmatic, died after suffering breathing complications attributable to the bushfire smoke. Research published in the Medical Journal of Australia in March 2020 estimated that in total, 417 excess deaths could be attributed to bushfire smoke exposure from 1 October 2019 and 10 February 2020. The researchers also found that 1124 hospitalisations for cardiovascular problems, 2027 hospitalisations for
respiratory problems, and 1305 emergency department presentations for asthma were attributable to bushfire smoke exposure during the same period.

One particularly concerning aspect of the 2019-20 bushfire smoke exposure in Australia is that the longer-term health effects of this kind of medium-term, intense exposure have not been comprehensively studied. The AMA noted this problem in media comment during the bushfire season, with AMA President, Dr Tony Bartone, emphasising that “we need to be very much more prepared in the coming years” for potential longer-term effects. The AMA therefore welcomed the Australian Government’s announcement of $3 million funding for research into ‘the physiological impacts of prolonged bushfire smoke exposure’, and further recommends that this funding be supported by parallel funding to mitigate, prepare for and manage future instances of bushfire smoke exposure in Australia.

The best way to ensure that Australians are protected from a similar event in the future is to take measures to prevent bushfires altogether, as well as make sure that the health system is appropriately prepared and resourced to respond when they do occur.

**Mental ill-health**

Although the full mental health effects of the 2019-20 bushfire season in Australia will not be understood for some time, it is clear that affected communities have already suffered mental ill-health as a result of the fires and will likely see these impacts continuing into the long-term.

The intense, prolonged fear experienced during a bushfire event and its anticipation, as well as grief and anger in the immediate aftermath, can contribute to severe trauma and/or exacerbate existing mental health conditions. Additionally, research conducted after the 1983 Ash Wednesday fires and 2009 Black Saturday fires highlights that affected communities suffer higher than average rates of mental ill-health in the years following a major bushfire. As noted in the AMA’s 2013 submission on extreme weather, bushfires are generally associated with long-term mental health complications such as depression, anxiety, and post-traumatic stress. Climate-related disasters more broadly are also associated with significant mental health risks.

A number of elements of the 2019-20 bushfire season in Australia are likely to contribute to significant mental health impacts beyond immediately affected communities, with Australians more broadly suffering stress and anxiety resulting from the long and highly visible season.

First, the length of the season, in which the bushfire danger period was pushed forward to begin on 1st September, and the last major fire was extinguished on 27th February, meant that Australians were subject to many months of bushfire risk, warnings, and headlines. Second, the fires were very widespread, threatening cities and towns across Australia, with seven states and territories affected by emergency-level fires. States of emergency or equivalents were declared in three jurisdictions, with NSW residents under a state of emergency on three separate occasions, for a total of 21 days. Third, news headlines were dominated by bushfire disaster stories for months, with similar saturation on social media. Catastrophic impacts on communities, economies, infrastructure, and animal populations were covered incessantly and difficult to ignore, which was magnified by the extent of bushfire smoke exposure. Google searches for ‘bushfires’ in December 2019 made this event the most-searched for news event of the decade in Australia, being searched for 37 times more frequently than the 2009 Black Saturday fires.
These factors are likely to have resulted in significant levels of vicarious trauma in the wider Australian population. Finally, the connection between the severity of the bushfire season and increasing climate change meant that many Australians suffered anxiety relating to the possibility of previously unprecedented disasters occurring more regularly.

The AMA welcomes the Australian Government’s announcement in January of funding for mental health measures, including free counselling and additional Medicare rebates for those in affected communities and frontline emergency workers. The AMA recommends that mental health support to communities is not only a temporary short-term response. Mental health impacts may not become apparent until months and even years after the bushfires themselves, necessitating ongoing support from government and health services.

i) Any related matters

**National Centre for Disease Control (CDC)**

The AMA urges the Committee to consider the AMA’s call for the Australian Government to establish a National Centre for Disease Control (CDC). The AMA’s Position Statement *Australian National Centre for Disease Control - 2017* noted that a CDC would be best positioned to educate the public about large-scale disease threats such as poor air and water quality, and provide up-to-date, relevant advice about how to prevent ill-health.

During the 2019-20 bushfire season in Australia, there was confusion in the community about health threats, especially the impact of smoke inhalation and how best to protect against this (i.e., where to source information about pollutant levels; what kind of mask or air purifier to use). A CDC would provide a trusted, nationally consistent source of advice on issues such as this during future crises.

Additionally, a CDC should work with State and Territory authorities to manage the allocation of public health workforces and resources to tackle emerging and current threats, including extreme weather events.

**The role of the Medical Profession**

Although the AMA has advocated on this for many years, the 2019-20 bushfire season has emphasised to the Australian population more generally that natural disasters have significant implications for health and the health system, with medical practitioners playing a key role in planning and response. The AMA strongly recommends that medical practitioners, especially General Practitioners, be involved in future disaster and emergency planning at all levels of government, to ensure that primary health care is coordinated and ready when disasters like bushfires occur.

The AMA wants to see all Australian jurisdictions prepare records for possible disaster response, including information on:

- Available GPs with the appropriate training who are willing to participate in a medical response team;
- Those GPs who are willing to assist as required out of rooms/clinics; and
- The GPs who are willing to assist as required in their rooms.

In addition, each jurisdiction needs a communication protocol to contact GPs in an emergency/disaster situation. These protocols should also include provision to draw on retired GPs living in the area as an additional resource that can be accessed in emergencies such as
bushfires. Local GPs should be prioritised in terms of supporting GPs working in communities. Continuity of care is essential in the recovery process for individuals, families and communities. AMA members with experience in crises and disasters highlight the importance of having local and on-going access to trusted and known primary care services, and in particular, GPs.

Simon Tatz  
Director, Public Health  
statz@ama.com.au  
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