



Bushfire Smoke – General information fact sheet

This fact sheet provides general information on how to stay safe and minimise the risk to your health from bushfire smoke.

There is concern from many Australians about bushfire smoke, and the impact air pollution has on their health. Bushfire smoke can decrease air quality some distance away from, or close to, a fire front. This was clear during the 2019 and 2020 Australian bushfire season.

Smoke from bushfires is made up of gases, water vapour and coarse and fine pieces of ash, or particles. Another name for this is particulate matter. Particulate matter is a complex mixture of solid and liquid particles and is classified according to size:

- PM₁₀ – particles smaller than 10 microns in diameter. These contribute to visible smoke haze, can irritate eyes, throat and lungs but are too large to enter the bloodstream.
- PM_{2.5} – particles smaller than 2.5 microns in diameter. These are too small to see and when breathed in, will go deep into a person's lungs and enter the bloodstream.

Although all pollution in the air from bushfire smoke has the potential to impact health, there is evidence that PM_{2.5} pollution is of greatest concern. States and territories generally publish monitoring of PM_{2.5} pollution in near real time.

What are the health effects of exposure to bushfire smoke?

For most people, exposure to bushfire smoke causes mild symptoms like sore eyes, nose, and throat. When there is visible smoke haze the recommendation is to stay inside as much as possible. It is also good to avoid physical activity outdoors, and to drink lots of water.

People with existing breathing difficulties or reduced lung capacity can experience more severe symptoms. If you have concerns or think you are at increased risk because of a pre-existing medical condition, speak to your medical practitioner. If you would like more information on Vulnerable Groups, please see the [Bushfire Smoke - Vulnerable groups fact sheet](#).

What can I do to minimise exposure to smoke?

If you see or smell bushfire smoke outside, you should stay inside when safe to do so. Remember to:

- keep your windows and doors shut
- avoid use of evaporative cooling as it draws external air into the house
- use an air conditioner with a recycled air setting where possible (read the instructions or contact the manufacturer)

- avoid sources of smoke inside the home including smoking, burning candles or incense sticks
- monitor the health of children, older people, and others at risk
- keep pets inside with clean water and food and keep pets' bedding inside if possible
- if safe to do so, visit alternate locations that are well-sealed and air conditioned indoor environments, for example libraries and shopping centres, (be aware of any restrictions that may be in place in your local area because of the COVID-19 pandemic)
- ventilate your home during periods of cleaner outdoor air quality to avoid build-up of indoor pollution.
- monitor air quality conditions to work out when the best time(s) to go outside are.
- exercising outdoors in periods of lower air pollution will help to maintain good physical activity levels without substantially increasing exposure to bushfire smoke (for more information about smoke pollution and exercise, see the [Australian Institute of Sport Position Statement](#))
- if at any time you are experiencing any health issues, seek medical attention.

What are the health effects of exposure to bushfire smoke over multiple days?

Exposure to air pollution over days or weeks increases the risk of illness. Evidence shows the risk of illness reduces when air quality improves. Australia generally has good air quality. While there is potentially a small increase in the risk of certain health effects after exposure over a long time, this is likely to be low for most people. Research is ongoing to better understand the longer term health effects particularly across groups at higher risk. These higher risk groups include people with chronic conditions, young children, pregnant women and their babies.

Should I buy and wear a P2/N95 face covering?

Children under the age of 2 should not wear face coverings. Anyone who has trouble breathing, is unconscious, incapacitated, or may not be able to remove the face covering without help should not wear one.

P2/N95 face coverings are not recommended for general community use during bushfires or smoke events. If your state or territory has issued specific advice on wearing face coverings because of COVID-19, then they must be worn. This is regardless of air quality advice. Please note, P2/N95 face coverings may be referred to as 'masks' or 'respirators'.

The use of P2/N95 face coverings due to bushfire smoke should be limited to:

- vulnerable people including those with significant health issues
- people who work outside
- people returning to their properties in burned areas.

If you would like more information on the use of P2/N95 face coverings, please see the factsheet available on the Department of Health's [website](#).

Do air purifiers help to reduce PM_{2.5} particles inside my home?

Air purifiers with a high efficiency particle air (HEPA) filter can reduce the number of fine particles indoors. To work well, seal the room and match the air purifier to the size of the room it is in. Humidifiers, negative ion generators and odour absorbers do not remove fine particles in bushfire smoke from the air.

Where can I get real time information on air quality in my area?

Find information and regular updates on air quality in your local area here:

- [Australian Capital Territory Air Quality Index](#)
- [New South Wales Current and Forecast Air Quality](#)
- [Northern Territory Air Quality Network](#)
- [Queensland Air Quality Monitoring](#)
- [South Australia Air Quality Monitoring](#)
- [Tasmania Real Time Air Quality](#)
- [Victoria AirWatch](#)
- [Western Australia Air Quality Index](#)

Where can I find more information?

If you are in an area affected by bushfires, please listen to the instructions given by emergency services personnel. [ABC Radio](#) is a reliable source for important messages.

If you would like to know more about the response to COVID-19, please go to the Department of Health's COVID-19 [health alert page](#). Your state or territory website or the relevant state or territory health department will provide location-specific advice.

If you need emergency assistance, ring triple zero (000).

This document is current as of December 2020 and does not account for updated advice since this date.