

Bushfire smoke and your health

Public health bushfire information

Introduction

Bushfire smoke can reduce air quality in rural and urban areas and may affect people's health.

This fact sheet provides information on bushfire smoke, how it can affect you and your family's health, and actions that you can take to avoid or reduce potential health effects.

Bushfire smoke – what is it?

Bushfire smoke is a mixture of different-sized particles, water vapour and gases, including carbon monoxide, carbon dioxide and nitrogen oxides.

The larger particles which are visible to the eye contribute to the visible haze when a fire is burning. They are generally too large to be breathed deeply into the lungs but can irritate the nose and throat.

Finer microscopic particles and gases are small enough to be breathed deep into the lungs and can cause health effects.

How can bushfire smoke affect my health?

How smoke affects you depends on your age, pre-existing medical conditions such as asthma or heart disease, and the length of time you are exposed to the smoke.

Signs of smoke irritation include itchy eyes, sore throat, runny nose and coughing. Healthy adults usually find that after a short exposure to smoke these symptoms clear up once they are away from the smoke.

Children, the elderly, smokers and people with pre-existing illnesses such as heart or lung conditions (including asthma) are more sensitive to the effects of breathing in fine particles. Symptoms may worsen and include wheezing, chest tightness and difficulty breathing.

It is very important that people with pre-existing health conditions take their medication, follow their treatment

plan, and seek immediate medical advice if symptoms persist.

Protecting your health

- Avoid physical activity outdoors (exercise allows more fine particles to be breathed deeper into the lungs). People with pre-existing lung or heart conditions in particular, should rest as much as possible and keep away from the smoke.
- Anyone with a heart or lung condition should follow the treatment plan advised by their doctor and keep at least five days supply of medication on hand.
- People with asthma should follow their personal asthma plan.
- When smoke is in the air, but a fire is not directly threatening you, stay indoors and close all windows and doors.
- If you operate an air conditioner during smoky conditions, switch it to 'recycle' or 'recirculate' to reduce smoke coming inside your home.
- If you do not have an air conditioner, take steps to reduce heat stress, especially for the very young, people who are unwell, or the elderly. Information on staying healthy in the heat is available at: <http://www.health.vic.gov.au/environment/heatwaves.htm>
- If your home gets too hot to be comfortable, or is letting in outside air, try to take an airconditioned break at a local community library or shopping centre.
- If there is a break in smoky conditions, take the opportunity to air out your home to improve indoor air quality.
- When indoors, minimise other sources of air pollution, such as cigarette smoke, burning candles, using unflued gas appliances or woodstoves or stirring up fine dust from sweeping or vacuuming.

- During extended, very smoky conditions, sensitive individuals should consider temporarily staying with a friend or relative living outside the smoke-affected area. Outdoor sporting events may also be postponed by event organisers.

What about wearing a facemask?

Ordinary paper dust masks, handkerchiefs or bandannas do not filter out fine particles from bushfire smoke and are generally not very useful in protecting your lungs.

Special face masks (called 'P2' masks) filter bushfire smoke providing greater protection against inhaling fine particles. They are available at most hardware stores.

However, before deciding to wear a mask you should understand that:

- they can be hot and uncomfortable to wear they can make it harder for you to breathe normally. Anyone with a pre-existing heart or lung condition should seek medical advice before using them
- if the seal around the face and mouth is poor the mask is much less effective (men should be clean shaven to get a good seal)
- the masks do not filter out gases such as carbon monoxide
- it is better to stay indoors, away from the smoke unless you cannot avoid working outdoors.

For further information

Your safety

If you see smoke haze, check for fire warnings in your area:

- Listen to your local radio station for updates.
- Visit the Country Fire Authority Victoria website at: www.cfa.vic.gov.au/
- Call the Victorian Bushfire Information Line on 1800 240 667. TTY users should use the National Relay Service (phone 1800 555 677) then ask for 1800 240 667.

Smoke and health

- If you or anyone in your family is experiencing symptoms that may be due to bushfire smoke exposure, seek medical advice or call NURSE-ON-CALL on 1300 60 60 24.
- Anyone experiencing difficulty breathing or chest pain should seek urgent medical assistance – phone 000.
- For further information about asthma go to the Asthma Foundation of Victoria's website at: www.asthma.org.au or call 1800 278 462.

Air quality and bushfire smoke

For information on air quality and smoke impacts from bushfires:

- Visit the Environment Protection Authority (EPA) Victoria website at: <http://www.epa.vic.gov.au/yourenvironment/air/air-pollution> or call EPA on 1300 372 842.

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