

Outdoor Smoke and Your Health

Introduction

Smoke from bushfires, planned burns and wood heaters can reduce air quality and may affect your health.

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

What is smoke?

Smoke is made up of particles, invisible gases and water vapour. The gases include carbon monoxide, carbon dioxide, sulphur dioxide, nitrogen oxides and volatile organic compounds.

Smoke clouds and smoke haze are caused by smoke particles. Smoke particles are the main health concern in smoke.

These particles are very small – around 30 times finer than a human hair – so they can be breathed deep into the lungs and can even get into blood.

Smoke from *bushfires and planned burns* can cause a rapid rise in the concentration of smoke particles.

These peaks are often brief but some can last for hours or even days. The duration of smoke depends on the sort of fire and the weather.

In contrast, the smoke from *wood heaters* can last for months when heaters used continuously during winter.

Most breaches of air quality standards in Tasmania are due to smoke from wood heaters during the colder months.

How can smoke affect my health?

How smoke affects you depends on your age, medical conditions (such as heart or lung disease), and how long you are exposed to the smoke.

You may get itchy or burning eyes, sore throat, runny nose and a cough. Healthy adults generally find after brief exposure to smoke, these symptoms clear quickly once the smoke goes.

Children, the elderly, smokers and people with heart and lung diseases (especially asthma and COPD) are more sensitive to breathing in small smoke particles.

Their symptoms may get worse, and they may experience wheezing, chest tightness and difficulty breathing.

Pregnant women should also minimise their exposure to smoke.

What should I do?

- Follow your asthma action plan, or your plan for managing flare-ups of other health conditions. If you don't have a plan, see your GP to prepare one.
- If your symptoms get worse, get immediate medical advice or care.
- Avoid physical activity outdoors. Activity increases breathing so you inhale more smoke particles.
- Stay indoors with windows and doors closed where possible.
- When indoors, avoid other sources of pollution such as cigarette smoke, candles, wood stoves, or fine dust from sweeping or vacuuming.

- If your home gets too hot for comfort or a lot of smoke from outside gets in, consider visiting a friend's place, or the library, shopping centre or sports centre.
- If there is a break in smoky conditions, open the windows and air out your home.
- People who need to travel should exercise caution if driving in smoke. Turn on your headlights and drive slowly.
- Disposable face masks called 'P2 masks' are available from most hardware stores. They give some protection against smoke particles but are only effective if worn correctly; they can make it harder to breathe and they do not filter out gases.
- Switch air conditioners to 'recycle' or 'recirculate'.
- Portable air cleaners, available from home electrical stores, will lower the concentration of indoor particles and reduce the risk of health effects from smoke. Only air cleaners that use either a HEPA filter or an electrostatic precipitator will provide protection from particles. Devices that only humidify, generate negative ions, or absorb unpleasant smells do not reduce airborne particles.

How can I keep track of the smoke?

You can check the smoke particle levels nearby through the Environment Protection Authority's real-time air quality data

<https://epa.tas.gov.au/epa/air/monitoring-air-pollution/real-time-air-quality-data-for-tasmania>

You can see when an air quality notification www.dhhs.tas.gov.au/publichealth/alerts/air is active in your area and follow the recommended precautions

www.dhhs.tas.gov.au/publichealth/alerts/air/precautions

Air quality notifications are activated when smoke levels are high in an area for just one hour.

You can download the free AirRater app <https://airrater.org> to keep track of air quality and weather in your area.

Where can I get more information?

- The Tasmania Fire Service website www.fire.tas.gov.au/ has an *Alerts list* and *Alert map* of all current landscape fires including planned burns, permit burns and bushfires.
- The Environment Protection Authority <https://epa.tas.gov.au/epa/air/monitoring-air-pollution> monitors air quality and logs complaints about smoke (1800 005 171).
- Check your local news or radio for warnings on smoke.
- The Parks & Wildlife Service www.parks.tas.gov.au/index.aspx?base=908 and Sustainable Timber Tasmania www.sttas.com.au/forest-operations-management/our-operations/planned-burns conduct planned burns for forest regeneration and to reduce bushfire risk.
- The Tasmania Fire Service www.fire.tas.gov.au/Show?pageId=colFuelReductionProgram conduct fuel reduction burns to reduce bushfire risk.
- The Environment Protection Authority <https://epa.tas.gov.au/epa/air/air-quality-in-tasmania/reducing-air-pollution/improving-wood-heater-use> has issued advice on how to use wood heaters efficiently to limit the amount of smoke they generate.
- Your local council can investigate a smoke complaint from wood heaters or backyard burning. Ask for the environmental health section.
- The Public Health Services – Tasmania Hotline is 1800 671 738.