

# Smoke from Bushfires and Planned Burning

Smoke from bushfires and planned burning of vegetation can reduce the quality of the air you breathe.

This fact sheet provides information on smoke from fires, on how it can affect your health and actions you can take to avoid or reduce health impacts. Action should be taken by others where possible to minimise exposure of the public to smoke.

## What is bushfire smoke?

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

Visible smoke clouds and smoke haze are caused by the small smoke particles.

Small particles are also the main pollutants of health concern in bushfire smoke. These particles are very small - around 1/30th of the diameter of a human hair. The small particles can be inhaled deeply into the lungs.

Smoke from bushfires and planned burning typically reaches peak levels quickly and dissipates relatively quickly as the fires go out. This is in contrast to the smoke from wood heaters which is at lower levels but persists when heaters are in continuous use in winter.

## How can the smoke affect my health?

How smoke affect 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.

Healthy adults generally find that the effects from short exposures to smoke will clear up quickly after the smoke goes away. Typical effects are irritation of the eyes, sore throat, runny nose and coughing.

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.

Pre-existing medical conditions such as asthma can get worse. It may take a day or two for these effects to occur.

## What should I do?

- If you have a pre-existing lung condition which is made worse by smoke, it is important that you take your medication according to your treatment plan. If you do not get better, seek medical advice.
- Minimise the amount of vigorous physical activity outdoors. Such activity leads to more rapid breathing and inhalation of more fine particles.
- Spend more time indoors with windows and doors closed.
- If you have an air conditioner in your home or car, turn it on and switch it to "recycle" or "recirculate".
- When indoors, avoid other sources of pollution as much as possible, including smoke from cigarettes, woodstoves, unflued gas appliances, or stirring up fine dust from sweeping or vacuuming.
- If your home gets too hot to be comfortable, or a lot of smoke from outside is getting in, consider going to a shopping centre, library or other community building that may have air conditioning, or staying with a friend.
- Disposable masks called P2 respirators, which are available from most hardware stores, will give some protection against fine particles. However, they must be worn correctly to be effective and may make it harder to breathe for some people. Use of such masks by the public in this way would not normally be necessary.

## Further Information:

- Listen to the local news on the radio for any specific warnings on smoke.
- For further information about health aspects of bushfire smoke, contact the Environmental Health Service of the Department of Health and Human Services on 1800 671 738.
- The Tasmanian forest industry maintains a web site which is updated daily on the status of planned burning operations.  
<http://www.plannedburnstas.com.au/#>
- The Tasmania Fire Service web site has a regularly updated summary of bushfire status.  
<http://www.fire.tas.gov.au/mysite/Show?pagelD=olHome>