Fact Sheet

Information on bushfire smoke and health

What is bushfire smoke?
Bushfire smoke consists of many chemical compounds that are produced during the burning of trees and other vegetation. It is considered similar in chemical composition to tobacco smoke and urban air pollution from incomplete combustion of fuel in motor vehicles. The chemicals in bushfire smoke are present as small particles and gases.

What causes the health effects of bushfire smoke?
The health risk comes from small particles and gases that can be inhaled deep into the lungs. These inhalable particles are 10 micrometres or less in diameter (PM10) and it is known that the finer particles, 2.5 micrometres or less (PM2.5), have the greatest potential to cause harm.

The best evidence about bushfire smoke is that it can adversely affect the respiratory and the cardiovascular systems. The more severe health effects can be explained by the actions of the respiratory immune system which is fighting the intruding smoke particles. The effects of bushfire smoke range from eye, nose and respiratory tract irritations to more serious effects, such as short-term decreases in lung function, exacerbations of asthma and chronic obstructive pulmonary disease (COPD) and heart problems.

What should we do about it?
The response of a person’s immune system to bushfire smoke can occur up to several days after the event and this means that people may feel pain or discomfort during this time. As bushfire smoke exposure is usually a short-term event it is unlikely that symptoms will persist. However it is important to seek medical advice if your symptoms continue or if you are concerned in any way.

It is particularly important that people with pre-existing illnesses such as asthma, chronic obstructive pulmonary disease, high blood pressure or heart disease monitor their health and seek and follow the advice of their doctor.

For further advice on bushfire smoke and specific advice for older people visit the SA Health website [www.sahealth.sa.gov.au](http://www.sahealth.sa.gov.au) and click on ‘Health related bushfire information’.

For more information

Emergency Management Unit
Systems Performance & Service Delivery
Department for Health and Ageing
Telephone: 08 8226 7115