

Expert: Bushfire smoke dangerous for those with undiagnosed asthma

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Credit: Tim Gouw from Pexels

As bushfire smoke continues to pollute the air of large parts of Australia's eastern states, some people have experienced throat irritation, coughing and breathing difficulties.

Health authorities [have also warned](#) more [severe symptoms](#) such as chest tightness and wheezing may emerge in people who have underlying asthma and in people who haven't yet been diagnosed.

Wheezing is a high-pitched whistling sound when you breathe, caused by muscle spasm or inflammation in narrowed airways.

Normal response to bushfire smoke

Respiratory symptoms can occur in otherwise healthy people in response to bushfire air pollution. This is due to large and small particulates in fire smoke irritating the the thin lining of the respiratory tract, called the mucous membrane.

These particles tend to cause increased secretions, inflammation and irritation of the eyes nose and throat, even in people who have no history of lung disease.

Why it's important to know your asthma profile

Asthma is an inflammatory disease which causes narrowing of the airways. Symptoms and flare-ups or attacks can occur after exposure to a wide range of triggers.

If the airway inflammation isn't treated, it can progress to more significant and permanent airway narrowing that results in persistent breathlessness and loss of lung function.

If you have asthma, it's most important to know the severity, how to control it, and how to identify and promptly treat an attack.

What might signal undiagnosed asthma?

People with asthma can experience severe attacks or flare-ups when exposed to bushfire smoke, or persistent [respiratory symptoms](#) that don't settle promptly after their smoke exposure ends.

Symptoms that suggest the possibility of asthma include chest tightness and wheezing in response to exposure to irritants such as smoke, dusts, aerosol sprays and fumes, or in response to allergic triggers such as pollens, cat and dog fur, house dust, and mouldy atmospheres.

Asthma can also manifest as a cough.

Many people with asthma have a history of hayfever, often provoked by pollens, house dust, cat and dog fur, and molds.

People with a [family history of asthma](#) are at greater risk of developing the disease, as are those with a history of [wheezing illness in childhood](#) caused by viral respiratory infections. In fact, viruses that cause the common cold are [frequent triggers](#) of asthma attacks.

Some people with asthma may experience symptoms predominantly when they exercise. In such cases, chest tightness and wheezing typically occurs while exercising but often intensifies over a few minutes after stopping.

What to do if you're unsure

If you experience symptoms of asthma from the bushfire smoke, see your GP.

To assess whether you have asthma, your doctor will undertake a breathing assessment called a spirometry test. This requires you to blow into a mouthpiece to assess how much air you can blow out and

how quickly you can expel the air.

The doctor will also determine whether there is airway narrowing which improves after taking a bronchodilator—a reliever medication such as Ventolin.

It's not OK to just take asthma medicines, gain some benefit and conclude you have the condition. Many respiratory symptoms can easily be mistaken for asthma, particularly when they occur in association with viral respiratory infection.

How is asthma treated?

Many people believe their asthma is being treated if they use their blue reliever inhaler as needed.

But relievers don't address the underlying airway inflammation, even though they relieve the symptoms. They should never be used as a daily medication for asthma.

Asthma treatment requires an anti-inflammatory medication, usually an inhaled corticosteroid taken regularly. These medications control the underlying inflammatory process and prevent symptoms and attacks.

Anti-inflammatory treatments are effective in maintaining asthma control day by day so that even with smoke and air pollution exposure, symptoms and attacks are less likely to occur.

People with asthma should have a written action plan which identifies symptoms that typically occur during asthma flare-ups and enables patients to increase their medications appropriately.

Finally, because [asthma](#) is a chronic inflammatory condition it requires

monitoring and regular review. In these reviews, your doctor will check your lung function and ensure you're taking the right medication and that your action plan is up to date.

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