
Air pollution and health

What is air pollution?

Air pollution occurs when the air contains substances that can affect or even cause harm to humans, animals or the wider environment. These substances – air pollutants – can be in the form of tiny particles, liquids or gas.

Some substances come from natural sources, while others are caused by human activities such as cars, fires, industry, agriculture and business.

Terms explained

Pollutant – a substance that has been introduced to the environment and has undesired or negative effects.

Health effects of air pollution

Air pollution can be harmful to our health, particularly for those people already at risk because of their age or existing health problems.

High concentrations of major air pollutants are linked with respiratory problems such as coughs, bronchitis and asthma.

Air pollutants

Air toxics

Air toxics are a range of air pollutants that are usually present in relatively low levels in the air around us. However, they do have characteristics that could make them a hazard to human, animal or plant health.

Sources of air toxics include:

- > motor vehicle emissions
- > the products of burning fuels, including woodsmoke
- > industrial emissions, such as gases produced by oil and coal refineries
- > materials such as paints and adhesives in new buildings.

Dust

[Environmental dust](#) is created by many sources and many different activities. It is a common air pollutant.

Man-made dust is prevalent in urban areas. It is produced by a range of activities from personal hobbies, such as gardening, to large scale industrial activities, such as electricity generation at power stations.

Bushfires

The effects of bushfires on people and the environment are wide ranging and can be catastrophic. Exposure to smoke from bushfires can:

- > worsen asthma and other respiratory conditions
- > cause coughing and shortness of breath
- > irritate the eyes, nose and throat.

Smoke from bushfires can also contaminate water sources, such as rainwater tanks.

Bushfires tend to be most common and most severe during summer and autumn.

Legionnaires' disease

[Legionnaires' disease](#) is a serious and potentially life threatening lung infection that is caused by breathing in the bacteria *Legionella*. The bacteria are found at low levels in both the natural and man-made environment.

Legionella infections are more common in the middle aged and older persons and those whose immune system is weak.

Wood smoke

Wood smoke – created from burning firewood and other materials – is a mix of chemicals and particles, which can have [negative health effects when breathed in](#).

Wood heaters, such as fireplaces and wood stoves, are a major source of air pollution, particularly during cold winter nights.

Some people, including children and the elderly, are more likely to develop health problems or experience aggravation of existing health problems from exposure to wood smoke.

Acknowledgements

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See also

- > [Legionnaires' disease](#)
- > [Minimising the risk of a Legionella infection at home](#)
- > [After a bushfire - hazards on your property](#)
- > [Carbon monoxide safety](#)