

Airborne dust and health effects

Community fact sheet

Dust is a common air pollutant, particularly in parts of the world with dry land. Periods of severe and widespread drought can increase the likelihood of airborne dust and major dust storms, particularly during the summer months.

Airborne dust reduces air quality and visibility, and may have adverse effects on health, particularly for people who already have breathing-related problems.

Dust and respiration

Dust particles vary in size from coarse (non-inhalable), to fine (inhalable), to very fine (respirable).

Coarse dust particles generally only reach as far as the inside of the nose, mouth or throat. Smaller or fine particles, however, can get much deeper into the sensitive regions of the respiratory tract and lungs. These smaller dust particles have a greater potential to cause serious harm to your health.

Commonly, particles in airborne dust tend to be coarse or non-respirable and do not pose a serious health threat to the general public. However, people with respiratory conditions, such as asthma and emphysema, may experience difficulties.

Exposure and health effects

The most common symptoms experienced during a dust storm are irritation to the eyes and upper airways.

People who may be most vulnerable are:

- infants and young children
- the elderly
- people with respiratory conditions, such as asthma, bronchitis and emphysema
- people with heart disease.

For these people, exposure to airborne dust may:

- trigger allergic reactions and asthma attacks
- cause serious breathing-related problems
- contribute to cardiovascular or heart disease

- contribute to reduced life span.

Prolonged exposure to airborne dust can lead to chronic breathing and lung problems, and possibly heart disease.

Health precautions

The following precautions can help you protect yourself and minimise the adverse effects of airborne dust:

- Avoid outdoor activity. Spend as little time outside as possible.
- Avoid vigorous exercise, especially if you have asthma or a breathing-related condition.
- Stay indoors, with windows and doors closed.
- Stay in air-conditioned premises if possible and ensure regular maintenance of air conditioner filters.

If you are an asthmatic or have a respiratory condition and you develop symptoms such as shortness of breath, coughing, wheezing or chest pain, follow your prescribed treatment plan.

If symptoms do not settle, seek medical advice.

Dust storms and safety

Visibility deteriorates very quickly during a dust storm. If you are on the road and poor visibility is impairing your ability to see ahead, drive slowly. Be prepared to pull off the road if visibility deteriorates to less than 100 metres.

If your car is air-conditioned, reduce the amount of dust entering your car by switching the air intake to 'recirculate'.

Airborne dust and water tanks

To minimise the amount of dust entering your rainwater tank install a first-flush diverter.

For further information regarding private drinking water supplies, contact the Department of Health and Human Services on 1300 761 874 or visit:

<http://www.health.vic.gov.au/water/privatedrinking/index.htm>

For further information

- If you or anyone in your family is experiencing symptoms that may be due to airborne dust, seek medical advice from your local doctor.
- For further information and advice, contact the Environmental Health section of your local council.
- For further information about air quality, contact the Environment Protection Authority Victoria on 1300 372 842 or visit: <http://www.epa.vic.gov.au/your-environment/air>

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