

Dust storms and health effects

Community fact sheet – December 2010

Dust storms are natural events and are common in parts of the world with dry land areas. Periods of severe and widespread drought can increase the likelihood of major dust storms, particularly during the summer months.

Dust storms reduce 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 dust storms tend to be coarse or non-respirable and do not pose a serious health threat to the general public. However, some people with pre-existing breathing-related problems, 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 a dust storm 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 a dust storm:

- avoid outdoor activity. If you must go outside, 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'.

Dust storms 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 Environmental Health Unit of the Department of Health on 1300 761 874 or visit:

<http://www.health.vic.gov.au/environment/water/tanks.htm>.

Further information

- If you or anyone in your family is experiencing symptoms that may be due to a dust storm, 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 (03) 9695 2722 or visit:
<http://www.epa.vic.gov.au/air/default.asp>.