

Fact Sheet

Dust and your health

Everyone is exposed to dust in some form or other. The human body has various defence mechanisms to deal with the dust we breathe in, but in some cases it can become overwhelmed if dust particles are small enough or in sufficient numbers. This fact sheet includes general advice about the dust in Port Augusta and a summary of health effects from dust.

What's in Port Augusta dust?

Dust in Port Augusta comes from a range of sources mostly from bare soil, including the ash dam. Analysis of dust that has come from the Flinders Power ash dam has shown it to be very similar to dusts from the desert. The levels of metals are low. However dust particles themselves are well known for their potential to cause respiratory and cardiovascular health problems. They can also irritate eyes, throat and skin.

The Environment Protection Authority (EPA) website has details on what is in the dust:

http://www.epa.sa.gov.au/business_and_industry/industry-updates/flinders-power-port-augusta

General advice

- > Stay indoors, and close windows and doors where possible
- > Avoid exposure to outdoor dust clouds
- > Seek medical advice if experiencing increased symptoms
- > Avoid prolonged or heavy exertion in areas of high dust pollution
- > Air conditioners are safe to use because of their filter systems
- > The dust in Port Augusta will not reduce the safety of rainwater collected from roof catchments
- > The dust will not reduce the safety of water in swimming pools and recreational pools are safe to use

Summary of health effects

Human health effects of dust relate mainly to the size of dust particles. Dust may contain microscopic solids or liquid droplets that are small enough to get deep into the lungs and cause serious health problems. Large particles may irritate the nose, throat and eyes. The particle size is a major determinant of how serious the health effect will be, especially for lung diseases and the effects on the heart.

Small particles less than 2.5 micrometres in aerodynamic diameter (called PM2.5) pose the greatest problem because they can get deep into the lungs and some may get into the bloodstream. The particles can come from industry such as foundries, and diesel engines. Those that are smaller than 10 micrometres in aerodynamic diameter (called PM10) can also cause serious health effects in susceptible individuals if the concentration is high enough. The EPA monitors these particles in the air as part of their air quality monitoring service.

Naturally occurring particles may also cause health issues. These include microorganisms, such as pollen, fungi and in certain circumstances bacteria and viruses (such as from wastewater or someone sneezing). Dust from soil can irritate the respiratory tract.



What do I do if I have symptoms from the dust

If you are having difficulty in breathing, seek medical attention - either from your local GP or the local emergency department.

People (adults and children) with asthma should follow their asthma plan and if prescribed a preventer, keep taking it according to their doctor's instructions.

People with Chronic Obstructive Pulmonary Disease (COPD - emphysema and/or chronic bronchitis) or other chronic lung condition should follow their action plan and continue their regular medications.

If dust is causing itchy eyes, nose and skin - wash well with water and if symptoms persist seek medical attention.

Health effects from various dusts can include:

- > Irritation of the airways, coughing, wheezing and difficulty breathing
- > Reduced lung function
- > Aggravate asthma, COPD and other chronic lung conditions: wheezing, coughing, shortness of breath and increased frequency and severity of attacks
- > Rarely, particles may also increase the risk of heart attacks and stroke in susceptible people.

For more information

**Scientific Services Branch
Public Health Services
11 Hindmarsh Square
Adelaide 5000
Telephone: 82267100
www.sahealth.sa.gov.au**

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