



# Sulfur dioxide

## What does the National Pollutant Inventory do?

Pollution in Australia comes from many different sources. Some is a result of industrial activity but there are also sources of pollution that are not industrial, like cars, woodheaters and even lawn mowers.

The National Pollutant Inventory (NPI) is tracking pollution right across Australia by collecting data about 93 different toxic substances emitted into the environment. The NPI can show you the source and location of these emissions.

The substances that are studied were chosen because of the problems they can potentially cause for our health and the health of the environment.

Sulfur dioxide is one of the substances that the NPI tracks across Australia. Here are some fascinating facts about sulfur dioxide and some hints on how you can help minimise any harmful effects of sulfur dioxide on our health and on the environment.

Sulfur dioxide can be dangerous and poisonous, and research has shown that it can be harmful to people, other animals, and the environment. However, it is found naturally in the environment and we use it in a wide variety of ways - from preserving yummy fresh fruit to cleaning our toilets with bleach!

## Where does sulfur dioxide come from?

### What about industry?

Industries that carry out activities such as wood pulping, paper manufacturing, petroleum and metal refining and metal smelting (*especially of ores containing sulfides, such as lead, silver and zinc*) all emit sulfur dioxide into the air. Fossil fuel combustion (*such as in coal-burning power plants*) also emits sulfur dioxide.

### What about the natural environment?

Sulfur dioxide can occur naturally in the environment through geothermal activity (*energy from the heat of the earth*) such as hot springs and volcanoes. Sulfur dioxide is also produced when vegetation on land, in wetlands and in oceans decays (*breaks down*).

### What about transport?

Sulfur dioxide may be present in the exhaust emitted into the atmosphere by cars, buses and trucks.

Wouldn't it be great if everyone walked or rode bicycles to get around? Just imagine how much less sulfur dioxide there would be in our atmosphere!

### What about in the products we buy?

Common products containing sulfur dioxide include foods, such as dried fruit that have been preserved, food preservatives, wine, bleach, disinfectant and fumigants (*used to control pests*).



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## What are some of the other sources?

Industries such as textile bleaching, wineries, and fumigation (*e.g. fruit growers and farmers spraying their crops to keep insects away*) are also sources of sulfur dioxide.

## What effect does sulfur dioxide have on the environment?

Sulfur dioxide can have serious effects on our environment. It is absorbed by soils and plants, affecting our land and water ecosystems, and it can even be captured within and below clouds, which increases the chance of acid rain.

Even small amounts of sulfur dioxide can harm plants and trees and slow down their growth, so farmers have fewer crops to harvest.

## How might people be exposed to sulfur dioxide?

People living in cities are exposed to low levels of sulfur dioxide every day. You can be exposed to sulfur dioxide in the following ways:

- breathing polluted air.
- living in or near industrial areas.
- living in cities, near freeways and busy roads.
- eating preserved foods and drinking wine.
- working in workplaces where sulfur dioxide is used or produced, such as wineries, smelters and coal-burning power plants.

## Who is taking action?

There are all sorts of things that we can do at home, school, and in our local community to help minimise the harmful effects of pollution on our environment.

Why not investigate ways in which you can take action every day to reduce the problems that polluting substances can cause people, animals and the environment?

Visit: [www.npi.gov.au/about/reduce.html](http://www.npi.gov.au/about/reduce.html)

## Where can I find out more about NPI substances?

For more information about sulfur dioxide see Australia's sulfur dioxide emission report on the main NPI web site.

You will also find detailed information about the remaining 92 substances that the NPI tracks across Australia in the fact sheets on the main NPI web site.



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