



Formaldehyde

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 on 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 and reported on were chosen because of the problems they can potentially cause for our health and the health of the environment.

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

You may not have heard of formaldehyde before, but it is used in a wide variety of products, everything from building materials to cosmetics! Isn't that interesting?

Where does formaldehyde come from?

What about industry?

Generating electricity and manufacturing wood products such as particleboard are the largest industrial sources of formaldehyde in Australia. Other sources of formaldehyde emissions may come from mining; making paper; agriculture; forensic, hospital and pathology laboratories; film processing and making cosmetics and personal care products that we use every day.

Heating machinery used in manufacturing, such as boilers, furnaces and engines can also generate formaldehyde.

What about the natural environment?

Formaldehyde is mainly emitted by industrial sources but it can occur naturally in the environment. Formaldehyde may be released in the smoke of forest fires and can also be found in animal waste and sea water.

What about transport?

Formaldehyde can be found in the exhaust emitted into the atmosphere by cars, buses and trucks.

What about in the products we buy?

There are many common products we buy that contain formaldehyde. These include glues, fibreboard, particle board, furniture, textiles and some insulation (*used in our houses to control their temperature*). It can also be found in pressed wood, clothing, sheets and towels, curtains, wallpaper, paint, grocery bags and waxed paper. Detergents, cosmetics, shampoos, hair conditioners, bubble bath, cigarettes, cigars and other tobacco products also contain formaldehyde. That is quite a list isn't it?!



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What are some of the other sources?

We even emit formaldehyde from our own homes! This can be done by using fuel burners and burning wood in open fireplaces. This is the biggest source of formaldehyde emissions in Australia. But even the carpet on our floors and the materials our furniture is made from can be a potential source of formaldehyde. The level of formaldehyde indoors can build up due to poor ventilation, so make sure you always have lots of fresh air

coming into your house. Indoor plants can also help reduce the level of formaldehyde inside because they help to filter the air. Do you have indoor plants in your house?

What effect does formaldehyde have on the environment?

In the atmosphere, formaldehyde usually breaks down quickly to create formic acid and carbon monoxide (*which can also be harmful substances*).

When animals are exposed to formaldehyde it can make them sick, affect their ability to breed, and reduce their life spans. It can also change their behaviour and appearance. Formaldehyde is highly toxic to aquatic life (*the fish, shellfish and other creatures in our rivers, lakes and oceans*).

How might people be exposed to formaldehyde?

People can be exposed to formaldehyde in the following ways:

- breathing in fumes from smog, cigarettes and other tobacco products, gas cookers and open fireplaces.
- eating food and drinking water containing formaldehyde.
- living or working in poorly ventilated areas that contain formaldehyde.
- applying cosmetics that contain formaldehyde to their skin.
- working in a job where formaldehyde is produced or used, such as in the timber industry or a funeral home.

Who is taking action?

There are all sorts of things 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

Where can I find out more about NPI substances?

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

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



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