

health

Carbon monoxide – Hazelwood open cut mine fire

Community information February 2014

This information has been developed by the Department of Health in response to community questions and concerns about the presence of carbon monoxide in the smoke from the Hazelwood open cut mine fire.

Fires are currently affecting two of the three coal mines associated with the Hazelwood power station and the Yallourn power station.

Local air quality in the Latrobe Valley region is currently being impacted by smoke, which contains carbon monoxide from the burning brown coal.

What is carbon monoxide?

Carbon monoxide is a colourless and odourless gas. It is found in smoke and is formed from the incomplete combustion of fuels such as wood, coal, charcoal, natural gas, petrol, kerosene, oil, or propane.

What are the levels of carbon monoxide in smoke from the coal mine fires?

Carbon monoxide levels are a concern for fire fighters working on the fires inside the brown coal open cut pit.

Carbon monoxide levels in the Morwell Township and around the perimeter of the mine are being monitored. To date, levels of carbon monoxide in air are not a health concern for the general community. This includes people living, working in or visiting the local area.

Carbon monoxide monitoring will continue to ensure that community health is protected until these fires are out.

Are there other sources of carbon monoxide in the Latrobe Valley region?

Carbon monoxide is found in exhaust fumes from cars, petrol and gas engines, gas ovens and cooktops, generators, lanterns, BBQ's and gas and wood heaters.

Carbon monoxide from some of these sources can build up in enclosed or semi-enclosed spaces. For example, gas heating appliances that are not working properly or are used incorrectly may produce dangerous levels of carbon monoxide.

At an individual level, cigarette smoke contains carbon monoxide therefore regular smokers are expected to have higher levels of carbon monoxide in their body than non-smokers.

What are the health effects of carbon monoxide exposure?

When breathed in, carbon monoxide displaces oxygen in the blood and deprives the heart, brain and other vital organs of oxygen.

Carbon monoxide may cause "flu-like" symptoms such as headache and tiredness, progressing to dizziness, confusion, nausea or fainting.

Very high amounts of carbon monoxide in the body may result in oxygen deprivation, leading to loss of consciousness or death.

Could carbon monoxide exposure affect someone's future health?

The effects of carbon monoxide exposure are reversible in most cases. However, significant oxygen deprivation may cause tissue damage in organs which require high levels of oxygen such as the brain or the heart. The unborn child is also susceptible to oxygen deprivation from high maternal carbon monoxide exposure.

Who is most at risk?

Whether someone develops health effects from exposure to carbon monoxide depends on a number of factors including:

- the levels of carbon monoxide in the environment (from smoke and also other environmental sources);
- how long a person is exposed;
- a person's individual susceptibility, for example, having an existing heart or lung condition; having anaemia; being young, elderly or pregnant (the unborn child);
- the level of exercise or physical activity, which increases the amount of air breathed into the lungs (ie breathing rate); and
- other lifestyle factors such as being a smoker.

Are current levels of carbon monoxide in the Latrobe Valley region likely to cause health effects in the general community?

Current levels of carbon monoxide in the air have not reached a level of health risk for the community, including vulnerable or sensitive people.

Carbon monoxide monitoring will continue to ensure that community health is protected until these fires are out.

What about other emissions from these fires?

The effects of fine particles associated with smoke exposure are the main health concern for the general community.

Further information about smoke and your health from the current brown coal mine fires is contained in the community information sheet, titled 'Smoke and your health – Information for the Latrobe Valley'.

I am still concerned about the health of my family. What should I do?

It is not necessary for the general community to be tested for carbon monoxide in the body. However if you are feeling unwell seek medical advice.

Further information

Other community information sheets relating to the Hazelwood open cut mine fire available online: <http://www.health.vic.gov.au/chiefhealthofficer/>

Smoke – Your health and safety

- Listen to your local radio station for updates
- Visit the Country Fire Authority Victoria website at: www.cfa.vic.gov.au/
- Call the Victorian Bushfire Information Line on 1800 240 667. TTY users should use the National Relay Service (phone 1800 555 677) then ask for 1800 240 667
- If you or anyone in your family is experiencing symptoms that may be due to smoke exposure, seek medical advice or call NURSEON-CALL on 1300 60 60 24.
- Anyone experiencing difficulty breathing or chest pain should seek urgent medical assistance phone 000.

EPA Victoria – For information on the impacts of the smoke on local air quality call EPA Victoria on 1300 372 842 (24 hours) or go to the EPA webpage at: www.epa.vic.gov.au

Department of Health – For more information on the health effects of smoke call 1300 761 874 (during business hours) or go to: www.health.vic.gov.au/environment/bushfires.htm

Asthma Foundation of Victoria – For information about asthma call 1800 278 462 or go to: www.asthma.org.au

Vic Emergency – For more information on fires across Victoria go to: www.emergency.vic.gov.au

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