



IIM Newsletter January 2020

AIR QUALITY INFORMATION



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AIR QUALITY INFORMATION MANAGEMENT

Local air quality affects your health, how you live and breathe. Similar to the weather, it can change hour to hour. Recently, most of Australians experienced a significant decline in the air quality, resulting from the massive bushfires that are burning across Australia. This means that the air we breathe and potential health effects of the air pollution we face is likely to be part of our lives for some time. This article provides some fundamental information about how air quality is measured, assisting you to make informed decisions and help you understand the potential impact, appropriately act and protect your health and health of people around you.

National Exposure Information System

The National Exposure Information System (NEXIS) is a Geoscience Australia capability designed to provide comprehensive and nationally consistent exposure information to enable Australians to understand the elements at risk.

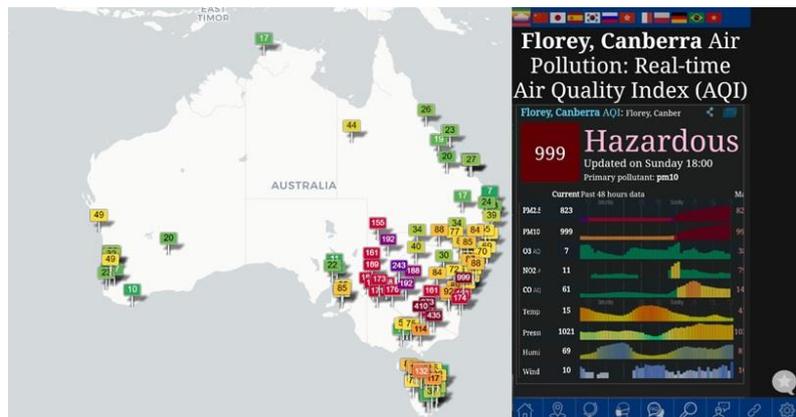
<https://www.ga.gov.au/scientific-topics/community-safety/risk-and-impact/nexis>

About the Bushfire Smoke Effects

The NSW Health provides a comprehensive overview of health risks associated with the air pollution and offers advice how to protect your health in smoky conditions caused by bushfires:

<https://www.health.nsw.gov.au/environment/air/Pages/bushfire-smoke.aspx>

Smoke and Air Quality Information



Monitoring air pollution (<https://aqicn.org/city/australia>)

The Bureau of Meteorology works closely with state and territory fire agencies to support their operations and keep Australians safe, including the acquisition of information from the state and territory health and environment agencies, which are responsible for monitoring bushfire smoke and warning the community when the air quality exceeds safe levels:

<http://www.bom.gov.au/catalogue/warnings/air-pollution.shtml>

Information About the Air Quality

Due to the bushfire crisis in Australia, our capital topped as the city with the worst air quality in the world. Air quality index readings above 200 are considered hazardous. According to The Canberra Times, on the very first day of this decade, readings at one of the Canberra monitoring sites peaked at 5,185 - more than 25 times above hazardous levels. (<https://www.canberratimes.com.au/story/6573121/air-quality-data-shows-scale-of-crisis/>).



Air in Canberra on the first day of this year (<https://www.abc.net.au/news>)

To check the most up-to-date air quality reading from the closest monitoring site, visit:

<http://aqicn.org/map/australia/>

Air Quality Index Scale Explained

A commonly used measure of air quality (pollution) is based on the Air Quality Index(AQI) Scale, defined by the United States Environmental Protection Agency (EPA) 2016 standard. To get a basic understanding of how the Air Quality Index works, visit:

<https://airnow.gov/index.cfm?action=aqibasics.aqi>

Air Quality Index	Who Needs to be Concerned?	What Should I Do?
Good 0-50	It's a great day to be active outside.	
Moderate 51-100	Some people who may be unusually sensitive to particle pollution.	Unusually sensitive people: Consider reducing prolonged or heavy exertion. Watch for symptoms such as coughing or shortness of breath. These are signs to take it easier. Everyone else: It's a good day to be active outside.
Unhealthy for Sensitive Groups 101-150	Sensitive groups include people with heart or lung disease, older adults, children and teenagers.	Sensitive groups: Reduce prolonged or heavy exertion. It's OK to be active outside, but take more breaks and do less intense activities. Watch for symptoms such as coughing or shortness of breath. People with asthma should follow their asthma action plans and keep quick relief medicine handy. If you have heart disease: Symptoms such as palpitations, shortness of breath, or unusual fatigue may indicate a serious problem. If you have any of these, contact your health care provider.
Unhealthy 151 to 200	Everyone	Sensitive groups: Avoid prolonged or heavy exertion. Move activities indoors or reschedule to a time when the air quality is better. Everyone else: Reduce prolonged or heavy exertion. Take more breaks during all outdoor activities.
Very Unhealthy 201-300	Everyone	Sensitive groups: Avoid all physical activity outdoors. Move activities indoors or reschedule to a time when air quality is better. Everyone else: Avoid prolonged or heavy exertion. Consider moving activities indoors or rescheduling to a time when air quality is better.
Hazardous 301-500	Everyone	Everyone: Avoid all physical activity outdoors. Sensitive groups: Remain indoors and keep activity levels low. Follow tips for keeping particle levels low indoors.

Air Pollution and your health (<https://www.epa.gov/>)

The following website provides detailed explanation of the Air Quality Index Scale, pollution levels and their potential health implications:

<https://aqicn.org/faq/>

More information about the US EPA 2016 standards (the National Ambient Air Quality Standards for Particle Pollution in the United States) can be found at the following web location:

https://www.epa.gov/sites/production/files/2016-04/documents/2012_aqi_factsheet.pdf

Common Air Pollutants and Health Effects

The following information resource prepared and maintained by the NSW Health provides a brief description of the most common air pollutants, possible health effects from inhaling them and how to limit or avoid exposure:

<https://www.health.nsw.gov.au/environment/air/Pages/common-air-pollutants.aspx>