

Air pollution linked to 3,200 Australian deaths a year: One of many reasons Australia demands urgent national action

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Australia is holding its collective breath ahead of a bushfire season that may bring a return of the smoke linked to 400 deaths and 4,500



hospitalizations and emergency department visits during the 2019–20 Black Summer fires.

Air pollution is the world's single greatest environmental cause of <u>preventable disease and premature death</u>. In Australia, it's linked to <u>more than 3,200 deaths</u> a year at an estimated cost of <u>A\$6.2 billion</u>.

These impacts are increasing due to <u>climate change</u> and an aging population, among other factors. Scientists at the <u>Center for Safe Air</u> (an NHMRC Center for Research Excellence) have launched <u>a report</u> today on the many benefits of safer air for Australians, to mark the United Nations' <u>International Day of Clean Air</u>.

The report summarizes the extensive evidence on the health impacts of <u>air pollution</u> for Australians. This pollution consists of both airborne particles (also called <u>particulate matter</u>) and gases such as carbon monoxide, <u>nitrogen dioxide</u> and sulfur dioxide. The report also explains why coordinated national leadership is needed to make our air safer.

Why invest in clean air?

Here are ten reasons Australia should invest in safer air.

1. Air pollution increases non-communicable diseases

Heart disease, stroke, dementia, type 2 diabetes, lung diseases and cancer are all leading causes of illness and death for Australians. Air pollution increases the risk of all these conditions in the community.

2. Air pollution makes communicable diseases worse

Air pollution increases the risk of <u>respiratory infections</u> such as



influenza and COVID-19, and may increase their severity.

3. Air quality affects our health throughout life

Air pollution can affect the growth, development and overall <u>health of unborn babies</u>. Later in life it adds to the risk of developing non-communicable diseases.

4. It adds to health inequities

Action on air pollution represents a powerful opportunity to reduce health inequities in Australia. Some of the most vulnerable people in our society are at higher risk of worse health outcomes from air pollution exposure. They include older adults, pregnant people and unborn babies, children, people with pre-existing chronic conditions, socially disadvantaged populations and Aboriginal and Torres Strait Islander people. Lessening air pollution reduces inequity.

5. Climate change and pollution make each other worse

Climate change is leading to <u>more frequent and severe bushfires</u>. In turn, severe bushfires are <u>influencing the global climate</u> and weather systems. Reducing air pollution is vital for mitigating climate change because they share common drivers such as fuel combustion.

6. Clean-air policies have many co-benefits

Policies to reduce air pollution from burning fossil fuels have many health, environmental and social benefits. Measures range from decarbonizing our energy and transport systems, greening our cities and improving urban and housing design to bushfire prevention strategies. Reducing air pollution improves social, environmental and economic



well-being.

7. The impacts are increasing

Population growth and aging, urbanization and increasing transport and energy demands add to the risks for air quality, climate change and population health. This is why timely interventions are needed.

8. Economic costs are high and underestimated

Australian estimates to date have placed annual mortality costs of fine particulate matter (PM2.5) air pollution at A\$6.2 billion. However, existing economic analyses of air pollution largely fail to account for the costs of other air pollutants, such as nitrogen dioxide from vehicle traffic, and non-health costs like labor, productivity, welfare and other societal impacts.

9. Return on investment is high

Every dollar spent generates returns in the forms of lower health costs, healthier people and longer lives. Soon-to-be-published research at the Center for Safe Air has found reducing the average population exposure to fine airborne particles (PM2.5) by a modest and highly achievable 5% could save more than 360 lives and A\$1.6 billion a year.

10. Small improvements produce large gains

The rate of increase of many air-pollution-related health outcomes is steeper at lower concentrations, <u>tapering off</u> at higher levels of pollution. For Australia, this means any small improvements, even to levels below current national air quality standards, will deliver measurable health and economic benefits.



All of us have a right to clean air

Air pollution and its <u>adverse health effects</u> are linked to how we generate energy, how we heat our homes, our <u>transport systems</u> and our climate. No single policy will adequately tackle the problem of air pollution. Therefore, effective policy measures and regulation must take into account the diverse sources, settings and populations that are more at risk from air pollution.

Currently, responsibility for air pollution policy falls between the health and environment portfolios. Policies are often needed in the environment, planning and transport sectors where health expertise and input are limited, whereas air pollution impacts and public health responses reside in the health sector.

Safe air is a shared resource and a fundamental human right. Air pollution affects everyone—co-ordinated national leadership on safe air will benefit all Australians.

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