Global environmental health and air pollution

The World Health Organization (WHO) recognises ambient (outdoor) air quality as a major environmental risk to health. Worldwide, an estimated 3.7 million premature deaths (under age 60) were found to be attributable to ambient air pollution in 2012.[1]

Household (indoor) air pollution is also an important global environmental health risk for an estimated 3 billion people worldwide, especially those in low and middle income countries where biomass fuels and coal are commonly burned for cooking and heating.[2] Worldwide, an estimated 4.3 million deaths in 2012 were attributable to household air pollution.[3]

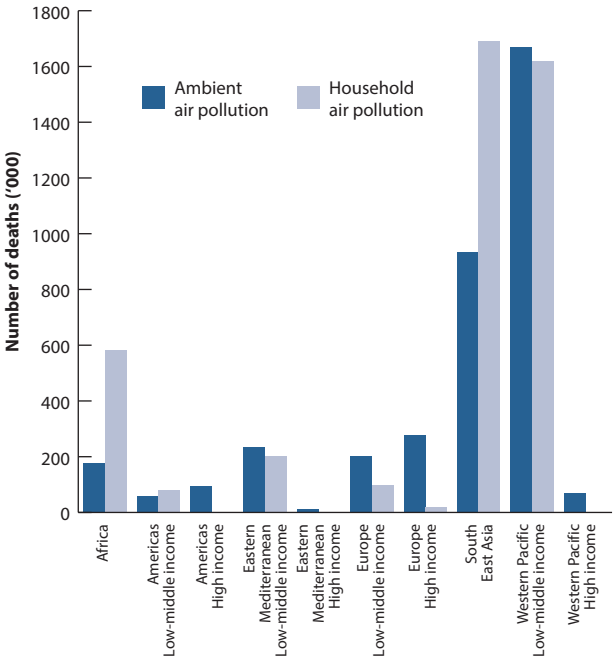

Figure 1. Global deaths attributable to ambient and household air pollution in 2012, by region[1,3]

The combined effects of ambient and household air pollution resulted in an estimated 7 million deaths globally among children and adults in 2012, due to respiratory and cardiovascular disease.[4] This figure is not a direct addition of estimated deaths from ambient and household air pollution—see source 5.

The most affected regions are South East Asia and the low and middle income countries in the Western Pacific. However, air pollution affects people in developed and developing countries alike. In Australia, the focus is primarily on reducing ambient air pollution.

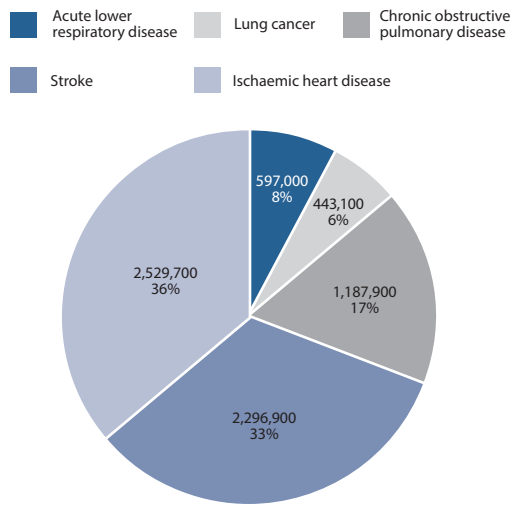

Figure 2. Global deaths attributable to the combined effects of ambient and household air pollution in 2012, by disease[4]

Photo: Clouds over suburban area (Leanne Chow)

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Key actions underway to ensure a clean air future for Australia

National Clean Air Agreement

Australia's Environment ministers are developing a National Clean Air Agreement to chart a course to a clean air future. The Agreement is expected to be finalised by the end of 2015.

The Australian Government is working with states and territories to finalise existing work streams as initial actions under the Agreement:

- strengthened reporting standards for particles in the National Environment Protection (Ambient Air Quality) Measure
- a national approach to minimise emissions from non-road spark ignition engines and equipment—such engines cover a wide range of petrol powered equipment (marine outboard engines and gardening equipment) and can be a significant source of air pollution in some urban air sheds
- specific actions to reduce emissions from wood heaters which can be significant contributors to air pollution, particularly in the cooler months.

Further information can be found via: www.environment.gov.au/national-clean-air-agreement

National Environmental Science Programme

The Australian Government is supporting practical and applied environmental research under the National Environmental Science Programme, including $8.8 million in funding for the Clean Air and Urban Landscapes Hub. This Hub will focus on increasing our understanding of the environmental and social impacts of air pollution in urban and peri-urban areas.

Further information can be found via: www.environment.gov.au/science/nesp

Fuel Quality

The *Fuel Quality Standards Act 2000* provides a legislative framework for regulating the quality of fuel supplied in Australia, to reduce emissions that may cause environment and health problems. The legislation places an obligation on the fuel industry and fuel suppliers to supply fuel that meets strict environmental requirements and reduces the amount of toxic pollutants in vehicle emissions.

The Australian Government has commenced a review of the Act to assess options to determine the most effective, efficient and appropriate means to improve air quality, through improved fuel quality.

Further information can be found via: www.environment.gov.au/protection/fuel-quality/legislation/review-2015

Source:

1 WHO (2014) Burden of disease from ambient air pollution for 2012. Summary of results. Available at: www.who.int/phe/health_topics/outdoorair/databases/AAP_BoD_results_March2014.pdf

2 WHO (2014) Household air pollution and health. Fact sheet No 292. Available at: http://www.who.int/mediacentre/factsheets/fs292/en/

3 WHO (2014) Burden of disease from household air pollution for 2012. Summary of results. Available at: http://www.who.int/phe/health_topics/outdoorair/databases/HAP_BoD_results_March2014.pdf

4 WHO (2014) Burden of disease from the joint effects of household and ambient air pollution for 2012. Summary of results. Available at: www.who.int/phe/health_topics/outdoorair/databases/AP_jointeffect_BoD_results_March2014.pdf

5 This figure is indicative only and is not a direct addition of the total deaths attributable to ambient and household air pollution due to limitations in assigning sources to individual exposures—see source 4 for further information.