

HEALTH EFFECTS OF AIR POLLUTION

We come into contact with many kinds of air pollutants every day. They are being released in our neighbourhoods, our backyards, inside our homes, and are finding their way into our lungs. Outdoor pollutants seep into houses, even through closed doors and windows. Air pollution can also cover large areas, as with smoke from a forest fire, or ground-level ozone in mountain valleys. Air pollution can be dangerous even when you can't see or smell it, such as carbon monoxide.

Outdoor air pollution now takes a greater toll on human life in BC than HIV/AIDS, and is the world's leading cause of preventable deaths. Health effects from air pollution can last for a short while (e.g., coughing) or become chronic (e.g., heart and lung disease). Health problems increase when we are exposed to air pollution for a long time (exposure), and when we breathe in a lot of it (concentration). In 2013, the World Health Organization declared that outdoor air pollution is carcinogenic to humans based on a thorough review of studies conducted over decades.

An August 2008 study on air pollution by the Canadian Medical Association (CMA), entitled *No Breathing Room: National Illness Costs of Pollution*, said that in 2008 alone, up to 21,000 Canadians would die from air pollution — specifically, from ground-level ozone and particulate matter.

Most deaths would be the result of long-term exposure to air pollution. However, almost 3,000 would be the result of acute, short-term exposure.

With respect to British Columbia, the CMA report says that, in 2008, air pollution would cause:

306 acute premature deaths;

1,158 hospital admissions;

8,763 emergency department visits;

2,526,900 minor illnesses; and

62,112 doctor's office visits.



Environment Canada estimated that in 2006, a 10% reduction in PM_{2.5} and Ozone emissions would quantifiable economic benefits to the Central Okanagan economy of \$16.6 million and \$1.8 million respectively. These benefits were calculated based on decreased rates of mortality and morbidity (respiratory hospital emissions, emergency room visits, child bronchitis, etc.)

Even areas that meet the national standard of “good” air quality may not be good enough. Scientists have found that low levels of particulate matter in the air can heighten the risk of lung and heart disease. As our population grows, more people will mean more motor vehicles and emissions, and increased pollution from other human activities.

SOURCES

<http://www.bcairquality.ca/health/index.html>

The Regional District of the Central Okanagan, the District of Peachland, the City of Kelowna, the District of Lake Country, West Bank First Nation, and the District of West Kelowna are working in partnership to develop a 2014 Clean Air Strategy with the vision of **clean and healthy air for current and future generations**. This work builds on the existing regional air quality program and will help to protect and improve our region's air through government policy and actions, community education and awareness initiatives, and pollution prevention programs.

