

European urbanites breathing highly polluted air: report

November 19 2014



Credit: Alfred Palmer/Wikipedia

As many as nine in 10 European city dwellers breathe air high in pollutants, blamed for 400,000 premature deaths every year, the European Environment Agency (EEA) said Wednesday.

Air pollution remains the top environmental cause of [premature death](#) in urban Europe, according to an analysis of data from almost 400 cities.

"European citizens often breathe air that does not meet European standards," said the agency's annual report.

"Almost all [city dwellers](#) are exposed to pollutants at levels deemed unsafe by the World Health Organisation (WHO)," added a statement—more than 95 percent are exposed to unsafe levels of some types.

Heart disease and stroke are the most common causes (80 percent) of death due to air pollution, followed by lung diseases and cancer.

"The effect of air pollution on health has considerable economic impacts, cutting lives short, increasing medical costs and reducing productivity through working days lost across the economy," said the report.

It cited WHO and European Commission statistics attributing more than 400,000 premature deaths to ambient air pollution every year.

Based on 2011 concentrations and population data, this translated to an estimated 458,000 deaths in 40 countries in Europe, or 430,000 in the 28 EU member states.

Last year, the EC estimated the damage costs of air pollution's health impacts in 2010 at 330-940 billion euros (\$413 billion to \$1.2 trillion), it added.

"Direct economic damage includes 15 billion euros from workdays lost, and four billion euros in healthcare costs.

The most dangerous pollutant was fine [particulate matter](#) (PM)—microscopic specks of dust and soot caused mainly by burning fossil fuels.

PM10, particulate matter measuring less than 10 microns, or 10 millionths of a metre, can lodge in the airways, causing respiratory problems.

More perilous still are smaller PM2.5 particles which can enter the lungs and even the bloodstream.

The report said 10-14 percent of city dwellers in the EU were exposed to PM2.5 levels above the EU target.

This increases to 91-93 percent if stricter, but non-binding, WHO guidelines are used.

The report said particulate matter and ozone had declined slightly over the last decade, though levels of nitrogen dioxide, mainly from car emissions, did not fall as fast as expected.

A hydrocarbon called benzo(a)pyrene (BaP) was the fastest growing pollutant—increasing by more than a fifth between 2003 and 2012 as use of woodstoves and biomass heating in cities increased.

"In 2012, almost nine out of ten city dwellers were exposed to BaP above WHO reference levels," said the EEA.

Last year, the WHO said outdoor air pollution was a leading cause of cancer.

Globally, it causes some 1.3 million deaths in cities every year. Nearly a quarter of a million of these deaths are caused by lung cancer.

According to the WHO, Iran, India, Indonesia and China are among the countries hardest hit by [air pollution](#). In one alert in Beijing last year, PM2.5 [levels](#) reached as high as 40 times WHO recommended limits.

© 2014 AFP

Citation: European urbanites breathing highly polluted air: report (2014, November 19) retrieved 17 July 2024 from <https://phys.org/news/2014-11-european-urbanites-highly-polluted-air.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.