

Facts on air pollution, cancer and health

Reducing air pollution will prevent millions of cancer-related deaths

Implementing measures such as fostering the transition to renewable energy, promoting public transportation, bicycling and walking, increasing green spaces, and strengthening pollution control policies can significantly reduce air pollution. Not only do these actions directly lower cancer and disease risk by reducing exposure to harmful pollutants, but they also indirectly promote better health by creating environments conducive to physical activity.

Sources and prevalence of air pollution ([WHO/IARC](#))

- Air pollution [is a mix of tiny solid and liquid particles](#) that penetrate deep into the lungs and even enter the bloodstream.
- Particulate matter that constitutes air pollution includes dirt, dust, soot and smoke. This comes from a variety of sources: coal- and natural gas-fired plants, cars, agriculture, wildfires, wood-burning stoves, unpaved roads and construction sites.
- [Agriculture is a significant source of air pollution](#) due to the contamination it releases into the environment as a by-product of growing and raising livestock, food crops, animal feed and biofuel crops
- Not a single one of the world's 100 biggest cities meets WHO air pollution guidelines. 99% of the world's population is exposed to air pollution.
- In addition to outdoor air pollution, indoor air pollution can also harm health. Sources of indoor air pollutants include domestic appliances, cleaning and personal care products, building materials, household consumer products and tobacco smoke.

Impacts: Health

- Short-term exposure to elevated levels of air pollution [can affect](#) lung function, exacerbate asthma, increase respiratory and cardiovascular hospital admissions, and even death.
- Long-term exposure to air pollution [can cause chronic conditions](#) such as cardiovascular and respiratory diseases, strokes and hardening of the arteries, as well as lung cancer.
- Air pollution can [cause changes in airway cells that can trigger lung cancer](#).
- These mutations are seen [in about half of people with lung cancer](#) who have never smoked.
- Air pollution causes as many as [29% of all lung cancer deaths, 43% of chronic obstructive pulmonary disease and 24% of stroke deaths](#).
- [In 2020](#), there are an estimated 1.8 million deaths due to lung cancer and 2.2 million new lung cancer cases.

- Overall, air pollution is estimated to contributed to [6.7 million deaths per year](#).

Actions to reduce air pollution ([WHO](#))

- Strengthen pollution control policies
- Fostering the transition to renewable energy and clean household energy solutions
- Promote public transportation, bicycling and walking,
- Increase green spaces
- Implement waste management strategies