

AMBIENT AIR POLLUTION



Air pollution is mainly caused by combustion of fuels and wastes, industrial activities, and also natural dusts. It consists of fine particles and harmful gases. Ambient air pollution is currently the greatest environmental risk to health, causing mainly cardiovascular and respiratory diseases. It is widespread and affects almost all countries. Many solutions exist to reduce air pollution, including cleaner energy, transport, and agriculture options. Individuals can also contribute by using less motorized transport and consuming less energy.

People walk on
pedestrian street in
heavy smog.

KEY RISKS TO HEALTH



Poor air quality

Vehicle exhaust, industrial emissions and power production, smoke from cooking and heating with unclean technologies and fuels, agricultural practices, waste burning and wildfires all contribute to poor air quality.

4.2 M

Around 4.2 million deaths occur each year as a consequence of ambient air pollution, mainly from noncommunicable diseases.

90%

Over 90% of people live in places where the air is unhealthy to breathe.

OF THE 4.2 MILLION DEATHS (2016):



38%

were due to heart disease
(1 598 000 deaths)



20%

were due to stroke
(832 000 deaths)



43%

were due to chronic obstructive pulmonary disease (18%; 780 000 deaths), pneumonia (18%; 772 000 deaths) and lung cancer (6%; 264 000 deaths)



WHAT ARE KEY ACTIONS FOR IMPROVEMENT?

Key actions to counteract air pollution depend on local conditions, and include the following:

1.

Energy

Conserve energy, use energy-efficient solutions and transition away from fossil fuel combustion for energy production.

2.

Regulate emissions

Regulate emissions of industry and power generation (for example brick kilns, coal-fired power plants).

3.

Transport options

Develop healthy and efficient transport options, such as rapid transit combined with walking and cycling.

4.

Pedestrian and cycling infrastructure

Provide transport network space for pedestrian and cycling infrastructure.

5.

Land use

Improve land use systems and promote walking and cycling, leading to reduced travel times, and move polluting sources away from people.

6.

Agricultural waste incineration

Reduce agricultural waste incineration, forest fires and certain agroforestry activities (for example charcoal production).

7.

Clean energy

Select clean energy options while considering health impacts and their financial implications.

MAIN WHO ACTIONS

WHO actions on air pollution include the following:

Road map

Promote implementation of the road map for an enhanced global response to the adverse health effects of air pollution, including through strengthening the health sector's role with knowledge and tools, and advocating health-wise solutions in different sectors.

Cities

Work with cities through the [Urban Health Initiative](#).

SDG indicators

Report on SDG indicators 3.9.1 (mortality from air pollution) and 11.6.2 (levels of fine particulate matter).

Global knowledge platform

Operate a global knowledge platform on air pollution and health.

Awareness campaigns

Conduct global awareness campaigns, for example the BreatheLife campaign.

Guidelines

Keep air quality [guidelines](#) of pollutant concentrations in the air up to date and provide technical support to countries for their implementation.

SECTORAL POLICIES INTERACTING WITH AMBIENT AIR QUALITY

Cooperation with the following sectors may be required to sustainably reduce risks to health:



Industry



Energy



Agriculture



Land use Planning



Labour



Health



Transport



Housing

Further information: www.who.int/airpollution.

Source: <http://www.who.int/phe/publications/healthy-environments/en/index.html>, WHO, 2019



World Health Organization