

AIR POLLUTION

7 million people die every year due to air pollution globally



» AIR POLLUTION» HEALTH RISK» GLOBAL WARMING



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Bamunimaidam, Guwahati - 21

Air Pollution

Air pollution – the invisible killer, may not always be visible, but can be deadly. Now, it is one of the greatest environmental health risks across the world.

Air is said to be polluted when excess gases, dust particles, smoke or odours enter atmosphere and bring changes to the natural composition of atmosphere. Things that pollute the air are called pollutants. Polluted air is very harmful to human, animals and plants. Pollutants get added to the atmosphere either through the natural processes or due to the activities of human being. It is evident that with the increasing span and pace of human activities and their changing life, the trend of air pollution is rising at an alarming rate across the globe. In fact, the level of air pollution we are facing today is really a man-made crisis, which turned to be the greatest environmental risk to human health. The state of air pollution in our country is also very critical; especially in the towns and cities. It is terrifying that many of the top ranked polluted cities of the world are in India. Moreover, at present, there are 132 non-attainment towns and cities in our country where air quality is below the national standards.

A major barrier in combating air pollution is the lack of awareness. Most of the common people do not understand the extent to which the polluted air can damage their health, with brutal effects. This lack of awareness leads to apathy. Thus, raising awareness and informing civil society about the dangers of air pollution is of paramount importance.

Did you know

- According to World Health Organization, nine out of every ten people are breathing unclean air globally.
- 7 million people die every year from diseases and infections related to air pollution.
- 43% of deaths from chronic obstructive pulmonary disease, 24% of deaths from ischemic heart disease, 25% of deaths from stroke, and 29% of deaths from lung cancer across the globe are due to air .pollution.
- Vehicles account for a significant portion of air pollution in cities and towns.
- Air pollution is consistently contributing to climate change.
- Over half of world's population lives in urban areas; but 88% of cities/towns failed to meet the air quality standards laid by World Health Organization.
- Air pollution is the fourth largest cause of death and globally one in every nine deaths is due to air pollution.
- About 4.3 million deaths are attributed to indoor (household) air pollution from cooking and poor ventilation.
- Impacts of air pollution on women and children are very high, especially in the low and middle-income countries of the world.



Sources of Air Pollution NATURAL SOURCES

- smoke and ash from wild fires; pollen grains from plants and trees;
- gases from marshes; radiation from radioactive materials etc.

MAN-MADE SOURCES

Industrial emissions; vehicular emissions; burning of fossil fuel (kerosene, coal) and bio-fuel (wood, bamboo, cow dung cake) for cooking, heating and lighting of houses; agricultural activities; burning of domestic and municipal solid wastes; burning of plastic waste; burning of crop residues and stubble burning; and dust from construction and demolition sites, etc.













Major Air Pollutants and their Impacts on Environment and Health

MAJOR POLLUTANTS

- √ Sulphur Oxides
- √ Nitrogen Oxides
- ✓ Particulate Matter (PM)
- ✓ Carbon Monoxide
- ✓ Ozone
- √ Methane
- √ Lead
- ✓ Ammonia
- √ Benzene
- ✓ Mercury Compounds
- ✓ Nickel Compounds

IMPACTS ON ENVIRONMENT

- ✓ Nutrients depletion in soil and waterways
- √ Harm to forests
- Drastic reduction in crop production
- ✓ Introduction of toxins and heavy metals to the food chain
- Damage to statues, relics and monuments
- ✓ Global Warming and Climate Change

IMPACTS ON HUMAN HEALTH

- √ Heart disease
- √ Lung disease
- ✓ Respiratory tract inflammation
- Liver and lung cancer
- √ Stroke/Cardiac arrest
- √ Asthma/ Bronchitis
- ✓ Eye illness
- √ Diabetes
- ✓ Dementia
- ✓ Impaired cognitive development
- ✓ Lower intelligence levels



Stop open burning of household waste, municipal solid waste, plastic waste and crop residues.

Prioritize walking, cycling or public transport over private vehicles.





Use LPG for cooking in place of coal, wood, cow dung cake and other solid fuels.

Use solar lights or LED Bulb.





Use clean fuel and low sulphur fuel in vehicles

Plant trees and increase green areas.





Use clean energy, clean raw materials and cleaner technology in industries

Use cleaner-burning fuels. Switch to clean diesel and improved engines for transport and freight.





Increase investment in renewable energy generation, like – solar energy and wind energy.

Widely share information on the impacts of air pollution and importance of acting to combat air pollution.



IT'S TIME TO TAKE ACTION TO COMBAT AIR POLLUTION.

AIR POLLUTION REDUCTION IS OUR SHARED RESPONSIBILITY.

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