



## Role of Air Pollution in Environmental Hazards

Luis Menendez Arias\*

Department of Environmental Science, Pompeu Fabra, Lugo, Spain

\*Corresponding Author's E-mail: [imenendez@c.csic.es](mailto:imenendez@c.csic.es)

**Received:** 27-October-2023, Manuscript No. JREST-23-118578; **Editor assigned:** 01-September-2023, PreQC No. JREST-23-118578 (PQ); **Reviewed:** 14-September-2023, QC No. JREST-23-118578; **Revised:** 01-December-2023, Manuscript No. JREST-23-118578 (R); **Published:** 28-December-2023, DOI: 10.14303/2315-5698.2023.60

### INTRODUCTION

Air pollution can cause diseases, allergies and even death in humans; it can also impact other living species like animals and crops, as well as the natural environment (by climate change, ozone depletion or habitat degradation) or the built environment (*via* acid rain). Air pollution can be caused by both human activities and natural phenomena. Air quality encompasses both outdoor and interior air quality. Environmental tobacco smoke, air pollution from chemical waste and other issues are major concerns concerning air quality.

The contamination of air due to the presence of compounds in the atmosphere that are harmful to the health of humans and other living beings or cause damage to the climate or materials, is referred to as air pollution. The contamination of indoor or outdoor environments by chemical, physical or biological agents also affects the natural properties of the atmosphere. Air contaminants include gases (such as ammonia, carbon monoxide, sulphur dioxide, nitrous oxides, methane and chlorofluorocarbons), particles (both organic and inorganic) and living molecules.

### DESCRIPTION

Every year, air pollution kills about 6.5 million people worldwide. Air pollution is the contamination of an atmosphere caused by the presence of harmful substances to the health of living creatures, the ecosystem or the climate. These compounds are of interest to environmental health professionals because air pollution is frequently a risk factor for pollution related diseases such as lung cancer, respiratory infections, asthma, heart disease and other respiratory related ailments. Adult mortality can be reduced by reducing air pollution and thereby improving air quality.

Road traffic, energy generation, domestic combustion, aircraft and motor vehicles and other pollutants are also common sources of emissions. These pollutants are responsible for fuel combustion, which can emit toxic particles into the atmosphere that humans and other living organisms can inhale or ingest. Air pollution has been linked to a variety of negative health effects, including respiratory and cardiovascular disease, cancer, other disorders and even death. The danger of a pollutant and the amount of exposure that affects a person determine the risk of air pollution. For example, a youngster who participates in outside activities is more likely to be exposed to outdoor air pollution than an adult who spends more time indoors, whether at work or elsewhere. Environmental health professionals work to identify individuals who are more likely to consume air pollution, reduce their exposure and identify risk factors in communities.

Every year, over 4.3 million people are killed by diseases caused by household air pollution. Indoor air pollution raises the risk of diseases such as heart disease, lung disease, stroke, pneumonia and other related ailments. Poor indoor air quality can be problematic for vulnerable populations that spend a lot of time indoors, such as children and the elderly.

When fuels such as coal or kerosene are burned inside homes, hazardous substances are emitted into the air. Dampness and mould in homes can also cause diseases, although little research has been done on mould in schools and workplaces. Because second and third-hand smoke is a common risk factor, environmental tobacco smoke is regarded as a major contributor to indoor air pollution. Tobacco smoke includes more than 60 carcinogens, with 18% of them being recognized human carcinogens. Exposure to these chemicals can aggravate asthma, cause cardiovascular and cardiopulmonary disorders and raise the risk of cancer development. Excessive weather events, such

as ozone pollution, dust storms and elevated aerosol levels, are becoming more often as a result of climate change, which is caused by excessive heat, drought, winds and rainfall. In vulnerable groups, extreme weather events can increase the chance of undernutrition, mortality, food insecurity and climate sensitive infectious illnesses. Climate change affects the entire planet, yet it disproportionately affects disadvantaged groups who are vulnerable to climate change. Increased rates of runoff, frequent heavy rains and the consequences of severe storms can all have an influence on exposure to water borne diseases. Extreme weather events and storm surges can also overwhelm water infrastructure, increasing the risk that people would be exposed to these toxins. Exposure to these toxins is more frequent in low-income communities, which have fewer infrastructures to respond to climatic disasters and are less likely to recover as rapidly.

People frequently confront problems such as the loss of their homes, loved ones and former ways of life after a natural disaster. These occurrences can lead to vulnerability in the form of home affordability stress, lower household income, a lack of community attachment, mourning and anxiety about the possibility of another disaster. Pollution related disorders, such as respiratory infections, heart disease, Chronic Obstructive Pulmonary Disease (COPD), stroke and lung cancer, are all increased by air pollution. A growing body of research suggests that

exposure to air pollution is linked to lower IQ scores, decreased cognition, an increased risk of psychiatric illnesses such as depression and poor perinatal health. Poor air quality has far reaching consequences on human health, although it mostly affects the respiratory and cardiovascular systems. Individual responses to air pollutants vary depending on the type of pollutant, the degree of exposure and the individual's health status and heredity.

## CONCLUSION

The global economy is predicted to lose \$5 trillion in productivity and quality of life due to air pollution each year. However, they are an externality to the current economic system and most human activities, along with health and death repercussions, albeit occasionally weakly managed and monitored. Several pollution control methods and tactics are available to mitigate air pollution. To mitigate the deleterious impacts of air pollution, several international and national laws and regulations have been enacted. When correctly implemented, local ordinances have resulted in considerable advancements in public health. Some of these international efforts have been successful, such as the montreal protocol, which reduced the release of harmful ozone depleting chemicals and the 1985 helsinki protocol, which reduced sulphur emissions, while others, such as international climate action, have been less successful.