Environmental Pollution Causing Many Diseases Including Covid-19

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Abstract

Environmental pollution is the world's most serious challenges facing humanity, which causes morbidity and mortality to the people. Man's activities through urbanization, industrialization, mining, and exploration are the main reason of global environmental pollution. Both developed and developing nations are responsible for this burden together. This paper examines the types of pollution—air, water, and soil; the causes and effects of pollution; and find out solutions in combating pollution for sustainable environment and health.

There are many pollutants are causing numerous diseases in human beings. Small particles penetrate the respiratory system via inhalation, causing respiratory and cardiovascular diseases, reproductive and central nervous system dysfunctions, and cancer. Also ozone in the stratosphere plays a protective role against ultraviolet radiations, this ultraviolet rays are harmful when are falling on human body, affecting the respiratory and cardiovascular system. This ozone layer is destroyed by carbon emission (CO_2, CO etc.). Furthermore, nitrogen oxide, sulfur dioxide, Volatile Organic Compounds (VOCs), dioxins, and polycyclic aromatic hydrocarbons (PAHs) are all considered as air pollutants that are harmful to humans. Carbon monoxide can even provoke direct poisoning when breathed in at high levels. Heavy metals such as lead, chromium, cadmium etc. when absorbed into the human body, can impose to direct poisoning or chronic intoxication, depending on exposure. Excessive electromagnetic waves from mobile or satellite or computer communications system are the most harmful. Therefore, climate change resulting from environmental pollution creates many dangerous diseases including Covid-19 in the world. The only way to deal with this problem is through public awareness in addition with multidisciplinary approaches by scientific experts; national and international organizations like Paris Climate Agreement or COP21 which have identified the emergence of this threat and propose sustainable solutions.

Image

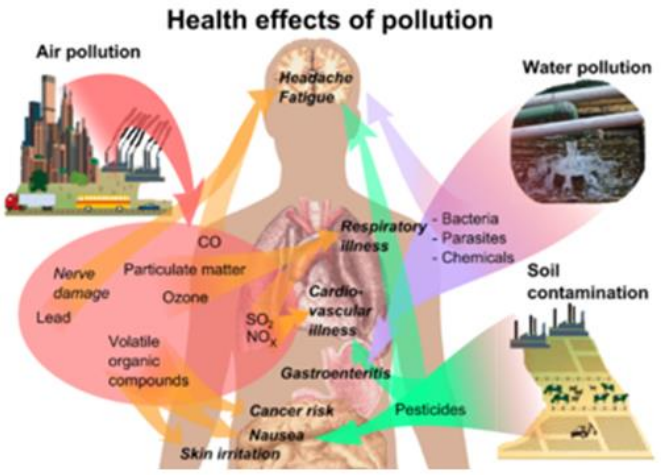


Figure 1: Overview of main health effects on humans from some common types of environmental pollution

Recent Publications

1. Beil, Laura (15 November 2017). "Pollution killed 9 million people in 2015". Science News. Retrieved 1 December 2017.
2. Maji, Kamal Jyoti; Arora, Mohit; Dikshit, Anil Kumar (2017). "Burden of disease attributed to ambient PM2.5 and PM10 exposure in 190 cities in China". Environmental Science and Pollution Research. **24** (12): 11559–11572.
3. Zivin, Joshua Graff; Neidell, Matthew (2012). "The Impact of Pollution on Worker Productivity". American Economic Review. **102** (7).
4. Jeffry M. Diefendorf; Kurkpatrick Dorsey (2009). City, Country, Empire: Landscapes in Environmental History. University of Pittsburgh Press.
5. John Tarantino (2012). "Environmental Issues". The Environmental Blog. Archived from the original on 2012-01-11.



Biography

Dr. Pijush Kanti Bhattacharjee worked in the Department of Telecommunications, Govt. of India, as a Telecom Engineer from 1981 to 2007, lastly holding Assistant Director Post. Then, he has worked at different Engineering Colleges and Assam University [Central University] as Assistant Professor and Associate Professor, from 2007 to 2021. He wrote eight books and more than a hundred research papers.

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