

ENVIRONMENTAL HEALTH

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ABSTRACT

Environmental health is a discipline that examines human health effects from exposures to harmful agents in the environment. The 'environment' may include the outdoors, home, workplace, or public buildings.

Environmental health is the branch of public health that focuses on the relationships between people and their environment; promotes human health and well-being; and fosters healthy and safe communities. Environmental health is a key part of any comprehensive public health system.

INTRODUCTION

Environmental health is a branch of public health that addresses all aspects of the broader environment that can affect human health. Environmental health has been defined by the World Health Organization as aspects of human health and diseases that are determined by environmental factors. Environmental health also refers to the assessment and control of environmental factors that can potentially affect health. Environmental health focuses on the direct pathological effects of chemicals, radiation and certain biological agents in dwellings, in urban, agricultural or natural environments, as well as their indirect effects on well-being. It connects the social and cultural environments, as well as genetic components.

CONCERNS

Environmental health addresses all **human-health-**related aspects of the **natural** environment and the **built** environment. Environmental health concerns include:

- Biosafety
- Disaster preparedness and response.
- Food safety, including in agriculture, transportation, food processing, wholesale and retail distribution and sale.
- Housing, including substandard housing abatement and the inspection of jails and prisons.
- Childhood lead poisoning prevention.
- Land use planning, including smart growth.
- Liquid waste disposal, including city waste water treatment plants and on-site waste water disposal systems, such as septic tank systems and chemical toilets.
- Medical waste management and disposal.
- Occupational health and industrial hygiene.
- Radiological health, including exposure to ionizing radiation from X-rays or radioactive isotopes.

- Recreational water illness prevention, including from swimming pools, spas and ocean and freshwater bathing places.
- Solid waste management, including landfills, recycling facilities, composting and solid waste transfer stations.
- Toxic chemical exposure whether in consumer products, housing, workplaces, air, water or soil.
- Vector control, including the control of mosquitoes, rodents, flies, cockroaches and other animals that may transmit pathogens.

AIR QUALITY

Air quality includes ambient outdoor air quality and indoor air quality. Large concerns about air quality include environmental tobacco smoke, air pollution by forms of chemical waste, and other concerns.

OUTDOOR AIR QUALITY

Air pollution is globally responsible for over 6.5 million deaths each year. Air pollution is the contamination of an atmosphere due to the presence of substances that are harmful to the health of living organisms, the environment or climate. These substances concern environmental health officials since air pollution is often a risk-factor for diseases that are related to pollution, like lung cancer, respiratory infections, asthma, heart disease, and other forms of respiratory-related illnesses. Reducing air pollution, and thus developing air quality, has been found to decrease adult mortality.

INDOOR AIR QUALITY

Household air pollution contributes to diseases that kill almost 4.3 million people every year. Indoor air pollution contributes to risk factors for diseases like heart disease, pulmonary disease, stroke, pneumonia, and other associated illnesses. For vulnerable populations who spend large amounts of their time indoors, such as children and elderly populations, poor indoor air quality can be dangerous.

Burning fuels like coal or kerosene inside homes can cause dangerous chemicals to be released into the air. Dampness and mold in houses can cause diseases as well, but little studies have been performed on mold in schools and workplaces. Environmental tobacco smoke is considered to be a leading contributor to indoor air pollution, since exposure to second and third-hand smoke is a common risk factor. Tobacco smoke contains over 60 carcinogens, where 18% are known human carcinogens. Exposure to these chemicals can lead to exacerbation of asthma, development of cardiovascular diseases, cardiopulmonary diseases, and increase the likelihood of cancer development

CLIMATE CHANGE AND ITS EFFECTS ON HEALTH

Climate change makes extreme weather events more likely, including ozone smog events, dust storms, and elevated aerosol levels, all due to extreme heat, drought, winds, and rainfall. These extreme weather events can increase the likelihood of under nutrition, mortality, food insecurity, and climate-sensitive infectious diseases in vulnerable populations. The effects of climate change are felt by the whole world, but disproportionately affect disadvantaged populations who are subject to climate change vulnerability

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NOISE POLLUTION

Noise pollution is usually non-environmental, machine-created sound that can disrupt activities or communication between humans and other life forms. Exposure to persistent noise pollution can cause diseases like hearing impairment, sleep disturbances, cardiovascular problems, annoyance, problems with communication and other diseases. For American minorities that live in neighborhoods of low socioeconomic status, they often experience higher levels of noise pollution compared to their higher socioeconomic counterparts.

SAFE DRINKING WATER

Access to safe drinking water is considered a "basic human need for health and well-being" by the United Nations. According to their reports, over 2 billion people worldwide live without access to safe drinking water

Harmful chemicals in drinking water can negatively affect health. Unsafe water management practices can increase the prevalence of water-borne diseases and sanitation-related illnesses. Schools in the United States are not required by law to test for safe drinking water, meaning that many children can drink contaminants like lead in their water at school

HAZARDOUS MATERIALS MANAGEMENT

Hazardous materials management, including hazardous waste management, contaminated site remediation, the prevention of leaks from underground storage tanks and the prevention of hazardous materials releases to the environment and responses to emergency situations resulting from such releases. When hazardous materials are not managed properly, waste can pollute nearby water sources and reduce air quality

WASTE MANAGEMENT

With the rapid growth of the world's population, the amount of waste we produce is increasing at an unprecedented rate. Poor waste management is a major threat that has an enormous impact on both environment and human health. Poorly collected or improperly disposed waste can contaminate surface and groundwater and cause air pollution from burning waste. Solid waste that is not managed properly can become a breeding ground for insects and vermin, contributing to the development and spread of air- and water-borne diseases

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CONCLUSION

Environmental issues are a major source of damage to both human well-being and the health of the planet. The most significant threats include climate change, air pollution, and waste management. The risks are systematic and wide-ranging, with climate change threatening to destroy multiple ecosystems and natural habitats, and water and air pollution consistently deteriorating the quality of human lives and the natural environment. With some of the problems, such as waste management, mostly affecting less developed countries, the others, such as climate change, provide a global threat. Since the problems have been recognized at the end of the 20th century, multiple studies have been conducted and numerous strategies developed to tackle the crisis. The current initiatives are focused on the collaborative efforts of local communities, national governments, and international organizations. They include the introduction of new environmental legislation, research and development, raising public awareness, and minimizing the damage to the environment.

REFERENCES

- 1. <u>^</u> WHO (n.d.). <u>"Health topics: Environmental health"</u>. Retrieved 10 January 2015..
- 2. <u>^ "environmental medicine European Environment Agency"</u>. www.eea.europa.eu. Retrieved 2021-08-02.
- 3. <u>^</u> National Research Council (US) Committee on Environmental Epidemiology (1991-01-01). <u>Environmental Epidemiology, Volume 1</u>. <u>doi:10.17226/1802</u>. <u>ISBN 978-0-309-04496-</u> <u>7. PMID 25121252</u>.
- 4. <u>^ "Toxicology"</u>. National Institute of Environmental Health Sciences. Retrieved 2021-08-02.
- 5. <u>* "Exposure Science"</u>. National Institute of Environmental Health Sciences. Retrieved 2021-08-02.
- 6. <u>* "Environmental Engineers : Occupational Outlook Handbook: : U.S. Bureau of Labor</u> <u>Statistics"</u>. www.bls.gov. Retrieved 2021-08-02.
- 7. <u>^ "Environmental law"</u>. Encyclopedia Britannica. Retrieved 2021-08-02.
- Environmental Health: from Global to Local (2 Editor= Howard Frumkin ed.). San Francisco: John Wiley & Sons. 2010. <u>ISBN 9780470567760</u>.
- <u>A World Resources Institute: August 2008 Monthly Update: Air Pollution's Causes, Consequences and Solutions Archived</u> 2009-05-01 at the <u>Wayback Machine</u> Submitted by Matt Kallman on Wed, 2008-08-20 18:22. Retrieved on April 17, 2009
- 10. <u>A Pennsylvania State University Potential Health Effects of Pesticides. Archived</u> 2013-08-11 at the <u>Wayback Machine</u> by Eric S. Lorenz. 2007