HEALTH IMPACTS OF ENVIRONMENTAL POLLUTION
Overview

Global development, continuing industrialization and rapid increase in world population, during the 20th century, has been a great contributor to several global issues; environmental changes being one of them. These environmental changes include also major global issues such as climate change, ozone depletion, changes in ecosystems, decreased biodiversity, depletion of natural resources and land degradation. As the population grows and consumption increases, these changes continue to threaten the health and wellbeing of humankind.

As human activities have a direct impact on the environment, leading to several serious problems such as pollution. The environmental pollution is an issue that also causes a negative impact on human health.

Health Impacts of Environmental Pollution

Among many other problems, environmental issues are one of the most significant challenges that the humankind is facing with in today’s world. Pollution is broadcasted everywhere, you hear it constantly, but what is environmental pollution?

There are several types of environmental pollution that surrounds the environment: air, water, land, noise, radioactive, thermal and light pollution. While some may have a trivial impact there are others that may have a severe effect on population. To humans and any other living organisms such as plants, animals, etc., pollution of any kind is harmful. For years, researchers have focused and studied the influence of the pollution on human health. Many results of the studies taken from the highly polluted sites around the world indicate the possible health impacts of high levels of environmental pollution. The correlation between these two is inevitable. Especially air, water and land pollution, these are the major environmental hazards that pose great risks to living organisms, in particular, human health.

Air Pollution is one of the environmental pollution that is caused mainly by releasing of harmful gaseous pollutants into the atmosphere. The foremost human-made sources of air pollutants are transportation and manufacturing. Examples of air pollutants include carbon dioxide which is released from combustion of fuel; benzene, which is found in gasoline; the chemical solvent used in dry cleaning facilities perchlorethlyene, etc. These pollutants are associated with diseases such as stroke, heart disease, lung cancer, and both chronic and acute respiratory diseases.

- Reduced lung functioning
- Irritation of eyes, nose, mouth and throat
- Asthma
- Respiratory symptoms such as coughing and wheezing
- Increased respiratory disease such as bronchitis
- Headaches and dizziness
- Disruption of reproductive and immune systems
- Cardiovascular problems
- Cancer
- Premature death
**Water Pollution** occurs when pollutants are directly or indirectly released into water streams without adequate treatment by causing physical changes, biological and chemical conditions of the water source. This kind of pollution is mainly caused by discharging chemical substances into freshwater streams without prior treatment or by accident, in cases of spills or leaks from oil and chemical containers. The presence of pollutants in water can lead to adverse health effects such as hepatitis, encephalitis, gastroenteritis, diarrhoea, vomiting, stomach aches; even reproductive problems and neurological disorders.

**Land Pollution**, also known as soil pollution, is the contamination of the land with hazardous and toxic chemicals. This kind of pollution is mostly caused by human-made actions, industrial activities, agricultural chemicals and inadequate waste disposal. The most common chemicals involved in land pollution are petroleum hydrocarbons, solvents, pesticides, lead, mercury and other heavy metals. All these aforementioned hazards have the potential to cause a number of negative effects on human health. Their effect ranges from light symptoms such as headaches, eye irritation and skin rash, to much more serious diseases. As an example, high levels of lead in soil can cause developmental damage to the brain on young children. On the other hand exposure to mercury can increase the risk of organ damage; including kidney and liver damage.

As a conclusion, air, water and land pollution are the major environmental hazards that pose risks to public health. As this is an issue not limited to the borders of any country, it is in best interest of every single country on the planet to take more seriously the environmental pollution. Thus, a large number of national and international actions have been taken to find solutions to this problem.

ISO 14001 is the international standard for environmental management systems published by the International Organization for Standardization (ISO). It is a voluntary standard that assists companies to establish, implement, maintain and improve their Environmental Management System (EMS).

Professional Evaluation and Certification Board (PECB) is a certification body for persons on a wide range of professional standards. Among other international standards, it also offers ISO 14001 training and certification services for professionals wanting to gain a comprehensive knowledge of the main processes of an EMS, project managers or consultants wanting to prepare and to support an organization in the implementation of an EMS, auditors wanting to perform and lead EMS certification audits, and staff involved in the implementation of the ISO 14001 standard.

ISO 14001 and Environmental Management Trainings offered by PECB:

- Certified ISO 14001 Lead Implementer (5 days)
- Certified ISO 14001 Lead Auditor (5 days)
- Certified ISO 14001 Foundation (2 days)
- ISO 14001 Introduction (1 day)

ISO 14001 Lead Auditor, ISO 14001 Lead Implementer and ISO 14001 Master are three certification schemes accredited by ANSI ISO/IEC 17024.

Narta Voca is the Heath, Safety and Environment (HSE) Product Manager at PECB. She is in charge of developing and maintaining training courses related to HSE. If you have any questions, please don’t hesitate to contact her at hse@pecb.com.

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