

## **The Influence of Environmental Factors on the Human Body and its Prevention**

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### **Abstract**

The study of environmental factors on the human body is extremely relevant, since in recent years, with the development of technological processes, more and more people are suffering from diseases with blurred, vaguely defined clinical conditions of the human body, the formation of which largely depends on various environmental factors. The quality of atmospheric air largely determines the health status of the population and is an active etiological factor in the development of diseases, primarily in children, the elderly, as well as people suffering from chronic diseases of the respiratory system and cardiovascular system. The article provides some recommendations for reducing the harm caused by environmental factors on human health.

**Key words:** ecology, environmental factors, atmospheric air, clinical manifestations, human health, environment, diagnostics.

### **Introduction**

The influence of the environment on human health is quite significant. Many diseases arise from air pollution, poor drinking water, consumption of chemically processed foods and many other environmental factors.

Human health depends 50% on lifestyle, 20% on environmental influences and technology development, 20% on bad heredity, and only 10% on the level of healthcare.

Polluted air mostly irritates the respiratory tract, causing bronchitis, asthma, allergic reactions, and the general health of a person worsens: headaches, nausea, a feeling of weakness, decreased or lost ability to work.

The largest amount of pollutants enters the human body through the lungs. At the same time, the inhalation route of entry of pollutants into the body is also the most dangerous, because due to the fact that pollution entering the body through the respiratory tract bypasses such a protective biochemical barrier as the liver - as a result, the toxic effect is stronger than the influence of pollutants penetrating through the gastrointestinal tract; the digestibility of harmful substances entering the body through the lungs is much higher than that of pollutants penetrating with food and water. And, besides, it is difficult to hide from atmospheric pollutants.

The main causes of death caused by air pollution are cancer, congenital pathologies, and disruption of the immune system of the human body.

Inhaling air containing combustion products (thin diesel exhaust), even for a short time, for example, increases the risk of coronary heart disease.

Industrial enterprises and vehicles emit black smoke, as well as emissions from coal-burning enterprises, saturate the air with tiny particles of pollution that can cause increased blood clotting and the formation of blood clots in the human circulatory system. Polluted air also leads to increased pressure. This is because air pollution causes changes in the part of the nervous system that controls blood pressure levels.

A very dangerous symptom for humanity is that air pollution increases the likelihood of having children with developmental defects. The prohibitive concentration of harmful substances in the atmosphere causes premature births, newborns have low weight, and sometimes stillborn children are born.

Children living near powerful power plants that are not equipped with dust collectors show changes in the lungs similar to forms of silicosis. Dust containing silicon oxides causes a serious pulmonary disease - silicosis. Heavy air pollution with smoke and soot, which continues for several days, can cause fatal poisoning.

Harmful substances contained in the atmosphere affect the human body upon contact with the surface of the skin or mucous membrane. This happens when a sweaty person (with open pores) walks along a polluted and dusty street in the summer. If, upon reaching home, he does not immediately take a warm (not hot!) shower, harmful substances have a chance to penetrate deep into his body.

Along with the respiratory system, pollutants affect the organs of vision and smell, and by affecting the mucous membrane of the larynx, they can cause spasms of the vocal cords.

Contaminated drinking water has a negative impact on human health. From contaminated soil, harmful substances and pathogenic bacteria penetrate into groundwater, which are absorbed from the soil by plants, and then, through milk and meat of animals, vegetables, fruits, enter the human body.

Water may contain dangerous chemicals, pathogens, bacteria, thereby causing poisoning and infectious diseases (typhoid fever, dysentery, polio, gastroenteritis, viral hepatitis A, etc.

### ***Recommendations for reducing environmental pollution:***

- Choosing a more environmentally friendly mode of transport: using public transport, preferably buying energy-efficient cars such as electric ones.
- In houses it is necessary to close windows more tightly, and also use various technical means to purify the air.
- It is necessary to landscape garden plots, plant trees, and plant and grow homemade flowers in apartments.
- It is strictly prohibited to burn garbage and fallen leaves on the streets.
- It is recommended to install filters to purify water and use only filtered and bottled water for drinking purposes.
- To reduce the concentration of harmful substances, vegetables and fruits should be thoroughly rinsed in clean water.
- Thermal treatment of products is also important; many harmful substances decompose when exposed to high temperatures.

The future of humanity depends on clean air, water, and forests. Only the right attitude towards nature will allow future generations to be healthy and happy..

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