

**THE IMPACT OF ATMOSPHERIC ENVIRONMENTAL POLLUTION ON HUMAN HEALTH: THE ROLE OF MOTOR VEHICLES AND INDUSTRIAL EMISSIONS**

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The development of science in the world has made a significant contribution to the development of the automotive industry, and today there is no need for excessive tariffs for the increasing number of cars on our streets. The annual amount of oil fuel used for these cars is 2.4 billion tons. The average efficiency of internal combustion engines in cars is 28%, the remaining 72% is spent on heating the environment. Along with the rapid increase in the number of vehicles, the amount of gases emitted from them into the external environment is also increasing.

As is known, air pollution is defined as the accumulation of harmful substances in the atmosphere at levels that can have a harmful effect on humans, animals or plants. There are 2 main types of external pollutants: industrial smog (a complex of sulfur dioxide particles) and photochemical smog (ozone and nitrogen oxides), and they can be present in the air at the same time. The level of aeropollutants in the atmosphere depends on weather conditions and local geographical conditions.

There is sufficient evidence of a direct relationship between environmental pollution, in particular atmospheric air, and an increase in the frequency of allergies, bronchopulmonary pathologies, neuropsychiatric and physical developmental disorders. The risk of developing malignant tumors increases. There is an ecological correlation between the severity of diseases of the musculoskeletal system, ENT organs, and somatic diseases.

Many xenobiotics are considered supertoxic substances (mercury, lead, dioxins, etc.). They cause profound changes in vital organs, reduce children's intellectual abilities, increase sensorimotor reaction time, and also reduce nonspecific resistance and change hematological parameters, altering the activity of the antioxidant system in the blood and saliva.

The problem of determining the cause-and-effect relationships between population health and environmental factors is largely due to the peculiarities of the procedure for statistical processing of material, since statistics makes it possible to identify and measure the regularities of phenomena and processes that are inextricably linked to chance in each individual case and only in the majority of cases manifest themselves as laws.

Given the long-term negative impact of polluted atmospheric air on population health (increased morbidity and mortality), a number of authors have recommended establishing quantitative relationships between morbidity, mortality, and atmospheric air pollution levels and subsequently developing methods for predicting population health based on this.

The increase in mortality from respiratory diseases is associated with an increase in the concentration of suspended particles in the air, especially those smaller than 10 microns, which, depending on their chemical composition and distribution, can cause a variety of adverse effects. The impact of suspended particles on overall mortality rates, as well as on mortality rates from cardiovascular and pulmonary diseases, has been proven.

An analysis of literature sources shows that the rapid development of industry, transport, urbanization, as well as the adoption of new technologies, has led to a significant increase in emissions of harmful substances into the atmosphere that have a negative impact on humans and the environment.

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