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# SCIENTIFIC ANALYSIS OF THE IMPACT OF TECHNOGENIC POLLUTION ON HUMAN HEALTH

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**Abstract.**

*In this article, we have focused on the scientific study of the complications of man-made pollution affecting human health. The mechanisms and methods of eliminating the severe consequences of man-made pollution on human health have been thoroughly analyzed.*

**Keywords.**

*Indicators, condition, population, disability, diseases, socio-economic, technogenic, evaluations, importance, quality, characteristic effect, pathology develops, human-modified biota, specific symptoms.*

**METHODS.**

The research used a systematic-structural approach based on the principles of objectivity, universality, concreteness, logical and historical practical systematic analysis. This makes it possible to see the environmental problems presented in the article as a whole system.

**INTRODUCTION.**

In this article, mainly the impact of man-made pollution on human health, their scientific analysis is covered in a wide way. In particular, an attempt was made to explain man-made pollution ecologically and scientifically. Therefore, they tried to deeply analyze the great impact of various technological processes on human health with radiation processes.

**RESULTS AND DISCUSSION**

Indicators of the general health condition of the population include the number of children and children, children and children, general disability from all causes, and the amount of work lost due to temporary incapacity. Toxic diseases can be divided into large nosological groups: for example, infectious-parasitic diseases, diseases of the cardiovascular system, oncological diseases, reproductive disorders and others. When studying the dynamics of these indicators, they

standardize according to the age group of the population. Many socio-economic, hygienic and ecological factors affect the degree of illness. Moreover, it depends on the socio-economic status of the region. It is difficult to separate technogenic pollution in the work of many factors. Often, expert evaluations are of great importance. According to the information provided by the world health experts, the health of the population and population health are on average 50-52% of the economic supply and the quality of life of people, 20-25% - racial factors, 7-12% - the level of medical services, 18 -20% depends on the condition of the surrounding center. There are other estimates, in which 40-50% of the causes of injury are attributed to the characteristic effect of the center.

In contrast to acute poisoning, man-made pathology develops as a result of the chronic effect of man-made pathogens, which are usually imperceptible and subcritical. Microorganisms, plants, and animals in the human-modified biota of the biosphere are to a certain extent poisoned by industrial poisons. For example, the skeleton of a modern American has 100 times more lead than the skeleton of a Mexican aborigine in the middle of the first millennium.

Currently, as a result of chronic exposure to technogenic pollutants in low concentrations, such specific symptoms are aggravated in pathological cases. This effect leads to the bringing of harmful substances from the external center to the internal center of the body, and then these substances are more or less poisoned for a long time and eventually accumulate.

Wide distribution of lead in the modern technosphere (industrial emissions, gases from automobiles, paints, products, etc.) and the fact that it cannot be used a second time calls for many lead anomalies in the center. When water and air enter the body, lead forms compounds with organic substances. Many of these compounds are neutropenic and cause damage to the nervous system and brain. Chronic damage from lead is especially dangerous for children in the form of neurological, psychomotor, and self-esteem disorders. It accumulates in the liver and kidneys and leads to disruption of the metabolic process and excretory function. As a result of the action of microorganisms, mercury is easily methylated and binds to sulfhydryl groups of proteins. These compounds are also neurotropic. If the amount of methylmercury increases in the pregnant woman's body, the child will be born with cerebral palsy and psychomotor retardation.

In the middle of the 20th century, in Japan, in a fishing village on the shores of Minamata Bay, a disease broke out that destroyed the sense organs and brain. 60 people died from this disease. The peasants have disappeared from these villages. After further investigation, it was determined that the main cause of the problem

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was methylmercury, which entered the sea water due to waste water from chemical factories. These compounds are accumulated in marine organisms and fish used by humans. Only in 1997, the quarantine in Minimata bay was opened.

Cadmium enters the body in a similar way to mercury, but it does not get poisoned in our body for a long time. It squeezes calcium out of the body and takes the place of zinc in the composition of biomolecules. It accumulates in the liver and kidneys, causing kidney failure and other problems.[1] In the 40s-60s of the 20th century, in one region of Japan, the contamination of the soil and water of rice paddies with cadmium and man-made substances led to the mass sickness of the local population, nephritis, and deformation of the bones. In young children, cadmium poisoning causes speech impairment, neuropathy and encephalopathy.

Due to the fact that pesticides are widely distributed in the biosphere, their traces are in the center and in the food of people and have a significant negative effect. Epidemic phenomena occurred in the 60s and 70s of the 20th century in the areas where pesticides are widely used (largely in agrobiocenoses of cotton cultivation, Latin America, India, Central Asia). Epoxy, phosphate, and diazoradical herbicides 81 insecticides caused many embryotoxic effects, i.e. death of embryos at an early stage, premature birth, death of newborns and one-year-old children.

Polycyclic (condensed) aromatic hydrocarbons are considered a group of strong carcinogenic substances that act like vapors. Of these, widely distributed benzopyrene, dibenzpyrene, and a number of other substances are considered by-products of petrochemical and rubber industries. Many studies have shown a lack of correlation between the presence of benzopyrene and other compounds in the center and all forms of cancer, especially lung cancer. Such costs are abnormal, and as a result of long-term exposure, they lead to the exacerbation of pathology with a different origin. Contamination of the atmosphere with weak ammonia and aromatic hydrocarbons leads to allergic diseases caused by pollinosis and mycosis - plant dust and microscopic fungi.

Radiation damage is caused by ionizing radiation and the internal body from radiation sources. The degree of radiation damage, the severity of radiation sickness and the consequences of certain radiation are determined based on the amount and amount of absorbed radiation. In a short period of time, radiation at a dose of 600-800 R and more than a dozen leads to a severe form of radiation that leads to death (people who participated in the atomic bomb tests in Hiroshima and Nagasaki, groups of personnel who were in the damage zone of the Chernobyl nuclear power plant, firefighters).

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***CONCLUSION***

The traditional end effects of radiation include all kinds of necrotic processes, disruption of immunity, hormonal and reproductive functions. Endogenous raditoxins appear, causing worsening of allergic reactions. All symptoms are more or less combined with mild forms of radiation damage. Their fate is in the form of chronic diseases such as leukemia, infertility, nervous and mental disorders, and many of these diseases lead to death. All these signs were seen in the people involved in the clean-up of the accident at the Chernobyl nuclear power plant. Due to the occurrence of racial genetic changes in people as a result of radiation damage, it was demanded to review the concepts of radiation limit (threshold) and permissible dose.

Based on the recommendation of the World Commission, a linear unbiased bias was adopted between dose and probabilities of conventional end-genetic and oncological effects. In this connection, we should remember what the well-known scientist, academician A.D. Sakharov said - "Limitless biological effects put us in front of a non-trivial moral dilemma." In the work of the next ten years, the explosions that have been tested will add a relative share, albeit a small one, to the deaths and illnesses caused by other causes. There are a lot of people in the world, but after some time, the absolute number of damage and death toll expected from the decay of radioactive substances will be very large and scary.

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