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# Ecological and Hygienic Condition of City Atmospheric Air

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**Annotation:** Atmospheric air in the world is one of the main factors affecting the health status of the population, determines the normal growth of children, mental development, functional capabilities of the body and a number of other indicators. This is the day , the atmosphere is mainly released with very large amounts of substances that are extremely harmful to human health: carbon oxides (SO, SO 2 ), hydrocarbons ( SxH x ), heavy and radioactive elements. 150 million tons of solid waste (harmful dust, soot) and 400 million tons of carbon monoxide are released into the atmosphere in one year. tons , and nitrogen oxide 100 mln . is a ton.

**Keywords:** atmospheric air, children health, population health, ecological-hygienic condition, risk factors.

The purpose of the research: to describe the ecological and hygienic condition of Sh ahar atmospheric air.

**Research methods:** Analytical and statistical methods were used in the process of scientific research.

The modern scientific and technological revolution is characterized by the rapid development of industry, the production of electricity and the increasing use of all types of transport. These processes cause an increase in environmental pollution, which is one of the most important problems of public health protection. Solving this problem is aimed not only at preserving natural resources for the economic and social development of the country, but also, first of all, at providing comfortable sanitary living conditions for the population and preventing the harmful effects of environmental pollution on the health of current and future generations.

The issue of environmental health has evolved from a national to an international level and has become the subject of constant attention by the United Nations (WHO). According to WHO, the health status of the population depends on the level of socio-economic development by 50-60%, solving environmental problems by 20-30%, and only by the development of the healthcare system by 15-20%. The fight against atmospheric air pollution, which threatens the health and well-being of society, occupies a special place in environmental protection [ 25].

According to the data of the World Health Organization in 2018, today 23% of the total death rate in the world is related to harmful environmental factors, which is 12.6 million per year [6, 3, 8] . When this indicator is analyzed by region, Southeast Asia 3.8, Western Pacific region 3.5, Africa 2.2, Europe 1.4, Eastern Mediterranean 0.854, and American region 0.847 million deaths due to harmful environmental factors were recorded [1, 3] .

Research shows that people are exposed to the following 9 risk factors in their homes, workplaces and public spaces, i.e. indoor and outdoor air pollution, poor water supply, anthropogenic factors, chemical and biological agents, ambient noise levels, climate change, UV and ionizing rays, risk factors in the working environment, agricultural practices [2, 5, 7].

World experience shows that as the process of urbanization develops, its negative environmental consequences are felt more and more. This is primarily due to the increasing number of diseases that appear among the population under the influence of harmful factors of the environment, and it is a pity that the average life expectancy is reduced by 6-7 years in cities compared to villages [4, 12, 20].

The development of science in the world contributes a lot to the development of the automobile industry, and the fact that cars are multiplying on our streets today does not need too much explanation.

The annual amount of petroleum fuel used for these vehicles is equal to 2.4 billion tons. The useful efficiency of internal combustion engines of cars is on average 28%, the remaining 72% is spent on heating the environment. Together with the rapid increase of vehicles, the amount of gases released from them to the environment is also increasing [18, 19, 20, 22].

Cars emit 95 percent of carbon monoxide, 65 percent of carbohydrates, and 30 percent of nitrogen oxides. Along with these, carcinogenic substances benzene, formaldehyde, benzapyrene, acetaldehyde, as well as lead and other heavy metals are released into the atmosphere. If we take into account that a single car releases an average of 10 kg of rubber dust in a year, this figure is 1.5 times higher in cities, because in urban conditions, there is a lot of wear of tires and brake pads as a result of frequent stops and changes in speed [ 13, 16,19 ].

, a consistent environmental policy is being implemented, aimed at protecting the environment, protecting public health , rational use of natural resources, and ensuring environmental safety. As a result of equipping and re-equipping production areas with modern technologies, the amount of harmful substances released into the atmosphere decreased by 2.1 times, and the discharge of waste water decreased by 2 times.

Atmospheric pollution occurs when the amount of harmful substances released into the atmosphere exceeds the natural cleaning ability of the atmosphere. People started polluting the air after they first used fire, but air pollution became a serious problem after the Industrial Revolution. Major disasters such as Meuse Valley in Belgium in 1930, Donora in Pennsylvania, USA in 1948, and "smog" in London in 1952 made people realize that air pollution can cause great harm to health [8, 21] .

After the London smog disaster, efforts were made not only in England but also in several countries to adopt environmental standards for environmental protection and to prevent air pollution. The level of air pollution in developed countries has improved to an extent that is incomparable to the major tragedy of the 1950s. However, in the early 1990s, the results of a study by Harvard University in the United States were published, which showed that the risk of death increases with the concentration of fine particles, even at ambient levels . After that , interest and concern about air pollution increased again, and air quality standards were strengthened [15,19, 21] .

Korea is undergoing rapid urbanization and industrialization , and although air pollution in metropolitan areas has reached a serious level, air pollution such as CO2, sulfur dioxide (CO2), and particulate matter has been improving in developing countries since 1990 due to the supply of clean fuels and government air pollution reduction policies such as low-sulfur fuel . On the other hand, the pollution levels of nitrogen dioxide (NO2 ) and ozone (O3 ) have been increasing due to the rapid growth of automobiles. Recently, epidemiological studies have been actively conducted in major cities in Korea to assess the negative impact of air pollution , and it has been found that the health damage caused by air pollution in Korea is not small [11, 13, 17, 21, 22] .

**Conclusion:** The main sources of atmospheric air pollution are industrial enterprises and motor vehicles, which directly depend on their capacity, type of fuel used, year of manufacture and technical condition of the vehicles, and the technological process at industrial enterprises. At the same time, the level of provision of industrial enterprises with purification facilities and meteorological factors also directly affect the level of atmospheric air pollution, which in turn negatively affects the health and sanitary living conditions of the population. In protecting atmospheric air, a sanitary doctor is assigned several tasks. To fulfill them, it is necessary to carry out work such as sanitary-technical, sanitary-topographic and sanitary-epidemiological inspections of pollution sources in the given population area.

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