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# THE INFLUENCE OF INDICATORS OF ATMOSPHERIC AIR POLLUTION ON THE HEALTH OF THE POPULATION

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**Abstract**
The article examines the composition of the atmospheric air of two selected districts of the city of Tashkent, as well as comparatively compared indicators of morbidity of the population living in this area.

**Keywords:** Atmosphere, ecology, environment, dosage, morbidity of children, public health.

**Relevance of the problem:** After gaining its independence, Uzbekistan has formed a legislative framework for the protection of atmospheric air, in particular, the adoption of the Laws of the Republic of Uzbekistan “On Nature Protection” and “On Atmospheric Air Protection”, which determine the legal status of atmospheric air, clearly demonstrates the state's attitude to this area [1,2]. Despite the fact that the adopted legal norms are being implemented in practice and the wide scope of measures taken, it should be recognized that there is still much important work to be done to protect atmospheric air at the national and regional levels [3].

Well, it is more difficult for us to give a positive assessment of the question of the level of legal protection of atmospheric air in our republic. This is because there are laws, but we cannot say that compliance with them is that excellent. A simple example is that in our republic, toxic gases emitted by vehicles amount to 203-208 kilograms per person per year. The State Committee for Nature Protection has established permanent control points to monitor air quality in more than 450 cities across the country. As a result of the inspections, it was found that Tashkent city is in the first place in terms of air pollution [4] .

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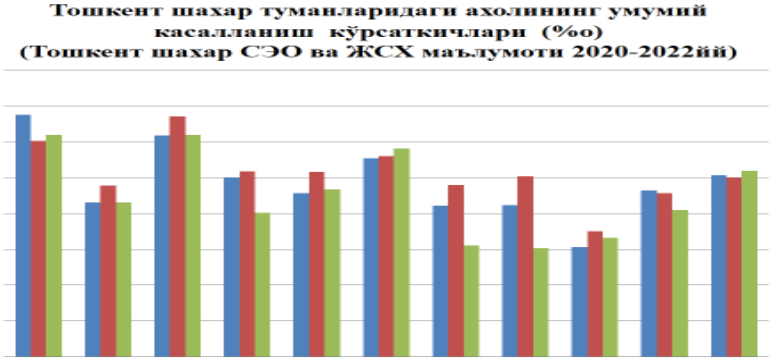
The main composition of atmospheric emissions in Tashkent is carbon monoxide (150.5-160 thousand tons/year), hydrocarbons (25-32 thousand tons/year), nitrogen oxide (12.5-16.4 thousand tons/year), sulfur oxide (2.6-2.9 thousand tons/year), and solids (1.5-2.6 thousand tons/year). The remaining pollutants (methane, ammonia, volatile organic compounds, styrene, formaldehyde, various acid vapors, alcohols, phenol, hydrogen chloride, methane oxides) account for 5.6-5.9%. Their absolute value is 12.5-14.6 thousand tons [5].

**Research Objective:**

To investigate the state of atmospheric air in the Mirabad and Yunusabad districts of Tashkent city and to study its impact on the health of the population and to make a hygienic assessment.

**Research Results**

Tashkent city is characterized by the fact that 80% of the emissions into the atmosphere are from motor vehicle emissions and 20% from small industrial enterprises. Analysis of morbidity among children showed that (1) respiratory system diseases are in the first place with 500.84 cases per 1000 children, (2) infectious and parasitic diseases are in the second place, (3) diseases of the nervous system are in the third place, (4) diseases of the skin and subcutaneous tissue are in the fourth place, and (5) injuries and poisonings are in the fifth place. If we consider the total incidence of the disease in Tashkent city by district during 2020-2022, the highest indicator was recorded in Mirzo Ulugbek district with 636‰, followed by Uch Tepa district with 632‰, and Chilonzor district with 565‰.



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In order to study the impact of atmospheric air on the health of the population of selected districts, we studied the morbidity of the population in the dynamics of 2020-2022. Analysis of the results obtained showed that, for example, in Yunusabad district, the morbidity rate in 2021 was slightly higher than in 2020 (57‰), and we can see that the dust concentration in these years was also slightly higher than the REC in 2021, on the contrary, we see that both the morbidity rate in 2022 and the dust concentration decreased slightly this year. In Mirabad district, the situation is a little different, that is, although the population morbidity rate in 2021 increased compared to 2020 (48‰), the concentration of dust is the same in 2020-2021, but in 2022, we see that both the disease rate and the concentration of dust decreased.

When analyzing the general prevalence of diseases in the population, it was observed that respiratory diseases were high in both districts: in Mirabad district - 21.8%, in Yunusabad district - 18.1%, diseases of the digestive system - 14.3%-12.6%, respectively; diseases of the circulatory system - 9.3%-10.6%, respectively.

## Conclusion

Air pollution in residential areas is of great hygienic importance, and this situation is directly related to the location, power and amount of emissions of polluting sources. This, in turn, affects the health of the population. Analysis of the results shows that in all years the concentration of dust in the air of Mirabad district is higher than the OEL, which may be the reason for the higher incidence of diseases of the respiratory system, skin and subcutaneous fat of the population in this district than other disease indicators.

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