

**RELEVANCE OF STUDYING INFLUENCE OF THE BONDS OF NITROGEN
POLLUTING THE ENVIRONMENT ON HEALTH OF THE POPULATION
SUFFERING CARDIOVASCULAR ILLNESSES (REPUBLIC OF UZBEKISTAN)**

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Abstract: in article it is said that development of technologies conducts to augmentation of entering of bonds of nitrogen to the environment, health of the population with chronic diseases worsens, in particular at people with illnesses of cardiovascular system it can be observed a recurrence. In this regard, the number of requests of the population of the city or district for ambulance and entering of patients in hospitals concerning sharp deterioration in health and rising of an indicator of a mortality among the population of the city, most often among the persons which had chronic diseases of respiratory organs and cardiovascular system in the anamnesis is enlarged.

Keywords: environment, population, health, atmospheric air, nitrogen bonds, monitoring, cardiovascular diseases, prophylaxis.

**АКТУАЛЬНОСТЬ ИЗУЧЕНИЯ ВЛИЯНИЯ СОЕДИНЕНИЙ АЗОТА,
ЗАГРЯЗНЯЮЩИХ ОКРУЖАЮЩУЮ СРЕДУ, НА ЗДОРОВЬЕ НАСЕЛЕНИЯ,
СТРАДАЮЩЕГО СЕРДЕЧНО-СОСУДИСТЫМИ ЗАБОЛЕВАНИЯМИ
(РЕСПУБЛИКА УЗБЕКИСТАН)**

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Аннотация: в статье говорится, что развитие технологий ведет к увеличению поступления соединений азота в окружающую среду, ухудшается здоровье населения с хроническими заболеваниями, в частности у людей с болезнями сердечно-сосудистой системы могут наблюдаться рецидивы. В связи с этим увеличивается число обращений населения города или района за скорой помощью и поступление больных в стационары по поводу резкого ухудшения здоровья и повышение показателя смертности среди населения города, чаще всего среди лиц, имевших в анамнезе хронические заболевания органов дыхания и сердечно-сосудистой системы.

Ключевые слова: окружающая среда, население, здоровье, атмосферный воздух, соединения азота, мониторинг, сердечно-сосудистые заболевания, профилактика.

Now, the majority of mankind just consumer belongs to generous gifts of the nature, blasting that the planet protected millions of years. Researches of the last years allow claiming that the polluted environment is one of important factors defining changes of the state of health of urban population. It is established that all types of pathology considerably meet in ecologically polluted territories more often, from 19 classes of illnesses in 53% of nosologic forms of diseases reliable connection with the maintenance of contaminants in the environment, in particular in atmospheric air is found in the population [1; p. 4].

Among the diseases bound to pollution of atmospheric air, most of researchers distinguish illnesses of respiratory organs (34,4-35,8%), a nervous system (9,5-10,8%), the system organs of a circulation blood (8,3-9,5%). Pollution of atmospheric air only suspended matters can be the cause up to 21 thousand cases of additional death a year from diseases of respiratory organs and cardiovascular system [5; p. 6].

The contaminants coming to atmospheric air from stationary and mobile sources can frame high concentrations not only on the place of emission, but also extend out of borders of the territory of a sanitary protective zone, including, to the territory of residential zones. The maintenance of the main contaminants in the

air basin of the city depends not only on the size of the settlement and its industrial potential, but also on physical geographical features of the territory (a relief, weather conditions and others) and also planning of the inhabited places [2; p. 17].

All aforesaid considerably belongs to the city of Tashkent which is not only the capital of the Republic of Uzbekistan, but also the largest administrative city of the republic with the population exceeding 2,5 million people.

Due to the pollution of atmospheric air the frequency of chronic nonspecific diseases of pulmonary system increases, there are more serious cardiovascular diseases [3; p. 4].

Nitrogen oxides and especially nitrogen dioxide are one of the main components of pollution of atmospheric air of the cities. Nitrogen oxide (II) is formed, generally in the course of combustion of organic fuel at high temperatures (it is above 1000°C) and then in the atmosphere is transformed to NO₂. A significant amount of nitrogen oxides is made by thermal power plants, the metallurgical enterprises, large and fine boiler rooms and motor transport. Typical content of nitrogen dioxide in air of the cities - 20-90 mkg/m³ (average annual concentration); hour concentration can reach 240-850 mkg/m³. Near the plants producing nitric acid, explosives or near thermal power plants (combined heat and power plant) very high concentrations become perceptible. Nitrogen dioxide is a part of group of the gaseous pollutants of air which are formed as a result of road and transport and other processes of combustion of fossil fuel [4; p. 5].

Nitrogen oxides promote formation of greenhouse effect and destruction of an ozone layer. Besides, they cause "extinction of the woods", are one of the reasons of acid rains, etc. The greenhouse activity of nitrous oxide is 298 times higher, than at a carbon dioxide. About 6% of global warming is the share of it. All nitrogen oxides are physiologically active; belong to the third class of danger. The importance of atmospheric effects of nitrogen oxides is bound to deterioration in visibility. Nitrogen dioxide plays an important role in formation of a photochemical smog [4; p. 5].

Development of technologies conducts to augmentation of entering of bonds of nitrogen to the environment, health of the population with chronic diseases worsens, and in particular at people with illnesses of cardiovascular system it can be observed a recurrence. In this regard the number of requests of the population of the city or district for ambulance and entering of patients in hospitals concerning sharp deterioration in health and rising of an indicator of a mortality among the population of the city, most often among the persons which had chronic diseases of respiratory organs and cardiovascular system in the anamnesis is enlarged.

In Tashkent, by organs of the State sanitary epidemiological surveillance it is already for many years controlled onto a condition of atmospheric air. A series of laws and also the sanitary standards and rules referred on control of a condition of atmospheric air works. For example, according to Health regulations and norms of the Republic of Uzbekistan No. 0246-08 "Sanitary standards and rules on protection of atmospheric air of the inhabited places of the Republic of Uzbekistan" is forbidden to place, project, build and put the objects which are the polluters exceeding the established standards into operation. Respectively, on the basis of Health regulations and norms of the Republic of Uzbekistan № 0293-11 "Hygienic standards, the list of maximum-permissible concentration of contaminants in atmospheric air of the inhabited places in the territory of the Republic of Uzbekistan" carries out the analysis of atmospheric air in the territory of industrial facilities on presence of these or those contaminants.

For environmental protection and the air basin a standard basis is the Law of the Republic of Uzbekistan "About protection of atmospheric air" (1996). However social and hygienic monitoring is limited mainly to accumulation of various territories given about an ecological state and separate attempts of identification of relationships of cause and effect between environmental pollution and health of the population.

Conservation is a problem of our century, the problem which became social. Again and again we hear about the danger threatening to the environment, but still many of us consider them unpleasant, but inevitable generation of a civilization and believe that we still will manage to cope with all poured-out difficulties.

However, impact of the person on the environment increased in the menacing scales. To improve situation, purposeful actions will be necessary. The responsible policy in relation to the environment will be possible only in case we save up reliable data on the current state of medium, reasonable knowledge of interaction of important ecological factors if we develop new methods of decrease and prevention of the harm done to the nature by the person.

Thus, the relevance of the matter will allow developing the preventive actions referred on improvement of the state of health of urban population on the basis of accounting of ecological factors on the basis of studying of influence of various extent of pollution of atmospheric air (nitrogen bond) on development of diseases of cardiovascular system.

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