

## HYGIENIC ASSESSMENT OF DRINKING WATER SUPPLY OF THE BREST REGION (2007–2017)

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A retrospective analysis of the incidence of the population of the Brest region was carried out; the quality of drinking water supply was analyzed in the region and the dependence of the occurrence of certain diseases on the use of low-quality drinking water by residents of the Brest region was studied.

*Keywords:* water, pollution, chemicals, incidence, monitoring.

As a result of a retrospective analysis of indicators of inappropriate water samples according to sanitary-chemical indicators from municipal water supply systems, from sources of centralized and non-centralized water supply, from departmental water supply systems of the Brest region, the relationship between drinking water pollution and the incidence of the population was analyzed.

During the study period, there is a decrease in the dynamics of the specific gravity of water pipelines that do not meet sanitary standards in the region.

Most of the inappropriate water samples for sanitary and chemical indicators are non-compliance with hygienic standards for iron content.

In the analyzing of the long-term dynamics (2013–2018) of the incidence of diseases of the digestive system in the population of the Brest region, no pronounced dynamics was revealed towards its growth or decrease.

There is a decrease in the infectious morbidity of the population of the Brest region and an increase in the incidence of urolithiasis for the period from 2013 to 2017.

As a result of the correlation analysis between the incidence rates of the population of the Brest region and water pollution, a reliable positive, strong correlation was found between the incidence of the population of the IHD area, as well as urolithiasis and the proportion of non-standard samples of drinking water in terms of iron content, there is also a significant positive, average degree of strength, the relationship between the incidence of the population of the IHD area, urolithiasis and the proportion of non-standard drinking water for sanitary-chemical indicators (centralized water sources).

The relationship between the incidence of the population of the region of IHD and the proportion of non-standard drinking water samples according to sanitary-chemical indicators (decentralized water sources) and the strong relationship between the incidence of the population of the region of urolithiasis and the proportion of non-standard samples of drinking water according to sanitary-chemical indicators are also noted as medium in intensity (decentralized water sources).

Protection of water resources from pollution is carried out by organizational, planning, technological and sanitary-technical methods and means. Organizational and planning ones include the rational placement of water intake and drainage and sewage spillway devices, the creation of closed cycles. Technological methods and means are reduction of water consumption, reuse of effluents, separation of household and household consumption systems, etc. Sanitary-technical - cleaning measures, a complex of treatment facilities, others cleaning agents.

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