Results and discussion When calculating the health risk assessment in accordance with the «Guidelines for assessing the health risks of the public when exposed to environmental pollutants» (P. 2.1.10.1920-04), the following results were obtained: a risk profile for the development of non-carcinogenic effects with combined and complex effects chemical compounds is based on the calculation of the hazard index. In conditions of combined exposure, the total hazard index characterizes the risk of adverse effects on the critical organ (system). The total index of the hazard of exposure to the respiratory organs was 6.52, on the organs of the cardiovascular system 0.4; eyes 3,2. Thus, if the hazard index of substances does not exceed one, then the probability of human development of harmful effects during daily intake of a substance during life is insignificant and such an impact is characterized as permissible if it exceeds, then the probability of harmful effects in humans increases in proportion to the increase in the hazard index, however It is impossible to accurately indicate the magnitude of this probability. The complex effect of pre-threshold levels of chemical air pollution can affect the morbidity of the pulmonary system of the inhabitants of the Amur Region.

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INFLUENCE OF DRINKING WATER QUALITY ON THE FORMATION OF NON-INFECTIOUS DISEASES OF THE DIGESTIVE SYSTEM IN THE AMUR REGION

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Abstract The Amur Region is part of an extensive biogeochemical province in the Russian Far East characterized by a pronounced deficiency of biogenic elements in environmental objects. The geochemical situation in the region is most affected by the chemical composition of drinking water in the water supply systems of the population. Drinking water has a low content of calcium, fluoride, magnesium, potassium on a background of low overall hardness and high iron content.

Key words: drinking water quality, digestive system

Pollution of drinking water with chemical substances of technogenic origin is considered to be the priority factors that form negative trends in the prevalence of diseases of the digestive system [1]. According to the Ministry of Health of the Russian Federation, the disease of the digestive system as a whole in Russia is 3568.0 per 100 thousand people, in the Far East, 4263.2 per 100 thousand people, the Amur Region is «leading» in this indicator, where the incidence in 2016 was 9690.2 per 100 thousand people [2].

Thus, the territory of the Amur region is characterized by steady growth and a high incidence of non-infectious pathology of the digestive system. According to the scientific literature it is supposed that the leading factors of the risk of diseases of the digestive system can be regional features of the natural mineral composition of water in drinking water supply systems. The issues of assessing the dependence of the health status of the population on the quality of the habitat in the developed on the territory of the Amur region are especially relevant.

Objective To establish the ecological and epidemiological component of the formation of the primary incidence of somatic pathology of the digestive organs of the population in the Amur Region.

Materials and methods The work used information about samples of drinking water, primary morbidity of the population with somatic pathology of the digestive organs, the following institutions and organizations of the region: the Amur Regional Center for Hydrometeorology and Environmental Monitoring, the Department of Rospotrebnadzor for the Amur Region, the territorial agency of the Federal State Statistics Service for the Amur Region, Amur Medical Information and Analytical Center; as well as a set of statistical analysis methods: paired and multidimensional correlation analysis by Pearson and Spearman, multidimensional linear regression analysis/

Results and discussion According to the office of Rospotrebnadzor for the Amur Region, the chemical composition of the natural waters of the Amur Region is primarily formed under the influence of natural factors characteristic of the Far Eastern region: physical and geographical and hydrological conditions, geochemical natural background lead to the fact that the drinking water of the water supply systems in the region is characterized by a high content iron (in some areas exceeding 5 MAC (maximum allowable concentration)) and manganese [3].

Concentrations of other chemicals do not exceed the MAC. The regional features of drinking water also include its low mineralization and a pronounced shortage of nutrients.

At present, the calculation of the health risk assessment is carried out in accordance with the «Guidelines for the assessment of the health risks of the public when exposed to pollutant chemicals» (P. 2.1.10.1920-04). Thus, the pathogenic effect of drinking water on the digestive organs of the population of the Amur region is possible.

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ANTIOXIDANT PROPERTIES OF REAMBERIN IN THE CONDITIONS OF ACUTE NEUROSURGICAL PATHOLOGY

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Summary. Studied the antioxidant activity of reamberin in acute neurosurgical pathology: 13 patients with standard therapy received the drug reamberin (Polysan, St.Petersburg, Russia) intravenously 400 ml of the solution for infusion of 1,5% at a rate of 90 drops/min (1-4,5 ml/min) 1 times a day; 10 patients (control group) received only standard