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Feral herd infections of animals and humans in Yaktia – the coldest manned region on the Earth

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Abstract

In Yakutia for a long time exits natural centers of infectious diseases of the person and animals: tularemias, malignant anthrax, rabies, brucellosis, canicola fever and others. Circulation of this agents in the nature is defines by features of natural ecosystems, its animal population, especially ecto-and endoparasites of bird species and mammals.

Due to the climate change, since the second half of the XX century, there were new aspects of conservation and diffusion of infectious agents. G.P.Somov (1974) on the basis of studying of a pseudotuberculosis put forward idea about a psychrophilic characteristics of its agents. For the first time in Yakutia the pseudotuberculosis was found in the Mirninsky region in 1971. It is believed that its agent was delivered with imported products. However further, the disease was found in 10 districts of the republic remote from each other on thousands kilometers, and cultures of the agent allocated from five mass species of rodents and insectivorous animals. Apparently, the agent remained in the nature in an inactive condition, and when warming passed to an active form.

Thawing of permafrost soils and flood of territories can promote "awakening" of the centers earlier widespread in the region of a malignant anthrax and natural smallpox. In permafrost soils were found viable microorganisms in the remains of mammoth fauna from natural burials. It testifies to probability of "an epidemiological echo" - carrying out on a surface of originators of especially dangerous infections of this era.

Biography

Khlebnyy E.S. completed his PhD at age 24 in Institute for biological problems of permafrost, were works now as a senior staff scientist. He has more than 30 science publications.