

# THE DYNAMICS OF TICK-BORNE ENCEPHALITIS MORBIDITY IN TOMSK AND ITS LINK TO CLIMATE CHANGES

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**Abstract.** The link of tick-borne encephalitis morbidity with climate change for 58 years was investigated on endemic by this disease areas in Tomsk city and its environs. Correlations between the morbidity and air temperature and precipitation were shown. The cyclicity of morbidity and climatic factors closed to periods of climatic cycles E. Brucner and its harmonics was revealed. It is established that in the different phases of the epidemic process the frequency spectra have a different structure. At low levels of morbidity the spectra are multifrequency with the presence of short period fluctuations reflecting uncoordinated interaction of focus components. At high level of morbidity, the spectra have a structure typical for well-synchronized multicomponent processes.

*Keywords:* tick-borne encephalitis endemic foci, climate change, the incidence of tick-borne encephalitis.