## **Abstract - Summary**

The bachelor thesis deals with the tick-borne encephalitis transmitted to humans by a tick and its distribution in the Czech Republic and the Pardubice region in the period 2000 - 2010.

The work is divided into two parts. First – the theoretical part of thesis summarizes the general knowledge on tick-borne encephalitis, its characteristics, occurrence, history, prevention, diagnosis as well as treatment of various forms of disability according to the development of disease. At the same time there is also described the tick as the vector of the disease, its development cycle and method of attachment to humans as the host. For the purposes of prevention of tick-borne encephalitis, this section also describes the conditions of increased tick activity, there are given recommendations of prevention and protection, and the correct procedure for removing the parasite.

The second - the practical part of the thesis includes the analysis and interpretation of epidemiological data on tick-borne encephalitis in the years 2000 - 2010 obtained from the system EPIDAT (countrywide information and monitoring system of infectious diseases). The obtained data were evaluated, focusing on the comparison of incidence of tick-borne encephalitis in the Czech Republic and in the Pardubice region and its individual districts. The comparison was performed not only in general, but also by the seasonality of the disease, according to different age groups or gender of the affected persons.

Generally, the results of the thesis can be summarized as follows. In recent years an increasing incidence of tick-borne encephalitis was reported, the largest increase was recorded in the reporting period for the years 2006 and 2009. Period of greatest risk in terms of infection is within the months of May to October, the high-risk groups are people aged from 25 to 74 years and according to reported cases, far more men than women. These generally summarized results are valid for the Czech Republic and the Pardubice region (certain minor exceptions are described in the text of the thesis).