This bachelory work is devoted to the issue of infections transmitted by ticks. It gives a comprehensive overview of the entire spectrum of infections, that are currently known as transmitted by cattle ticks Ixodes ricinus. Work is focused on analysis of the two most common diseases in natural epizootic area in the Czech Republic - Lyme borreliosis and central tick-borne encephalitis. According to epidemiological characteristics the incidence of Lyme borreliosis in the Moravskoslezsky Region in the years 2006 and 2007 was analysed.