

The risk of tick-borne diseases in Szczyrk (Province Silesian)

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Common tick *Ixodes ricinus* is a parasite of a major medical and veterinary meaning. It transfers the pathogens responsible for many serious diseases. Commonly it occurs throughout the Poland and is the best diagnosed tick species in the country. Silesian region is not the best inspect for the presence of *I. ricinus*, and the incidence rates for Lyme disease are lower than the national average. Harvest ticks on the needs of the work carried out in the years 2014–2015 in the months of May, June, October and November. It was used generally accepted flagging method. The collected specimens were placed in tubes with alcohol, then all analyzed in order to determine the species, stage of development and gender. Each species of ticks is a potential vector dangerous diseases. Epidemiological studies on the presence of *Borrelia burgdorferi* sensu lato, *Anaplasma phagocytophilum* and *Rickettsia helvetica* performed in the Department of Parasitology at the Faculty of Pharmacy and Emergency Medicine in Sosnowiec (Medical University of Silesia). Biological research material were hungry ticks *I. ricinus* common. Using molecular methods PCR examined the occurrence of *Borrelia burgdorferi* s.l., *Anaplasma phagocytophilum* and *Rickettsia helvetica* in *I. ricinus*. Of the 108 tested *I. ricinus* ticks, no individual has not been infected with the pathogen causing the disease *Anaplasma phagocytophilum* anaplasmosis and *Borrelia burgdorferi* s.l. causing Lyme disease. In 73 samples were found bacteria *Rickettsia helvetica*, associated with simultaneous acute pericarditis and myocarditis. The results allow to conclude that in the city Szczyrk tick *I. ricinus* occurs commonly. His presence was found in four of the six designated research areas differ in terms of topography, sunlight, vegetation, and slightly absolute height above sea level. The risk of rickettsiosis is high and incorrect diagnosis of this disease can even lead to the death of a man.