



P 39 Tick-borne encephalitis virus (TBEV) in ticks detached from humans in Sweden and Åland 2008–2009

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In Sweden, about 200 cases of tick-borne encephalitis (TBE) are registered each year. During the last decades, the number of cases has shown an increasing trend at the same time as TBE cases have spread to new areas.

Ticks, blood samples, and questionnaires were collected at 27 and 32 participating healthcare centers in Sweden and Åland, respectively, from tick-bitten individuals in 2008 and 2009. Blood samples were collected both when the study subject came to deliver the tick and 3 months later. The ticks were analyzed using real-time PCR to detect and quantify TBEV, and the blood samples from the tick-bitten individuals were screened for TBEV antibodies. The work flow developed was to a large extent automated.

In 2008, 865 people handed in 1034 ticks that had bitten them and a first blood sample, and we received 742 follow-up blood samples. In 2009, 1006 people participated, and we received 1228 ticks and 877 follow-up blood samples. The prevalence of TBEV-containing ticks was very low both in Sweden and Åland, far below 0.5%.