



## V 24 Tick-borne encephalitis virus persists in wild rodents outside of tick-feeding season

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RNA of European and Siberian subtypes of tick-borne encephalitis virus (TBEV) was detected in brain and internal organs of *Microtus agrestis* and *Myodes glareolus* rodents, respectively, during 2 subsequent winters several months after the tick feeding season in Finland. This may indicate that small mammals act not only as tick cofeeding hosts and when viraemic as a source for infection of ticks, but also as long-term reservoirs for the virus.

The 3 known subtypes of TBEV are designated as European, Siberian, and Far eastern. Vector for the European subtype is *Ixodes ricinus*, whereas the 2 other subtypes are spread by *I. persulcatus* ticks. Both European and Siberian subtype of TBEV have been shown to exist in ticks in Finland. The rodents were caught in areas representing both subtypes, in Kokkola archipelago (Siberian subtype) and on Isosaari island outside of Helsinki (European subtype). A total of 201 rodents and insectivores was trapped in February and early March 2008 and 2009 by snap trapping. Viral RNA was detected in both areas in brain and organ pools of rodents using real-time reverse transcription (RT). Further to real-time RT-PCR, viral RNA was detected by nested RT-PCR and sequenced. Sequence analysis showed that strains were similar to those detected in ticks in the areas in question.