“TBE is endemic in regions of 27 European countries and every year we detect new risk areas.”
J. Süss, PhD, Jena

The World Health Organisation (WHO) reports: “TBE is a serious acute central nervous system disease, which may result in death or long-term neurological sequelae in 35-58% of patients.”

Currently no causal treatment is known for TBE. Prevention by special clothing and/or tick repellents has proven not reliable enough.

However TBE can be successfully prevented by active immunization.

Correctly performed vaccination builds up specific antibodies. These antibodies fight an infection caused by the bite of an infected tick, so that the spread of viruses in the body is usually prevented.

Conventional primary immunization:
First vaccination
The first dose should be given on an elected date in the cold season, to be protected by the beginning of the tick activity.
Second vaccination
1 to 3 months after the first vaccination
Third vaccination
5 to 12 months after the second vaccination

Booster doses:
First booster dose
Should be given 3 years after the primary immunization series.
Sequential booster doses
Should be given according to national recommendations.

Those who are vaccinated have a high protection rate against the disease and its consequences. Please ask your doctor or pharmacist for detailed medical advice.

Remove ticks by using fine-tipped tweezers. Grasp the tick firmly and as close to the skin as possible. Using a steady motion, pull the tick’s body away from the skin without rotation.

>J. Süss, PhD, Jena

“TBE/FSME vaccination is recommended within Europe for all people residing in or traveling to endemic areas.”
M. Kune, MD, Chairman, ISW, Munich 2006

“Even though TBE has already been described in 1931, this dangerous form of encephalitis has been underestimated for a long time.”
C. Kunz, MD, Co-inventor of the first Western-European TBE vaccine, Vienna

Tick removal

Are you traveling in Europe during spring or summer? Will you be pursuing activities in nature?
If yes, then you should consider protection against tick borne encephalitis (TBE/FSME)!

Please ask your physician for further information!
What is TBE?
TBE (Tick-Borne Encephalitis) is a viral disease transmitted by ticks that attacks the nervous system and can cause both mild and severe illnesses, with permanent consequences such as concentration problems, paralysis and depression. Approximately every 100th case results in the death of the affected person.

Signs and symptoms
After a frequently symptom-free interval of between 2 and up to a maximum of 8 days, symptoms indicating the affection of the nervous system appear. This happens when the virus enters the bloodstream. Patients complain about general symptoms, such as temperature increase (usually under 39°C), headaches, overall weakness, fatigue, intestinal problems, cough and sniffles; symptoms often indicative of the common cold.

How is TBE transmitted?
TBE is transmitted through tickbites from infected ticks. The Ixodes ricinus tick (common castor-bean tick) is prevalent across Europe. Not every tick transmits the dangerous TBE virus, but the rate of infestation in some high-risk areas can be high. In certain areas ticks can be found at altitudes of up to 1,800 m above sea level; infections of the TBE virus have been reported at altitudes of 1,300 m.

Where do ticks hide?
Although many still believe that ticks fall from trees, they actually live in the soil and don’t climb much higher than 20 to 70 centimetres onto grasses and bushes in their search for a blood host (people, animals). Therefore, we generally brush ticks off vegetation when we pass through grasses or by bushes along forest paths, or when we walk on lawns and in the garden. Ticks have temperature- and olfactory senses that detect “prey”. Many infected people cannot remember ever being bitten because of the small size of the ticks.

Infection

After a frequently symptom-free interval of between 2 and up to a maximum of 8 days, symptoms indicating the affection of the nervous system appear. This happens when the virus succeeds in breaching the blood–brain barrier and infects the brain. Another temperature increase (usually over 39°C) ensues, with typical additional symptoms, such as agitated headaches, neck stiffness, impaired consciousness, delirium, cranial nerve paralysis, coordination problems and paralysis of the arms and legs. Ultimately, paralysis of the respiratory musculature can occur.

Intensive treatment, including artificial respiration, is then essential.
There is no specific treatment for TBE. Therefore, therapy can only be symptom-oriented, e.g., reducing fever, alleviating pain.