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Tick borne encephalitis

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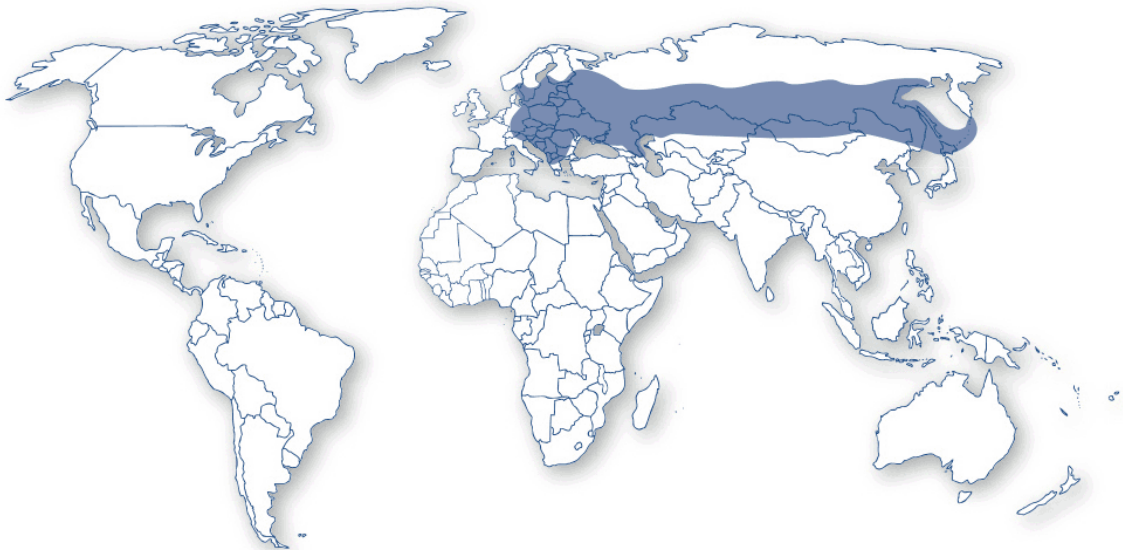
What is tick borne encephalitis?

Tick borne encephalitis (TBE) is a viral infection, spread by tick bites, which can cause meningitis and inflammation of the brain. It can be fatal, although this is rare.

Where is it found?

TBE is usually found in central, eastern and northern Europe, particularly in forests and meadows lower than 1,400 m elevation. There are smaller areas of risk in China, Japan and the Russian Federation, including Siberia.

Tick-borne Encephalitis Risk Areas



■ Countries or areas at risk for tick-borne encephalitis

Acknowledgment: Adapted from Lindquist L, Vapalahti O. Lancet Infect Dis. 27:1861, 2008.

Check if you are visiting risk areas by looking at [NaTHNaC's Country Information Pages](#).

What are the symptoms?

These usually appear 4 to 28 days after an infective tick bite:

- Fever (high temperature)
- Flu like illness
- Headache
- Nausea and vomiting
- Tiredness
- Sore muscles

These symptoms usually last for one to eight days - most people then make a full recovery. However, sometimes a serious illness develops, usually one to twenty days after the first illness. This is more severe and there can be brain inflammation ([encephalitis](#)) or [meningitis](#), paralysis, permanent disability and even death.

What is my risk?

TBE is carried by: cattle, goats, mice, sheep, voles and even small birds. The ticks that spread TBE live in or near woods, forests, grasslands, meadows and riversides, mainly in the countryside, but sometimes in large parks in cities.

Ticks live in the undergrowth and can attach themselves by dropping onto humans as they walk by. If the ticks are infected with the TBE virus, they can pass it on in their saliva when they bite you. TBE can also be spread by eating or drinking unpasteurised dairy products. You cannot catch TBE from another person.



Ixodes tick: Courtesy Norwegian Institute of Public Health

The main risk is April to November and depends on when, where and what you are doing. Most trips are low risk, especially if you just visit cities. However, your risk is higher in rural areas, especially if you are camping and/or spending a lot of time outside. TBE is usually gotten by local people who live in risk areas and have never been vaccinated. Your risk is higher if you move permanently to a risk country.

To date, there has never been a case reported in a British traveller.

How do I reduce my risk?

Follow strict [insect bite avoidance guidelines](#) and do not ingest any unpasteurised dairy products.

Check you body regularly for ticks.



Make sure you know how to [remove ticks](#) correctly, and promptly remove them if they are attached.

If you think you will be at risk during your trip, get advice from your GP or travel clinic about the vaccine.

Is there a vaccine?

There is a safe and effective vaccine, which is given as a course of injections into your upper arm. There are two injections between one and three months apart, with a third dose five months to a year later.

If you need more rapid protection, two doses of vaccine can be given two weeks apart, with the third dose five months to a year later. Booster doses are given after three years if you are still at risk.

You should consider vaccination if:

- You live, work in or frequently visit risk countries.
- You are visiting the countryside, woods or forests in risk regions.
- You are camping, cycling or spending a lot of time outside.

Can TBE be treated?

There are no specific drugs or medicines to treat TBE.

Remember – any activity that brings you into contact with ticks increases your risk. Avoiding unpasteurised dairy products and good bite avoidance are important, even if you get the vaccine.

Links

- Centers for Disease Control: Tick Borne Encephalitis.
- Centers for Disease Control: Tick removal.
- Health Protection Agency: Tickborne Encephalitis
- NHS Choices: Tick-Borne Encephalitis.