# About the diseases: symptoms and treatments

Please contact your doctor if you experience any of the symptoms below.



> Lyme borreliosis symptoms occur usually within 30 days after the



- Reddish skin rash in a ring shape around the bite
- Flu-like symptoms such as fever, tiredness, headache

Most cases of Lyme borreliosis can be treated success-

fully with a few weeks of antibiotics. However, if left untreated, the disease can infect the heart, joints and nervous system.



> Tick-borne relapsing fever symptoms occur usually within 3 weeks after the bite:

- Recurring episodes of fever
- Often accompanied by headache, muscle and joint pain, nausea

The number of relapses is highly variable and the interval between fever episodes ranges from 4 to 14 days. The recommended treatment is tetracycline or doxycycline. Deaths are very rare.



> Tick-borne encephalitis symptoms occur usually within 4 weeks after the bite:

• Fever, tiredness, headache, muscle pain and nausea

The later phase of the disease involves the neurological system with meningitis-like symptoms and requires hospitalisation. There is currently no cure for Tick-borne encephalitis. While deaths are rare, there is however a significant risk of long-term neurological effects. Considering vaccination and taking protective measures against tick bites are of outmost importance when visiting an endemic area.



- Fever, muscle pain, dizziness
- Abdominal pain and vomiting
- Bleeding

There is currently no validated cure for Crimean-Congo haemorrhagic fever, which can be fatal, so it is very important to take preventive measures when visiting endemic areas.

For more information on the distribution of ticks in Europe: www.tickmaps.ecdc.europa.eu

[Name and contact details of health authorities]



# Information for travellers on >>





# Ticks can pass on diseases

icks are very small and live on blood of mammals, reptiles and birds. As they feed, they can pick up bacteria or viruses naturally carried by these animals.

Ticks can also bite humans who pass through the environments where they live. Although tick bites are not dangerous in themselves, there is a risk that ticks may transfer infections into your bloodstream while they feed. This can cause disease in humans.

In Europe, tick-borne diseases passed on to humans include:

- Tick-borne encephalitis
- Lyme borreliosis
- Tick-borne relapsing fever
- Crimean-Congo haemorrhagic fever
- Mediterranean Spotted Fever
- Anaplasmosis

These diseases occur in different regions where infected ticks are present.

Ticks can be as small as a pin's head or fairly large (about the size of a pencil eraser).



Illustration is only indicative. Sizes can change considerably depending on tick species.

[National authority to insert relevant local/national/ international information, such as risk areas, statistics, a map etc]

# Be aware of the risk of tick bites

Ticks can be found in both rural and urban locations, including many popular destinations for outdoor activities and tourism.

People visiting rural areas are most at risk from tick bites, but they can also occur in picnic spots, parks and gardens. There is a higher risk when pursuing outdoor activities such as camping, hiking, cycling, climbing, fishing or hunting.

If you are visiting an area where ticks are present, make sure you know how to prevent and check for tick bites.

### **Preventive measures**

Tick-borne encephalitis can be prevented by a vaccine. Vaccination is recommended for those travellers who intend to visit rural areas in endemic regions, or who plan to camp in these areas.

Please ask your doctor for more information at least 1 month before travelling and be aware that more than one shot is

required for the vaccine to be effective.

Also be aware that this vaccine

does not protect you against other tick-borne diseases.

As the other tick-borne diseases, cannot be prevented by vaccination it is important to protect yourself against tick bites.

### AVOID OR MINIMISE EXPOSURE TO TICK BITES



- Use insect repellents on your skin and clothes (clothes specific insect repellents should not be used on the skin)
- Keep arms and legs covered with long sleeves, long trousers and boots, with trousers tucked into socks
- Use light-coloured clothing and picnic blankets that make it easy to detect ticks
- After being outdoors, remove your clothes outside and expose them to the sunlight or wash them
- Use ground sheets when sleeping on the ground or camping
- Walk in the middle of paths and avoid brushing against the surrounding vegetation

### EARLY AND CORRECT REMOVAL OF TICKS

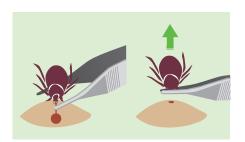
For some diseases, there is a lower risk of infection if the tick is detected and removed quickly.

As ticks are very small and their bites do not usually hurt, ticks can easily be overlooked on the body. So it is important to check yourself and your children, as well as your clothes and pets, carefully after having visited places where ticks may be present.



> Check all over the body, paying particular attention the armpits, groin, legs, navel, neck and head. On children, ticks are often found on the hairline, behind the ears, in the neck creases or on the scalp.

A tick bite usually looks like a small dark freckle with a scab on the skin which cannot be brushed away. A magnifying glass may be helpful.



> Use fine-tipped tweezers or tick removal tools to grasp the tick as close to the skin's surface as possible. Pull upward with steady, even pressure without jerking or twisting avoiding squeezing the ticks body

or that mouth parts remains in the wound. Do not squeeze the tick's body, and do not apply heat or any substances to the tick, as this may cause it to empty its stomach contents into the wound which would cause infections.

> Still using the tweezers, wrap the tick in some toilet paper and flush it down the toilet. Finally, wash your wound with warm



water and soap and apply antiseptic, like alcohol or iodine, to the area.

> After the tick has been removed, a small part of the tick's mouth may remain in the wound. This is not dangerous and it will disappear after a couple of days along with the wound. However, if the lesion does not start to resolve after a couple of days, you should see a medical professional as this may indicate an infection (rare).

Mark the date of the tick bite in your calendar and watch out for the symptoms of tick-borne diseases in the time following the bite. Make sure to inform your doctor of the date and location of the bite if you fall ill within 1 month after the bite.