

Monday, 19 June 2023

Dear Parents and Carers,

The following information is from the [UK Health Security Agency](#)

As we head into spring and summer we are reminding people to be 'tick aware' as they enjoy the great outdoors.

Ticks can carry infections and while [Lyme disease](#) is more common in the UK, we have recently confirmed a case of tick-borne encephalitis (TBE) in England. To help you stay safe this spring and summer, we've compiled a guide to protecting yourself from tick-borne infections. In this blog, you'll learn how to avoid tick bites, how to recognise the signs and symptoms of Lyme disease and TBE and when to seek medical assistance.

Where are ticks found?

Ticks live in many different outdoor environments but they are particularly common in grassy and wooded areas. You are therefore more at risk of being bitten if you take part in activities such as hiking, cycling or camping, but they can also sometimes be found in urban gardens.

How to avoid tick borne infections

While walking in green spaces, consider wearing clothing that covers your skin to make it more difficult for ticks to access a suitable place to bite.

Use insect repellent such as DEET and consider wearing light coloured clothing so that you can easily spot ticks and brush them off.

After spending time outside, check yourself, your clothing, your pets and others for ticks. Remove any attached tick as soon as you find it using a tick-removal tool or fine-tipped tweezers.

What is Lyme disease?

[Lyme disease](#) is an infection transmitted by some tick species. The disease can be acquired when bitten by an infected tick, particularly when spending time outdoors in green spaces. Although Lyme disease should not deter you from enjoying the outdoors, you can reduce your chance of infection by following the precautions above.

What are the symptoms of Lyme disease?

The most common [symptom](#) is a spreading, bulls-eye rash at the site of the tick bite which typically develops 3 to 30 days after being bitten. This occurs in approximately 2/3 of infected people. Other symptoms include a non-specific flu-like illness, a facial droop, nerve pains and numbness or tingling in the hands or feet.

Where can you catch it?

People are most likely to encounter ticks when doing activities in the countryside or other green spaces such as woodland, some urban parks or gardens.

Ticks are most active in the spring and summer months when the weather warms up but can be found all year round. Not all ticks in England are infected, and the majority of tick bites will not cause Lyme disease. There were 849 laboratory confirmed cases of Lyme disease in England in 2022, although around 1000-2000 people are diagnosed each year based on clinical assessment rather than laboratory test.

What is the prognosis?

In the UK, Lyme disease is an uncommon infection and can be successfully treated with antibiotics as per NICE guidelines. If untreated, it can cause a wider range of symptoms in some people such as multiple rashes on other parts of the body, facial droop, shooting nerve pain and rarely palpitations or joint swelling. Most patients treated in the later stages of infection also respond very well to antibiotics, although some may have long-term damage to their joints or the nervous system.

Looking out for symptoms of Lyme disease, and checking yourself for ticks after you go to green spaces where they may be present is very important. Prompt tick removal can reduce your chances of acquiring Lyme disease.

Symptoms typically develop 3 - 30 days after a bite from an infected tick. Rapid recognition of symptoms can ensure that you receive the earliest diagnosis and treatment from your GP.

What to do if you have symptoms of Lyme disease

If you have developed symptoms such as a bulls-eye rash after being bitten by a tick or spending time outdoors, immediately contact your GP or call NHS 111, mentioning where you have been and if you remember being bitten. There are national guidelines that your doctor will follow that provide advice on diagnosis and management of Lyme disease.

How do you track cases of Lyme disease across the country?

Current surveillance tools for Lyme disease use information from ticks collected in locations across the country, and laboratory data from patient samples.

However, as the laboratory data is typically tied to where someone lives, there is a gap in understanding about where an infection is acquired.

We have updated our enhanced surveillance which will see people who test positive for recently acquired Lyme disease being asked to provide information about where they may have picked up the infection. They will be asked if they recall a tick bite, where in the country this took place, whether they have any pets, their recent outdoor activities, travel and their occupation.

This new surveillance will allow us to better map the spread of infection in England, so people can take steps to reduce their risk when they are enjoying the outdoors.

Are cases of Lyme disease increasing?

Studies in Europe estimate that 1-5% of tick bites can lead to Lyme disease. On average, between 2.5–5.1% of ticks are infected in England and Wales, although this range can fluctuate in different areas and across years.

Since data collection began in 2005, there has been a general trend of increasing cases of Lyme disease, although yearly fluctuations have been observed. In 2021, there were a total of 1,156 laboratory-confirmed cases of Lyme disease in England and Wales.

The rise in total cases may be due to a combination of increased awareness of Lyme disease as well as improved surveillance, better access to diagnostics, increased potential for encounters with ticks due to changes in wildlife populations and habitat modification that may have resulted in changes in tick distribution across the country.

What is 'chronic Lyme disease'?

There is no agreed definition of the term 'chronic Lyme disease' among doctors so it can mean different things to different people. Some people use the term chronic Lyme disease to describe a range of non-specific symptoms including chronic tiredness and unexplained neurological symptoms, even when there is no evidence of past or current Lyme disease infection.

The non-specific symptoms overlap with those of several other conditions including fibromyalgia and chronic fatigue syndrome, which can be triggered by common infections such as the glandular fever virus, and more recently COVID-19.

Although most people with Lyme disease recover from the infection quickly and completely, it is not unusual to feel some lingering fatigue or muscle pain at the time you finish your course of antibiotics. These symptoms generally resolve on their own over time although very rarely can persist for over 6 months, and are not improved with longer or repeated courses of antibiotics.

Should I get tested by the NHS or a privately funded laboratory? Is there a difference?

If you have a classic bulls-eye rash, then you can be treated for Lyme disease without the need for a test. If you have a recent tick exposure and symptoms of Lyme disease (but no bull's eye rash), guidance to NHS doctors in England is to take a blood sample and send it for testing at an NHS or UKHSA laboratory. The tests work by looking for antibodies that a person infected with Lyme disease would produce.

The antibodies take some time to reach levels that can be detected, therefore, tests carried out within the first 4 weeks of infection may be negative and may need to be repeated on a fresh blood sample taken 4 to 6 weeks after the first test.

We recommend people exercise caution with private tests and speak to their NHS doctor for advice before spending money on private tests or treatments, as some private laboratories and clinics offer unreliable tests and treatments that are not supported by the scientific community.

Diagnostic tests done outside the NHS may also produce false positives where the test shows positive for Lyme disease when the patient doesn't actually have it. Our advice is to seek help through the NHS.

What is tick-borne encephalitis virus (TBEV)?

TBEV is a viral infection that spreads through tick bites. Although it is prevalent in many parts of the world, including several European countries, in the last few years, ticks carrying TBEV have been found in England.

What are its symptoms?

TBEV causes a range of diseases, from completely asymptomatic infection to mild flu-like illness, all the way to severe infection in the central nervous system such as meningitis or encephalitis (swelling of the brain).

Symptoms of [encephalitis](#) can include a high fever with a headache, neck stiffness, confusion, seizures or fits, reduced or loss of consciousness.

Seek urgent medical attention if you or anyone you know experiences symptoms of meningitis:

- severe headache
- stiff neck
- pain looking at bright lights

Seek urgent medical attention if you or anyone you know develops neurological symptoms:

- a fit (seizure), if not known to be epileptic
- sudden confusion or change in behaviour
- weakness or loss of movement in arms and legs
- facial dropping, change in vision or slurred speech

More information can be found on the [NHS website](#).

Remember that advice and treatment is readily available through the NHS. So, if you think you have been bitten by a tick and have symptoms, contact your GP and accept the treatment that is offered to you.