



UK Health  
Security  
Agency

## Ticks and Lyme disease: resources for you & your patients

Lyme disease is a bacterial infection that can be transmitted to humans when they are bitten by an infected tick. On average, nearly 6% of ticks in England and Wales are infected with Lyme disease bacteria, but this varies in different areas and between years. Lyme disease is the commonest tick-borne disease in the UK.

Frontline healthcare practitioners play a key role both in promoting **awareness** of tick borne infections amongst their patients and in the early **diagnosis and management** of Lyme disease.

### Awareness

Ticks are widespread across Great Britain (see this [map](#)) and their distribution is expanding. Ticks are most active in the spring and summer months but can be active all year round. Lyme disease can be contracted anywhere where humans come into contact with ticks - in the countryside, urban parks or private gardens. It is important not to dismiss any areas as 'zero risk'.

For travellers, Lyme disease is particularly prevalent in parts of central, eastern and northern Europe (including Scandinavia) and in the [north eastern states of the US](#).

It is important for the public to 'be tick aware'- to know what measures to take to avoid being bitten, how to perform tick checks on themselves, family members and pets and how to remove any attached tick promptly and safely.

Please display this [tick awareness infographic](#) on digital screens in your surgery to encourage your patients to be tick aware when enjoying the outdoors this summer.



## Further sources of awareness information for patients and the public

From the UK Health Security Agency:

- A [poster](#) and [leaflet](#) about tick awareness which you can make available in your surgery. You can order printed leaflets and other tick awareness materials at <https://www.healthpublications.gov.uk/ViewProduct.html?sp=Stickawareness5leaflet>
- A blog post: [What is Lyme disease and why do we need to be tick-aware?](#)
- A video: [What is Lyme disease? \(youtube.com\)](#)

From the NHS:

- Information for patients is available [here](#)

## Diagnosis and management

National guidance for healthcare practitioners on the diagnosis and management of Lyme disease is available [here](#).

### Diagnosis

The most common symptom of Lyme disease is a spreading, red [erythema migrans \(EM\)](#) or 'bullseye' rash at the site of the tick bite. This typically develops 3 to 30 days after being bitten. These cases should be treated on clinical suspicion and laboratory testing is not required.

About a third of Lyme disease cases do not notice a rash and may present with non-specific flu-like symptoms such as fever, fatigue, myalgia and headache. Neurological symptoms including nerve pains and numbness, tingling in the hands and feet and Bell's palsy may also be experienced. Consider a range of [differential diagnoses](#) and [laboratory testing](#) to reach a diagnosis.

Laboratory testing for Lyme disease should be arranged through your local NHS microbiology services provider. For routine Lyme disease serological testing, a serum sample (gold- or red-topped tube) is required. Please include as much clinical information as possible about symptoms and timing of onset to allow correct interpretation of results.

### Management

If recognised and treated promptly most cases will resolve without complications. Antibiotic treatment guidelines for different presentations of Lyme disease are specified in the national guidance and in this [bmj visual summary](#).

If you are uncertain about the correct management of your patient, contact your local infection department or contact the reference laboratory at UKHSA Porton Down (01980 612348).

## Further sources of information for healthcare practitioners

- [resources and guidance](#) from UKHSA
- [Lyme disease Clinical Knowledge Summary](#) from NICE

If you and your practice would like some teaching or CPD on Lyme disease, contact [Lyme.ripl@ukhsa.gov.uk](mailto:Lyme.ripl@ukhsa.gov.uk)