

## What is Lyme disease?

Lyme disease is an infection caused by bacteria called *Borrelia burgdorferi* (pronounced bore-EL-ee-uh burg-DOR-fer-rye). They belong to a family of bacteria called Spirochaetes (SPY-roe-keets), because of their appearance.

This is a highly magnified image of a group of *Borrelia burgdorferi* bacteria.



## What happens when you get Lyme disease?

Some people get a circular red rash that spreads out, usually from the site of the bite. Later, you might feel ill. You might experience:

- headaches
- feeling very tired
- fevers or sweats
- pains in muscles or joints
- numbness or tingling

Lyme disease can be mild, but it can also be very serious. Lyme disease might not go away on its own, so must always be treated.



## Be smart and be aware!

- Keep your arms and legs covered when walking in woodland and similar places.
- Insect repellents containing chemicals called DEET or Picaridine will help keep ticks away.
- Check for ticks regularly when you are out, brush off clothing and check pets and flowers etc. before going inside and check yourself carefully afterwards.
- If you find a tick attached, remove it quickly and in the proper way.

**FACT:** ticks can carry other diseases as well. These include Babesia, Bartonella, Rickettsia and Anaplasma. An infected tick can give you more than one infection at the same time!

## Further Information

See our website to find out more about Lyme disease, including links to many other resources.

[www.LymeDiseaseAction.org.uk](http://www.LymeDiseaseAction.org.uk)

Leaflets are also available from:

Lyme Disease Action,  
PO Box 235, Penryn, Cornwall,  
TR10 8WZ, UK



Including a donation will help us in our work for people affected by Lyme disease.

Please don't bin this leaflet - pass it on.

*Disclaimer: Lyme Disease Action publications are not a substitute for professional medical advice and are intended as general information only. If you have or suspect you may have Lyme disease you should consult a doctor.*

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# LDA

Lyme Disease Action

# Ticks and Lyme Disease

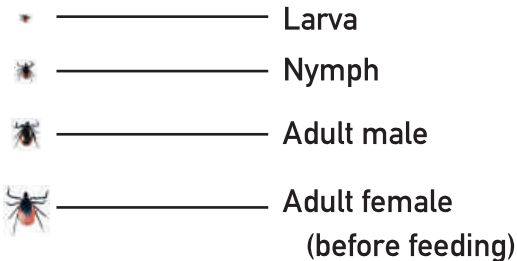
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## What are ticks?

Ticks have eight legs (apart from the larvae, which have six), so they are not insects, but are ARACHNIDS, and are related to spiders, mites and scorpions. They go through four stages in their life cycle - egg, larva, nymph, then adult.

Actual size!

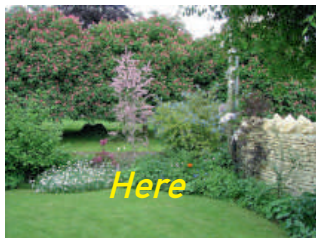


This is an adult female tick, which is about the size of a pea. It has fed so its body has stretched and is full of blood.

## Where are ticks found?

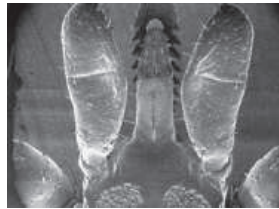
The native UK ticks tend to live in places with damp vegetation and lots of small animals and birds they can feed on.

Ticks can be found in woodland, moors, and even parks and gardens all over the UK. Some imported ticks from Europe can survive in houses.



## So how does a tick feed?

To grow from one stage to the next, the tick has to feed. It climbs a leaf or stalk, then waits for an animal or person to brush past. The tick has hooks on its front legs so that it can hang on to fur, clothing or skin. It then searches on the host for a suitable place to feed. The tick's mouth is like a hollow needle (the proper name is HYPOSTOME). This enables the tick to stab through the skin and slowly feed on blood.



This is a highly magnified photograph of a tick's mouthparts, showing the barbed hypostome in the middle. The barbs help the tick to stay firmly attached.

The tick might stay attached for several days. Infections can be passed to you during this time. When it has finished feeding it drops off, ready to change to the next stage in its life cycle.



This photograph shows a nymph tick attached to someone's skin. Look how small it is compared to a fingernail!

## How do you remove a tick?

The best way to remove a tick is to use a simple tick remover which hooks underneath the tick. Some, like the one shown, are meant to be twisted as you pull to help break the grip.

Tick removers can be bought from our website or from vets and pharmacies.



If you don't have a tick remover, tie a loop of thread around the tick as close to your skin as possible and pull firmly upwards without twisting. Try not to damage the tick.

- DO NOT try to pull a tick out with your fingers! You might squeeze the contents of the tick into your body, which is more likely to make you ill.
- DO NOT try to burn the tick or cover it with vaseline or any other creams or chemicals.
- DO NOT scrape or cut the tick: remove it whole.
- DO disinfect the area around the bite using antiseptic cream, after you remove the tick.

Wrap tick in tape and dispose of, or send it to [www.gov.uk/guidance/tick-surveillance-scheme](http://www.gov.uk/guidance/tick-surveillance-scheme)

## What if I have been bitten?

Don't panic! Not all ticks carry diseases, so you might not get ill. Just remove the tick as soon as possible and in the right way.

Lyme disease can be serious, so if you get a rash or you feel ill in the first six weeks or so after a tick bite, see a doctor straight away.



# Ticks & Lyme Disease

## Ticks:

A tick is a small, blood-sucking mite. Normally it lives on blood from wild animals, such as deer, but occasionally it may attach itself to humans when they walk through grass, rough vegetation, bracken or heathland. Most tick bites are harmless but, occasionally, the tick carries a small bacterium called *Borrelia burghdorferi* in its stomach. This bacterium causes Lyme Disease.

## What does a tick look like?



1

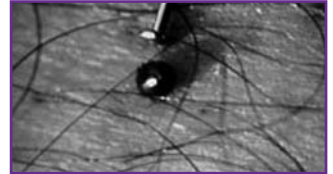


2



3

1. Female itck
  2. Male tick
  3. Engorged female tick
- N.B. A tick at nymph stage is the size of a large pin head



Tick on skin

## Lyme Disease

Lyme Disease is an infection caused by bacteria that can be transmitted by ticks when they bite (not every tick carries Lyme Disease).

The infection can affect the skin, cause partial paralysis of the face (Bells Palsy) and cause serious illness of the nervous system, joints and heart. Ticks are tiny flat bodied, spider-like creatures that attach themselves to passing animals or persons for a blood meal. The highest risk was thought to be from April to October when the tick was most active and feeding, but research has shown that, in certain areas, ticks may be active throughout the year.

## Can it be prevented?

Yes. When visiting the countryside keep to open paths and always keep your skin covered (wear long trousers and long-sleeved shirts) whilst passing through areas of rough vegetation. Tuck trousers into socks if necessary.

Light coloured clothes will help you spot ticks and brush them off. At regular intervals check your clothing and exposed skin for ticks. At the end of the day completely check over your body for ticks.

Dogs are susceptible to Lyme Disease and may cause them to develop arthritis at an early age. Insect repellents and repellent collars for pets may help prevent ticks getting hold.



## What if I am bitten?

Remove the tick as soon as possible by grasping it close to the skin with a pair of tweezers.



Apply gentle pressure, twist anti-clockwise and pull upwards.

Pull slowly and consistently until it lets go.

Do not squeeze the body of the tick or attempt to remove the tick through burning or chemicals.

If the tick is accidentally pulled apart and the head remains in the skin, there may be a risk of infection from other microscopic organisms. This kind of infection is not related to Lyme Disease but can still be unpleasant. Consult a doctor if infection occurs.

Save the tick in a sealed container in case you develop symptoms later.

## Should I see my Doctor?

The disease might show itself as an expanding reddish, round rash in the area of the bite. Usually this will occur within three to thirty days of a bite.

Early symptoms may resemble influenza (flu), with swollen glands near the site, mild headaches, aching muscles and joints, and tiredness.

If you develop any of these symptoms and you suspect that a tick has bitten you, inform your doctor. Lyme Disease is treatable with antibiotics and the earlier it is diagnosed, the better.

## Contacts:

To order more leaflets, please contact Somerset County Council on 01823 355563. You can get more information from these websites: [www.nhsdirect.nhs.uk](http://www.nhsdirect.nhs.uk) or [www.bada-uk.org](http://www.bada-uk.org). Alternatively you can go on NHS Direct Digital TV via SKY or Freeview or call NHS Direct 24 hours a day on 0845 4647.

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This document is also available in Braille, large print, on tape and on disc and we can translate it into different languages. We can provide a member of staff to discuss the details. For more information contact 01823 355563.



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