Health Protection Surveillance Centre

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Feidhmeannacht na Seirbhíse Sláinte Health Service Executive



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# WHAT CAUSES

Lyme disease is caused by the bacterium *Borrelia burgdorferi* which is spread by the bite of a tick. Ticks are tiny spider-like creatures with three life-cycle stages, the smallest of which is about the size of a pinhead.

Adult female Nymph \* • Larva

ny spider-like creatures with tages, the smallest of which is about the size of a pinhead. They are frequently Addit found in woodland, moorland and other grassy areas, where they feed on the blood of mammals (e.g. deer) and birds. They are usually found close to the ground,

especially in moist, shaded areas.

## WHO IS AT RISK?

Ramblers, campers, mountainbikers, and people who work and walk in forested/grassy areas are at greatest risk of being bitten by ticks and developing Lyme disease, but even in these groups, the risk is low.

### HOW COMMON IS LYME DISEASE IN IRELAND?

The true incidence of Lyme disease is not known in Ireland; recent estimates suggest that there are at least 50-100 confirmed cases identified each year.

# WHAT ARE THE SYMPTOMS OF LYME DISEASE?

The first symptom of Lyme disease is often a rash (*erythema migrans*) that can appear 3 to 30 days after the tick bite. It starts as a small red dot at the bite site but may grow larger with time. The centre of the spot often fades creating a characteristic "bull's-eye" appearance. Other symptoms include fever, chills,

headaches, stiff neck, fatigue, muscle aches and joint pain. Occasionally, a severe form of Lyme disease can develop and the heart, joints or the nervous system can be affected.



Photo courtesy of CDC/ James Gathany

## PREVENTING LYME DISEASE

### **Avoid Tick Bites**

- Walk in the middle of paths/trails; avoid overgrown vegetation, sitting on logs and leaning against trees.
- 2. Wear a hat and tuck in hair.
- 3. Wear a long sleeved shirt fitted at the wrist.
- 4. Wear shoes, not sandals or bare feet.
- 5. Wear long trousers tucked into socks or boots.
- 6. Consider using an insect repellent containing DEET. Follow the manufacturers' application guidelines.
- 7. Wear white or light coloured clothing to make ticks more visible and inspect clothes every 3-4 hours.
- 8. At the end of your day out, check yourself (and your children) for ticks. Check both skin and hair, particularly warm moist areas such as the groin, backs of knees, armpits and neck. Pay particular attention to the head, neck and scalp of children.
- 9. If you find a tick, remove it as described below, and consult your GP if symptoms develop.
- 10. Check your pets for ticks after outdoor activities too.

### I've been bitten by a tick, what should I do?

- Firstly don't panic. Only a small minority of ticks carry the infection. Your risk of developing Lyme disease increases the longer the tick is attached to your skin. However, if the tick is removed within the first few hours after a bite, you are very unlikely to develop Lyme disease.
- 2. Remove the tick (ideally with tweezers) by gripping it close to the skin. Wash the area as soon as possible afterwards with soap and water.
- 3. If any of the mouthparts of the tick are left behind, remove as much as possible with tweezers.
- 4. Check the skin over the next few weeks for a rash. Initial redness and swelling the same day is normal and does not indicate infection.
- 5. If a rash or other symptoms develop, see your GP and report being bitten by a tick.
- 6. Your GP will make a diagnosis and prescribe treatment if necessary.



### HOW IS LYME DISEASE TREATED?

Lyme disease can be treated using antibiotics. Treatment lasts generally for up to three weeks to ensure that the bacteria have been killed. It is important that the full course of antibiotics is taken to prevent wider spread of the bacteria.

### FOR MORE DETAILED INFORMATION SEE:

www.hpsc.ie/hpsc/A-Z/Vectorborne/LymeDisease