Lyme disease

Lyme disease is caused by *Borrelia burgdorferi*, and is a bacterial infection transmitted to humans from the bite of some species of infected tick. The tick species capable of carrying Lyme disease-causing bacteria are found in Asia, Europe, North America and Africa, but not in Australia. There have been no proven cases of Australian-acquired Lyme disease to date. Overseas-acquired Lyme disease may be diagnosed in Australia in returned travellers. A number of other tick-borne infections occur in Australia, and it is possible that people who are diagnosed with Lyme disease may have one of these.

**How Lyme disease is spread**

Lyme disease is transmitted by the bite of an infected tick.

**Signs and symptoms**

Symptoms of Lyme disease may include:

- one or more reddened, ring-shaped skin lesions
- fever
- headache
- joint aches or swelling
- swollen lymph nodes.

Rarer symptoms of chronic (long-term) infection include disturbances in movement or sensation and heart abnormalities.

**Diagnosis**

Testing for Lyme disease should be performed by an Australian laboratory accredited by the National Association of Testing Authorities, Australia (NATA). Testing performed by non-accredited laboratories (including overseas) may be unreliable.

**Incubation period**

*(time between becoming infected and developing symptoms)*

Usually 7 to 10 days; range 3 to 32 days.

**Infectious period**

*(time during which an infected person can infect others)*

There is no evidence that Lyme disease can be passed from person-to-person. While in theory the infection could be passed through a blood transfusion, no actual cases of transfusion-associated Lyme disease have been reported to date.

**Treatment**

Confirmed cases of Lyme disease can be treated with a short course of commonly-available antibiotics. Admission to hospital may be needed.

**Prevention**

Persons travelling to countries where tick-borne disease is present are advised to protect themselves against tick bites when walking or hiking in wooded or grassy areas.
Lyme disease

In particular:

> Always walk in the centre of trails.
> Use insect repellents containing DEET (diethyl toluamide) or picaridin on clothing and skin. Always follow instructions on the label, particularly regarding use in young children and pregnant and breastfeeding women.
> Wear long sleeved protective clothing, long pants tucked into socks and a broad brimmed hat. After coming indoors, check your clothing for ticks. Wearing light coloured clothing makes it easier to see ticks on clothing.
> Shower within 2 hours of coming indoors and thoroughly check your body for ticks. Use a mirror so all body parts can be checked (especially behind the ears, on the back of the head, in the groin and armpits, and the back of the knees).
> Ensure your children are checked for ticks.
> Remove any attached tick by pulling it straight out with tweezers, grasping as close to the skin as possible. Then clean the area and your hands thoroughly with soap and water or alcohol hand rub. See a doctor if you become ill and tell them about the tick.

As a precaution, people with suspected or confirmed Lyme disease should not donate blood during testing or treatment.

Useful links


> Overseas travel
> Rickettsial infections

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**You’ve Got What? 5th Edition**

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