

Tick bites

Ticks are parasites that feed on human and animal blood. A tick bite is usually harmless, but sometimes it can cause an allergic reaction or serious illness. If you have a tick bite, it is very important to remove the tick as soon as possible.

Types of tick bite

There are about 70 different sorts of tick in Australia. They are especially common along the east coast. Some have a flat body and a long mouth, while some look wrinkly and leathery.

In Australia, most tick bites are caused by the paralysis tick *Ixodes holocyclus* (sometimes called a grass tick, seed tick or bush tick). They grow from an egg to a larva (about 1mm long and brown) and then to a nymph (about 2mm long and pale brown). An adult paralysis tick is about 1cm long and a grey-blue colour.

Ticks need blood to grow. They crawl up grass or twigs and drop onto passing animals or humans, attaching themselves to the soft skin to feed. They inject a substance to stop the blood clotting. Their saliva can also be poisonous.

Some people are allergic to tick bites. Others, usually children, can develop a condition called tick paralysis. It is also possible for ticks to pass on several illnesses to humans.

Tick bite symptoms

If you have been bitten, usually you will just notice redness and swelling around the tick bite. This will disappear once you remove the tick.

Symptoms of tick paralysis include:

- a rash
- headache
- fever
- flu-like symptoms
- sore glands
- walking unsteadily
- not being able to tolerate bright lights
- weak limbs
- a paralysed face

Symptoms of an allergic reaction to tick bites include:

- swollen throat
- difficulty breathing
- collapsing

What to do after a tick bite

If you have been outdoors and you have an itch, try not to scratch it. Look at the area first. Ticks in the larvae or nymph stages can be very small – they might look like just a black dot.



Unless you are allergic to ticks, there is no need to see a doctor. Remove the tick as safely and quickly as possible and keep an eye out for symptoms of tick-related illnesses (see below). Don't scratch or pick at the tick.

If you are allergic to ticks, it is best to have a doctor remove the tick. You should have your emergency adrenaline autoinjector on hand and go to the nearest emergency department.

Remember that symptoms of other illnesses caused by the tick can develop or become worse after the tick has been removed.

Some people develop a serious allergy to meat and products containing gelatin after they have had a tick bite. This will need to be diagnosed by a doctor who specialises in <u>allergies</u> (called an allergist or immunologist).

Tick bite treatment

If you are *not* allergic to ticks, you should remove the tick as soon as possible. Try not to squeeze or agitate the tick since it will be more likely to inject its saliva into you.

First, kill the tick by spraying it with a product that contains ether (such as Wart-Off Freeze, Aerostart or Elastoplast Cold Spray) and wait for it to drop off. It should die and drop off in about 5 minutes. Don't use tweezers to pull the tick out.

Do not jerk or twist the tick. Don't use methylated spirits, kerosene, petroleum jelly, nail polish, oil or alcohol, or use a lighted match. These don't work and may cause the tick to burrow deeper into your skin.

If you *are* allergic to ticks, do not try to remove the tick — kill it with a spray that contains ether. If it's your first allergic reaction, go straight to a hospital emergency department. If you have had allergic reactions before, talk to your doctor about how to remove the tick and whether you will need to see a doctor every time. Always carry your adrenaline autoinjector.

If you have mammalian meat allergy, you will need to avoid eating *any* form of meat at all and *anything* containing gelatin. Consider wearing a medical bracelet since you might also be allergic to some products used in hospitals.

Tick bite prevention

- Keep your skin covered in areas where there might be ticks. Wear a long-sleeved shirt, tuck your trousers into your socks and wear a wide-brimmed hat.
- Avoid bush and long grass, especially after rain.
- Use an insect repellent that contains DEET or picaridin.
- You can put an insecticide that contains permethrin onto your clothes.
- Brush your clothes and check your skin for ticks when you come inside.
- Place clothes in a hot dryer for 20 minutes to kill ticks.

When to seek help

See your doctor if you can't remove a tick properly and part of it is still left in your skin. You should also see a doctor if you develop signs of an infection, such as:

increasing pain, swelling and redness



- · red streaks leading from the area
- pus
- fever

Tick bites can sometimes cause other illnesses such as rickettsia infections, Queensland tick typhus, Flinders Island spotted fever and possibly <u>Lyme disease</u> or Lyme disease-like conditions. However, whether these are linked to a tick-born illness in Australia is still being investigated.

See your doctor if you have had a tick bite and you experience any of these symptoms for more than a week:

- flu-like symptoms
- a new rash
- pain in your joints
- tiredness

More information

- Visit the <u>Australasian Society of Clinical Immunology and Allergy</u> website for information about tick allergy.
- Visit the <u>Department of Health</u> website to learn more about tick bite prevention.
- Visit <u>Tiara</u> website for information about tick-induced allergies, research and awareness.

Sources:

<u>Department of Health</u> (*Tick bite prevention*), <u>Australasian Society of Clinical Immunology and Allergies</u> (*Tick allergy*), <u>Tiara</u> (*Tick bite prevention*)

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