

Tick bites and disease

What are ticks?

Ticks are tiny bugs, about the size of a sesame seed, which feed on blood. Different ticks prefer feeding from different types of animals.

Sometimes, a tick will bite a person instead of biting an animal. While most tick bites do not result in disease, some do.

Ticks live in tall grass and wooded areas. They are easiest to spot on a person when they are actually sucking blood. Ticks burrow part way into the skin, bite, draw blood, and then drop off. The feeding tick's mouth will be under the skin, but the back parts will be sticking out. When they are full of blood they are usually blue-grey in colour. This is called an engorged tick.



Immature tick
(approximate actual size)



Female adult tick
(approximate actual size)



Female adult tick
(approximately
10 times actual size)

What should I do if I find a tick on my skin?

If you find a tick on your skin, you need to remove it as soon as possible. Check your entire body and clothing. Do not stop when you find one tick. There may be more. Make sure the lighting is good, so you do not miss seeing the tick(s). If you cannot reach the tick or see it clearly, get someone else to remove the tick for you or see a health care provider to remove it. Be sure to check for ticks on your children and pets if they have been out in an area where ticks can live.

When to see a health care provider to remove the tick

See your health care provider to remove the tick if it has buried itself deep into your skin. This happens if the tick has been on you for several hours or even a day or two. When a tick has burrowed deep into your skin, it is very hard to remove the tick without leaving some mouth parts behind, which can cause an infection.

How to remove a tick yourself

If you can remove the tick yourself, follow these instructions.

1. Use tweezers to gently get a hold of the tick as close to its mouth as possible. The body of the tick will be above your skin. Do not touch the tick with your bare hands. Wear gloves if possible.
2. Steadily lift the tick straight off the skin. Do not squeeze the tick because this can force its stomach contents into the wound and increase the chance of an infection. Do not jerk, unscrew or twist the tick because this may separate the head from the body. It is very important to make sure that all of the tick, including the mouth parts buried in your skin, is removed.
3. Once the tick has been removed, clean the area with soap and water. You may also put a small amount of antibiotic ointment on the area. Wash your hands with soap and water.

You cannot remove a tick by covering it with grease or gasoline, or by holding a match or cigarette against the tick. This does not work and may increase the chance of getting an infection.

What to do with the tick once it is removed

If the tick is alive, put it in a small container (e.g., a pill bottle) with a tight fitting lid along with a cotton ball dampened with water to keep it alive. Do not use rubbing alcohol or any other

liquid. The container with the tick can be stored briefly in a refrigerator. Speak with your health care provider as soon as possible to see if they want to submit the tick to the BC Centre for Disease Control for testing.

How do I avoid getting bitten by a tick?

You can help protect yourself and your family against tick and insect bites by following these tips when you spend time in an area where ticks may live:

- Walk on cleared trails wherever possible when walking in tall grass or woods.
- Wear light coloured clothing, tuck your top into your pants, and tuck your pants into your boots or socks.
- Use an insect repellent containing DEET on your clothes and on all uncovered skin. Reapply it as directed on the container. For more information about insect repellents and DEET, see [HealthLinkBC File #96 Insect repellent and DEET](#).
- Check clothing and scalp when leaving an area where ticks may live. Check in folds of skin. Have someone help you check young children.
- Regularly check household pets which go into tall grass and wooded areas.

Which diseases can be spread by ticks?

Several diseases can be passed to humans from tick bites. The most well-known is Lyme disease.

Borrelia burgdorferi, the organism that causes Lyme disease, has been found in ticks collected from many areas of British Columbia, and dozens of Lyme disease cases have been identified in the past 15 years. Many people with Lyme disease have not travelled outside of the province, and it is likely they contracted the disease in B.C.

Not all ticks carry the bacteria for Lyme Disease, and there is only a very small chance of ticks giving it to you. However, since Lyme disease is such a serious disease, it is worth taking steps to avoid being bitten.

Other diseases passed on by ticks include relapsing fever, tularemia, Rocky Mountain Spotted Fever (RMSF), Q fever, and anaplasmosis. All of these diseases are rare in British Columbia. Certain ticks may release a toxin that can cause temporary paralysis. For this reason it is important to remove the whole tick as soon as possible.

What are the symptoms of tick-related diseases?

If you have the following symptoms within days or weeks after being bitten by a tick, report them to your health care provider right away. Tell your health care provider when and where a tick bit you.

- General symptoms of fever, headache, muscle and joint pains, fatigue, or weakness of the muscles of the face.
- Skin rash, especially one that looks like a bull's eye, which may or may not be in the area of the bite.
- In very rare cases, paralysis may occur. The paralysis usually starts in the feet and legs and works its way up to the upper body, arms and head. The paralysis usually starts within a few hours to a day or two days after the bite.

What is the treatment?

There are currently no vaccines licensed in Canada for any diseases passed on by ticks.

Lyme disease and other tick-related diseases can be treated with antibiotics. Early diagnosis and treatment can help prevent complications.



BC Centre for Disease Control
An agency of the Provincial Health Services Authority

For more HealthLinkBC File topics, visit www.HealthLinkBC.ca/healthfiles or your local public health unit. For non-emergency health information and advice in B.C. visit www.HealthLinkBC.ca or call **8-1-1** (toll-free). For the deaf and hard of hearing, call **7-1-1**. Translation services are available in more than 130 languages on request.