
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 different types of animals. Sometimes a tick will bite a person instead of biting an animal.

Over the last several years, the Provincial Laboratory has coordinated a passive tick surveillance survey in Saskatchewan. As a result of publicity in the media over 1,500 ticks from Saskatchewan were submitted. While the majority were the common wood tick or *Dermacenter Variabilis*, there were five ticks submitted that were the blacklegged tick or *Ixodes Scapularis*. These five black-legged ticks tested negative for "*Borrelia burgtorferi*".

While no cases of locally acquired Lyme Disease have been identified in Saskatchewan, the presence of *Ixodes Scapularis* in Saskatchewan means Lyme Disease must be considered when patients present with consistent symptoms.

Not all ticks carry *Borrelia burgtorferi*, so there is only a very small chance of becoming infected. However, because the resulting disease can be serious, it is worth taking steps to avoid being bitten.

Ticks live in grass and wooded areas. They are easiest to spot 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. They will be full of blood and blue-grey in color (this is called an "engorged" tick).

DISEASE SPREAD BY TICKS

Several human diseases are caused from tick bites. The most well known is Lyme Disease. Others include relapsing fever, tularemia, Rocky Mountain Spotted Fever (RMSF), Q Fever and Ehrlichiosis. All of these diseases are rare. Certain ticks may cause temporary paralysis. In these cases it is very important to remove the whole tick.

WHAT ARE THE SYMPTOMS?

If you have the following symptoms within days or weeks after being bitten by a tick, please report them to your family doctor immediately. Tell your doctor when and where you were bitten by a tick.

1. General symptoms of fever, headache, muscle and joint pain, fatigue or weakness of the muscles of the face.
2. Skin rash, especially one that looks like a "Bull's Eye". It may or may not be where the bite was.
3. In some cases paralysis may occur. The paralysis usually starts in the feet and legs and gradually works its way up to the upper body, arms and head. This paralysis can develop in a few hours to several days.

TREATMENT

If you have Lyme Disease or another tick-related disease, you will need antibiotics to prevent complications of the disease.

IS THERE A VACCINE?

A vaccine to prevent Lyme Disease has just been licensed in Canada. This vaccine is most useful for people who spend a lot of time outdoors in high-risk areas like the north-eastern United States. The vaccine is not 100% effective and will not prevent other tick-borne diseases. Therefore, you should use other protective measures to prevent illness.

AVOIDING TICKS

To protect yourself against tick and insect bites:

1. Walk on cleared trails wherever possible when walking in tall grass or woods.
2. Wear light colored clothing, tuck your top into your pants and tuck your pants into your boots or socks.
3. Put insect repellent containing 5% Permethrin onto clothing and insect repellent containing DEET on all uncovered skin. Re-apply as frequently as directed on the containers.
4. Check clothing and scalp (covered or not) when leaving an area where ticks may live. Check in folds of skin. Have someone help you check hard-to-see areas. When a tick is located, remove it immediately. Check the whole body! Don't stop when you find one tick. There may be more. Make sure the lighting is good so that you will not miss seeing the ticks.
5. regularly check household pets that go into tall grass and wooded areas.

HOW NOT TO REMOVE A TICK!

Some people think you can remove a tick by covering it with grease, or gasoline, or some other substance. This does not work! It only increases the chance of you getting an infection.

Holding something hot (for example, a match or cigarette) against the tick also does NOT work!

Again, this will only increase the chance of infection from accidentally burning yourself. If you decide to remove the tick yourself, follow the instructions below.

WHEN SHOULD YOU REMOVE THE TICK?

You should only remove a tick yourself, or get a friend or family member to remove it, if the tick is not buried very deep into your skin. If the tick has been on your skin for less than two hours, it has probably not had a chance to burrow into your skin. If the tick is just on the surface of your skin, or only biting on to the outside of the skin layer, you can remove it following the instruction below.

HOW TO REMOVE A TICK

Remove the tick right away (if possible, wear latex gloves when handling an engorged tick):

1. Use tweezers or forceps to gently get a hold of the tick as close to the skin as possible. Don't touch the tick with your hands.
2. Without squeezing the tick, steadily lift it straight off the skin. Avoid jerking it out. Try to make sure that all of the tick is removed.
3. Once the tick has been removed, clean the bite area with soap and water then disinfect the wound with antiseptic cream. Wash hands with soap and water.
4. If possible, save the tick in a container with a tight fitting top. If the tick is alive, dampen a small cotton ball and put it into the tick container to keep the tick alive. (A live tick is necessary for culturing the *spirochete* which causes Lyme Disease). Label the container with date shipped, name and address of person bitten or what type of animal the tick was from, what part of the body was bitten, and what part of the province the tick probably came from. Your Doctor may submit the tick for Laboratory testing.

WHEN SHOULD YOU GET A DOCTOR TO REMOVE THE TICK?

You should only remove a tick yourself, or get a friend or family member to remove it, if the tick is not buried very deep into your skin. This usually 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 mouthparts behind, which can cause infection.

For Further Information Contact your Local Public Health Inspector:

Melfort/Tisdale 752-6310

Nipawin 862-7235/862-7238