

# TICK TALK

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## FOR JANET SPERLING, AN ENTOMOLOGIST AT THE UNIVERSITY OF ALBERTA, ONE THING IS CERTAIN: "IF YOU LIVE IN THE KOOTENAYS, YOU WILL GET BITTEN BY A TICK."

Sperling spends her days mapping out the various kinds of bacteria that live on and in ticks in the Kootenays and other regions in an effort to help doctors determine what diseases they should be looking out for if a patient falls ill after being bitten by a tick.

There are quite a few to consider. The Kootenays have long been home to many tick-borne illnesses, including relapsing tick fever, Rocky Mountain spotted fever, tick paralysis, tularemia and, more recently, Lyme disease. And there may be some that researchers have not yet discovered.

"There's no question that there are a lot of bacteria in these ticks," Sperling says. "But I can't swear on a stack of bibles that the bacteria I'm finding are the pathogenic forms."

This, Sperling notes, is a huge, open research question that still begs to be answered. Concern about ticks and the diseases they carry has grown in recent years due in large part to the increasing number of media reports about Lyme disease. The main tick that transmits Lyme disease to humans, the Western blacklegged tick, is much smaller than you might think. In its immature stage - the stage most likely to give you Lyme disease - it's roughly the size of a poppy seed.

The tininess of these ticks often surprises people and with good reason. The most common tick in our region is the much larger Rocky Mountain wood tick, which is the one we tend to picture when we think about ticks. And although the Rocky Mountain wood tick is not known to transmit Lyme disease, it can transmit other tick-borne illnesses.

Public health authorities describe the risk of contracting tick-borne illnesses in the region as low but real. And yet with all the

media attention focused on Lyme disease these days, it does raise the question of whether tick-borne illnesses are on the rise in the Kootenays.

"I don't think we have that data. And that's because we know that you've always had a big risk in the Kootenays. When we talk about these tick-borne illnesses [in the region], you can easily go back to the 1930s," Sperling says. "So is the risk now the same as it was in the 1930s? And the answer is, I don't actually know. I don't think anybody knows."

Researchers agree that the southern valleys of the Kootenay region are ideal tick habitat and it's through these valleys, most notably the Columbia and Creston valleys, that disease-carrying ticks are expected to continue their northward spread. "The good news is that we have a lot of ways to control our risk from ticks," Sperling says.

The British Columbia Centre for Disease Control recommends that whenever you head out into nature, you should apply an insect repellent containing DEET, stick to cleared paths, wear light-coloured clothing, tuck your shirt into your pants and your pants into your boots or socks and, above all else, do a thorough tick check both during and after your adventures.

If you discover that a tick has attached to you, remove it by grasping its head with a pair of pointy tweezers and pulling it straight out. Don't try to pull it out by the body, smother it, or burn it off, all of which can cause the tick to regurgitate any pathogens it may be carrying into your body.

And don't forget Fido. Dogs can be magnets for ticks, largely because they tend to go crashing into the underbrush where ticks hang out. So it's important that

you check your dog for ticks whenever it comes in from the outdoors, especially in the spring when blacklegged ticks are at their most active in the Kootenays.

Still, the threat of contracting tick-borne illnesses in this region should neither be overstated nor ignored.

"Everybody agrees that the Kootenays is a great place," Sperling says. "We're not trying to discourage people from going out there and enjoying nature. But they do need to keep in mind that ticks are not benign." ■

## HAVE YOU BEEN BITTEN BY A TICK? HERE'S WHAT TO DO

- 1 Don't panic. Most ticks do not carry disease and removing an attached tick immediately will reduce your chances of contracting Lyme disease.
- 2 Remove the tick by grasping it with a pair of sharp tweezers as close to the skin as possible. You want to grab the tick by its head, not its body, then slowly pull it straight out without any twisting or jerking. Do not try smothering the tick or burning it off. Both can cause the tick to regurgitate any pathogens it may be carrying into your body, increasing your chances of contracting a tick-borne infection.
- 3 Wash the site of the tick bite with soap and water then disinfect it with an antiseptic.
- 4 Place the tick in a sealed container, mark the date and location of the tick bite on the container, then place it in the fridge. If you subsequently fall ill, this tick can be used by your doctor to assess your condition.
- 5 Seek medical advice if you notice a change in your health in the weeks following a tick bite. Symptoms of tick-borne illnesses can include rashes and fevers, but they can also be wide-ranging. Any change is cause for concern.