

## What's on the Horizon for Public Health?



### Spring in Minnesota Means Ticks

I was able to hear Elizabeth Schiffman, Epidemiologist Supervisor for the Minnesota Department of Health Vector Borne Disease Unit, speak this past week. Regarding prevention of tick bites, she shared a little of what every Minnesotan may know: use tick repellent but also check yourself for ticks after being outside, put your gear/clothing in a hot dryer for 10 minutes to kill ticks and also check your pets for ticks. Schiffman shared additional information which may be new to you.

In Minnesota there are about 12 different types of ticks and not all of them spread disease. The three types that do however, and which you may encounter, are the blacklegged or deer tick, the American dog or wood tick and the lone star tick.

The deer tick, which causes by far the most tickborne disease, is most commonly found in Minnesota's more forested counties to the southeast, east and north. Included in this geographical area are Pope and Douglas Counties. Whereas the wood tick, which can spread Rocky Mountain spotted fever and tularemia, prefers grassy, prairie-type environments as in Traverse, Grant and Stevens Counties. Lone star ticks are rarely found in Minnesota but they are very aggressive and actively travel to the host, unlike most species that wait for the host to come to them.

Ticks have a two-year life span. In the spring of their first-year, eggs hatch into larvae. They feed on blood from small mammals, molt into nymphs and rest until the next spring. During this first meal the larva may pick up a disease agent like the bacteria that causes Lyme's disease. Late the following spring, nymphs aren't as picky about a host and feed on small or large mammals like white-tailed deer and humans. This is when an infected nymph spreads disease to the host it feeds on. That fall, the nymphs molt into adult ticks. Females find a host to feed on, mate with an adult male tick, lay hundreds to thousands of eggs and then die. The males attach to a host to find a female and then die.

Some adult ticks who do not feed or mate in the fall will survive through the winter and will feed and mate the following spring. If there is little to no snow cover and the temperature is above freezing, it is possible to find an active adult searching for a host on a warm winter day.

In Minnesota, adult ticks usually emerge right after the snow melts and reach peak spring-time activity during May and June. Adults become active again in the fall until temperatures drop below freezing or snow covers the ground. Spring in Minnesota is finally here, know where to expect ticks. Avoid grassy, brushy or wooded areas when you can, and always use an EPA-registered insect repellent. Examine your body and clothes after coming indoors and promptly remove ticks.

To read much more about ticks and other disease-causing vectors, like mosquitos, go to <https://www.health.state.mn.us/diseases/tickborne/index.html>

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