

HEALTH ALERT

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May-03-2024

Lyme Disease and Other Tickborne Diseases in Pennsylvania

The Office of Developmental Programs is sharing this Health Alert to make all individuals, providers, staff, and other caregivers aware of the latest Health Alert from the Pennsylvania Department of Health (PA DOH) for Lyme disease and other tickborne inlinesses.

The DOH notes that:

- Tick bite-related emergency department visits have increased recently in Pennsylvania.
- Health care providers should have a heightened clinical suspicion for tickborne diseases in persons with clinically compatible symptoms.
- For questions, please call 1-877-PA-HEALTH (1-877-724-3258) or your local health department for more information.

The Pennsylvania Department of Health (DOH) has identified recent sustained increases in tick bite-related emergency department visits in nearly all regions of the state. This trend was expected, as tick exposures in Pennsylvania generally increase during spring and summer months, and serves as an important reminder that tickborne diseases occur seasonally in Pennsylvania.

What Is a Tick?

Ticks are small, hard-bodied parasitic arachnids that range in color from brown to black. They have four pairs of legs and a small head with a mouthpart designed to pierce the skin of their host. They can range in size from as small as a pinhead to as large as a dime after feeding and becoming fully engorged with blood. Most ticks go through four life stages: egg, six-legged larva, eight-legged nymph, and adult. After hatching from the eggs, ticks must eat blood at every stage to survive.



To attach to a host for feeding, they use their mouthpart to pierce the skin. The mouth part has small barbs that anchor it to the host



What is a Tickbourne Illness?

When a tick attaches to a person to feed, they can sometimes pass diseases that they acquired from another host. This is called a tickborne illness. Tickborne illnesses are caused by bacteria, viruses or other parasites passed to the host while the tick is feeding.

Symptoms of Tickborne Illness

Many tickborne diseases can have similar signs and symptoms. If you get a tick bite and develop the symptoms below within a few weeks, see your healthcare provider.

The most common symptoms of tick-related illnesses include:

• Fever/chills. All tickborne diseases can cause fever.

- Aches and pains. Tickborne diseases can cause headache, fatigue, and muscle aches.
 People with Lyme disease may also have joint pain.
- Rash. <u>Lyme disease</u>, <u>Southern tick-associated rash illness (STARI)</u>, <u>Rocky</u>
 <u>Mountain spotted fever (RMSF)</u>, <u>ehrlichiosis</u>, and <u>tularemia</u> can cause distinctive rashes.

Tick bite prevention and removal

Individuals with exposure to wooded and brushy areas with high grass and leaf litter are at greatest risk of tick exposure. The risk of getting a tick bite can be reducted by:

- walking in the center of trails and avoiding areas with high grass and leaf litter;
- using EPA approved insect repellents on exposed skin and over clothing;
- using products that contain 0.5% permethrin on shoes, clothing, and gear;
- wearing light-colored clothing, which will make it easier to see crawling ticks;
- conducting full-body tick checks (including pets) after spending time in tick habitats;
- bathing or showering within 2 hours after coming indoors; and
- placing clothing worn outdoors in the dryer on high heat for 10 minutes to kill ticks.

If an attached tick is found, it should promptly be removed using fine-tipped tweezers. The tick should be grasped as close to the skin's surface as possible and pulled upward with steady, even pressure. CDC's directions for tick removal can be found here:

https://www.cdc.gov/lyme/removal/index.html.

It is common for individuals who remove a tick to want it to be tested. However, testing of individual ticks is discouraged for the following reasons:

- If the tick tests positive for disease-causing organisms, that does not necessarily mean that the bitten individual has been infected.
- If the bitten individual has been infected, they are likely to develop symptoms before
 results of the tick test are available. Patients with symptoms should not wait for tick testing
 results before starting treatment.

Negative results can lead to false assurance. For example, the individual may have been

unknowingly bitten by a different tick that was infected.

• After sharing these limitations, if a person still would like to have the tick tested, they can

find more information on tick testing here.

Contact your healthcare professional if:

• You aren't able to completely remove the tick. The longer the tick remains attached to the

skin, the greater the risk of getting a disease from it. Your skin may also get irritated.

• The rash gets bigger. A small bump may appear at the site of the tick bite. This is typical. If

it develops into a larger rash or you develop a rash anywhere, possibly with a bull's-eye

pattern, it may be a sign of Lyme disease. The rash usually appears within 3 to 14 days.

Consult your provider even if the rash disappears because you may still be at risk of

having the disease. Your risk of contracting a disease from a tick bite depends on where

you live or travel to, how much time you spend outside in woody and grassy areas, and

how well you protect yourself.

• You develop flu-like signs and symptoms. Fever, chills, fatigue, muscle and joint pain, and

a headache may accompany the rash.

• You think the bite site is infected. Signs and symptoms include pain, change in skin color

or oozing from the site.

You think you were bitten by a deer tick. You may need antibiotics. If possible, bring the

tick, or a photo of the tick, with you to your doctor's appointment.

References

Ticks | Ticks | CDC

Tick bites: First aid - Mayo Clinic