



# Department of Health

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## FOR IMMEDIATE RELEASE

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## **Tick Season is Back;**

*Experts Predict Increase in Tick-borne Illnesses this Year*

BREWSTER, NY— The recent mild winter, together with an unusually large population of mice last year, have experts thinking there will be increased numbers of ticks and the diseases they carry this season. A single mouse can carry up to 100 infected ticks on its tiny ears and face.

“Unfortunately, it is not only Lyme disease we are concerned about,” says interim Health Commissioner Michael J. Nesheiwat, MD. “There are other illnesses carried by ticks and we are seeing increases in all of them. Our number-one line of defense has been, and still is, preventing tick bites in the first place.”

More than a dozen tick-borne illnesses have been identified by the Centers for Disease Control (CDC) and Prevention, including five that infect residents in the Hudson Valley region. Lyme disease is the most common and the most well-known, but anaplasmosis, ehrlichiosis and babesiosis are present as well and appear to be on the increase. Powassan disease, a rarer and potentially deadly infection, is also carried by the same black-legged tick (commonly referred to as a deer tick) that transmits Lyme disease, anaplasmosis and babesiosis.

To prevent these illnesses, residents should take extra care this summer when outside, especially in wooded or brushy areas with high grass and leaf litter. Young or nymphal ticks develop in the spring and their tiny size makes them more difficult to see. They feed primarily on white-footed mice, which may be infected with Lyme or other bacteria. The nymphal ticks then go on to bite and infect humans. Infected squirrels and birds can also serve as hosts, or go-betweens, to spread the disease to ticks. Deer play a role as well, by providing a third and final blood meal that the tick needs in order to reproduce.

Unfortunately tick-borne illnesses can be challenging to diagnose. If a blood test is performed too early, the results may come back negative when the person has in fact contracted the infection. The test is only negative because the patient’s antibodies have not reached a level high enough to be detected, which takes approximately one week. A physician makes a diagnosis based on a combination of available tests,

his or her observation of the patient, along with a patient history and description of symptoms. The only way an absolute diagnosis of Lyme disease can be made is in a patient with the unmistakable bullseye rash, which occurs in only 70 to 80 percent of infected individuals.

Making the situation worse, a small percentage of patients who do contract Lyme disease may have lingering symptoms of fatigue, joint pain or muscle aches, lasting 6 months or more after completing treatment. The cause of this condition, sometimes called chronic Lyme disease, but more accurately described as post-treatment Lyme disease syndrome, is not completely understood.

“Patients may not recall a tick bite, and early symptoms, when antibiotics are most effective, are non-specific or similar to other viral illnesses,” continues Dr. Nesheiwat. “Not all patients get the telltale bullseye rash with Lyme. That’s why preventing bites is so important.”

Research shows that using insect repellent with 20 percent or more of DEET (chemical name, N,N-diethyl-meta-toluamide), performing frequent tick checks and wearing protective clothing are effective methods to reduce a person’s chance of infection. As a result, even in spring and summer when the weather is warm, shoes and socks, along with long pants and long-sleeved shirts are advised in areas where ticks are common. Clothing that is factory-treated with the insecticide permethrin has proven highly effective in deterring tick bites in research studies as well. Treated clothing is commercially available, as is a spray that can be applied on one’s own clothing. These may be worth considering if much time is spent in risky environments. If clothes are untreated, the Centers for Disease Control and Prevention (CDC) recommends placing them in a dryer on high for at least ten minutes to kill any ticks that may have been brought in from outside. Damp clothing may need up to one hour of drying to rid them of ticks—simply washing clothes does not work.

Full tick checks are also advised. Ticks crawl upwards—they don’t fly or jump. They instinctively move up to attach around the scalp, neck or ears, where skin is naturally thinner and where animals and people alike, have more trouble finding and dislodging them. Places to especially check are behind the knees, around the groin area, underarms, head, neck and ears. If a tick is found attached, it should be removed at once with fine-tipped tweezers. Application of petroleum jelly, alcohol or other substance is not advised and may increase infection risk. Studies done on mice show that removal within 24 hours provided 100 percent protection from Lyme disease transmission and removal at 48 hours provided 63 percent protection. No protection was found with removal after 66 hours of attachment.

In Dutchess County to Putnam’s north, where tick-borne illnesses are similarly high, a five-year study has begun to test if neighborhood-based prevention efforts can reduce human cases of tick-related diseases. Two tick control methods will be tested. The first applies a low dose of fipronil, a tick medicine used on dogs and cats to kill their ticks, onto mice and chipmunks; the second involves applying a spray on vegetation to eliminate ticks. The spray, developed from a naturally occurring fungus, is safe

for people, pets and the environment. Called the “Tick Project,” this research may formulate a neighborhood-based plan that can reduce these diseases, since no human vaccine is available.

If you think you have been bitten by a tick and develop symptoms within a few weeks, you should visit your healthcare provider as soon as possible. The most common symptoms include fever/chills, aches and pains, and a skin rash. Your provider will evaluate your symptoms and order diagnostic tests if indicated. For more details, visit the [CDC’s webpage on “Symptoms of Tick-borne Illnesses.”](#)

The Department of Health’s mission is to improve and protect the health of the Putnam County community, composed of nearly 100,000 residents. Core services include community health assessment, disease surveillance and control, emergency preparedness, environmental health protection, family health promotion and health education. For more information, please visit the PCDOH website at [www.putnamcountyny.com/health](http://www.putnamcountyny.com/health) or visit the social media sites on Facebook at [www.facebook.com/putnamhealth](http://www.facebook.com/putnamhealth), and Twitter @PutnamHealthNY.

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