

Did You Know That There are many types of tick-borne diseases that can cause serious health issues.

According to Dr. Erin McGintee, a member of Tick-borne Disease Resource Center at Southampton Hospital, “tick-borne illnesses are increasing on Eastern Long Island. From Lyme disease to Rocky Mountain spotted fever, from ehrlichiosis to babesiosis, just about every resident of the Hamptons can share a story about an ailment they have experienced as the result of a tick bite.”

Not all ticks carry disease and not all tick bites result in a tick-borne illness. Nevertheless, tick density levels remain high on Eastern Long Island and the cases of tick-borne disease continues to be a major health issue for these communities. The blacklegged tick or the deer tick (*Ixodes scapularis*) is responsible for transmitting Lyme disease, anaplasmosis, babesiosis, and Powassan disease. The lone star tick (*Amblyomma americanum*) is responsible for transmitting ehrlichiosis to humans, primarily in the south central and eastern U.S.

The New York State Department of Health and local health departments continue to investigate the spread of Lyme disease and other tick-borne illnesses throughout New York State. Lyme disease is a bacterial infection caused by the bite of an infected deer tick. Untreated, the disease can cause a number of health problems.

Patients treated with antibiotics in the early stage of the infection usually recover rapidly and completely.

Lyme disease can affect people of any age. People who spend time in grassy and wooded environments are at an increased risk of exposure. The chances of being bitten by a deer tick are greater during times of the year when ticks are most active. Young deer ticks, called nymphs, are active from mid-May to mid-August and are about the size of a poppy seed. Adult ticks, which are approximately the size of sesame seeds, are most active from September to mid-May and from mid-August to November. Both nymphs and female adults can transmit Lyme disease.

Ticks can be active any time the temperature is above 40 degrees Fahrenheit. Ticks can become infected if they feed on small animals that are infected, primarily the white-footed mouse. The disease can spread when an infected tick bites a person and stays for a period of time. In most cases, the tick must attach for approximately 24-36 hours before the bacteria can be transmitted.

Lyme disease does not spread from one person to another. Transfer of the bacteria from an infected pregnant woman to the fetus is extremely rare.

In 60-80 percent of cases, a rash resembling a bull's eye or solid patch, about two inches in diameter, appears and expands around or near the site of the bite.

Sometimes, multiple rash sites appear. The early stage of Lyme disease is usually marked by one or more of the following symptoms: chills and fever, headache, fatigue, stiff neck, muscle and/or joint pain, and swollen glands. If Lyme disease is unrecognized or untreated in the early stage, more severe symptoms may occur. As the disease progresses, severe fatigue, a stiff aching neck, and tingling or numbness in the arms and legs, or facial paralysis can occur. The most severe symptoms of Lyme disease may not appear until weeks, months or years after the bite. These can include severe headaches, painful arthritis, swelling of the joints, and heart and central nervous system problems. A person successfully treated for an earlier case of Lyme disease, will find that previous infection does not confer immunity if they are bitten again by an infected deer tick.

Some of you may have heard about “meat allergies” triggered by tick bites. In February 2009, researchers at the University of Virginia identified this novel allergy to mammalian meat. Patients develop allergic reactions 3-6 hours after ingestion of mammalian meat, such as beef, pork, or lamb. Poultry, fish and shellfish do not trigger allergic reactions in these patients. The responsible allergen for this reaction has been identified as a carbohydrate called galatose-alpha-1,3-galactose (nicknamed alpha-gal). It is not yet known what predisposes some patients to develop the alpha-gal allergy. The lone star tick is an aggressive species, and in indigenous areas, tick bites are a frequent occurrence.

Patients with alpha-gal allergy can present with symptoms ranging from generalized hives, swelling and itching, to anaphylaxis, which is a multi-system allergic reaction that, in severe cases, can lead to death. Due to the fact that reactions to alpha-gal occur 3-6 hours after meat ingestion, the classic patient gives a history of awakening in the middle of the night with severe itching, redness, and hives over their entire body. Patients with more severe episodes may also describe cramping, vomiting, diarrhea, wheezing, shortness of breath, or even loss of consciousness. Any patients with a history of possible tick exposure, who is now experiencing unexplained allergic reactions, should seek out consultation with an experienced allergist.

**Ref: <https://www.health.ny.gov/publications/2825>
New York State's Department of Health – July 2011
(revised)**

<http://www.southamptonhospital.org/patients-visitors/resources>

**“food Allergy Triggered by Tick Bites” – June 2, 2014
by Erin McGintee, MD**