



April Showers Bring May Flowers.....and Ticks.
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5/3/11

*Ticks: the foulest and nastiest creatures that be...*Pliny the Elder (23 – 79 AD).

Many species of ticks live and flourish in the woods and fields of upstate New York. In the warm weather ticks and humans are apt to bump into each other on a path or lawn. More annoying than finding a tick crawling up your pant leg is finding one firmly embedded in your skin.

Tick removal is simple and straightforward. It is important to avoid “upsetting” the tick as well as the human to which it is attached. To this end do **NOT** use alcohol, Vaseline, gasoline, nail polish, nail polish remover or above all, a match. Simply grasp the tick with tweezers as close to the skin as possible; pull gently and steadily until the tick comes out. Wash the area with soap and water. Redness at the site should resolve in a few days. If “tick parts” are left behind, signs of a skin infection might develop (redness, warmth, pain, etc.). If this occurs, call your doctor.

The ticks in our “neck of the woods” that cause human sickness are the American dog tick (*Dermacentor variabilis*) and the black-legged deer tick (*Ixodes scapularis*). The dog tick transmits Rocky Mountain Spotted Fever (RMSF) and the deer tick is associated with babesiosis, anaplasmosis, and Lyme disease.

Rocky Mountain Spotted Fever (RMSF)

Though we see an occasional case of RMSF in the northeast, the majority of cases occur in five states (North Carolina, Oklahoma, Arkansas, Tennessee, and Missouri). Symptoms begin 2-14 days after a tick bite and include fever, rash, headache, nausea, vomiting, abdominal pain, muscle pain and conjunctivitis (“pink-eye”). Rash is present in 90% of cases but may vary in time of onset, appearance, and location (LINK TO RASH PICTURES: <http://www.cdc.gov/rmsf/symptoms/index.html>). RMSF is treated with doxycycline, a common antibiotic. Illness can be severe and may have lasting health effects if not treated promptly.

Babesiosis

Babesiosis is caused by a parasite that infects red blood cells. Most cases occur in coastal areas of the northeastern U.S. (Islands off of MA and RI, Long Island, etc.). Symptoms can take a few days to a few months to develop. They might include fever, chills, sweats, headache, body aches, nausea, and fatigue. Some individuals develop anemia. Treatment includes a two-drug regimen; an anti-malarial drug and azithromycin.

Anaplasmosis

Anaplasmosis is bacterial and is most frequently reported from the upper midwestern and northeastern United States. Symptoms usually occur within 1-2 weeks of a tick bite and include fever, headache, chills, nausea, abdominal pain, and muscle aches. Illness is more severe in immune-compromised individuals. Doxycycline is the treatment of choice.

Lyme Disease

Lyme disease is most prevalent in the northeastern and north-central U.S. (LINK TO LYME MAP: http://www.cdc.gov/ncidod/dvbid/lyme/ld_incidence.htm). It is more common in NY than other tick-borne illnesses. Like anaplasmosis, it is bacterial and usually responds well to doxycycline.



Symptoms begin 3-30 days after the tick bite and can include fever, headache, fatigue, muscle and joint pain, swollen lymph nodes, and a rash. The rash occurs in 70-80% of cases and often resembles a target (“bull’s-eye”). It usually starts at the bite site. (LINK TO RASH: http://www.cdc.gov/ncidod/dvbid/lyme/ld_LymeDiseaseRashPhotos.htm). If left untreated, infection can spread to joints, the heart, and the nervous system. Early treatment is usually successful. Unfortunately, a small percentage of people experience persistent symptoms even after being treated.

Deer ticks are very tiny (poppy-seed-sized) and may go unnoticed. Treatment for diseases spread by deer ticks should not hinge on the presence of a tick. Symptoms should be addressed in light of the season of the year, the prevalence of tick-borne diseases in the region and the activities of the patient (travel, hiking, hunting, living near a wooded area, etc.).

It is sometimes useful to have a tick identified. The NY State Department of Health provides this service free of charge. In addition to identifying the species, the length of attachment and presence of mouth parts are noted. These can provide useful clues regarding the risk for disease. To make arrangements to have a tick identified, call Ontario County Public Health at 585-396-4343 OR 800-299-2995.

This would not be a Public Health article, without a prevention message. To prevent exposure to ticks and the diseases they carry:

- Walk on cleared trails (avoid brush, tall grass and leaf litter)
- Minimize exposed skin (tuck in pant legs to socks)
- Wear light colored clothing (easier to see dark ticks)
- Check yourself, your loved ones, and your pets for ticks after being outdoors
- Shower soon after being outdoors
- Wear tick repellent (see: http://www.cdc.gov/ncidod/dvbid/lyme/Prevention/ld_Prevention_Avoid.htm)
- Create a “tick-free zone” around your home (see: http://www.cdc.gov/ncidod/dvbid/lyme/Prevention/ld_Prevention_Control.htm)
- Discourage deer from entering your yard (see: http://www.cdc.gov/ncidod/dvbid/lyme/Prevention/ld_Prevention_Control_Deer.htm)

Sources and links:

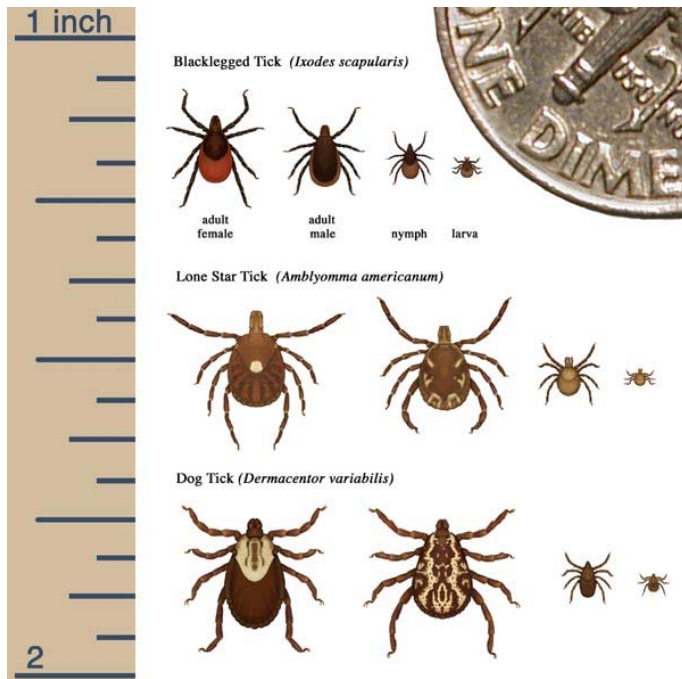
<http://www.cdc.gov/rmsf/stats/#risk>

http://www.columbia-lyme.org/patients/tbd_paralysis.html

<http://www.cdc.gov/anaplasmosis/>

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http://www.cdc.gov/ncidod/dvbid/lyme/ld_humandisease_symptoms.htm



http://www.cdc.gov/ncidod/dvbid/lyme/ld_transmission.htm