URI researchers: Another tick-borne disease is on the rise in Rhode Island -- Babesiosis

KINGSTON, R.I. – July 24, 2006 – Lyme disease isn’t the only tick-borne disease that Rhode Islanders should be concerned about. Babesiosis, caused by a malaria-like parasite that infects red blood cells, is on the rise in the state, and it is transmitted by the same ticks that transmit Lyme disease.

According to University of Rhode Island entomologist Thomas Mather, about 12 percent of the deer ticks in southern Rhode Island are infected with the babesiosis parasite, while typically 20 percent of the ticks statewide are infected with the bacterium that causes Lyme disease. That means that in some cases, both diseases can be transmitted in one tick bite.

“If you suspect that you are feeling the symptoms of Lyme disease, you should also suspect babesiosis and have appropriate testing done for both diseases,” said Mather, director of URI’s Center for Vector-Borne Disease. It is important to note that the treatment for the two diseases is not the same.

In just the last few weeks, South County Hospital has diagnosed 15 cases of babesiosis, and Westerly Hospital has diagnosed an additional five cases.

“Babesiosis is a relatively rare disease, but since South County Hospital is in the middle of an endemic area for tick-borne diseases, our emergency room doctors and medical staff are all well aware of the possibility for infection when seeing patients, and we are experienced in treating it appropriately,” said Dr. Casimiro Giampaolo, the hospital’s chief of pathology and medical laboratory.

Ticks infected with the babesiosis parasite are only found in areas where tick abundance is greatest. “In Rhode Island, South County is the only area where tick numbers are high enough to sustain the parasite, though it is slowly moving northward,” said URI researcher Sarah Rodgers. “The rest of the state is risk-free for babesiosis, though they’re still at risk for contracting Lyme disease. Of course, if you travel to southern Rhode Island but live elsewhere, you could still become infected”
The symptoms of babesiosis – formerly referred to as Nantucket fever – are mostly non-descript in younger and healthy individuals, and include fevers and fatigue. People fitting that profile can often fight off the infection without treatment and may not even know they have it. But severe disease symptoms, including spiking chills and fevers, anemia, and respiratory distress, can occur in older individuals and others with suppressed immune systems. These patients nearly always must be admitted to the hospital for treatment, often in intensive care. The median age of people experiencing severe disease is about 64.

“This is a disease that sometimes can be fatal – we’ve had four fatalities in Rhode Island from babesiosis in recent years, more than from West Nile virus and Eastern equine encephalitis combined – and yet few people have even heard of it,” Mather said.

It takes three to four weeks after a tick bite for the disease to begin to cause symptoms. The peak of tick activity in the state has just passed, according to Mather, and the peak of babesiosis cases is usually about three or four weeks after that, so it’s likely that many additional cases of the disease are yet to be seen.

Mather and Rodgers recommend that all Rhode Islanders take precautions to prevent contracting both Lyme disease and babesiosis by routinely practicing personal protective measures and implementing tick control strategies around the yard. They recommend:

- checking oneself thoroughly every day for ticks;
- applying a repellent containing Permethrin on clothing whenever going outdoors;
- keeping the edge of the yard clear of leaf litter because that’s where exposure to infected ticks is most likely to occur; and
- hiring a trained professional pest controller or arborist to apply an appropriate tick treatment around the yard.

Deer ticks require about 48 hours of attachment before the babesia parasite is transmitted while the Lyme disease bacterium can be transmitted after just 24 hours of attachment. More information is available at www.tickencounter.org.

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