

## Time To Take Action Against Ticks

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**717,614** – that's the number of Rhode Islanders currently at risk for encountering a deer tick where they live. Officially known as black-legged ticks, they transmit Lyme disease, babesiosis and anaplasmosis. Lyme disease is the most common tick-transmitted infection, and now, in 2006, 68% of the state's population is at risk in their own backyards.

It wasn't always this way. Although official statewide surveillance of these ticks began in 1993, as recently as 20 years ago a majority of the state's residents were largely free from the risk of encountering these ticks and the serious diseases they transmit unless they traveled to Prudence or Block Island. Jamestown had no deer and none of these ticks as recently as 1986! In 1993, University of Rhode Island scientists began the Rhode Island Deer Tick Survey in conjunction with the R.I. Department of Health, using standardized methods to sample for the tiny nymphal stage ticks at 80 forested sites throughout the state. Fourteen years later, and with literally thousands of ticks collected, this surveillance program stands as the world's largest and most comprehensive single database on changes in the distribution and abundance of this public health nemesis. And there have been some interesting and significant changes even over this relatively short period of time that public officials should take note of:

- In 1993, at least one nymphal deer tick was collected at just 60% of the 80 sampling sites, while in 2006 ticks were collected at all 61 sites sampled (19 sites were dropped in 2000 to save costs).
- In the first year of the survey, an estimated 275,000 Rhode Islanders were at risk for encountering these ticks where they live. That number is now above 717,000.
- The three highest recorded tick rates have occurred in the past 5 years (highest to lowest -- 2002, 2006, 2005).
- Although fluctuating along with tick rates, the overall trend in tick-transmitted disease incidence is increasing in Rhode Island. Cases of babesiosis, a life-threatening, malaria-like disease, has affected more than 50 Rhode Islanders already this year, including one fatal case; this is an all-time record high number. Each year Lyme disease infects many hundreds, at least, although accurate records are harder to come by.

Unlike with the considerably rarer mosquito transmitted diseases, state government has yet to allocate any funding leading towards solutions to the increasing tick-borne disease threat. And this despite findings from Governor Almond's Commission on Lyme and other Tick-borne Illnesses (2001-2002)

which suggested that if Rhode Island experiences just 3% of the total number of Lyme disease cases nationwide and incurs that same proportion of their estimated costs, then Lyme disease drains over \$30 million annually from the state's economy. The commission also noted "exceptional insufficiency" in tick-transmitted disease prevention activities statewide. Currently, there is no person or office dedicated to coordinating tick bite prevention activities in a state that historically ranks second nationally in *per capita* incidence of tick bites and disease. A 2004/2005 URI survey found that 86% of Rhode Islanders do not regularly use any of the available tick control/tick bite prevention strategies -- a clear call for more effective outreach.

The good news is that tick bite prevention is finally on the radar screen of both the Governor and the General Assembly. In June 2006, Rhode Island was the first state in the nation to proclaim a Tick Control Awareness Day, highlighting available state-of-the-art prevention strategies. Legislative leaders participated and are beginning to pledge their support for taking action. URI's Center for Vector-Borne Disease, the same group that initiated the Deer Tick Survey in 1993, launched an aggressive initiative in 2006, with its major goal to make swift progress in creating and implementing strategies to "drive tick-borne disease out of Rhode Island." However, the success of this initiative will depend on much more than making lawmakers, and the 717,614 citizens at risk, aware of the problem. If we hope to achieve real tick relief, every one of us must take the action that we can. Scientists need to research solutions; lawmakers need to address policies and make important changes to stem the upward spiraling of tick encounters; citizens need to become informed and motivated to take appropriate actions to protect themselves and their families. All of this needs coordination and effective communication through a variety of media. If the Bill and Melinda Gates Foundation can hope to rid Africa of the ravages of AIDS and malaria, certainly Rhode Island can work to find the resources and resolve to drive tick-borne disease from its borders. For more information on the tick-bite prevention initiative, go to [www.tickencounter.org](http://www.tickencounter.org) and click on 'Events'.

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