

## **TICK BORNE DISEASE NETWORK INFORMATION FOR LOCAL HEALTH DEPARTMENTS**

### **What is the program about?**

Cape Cod and Nantucket is part of a group that has been awarded a Governor's Community Innovation Challenge Grant to provide free tick-testing services to residents. Testing will be conducted by the UMass Laboratory of Medical Zoology (LMZ). Up to 100 ticks per community will be tested for FREE during Spring/Summer/Fall 2014.

Each tick will be tested to see if it is carrying the pathogens that cause the three most common tick-borne diseases in Massachusetts: **Lyme disease, Babesiosis, and Anaplasmosis**

The purpose of this program is to:

- Provide residents with information about whether the ticks they have found carry a pathogen which could potentially be transmitted during a tick bite. Residents are sent a report within business 5 days. The report includes photographs of the tick and test results. Residents may choose to share the report with health care providers, but they should be made aware that a tick test is not part of a medical diagnosis.
- Help build the Tick-Borne Disease Surveillance Network, a statewide database of pathogen prevalence in ticks which helps track the spread and risk of tick-borne disease throughout Massachusetts and the country. Personal information about tick bite victim is kept confidential.

### **Who can submit ticks for testing?**

Anyone living in a participating town may submit the tick for free testing for the pathogens that carry Lyme disease, babesiosis and anaplasmosis.

While our preference is to have ticks submitted that have actually bitten a person, ticks found walking on people's skin or clothing, or found in their yard, can also be submitted.

**What about non-residents who are visiting a participating town—can they submit ticks?** This is a program for residents in all 15 towns on the Cape. Non-residents can have ticks tested for a fee.

### **What pathogens are tested for?**

The LMZ will test ticks for free to see if the tick is carrying the pathogens (the microorganisms that can make you sick) that cause **Lyme disease, Babesiosis, and Anaplasmosis** (also called human granulocytic anaplasmosis, HGA or, formerly, erlichiosis). These are the 3 most common tick-borne diseases transmitted by deer ticks in Massachusetts.

At least two other human biting ticks are commonly found in Massachusetts, these are the Lone star tick and Common Dog Tick. These other species of ticks are associated with other pathogens and can be tested for a fee but are not part of the CIC free tick testing program [FYI, LMZ CAN TEST THESE OTHER SPECIES AS WELL, BUT THEY WOULD BE PART OF THE TOWN'S QUOTA OF 100 TICKS] It is important to note that the test only shows which diseases/pathogens that that particular tick is carrying. The results do not indicate that the person who was bitten has acquired any disease as a result of the tick bite. Even if a tick is found to be carrying the pathogens for a disease that tick may not necessarily transmit the pathogen. Transmission of tick pathogens increases with the length of time that tick has fed.

### **What do my test results mean?**

Test results provide residents with information about whether the tick they have found carries a pathogen which could potentially be transmitted during a tick bite. Residents may choose to share the report with health care providers, as it may inform medical treatment decisions, but they should be aware that a tick test is not part of a medical diagnosis.

### **How do I submit a tick for testing?**

The process is simple.

- 1) COMPLETE ONLINE SUBMISSION FORM at [www.TickReport.com](http://www.TickReport.com)
- 2) PLACE THE TICK IN A SEALABLE BAG OR CONTAINER (such as a small zipper locking bag). The tick may be alive or dead.
- 3) LABEL THE CONTAINER WITH THE ORDER NUMBER AUTOMATICALLY ASSIGNED IN STEP 1, AND MAIL IT TO:  
ATTN: Tick Testing  
Laboratory of Medical Zoology  
University of Massachusetts  
Amherst, MA 01003
- 4) RESULTS ARE SENT AUTOMATICALLY TO THE EMAIL (or mailing address) PROVIDED usually within business 5 days of receipt of the tick. LMZ cannot be responsible for delay or losses incurred during the delivery process.
- 5) Alternatively, residents may obtain a limited number of **pre-paid mailers at their local Board of Health office**, and use this to mail the tick to the LMZ.

### **What if residents are having trouble using the on-line tick submission process?**

LMZ is prepared to help and will respond to questions/problems, either via email or live on-line chat from residents or LBOHs as they go through the tick submission process on the site, as follows:

- 1) Email: the address [LMZ@umass.edu](mailto:LMZ@umass.edu) is checked throughout the day (as above) and several of LMZ staff reply to inquiries as they arise. If LBOH inquiries are earmarked (e.g. with town name in subject line) LMZ will make responding to them a priority.
- 2) Chat-line (Olark): This is the opportunity for real time response. Although LMZ doesn't actively monitor it 24/7, it's generally on during business hours and when someone isn't attending on LMZ's end, the visitor's message is emailed to LMZ for follow-up (as above).

### **I found a tick on me, but I'm not sure if it is a deer tick or another type of tick. Where can I find information to identify the tick? If it is not a deer tick, or if I can't tell what type of tick it is, should I submit it for testing?**

Tick identification pictures are available at [http://www.tickencounter.org/tick\\_identification](http://www.tickencounter.org/tick_identification). You may also obtain one of the LMZ's clear plastic tick ID cards with actual size tick pictures to compare with your tick. **Cape Cod residents can also have ticks identified by Larry Dapsis, Cape Cod Cooperative Extension...508-375-6642, [ldapsis@barnstablecounty.org](mailto:ldapsis@barnstablecounty.org)**

Many people find tick identification a challenge, but don't worry, if you submit the tick to LMZ, the first step is photograph it and identify the species (all included in your report). If it's not a tick, or not a deer tick, LMZ will notify you of that in the report and that Lyme, Anaplasma and Babesia testing will not be performed.

**What if the tick wasn't removed cleanly, has disintegrated, only some parts of the tick are intact, etc.—can I still submit it for testing?**

Yes. Many ticks, especially deer ticks, cannot always be removed in one piece without breaking apart. The tick can be tested anyway—send all parts you are able to recover. After removing the tick, wipe the bite area with alcohol and/or a topical antibiotic. It is generally not a problem if some parts of the tick remain embedded in your skin since once the tick is dead, it can no longer transmit its pathogen payload. As with any skin lesion, if sign of infection or rash occur, consult your physician.

**I found a tick walking on me, but it wasn't attached. Can I/Should I submit it for testing?**

Yes, absolutely. We're using your tick encounter to determine who's at risk and what actions they are taking. Its great if you find the tick before it bit you, and keep checking for ticks, but send us the tick because we still want to know what pathogens its carrying (and when you found it and where, etc.).

**What about ticks found on pets—can I have them tested?**

Yes. As with people, we are encouraging residents to submit ticks that are found actually embedded or biting the pet. But, all ticks, even if just found on the pet's fur, may be sent for testing. This is because we want residents to be honest about where they found the tick (biting a human vs. on a pet) when they submit the tick, as this information may be used in the future for epidemiological follow-up. These ticks will count toward your town's 100 tick allotment.

**Where can I access information about what diseases ticks are carrying in my area?**

Go to the LMZ's complete database at [stats.tickdiseases.org](http://stats.tickdiseases.org). The database can be queried by town, tick species, year, and pathogens carried. This tool will also be available on [www.TickReport.com](http://www.TickReport.com). Residents and towns can use this tool to access the data. Monthly reports will also be provided to towns with summary statistics.

**FOR TOWN HEALTH AGENTS**

To see how the on-line tick submission process works, go to <http://www.TickDiseases> (or <http://TickReport.com> after 1-April) and do a trial run. You can go through the whole procedure. Enter "TICKTESTER" for your name, and give your real email address. You'll see the existing submission form and the information we currently collect. In your trial run, indicate you'll pay by check (we'll discard your fake order in 24 hrs; if it was a real order, we would hold it until the tick and check arrive in lab). For purposes of the CIC program, all reference to payments will be removed. If you use your real email address, the mock results of your trial will be sent to you. Those mock results will differ from a real report since an actual report will include a photo of the submitted tick. The LMZ lab system is set up so that each time information is added to the record, i.e. each time a milestone is passed, the system sends out an email with a unique URL linking you to the updated report file.