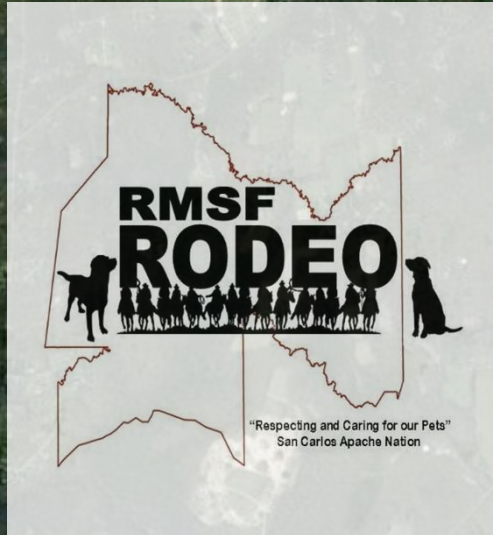


GETTING ITM DONE...

COMMUNITY ENGAGEMENT FOR IMPLEMENTATION

THOMAS MATHER
Univ. of Rhode Island



A good idea is not enough...

PREREQUISITE FOR ADOPTION

For **health promotion** to be effective, people must believe that...

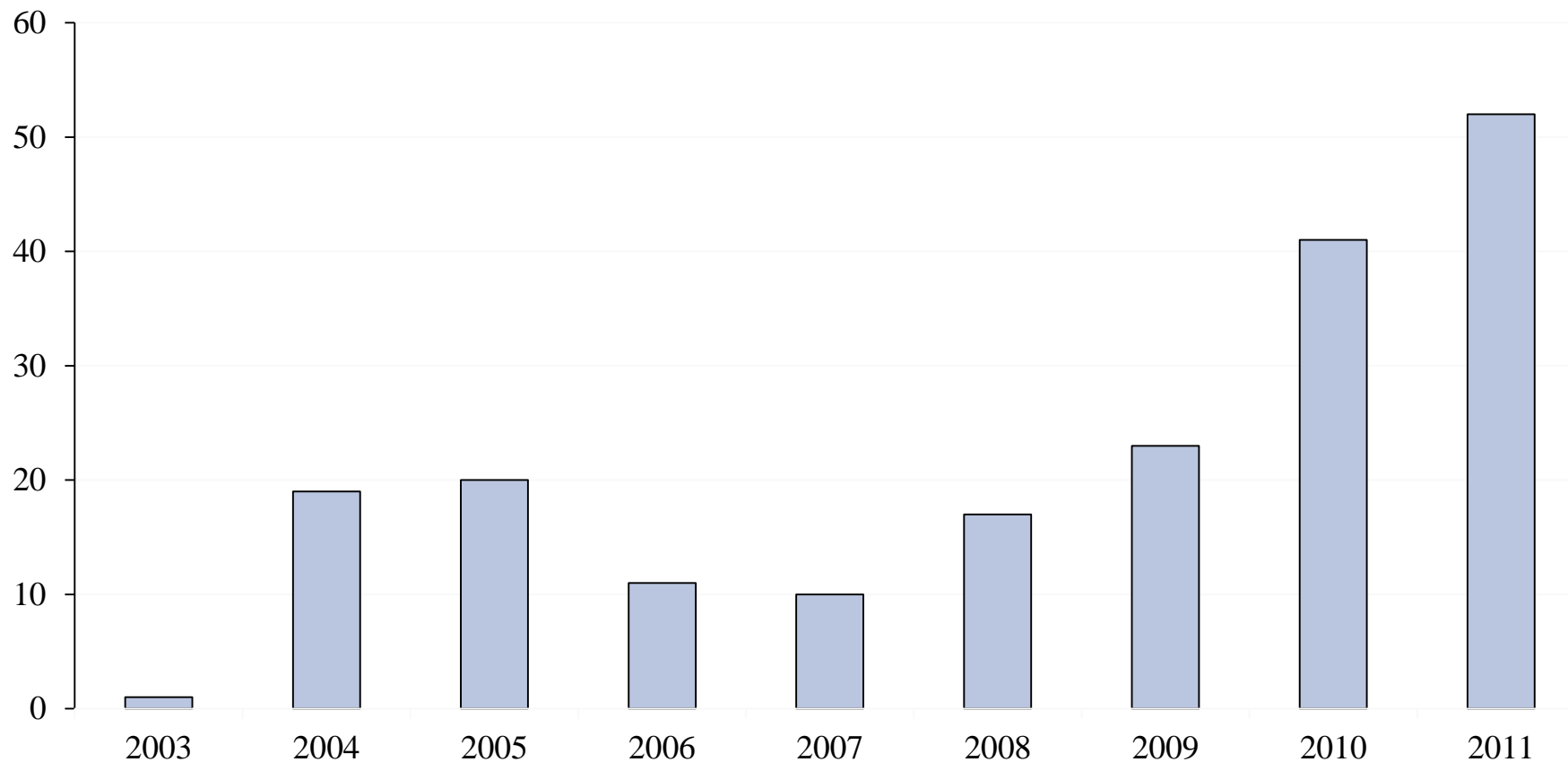
- They're **susceptible** and likely to fall victim to disease
- Disease will cause them significant **adverse consequence**
- Adopting preventive practice actually is **effective**
- **"I can do that!"** belief in ability to do preventive practice



A tick-borne disease prevention education initiative for communities

Increasing Number of Reported Human Cases in Arizona

SCAT Rodeo Project



****18 Deaths 2003-2012 (7% Case Fatality Rate)***

RMSF SUSPECTED CASES FROM MARCH 20 – JULY 16, 2012

The San Carlos Apache Tribe has an average of **greater than 6**
RMSF suspected cases per day
from March 20 – July 16, 2012 (118 days)

Age Groups	Cases	Mean Cases/ Day
Children (0-18 yrs)	497 CASES	4.2 per DAY
Adults (>18 yrs)	297 CASES	2.5 per DAY
TOTAL	794 CASES	6.8 per DAY

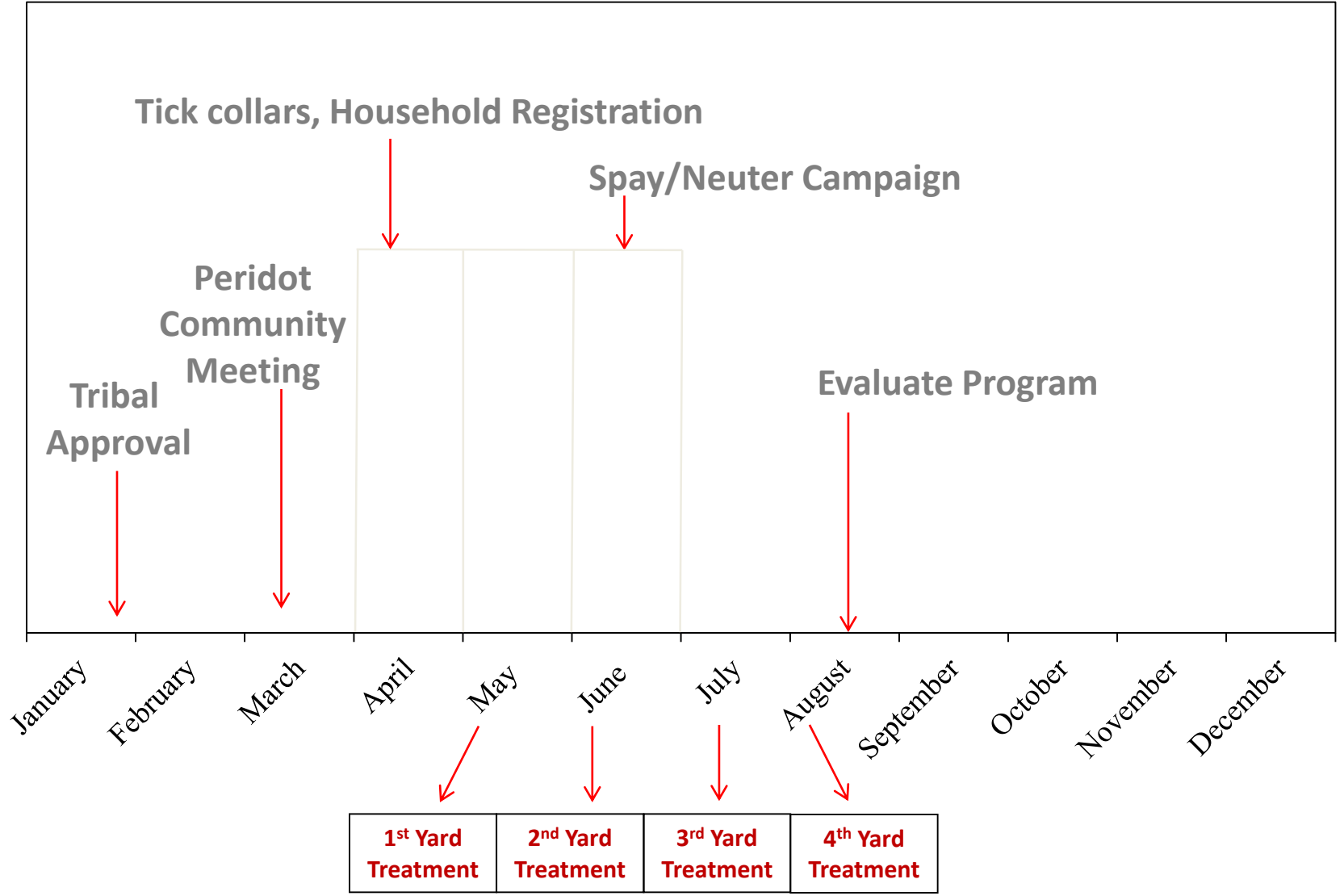


THE RMSF RODEO PROJECT :2012

- **Project divided in six primary rotating phases:**
 - Dog population count
 - Collar and register all dogs in study area
 - Spray each home 4 times
 - Tick counts in environment
 - Spay/neuter clinic
 - Knowledge, attitudes and practices survey
- **Provide data for tribe to expand reservation-wide**



RMSF RODEO TIMELINE, 2012



Field Team Objectives

1. Visit every home
2. Collar, register, tie-outs, follow up on dogs
3. Educate homeowners
4. Treat yards for ticks

Eliminate Ticks!

Tick Collars for Dogs

- Seresto®, new pre-market tick collar provided by Bayer
 - 4.5% Flumethrin, 10% imidacloprid
 - Visible marker of treatment
 - Utility in harsh environment unknown
 - Expected to last complete season (8 months)
- Applied with tribal/owner consent



Properly Timed Pesticide Treatments



Once a Summer



May



June

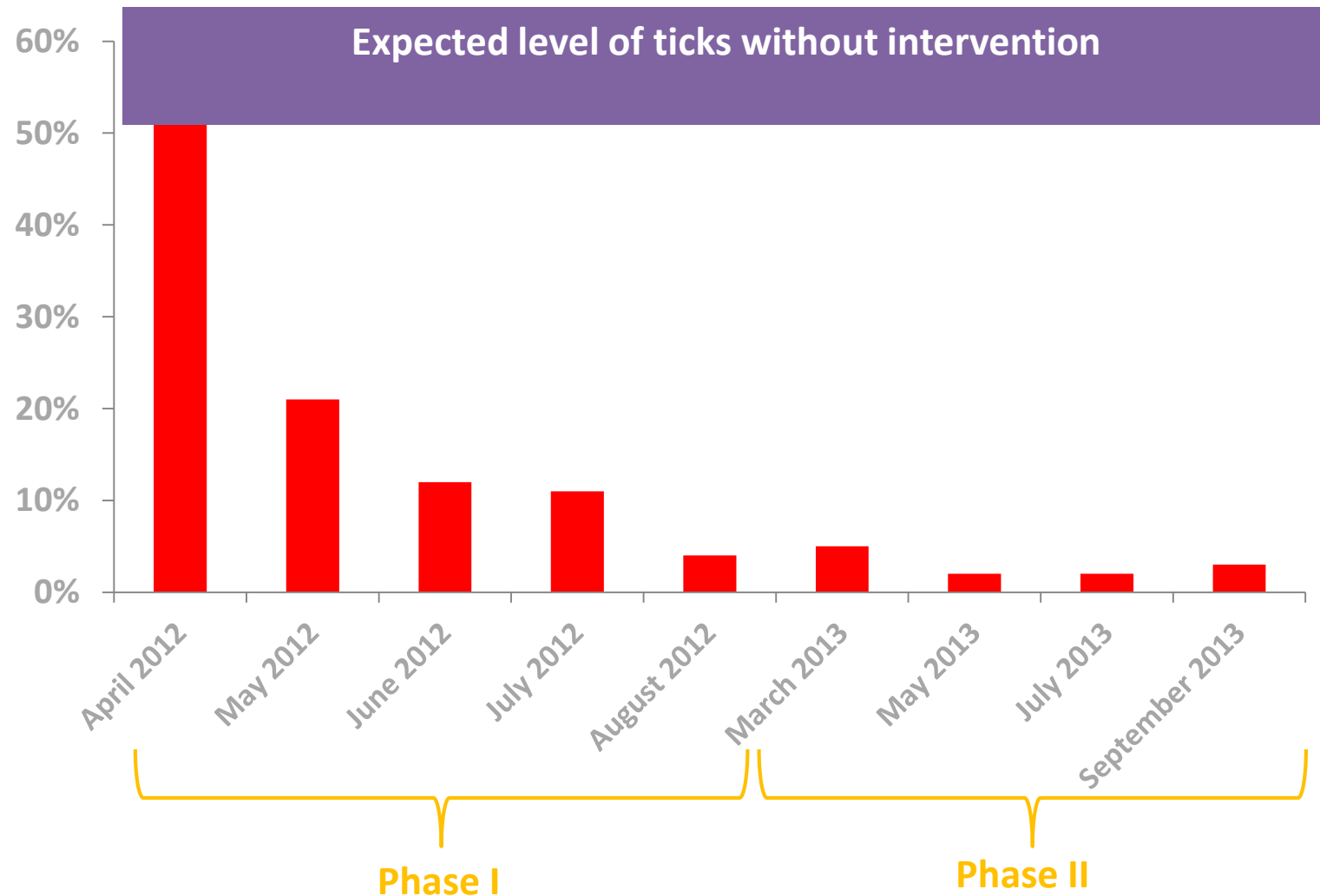


July



August

Tick Counts on Dogs at RMSF Rodeo Home sites

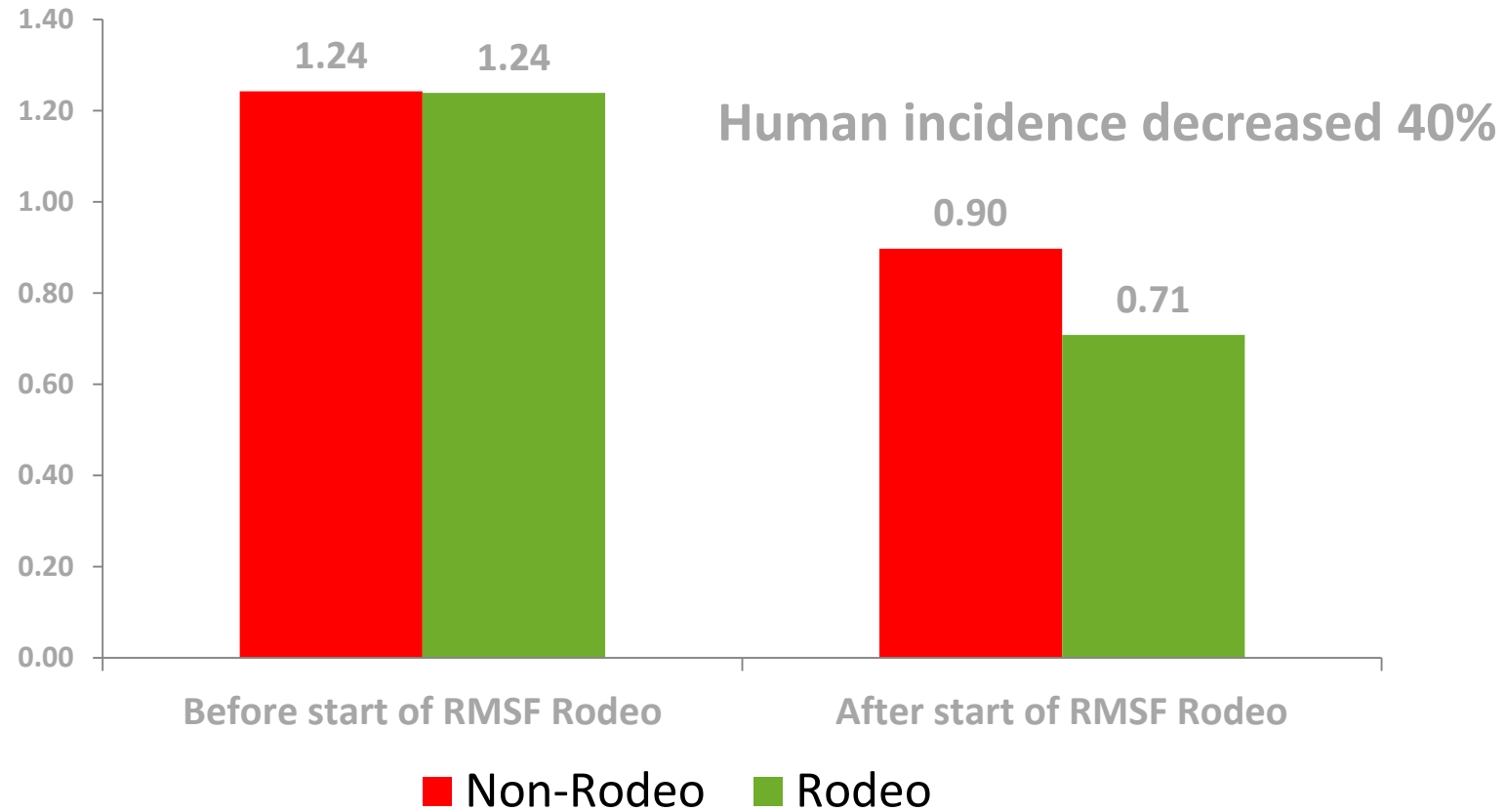


Tick Traps at Rodeo Home sites

Environmental Counts



Human incidence of *R. rickettsii*



Includes surveillance data 2 years prior to start of RMSF Rodeo, and 2 years after

KEYS TO SUCCESS

- 99% Compliance in target community
- High level of perceived **susceptibility**
- High level of concern for **severe outcome**
- **Implementation was free**





A Community-driven Public
Health Strategy for Solving
America's Tick Problem

An aerial photograph of a suburban neighborhood with several houses, trees, and a road. The image is slightly blurred and has a dark, moody tone.

TickSmart™ Towns are places where civic leaders care enough and neighbors know enough...about how to avoid potentially life-altering tick encounters, and what to do next if they do find a tick.

More Ticks In More Places...

...and likely even more to come!



More Ticks In More Places...
...and likely even more to come!

**THAT'S
A PROBLEM**

More Ticks In More Places...

...and likely even more to come!



... 'cause ticks
can make you
sick.

**Sometimes
real sick!**



More Ticks In More Places...

...and likely even more to come!

CDC estimates Lyme disease hits 300,000 each year

Filed Under: [Tick-borne Disease](#)
[Lisa Schnirring](#) | Staff Writer | [CDRAP News](#) | Aug 19, 2013

A new estimate on Lyme disease suggests that about 300,000 Americans are sickened each year, which is about 10 times higher than the number of cases reported, according to an analysis of the latest information by the US Centers for Disease Control and Prevention (CDC).

Scientists from the agency base their projection on findings from three ongoing studies that are designed to better gauge the number of people diagnosed with Lyme disease each year. CDC researchers reported the preliminary findings yesterday at a tickborne disease conference in Boston.

Ongoing studies are based on medical claims information for about 22 million insured people, a survey of clinical laboratories, and self-reported Lyme disease cases from a survey of the general public, the CDC said in a press release today.

Paul Mead, MD, MPH, chief of epidemiology and surveillance for the CDC's Lyme disease program, said in the statement that routine surveillance shows only part of the picture and that the real number of Lyme cases is much greater. "This new preliminary estimate confirms that Lyme disease is a tremendous public health problem in the United States and clearly highlights the urgent need for prevention," he said.

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iStockphoto

Lyme disease, caused by bacteria carried by ticks, is particularly common in the northeastern and midwestern US.



More Ticks In More Places...

...and likely even more to come!

CDC estimates Lyme disease hits 300,000 each year

Filed Under: **Tick-borne Disease**
Lisa Schnirring | Staff Writer | CDRAP News | Aug 19, 2013

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iStockphoto

Lyme disease, caused by bacteria carried by ticks, is particularly common in the northeastern and midwestern US.



21% of households

According to the CDC, 21% of households reported **at least one tick encounter** during the past year.



And In This “More Ticks In More Places World”...



Hey, there's a deer in the backyard! Now we're all gonna get Lyme 😞

Do you think we should spray the yard with Cedar Oil? They say it kills ticks.

Aaaaaaah!

I can't believe how many ticks I found on the dog today. We only walked in the neighborhood.

Oh no, there's a tick on me...GET IT OFF, GET IT OFF!!

More Ticks In More Places...

...and likely even more to come!

TICK LITERACY DEFICIT

Hey, there's a deer in the backyard! Now we're all gonna get Lyme!

Do you think I should go to the yard? Oh, no! The ticks are everywhere!

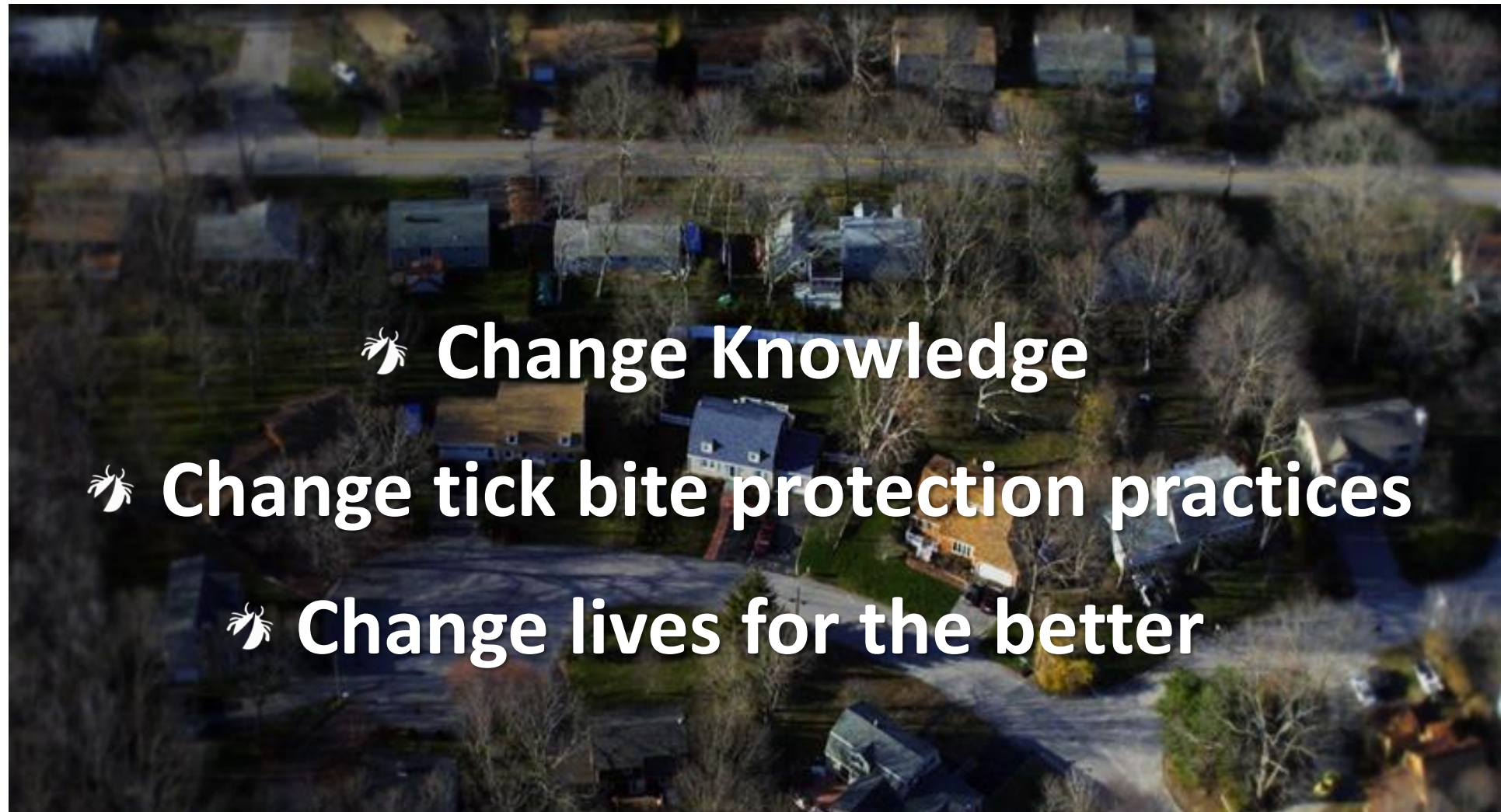
I can't believe how many ticks I found on the dog today. We just walked in the neighborhood.

Oh no, there's a tick on me...GET IT OFF, GET IT OFF!!



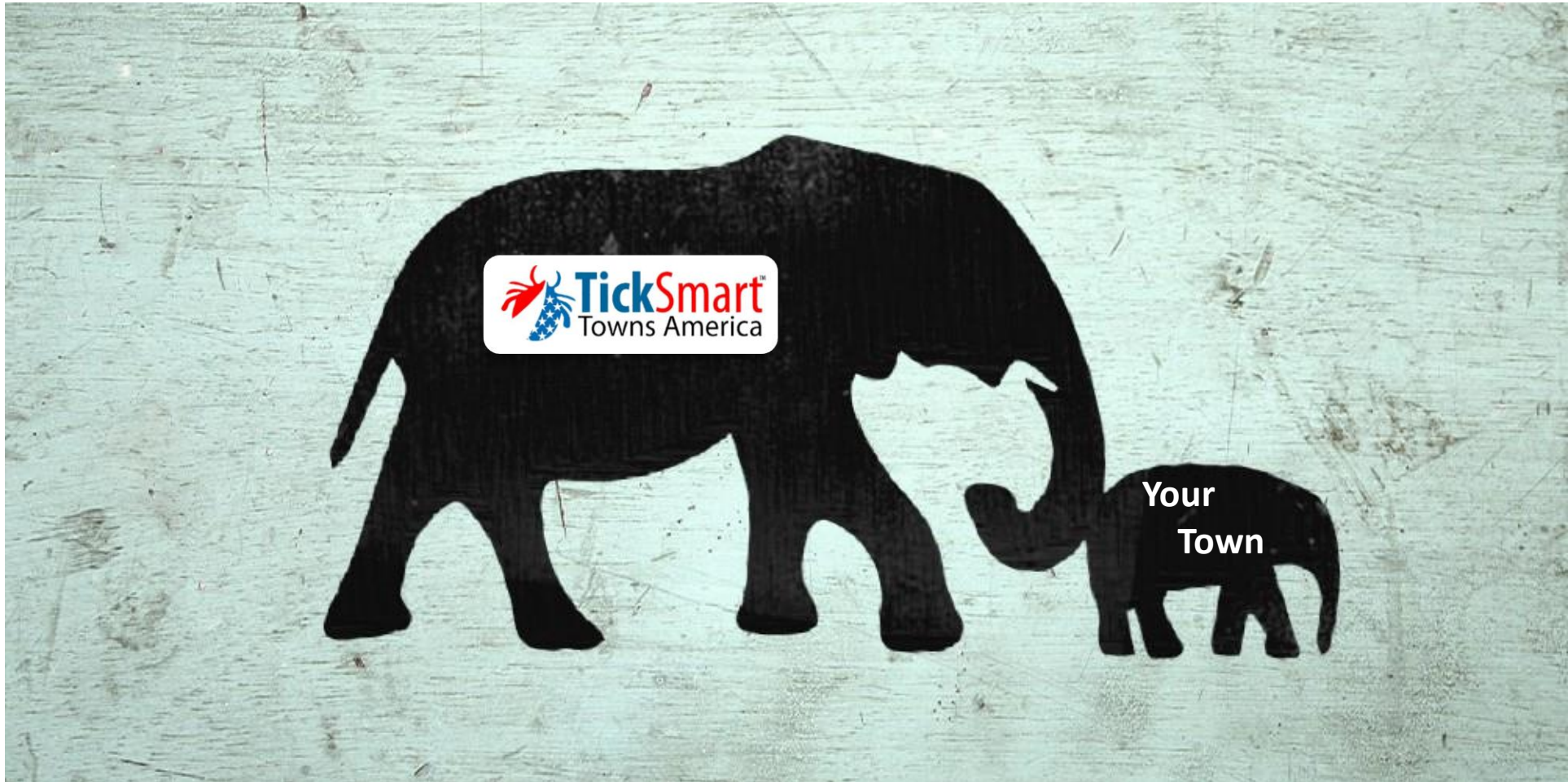


A Community-driven Public
Health Strategy for Solving
America's Tick Problem



- 🦋 Change Knowledge
- 🦋 Change tick bite protection practices
- 🦋 Change lives for the better

Because everybody could use a....



NUDGE

to make
better choices



A Community-driven Public
Health Strategy for Solving
America's Tick Problem

We're TickSmart. We do
Text Text Text Text Text
Text Text Text Text Text
Text Text Text Text Text
Text Text Text Text Text.

We're TickSmart. We do
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TickSmart Towns America

MEMBERSHIP BENEFITS

TickSmart™ Advisor

Your TickSmart™ Advisor is a change agent and pacesetter, backed by a team of experienced tick scientists and health communication experts. **Works directly with your town's Tick Task Force point person**, coordinator or committee to help turn insights into ideas, action and impact. TickSmart™ Advisors are skilled in launching and supporting campaigns that ensure client success.

TickReport™ Tick Testing

100 subsidized* tick tests annually, with testing conducted by UMass Laboratory of Medical Zoology. *Requires \$20 user co-pay to TickReport™ upon submission

TickSpotters 24/7

Access to expert tick identification and riskiness assessment. Each submission (w/picture) receives a personalized **TickSpotters Report** within 24-36 hrs, based on the submitted picture. Report includes tick id, riskiness assessment and best next-step actions.

TickSmart™ Live! Webinar Events

Member towns can host up to **two** 20-30 minute webinars annually featuring URI's TickGuy, Dr. Tom Mather. Each webinar is delivered live & features direct interaction.

TickSmart™ Educator Certification

Three hour **live TickSmart™ training** as well as supplemental training with the purchase of TickSmart™ Learning Kit modules.

TickSmart™ Messages

Annual non-transferrable, rights managed license w/unlimited reproduction rights of seasonally-relevant **TickSmart™ messages** (signs, posters, rack cards).

TickSmart™ Web Content

Gives any member town entity (e.g. schools, libraries, churches) **TickSmart™ web content** (e.g. tick photos, web applications like Current Tick Activity, The TickGuy vetted F.A.Q. text) with an annual rights managed license allowing unlimited distribution to town entities.

© TickEncounter Resource Center • www.TickEncounter.org

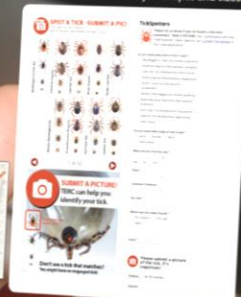


BECOME A TICKSPOTTER!

TickEncounter.org can help you identify your tick.
Submit your tick picture before testing!



Ticks can come in a variety of shapes and sizes!



WWW.TICKENCOUNTER.ORG/TICKSPOTTERS



TickSmart
Towns America

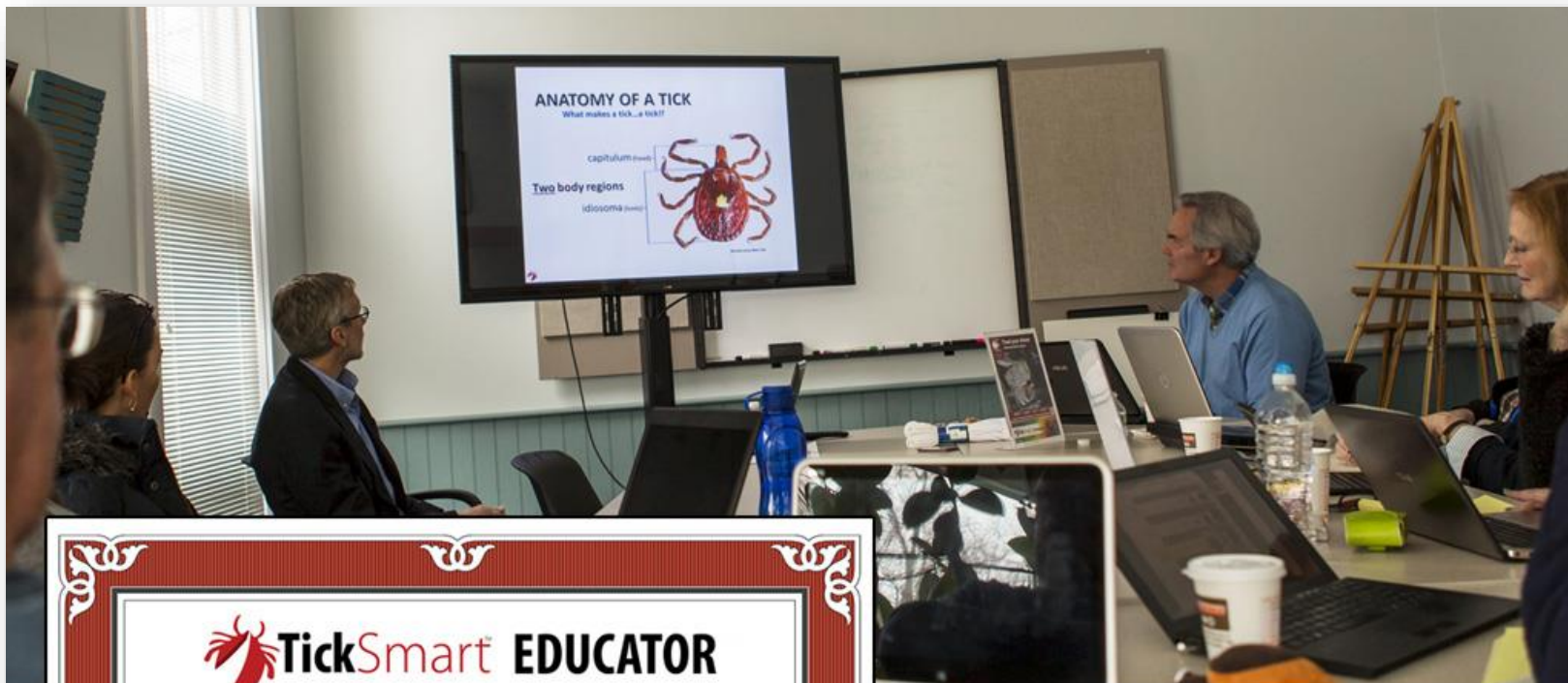
Jamestown, RI is a TickSmart™ Town
TickEncounter Resource Center © 2015

TickSmart[™] Advisor



Your Connection To:

- 🦋 **Ideas**
- 🦋 **Best Practices**
- 🦋 **Unique Resources**



3 hour training class
or
50 min public forum

"I JUST FOUND A TICK!!"



STEP 1

IS MY TICK RISKY?
SEND A PICTURE. IT'S FREE!
TICKENCOUNTER.ORG/TICKSPOTTERS
 TICKSPOTTERS ASSESSES YOUR RISK BEFORE TESTING
 (PERSONALIZED E-MAIL IN 1-3 DAYS)
 TICKSPOTTERS IS A SERVICE OF THE URI TICKENCOUNTER RESOURCE CENTER


STEP 2






IS IT INFECTED?
SEND YOUR TICK. IT'S SIMPLE!
TICKREPORT.COM
 ORDER ONLINE, TICKREPORT™ TESTS YOUR TICK
 (TEST RESULTS IN 3-5 BUSINESS DAYS)
 TICKREPORT™ IS A SERVICE OF THE UMASS LABORATORY OF MEDICAL ZOOLOGY

 **UMASS AMHERST**  **LABORATORY OF MEDICAL ZOOLOGY**

 **University of Rhode Island**
TickEncounter Resource Center


TICKSPOTTERS/TICKREPORT™ TOOLS DO NOT DIAGNOSE DISEASE BUT ARE AN AID IN ASSESSING RISK AND SUPPORTING TICKSMART™ BEST PRACTICES FOR PREVENTION.

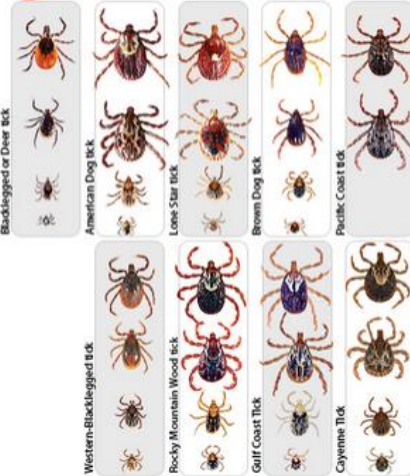

University of Rhode Island
TickEncounter Resource Center









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[F.A.Q.](#)
[TICK IDENTIFICATION](#)
[TICK TESTING](#)
[PREVENTION](#)
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[RESOURCES](#)

[TickSpotters](#)
[TickSpotters Submit Form](#)
[Top 14 TickSpotters Submissions from 2014](#)
[Veterinary Clinic Program](#)


SPOT A TICK -SUBMIT A PIC!
 Life stages are Top to Bottom:
 Adult Female, Adult Male, Nymph, Larva




SUBMIT A PICTURE!
 TERC can help you identify your tick.



These are the same tick.

Don't see a tick that matches?
 You might have an engorged tick!

TickSpotters
 Please let us know if you've found a tick! And remember, **TAKE A PICTURE!** Your submissions will help TickEncounter collect data for our [Current Tick Activity](#) In Your Area application.

Do you know what kind of tick it was? *

- ☐ Blacklegged or Deer tick (*Ixodes scapularis*)
- ☐ American Dog tick (*Dermacentor variabilis*)
- ☐ Lone Star tick (*Amblyomma americanum*)
- ☐ Brown Dog tick (*Rhipicephalus sanguineus*)
- ☐ Pacific Coast tick (*Dermacentor occidentalis*)
- ☐ Western-Blacklegged tick (*Ixodes pacificus*)
- ☐ Rocky Mountain Wood tick (*Dermacentor andersoni*)
- ☐ Gulf Coast Tick (*Amblyomma maculatum*)
- ☐ Cayenne Tick (*Amblyomma cajennense*)
- ☐ I don't know

Do you know what stage of tick it was? *

- ☐ Larva
- ☐ Nymph
- ☐ Adult
- ☐ I don't know

When did you find the tick? *

/ /

MM DO YYYY

State *


Canadian Provinces

Zip code *

Where was the tick(s) found? *

- ☐ On a person
- ☐ On a pet
- ☐ Other

Email *


 Please submit a picture of the tick. It's important!

100 subsidized
**Tick
Testing**

**Requires
\$20
Co-pay**

**Tests for
5 germs**
Lyme
Babesia
Anaplasma
Borrelia miyamotoi
Borrelia mayoni



209 Fernald Hall
270 Stockbridge Rd.
University of Massachusetts
Amherst, MA 01003
<http://www.umass.edu/lmz>
lmz@umass.edu

Print Report

Order #10589

Tick ID

20140707-55

Date

Tick Received: 0000-00-00
Report Created: 2014-07-08 22:43:18

Submitter Information

Tricia L. [redacted]
[redacted] Road
Watertown, NY 13601

Email: [redacted]@rocketmail.com
Phone: [redacted]
Fax: --

Tick Information

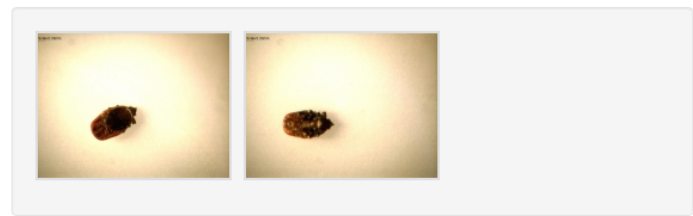
Species: *Ixodes scapularis*
Sex: female
Stage: adult
Feeding State: partially fed

Patient/Host Information

Host Source: human
Gender: female
Age: 9
City: Watertown
State: Ne
Zip: 13601
Attached: Yes
Site of Attachment: Head
Rash Present: No

Client Notes

Pill Container



Tests Results

The following tests have already been ordered

Test Name	Date Ordered	Result
<i>Borrelia burgdorferi sensu latu</i>	2014-07-14	negative
<i>Anaplasma phagocytophilum</i>	2014-07-14	negative
<i>Babesia microti</i>	2014-07-14	negative

Additional Tests Available

We securely store all ticks so that you can order additional tests at a later date.
Check off each additional test you'd like to order. Results will be emailed to you in 1-5 business days.

Test Description	Cost	Request
<i>Bartonella henselae</i>	\$50	<input type="checkbox"/>
<i>Borrelia lonestari</i>	\$50	<input type="checkbox"/>
<i>Francisella tularensis</i>	\$50	<input type="checkbox"/>
<i>Ehrlichia chaffeensis</i>	\$50	<input type="checkbox"/>
<i>Ehrlichia canis</i>	\$50	<input type="checkbox"/>
<i>Babesia divergens</i>	\$50	<input type="checkbox"/>
<i>Borrelia miyamotoi</i>	\$50	<input type="checkbox"/>
<i>Rickettsia rickettsii</i>	\$50	<input type="checkbox"/>

[Continue to Checkout](#)

KNOW YOUR TICKS!

Jamestown, RI is a TickSmart Town

TickEncounter Resource Center

Unfed Blacklegged (Deer) Ticks

(Ixodes scapularis)
Known diseases transmitted: Lyme disease, Anaplasmosis, Babesiosis, Relapsing Fever borreliosis, Deer tick virus



Adult Female

October-May



Adult Male

October-May



Nymph

May-August



Larva

June-September

Ticks can come in a variety of shapes and sizes, but...

THIS TIME OF YEAR, THEY'RE ALL DEER TICKS!

PROTECT YOURSELF! PROTECT YOUR CHILDREN! PROTECT YOUR PET!



TICKS CHANGE APPEARANCE AS THEY FEED. IT'S STILL THE SAME TICK!

FIND OUT HOW TO STAY TICKSAFE. GO TO JAMESTOWNRI.GOV



ADULT STAGE FEMALE BLACKLEGGED (DEER) TICK

TickSmart
Towns America

Get TickSmart™ @ www.TickEncounter.org

TickEncounter Resource Center © 2014

Jamestown, RI

is a TickSmart Town

Mice are the primary culprits for producing infected ticks!



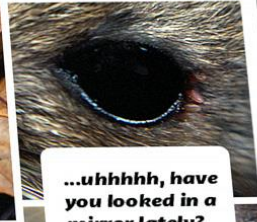
DUDE, what's up with your face???

...what do you mean?



SORRY, no tweezers on me, but you could use that Tick Tube over there.

ACCKKKK, GET THEM OFF, GET THEM OFF!!!



...uhhhhh, have you looked in a mirror lately?



Dear humans, PLEASE send more of these tubes...!

Mice are the primary culprits for producing infected ticks. Tick Tubes are stuffed with cotton nesting material impregnated with permethrin. If mice are present, they typically are very attracted by this nesting material. If tubes are placed in areas harboring mice, the mice will steal the treated nesting material and place it in their nests. Once mice have treated nests, they almost never are infested by ticks.

FIND OUT HOW TO STAY TICKSAFE. GO TO WWW.JAMESTOWNRI.NET

TickSmart
Towns America

Get TickSmart™ @ www.TickEncounter.org

TickEncounter Resource Center © 2014

Seasonally-Relevant
TickSmart Print Materials

Norwell Public Schools

21st Century Schools for 21st Century Students



Food Services

- Overview
- **Menus**
- Meal Prices
- Student Lunch Accounts
- Nutritional Information
- Services and Programs
- Farm to School
- Resource Links

[Norwell Public Schools](#) ▶ [Operational Services](#) ▶ [Food Services](#)

School Lunch Menus



This site contains links below that lead to the individual school lunch menus. There is also a link that leads to a subscription page that allows for you to get the menu's through your email.



Elementary School Menu



Middle School Menu



High School Menu



"I Just Found A Tick"



learn what to do next ...



Only
\$5 / household
per year



TickSmart™ Towns America

MEMBERSHIP ELIGIBILITY



In today's "**more ticks in more places**" world, who wouldn't want to live in a TickSmart™ Town? Places where civic leaders care enough and neighbors know enough about how to avoid potentially life-altering tick encounters? And they know what to do next if they find a tick, too.

To qualify as a TickSmart™ Towns America community, you must meet three standards established by the TickEncounter Resource Center. These standards were developed to help ensure that the program works optimally to engage the entire community in increasing tick literacy and tick bite prevention behaviors.

TickSmart™ Towns America -- Eligibility Criteria

Each TickSmart™ Town will:

1) Commission or form a tick task force, board, or other citizen-led committee, with a stated goal of reducing the impact of tickborne disease among community members. Often, town officials, professional town staff, business owners, and citizen volunteers work together on the task force or board to create the greatest impact and best access to available resources within the community.

The town's tick task force, board, or committee will appoint or engage a point person or coordinator who will become the main point of contact with their TickSmart™ Advisor.

2) Implement a community-wide tick literacy and tick reduction program based on TickSmart™ principles and core actions. To accomplish this, the town should plan to support this activity with an annual budget of at least \$5 per household.

Supporting the TickSmart™ Towns America effort at or above a minimum of \$5 per household ensures that funds will be available for an appropriate level of professional public health entomology risk assessment and advisory services, as well as to license community-wide distribution rights of high quality, multi-channel health communications messaging, training, and outreach.

3) Encourage and assist the local school district in offering tick literacy training using a grade-level appropriate, activity-driven tick education module in each grade level between 1st and 8th grades.

The TickEncounter Resource Center currently is developing a series of short, self-contained TickSmart™ modules that are NGSS compliant, and that will be available for adoption.

TickSpotters



...It's **TickSmart**



3.5 day fed female blacklegged tick

December 23, 2015

“ I had no idea that ticks were still active when it's cold outside. We're very vigilant about tick checks in spring, summer, and early fall, but I thought we were out of the woods (so to speak) at this time of year. **I will change our winter behavior immediately.** ” Amy E, Salem NH

TickSpotters



<1 day fed nymphal blacklegged tick
June 15, 2015



...It's **TickSmart**

“ I haven't had any deer tick encounters **since I started following all of the steps on your website.** Two yard treatments, tick tubes, Insect Shield clothing, permethrin on shoes, and a lot more awareness. My family **has not had any new tick encounters.**” Jeff, NY

KEYS FOR SUCCESS

- Community makes investment
- Town tick committee actively promotes
- People believe prevention is effective
- People believe they can do ITM best practices
- Adoption of tick literacy training in schools

