GETTING ITM DONE...
COMMUNITY ENGAGEMENT FOR IMPLEMENTATION

THOMAS MATHER
Univ. of Rhode Island
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 good idea is not enough...
Increasing Number of Reported Human Cases in Arizona

SCAT Rodeo Project

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

<table>
<thead>
<tr>
<th>Age Groups</th>
<th>Cases</th>
<th>Mean Cases/ Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children (0-18 yrs)</td>
<td>497 CASES</td>
<td>4.2 per DAY</td>
</tr>
<tr>
<td>Adults (&gt;18 yrs)</td>
<td>297 CASES</td>
<td>2.5 per DAY</td>
</tr>
<tr>
<td>TOTAL</td>
<td>794 CASES</td>
<td>6.8 per DAY</td>
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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

1st Yard Treatment | 2nd Yard Treatment | 3rd Yard Treatment | 4th Yard Treatment

Tick collars, Household Registration
Spay/Neuter Campaign
Evaluate Program

Tribal Approval
Peridot Community Meeting
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

Expected level of ticks without intervention
Tick Traps at Rodeo Home sites

Environmental Counts

Number of ticks observed

- Adults
- Nymphs
- Larvae
Human incidence of *R. rickettsii*

Average cases per 1000 persons:
- Before start of RMSF Rodeo: 1.24
- After start of RMSF Rodeo: 0.90

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

Human incidence decreased 40%
KEYS TO SUCCESS

• 99% Compliance in target community
• High level of perceived susceptibility
• High level of concern for severe outcome
• Implementation was free
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!
CDC estimates Lyme disease hits 300,000 each year

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.
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 😞

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

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

Aaaaaaah!

Oh no, there’s a tick on me...GET IT OFF, GET IT OFF!!
Hey, there’s a deer in the backyard! Now we’re all gonna get Lyme 

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

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

Oh no, there’s a tick on me...GET IT OFF, GET IT OFF!!
Change Knowledge

Change tick bite protection practices

Change lives for the better
Because everybody could use a nudge to make better choices.
MEMBERSHIP BENEFITS

TickSmart™ Advisor
Year TickSmart™ Advisor is a change agent and professional. Dedicated to a team of experienced tick scientists and health communicators, our advisor works directly with your TickSmart™ Town to ensure your goals are met. Our advisor is a key member of your team, sharing ideas, acting, and innovating. TickSmart™ Advisors have been known for developing such compelling campaigns that create client interest.

TickReport™ Tick Testing

100 subcutaneous tick tests annually with testing conducted by Clinical Laboratory of Medical Zoology. Each test includes an analysis of the tick and a report of tick identification and tick-borne disease.

TickSpotters 24/7

Access to expert tick identification and treatment management. Each subscription includes a personalized Tick Spotters Report with tick ID reports, based on the submitted picture. Report includes tick ID, management, and treatment action.

TickSmart™ Live! Webinar Events

Member towns can host up to two 30-minute webinars annually featuring TicksSmart CEO, Dr. Tom Miller. Each webinar is delivered live and features direct interaction.

TickSmart™ Educator Certification

TickSmart™ Educator Certification training as well as a comprehensive program with the purchase of TickSmart™ learning kit modules.

TickSmart™ Messages

Adaptable non-transferable, rights-managed license workflow, and reproduction rights of seasonally relevant TickSmart™ messages (texts, posters, social, email).

TickSmart™ Web Content

Gives any member town access to school libraries, classrooms, TickSmart™ logo content for tick photos, web applications, and current Tick Smart Activity. The testing allows FAS to work with an available rights managed license allowing unlimited distribution to local entities.

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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 AVOID YOUR RISK BEFORE TESTING
(PERSONALIZED EMAIL IN 1-3 DAYS).

**STEP 2**
**IS IT INFECTED?**
SEND YOUR TICK. IT'S SIMPLE!
TICKREPORT.COM
ORDER ONLINE; TCKPREP™ TEST YOUR TICK
(RESULTS IN 3-5 BUSINESS DAYS).

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**TickEncounter Resource Center**

**SPOT A TICK - SUBMIT A PIC!**

**TickSpotters**

Please let us know if you've found a tick! And remember, TAKE A PICTURE! Your submission will help TickEncounter.com better identify ticks in your area.

- Do you know what kind of tick it was?
- Is it in a tick habitat?
- Do you know what stage of tick it was?
- Adult
- Nymph
- Larva

**Submit a Picture!**
TERC can help you identify your tick.

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

Please submit a picture of the tick. It's important!
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
Only $5 / household per year

TickSmart®
Towns America

MEMBERSHIP
ELIGIBILITY

In today’s “more ticks mean 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**

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.
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
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