

Project Listen: Experiences & Challenges of Public Health & Vector Control Professionals across New England

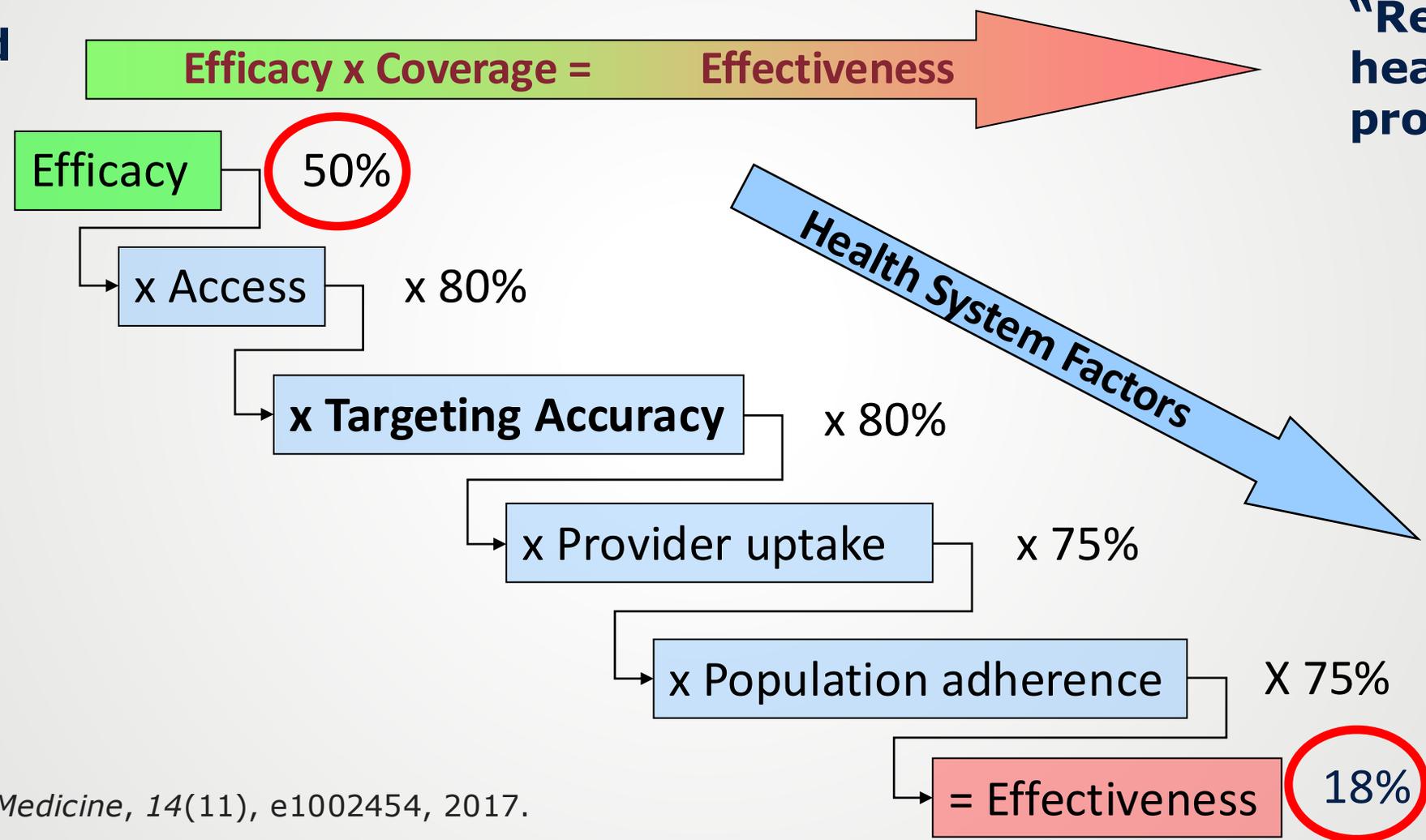
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NASEM Series: *Behavior, Beliefs, and Bugs:
Protecting Communities from Arboviral Diseases*
January 28, 2026

University of
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Amherst BE REVOLUTIONARY™



Why interventions may lose traction

Randomized trials



Adapted from *PLoS Medicine*, 14(11), e1002454, 2017.

How can programs be improved..... ?

- Understanding target groups



Groups at high-risk for malaria in SE Asia may spend **2-3 day's wages** for an improved forest hammock, while others are available for free from health clinics.

Why?

Project Listen: Primary research questions

- **While gaps in public health entomology have been identified in prior surveys (NEVBD, 2017) what *factors help well-functioning units be successful?***

What are the factors that influence interagency and cross-sector collaboration for public health vector control across New England?

(ideally.... reasonably “interventionable” factors)



Who and how?

1. Pilot Testing/Refining Interview Guides

2. Key informant interviews (KIIs)

- **Who:** State-level epi staff; MCD/county health directors; private company owners; state- and local-level legislators.
- 37 total (5-6 per state).

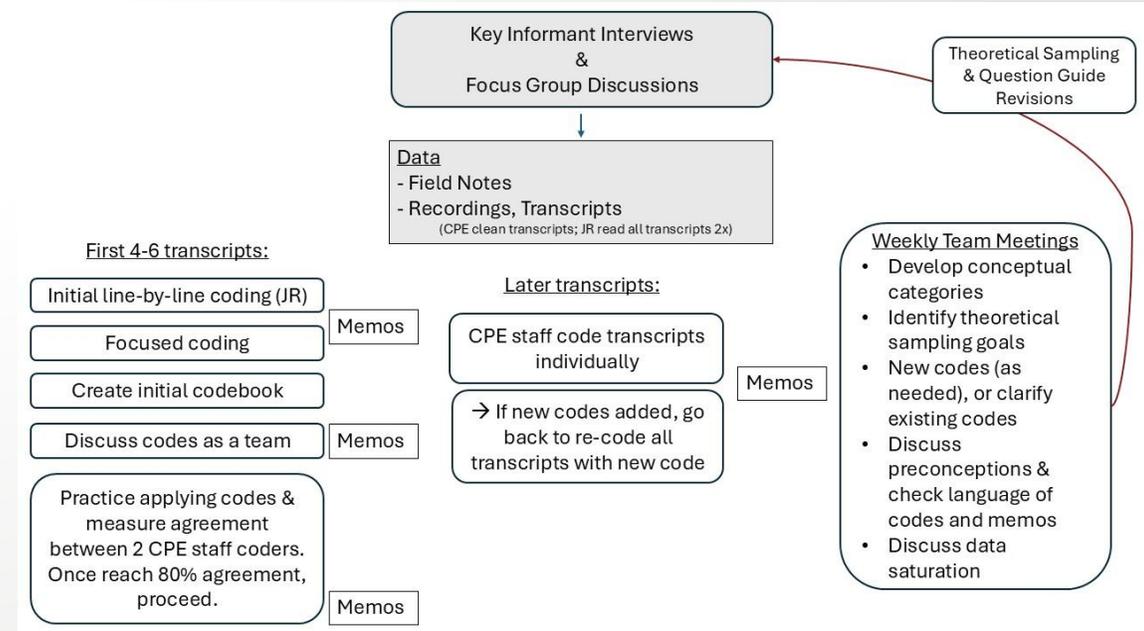
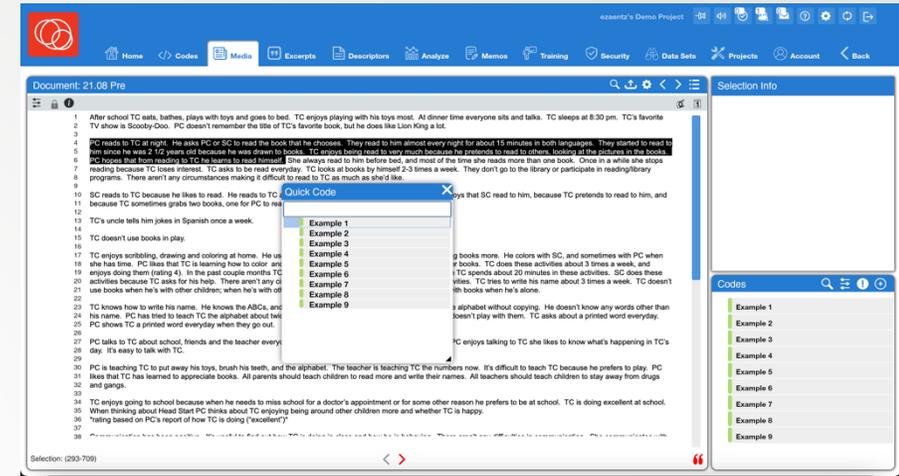
3. Focus group discussion (FDGs)

- **Who:** MCD field staff; local-level health; pesticide applicators; state- and county-level entomologists.
- 6 FGDs with 4-7 participants each (30 total).

UMass IRB approval #4235.

Analysis

- Interviews recorded, transcribed and coded. (~850 pages)
- Inductive coding using Dedoose 9.2.22
- Collaborative coding approach
 - Weekly meetings
 - Inter-rater agreements
 - Iterative process for revisions
 - Reflexivity
- **Goal:** Data saturation



Main findings

Factors supporting impactful programs

1. Sense of urgency & joint priorities
2. Trusted partners, with well-defined operational roles
3. Frequent and open communications during “the season”
4. Flexibility in resource-sharing

Factors hindering more impactful programs

1. Split prioritization between ticks and mosquitoes
2. Missed opportunities to work together (public-private)
3. Human health data and vector data not well-aligned
- 4. Local vs regional programs**
5. Pathways to legislative action unclear

Local programs vs regional action

Local control

1. Historical trends
2. Sense of investment in communities and buy-in
3. Local funding decisions in some states
4. Local knowledge of ecology and health systems
5. Limited capacity (esp. rural areas)

Regional offices

1. Standardization or “quality control”
2. Technical support and lab facilities
3. Consolidating data (storage and analysis)
4. Linkages to state-level resources

“...every town is an island in New Hampshire!”

“...we’re very blind to what’s going on around us.”

Regional Collaboration & Strategies

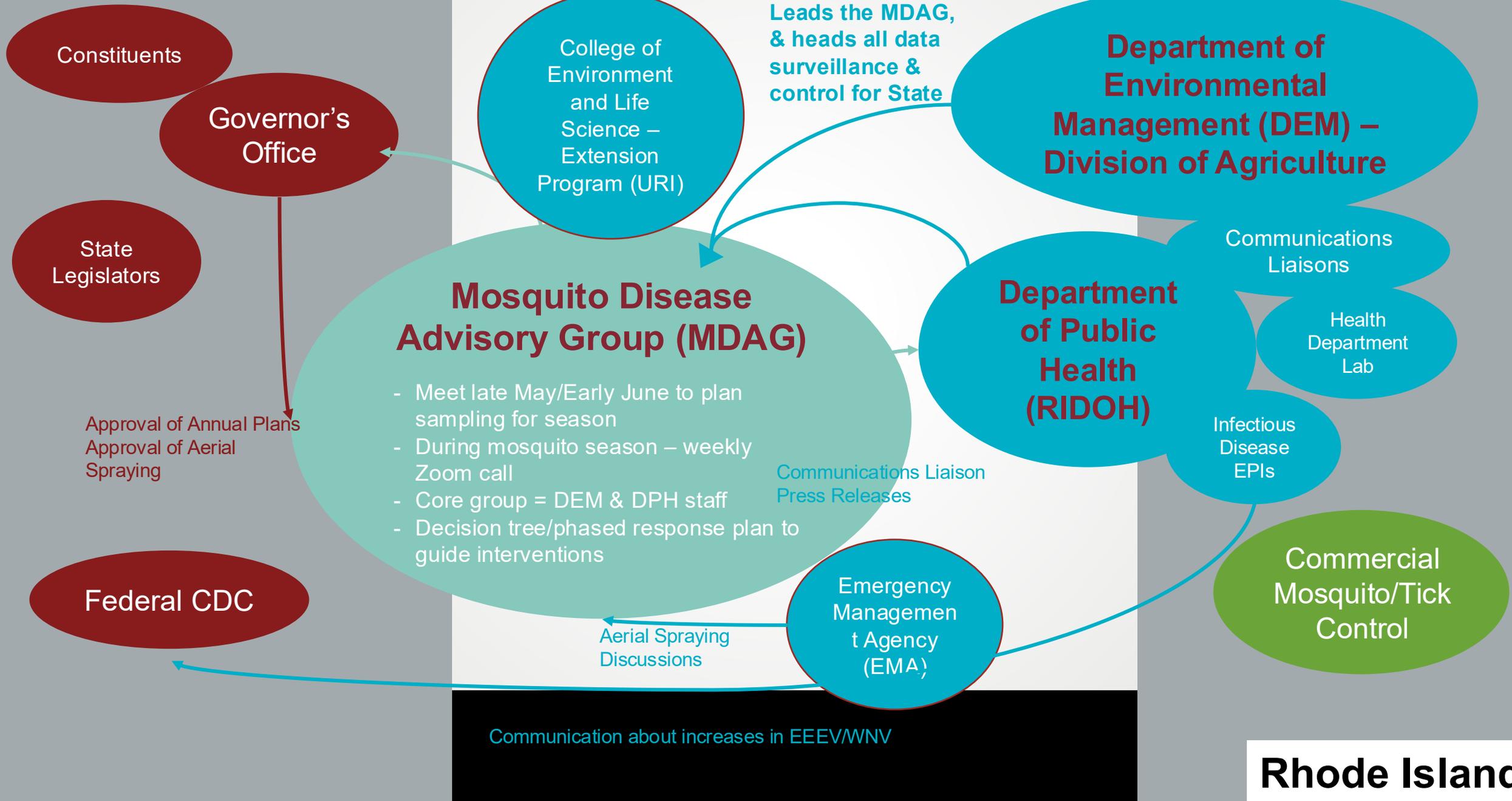
“Yeah. I think for me, as a professional, what I need is ***less competition and more community collaboration*** like...I want a portal, a way we can go in and [find]...maps of the agencies. These are their expertise. What they do. Here's who you can contact and then...let's feed each other information.” [emphasis added]

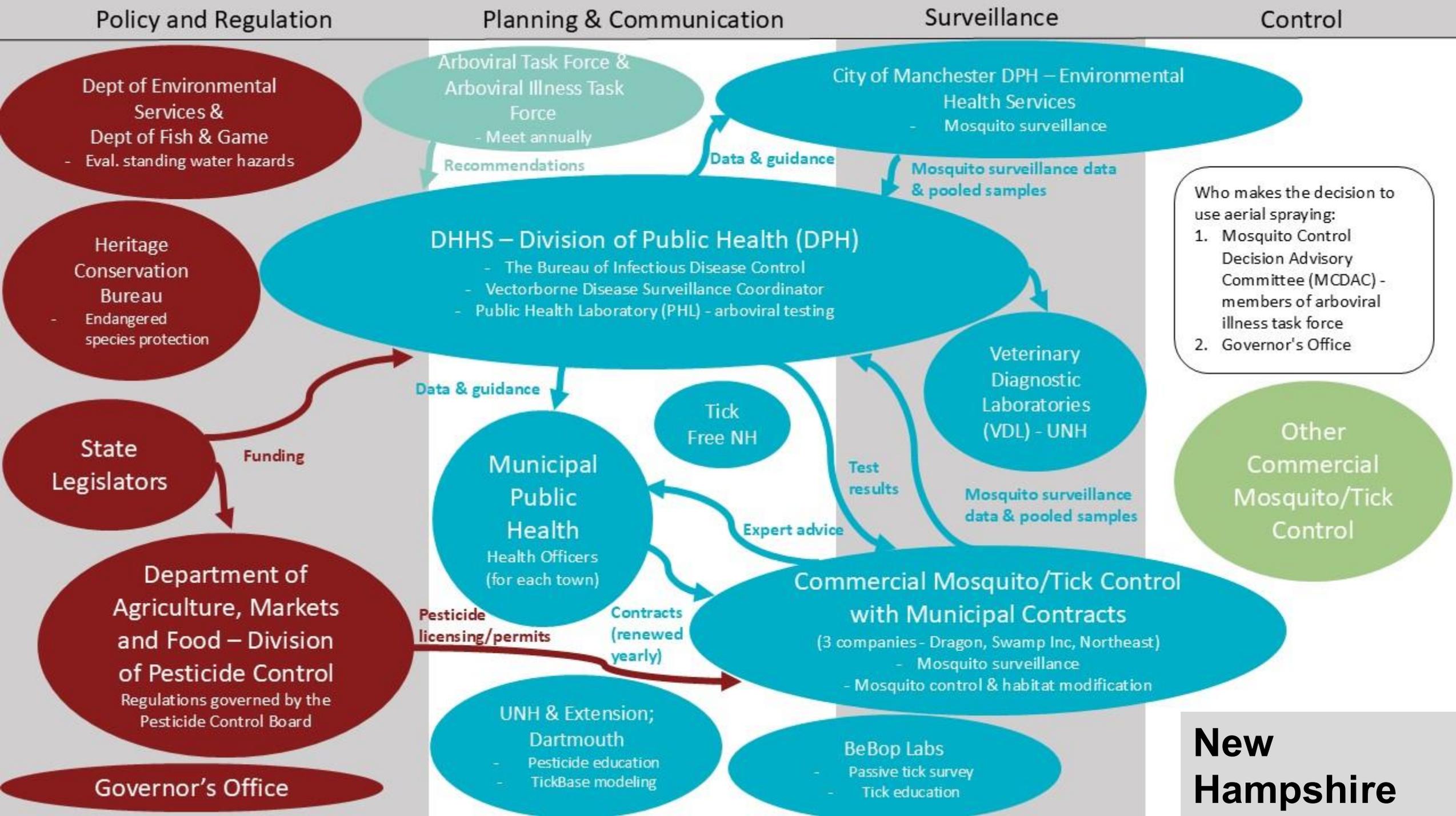
Organizational Landscape Mapping

Policy and Regulation

Planning based on Surveillance Data

Surveillance and Control





Research team



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Funding: CDC U01CK000661, to NEWVEC



Discussion and questions



Project Listen

Investigating the Experiences and Challenges
of Public Health and Vector Control
Professionals in New England

Vector-borne diseases have a large and growing public health impact across New England. In some states, responsibility for tracking vector populations rests on the shoulders of only a handful of dedicated individuals. Project Listen is a qualitative study that uses data from in-depth interviews with 67 professionals across all six New England states including field staff, agency leadership, and policymakers. Suggested action items and next steps focus

Stakeholder report:
<https://www.newvec.org/project-listen>

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