



# Supplementary Materials: Mosquito and Vector Control Agency Capacity and Needs Assessment for Emerging Vector-Borne Disease Threats in the Southeastern United States

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Thank you for your time and interest! This questionnaire is confidential (we will not ask any personal identifying information), and your participation is voluntary. The questionnaire should take less than 10 minutes to complete. Your answers will help us to inform policy makers as to the needs of local mosquito and vector control agencies to strengthen the overall vector-borne disease management and capacities in the southeastern United States.

## Vector Control Capacity, Barriers and Needs Assessment Questionnaire

1. In what state do you operate? \_\_\_\_\_
2. Do you work for a county, city, regional or state mosquito/vector control district/agency? \_\_\_\_\_
3. Is your organization a part of the local public health agency or separate? Yes (apart) No (separate)
4. What is your job title? \_\_\_\_\_
5. What is your educational or training background? \_\_\_\_\_
6. What is the estimated population size of the residents you serve?  
0-10,000      10,001-100,000      100,001-1,000,000      1 million+
7. What vector borne diseases have you seen in your county? (Circle all that apply)  
West Nile virus      Eastern equine encephalitis      LaCrosse encephalitis  
St. Louis Encephalitis      Spotted fever group rickettsiosis      Lyme disease  
Murine typhus      Chagas disease      Other: \_\_\_\_\_
8. What pest(s) does(do) your organization control for: (Circle all that apply)  
Mosquitos      Ticks      Kissing bugs      Bed bugs      Sandflies      Fleas      Other pests (spiders, rats, etc.)
9. What time of year do you conduct surveillance? Summer All year long Other: \_\_\_\_\_
10. What types of surveillance do you conduct? Vector collections Pathogen testing Other: \_\_\_\_\_
11. What treatment thresholds do you abide by? (Circle all that apply)

Presence of nuisance insects      Positive mosquito pool      Positive human case      Positive avian/equine case  
 Pre-determined schedule      Other: \_\_\_\_\_

12. Which adulticides does your organization utilize? *(Circle all that apply)*

Malathion      Permethrin      Other: \_\_\_\_\_  
 \_\_\_\_\_

13. What larvicides does your organization utilize? *(Circle all that apply)*      Biological control      Growth regulators      Contact  
 insecticides      Stomach insecticides      Other: \_\_\_\_\_  
 \_\_\_\_\_

14. With what frequency does your organization apply insecticides?

Everyday      Twice a week      Weekly      Other: \_\_\_\_\_  
 \_\_\_\_\_

15. In what manner(s) do you apply insecticides? *(Circle all that apply)*      Organization-owned truck      Organization-  
 owned aerial      Contractor      Other: \_\_\_\_\_

16. How many trucks equipped for spraying insecticides does your organization own? \_\_\_\_\_

17. How many airplanes and/or helicopters equipped for spraying insecticides does your organization own? \_\_\_\_

18. Does your organization conduct their own vector speciation?      Yes      or      No

If yes, please describe vector type (mosquito, ticks, etc) and process (subsampling, all collected vectors, etc.):  
 \_\_\_\_\_

19. What type of mosquitos have you seen in your region? (Circle all that apply) *Ae. aegypti* *Ae. albopictus* *Ae. triseriatus* *Cx. pipiens* *Cx. restuans* *Cx. nigripalpus* *Cx. salinarius* *Anopheles quadrimaculatus* *Culiseta melanura*

20. What type of ticks have you seen in your region? (Circle all that apply)

*Amblyomma americanum* *Dermacentor variabilis* *Ixodes scapularis* *Amblyomma maculatum*  
*Rhipicephalus sanguineus* *Haemaphysalis longicornis* Other: \_\_\_\_\_

21. How do you perform disease testing? (Circle all that apply)

Send to an outside laboratory In-house Don't perform any testing Other:  
 \_\_\_\_\_

22. Is there someone in your agency that performs outreach and education to the community you serve? Yes No If yes, what type of outreach/education is performed? (Circle all that apply) School-based programs Health-fairs Media Website/online presence Mobile units Other: \_\_\_\_\_

23. Is there someone in your organization that performs GIS or the mapping services? Yes No

24. Is there someone in your organization that performs insecticide resistance testing? Yes No If yes, how do you conduct resistance testing? Field cage tests Bottle bioassays Other: \_\_\_\_\_

25. Is your agency prepared for a natural disaster-related vector-borne disease threat? Yes No

If yes, please elaborate: \_\_\_\_\_

26. What are the additional testing or control methods that you would like to use in your region, but do not have the resources for? Please elaborate. (Examples: additional chemical or biological control methods / pathogen testing / insecticide resistance testing)

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27. In the event of a natural disaster, how timely are funds and/or resources normally available for response?

Within 24 hours      Within 72 hours      Not at all      Other:

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28. Are your testing and/or application equipment up-to-date and reliable?      Yes      No

29. Have faulty equipment ever halted a necessary control or surveillance activities?      Yes      No

If yes, please elaborate: 

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30. What gaps or needs do you see in your vector control program as the most urgent for vector prevention and control? [Resources](#)

[Personnel](#)      [Funds](#)      [Training](#) Other: 

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31. What type of training does your organization most need? [Vector identification](#)      [Testing](#)      Other: 

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32. What training dissemination style would be optimal for your organization? [One day regional](#)      [Online webinar](#)      [Out of town workshop during non-peak season](#)      [Working with an extension agent to hold on-site training](#)

Other: 

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33. Thank you for your participation! Are there any final thoughts you would like to share with us?

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