

Mosquito and Tick Control Program Questionnaire
2023 Vector Assessment: Word Version

Introduction

This survey aims to collect information about mosquito and tick surveillance and control programs in your district or jurisdiction. Your answers to this survey will inform the Centers for Disease Control and Prevention (CDC) of the mosquito and tick control needs for each district or jurisdiction in your state.

Please complete this survey by **Month, Day, 2023**.

Instructions:

This survey should take **about 9 minutes**, but you can do it in multiple sittings, if needed. As you complete the survey, your answers will be saved. They can be changed at any time, up until the final page.

Please read and answer each question based on whether your program

- completes an activity in-house,
- contracts the service to another organization, or
- has another type of agreement with an outside agency that performs the service on your program's behalf.

This survey is unique to **\${m://ExternalDataReference}**. If your program supports more than one agency, the email you received will indicate which health department we are asking about. The results of this survey will be shared in summary format only. Your individual answers will not be shared with anyone outside the survey team.

You should use the latest version of the browser of your choice: Mozilla Firefox, Google Chrome, Apple Safari, or Internet Explorer. Please do not use your web browser's back button when completing this survey. Only use the forward and back buttons provided in the survey.

If you have problems with the survey, **please contact Angana Roy at aroy@naccho.org or at 202-507-4212.**

CDC estimates the average public reporting burden for this collection of information as **9 minutes** per response, including the time for reviewing instructions, searching existing data/information sources, gathering and maintaining the data/information needed, and completing and reviewing the collection of information. An agency may not conduct or

sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing burden to CDC/ATSDR Information Collection Review Office, 1600 Clifton Road NE, MS D-74, Atlanta, Georgia 30333; ATTN: PRA (0920-XXXX).

Mosquito and Tick Control Program Vector Assessment Questionnaire

Demographics and Funding

1. Indicate the size of population your program serves (select one): (q1)
 - [1] <25,000
 - [2] 25,000 – 49,999
 - [3] 50,000 – 99,999
 - [4] 100,000 – 249,999
 - [5] 250,000 – 499,999
 - [6] 500,000 – 999,999
 - [7] 1,000,000 +

 2. Please indicate the amount of dedicated funding that supports your vector program activities. You may provide an estimate if exact figures are not available to you at this time. (q2)
 - [1] Dedicated funding in the amount of: (text) [2] No dedicated funding skip to q4

 3. Please indicate your program's source of funding (SELECT ALL THAT APPLY): (q3)
 - Local funding (q3a)
 - State funding (non-federal) (q3b)
 - State pass through funding (federal funding) (q3c)
 - Other (text) (q3d)
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Mosquito Questionnaire

4. Does your program conduct routine surveillance for mosquitoes through standardized trapping and/or species identification? (q4)
 - [1] Yes
 - [0] No If no, skip to q6

5. Does your program make treatment decisions for mosquito control based on that surveillance? (q5)
 - [1] Yes
 - [0] No

6. Does your program engage in routine mosquito control (e.g., chemical, biological, source reduction, or environmental management)? (q6)
 - [1] Yes
 - [0] No

If "No" is selected here, Q7, Q9, Q10, and Q11 can be skipped.

7. Which of the following routine mosquito control activities does your program conduct? (SELECT ALL THAT APPLY) (q7)
- Adulticiding (q7a)
 - Larviciding (q7b)
 - Neither adulticiding nor larviciding (exclusive option)
8. [display if NEITHER adulticiding NOR larviciding are selected in q7; OR if [0] No is selected in q6] Why does your program not conduct larviciding or adulticiding for routine mosquito control? (q8)
- a. [1] My program does not have the capacity to conduct routine larviciding or adulticiding for mosquito control.
 - b. [2] My program has the capacity to conduct routine larviciding or adulticiding for mosquito control, but we do not conduct these activities due to other circumstances.
9. Which of the following non-chemical vector control activities does your program conduct? SELECT ALL THAT APPLY (q9)
- Source reduction (examples: removing water-holding containers, draining standing water) (q9a)
 - Environmental management (examples: water salinity changes, stream flushing, water level regulation in reservoirs, dewatering or flooding of swamps or boggy areas, vegetation removal, filling depressions that collect water, shading and exposure to sunlight) (q9b)
 - Biological control (q9c)
 - Other (text) (q9d)
 - My program does not conduct non-chemical control (q9e) (exclusive option)
10. [display if [1] Yes is selected in q6] Does your program engage in routine mosquito control for any of the following mosquito species specifically? (SELECT ALL THAT APPLY)
- Aedes aegypti* (q10a)
 - Aedes albopictus* (q10b)
 - Aedes triseriatus* (q10c)
 - Aedes japonicus* (q10d)
 - Aedes vexans* (q10e)
 - Culex pipiens* (q10f)
 - Culex quinquefasciatus* (q10g)
 - Culex tarsalis* (q10h)
 - Culex nigripalpus* (q10i)
 - Culiseta melanura* (q10j)
 - Other *Culex* spp. (q10k)
 - Anopheles* spp. (q10l)
 - Other (text) (q10m)
 - My program does not engage in species-specific mosquito control (q10n)
11. When applying pesticides for mosquito control, does your jurisdiction require that your program: (SELECT ALL THAT APPLY) (q11)
- [1] Operate on a general use applicator license
 - [2] Operate on a separate mosquito control pesticide applicator license
 - [3] Have several applicators operate under one master applicator's license
 - [4] Operate with each individual applicator licensed to apply pesticides

- [5] No licensing required (exclusive option)
- [6] Our program does not apply pesticides (exclusive option)

12. Does your program conduct pesticide resistance testing for mosquitoes? (q12)

- [1] Yes, adulticide resistance testing
- [2] Yes, larvicide resistance testing
- [3] Yes, both larvicide and adulticide resistance testing
- [4] No

13. Does your program directly engage in or provide community outreach and education campaigns that inform people on how mosquito-borne diseases are transmitted and how they can be avoided? (q13)

- [1] Yes
- [0] No

14. Does your program maintain situational awareness on mosquito-borne diseases (e.g., currently communicate with and receive human surveillance, epidemiology and activity reports on mosquito-borne diseases from a state or local public health department/program? (q14)

- [1] Yes
- [0] No

15. Is your program willing and able to communicate or share equipment/personnel with nearby mosquito control programs? (q15)

- [1] Yes
- [0] No

16. Has your program been in contact with a state epidemiologist in the past year? (q16)

- [1] Yes
- [2] No
- [3] Do not know
- [4] Other (text)

Read and answer each question based on if your program completes an activity in-house, contracts the service to another organization, or has another type of agreement with an external agency who performs the service on your program's behalf unless otherwise stated. Questions that directly ask for your program's in-house capabilities should be answered based on your program's internal capacity to perform the activity.

Tick Questionnaire

17. Does your program directly engage in or provide community outreach and education campaigns that inform people on how tick-borne diseases are transmitted and how they can be avoided? (q17)

- [1] Yes
- [0] No

18. Does your program provide any of the following tick-bite prevention or tick control information to the public? (SELECT ALL THAT APPLY) (q18)

- Tick species that occur locally (q18a)
- Tick-borne diseases that occur locally (q18b)

- Risk habitats for tick exposure (q18c)
- Periods of the year when ticks are active (q18d)
- Effective repellents for skin and clothing (q18e)
- Clothing only (permethrin) treatments (q18f)
- Daily tick checks (q18g)
- Drying of clothing at high heat after spending time in tick habitat (q18h)
- Showering/bathing after spending time in tick habitat (q18i)
- Domestic animal (e.g., livestock and/or pets) treatments (q18j)
- Landscaping to reduce tick habitat (q18k)
- Rodent harborage reduction (q18l)
- Yard treatments to kill host-seeking ticks (q18m)
- Yard treatments to kill ticks on rodents (q18n)
- Deer fencing (q18o)
- Other (text) (q18p)
- None of the above (q18q) (exclusive option)

19. Does your program use any of the following communication channels to share tick-bite prevention information with the public? (SELECT ALL THAT APPLY) (q19)

- Post warning signs for ticks and tick-borne diseases on public land (q19a)
- Publish social media posts (q19b)
- Publish updates to the program website (q19c)
- Print material distribution (fliers, brochures, etc.) (q19d)
- In-person educational events (q19e)
- Other (text) (q19f)

20. Does your program conduct any surveillance of ticks? (q20)

- [1] Yes
- [0] No *If "No" is selected here, skip Q21, Q23, and Q24*

21. Does your program summarize and report your tick surveillance data to the public? (q21)

- [1] Yes
- [0] No

22. Does your program share data on tick surveillance and tick-borne diseases with other programs? (q22)

- [1] Yes
- [2] No

23. Why do you conduct tick surveillance in your jurisdiction? (SELECT ALL THAT APPLY) (q23)

- To demonstrate that ticks of a particular species are present (including invasive or non-native species) (q23a)
- To measure the abundance of host-seeking ticks (q23b)
- To assess whether specific human pathogens are found in host-seeking ticks (q23c)
- To measure the prevalence of human pathogens in host-seeking ticks (q23d)
- To guide tick control actions (q23e)
- Other (text) (q23f)

24. Which species of ticks are you targeting? (SELECT ALL THAT APPLY) (q23)

- Ixodes scapularis* (q24a)
- Ixodes pacificus* (q24b)
- Ixodes angustus* (q24c)
- Dermacentor variabilis* (q24d)
- Dermacentor andersoni* (q24e)
- Dermacentor occidentalis* (q24f)
- Rhipicephalus sanguineus* (q24g)
- Amblyomma americanum* (q24h)
- Amblyomma maculatum* (q24i)
- Haemaphysalis longicornis* (q24j)
- Other (text) (q24k)
- Don't know (q24l)

25. Does your program offer in-house tick species identification services to the public? (q25)

- [1] Yes
- [0] No

26. Does your program offer in-house tick pathogen testing services to the public? (q26)

- [1] Yes
- [0] No

27. Does your program perform any type of tick control? (q27)

- [1] Yes
- [0] No

28. [display if [1] Yes is selected in q20] In which of the following tick control activities does your program engage? For this question, please consider only tick control activities that your program engages in. Do not consider tick control activities that are the responsibility of homeowners or property owners.

(SELECT ALL THAT APPLY) (q28)

- Application of synthetic chemical acaricide to kill host-seeking ticks (q28a)
- Application of natural product based acaricide to kill host-seeking ticks (q28b)
- Application of fungal biological control agent to kill host-seeking ticks (q28c)
- Treatment of rodents with topical acaricide to kill ticks that try to feed on them (q28d)
- Treatment of deer with topical acaricide to kill ticks that try to feed on them (q28e)
- Treatment of pets with topical or oral acaricide to kill ticks that try to feed on them (q28f)
- Rodent harborage reduction (q28g)
- Deer culling (q28h)
- Vegetation management (i.e. mowing or brush removal) (q28i)
- Other (text) (q28j)