**Attachment A - Mosquito and Tick Control Program Questionnaire**

**2020 Vector Assessment**

**Introduction**

Background:

This assessment aims to collect information on the status of mosquito and tick surveillance and control programs in your district or jurisdiction. Your responses to this questionnaire will inform the CDC of the status and needs of each district or jurisdiction in your state regarding mosquito and tick control.

This assessment was supported by the Centers for Disease Control and Prevention (CDC) under cooperative agreement 6 NU38OT000306-02-01. NACCHO is grateful for this support. Its contents are solely the responsibility of NACCHO and do not necessarily represent the official views of the sponsor.

CDC estimates the average public reporting burden for this collection of information as 9 minutes 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 collection 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 the burden to CDC/ATSDR Information Collection Review Office, 1600 Clifton Road NE, MS D-74, Atlanta, Georgia 30333; ATTN: PRA (0920-0879).

Instructions:

This questionnaire is designed so that it can be completed in multiple sittings, however, is estimated to take **9 minutes or less** to complete. As you complete the questionnaire, all of your responses will be saved and can be changed at any time, up until the final page.

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.

This survey is unique to **${m://ExternalDataReference**}. If you support multiple agencies, the email you received will indicate the health department that we are surveying. The results of this assessment will be reported and shared in an aggregate format only. Your individual responses will not be shared with anyone else.

We recommend that you use the latest version of the browser of your choice. The web browsers supported by the assessment software are Mozilla Firefox, Google Chrome, Apple Safari, and Internet Explorer. Please do not use your web browser’s back button when working on this assessment. Only use the navigation buttons provided by the survey’s application program.

If you experience problems with the questionnaire, **please contact Danielle Chatelain at** **dchatelain@naccho.org** **or at 202-559-4318**.

**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 (enter text) (q3d)

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**Mosquito Questionnaire**

1. Does your program conduct routine surveillance for mosquitoes through standardized trapping and/or species identification? (q4)
	* [1] Yes
	* [0] No → skip to q3
2. Does your program make treatment decisions for mosquito control based on that surveillance? (q5)
	* [1] Yes
	* [0] No
3. Does your program engage in mosquito control (e.g., chemical, biological, source reduction, or environmental management)? (q6)
	* [1] Yes
	* [0] No → skip to q8
4. Which mosquito control activities does your program conduct? (SELECT ALL THAT APPLY) (q7)
	* Adulticiding (q7a)
	* Larviciding (q7b)
	* Source reduction (q7c)
	* Environmental management (q7d)
	* Biological control (q7e)
	* Other (q7f)
5. [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)
6. [1] My program does not have the capacity to conduct routine larviciding or adulticiding for mosquito control.
7. [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.

1. [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) (q9)
	* *Aedes aegypti* (q9a)
	* *Aedes albopictus* (q9b)
	* *Aedes triseriatus* (q9c)
	* *Aedes japonicus* (q9d)
	* *Aedes vexans* (q9e)
	* *Culex pipiens* (q9f)
	* *Culex quinquefasciatus* (q9g)
	* *Culex tarsalis* (q9h)
	* *Culex nigripalpus* (q9i)
	* *Culiseta melanura* (q9j)
	* Other *Culex spp.* (q9k)
	* *Anopheles spp.* (q9l)
	* Other (specify) (q9m)
	* My program does not engage in species-specific mosquito control (q9n)
2. When applying pesticides for mosquito control, does your jurisdiction require that your program: (SELECT ALL THAT APPLY) (q10)
	* [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
	* [6] Our program does not apply pesticides
3. Does your program conduct pesticide resistance testing for mosquitoes? (q11)
	* [1] Yes, adulticide resistance testing
	* [2] Yes, larvicide resistance testing
	* [3] Yes, both larvicide and adulticide resistance testing
	* [4] No
4. 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? (q12)
	* [1] Yes
	* [0] No
5. 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? (q13)
	* [1] Yes
	* [0] No
6. Is your program willing and able to communicate or share equipment/personnel with nearby mosquito control programs? (q14)
	* [1] Yes
	* [0] No

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**

1. Does your program conduct any surveillance of ticks? (q15)
	* [1] Yes
	* [0] No → skip to q18
2. [display if [1] Yes is selected q15] Why do you conduct tick surveillance in your jurisdiction? (SELECT ALL THAT APPLY) (q16)
	* To demonstrate that ticks of a particular species are present (including invasive or non-native species) (q16a)
	* To measure the abundance of host-seeking ticks (q16b)
	* To assess whether specific human pathogens are found in host-seeking ticks (q16c)
	* To measure the prevalence of human pathogens in host-seeking ticks (q16d)
	* To guide tick control actions (q16e)
	* Other (specify) (q16f)
3. [display if [1] Yes is selected in q15] Which species of ticks are you targeting? (SELECT ALL THAT APPLY) (q17)
	* *Ixodes scapularis* (q17 a)
	* *Ixodes pacificus* (q17b)
	* *Dermacentor variabilis* (q17c)
	* *Dermacentor andersoni* (q17d)
	* *Rhipicephalus sanguineus* (q17e)
	* *Amblyomma americanum* (q17f)
	* *Amblyomma maculatum* (q17g)
	* *Haemaphysalis longicornis* (q17h)
	* Other (specify) (q17i) (q17itext)
	* Don’t know (q17j)
4. [display if [1] Yes is selected in q15] Does your program summarize and report your tick surveillance data to the public? (q18)
* [1] Yes
* [0] No

1. Does your program perform any type of tick control? (q19)
* [1] Yes
* [0] No → skip to q22

1. [display if [1] Yes is selected in q19] Where is tick control performed? (q20)
* [1] Public lands only
* [2] Private properties only
* [3] Both public land and private properties

1. [display if [1] Yes is selected in q19] 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) (q21)
* Application of synthetic chemical acaricide to kill host-seeking ticks (q21a)
* Application of natural product based acaricide to kill host-seeking ticks (q21b)
* Application of fungal biological control agent to kill host-seeking ticks (q21c)
* Treatment of rodents with topical acaricide to kill ticks that try to feed on them (q21d)
* Treatment of deer with topical acaricide to kill ticks that try to feed on them (q21e)
* Treatment of pets with topical or oral acaricide to kill ticks that try to feed on them (q21f)
* Rodent harborage reduction (q21g)
* Deer culling (q21h)
* Vegetation management (i.e. mowing or brush removal) (q21i)
* Other (specify) (q21j)
1. Does your program provide information to the public on any of the following tick bite prevention/tick control activities? (SELECT ALL THAT APPLY) (q22)
* Tick species that occur locally (q22a)
* Tick-borne diseases that occur locally (q22b)
* Risk habitats for tick exposure (q22c)
* Periods of the year when ticks are active (q22d)
* Effective repellents for skin and clothing (q22e)
* Clothing only (permethrin) treatments (q22f)
* Daily tick checks (q22g)
* Drying of clothing at high heat after spending time in tick habitat (q22h)
* Showering/bathing after spending time in tick habitat (q22i)
* Domestic animal (e.g., livestock and/or pets) treatments (q22j)
* Landscaping to reduce tick habitat (q22k)
* Rodent harborage reduction (q22l)
* Yard treatments to kill host-seeking ticks (q22m)
* Yard treatments to kill ticks on rodents (q22n)
* Deer fencing (q22o)
* Posting of warning signs for ticks and tick-borne diseases on public land (q22p)
* Other (write in option) (q22q)
* None of the above (q22r)
1. 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? (q23)
	* [1] Yes
	* [0] No
2. Does your program offer in-house tick species identification services to the public? (q24)
* [1] Yes
* [0] No
1. Does your program offer in-house tick pathogen testing services to the public? (q25)
* [1] Yes
* [0] No

26. Does your program share local data on tick surveillance and tick-borne diseases? (q26)

* [1] Yes – Internally only
* [2] Yes – Externally only
* [3] Yes – We share data both internally and externally
* [4] No – We don’t publish or share that information