

PROJECT: Vector-Borne Disease Surveillance

Start Date: 10/1/2024

End Date: 9/30/2025

Project Synopsis

This agreement is intended to support the development of vector-borne disease surveillance and control capacity at the local health department level. Funds may be used to support a low-cost, community-level surveillance system for 1) the early detection of arbovirus threats by identifying potential invasive mosquito vectors or local virus transmission in mosquitoes and 2) populations of ticks including *Ixodes scapularis*, *Amblyomma americanum*, and *Haemaphysalis longicornis*. This information can be utilized by participating local health departments to notify its citizens of any local transmission risk using education campaigns and to potentially work with local municipalities to conduct vector control activities such as drain management, scrap-tire campaigns, breeding site removal, landscape modifications, or pesticide application. Requirements for participation in this program include providing for the placement of a minimum number of mosquito traps, operating for at least five “trap-nights” per week, conducting a minimum number of targeted tick “drags,” and identifying ticks and mosquitoes. Bi-weekly (occurring every two weeks) reporting to MDHHS of grant activities is also required. MDHHS EZID should be notified immediately if an invasive mosquito or tick species is identified.

Additional Reporting Requirements:

The subrecipient shall submit bi-weekly tables of surveillance data (template provided) documenting trap rates and disease detections to Emily Dinh (dinhe@michigan.gov) and Rachel Wilkins (rwilkins3@michigan.gov) at the MDHHS EZID Section.

- A final report on all activities completed is due at the end of the fiscal year, by October 15

Additional requirements:

- Mosquito and/or Tick Surveillance
- Minimum recommended mosquito and tick surveillance effort according to the point formula in Table 1 (below) over a period of 14 weeks.
- Provide bi-weekly reporting of surveillance results to MDHHS EZID Section (see contact information below).
- Use surveillance data to notify the public of risks related to vector borne disease in mosquitoes or ticks in the jurisdiction.

- The total funds allocated for this project to participating local health departments must be utilized prior to September 30.
- Each local health department as a sub-recipient of the State of Michigan Emerging Public Health Funds shall conduct activities for the purposes of mosquito and tick surveillance in their jurisdiction. For mosquito surveillance, funds may be used to support personnel, to purchase equipment and supplies related to conducting mosquito surveillance in areas of historically high incidence of arboviral disease, and to produce and distribute educational and other materials related to mosquito-borne disease prevention and control. For tick surveillance, funds may be used to support personnel, to purchase equipment and supplies, and to produce and/or distribute educational and other materials related to tick-borne disease prevention and control.
- Activities can be conducted according to the needs of the local jurisdiction but must conform to the point allocation formula in the table below. For instance, if mosquitoes are more of a concern in the jurisdiction, the funded LHD can focus its efforts on mosquito surveillance, educational activities, etc. If ticks are more of a concern in the jurisdiction, the funded LHD can focus its efforts on tick surveillance, educational activities, etc.

Local Health Department VBDSP Activity Formula

Activity	Required Activity / Weeks	Metric
5 mosquito collection devices* placed for 24-hour period	20/10	Report to MDHHS bi-weekly
2 mosquito collection devices* placed for 24-hour period in August	2/4	Report to MDHHS bi-weekly
1,000 meter tick drag	4 / 2	Report to MDHHS bi-weekly
Educational outreach activity / event		Report to MDHHS bi-weekly
Press release		Report to MDHHS bi-weekly
Coordination of control efforts with local municipalities / other prevention efforts		Report to MDHHS bi-weekly

*Devices can include BG-2 traps, CDC light traps, resting boxes, etc.