NACCHO
National Association of County & City Health Officials
The National Connection for Local Public Health

January 4, 2023

Kristen Honey
Chief Data Scientist and Executive Director of InnovationX
Office of the Assistant Secretary for Health
Department of Health and Human Services
200 Independence Avenue SW
Washington, DC 20201

Re: Input on the National Public Health Strategy for the Prevention and Control of Vector-Borne Diseases in Humans: Request for Information

Dear Ms. Honey:

On behalf of the nation's nearly 3,000 local health departments, the National Association of County and City Health Officials (NACCHO) appreciates the opportunity to respond to the Request for Information on the National Public Health Strategy for the Prevention and Control of Vector-Borne Diseases in Humans. Vector-borne diseases (VBDs) pose a substantial risk to human health and reducing overall contact with disease vectors remains the best available prevention strategy. Local vector programs – which may be housed in local health departments, mosquito control districts, or other governmental structures – play a critical role in monitoring and managing disease carrying species of mosquitoes and ticks and engaging in outreach activities to help raise awareness of the risk of vector-borne diseases.

Sustained federal resources are invaluable for the 51 percent of local health departments without dedicated funding or support for local vector surveillance and control. As the Department of Health and Human Services (HHS) develops its National Public Health Strategy for the Prevention and Control of Vector-Borne Diseases in Humans, NACCHO urges that you include and incorporate local vector programs whenever appropriate. Specifically, we offer the following input on Goals and Strategies outlined in the Request for Information.

Goal 1: Better understand when, where, and how people are exposed to and become sick or die from vector-borne diseases (VBDs).

Strategic Priority 1: Better understand vectors, the pathogens they transmit, and the potential effects of a changing climate.
In order to achieve this strategic priority, the nation must have a functioning local vector surveillance system. Local programs are best positioned to understand the specific risks in their communities, and HHS should provide support to ensure local data are incorporated into state and federal efforts. Coordination is needed between local public health departments, mosquito control districts, climate scientists, and entomologists to best understand and track changes in mosquito and tick behavior, and then communicate these changing risks effectively to affected communities. HHS can and should be a leader in facilitating coordination among these entities. The Centers for Disease Control and Prevention

(CDC) Regional Centers of Excellence in Vector-Borne Disease provide critical knowledge and training for vector control across the country

Strategic Priority 2: Modernize and maintain surveillance systems for vectors, reservoirs, and VBDs.
The governmental public health system's data infrastructure, particularly at the state and local level, is lacking, in part because those needs have not always been accounted for in federal health information technology efforts. Data modernization is needed across local health departments to enable effective response to a range of challenges, including mosquito and tick surveillance. Across the country, local and state public health departments operate a mismatched network of siloed public health information systems, most of which do not talk to each other nor to other sectors, and all of which are in urgent need of upgrade to prepare for and respond to public health challenges. Federal initiatives should support data modernization and consider data needs throughout all levels of the public health system – federal, state, and local – capable of delivering robust, real-time, and accurate data. A modern surveillance system will enable rapid detection to novel emerging and re-emerging vectors and VBDs.

Goal 3: Develop, evaluate, and improve tools and guidance for the prevention and control of vector-borne diseases.

Strategic Priority 1: Develop, evaluate, and improve safe and effective VBD prevention tools such as vaccines, vector control strategies, and health communication tools and products that are tailored for communities that are disproportionately affected.
Local health departments will be critical for distribution of any novel vaccines or other pharmaceutical interventions, and federal partners should include local perspectives in planning, education, and distribution efforts. Local vector control programs are well positioned to serve as messengers to their communities, with 80 percent that responded to the 2020 Vector Control Assessment reporting engagement in community outreach and education activities.[i]

To ensure broad, equitable vector control and VBD prevention in a community, widespread surveillance activities must be conducted and be representative of all neighborhoods, especially those that have been understudied or those with the potential for novel vector-borne pathogens to emerge, including tribal areas and U.S. territories. Additionally, any control or mitigation actions must be based on equitable surveillance data, and intervention strategies should be tailored based on best available tools and resources.

Insecticide resistance testing capacity is an important vector control strategy, but only 31 percent of local vector control programs reported capacity to conduct testing. Resistance testing ensures that any chemical intervention has the greatest chance of success eliminating the target species and not harming beneficial insects (e.g., pollinators) or the ecosystem. Most programs need additional support to build capacity for pesticide resistance testing, which represents the biggest gap in mosquito surveillance and control capacity. To help address this, the federal government should support partnerships that can help provide insecticide resistance testing capacity to local health departments.

Finally, vector control efforts will not be successful without an adequate and trained workforce. The federal government must expand funding to ensure there are enough staff and training opportunities for staff to implement evidence-based control strategies.

Strategic Priority 2: Develop and evaluate data-driven and adaptive predictive models and decision support tools for VBDs.

The federal government should play a leading role in developing and evaluating data-driven and adaptive predictive models, tools, and strategies. To strengthen these efforts, the federal government should engage academic, local, and national partners to incorporate their knowledge and expertise, and use their existing networks to help develop and disseminate new tools and strategies quickly into the field.

Strategic Priority 3: Develop and evaluate evidence-based recommendations and guidelines on VBD prevention.

In order to develop and evaluate evidence-based recommendations and guidelines on VBD prevention, the federal government must understand the existing capabilities and ongoing challenges in vector control. NACCHO is appreciative of CDC's support through a cooperative agreement that has enabled multiple nationwide assessments of local vector control programs. NACCHO conducted a first assessment in 2017, which provided a baseline understanding of local mosquito surveillance and control capacity. In 2020, NACCHO conducted the second iteration of this national assessment, with an expanded questionnaire that included items related to tick surveillance and control. The results of the 2020 Vector Control Assessment provide updated data on local mosquito surveillance and control capacity, as well as an opportunity to begin tracking changes in mosquito-related activities over time and provide baseline data on tick surveillance and control. The results can help inform public health officials and policymakers. NACCHO urges the federal government to continue to fund these assessments, as well as others that provide important insight into vector surveillance and control activities.

Goal 5: Disseminate and support the implementation of effective public health products, tools, programs, collaborations, and innovations to prevent, detect, diagnose, and respond to VBD threats.

Strategic Priority 2: Ensure current and future capacity to implement and adequately and equitably scale safe, effective, and publicly accepted VBD prevention and control programs.

Local vector control programs will be vital to scaling safe, effective, and publicly accepted VBD prevention and control programs. However, as of the 2020 Vector Assessment, only 24 percent of programs reported the capacity to perform all ten core and supplemental mosquito surveillance and control activities, while only 21 percent reported tick surveillance activities and only 3 percent reported tick control activities. This assessment shows that most programs need additional support to build vector control capacity, and providing resources to build this capacity should be an integral part of the National Strategy. The federal government can support capacity building at local vector control programs by providing disease-agnostic funding to address cross-cutting needs. Workforce is an essential piece of VBD capacity as well, and additional training and staffing for local health department and local vector control programs will be necessary to scale programs. Finally, the federal government should continue to support assessments of mosquito and tick surveillance and control activities to understand existing capacity and identify gaps.

Strategic Priority 3: Monitor and evaluate evidence-based public health programs and tools.

Monitoring and evaluation efforts should include continued assessment of vector surveillance and control activities at the local level so that policymakers understand the effectiveness of federal public health programs and tools on the ground. Assessments should report the changes in the capacity of these programs over time so that the federal government understands how programs are enabling VBD activities at the local level and can work to address gaps or deficiencies that remain.

Strategic Priority 4: Respond to public health emergencies resulting from VBD threats.
Effective public health emergency response must involve coordination across all governmental levels – local, state, and federal – as well as across different sectors. The federal government should help facilitate coordination between public health departments, climate experts, entomologists, and epidemiologists to effectively predict and respond to vector-borne disease outbreaks. Furthermore, steady funding is needed to establish baseline capacity for local vector control and surveillance systems to respond to average vector seasons. Such baseline capacity will enable local systems to be in position to scale up activities, with additional emergency funding, to respond to emergencies.

Thank you for the consideration of these comments. For additional information, please contact Adriane Casalotti, Chief of Government and Public Affairs, at acasalotti@naccho.org.

Sincerely,

Lori Freeman, MBA
Chief Executive Officer

[i] https://www.naccho.org/uploads/downloadable-resources/Vector-control_2020-assessment-report_Final.pdf