

# Evaluation in the time of Zika: Using Mid-Term Data to Inform Long-Term Response

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## OBJECTIVES

1. Identify current priority areas in public health and healthcare preparedness at the local, state, tribal, and national levels.
2. Describe the evaluation process for ascertaining gaps and best practices during a long-term response.
3. Extend support to health departments for the development of evaluation methodologies that can be adapted to meet the needs of local jurisdictions.

## BACKGROUND

Maryland is a mid-Atlantic state with geographical and demographic diversity from mountains to coastline and urban areas serviced by international airports to rural areas. Maryland has a diverse population, including immigrants from all parts of the world (including from Central and South America), some of whom do not speak English as a first language.

Zika virus can be spread by the *Aedes* mosquito. While the *Aedes aegypti* mosquito ranges from unlikely to very likely to live and reproduce in the area, the *Aedes albopictus* mosquito is believed to be very likely to live and reproduce in Maryland, meaning mosquito-borne transmission of Zika virus is a viable threat to the population. Maryland centralized its clinical response to Zika working throughout the Maryland Department of Health as well as coordinating with all 24 local health departments (LHDs). However, mosquito abatement response was led by local jurisdictions with support and technical assistance from the state.

## METHODS

A mid-course evaluation was conducted to understand how each LHD responded to the Zika response and ways to improve the response at the state and local level. The time-frame represented is from the beginning of the Zika Virus Disease response in December 2015 through the end of October 2016. Information for the evaluation was collected via an electronic survey. This survey was sent to all 24 LHDs with 100% responding to the survey. The survey contained questions pertaining to performance measures (based on Centers for Disease Control and Prevention requirements), federal and state recommended activities, training/exercising, and unmet needs. LHDs were required to answer all survey questions pertaining to performance measures; all other questions were optional or may not have been offered (i.e. skip pattern).

## RESULTS

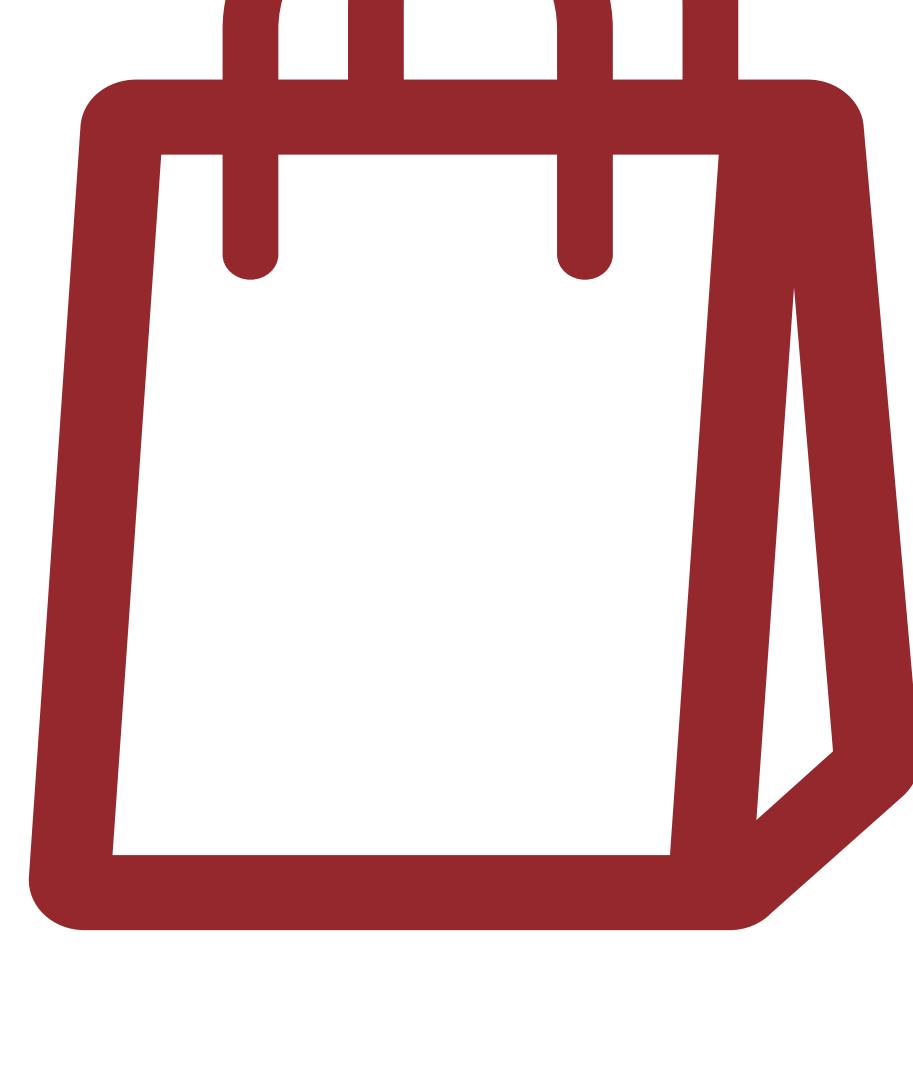


LHDs conducted over 500 Zika awareness partner engagements from the start of the response through October 31, 2016.

LHDs trained 2,934 volunteers and/or jurisdictional response partners to support Zika operations. Almost 70 volunteers/ jurisdictional response partners participated in Zika operations.



LHDs distributed 16,180 Zika Prevention Kits, which were made by the Maryland Department of Health and distributed to local health departments to dispense to jurisdictional residents.



### Types and Percentages of LHD Staff Used for Outreach/ Mosquito Abatement Activities



83% of LHDs had developed a local Zika Response plan, protocol, or annex and 75% of those local health departments had tested this planning through exercise or real-time activation.

## CONCLUSION

Certain themes emerged from the survey results, such as distributing Zika Prevention Kits to local constituents, providing outreach to partners and the public, and developing/testing local Zika planning efforts. However, other activities were not as broadly spread; for example, activating the LHD Emergency Operations Center for a mosquito abatement response or exercise, or using volunteers or other response partners (non-LHD staff) to support their Zika response activities.

As part of this mid-course evaluation, LHDs provided feedback as to which state activities were helpful for local implementation, which best practices are currently implemented, and what support and training gaps remained. LHDs also gave feedback as to which activities were reprioritized due to Zika response to provide perspective on the opportunity costs associated with these activities.

Understanding these issues helped the Maryland Department of Health to provide a mid-response adjustment for its strategy and approach in providing support to LHDs in completing the Zika response. Lessons learned will also be used to implement future Zika-related responses.

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