

ZIKA IN THE UNITED STATES



THE GROWING PUBLIC HEALTH THREAT AND THE CRITICAL ROLE OF LOCAL RESPONSE

The primary Zika virus carrier, *Aedes aegypti* mosquitoes, seek proximity to humans, exclusively subsisting on their blood.

THE ZIKA VIRUS IS A THREAT

Zika virus infection carries adverse and costly health risks for pregnant women and their babies.



3.7B

Of global population exposed to *Aedes aegypti* mosquitoes every year¹



118

Countries across the world with areas native to the *Aedes aegypti* mosquito²



TO GLOBAL HEALTH & SECURITY



1 IN 10

Chance of severe birth defects (i.e., microcephaly) in fetus when pregnant mother has Zika virus³



\$10M

Estimated cost of raising an individual into adulthood with microcephaly⁴

Zika virus infection in the United States continues to grow, spread by both human and mosquito carriers.

THE IMPACT OF ZIKA

Continued Zika virus infection in the United States stands to hinder American health and economy.



5,359

Symptomatic Zika virus disease cases in the U.S. during 2016-2017⁵



40

U.S. states with at least one reported Zika case⁵



IS RISING IN THE U.S.



1,963

U.S. pregnant women infected with the Zika virus⁶



\$183M

Estimated cost to U.S. economy if current Zika virus infection rate continues in 2017⁷

The Zika virus disproportionately impacts areas in the United States, necessitating a highly effective local response.

GAPS IN LOCAL CAPACITY

An initial assessment of local Zika response agencies serving 10 high-risk areas in the United States found inadequate capacity.



90%

Of all locally acquired Zika infections occurred in 10 high-risk U.S. areas⁸



381

Local Zika response agencies in 10 high-risk U.S. areas, critical to preventing national disease outbreak⁸



WEAKEN U.S. ZIKA RESPONSE



68%

Of surveyed Zika response agencies in 10 high-risk U.S. areas lack competency in mosquito control and surveillance⁸



43%

Of surveyed Zika response agencies in 10 high-risk U.S. areas need improvement in pesticide resistance testing⁸

Local agencies currently leading or that may lead future Zika response need adequate mosquito surveillance and control capacity.

4 URGENT ACTIONS

Public health officials, community members, and policy makers must be informed and engaged in supporting local Zika response.



1

Local Zika response staff need quality, ongoing training in mosquito surveillance and control



2

Local public health officials must ensure mosquito surveillance and control resources are a funding priority



TO BOOST U.S. ZIKA RESPONSE



3

Health departments should engage local partners (e.g., mosquito control agencies, universities) to bolster Zika response capacity



4

This infographic and the below sources should inform local action and national decisions related to the Zika response

INFOGRAPHIC SOURCES ON THE ZIKA VIRUS AND LOCAL RESPONSE CAPACITY

1. Monaghan, A. J., Sampson, K. M., Steinhoff, D. F., Ernst, K. C., Ebi, K. L., Jones, B., & Hayden, M. H. (2016). The potential impacts of 21st century climatic and population changes on human exposure to the virus vector mosquito *Aedes aegypti*. *Climatic Change*, 135(3-4). <http://bit.ly/2vG1Koy>

2. Kraemer, M. U. G., Sinka, M. E., Duda, K. A., Mylne, A., Shearer, F. M., Brady, O. J., & Hay, S. I. (2015). The global compendium of *Aedes aegypti* and *Ae. albopictus* occurrence. *Scientific Data*, 2. <http://go.nature.com/2uV1brZ>

3. Reynolds, M. R., Jones, A. M., Petersen, E. E., Lee, E. H., Rice, M. E., Bingham, A. & Honein, M. A. (2017). Vital signs: Update on Zika virus-associated birth defects and evaluation of all U.S. infants with congenital Zika virus exposure - U.S. Zika pregnancy registry. *MMWR*, 66, 366-373. <http://bit.ly/2vGEVJz>

4. Leefeldt, E. (2016, June 03). The true cost of Zika in the U.S. could be staggering. Retrieved from <http://cbsn.ws/2eLGRmH>

5. Centers for Disease Control and Prevention. (2017, June 29). Zika cases in the United States. Retrieved from <http://bit.ly/2vGwQLp>

6. Centers for Disease Control and Prevention. (2017, July 20). Pregnant women with any laboratory evidence of possible Zika virus infection in the United States and territories. Retrieved from <http://bit.ly/2v5Jrur>

7. Lee, B. Y., Alfaro-Murillo, J. A., Parpia, A. S., Asti, L., Wedlock, P. T., Hotez, P. J., & Galvani, A. P. (2017). The potential economic burden of Zika in the continental United States. *PLoS Negl Trop Dis*, 11(4). <http://bit.ly/2vJ1ynl>

8. National Association of County and City Health Officials. (2016, December 30). Mosquito surveillance and control assessment in Zika virus priority jurisdictions. Retrieved from <http://bit.ly/2IAqAMT>