

Build Comprehensive Vector Programs

Problem: Training and research for vector-borne disease surveillance and control programs must be upgraded to mitigate the future impacts of imported exotic vector-borne disease.

Background: In the past 20 years, the United States has seen the introduction and spread of West Nile virus, Chikungunya and Zika, in addition to the continued impact of Dengue. The Centers for Disease Control and Prevention (CDC) Division of Vector Borne Diseases (DVBD) obtains and allocates funding for state, county and district or municipal mosquito control programs to help support operations, build infrastructure and develop improved vector control tools which play a crucial role in the fight against emerging tropical diseases such as Dengue, Chikungunya and Zika.

Discussion: Since 2000, annual Epidemiology and Laboratory Capacity (ELC) grants from the CDC have provided money to 50 states and six large cities to detect, monitor and control over 20 mosquito-borne and tick-borne diseases. However, the funds directed to be used by individual mosquito districts for control operations was insufficient. The redirection of supplemental federal funds to support expanded ELC grants in FY 2016 for arbovirus surveillance, and particularly operational control activities, should be sustained and enhanced. It allowed:

- States to prevent, rather than merely react, to vector-borne disease outbreaks by controlling the vectors themselves – and that likely helped saved lives.
- CDC to contract the American Mosquito Control Association (AMCA) to develop and implement a comprehensive training program that set up regional training centers to significantly enhance professional development in the knowledge of emerging vector-borne diseases and their control. This skilled vector workforce is essential to effectively and efficiently respond to any future vector-borne disease threats.

The Mosquito Abatement for Safety and Health (MASH) Act of 2003 was designed to support local government mosquito control activities and was originally passed during the first West Nile Virus outbreak. This Act authorized federal funds for local governments to protect communities from mosquitoes and other disease vectors. Local program funds were to be matched by federal funding by a ratio of at least 1 to 2, and additional funding was to be made available for each state to monitor the local program funding.

The Strengthening Mosquito Abatement for Safety and Health Act (H.R.1310/S.849) has been introduced in the Senate and House this year. This legislation reauthorizes the MASH Act, as well as ELC programs for mosquito control and represents a platform for building a sustainable capacity to meet future imported exotic diseases.

Actions Needed:

- **Increase the CDC's Division of Vector Borne Diseases annual budget from its current level to at least \$200 million/year to support vector surveillance and control, and disease reporting.**
- **Pass and fully fund all provisions of H.R.1310/S.849 Strengthening Mosquito Abatement for Safety and Health Act. This amounts to \$130 million per year, FY 2018-FY 2023.**

