Mosquito Control In The United States:

Meeting the Zika Challenge

Joseph M Conlon
Technical Advisor
American Mosquito Control Association
Mosquito Control Districts

Updated as of March 1, 2016
>947 Government Mosquito Control Entities
Budgets >$400 million

Florida  61 districts  ~$165 million
California  >60 districts  ~$92 million
New Jersey  21 districts  ~$12 million
Louisiana  18 districts  ~$9 million
Types Of Structures

- Independent Taxing Districts
- County/City/Parish Health Departments
- Decentralized – Public Works, etc.
- Private Companies
Integrated Mosquito Management

What It Is

Knowledge-based

Surveillance-driven

Resource-limited

Elements: Public Education/Community Involvement
Surveillance
Source reduction
Larval Control
Adult Control
Peridomestic *Aedes* sp.

*Aedes aegypti*  
*Aedes albopictus*
Source Reduction
Artificial Containers
“Before this approach can be effective, it must become socially unacceptable to allow mosquito larval habitats to exist in the community; Only then will they, in partnership with government agencies, develop effective, sustainable *Ae. aegypti* control programs.”

Duane Gubler ScD, 1989
Ultra Low Volume Adulticide/larvicide
What is the AMCA?

- Non-profit professional association founded in NJ in 1935.
- 1600+ members
- Made up of: students, scientists, regulators, industry, mosquito control employees, trustees, commissioners, and many others
- Members in 52 countries
AMCA Young Professionals
Information

- *Journal of the American Mosquito Control Association*
- *Wing Beats* – Trade magazine
- AMCA Website – [www.mosquito.org](http://www.mosquito.org)
Education

• CDC/AMCA Training Contract
  • Best Management Practices For Integrated Mosquito Management
  • Establishment of Training and Certificate Programs for Mosquito Surveillance and Control

• Vector-Borne Disease Regional Centers of Excellence - $10 million/

• National/regional/state vector control meetings
Congressional Testimony

ZIKA

- Testimony
  - House Subcommittee on Oversight and Investigations
  - Senate roundtable

- Briefings of Congressional Staff

- GAO - National Academy of Sciences Panel
Challenges

• Public Misconceptions/Activism

• Regulatory Reform – NPDES Permits

• ELC Funding

• Integrating PCOs entering mosquito control market
Control Tool Availability

• Retain registrations – data call-in assistance

• Develop new surveillance/repellent technologies

• Develop, field validate and register new pesticides and control methodologies – *Wolbachia*, GMO, etc.
Bottom Line

We’re good

We need to get better!
What’s Next ????

- Rift Valley Fever
- Usutu
- Mayaro
- O’nyong-nyong
- Venezuelan Equine Encephalitis
- Bwamba
- Sindbis
- Barmah Forest
- Semliki Forest
- Ross River
- Rocio
- Spondweni
- Ilheus