

2016 Utah Zika Planning Summit "Vector Control"

Ary Faraji, PhD
1 September 2016

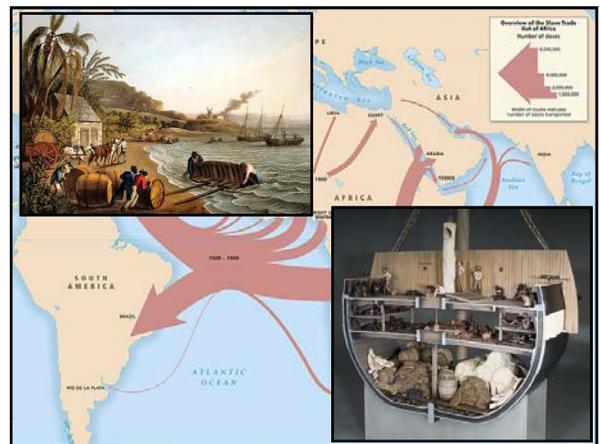
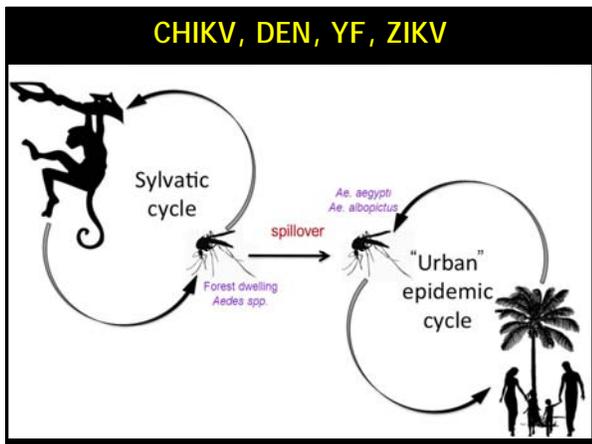
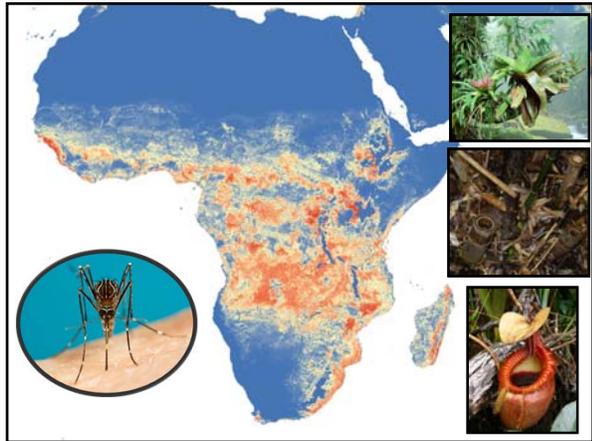


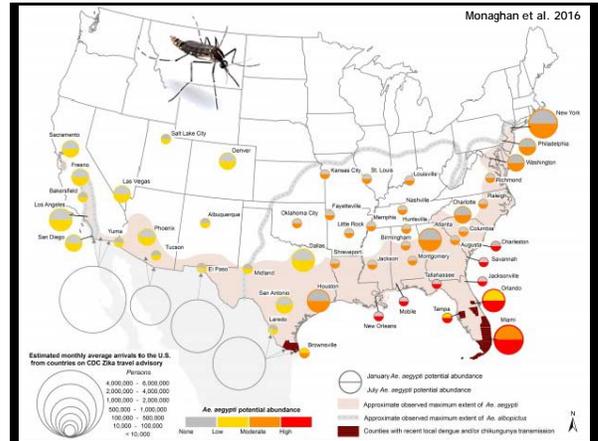
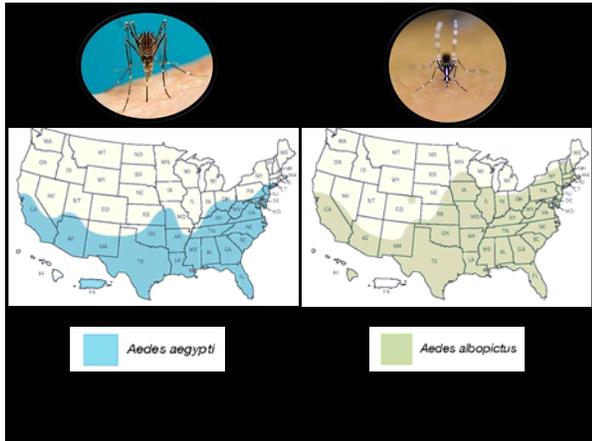


Aedes aegypti
(Yellow Fever Mosquito)

Aedes albopictus
(Asian Tiger Mosquito)

"Invasive Aedes"





Aedes Mosquitoes

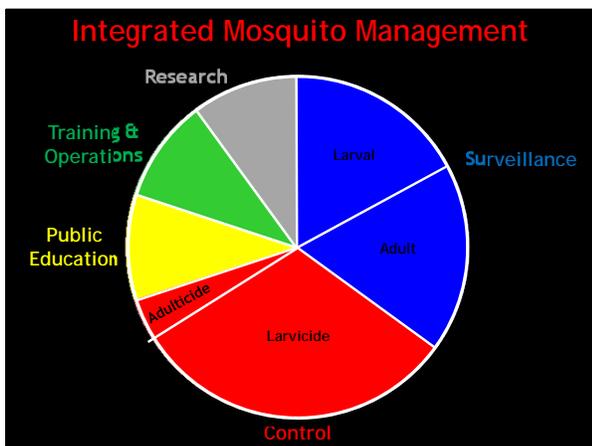
- Highly invasive
- Container-inhabiting (eggs)
- Peridomestic
- Major nuisance (feed on man)
- Emergent/efficient vector
- Difficult to control

BIG PEST and PUBLIC HEALTH CONCERN

Aedes aegypti

Aedes albopictus

Culex pipiens





Utah 3rd state to pass mosquito abatement legislation
SLCMAD - 1924



Urban Jungle



Suburban Jungle





Door-to-door Source Reduction

Labor intensive
Time consuming
Demoralizing
Access issues
Recurring trash

- Site 3 Border
- BGS Trap
- Site 3 Parcels
- Abandoned Lot
- Limited Access
- Empty Rental
- Drug Present

© 2016 CDC. All rights reserved.

Vector Control Guidelines

ZIK

CDC Interim

Surveillance and Control of *Aedes aegypti* and *Aedes albopictus* in the United States

Table of Contents

- Overview..... 3
- Transmission Cycle..... 3
- Global Distribution..... 3
- Estimated range of *Aedes aegypti* and *Aedes albopictus* in the United States, 2016^a..... 3
- Life Cycle..... 4
- Prevention and Control..... 4
- Vector Surveillance and Control Recommendations..... 4
- Surveillance Collection and Type of Trap..... 4
- Mosquito Baited Surveillance Initiatives..... 4
- Inspection of Well-Kept Sites..... 4
- Limitations to Mosquito Baited Surveillance..... 4
- Vector Control..... 4
- References..... 10

Intended Audience

Vector control professionals

Objectives

The primary objective of this document is to provide guidance for *Aedes aegypti* and *Aedes albopictus* surveillance and control in response to the risk of introduction of dengue, chikungunya, Zika, and other Aedes-borne viruses to the United States. This document is intended for state and local public health officials and vector control specialists.

© 2016 CDC. All rights reserved. All other trademarks are the property of their respective owners.

Zika Virus: Public Health and Environmental Concerns

Response for
ya Virus
Americas

ZIKA

CDC Interim Response Plan

CDC and partners will support and assist states in the key activity areas listed below as different stages in this continuum are reached.

Stage	Phase Level	Transmission Risk Category
Pre-incident	0	Preparedness — vector present or possible in the state
	1	Mosquito Season — <i>Aedes aegypti</i> or <i>Aedes albopictus</i> mosquito biting activity, introduced travel-related, sexually, or other bodily fluid transmitted cases
Suspected/Confirmed Incident	2	Confirmed Local Transmission — single, locally acquired case, or cases clustered in a single household and occurring <2 weeks apart
Incident/Response	3	Confirmed Multiperson Local Transmission — Zika virus illnesses with onsets occurring 22 weeks apart but within an approximately 1 mile (1.5 km) diameter

Phase 0 (Vector Present or Possible)

1. Action plan
2. High risk areas
3. COMMUNICATION
4. Resources & logistics
5. Community involvement

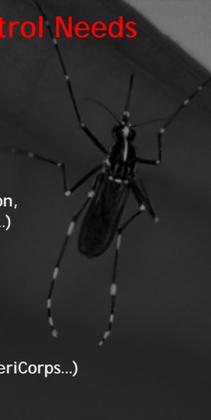
Phase 1 (Vector Biting or Virus Introduction)

1. Increased surveillance
2. Insecticide susceptibility
3. Community outreach
4. Larval control
5. Adult control



Utah Mosquito Control Needs

1. Traps (BGS/LOT...)
2. Predictive modeling
3. Public relations (Personal protection, source reduction, pesticide safety, vigilance...)
4. Insecticide monitoring
5. Enforcement
6. Collaborations (DOT, DPW, City, AmeriCorps...)
7. COMMUNICATION



Home Collection Form View Data Resources Media Forum



www.citizenscience.us

Featured News Stories







Join our [Google Group!](#)

AMCA [Home](#) [About AMCA](#) [Membership](#) [Education](#) [Publications](#) [Meetings](#) [Resources](#) [Contact Us](#)

AMCA Board of Directors
2016-2017

Invasive *Aedes*
training coming
soon!