Opening:

2018 Vector Control Summit

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Zika virus emergence

- Originally identified in Africa and Southeast Asia
- First identified in Uganda’s Zika Forest in 1947
- Outbreaks since 2007
- 2015–2016 Zika virus epidemic in Brazil
- 2017 local transmission in FL, TX
Number of Zika PUI by Month, Orange County, Florida 2016–2018

Month

Jan  Feb  Mar  Apr  May  Jun  Jul  Aug  Sep  Oct  Nov  Dec
2016

Jan  Feb  Mar  Apr  May  Jun  Jul  Aug  Sep  Oct  Nov  Dec
2017

Jan  Feb  Mar  Apr  May  Jun  Jul  Aug  Sep  Oct  Nov  Dec
2018

Count

Number of People Tested

Number of Block Addresses Sprayed
Prioritization of top emerging pathogens likely to cause severe outbreaks in the near future

Few or no medical countermeasures exist

Focus for preparedness to help control potential future outbreaks
WHO List of top emerging diseases (2015)

- Crimean Congo hemorrhagic fever
- Ebola
- Lassa fever
- Marburg
- MERS
- Nipah
- Rift Valley fever
- SARS
CDC Division of Vector-borne Diseases: Priority diseases

- Chikungunya virus
- Dengue virus
- Ehrlichiosis & anaplasmosis
- Lyme disease
- Plague
- Rocky Mountain spotted fever
- Tularemia
- West Nile virus
- Zika virus
Emerging and Reemerging infections - 70% vector-borne or zoonotic
ESA satellite image: Global air travel
One Health approach