In the Time of Zika: A Personal Account

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Disclosure

Speaker for Sanofi
Zika Virus: Global Spread

The Zika Virus, traditionally found in Africa and parts of South East Asia, is spreading. See when and where it was detected.

Countries virus is normally found
- 2016 Texas
- 2015 Puerto Rico
- 2015 Mexico
- 2015 Easter Island
- 2014 South America

Countries virus has spread to
- 2014 Polynesia
- 2007 Yap

Source: Centers for Disease Control
Range of Microcephaly Severity

- Baby with Typical Head Size
- Baby with Microcephaly
- Baby with Severe Microcephaly

Fetal Brain Disruption Sequence

- First described in 1984 but noted in earlier literature
- Brain destruction resulting in collapse of the fetal skull, microcephaly, scalp rugae and neurologic impairment
- Images below from 1990 series; phenotype appears to be present in some affected babies in Brazil (2015—present)
Retinal findings:

R: Pigmentary mottling in the macula
L: Chorioretinal lobulated atrophic lesion

R: Pigmentary mottling in the macula; enlarged cup: disk ratio
L: Macular chorioretinal atrophic lesion with a hyperpigmented halo

R: Optic disc hypoplasia, excavated nasal round lesion with hyperpigmented halo and colobomatous-like aspect
L: similar findings
Confirmed cases       117
Hospitalized                 5
Pregnant Women          5
Guillain Barré 1

Febbruary 11 2016

World Map of Areas with Risk for ZIKA

FROM ALD TO ZIKA: NEWBORN SCREENING AND SURVEILLANCE IN NJ
APRIL 25, 2107
Puerto Rico's Efforts To Stop Zika Are Hampered By Mistrust

August 10, 2016
Heard on Morning Edition

Zika Cases Reported in the United States

Laboratory-confirmed Zika virus disease cases reported to ArboNET by state or territory as of April 12, 2017.
Confirmed cases: 117
Hospitalized: 5
Pregnant Women: 5
Guillan Barré: 1

February 11, 2016
Confirmed cases 39,839
Hospitalized 413
Pregnant Women 3,356
Guillan Barré 70
Deaths ZIKA 5
Deaths GB 2
CZS 12

March 25 2016

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Prevention

Diagnosis

Management

Prevention

• Vector Control
Prevention

- Repelents
- Education to the Population
- Prophylactics

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APRIL 25, 2017
Diagnostics

Clinical

- Rash
- Fever
- Headaches
- Conjunctivitis
- Myalgia
- Arthralgia

Laboratories

- < 2 weeks
  - rRT-PCR
    - Real-Time Reverse Transcription-Polymerase Reaction
  - Trioplex
    - Authorized by the FDA under the Emergency Use Authorization (EUA)
    - Distinguishes between ZIKA, Dengue & Chikungunya

- > 2 weeks IgM
  - No IgG tests available
  - Rapid office test under evaluation
Support Management

- Antipyretics
- Analgesics
- Antipruritic

Avoid spreading the virus
Family Orientation
Evaluation according to Bright Futures
Registry for ZIKA + children
Grief Cycle - Elizabeth Kubler Ross

Denial
Anger
Bargain
Depression
Acceptance