

AAP ZIKA ECHO

(EXTENSION FOR COMMUNITY
HEALTHCARE OUTCOMES)

American Academy of Pediatrics
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HOUSEKEEPING ITEMS

- For educational and quality improvement purposes, this ECHO session will be recorded
- Project ECHO® collects participation data for each ECHO session. This data allows Project ECHO to measure, analyze, and report on the ECHO movement's reach. Data is used in reports, on maps and visualizations, for research, for communications and surveys, for data quality assurance activities, and for decision-making related to new initiatives.
- To protect patient privacy, please do not provide any (PHI) protected health information.
- Please mute your microphone when not speaking. If you have video capability, please enable it.
- Please communicate clearly during the clinic. There is a chat function in Zoom; Please use that chat function to send messages to the group. For IT help, please chat AAP Admin and we will assist you.



TODAY'S LECTURE

Zika Incidence and Risk in the U.S.: An Update

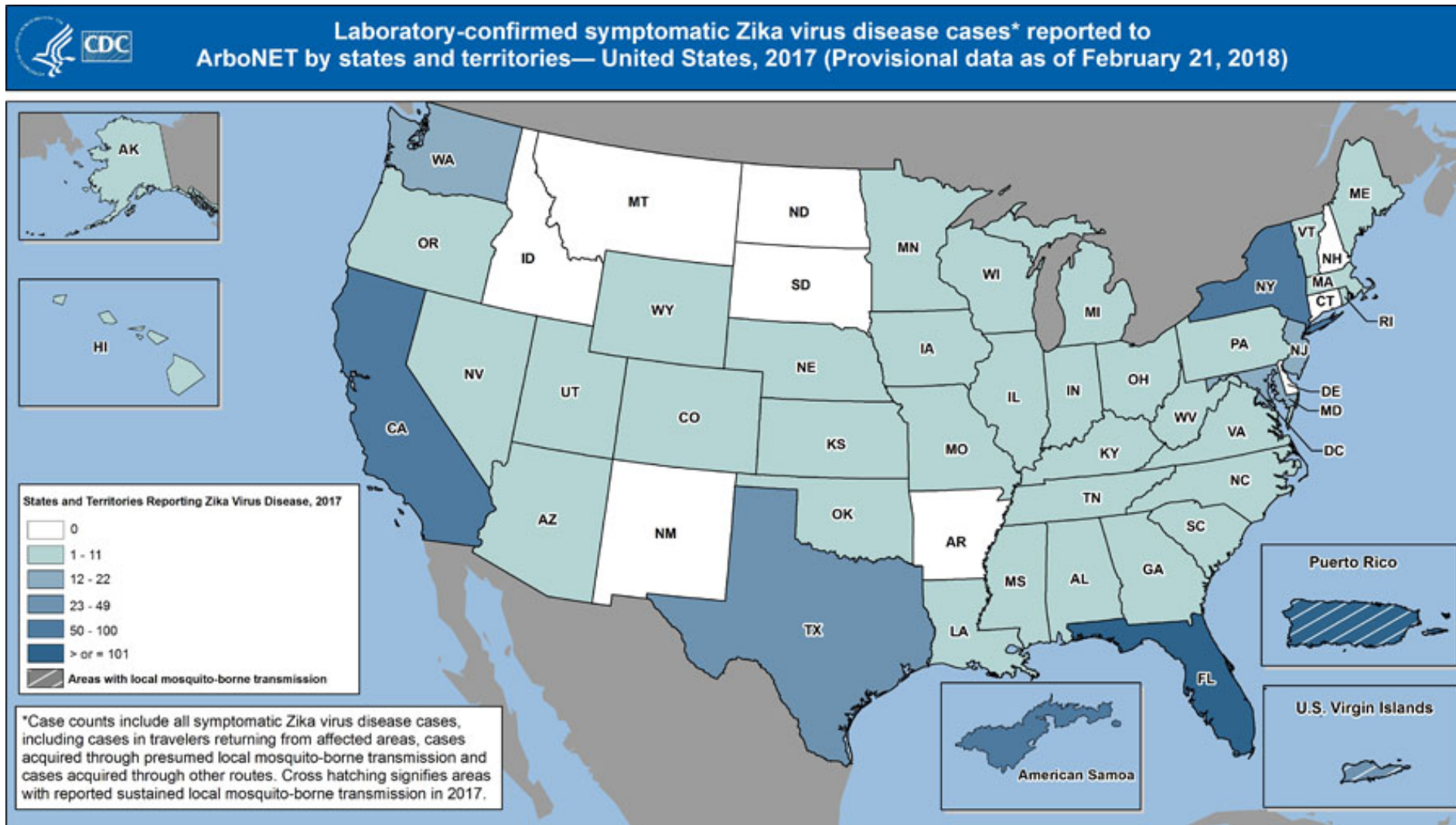
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Presented March 5 and 13, 2018



ZIKA VIRUS CASES REPORTED IN THE U.S., 2017



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ZIKA INCIDENCE IN THE U.S. TERRITORIES: SYMPTOMATIC DISEASE CASES*

Territories	TOTAL	2018	2017	2016	2015
American Samoa	204	0	73	131	0
Puerto Rico	35,939	1	534	35,395	9
US Virgin Islands	1,032	0	46	986	0

*Excludes congenital disease cases

Note: 2017 and 2018 data are provisional and might not reflect actual numbers due to delays in reporting



PREGNANT WOMEN IN THE U.S. WITH ANY LABORATORY EVIDENCE OF POSSIBLE ZIKA VIRUS INFECTION, 2015-2018

US States and the District of Columbia	US Territories and Freely Associated States
2,418	4,784

- As of February 20, 2018, a total of 23 additional pregnant women with laboratory evidence of possible Zika virus infection in the US States and the District of Columbia have been included since the last reporting date 1/23/2018.
- A total of 73 additional pregnant women with laboratory evidence of possible Zika virus infection in the US territories and freely associated states have been included since the last reporting date 1/23/2018.



Outcomes of Pregnancies with Laboratory Evidence of Possible Zika Virus Infection in U.S. States and District of Columbia, 2015-2018

Completed Pregnancies with or without birth defects	
2,233	
Liveborn infants with birth defects	Pregnancy losses with birth defects
112	9

- As of February 20, 2018, a total of 42 additional completed pregnancies with or without Zika-associated birth defects in the US States and the District of Columbia have been included since the last reporting date 1/23/2018.



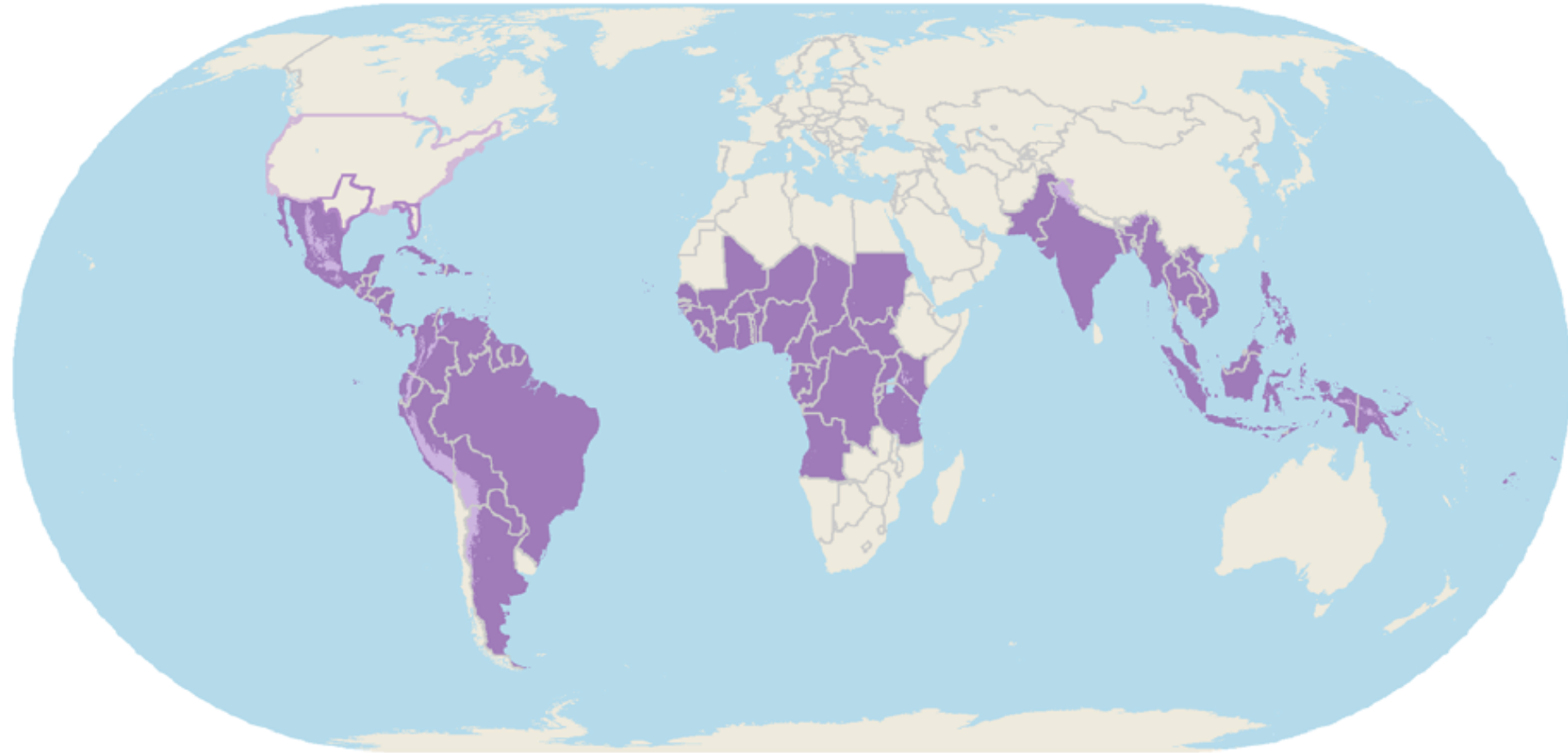
Outcomes of Pregnancies with Laboratory Evidence of Possible Zika Virus Infection in US Territories and Freely Associated States, 2015-2018

Completed Pregnancies with or without birth defects	
4,055	
Liveborn infants with birth defects*	Pregnancy losses with birth defects**
157	8




- As of February 20, 2018, a total of 140 additional completed pregnancies with or without Zika-associated birth defects in the U.S. territories and freely associated states have been included since the last reporting date, 1/23/2018.



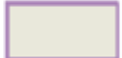

World Map of Areas with Risk of Zika



International areas and US territories

-  Area with risk of Zika infection (below 6,500 feet)*
-  Area with low likelihood of Zika infection (above 6,500 feet)*
-  Areas with no known risk of Zika infection

United States areas

-  State previously Reporting Zika
-  No Known Zika

RISK OF BIRTH DEFECTS DURING PREGNANCY: DATA FROM U.S. STATES AND TERRITORIES

- Up to 1 in 10 babies of women with possible Zika virus infection during pregnancy had Zika-associated birth defects
- Compared to women who did not have Zika virus infection during pregnancy, women with Zika during pregnancy had a 20-fold-risk of having a baby with birth defects that can occur from Zika virus infection



RISK FOR BIRTH DEFECTS BY SYMPTOM STATUS: DATA FROM U.S. STATES AND TERRITORIES

- In US states, 2 in 25 (8%) of pregnant women with symptoms of Zika virus infection during pregnancy had a baby with Zika-associated birth defects, compared with 3 in 25 pregnant women without Zika symptoms
- In US territories, about 1 in 25 (5%) of women with symptoms of Zika infection had a baby with Zika-associated birth defects, compared with 2 in 25 (7%) of pregnant women without Zika symptoms



MMWR, JANUARY 26, 2018

Morbidity and Mortality Weekly Report

Population-Based Surveillance of Birth Defects Potentially Related to Zika Virus Infection — 15 States and U.S. Territories, 2016

Augustina Delaney, PhD¹; Cara Mai, DrPH¹; Ashley Smoots, MPH¹; Janet Cragan, MD¹; Sascha Ellington, MSPH¹; Peter Langlois, PhD²; Rebecca Breidenbach, MPA²; Jane Fornoff, PhD³; Julie Dunn, PhD⁴; Mahsa Yazdy, PhD⁴; Nancy Scotto-Rosato, PhD⁵; Joseph Sweatlock, PhD⁵; Deborah Fox, MPH⁶; Jessica Palacios, MPH⁶; Nina Forestieri, MPH⁷; Vinita Leedom, MPH⁸; Mary Smiley, MS⁸; Amy Nance, MPH⁹; Heather Lake-Burger, MPH¹⁰; Paul Romitti, PhD¹¹; Carrie Fall, MS¹¹; Miguel Valencia Prado, MD¹²; Jerusha Barton, MPH¹³; J. Michael Bryan, PhD¹³; William Arias, MPH¹⁴; Samara Viner Brown, MS¹⁴; Jonathan Kimura, MPH¹⁵; Sylvia Mann, MS¹⁵; Brennan Martin, MPH¹⁶; Lucia Orantes, PhD¹⁶; Amber Taylor, MPH¹; John Nahabedian, MS¹; Amanda Akosa, MPH¹; Ziwei Song, MPH¹; Stacey Martin, MSc¹⁷; Roshan Ramlal, PhD¹; Carrie Shapiro-Mendoza, PhD¹⁸; Jennifer Isenburg, MPH¹; Cynthia A. Moore, MD, PhD¹; Suzanne Gilboa, PhD¹; Margaret A. Honein, PhD¹

Zika virus infection during pregnancy can cause serious birth defects, including microcephaly and brain abnormalities (1). Population-based birth defects surveillance systems are critical to monitor all infants and fetuses with birth defects potentially related to Zika virus infection, regardless of known exposure or laboratory evidence of Zika virus infection during pregnancy. CDC analyzed data from 15 U.S. jurisdictions conducting population-based surveillance for birth defects potentially related to Zika virus infection.* Jurisdictions were stratified into the following three groups: those with 1) documented local transmission of Zika virus during 2016; 2) one or more cases of confirmed, symptomatic, travel-associated Zika virus

births in the first half of 2016 to 3.0 cases in the second half ($p = 0.10$). However, when neural tube defects and other early brain malformations (NTDs)[§] were excluded, the prevalence of birth defects strongly linked to congenital Zika virus infection increased significantly, from 2.0 cases per 1,000 live births in the first half of 2016 to 2.4 cases in the second half, an increase of 29 more cases than expected ($p = 0.009$). These findings underscore the importance of surveillance for birth defects potentially related to Zika virus infection and the need for continued monitoring in areas at risk for Zika.

In 2016, as part of the emergency response to the Zika virus outbreak in the World Health Organization's Region of the



POPULATION-BASED SURVEILLANCE OF BIRTH DEFECTS POTENTIALLY RELATED TO ZIKA VIRUS INFECTION – 15 STATES AND US TERRITORIES, 2016

- CDC examined data from 15 U.S. jurisdictions for birth defects potentially related to Zika virus infection
 - Florida, Georgia, Hawaii, Illinois, Iowa, Massachusetts, New Jersey, New York (excluding NYC), North Carolina, Puerto Rico, Rhode Island, South Carolina, Texas, Utah and Vermont
- 2,962 infants and fetuses met case definition; 2,716 (92%) were live births
 - 45 (1.5%) with lab evidence of possible Zika virus infection
 - 96 (3.2%) with negative tests for Zika virus
 - 2,821 (95.2%) with no testing performed or no results available

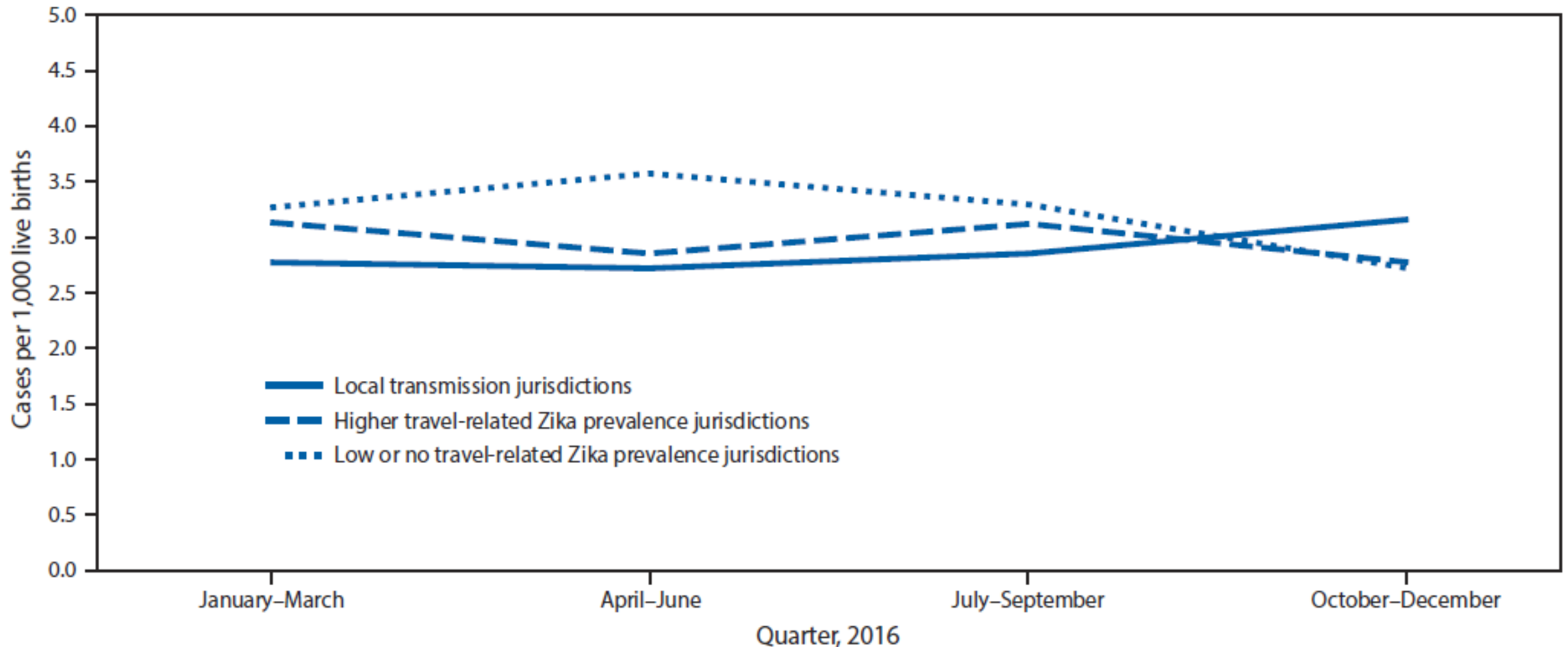


POPULATION-BASED SURVEILLANCE OF BIRTH DEFECTS POTENTIALLY RELATED TO ZIKA VIRUS INFECTION – 15 STATES AND US TERRITORIES, 2016

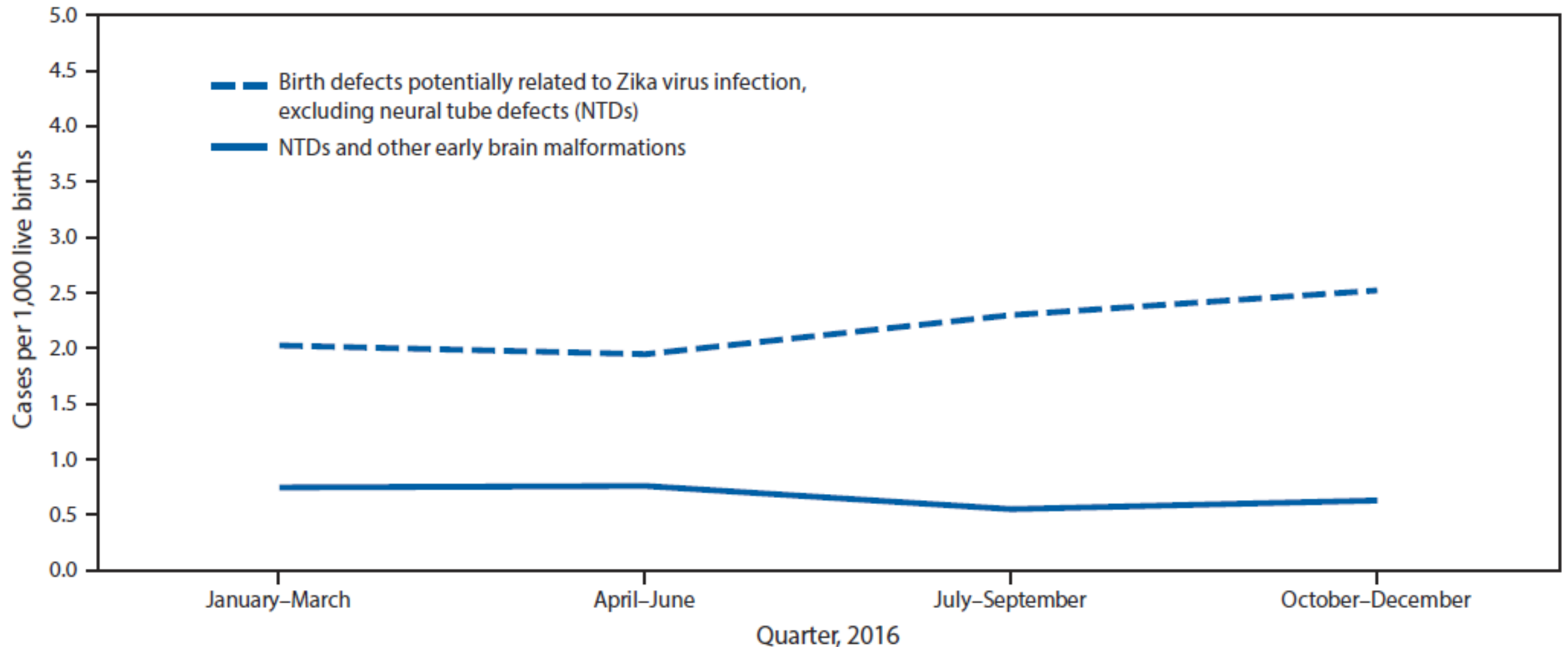
- First comprehensive data on the prevalence of birth defects (3.0 per 1,000 live births) potentially related to Zika virus infection in a birth cohort of nearly 1 million births in 2016



PREVALENCE OF BIRTH DEFECTS CASES POTENTIALLY RELATED TO ZIKA VIRUS INFECTION, BY ZIKA VIRUS TRANSMISSION CHARACTERISTICS AND QUARTER — 15 U.S. JURISDICTIONS, 2016



PREVALENCE OF BIRTH DEFECTS CASES POTENTIALLY RELATED TO ZIKA VIRUS INFECTION IN U.S. JURISDICTIONS WITH DOCUMENTED LOCAL TRANSMISSION OF ZIKA VIRUS, BY DEFECT TYPE AND QUARTER, 2016



POPULATION-BASED SURVEILLANCE OF BIRTH DEFECTS POTENTIALLY RELATED TO ZIKA VIRUS INFECTION – 15 STATES AND US TERRITORIES, 2016

In Summary....

- A significant increase in birth defects strongly related to Zika virus during the second half of 2016 compared with the first half was observed in jurisdictions with local Zika virus transmission
- Only a small % of birth defects potentially related to Zika had lab evidence of Zika virus infection – most were not tested



QUESTIONS?

