

Zika Virus and the Blood Supply

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September 8, 2016**

Zika and the blood supply

- Our main priority is blood safety
- To ensure blood safety:
 - Use of screening questions
 - Test for infectious diseases
 - For example: HCV, HIV, Syphilis..... and now Zika virus
 - Post donation information
- Threats of new and emerging pathogens

Concerns for the blood supply

- Documented transfusion transmission of other flaviviruses- West Nile virus
- Asymptomatic in **80%** of people
- Pre-symptomatic period with possible viremia- 3-12 days before symptoms
- Transmitted sexually up to 6 months

Zika and the blood supply

RAPID COMMUNICATIONS

Potential for Zika virus transmission through blood transfusion demonstrated during an outbreak in French Polynesia, November 2013 to February 2014

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Citation style for this article:

Musso D, Nhan T, Robin E, Roche C, Bierlaire D, Zisou K, Shan Yan A, Cao-Lormeau VM, Brout J. Potential for Zika virus transmission through blood transfusion demonstrated during an outbreak in French Polynesia, November 2013 to February 2014. *Euro Surveill.* 2014;19(14):pii=20761. Available online: <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=20761>

Article submitted on 31 March 2014 / published on 10 April 2014

- 3% of samples from asymptomatic blood donors contained detectable ZIKV RNA
- No post transfusion Zika cases reported

Transfusion transmission?

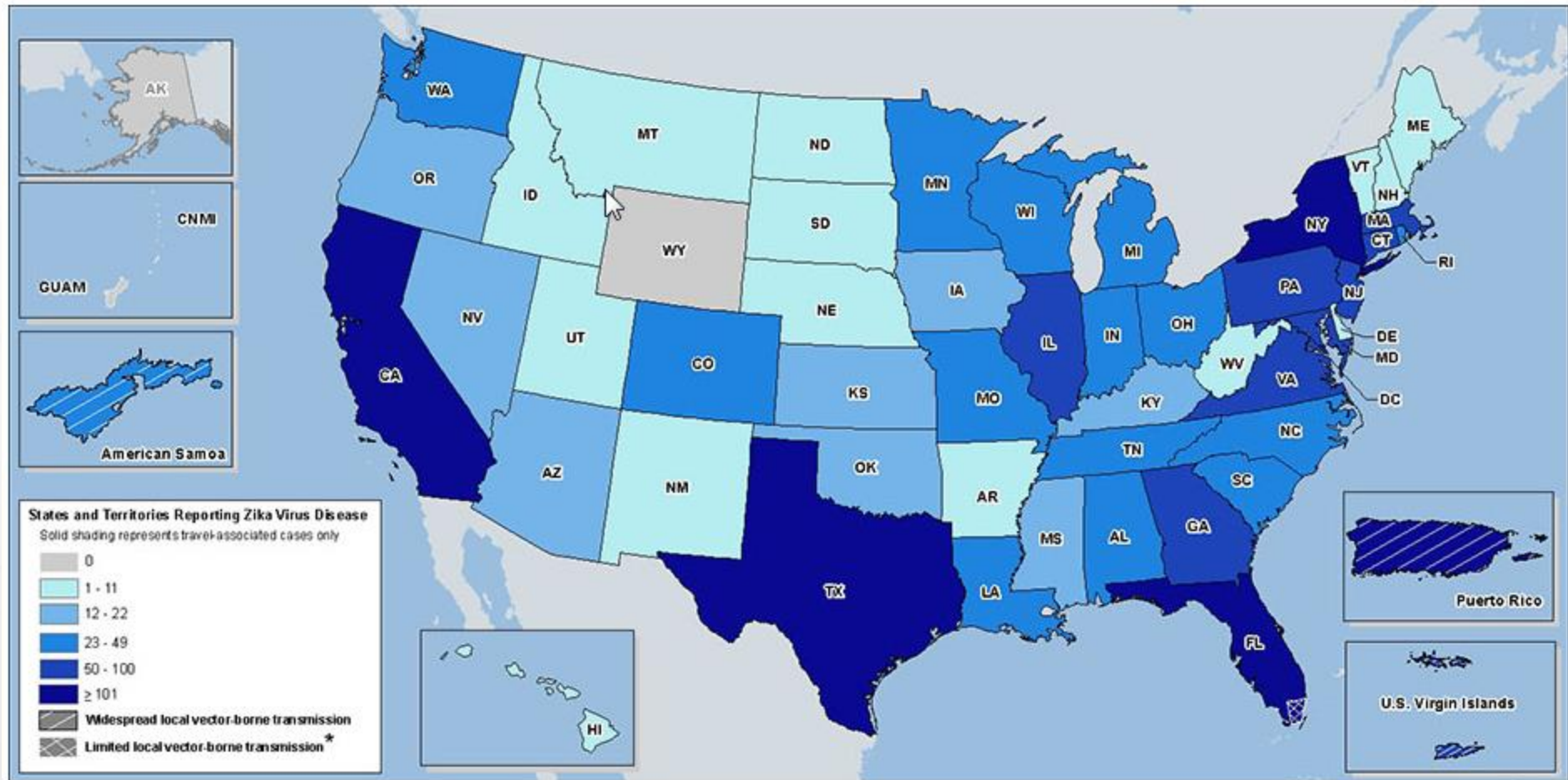
- 2 probable cases of transfusion transmission reported in Brazil
- NEJM: 2 cases from a pre-symptomatic platelet donor
 - Donation: 2 Leukoreduced platelets that were later irradiated
 - 5 days after donation, donor calls to report a rash, retro-orbital pain and knee pain
 - Donor tested for CHIV, Dengue and Zika → Zika +
 - Recipients
 - Pretransfusion samples: negative for Zika, CHIV, Dengue
 - Post transfusion samples (6 days later): + ZIKA

Zika and the Blood Supply

- Concerns for transfusion transmission
- Response from the FDA:
 - Recommendations (February 2016) for the reduction of transfusion transmitted Zika virus
 - Areas with NO active transmission
 - 28 day deferral for travel to Zika affected areas
 - Areas **with** active transmission
 - Stop collecting blood unless testing or using pathogen reduction technology
 - Import blood from an area with NO active transmission
 - If testing, requirement to add questions regarding sexual contact

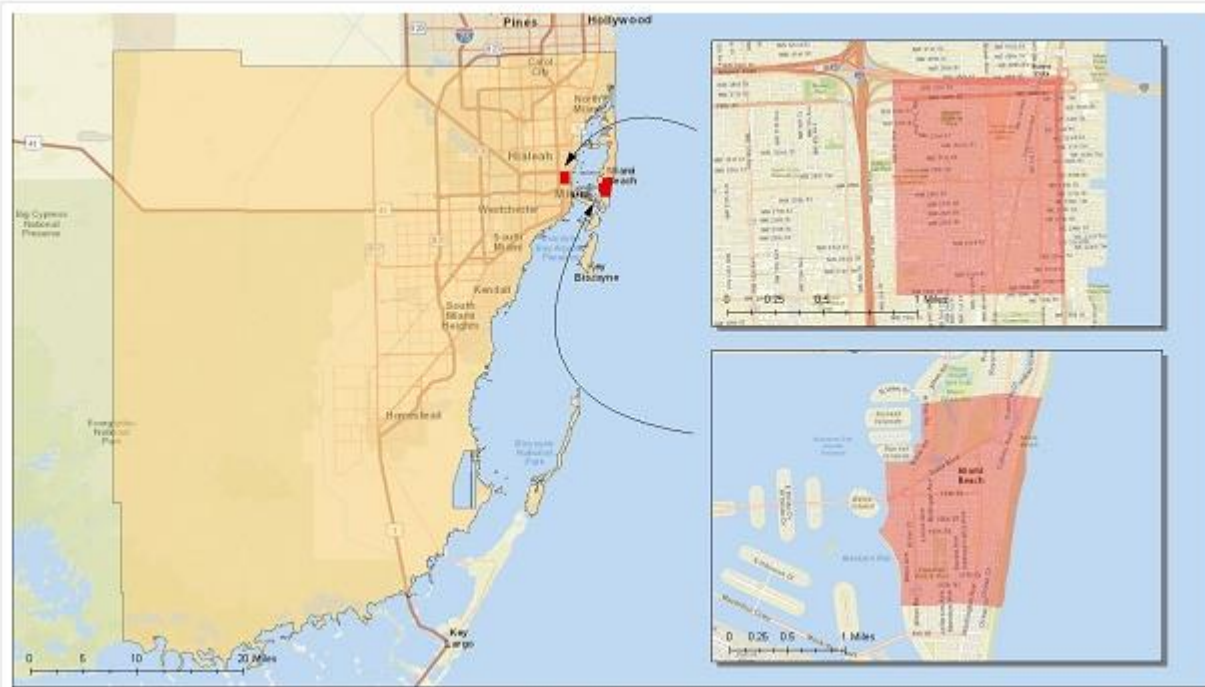
CDC Zika Cases in the United States- 2016

Laboratory-confirmed Zika virus disease cases reported to CDC by state or territory, as of August 31, 2016



- As of August 31, 2016
- Travel-associated cases reported: 2,686

CDC Zika Cases in the United States- 2016: Active Zika Virus Transmission in Florida

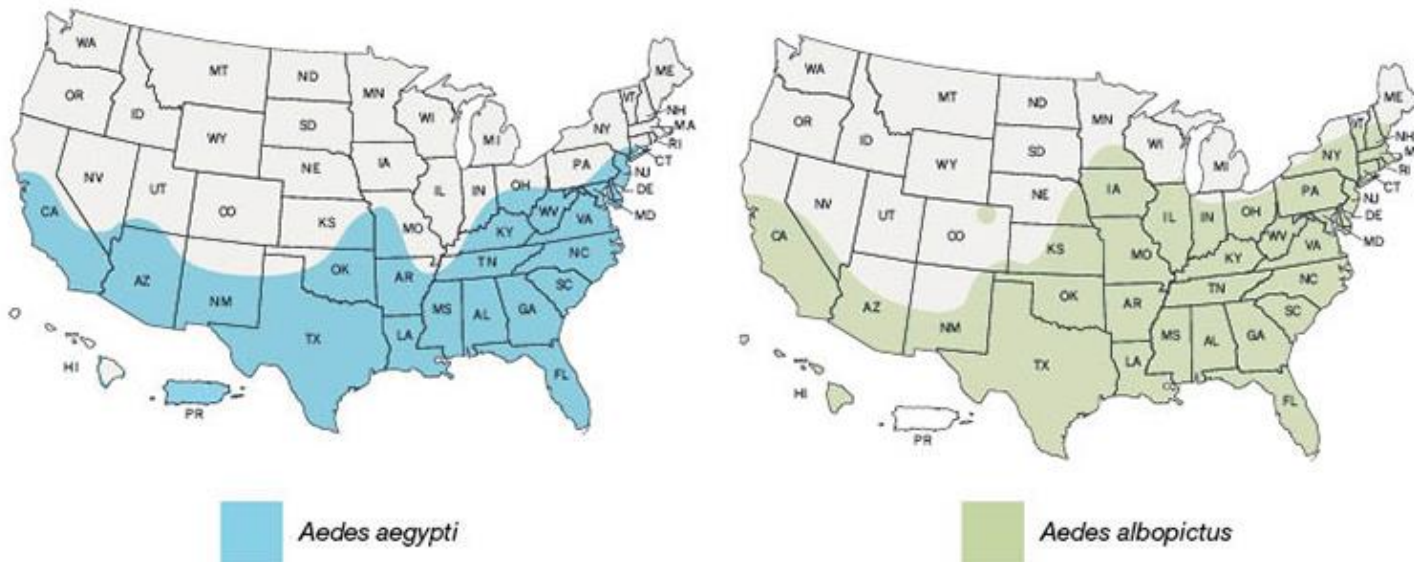


CBER/July 27, 2016:” In consideration of the possibility of an emerging local outbreak of Zika virus, and as a prudent measure to help assure the safety of blood and blood products, FDA is requesting that all blood establishments in Miami-Dade County and Broward County cease collecting blood immediately until the blood establishments implement testing of each individual unit of blood collected in the two counties with an available investigational donor screening test for Zika virus RNA or until the blood establishments implement the use of an approved or investigational pathogen inactivation technology”

Zika Virus



Estimated range of *Aedes aegypti* and *Aedes albopictus* in the United States, 2016 Maps



*Maps have been updated from a variety of sources. These maps represent CDC's best estimate of the potential range of *Aedes aegypti* and *Aedes albopictus* in the United States. Maps are not meant to represent risk for spread of disease.

What is STBTC doing to keep the blood supply safe?

- Since July 5th, STBTC has been testing donors with a Zika virus test under an investigational new drug application (IND)
 - 3rd blood center in the US to test for Zika virus
 - No donor screening test licensed by the FDA; FDA has allowed for the use of the Roche Zika test under an IND and specific protocol
 - Individual donor nucleic acid test (ID-NAT)
 - Donors must consent to be tested for Zika virus
- Work closely with Metro Health, DSHS and blood banking organizations

- FDA Guidance August 2016:
 - **ALL** blood collected in the US must be tested for the Zika virus or pathogen reduction technology must be implemented (only FDA-approved for platelets and plasma)
 - Implementation schedule different depending on what state blood collection takes place
 - STBTC must implement testing for all donors by September 23rd
- 2016: Asymptomatic blood donors in Puerto Rico- 1%

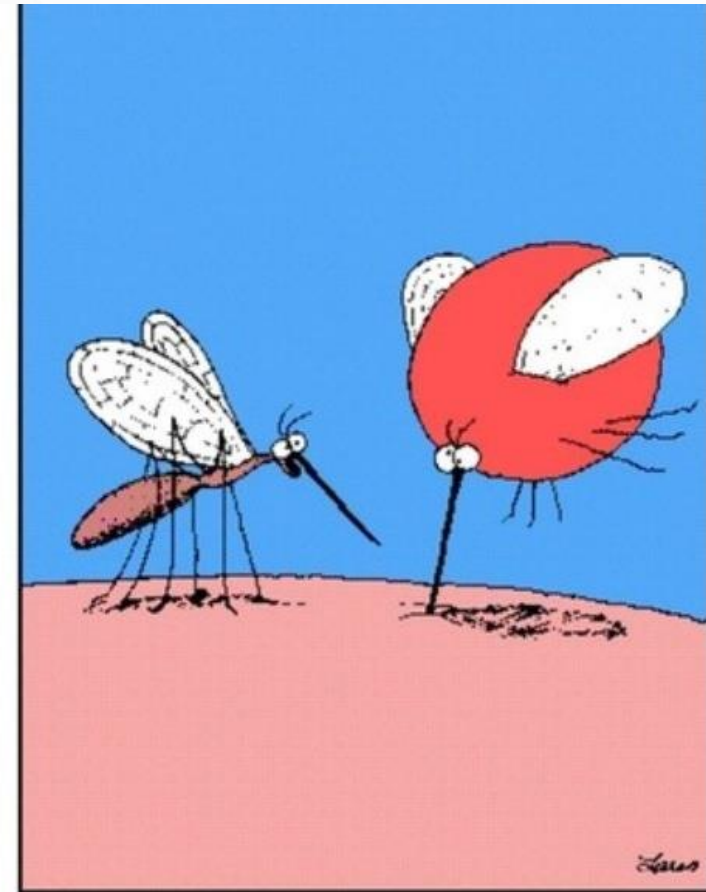
Zika consent- donor education

- Working on educating donors on what the consent means and what it involves
- Getting tested for the Zika virus is Voluntary
- Donor Zika testing requires consent
- Doesn't change the donation process
 - Only requires an extra signature from the donor

- #1 concern is blood safety
- STBTC is already testing donors for Zika virus

Thanks!!!

**Visit us at
SouthTexasBlood.org**



"Pull out, Betty! Pull out! . . . You've hit an artery!"