



Zika

Missouri — PRAMS, 2016-2017

Background

The Missouri Department of Health and Senior Services (DHSS) received a supplementary questionnaire and funding from the U.S. Centers for Disease Control and Prevention (CDC), modifying the Pregnancy Risk Assessment Monitoring System (PRAMS) survey in Missouri to implement rapid surveillance of maternal behaviors relating to the Zika virus (ZIKV). This infection has been strongly associated with neurological disorders, including congenital microcephaly, in which brain size is severely reduced (CDC has recently concluded that ZIKV causes microcephaly)¹.

Awareness of Zika Virus

The Missouri PRAMS surveillance system collected data to provide state health departments and CDC's emergency response teams a basis on which to make decisions concerning Zika. During the supplemental Zika data collection period for the Missouri PRAMS survey, from February-July 2017, nearly one of six women in the state (15.6%) reported that they had never heard of the Zika virus during their pregnancy. The proportion of mothers who responded that they were "Very Worried" or "Somewhat Worried" was greater in rural areas (20%) than urban (14%), potentially associated with greater exposure to media coverage of Zika in urban areas.

Percent of mothers responding to the survey question, "During your most recent pregnancy, how worried were you about getting infected with the Zika virus?"

Missouri Geographic Area of Residence	Very Worried	Somewhat Worried	Not At All Worried	Never Heard of Zika
Urban	11.4	39.6	35.0	14.0
Rural	10.0	30.0	40.0	20.0
Total	11.0	37.0	36.4	15.6

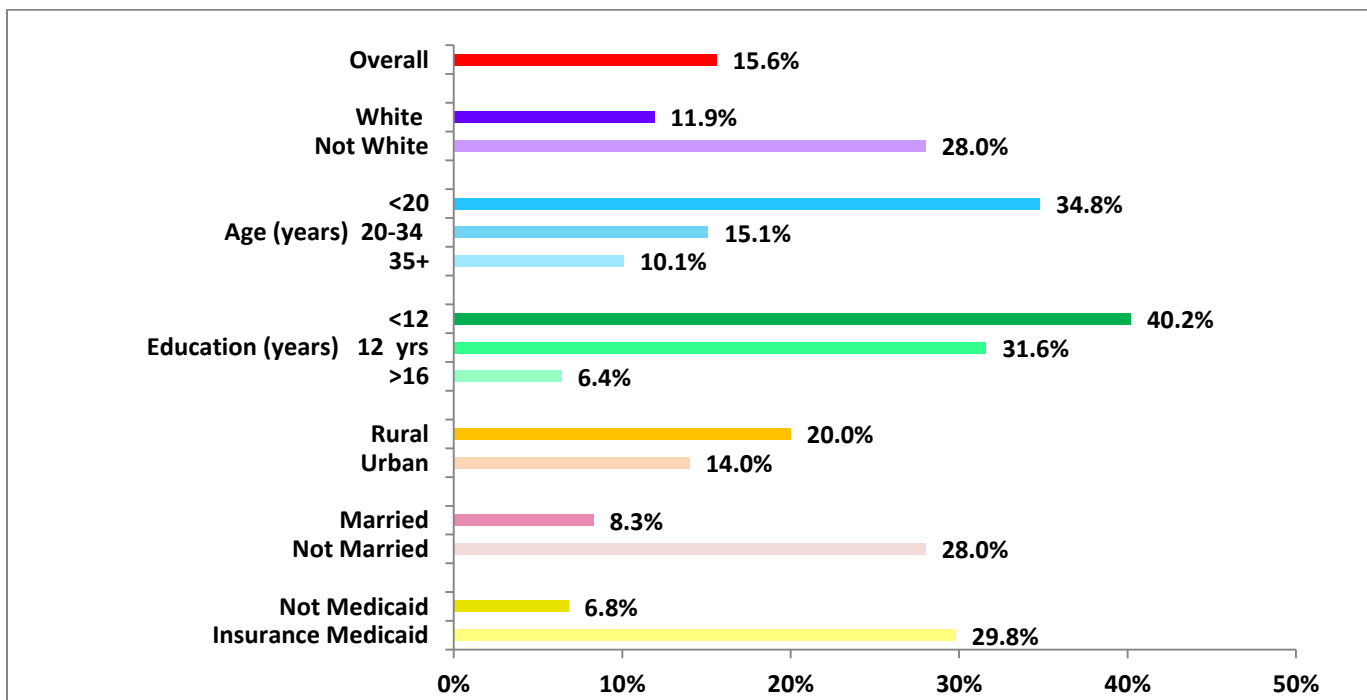
Effective data dissemination and collaboration will lead to the building of a sustainable information and referral service system to reduce Zika virus infections. One of the specific aims of PRAMS Zika data collection was to assess mothers' personal knowledge, awareness, and behaviors related to the Zika virus occurring before and during pregnancy.

Missouri PRAMS: Zika: 2016-2017

PRAMS Indicators	Missouri %		
	White	Non-White	Overall
Doctor, nurse or health care worker talked to you about the Zika virus without you asking about it	24.9	38.2	27.6
Doctor, nurse or health care worker talk to you about the Zika virus after you asked about it	20.6	11.5	18.6
Doctor, nurse, or health care worker did not talk about Zika virus	54.5	50.2	53.8
Traveled outside the United States while pregnant	4.7	5.2	4.8
Husband or partner traveled outside of the United States anytime within six months of your pregnancy	4.8	3.7	4.5
Received a blood test for Zika virus	3.1	22.5	7.0
Prevalence of use of condoms for Zika protection	6.0	16.6	8.5

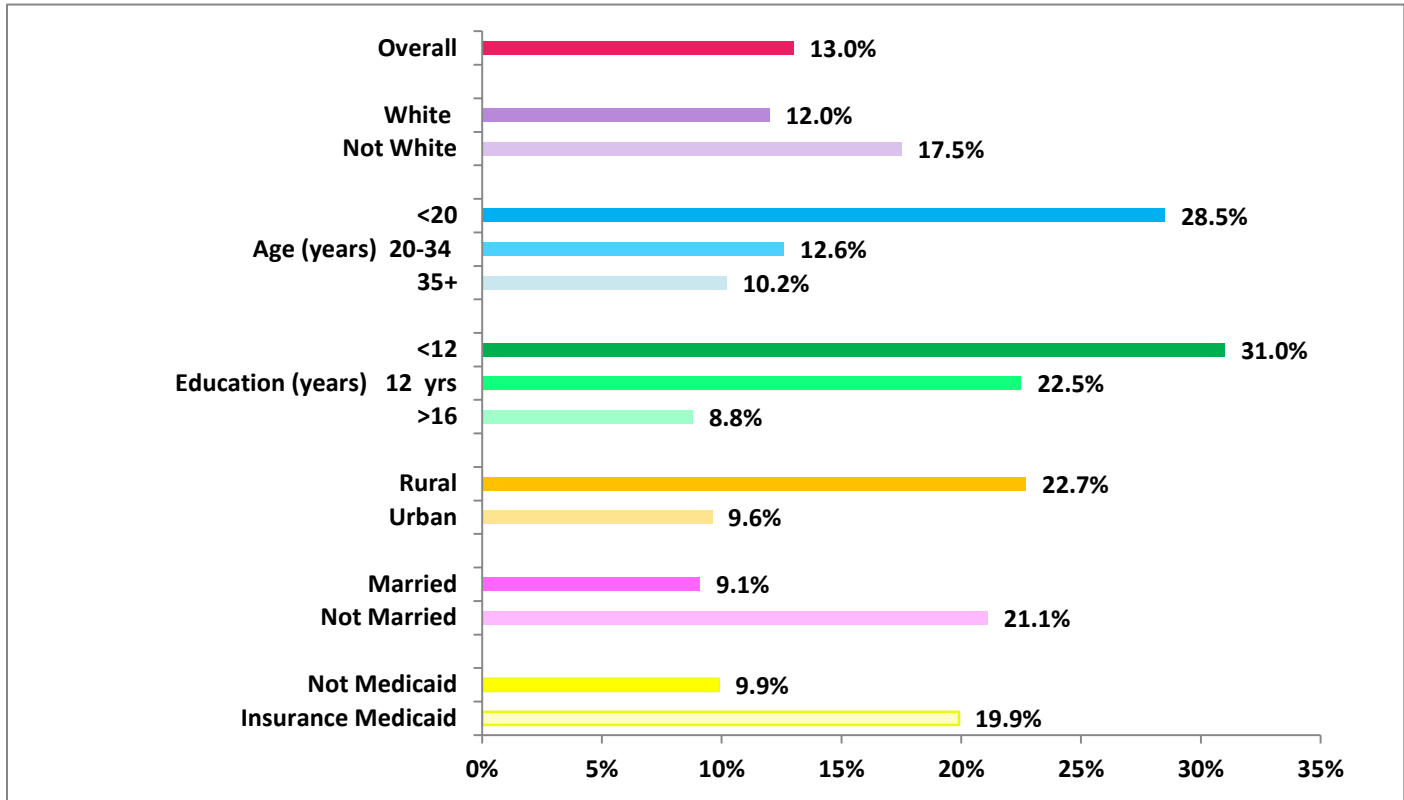
Who has not heard about the Zika virus? Zika virus can pass from a pregnant woman to her fetus. Zika acquired during pregnancy can cause microcephaly and other problems, including eye defects, hearing loss, and impaired growth. *Zika is spread mostly by the bite of an infected Aedes species mosquito (Ae. aegypti and Ae. albopictus)².*

Percent of mothers responding “I have never heard of the Zika virus” to the survey question, “During your most recent pregnancy, how worried were you about getting infected with the Zika virus?”



Who is not aware of the recommendation that pregnant women should avoid travel to areas outside of the United States with Zika?

Percent of mothers responding to the PRAMS survey question, “During your most recent pregnancy, were you aware of recommendations that pregnant women should avoid travel to areas with the Zika virus?”



Pregnancy precautions to prevent Zika

Currently, there is no ZIKV vaccine or cure for infection³. At this time, CDC strongly cautions pregnant women and women who are trying to get pregnant against traveling to countries or areas of the USA where Zika is known to be a risk. The CDC also suggests that men who have traveled to tropical climates should abstain from sex or use condoms for 6 months after their last trip, and that women should abstain from sex or use condoms for 2 months past their last trip.

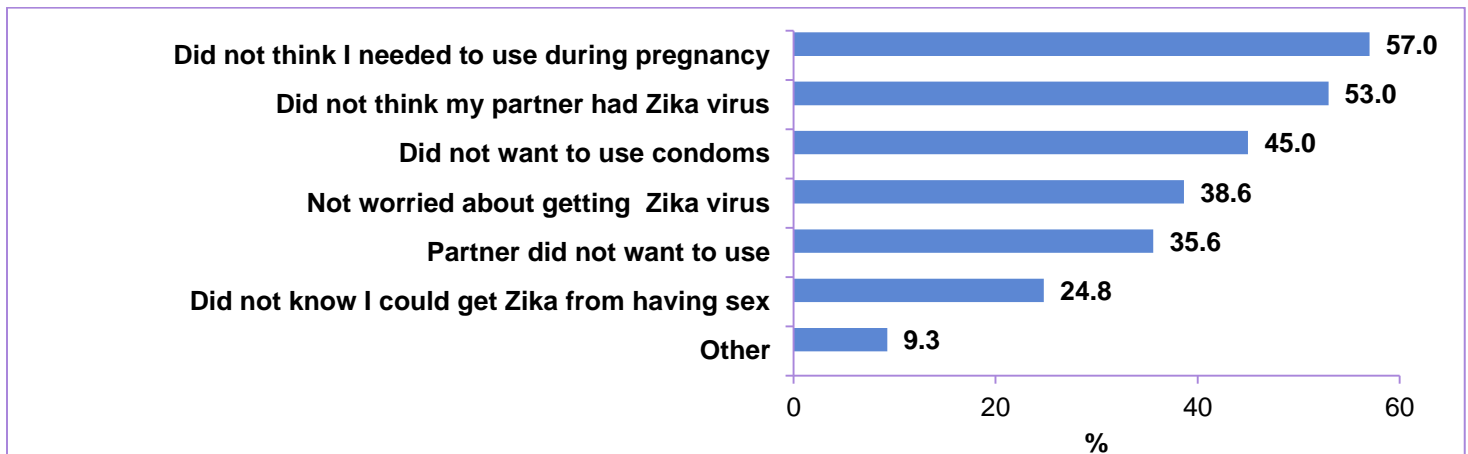
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Percent of responses to the PRAMS survey question, “During your most recent pregnancy, how often did you use condoms when you had sex with your husband or any male partner?”

Percent of women using condoms when having sex with husband or partner	Missouri %				
	No Sex	Never	Sometimes	Every Time	Overall Use
Using condoms during sex with husband or partner	5.4	86.0	5.9	2.6	8.5
Age >20	2.5	83.4	8.1	6.0	14.1
Ages 20-35	5.4	86.7	5.3	2.6	7.9
Age 35 and over	7.1	82.6	9.3	1.0	10.3

Reasons for not using condoms during most recent pregnancy

Percent of mothers responding to the PRAMS survey question, “What were your reasons for not using condoms during your most recent pregnancy?”



Public Health Action

- Health care providers can provide information during well woman visits and discuss measures to reduce the likelihood of Zika infection during prenatal care visits
- Although the research has not yet drawn a clear link between other neurological complications and the virus, the CDC and WHO are strongly cautioning **pregnant women from traveling** to areas where this virus is a known risk.

Resources

CDC Website: <https://www.cdc.gov/zika/index.html>

Washington University: <https://infectiousdiseases.wustl.edu/zika-virus-testing-st-louis-area/>

PRAMS - Missouri Department of Health & Senior Services: <http://health.mo.gov/data/prams/index.php>

Missouri Department of Health & Senior Services: <http://health.mo.gov/living/healthcondiseases/communicable/zika/>

References:

1. *Bulletin of the World Health Organization* 2016;94:406-406A. doi: <http://dx.doi.org/10.2471/BLT.16.176990>.
2. Mo, Yin, Salada, Brenda, Tambyah, Paul A., *British Medical Bulletin*. 2016;119:issue;25-26. <https://doi.org/10.1093/bmb/ldw023>.
3. Rather IA, Kumar S, Bajpai VK, Lim J, Park Y-H. Prevention and Control Strategies to Counter ZIKA Epidemic. *Frontiers in Microbiology*. 2017;8:305. doi:10.3389/fmicb.2017.00305



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Missouri Department of Health and Senior Services
PO Box 570
Jefferson City, MO 65102

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