Communicating Changing Guidance
Webinar: Lessons from Zika and Beyond

June 25, 2018

The webinar will begin at 12:00 PM ET.

Please listen through the audio on your computer.
• Please listen through the audio on your computer
• This call is being recorded and the recording will be shared
• Submit questions through the Q&A Box at any time. We will discuss questions at the end of all the presentations
• If you need technical assistance, please use the Q&A box or email infectiousdiseases@naccho.org
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Communicating Changing Guidance During the Zika Outbreak

Victoria Carter, PhD, MPH

NACCHO Webinar
June 25, 2018
The landscape
Emergence of the Zika outbreak

- **Before 2015**: Zika outbreaks occurred in areas of Africa, Southeast Asia, and the Pacific Islands, with few cases recorded.

- **May 7, 2015**: Pan American Health Organization issues an alert regarding the first confirmed Zika virus infections in Brazil.

- **Since May 2015**: CDC has been responding to increased reports of Zika and has assisted in investigations with PAHO and countries’ ministries of health.

- **June 9, 2015**: CDC posts first travel notice for Zika virus in Brazil.

- **December 2015**: the Commonwealth of Puerto Rico reported its first confirmed locally transmitted Zika case.

- **January 22, 2016**: CDC activates its Emergency Operations Center to respond to outbreaks of Zika.

- **February 8, 2016**: CDC elevated its EOC activation to a Level 1, the highest level.

- **February 1, 2016**: World Health Organization declares a Public Health Emergency of International Concern because of clusters of microcephaly and other neurologic disorders in areas affected by Zika.
Communicating in a unique environment

- Prior to 2015, Zika was virtually unknown
  - Approximately 25 scientific articles had been published on Zika at the time
  - Initial messaging developed based on what was known

- Continual discovery of new and/or changing information in several fields
  - Required messaging and materials to be quickly updated and redistributed each time

- Virus characteristics, as well as the expansive outbreak area, created multiple target audiences, professional and public
  - Varying languages and literacy levels
  - Differing practices and opinions

- This outbreak was CDC’s most complex response to date, spanning across several of the agency’s centers
Developing guidance
Types of guidance developed by CDC

- Transmission prevention: vector and sexual
- Clinical diagnosis and testing
- Caring for patients with Zika or Zika exposure
  - Pregnant women
  - Infants
- Laboratory
- Conception and pregnancy prevention
- Vector control

- Travel: for people going to and returning from areas with risk of Zika
- Planning for state and local health departments
  - Zika Interim Response Plan
  - Zika Communication Planning Guide for States
  - Interim CDC Recommendations for Zika Vector Control in the Continental United States
  - Toolkit for Investigating Possible Local Mosquito-Borne Transmission of Zika Virus
Guidance formats

Controlling Mosquitoes at Home

Control mosquitoes outside your home

Remove standing water where mosquitoes could lay eggs:

- Once a week, empty and scrub, turn over, cover, or throw out any items that hold water like tires, buckets, planters, toys, pools, bird baths, flowerpot saucers, or trash containers. Mosquitoes lay eggs near water.
- Tightly cover water storage containers (buckets, cisterns, rain barrels) so that mosquitoes cannot get inside to lay eggs.
- For containers without lids, use wire mesh with holes smaller than an adult mosquito.
- Use larvicides to treat large containers of water that will not be used for drinking and cannot be covered or emptied out.
- If you have a septic tank, repair cracks or gaps. Cover open vents or plumbing pipes. Use wire mesh with holes smaller than an adult mosquito.

Morbidity and Mortality Weekly Report (MMWR)

Update: Interim Guidance for the Diagnosis, Evaluation, and Management of Infants with Possible Congenital Zika Virus Infection — United States, October 2017

Weekly / October 20, 2017 / 66(41),1089-1099
Interactive guidance

Know Your Zika Risk

Where do you live?

Pregnancy & Zika Testing

Select your profession:
- Obstetrician/Gynecologist
- Family Physician
- Nurse
- Nurse-midwife
- Other healthcare provider
- State health department official
- Local health department official
- Other

Restart

Go to the map to find Zika information for your destination.

Zika Travel Information

Check this page for the most up-to-date information before you make travel plans.

Note: The information on this page is for travelers to international destinations and US territories. For information on Zika in US states, visit Areas with Risk of Zika. For the most current information about Zika virus, please visit CDC's Zika website.

Search for a destination

Map of Zika risk areas:
- United States
- Mexico
- Cuba
- South America
- Eastern Europe
- Africa

Restart
Communicating
Communicating guidance

- Used channels that would reach key target audiences
  - Professional audiences (healthcare providers, laboratories)
  - Clinician Outreach and Communication Activity (COCA) calls
  - MMWR
  - Zika Website
  - HAN
  - For the public, specifically at-risk populations
    - Website (Zika & CDC’s travel website)
    - Multiple social media channels
    - State and local health departments
    - Community organizations/partners

- CDC often issued press releases/media statements for new guidance
Make guidance easy to find

For Healthcare Providers

Summary

- Zika virus disease is a nationally notifiable condition. Healthcare providers should report suspected Zika virus disease cases to their state, local, or territorial health department to facilitate diagnosis and mitigate risk of local transmission.
- CDC recommends that pregnant women should not travel to areas with risk of Zika. Pregnant women with Zika symptoms and with possible exposure to Zika virus should be tested for Zika virus infection. Pregnant women with no Zika symptoms but who have ongoing Zika exposure should be offered Zika testing.
- Women and their partners should plan their pregnancies in the context of the Zika outbreak. Healthcare providers should discuss reproductive life plans, including pregnancy intentions and timing of pregnancy, with women of reproductive age.
- Zika testing and evaluation for infants is based on the mother’s possible exposure to Zika virus during pregnancy.

Zika Topics

Clinical Guidance

- Pregnant Women
- Infants and Children
- Women of Reproductive Age
- Sexual Transmission
- Infection Control

Guidance

- Testing Guidance for Non-Pregnant Symptomatic Individuals, Symptomatic Pregnant Women, and Asymptomatic Pregnant Women
- Update: Interim Guidance for Health Care Providers Caring for Pregnant Women with Possible Zika Virus (MMWR, July 24, 2017)
Zika Virus

Mosquitoes and Hurricanes

ABOUT ZIKA
What everyone needs to know about Zika virus.

SYMPTOMS, TESTING, & TREATMENT
The most common symptoms of Zika are rash, headache, joint pain, red eyes, and muscle pain.

PREVENTION AND TRANSMISSION
Zika is spread mainly by the bite of an infected mosquito. Prevent Zika by avoiding mosquitoes.

HEALTH EFFECTS & RISKS
Zika can cause birth defects and is a neurologic disorder.

PREGNANCY
Essential information about Zika for pregnant women and couples interested in conceiving.

AREAS WITH RISK OF ZIKA
See countries and territories where Zika is a risk.

MOQUITO CONTROL
Prevent the spread of Zika by controlling mosquitoes in and around your home and work environment.

REPORTING AND SURVEILLANCE
CDC has surveillance system for reporting cases of Zika virus, its spread, and its effects on pregnancies.

Communication Resources

What’s New

Updates and new information

Make it clear what is new

New and updated information highlighted

Last updated October 6, 2017
Available at: https://www.cdc.gov/zika/pdfs/zika-key-messages.pdf
Improving communication

- Conducted research to evaluate understandability and usability of formal guidance and public materials, as well as preferred channels for health communication and information seeking
- Evaluated web usability to determine if guidance could be easily found
- Used evidence-based recommendations to make improvements

EXAMPLE: Preconception & Sexual Transmission Guidance Message Testing with HCPs in the US and Puerto Rico

- Evaluated levels of agreeability with guidance being informative, understandable, and from a trustworthy source
- Evaluated HCP confidence in their ability to implement guidance with their patients
- Collected suggestions for improving formatting of guidance to make it more user friendly
## Zika by the Numbers

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<th>Description</th>
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<tr>
<td>&gt;2,200*</td>
<td>Communication products cleared</td>
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<tr>
<td>426*</td>
<td>Scientific products cleared</td>
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<tr>
<td>32,559</td>
<td>CDC-INFO inquiries answered</td>
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<td>CDC infographics and factsheets published</td>
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<td>&gt;90M</td>
<td>Cumulative views on the Zika website</td>
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<tr>
<td>50</td>
<td>MMWR early releases published</td>
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As of September 20, 2017; *As of September 29, 2017
Moving forward
Planning for next time

- Zika research and guidance may help responses for future outbreaks
  - Advancements in vector control
  - Personal prevention practices and attitudes

- Need to maintain and build on relationships with state and local health departments to ensure new guidance continues to be effectively communicated and implemented

- Digital first considerations
  - Allows for faster dissemination, immediate feedback, and timely updating
Help us support you as we prepare for next time

- What worked or was helpful to you?
- What missed the mark?
- What was missing?
- What could we consider for next time?
- How could we communicate about new or updated guidance better?
Questions?

Victoria Carter: yez7@cdc.gov

For more information, contact CDC
1-800-CDC-INFO (232-4636)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.
COMMUNICATING EMERGING INFORMATION AND CHANGING GUIDANCE

Meredith Li-Vollmer, PhD
Risk Communication Specialist
ZIKA: AN EMERGING SITUATION

PUBLIC HEALTH INSIDER

ZIKA IN KING COUNTY: WHAT IT MEANS AND WHO SHOULD BE CONCERNED

Zika virus is a mosquito-borne virus that can be transmitted to humans through the bite of infected mosquitoes. The virus is carried by the Aedes aegypti and Aedes albopictus mosquitoes, which are found in many parts of the world. Once infected, a person can develop symptoms such as fever, rash, joint pain, and conjunctivitis. In severe cases, Zika can cause microcephaly and other birth defects. The virus can also be transmitted sexually to men and women who have traveled to or live in an area with ongoing outbreaks.

Were you surprised that we’ve gone this long without having a case of Zika in our county?

Yes, it was a little surprising, given the amount of international travel that passes through SeaTac. With ongoing widespread outbreaks in the Americas and the Caribbean, including Puerto Rico, there have been over 400 Zika cases among travelers visiting or returning to the mainland United States. I expect that those numbers will continue to grow, including here in King County. And because many Zika cases are mild or without symptoms, there are likely more cases than get reported everywhere.

Could Zika spread from this one case to the wider public through local mosquitoes?

No, Zika cases in returning travelers to King County do not pose a risk of community Zika spread locally. The kind of mosquitoes that can transmit Zika virus (from the species Aedes aegypti and Aedes albopictus) aren’t found in the Pacific Northwest. Even if a local mosquito bit someone who is infected, they wouldn’t pass the Zika virus.

What about through sexual transmission?

Zika virus can be spread from a recently infected man through sexual contact. This case and all men who test positive for Zika infection are counseled about
Clarify what you know, what you don’t know
“For example, we don’t know why some infected pregnant women have babies that are healthy and others have babies with birth defects.”

Forecast potential for change
“So far, only men have been shown to spread Zika through sexual transmission...”

Explain why we don’t know yet (share the dilemmas)
ZIKA VIRUS, ONE YEAR LATER

It's been just over a year since King County had its first diagnosed case of Zika virus infection. We caught up with medical epidemiologist Dr. Meagan Kay, DVM, to find out what we've learned about Zika virus since then, and what concerns health experts have now.

At this time last year, Meagan, you were expecting a child yourself. What concerns did you have about Zika when you were pregnant?

Information was just starting to emerge about the risk of Zika to pregnant women and their babies. As a public health professional, I was alarmed about the early reports of microcephaly in some Zika-infected newborns and what it would mean for families. Microcephaly is a birth defect resulting in an abnormally small head. Babies with microcephaly often have smaller brains that might not have developed properly.

I knew my personal risk in Washington state was low because we don't have the mosquito that can transmit Zika here, but it did affect where I chose to go for vacation. My husband and I love international travel, but I knew I could prevent a Zika infection if we avoided those countries where Zika was circulating. It just wasn't worth the risk of becoming infected and potentially having a miscarriage or poor outcome for my baby.

Have there been any cases among pregnant women, and what have been the outcomes for their babies?

Yes, we've had thousands of people diagnosed with Zika virus infection in the U.S. In the past year, and over 1,845 have occurred in pregnant women. In 2016, about 1 in 10 pregnant women with confirmed Zika...
KING COUNTY CASE PART OF NATIONAL E.Coli OUTBREAK LINKED TO I.M. HEALTHY BRAND SOYNUt BUTTER

UPDATE (3/16/17):

A second child in King County was hospitalized for E. coli (STEC) O157:H7 linked to eating I.M. Healthy brand SoyNut Butter. The child is now recovering and has been discharged from the hospital.

On March 10, 2017, The SoyNut Butter Company expanded its recall of SoyNut Butter products to include Dixie Diner’s Club brand Carb Not Beanit Butter. The Centers for Disease Control and Prevention (CDC) recommends that consumers do not eat, and childcare centers, schools, and other institutions do not serve, any variety or size of I.M. Healthy brand SoyNut Butter, I.M. Healthy brand granola, or Dixie Diner’s Club brand Carb Not Beanit Butter, regardless of the date of purchase or the date listed on the container.

Original post (3/7/17):

A King County child is currently hospitalized with an E.coli infection that is part of a national outbreak of Shiga toxin-producing E. coli (STEC) O157:H7 linked to I.M. Healthy brand SoyNut Butter. As of March 7,
BECOME THE NEWS SOURCE
SOMETIMES YOU DON’T SEE CHANGES COMING...

Jessie Robillard is the manager at Roberto's Pizza and Pasta on Mercer Island. It's one of many restaurants ordered to close on Thursday after E. coli was found again in the community's water. (Mark Harrison / The Seattle Times)
ROBUST COMMUNICATIONS NETWORKS ARE KEY

News release

Social media retweets!

Schools and childcare

Coordinated messages from response partners: city, utilities, state department of health, emergency managers

Restaurant inspectors (boots on the ground)

Community Communications Network
From local news coverage:

“Experts said it is challenging to trace and locate the source of the contamination, describing it as a puzzle. The city is flushing water mains and continuing to take samples. Seattle Public Utilities has tested water in other areas but determined the problem is isolated to Mercer Island.”
**WHAT TO DO WHEN YOU ARE ISSUED A BOIL WATER ORDER**

A **Boil Water Order** is issued when bacteria or other organisms that may be harmful are found in the water supply. All food establishments must do the following during a boil water order:

1. **Stop Operations**
   - This means: Stop all food service until the order is removed
   - Including: cooking, food preparation, and washing

2. **During the Boil Water Order**
   - Hand washing
     - Wash hands with soap and warm water for 20 seconds
     - Dry hands with clean paper towels
     - After washing, use hand sanitizer
   - Throw away all fresh produce that was washed
   - Report any illnesses to Public Health 206-296-4774

3. **After the Order is Removed**
   - Flush all water lines for 5 minutes
   - Wash, rinse, and sanitize food contact surfaces and sinks
   - Empty and flush ice makers, clean and sanitize inside, and discard the first batch of ice
   - Drain beverage machines and flush water lines
   - Run dishwashers empty for at least two cycles
   - Wash, rinse and sanitize all utensils, cups and plates

4. **Re-Opening**
   Contact Public Health for re-opening inspection/approval: 206-263-9566

See other side for detailed instructions.

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**LEAN FORWARD**

Predevelop messages as much as possible
WILDFIRE SMOKE
WHAT WE DIDN'T ANTICIPATE

Saturday AM, still hazy, air quality still listed as "Unhealthy for Sensitive Groups" by Puget Sound Clean Air Agency. Even if you're not in a "sensitive group," avoid exercise outdoors. Children, pregnant women, diabetics, and those with heart or lung conditions (including asthma, COPD), a cold, history of heart attack or stroke) should stay indoors.

More: ow.ly/NmH5dEr7RJM
OUR APPROACH MOVING FORWARD

- Forecast potential for changing information: “Check updates frequently.”
- Point to other credible sources.
- Coordinate with partners on messaging.
KEY RISK COMMUNICATION PRINCIPLES

- Timeliness
- Transparency and openness
- Consistency
Please enter your questions or comments in to the Q&A box
Thank you for joining us!

Contact us with questions
Email: infectiousdiseases@naccho.org