

\*NOTICE: This health alert provides written guidance for health care professionals and others who may need to take action to prevent or control a notifiable condition. It is not intended to provide guidance for the general public.

# Update on Measles, Chikungunya, & Drug Resistant Shigella

Measles Exposure at a Large Gathering in Kentucky, February 2023, including Global Measles Outbreaks

### Action Requested:

- Consider measles as a diagnosis in anyone with a febrile illness and clinically compatible symptoms (e.g., rash, cough, coryza, or conjunctivitis) who:
  - Attended the Kentucky event at Asbury University during the exposure dates of February 17 or 18, 2023 or has had contact with an attendee.
  - Has recently traveled abroad, especially to countries with ongoing outbreaks.
- Immediately notify Thurston County Public Health and Social Services of any suspected measles cases at 360-867-2610 Monday - Friday 8am-5pm and at 1-800-986-9050 after hours to ensure rapid testing and investigation. Assess suspect measles case using the Washington State Department of Health Measles Assessment Sheet found at: <u>https://www.doh.wa.gov/Portals/1/Documents/Pubs/348-490-</u> MeaslesAssessmentQuicksheetProviders.docx
- Recommend MMR vaccine for patients who are unvaccinated or not fully vaccinated.
- Do not allow patients with suspected measles to remain in the waiting room or other common areas of the healthcare facility; isolate patients with suspected measles immediately, ideally in a single-patient airborne infection isolation room (AIIR) if available.
- Follow CDC's testing recommendations and collect either a nasopharyngeal swab, throat swab, or urine specimen for Reverse Transcription Polymerase Chain Reaction (RT-PCR) as well as a blood specimen for serology from all patients with clinical features compatible with measles. RT-PCR is available at many states public health laboratories and through the APHL/CDC Vaccine Preventable Disease Reference Centers. Nasopharyngeal or throat swabs are preferred over urine specimens.



- Collect the first (acute phase) serum specimen (IgM and IgG) as soon as possible upon suspicion of measles disease. If the acute-phase serum specimen collected ≤3 days after rash onset is negative and the case has a negative result for real-time RT-PCR (rRT-PCR), or one was not done, a second serum specimen collected 3–10 days after symptom onset is recommended because the IgM response may not be detectable until 3 days after symptom onset.
- HCP should use respiratory protection (i.e., a respirator), that is at least as protective as a fit-tested, NIOSH-certified disposable N95 filtering facepiece respirator, regardless of presumptive evidence of immunity, upon entry to the room or care area of a patient with known or suspected measles.
- Ensure all patients are up to date on MMR vaccine and other recommended vaccines.
- For people traveling abroad, CDC recommends that all U.S. residents older than 6 months be protected from measles and receive MMR vaccine, if needed, prior to departure.

### Background:

On February 24, 2023, the Kentucky Department for Public Health (KDPH) identified a confirmed case of measles in an unvaccinated individual with a history of recent international travel. While infectious, the individual attended a large religious gathering on February 17–18, 2023, at Asbury University in Wilmore, Kentucky. An estimated 20,000 people attended the gathering from Kentucky, other U.S. states, and other countries during February 17–18, and an undetermined number of these people may have been exposed.

With declines in measles vaccination rates globally during the COVID-19 pandemic, measles outbreaks are occurring in all World Health Organization (WHO) Regions. Large outbreaks (≥20 reported measles cases per million population over a period of 12 months) have been reported in the European, African, Eastern Mediterranean, and Southeast Asian Regions. The United States has seen an increase in measles cases from 49 in 2021 to 121 in 2022, all among children who weren't fully vaccinated, including outbreaks in Minnesota and Ohio.



#### Resources:

- Measles | Washington State Department of Health
- For Healthcare Professionals Diagnosing and Treating Measles | CDC
- Interim Measles Infection Prevention Recommendations in Healthcare Settings
  CDC
- Measles Vaccine Preventable Diseases Surveillance Manual | CDC
- Plan for Travel Measles | CDC

# Increased Chikungunya Virus Activity in Paraguay and Associated Risk to Travelers

# Action Requested:

- Consider chikungunya virus infection in travelers returning from Paraguay and surrounding countries with acute onset of fever and polyarthralgia.
- <u>Rule out dengue virus infection</u> in travelers with suspect chikungunya virus infection as these viruses often cocirculate and have similar clinical presentations during acute illness. Early clinical management of dengue can improve patient outcome.
- Manage travelers with suspect chikungunya with acetaminophen as the preferred first-line treatment for fever and joint pain in travelers returning from Paraguay and surrounding areas. Aspirin and other NSAIDS should not be used until dengue can be ruled out to reduce the risk of hemorrhage.
- Provide travelers to Paraguay and surrounding areas information on the risk of chikungunya and dengue and how to prevent these mosquito-borne infections.
- Inform returning travelers suspected to have chikungunya of the need to protect themselves from mosquito exposure during the first week of illness to prevent further transmission in communities where the vector is present (<u>Range of Ae.</u> <u>aegypti</u> and <u>Ae. albopictus</u> in the United States).
- Report suspected chikungunya cases to Thurston County Public Health and Social Services to facilitate diagnosis and mitigate risk of local transmission.



### Background:

There has been an increase in the number of cases of chikungunya reported in Paraguay. Most cases have been reported in the capital district of Asunción and the neighboring Central department. Chikungunya virus is a mosquito-borne alphavirus transmitted by infected mosquitoes, primarily Aedes aegypti and Aedes Albopictus. Humans are the primary reservoir during epidemics. Most people infected with chikungunya virus become symptomatic. The incubation period is typically 3–7 days (range 1–12 days). The most common clinical findings are acute onset of fever and polyarthralgia. Joint pains are usually bilateral, symmetric, and often severe and debilitating. Other symptoms can include headache, myalgia, arthritis, conjunctivitis, nausea, vomiting, or maculopapular rash. No specific antiviral treatments or vaccines are available for chikungunya. Treatment for symptoms can include rest, fluids, and use of analgesics and antipyretics. Diagnostic testing is available through commercial laboratories and CDC.

#### Resources

- CDC Chikungunya Virus
- CDC Chikungunya Virus Information for Healthcare Providers
- <u>CDC Factsheet Chikungunya information for healthcare providers</u>
- <u>CDC Travel Health Notices</u>

# Increase in Extensively Drug-Resistant Shigellosis in the United States

# Action Requested:

- **Consider shigellosis in the differential diagnosis of acute diarrhea**, especially for patients at higher risk for *Shigella* infection, including:
  - Young children
  - o MSM
  - People experiencing homelessness



- o International travelers
- o Immunocompromised persons
- People living with HIV
- If shigellosis is suspected,
  - Ask the patient about relevant exposures and social history, including <u>sexual activity</u>, housing status, and international travel.
  - When ordering diagnostic testing for *Shigella*, stool culture is preferred for patients who will require antimicrobial treatment.
- If a culture-independent diagnostic test (<u>CIDT</u>) is performed instead of culture and *Shigella* bacteria are detected, request on sample submission that the clinical laboratory perform reflex culture.
- If a culture is positive for *Shigella*, order antimicrobial susceptibility testing (AST) to inform antimicrobial selection.
- Most patients recover from shigellosis without antimicrobial treatment. Oral rehydration may be sufficient for many people with shigellosis. **Use AST results to guide antimicrobial treatment selection**, when possible.
- Encourage patients to inform you if symptoms do not improve within 48 hours after beginning antibiotics.
- To date, there are no CDC recommendations for treating XDR shigellosis in the United States; however, a <u>recent publication</u> from the United Kingdom outlined a possible strategy for treating severe XDR shigellosis using oral Pivmecillinam and Fosfomycin (for patients with prolonged symptoms or as oral step-down after intravenous treatment) or IV carbapenems and colistin (for hospitalized patients with severe infections or complications) [7].
  - XDR *Shigella* isolates in the United States typically do not carry resistance mechanisms for Fosfomycin or carbapenems.
  - Note: Pivmecillinam is not commercially available for use in the United States.



- Please counsel patients with suspected or confirmed shigellosis about measures they can take to keep others healthy. Patients taking antibiotics should continue to follow prevention measures. All patients with suspected or confirmed shigellosis should:
  - Stay home from school or from healthcare, food service, or childcare jobs while sick or until the health department says it's safe to return.
  - During diarrhea and for 2 weeks after it ends,
    - Abstain from sex (anal, oral, penile, or vaginal).
    - <u>Wash hands</u> often with soap and water for at least 20 seconds, including at key times such as after using the toilet, before and after changing diapers, cleaning up after someone who is sick, and before preparing or eating food.
    - Do not prepare food for others, if possible.
    - <u>Stay out of recreational water</u>, including swimming pools, hot tubs, water playgrounds, oceans, lakes, and rivers.
  - Closely follow safer sex practices for at least 2 weeks after resuming sex to prevent the spread of *Shigella* bacteria that may remain in stool.
  - Wash hands, genitals, and anus with soap and water before and after sexual activity.
  - Wash hands after touching sex toys, external and internal condoms, dental dams, and any other items that might have been in contact with the vagina or anus.
  - Use <u>condoms or dental dams</u> during oral-genital sex and oral-anal sex.
  - Use latex gloves during anal fingering or fisting.
  - $\circ$  Wash sex toys with soap and water after each use.



### Background:

*Shigella* bacteria are transmitted by the fecal-oral route, directly through person-toperson contact including sexual contact, and indirectly through contaminated food, water, and other routes. *Shigella* bacteria are easily transmitted because of the low infectious dose (as few as 10–100 organisms), and outbreaks tend to occur among people in close-contact settings. The Centers for Disease Control and Prevention (CDC) has been monitoring an increase in extensively drug-resistant (XDR) *Shigella* infections (shigellosis) reported through national surveillance systems [1]. In 2022, about 5% of *Shigella* infections reported to CDC were caused by XDR strains, compared with 0% in 2015. CDC defines XDR *Shigella* bacteria as strains that are resistant to all commonly recommended empiric and alternative antibiotics azithromycin, ciprofloxacin, ceftriaxone, trimethoprim-sulfamethoxazole (TMP-SMX), and ampicillin.

#### Resources:

- Shigella and Shigellosis
- <u>Shigella Information for Specific Groups (including healthcare and public health</u> professionals)
- Handwashing and Hand Hygiene in Healthcare Settings
- Antimicrobial Resistance
- Antibiotic Prescribing and Use

COMMUNICABLE DISEASE CONTROL AND PREVENTION SECTION THURSTON COUNTY PUBLIC HEALTH AND SOCIAL SERVICES DEPARTMENT 412 LILLY RD NE OLYMPIA, WA, 98506-5132 DISEASE REPORTING: (360)786-5470



3/6/2023

#### THANK YOU FOR REPORTING

TO REPORT A NOTIFIABLE CONDITION IN THURSTON COUNTY	
Voice mail for reporting <b>non-immediately reportable</b> conditions (24 hours a day)	Phone: 360-786-5470 Fax: 360-867-2601
Reporting a Notifiable Condition   Thurston County (thurstoncountywa.gov)	
<b>Day time immediately reportable conditions –</b> Call detailed information to the 24-hour Notifiable Condition Reporting Line at 360-786-5470. Messages are picked up hourly. If a call back can't wait call 360-867-2500 and ask staff to locate a Communicable Disease staff.	Phone: 360-786-5470
After hours immediately and 24-hour reportable conditions or a public health emergency	Call 1-800-986-9050
No one is available with Thurston County Public Health and condition is <b>immediately notifiable</b>	1-877-539-4344

Communicable Disease Updates are posted online at: <u>Communicable Disease Updates |</u> <u>Thurston County (thurstoncountywa.gov)</u>