

May 5, 2017

CDC recommendations on emergent *Shigella* strains with reduced susceptibility to Ciprofloxacin

Actions Requested

- Be aware of increasing antibiotic resistance among *Shigella* strains.
- Obtain cultures and order antimicrobial sensitivities when testing for *Shigella*.
 - Request ciprofloxacin testing that includes dilutions of 0.12 µg/mL or lower.
- Do not routinely prescribe antibiotic therapy for *Shigella* infection; reserve for patients for whom it is clinically indicated or when public health officials advise it in an outbreak setting. When treatment is indicated (e.g., patients who are immunocompromised, require hospitalization, have invasive disease, or have complications), tailor antibiotic choice to antimicrobial susceptibility results as soon as possible.
- Avoid prescribing fluoroquinolones if the ciprofloxacin minimum inhibitory concentration (MIC) is 0.12 µg/mL or higher, *even if* the laboratory report identifies the *Shigella* isolate as susceptible.
- Obtain follow-up stool cultures in shigellosis patients who have continued or worsening symptoms despite antibiotic therapy.
- Counsel patients with active diarrhea on how they can prevent spreading the infection to others.
- Call us to report shigellosis cases within 24 hours of diagnosis and for guidance on when patients may return to childcare, school, or work. It is especially important to report cases with a ciprofloxacin MIC of 0.12–1 µg/mL to facilitate further testing of the isolate.

For questions, please contact our Communicable Disease staff at 360-728-2235.

Background

The Centers for Disease Control and Prevention (CDC) issued an advisory (*see link below*) regarding the concerning emergence of *Shigella* strains with elevated minimum inhibitory concentration (MIC) values for Ciprofloxacin. The advisory includes clinical guidance for the diagnosis, management, and treatment of patients with shigellosis. The key points are summarized above, though we encourage you to refer to the CDC advisory for full details.

We remind you that culture-independent diagnostic testing (such as PCR, EIA, or DNA probe) does not provide an isolate and therefore cannot be used to assess susceptibility. Even when treatment is not indicated, ordering susceptibility testing will help identify patients with drug-resistant infections and help inform public health management.

Recommendations for patients with active diarrhea include: 1) wash hands with soap and water for at least 20 seconds, especially after using the toilet, after handling a soiled diaper, and before eating; 2) avoid preparing food for others; 3) wait to have sex (vaginal, anal, or oral) until 2 weeks after diarrhea has resolved, because *Shigella* may still be in stool for several weeks. Persons should not work as food handlers or attend child care as long as they have diarrhea.

Resources

- CDC Health Advisory: “Recommendations for Diagnosing and Managing *Shigella* Strains with Possible Reduced Susceptibility to Ciprofloxacin” (April 18, 2017): <https://emergency.cdc.gov/han/han00401.asp>.
- CDC *Shigella* webpage: <https://www.cdc.gov/shigella/>