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Health Advisory

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CDC Recommendations for Diagnosing and Managing *Shigella* Strains
with Possible Reduced Susceptibility to Ciprofloxacin

Please distribute to all providers and staff in your practice

Current Situation:

The CDC has issued a Health Advisory describing the identification of emerging *Shigella* strains with elevated minimum inhibitory concentration values for ciprofloxacin and outlines new recommendations for clinical diagnosis, management, and reporting, as well as new recommendations for laboratories and public health officials.

CDC has identified an increase in *Shigella* isolates in the United States with minimum inhibitory concentration (MIC) values of 0.12–1 µg/mL for the fluoroquinolone antibiotic ciprofloxacin. Preliminary data suggest that all *Shigella* isolates with ciprofloxacin MICs in this range harbor at least one quinolone resistance gene known to confer reduced susceptibility in enteric bacteria.

Fluoroquinolone resistance is of particular concern given that data from the National Antimicrobial Resistance Monitoring System indicate that many *Shigella* isolates with a quinolone resistance gene also are resistant to many other commonly used treatment agents, such as azithromycin, trimethoprim-sulfamethoxazole, amoxicillin-clavulanic acid, and ampicillin.

The emergence of *Shigella* species with ciprofloxacin MICs of 0.12–1 µg/mL and their association with quinolone resistance genes raises the following concerns:

- Fluoroquinolone treatment of *Shigella* infection with a strain harboring a quinolone resistance gene may be less effective and may increase the risk of a more severe clinical course for the individual (e.g., increased duration or severity of symptoms, increased need for hospitalization or admission to an intensive care unit, increased length of hospitalization, or increased risk of death).
- Fluoroquinolone treatment of *Shigella* infection with a strain harboring a quinolone resistance gene also may increase the risk of secondary cases, if the treatment prolongs the duration or increases the quantity of organisms shed in the stool, given the very low infectious dose required for transmission of *Shigella* bacteria

Please see the following link to the complete advisory for clinician recommendations on diagnosis, management and reporting.

[HAN Archive - 00401 | Health Alert Network \(HAN\)](#)

Sources for Information:

- Center for Disease Control (CDC): [Shigella – Shigellosis | Shigella – Shigellosis | CDC](#)
- City of Berkeley Public Health Division: <http://www.ci.berkeley.ca.us/publichealth>
- California Department of Public Health (CDPH): [Shigellosis](#)
City of Berkeley Public Health: Health Advisory - Zika Virus and Use of Commercial Labs for Testing (03/03/2017)

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