

CHERYL BETTIGOLE, MD, MPH Health Commissioner SHARA EPSTEIN, MD Medical Director, Division of Disease Control LANDRUS BURRESS, DRPH Director, Division of Disease Control

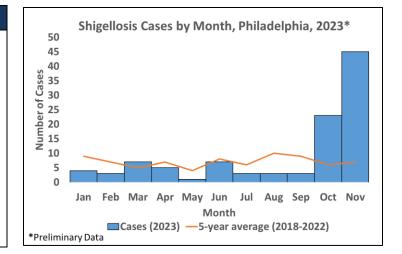
Health Advisory

Increase in Shigella Cases in Philadelphia

December 11, 2023

SUMMARY POINTS

- After an initial increase in shigella cases in October, cases have continued to increase in November and into December.
- Cases are being reported most among people experiencing homelessness and opioid use disorder.
- No cases of XDR Shigella have been identified
- Varying resistance patterns are being identified. Shigella in the current outbreak is most often but not always sensitive to trimethoprimsulfamethoxazole.



Shigellosis is an acute enteric infection that can cause bacterial diarrhea. Diarrhea may be bloody and associated with fever, abdominal pain, and tenesmus. Shigellosis is often self-limited, but sometimes requires treatment with antibiotics. Treatment can shorten the course and limit further transmission.

Shigella is a bacteria transmitted by the fecal-oral route via person-to-person contact, including sexual contact, or through contaminated food and water. To prevent shigella, providers should encourage individuals to wash their hands thoroughly with soap and warm water after using the bathroom and before handling food. Persons who do not have access to soap and water should use hand sanitizer with at least 60% alcohol. Advise persons ill with shigella to wash hands often, refrain from preparing food for others, and to not have sex for two weeks after diarrheal illness or use condoms and other barriers to reduce spread to others.

There have been 68 cases identified among adults and 12 cases identified among children since October 1, 2023. Investigations suggest that most adults testing positive are experiencing homelessness or opioid use disorder. Among the cases, different species and serovars have been identified indicating that more than one cluster is possibly occurring. However, the most prevalent serovar among the serotyped isolates is *Shigella flexneri* serovar 3. *Shigella flexneri* serovar 2, *Shigella flexneri* serovar Y and *Shigella sonnei* have also been identified. Bacteremia has been identified in several cases. Thus far, antibiotic resistance testing results were obtained for 29 isolates, and the majority (21, 72%) were sensitive to trimethoprim-sulfamethoxazole. Of isolates tested for ciprofloxacin susceptibility, 23% (6/26) were sensitive to ciprofloxacin. Only 22 specimens were tested for ceftriaxone susceptibility with 32% sensitive. Most isolates are resistant to azithromycin and ampicillin. Antimotility agents are not recommended during treatment of shigellosis.

Shigellosis is a reportable disease in Philadelphia. Labs and clinicians should report all cases of shigellosis with antibiotic susceptibility test results to the Philadelphia Department of Public Health's Division of Disease Control through electronic laboratory reporting, faxing a report to 215-238-6947, or calling 215-685-6748. All positive isolates or specimens are required to be submitted to the Pennsylvania Department of Health Bureau of Laboratories within five workdays of the positive test result.

Providers using culture-independent diagnostic test (CIDT) instead of culture for diagnosis of enteric infections should request that the clinical laboratory perform reflex culture when CIDT is positive for Shigella species. If a culture is positive for Shigella, order antimicrobial susceptibility testing to inform antimicrobial selection.



Resources

- CDC Shigellosis Information for Healthcare Providers: <u>https://www.cdc.gov/shigella/audience-medical-professionals.html</u>
- CDC Shigellosis Among People Experiencing Homelessness: <u>https://www.cdc.gov/shigella/specific_groups/people-experiencing-homelessness.html</u>
- PA HAN 726 Statewide Increase in Shigellosis Cases in Pennsylvania: <u>https://www.health.pa.gov/topics/Documents/HAN/2023-726-11-15-ADV-Shigellosis.pdf</u>