

Division of Disease Control

THOMAS FARLEY, MD MPH Health Commissioner CAROLINE C. JOHNSON, MD Acting Deputy Health Commissioner & Director, Division of Disease Control

Health Advisory Increase in Shigellosis Infections in Philadelphia July 5, 2016

The Philadelphia Department of Public Health (PDPH) has detected a significant increase in the number of shigellosis reports received over the past 6 months (Figure 1). Cases are being identified throughout the city but are most concentrated in West Philadelphia (Figure 2). Approximately 45% of the 2016 cases are in children aged 5 years and younger, with 66% attending daycare facilities. As in previous years, there is a high level of resistance to some commonly-used antibiotics, including ampicillin (86% of tested isolates) and trimethoprim-sulfamethoxazole (Bactrim^R) (45% of tested isolates).

Shigellosis has a very low infectious dose, is highly contagious, and is spread through the fecal-oral route. Symptoms of shigellosis typically begin one to four days after exposure and include diarrhea, fever, abdominal cramps, nausea, and/or vomiting. Severe complications including dehydration, bacteremia, and seizures may develop in young children, the elderly, and immunocompromised individuals.

Figure 2: Rates of Laboratory-Confirmed Shigellosis by Zip Code (191XX) in Philadelphia, PA, 2016 to date

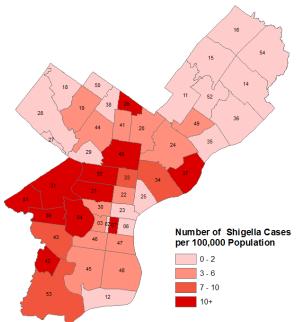
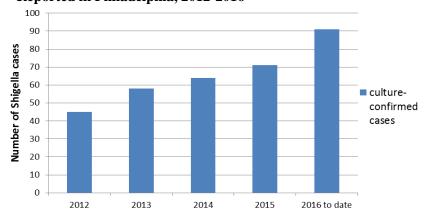


Figure 1: Number of Culture-Confirmed Shigella Cases Reported in Philadelphia, 2012-2016



Healthcare providers are advised to culture the stool of patients presenting with symptoms consistent with shigellosis and to request antimicrobial susceptibility testing on all *Shigella* isolates. Antibiotic therapy may help to shorten the duration of illness and reduce disease transmission, but is typically reserved for patients with severe disease, who are immunocompromised, or working in high-risk settings (childcare, healthcare, foodhandling). Treatment should be tailored on the basis of antimicrobial susceptibility testing. Individuals who work in or attend high-risk settings are to be excluded from these settings until two negative stool cultures are obtained after completion of antimicrobial therapy. Both symptomatic and asymptomatic household contacts who work in or attend high-risk settings are also to be excluded until two negative stool cultures are obtained.

Report all cases of shigellosis to PDPH by calling 215-685-6748 or faxing a disease report form to 215-238-6947.

Careful attention to hand hygiene is important in limiting the spread of infection. All patients should be reminded to wash hands with soap and water after using the bathroom or changing diapers. In addition, as PDPH has noted an increase in the number of sexually-acquired shigellosis infections particularly among the MSM demographic over the last few years, healthcare providers are encouraged to educate adult patients that shigellosis can be acquired via sexual activity, particularly through oral-anal and oral-genital contact. The use of latex barriers such as condoms and dental dams can reduce the risk of transmission.