



Philadelphia Department of Public Health
Division of Disease Control

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Health Advisory
Shigella Transmission Among Children in Childcare and Other Settings
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In the last week, the Philadelphia Department of Public Health Division of Disease Control has received reports of cases of *Shigella* infection among young children who attend a large child care program in North Philadelphia. There has been secondary spread to household and other close contacts of these cases. In addition, *Shigella* infection has been reported in children who attend other congregate settings, including school and summer camp. *Shigella* is highly contagious, and young children with infection who attend child care are subject to city and state communicable disease control regulations. This communication summarizes those regulations, and provides additional public health recommendations to control the spread of *Shigella* in the community.

1. No child or staff person with probable infectious diarrhea (e.g., acute onset) should participate in a group setting, such as child care, camp, school, etc, while they are symptomatic, regardless of the cause of the illness.
2. Healthcare professionals should obtain stool cultures from persons who participate in child care or preschool programs who present with diarrhea, irrespective of whether there is a recognized outbreak of gastrointestinal illness in the facility. Other bacterial infections (e.g., *Salmonella*, *Campylobacter*) are also circulating among this age group, and these are both important to recognize and often subject to similar restrictions.
3. When *Shigella* infection is identified in a child care attendee or staff member, stool specimens from other symptomatic attendees and staff should be cultured. Stool specimens from other household contacts who have diarrhea should also be cultured.
4. All symptomatic people whose stool specimens yield *Shigella* should receive appropriate antimicrobial therapy. Antimicrobial resistance is common; susceptibility data should guide therapy. Recent isolates have been resistant to ampicillin but susceptible to trimethoprim-sulfamethoxazole (TMP-SMX or Bactrim) and flouoroquinolones. Therapy is typically administered for 5 days. Resistance to other antimicrobials may emerge during prolonged outbreaks.
5. Children and staff with *Shigella* must have two negative stool cultures, obtained at least 48 hours after the last dose of antibiotic and at least 24 hours apart, prior to returning to child care facilities. The same restrictions apply to persons with *Shigella* who are healthcare workers or employed as food handlers. Older, school-age children may return to school once no longer symptomatic, without proof of negative stool cultures, if the facility provides adequate access to hand washing, and the children maintain good hygiene.
6. Asymptomatic persons who continue to shed *Shigella* from stool are considered carriers and must be excluded from child care settings, or employment in healthcare or food handling until they have two negative stool cultures. To reduce the spread of illness throughout the community, PDPH may work with specific facilities to develop a cohort system to accommodate long-term shedders.
7. Attention to hand hygiene is important to limit spread. Counsel all patients with diarrheal illness, particularly *Shigella*, to wash hands after using the bathroom, changing diapers, and before preparing food. Young children should be instructed to wash hands after using the toilet and supervised.

To report a case of *Shigella*, or to obtain additional information, contact the Division of Disease Control (DDC) at 215-685-6740. To reach a DDC representative after normal business hours, call 215-686-1776 and ask to speak with the person on-call for the division.