



DATE:	3/8/2016
TO:	Health Alert Network
FROM:	Karen Murphy, PhD, RN, Secretary of Health
SUBJECT:	Shigellosis Outbreak: Delaware and Lancaster counties
DISTRIBUTION:	Southeastern Pennsylvania
LOCATION:	Southeastern Pennsylvania
STREET ADDRESS:	N/A
COUNTY:	N/A
MUNICIPALITY:	N/A
ZIP CODE:	N/A

This transmission is a “Health Advisory”: provides important information for a specific incident or situation; may not require immediate action.

HOSPITALS: PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, INFECTION CONTROL, NURSING, AND LABORATORY STAFF IN YOUR HOSPITAL

EMS COUNCILS: PLEASE DISTRIBUTE AS APPROPRIATE

FQHCs: PLEASE DISTRIBUTE AS APPROPRIATE

LOCAL HEALTH JURISDICTIONS: PLEASE DISTRIBUTE AS APPROPRIATE

PROFESSIONAL ORGANIZATIONS: PLEASE DISTRIBUTE TO YOUR MEMBERSHIP

The Pennsylvania Department of Health (PADOH) is currently investigating outbreaks of shigellosis (i.e., *Shigella* infection) linked to daycare facilities in Delaware and Lancaster counties.

Shigellosis is characterized by diarrhea (often bloody) accompanied by fever, nausea, vomiting, and abdominal cramps. Illness is generally self-limited, with symptoms lasting an average of four (4) to seven (7) days. Individuals remain infectious until bacterial carriage and shedding subsides, which generally occurs after four (4) weeks.

In order to reduce *Shigella* transmission and outbreak spread, **the Pennsylvania Department of Health requests that all healthcare providers maintain a high index of suspicion for shigellosis (i.e., *Shigella* infection) in persons presenting with symptoms clinically compatible with *Shigella* (e.g., diarrhea [both bloody and not bloody], fever, nausea, vomiting, and/or abdominal cramps), especially if these persons are associated with a childcare facility. Stool cultures should be collected for *Shigella* testing and inquiries**

should be made regarding the food handler, child care provider, or healthcare worker status of the ill individual's close contacts.

Shigella is transmitted via the fecal-oral route (direct or indirect) and is highly contagious, with an infectious dose of only 10-100 organisms. Due to this highly infectious nature, infected individuals working and/or functioning in high-risk situations where transmission is particularly likely (young children who attend childcare facilities, staff members at childcare facilities, healthcare workers, and food handlers) are subject to state communicable disease control regulations. These regulations, along with additional public health recommendations regarding shigellosis, are summarized as follows:

1. No child or staff member with acute onset diarrhea should attend group settings, 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 attend child care or preschool programs who present with diarrhea, irrespective of whether there is a recognized cause of an outbreak of gastrointestinal illness in the facility. Other bacterial infections (e.g., *Salmonella*, *Campylobacter*) also can occur in this age group, and these are important to recognize in order to prevent transmission to others.
3. For symptomatic persons who test culture positive for *Shigella*, antibiotic therapy can be considered. Antibiotics should be used on a case-by-case basis, considering illness severity and/or the protection of vulnerable populations. Since antimicrobial resistance is common among *Shigella*, antibiotic selection should be made according to available; susceptibility data
4. When *Shigella* infection is identified in a child care setting, either in an attendee or staff member:
 - a. Stool specimens should be obtained from other symptomatic attendees and symptomatic staff members. Additionally, stool samples should be obtained from close contacts of the confirmed (i.e., *Shigella* culture positive) case(s).
 - b. Infected children and staff 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.
 - c. Older, school-age children may return to school, without proof of negative stool cultures, once they are no longer symptomatic, if the facility provides adequate access to hand washing and the children maintain good hygiene.
5. When *Shigella* infection is identified in persons who are healthcare workers or employed as food handlers:
 - a. Stool specimens should be obtained from other symptomatic staff members at the facility. Additionally, stool samples should be obtained from close contacts of the confirmed (i.e., *Shigella* culture positive) case(s).
 - b. Infected healthcare workers or food handlers 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 work.
6. Asymptomatic persons who continue to shed *Shigella* from stool (i.e., *Shigella* culture positive) are considered carriers, and are therefore capable of transmitting infection. These

persons must be excluded from child care settings and employment in healthcare or food handling roles until they have two negative stool cultures.

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 when doing so.

Any questions or concerns regarding these recommendations should be directed to the Pennsylvania Department of Health at 1-877-PA-HEALTH. Further information on shigellosis is available on the PADOH web site at www.health.pa.gov or the web site of the Centers for Disease Control and Prevention at www.cdc.gov.

This information is current as of March 8, 2016, but may be modified in the future. We will continue to post updated information regarding the most common questions about this subject.
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