

Shigellosis Investigation Overview

The following guidelines provide a brief overview of the steps of a Shigellosis investigation. Shigellosis is an infectious disease caused by a group of bacteria called *Shigella* (shih-GEHL-uh). Most who are infected with *Shigella* develop diarrhea, fever, and stomach cramps starting a day or two after they are exposed to the bacteria. Some people who are infected may have no symptoms at all but may still pass the *Shigella* bacteria to others.

For additional support, consult the NC Communicable Disease Branch at (919) 733-3419.

Basic Steps of a Shigellosis Investigation

1. Ensure case definition is met	<ul style="list-style-type: none">• Clinical criteria are not required for the Shigellosis case definition as asymptomatic cases may occur• Evaluate laboratory result to determine if requirements for case definition are met<ul style="list-style-type: none">• If laboratory evidence is missing, symptomatic epi-linked individuals are probable cases
2. Collect clinical information	<ul style="list-style-type: none">• Use information collected from medical records and/or• Interview the case and complete the Part 2 Form/risk history and clinical packages in NCEDSS• Epidemiologic linkages to similarly ill individuals and other risk factors• If 2 or more cases are identified report as an outbreak
3. Incubation period	<ul style="list-style-type: none">• The incubation period is usually 12 – 96 hours• The duration is usually 7 days
4. Manage the case	<ul style="list-style-type: none">• Ensure positive specimens are forwarded to the SLPH if the <i>Shigella</i> species (e.g. <i>dysenteriae</i>, <i>flexneri</i>, <i>boydii</i>, <i>sonnei</i>) is not already known.• Interview the case and complete the Part 2 Form/risk history and clinical packages in NCEDSS• Most people with <i>Shigella</i> infection recover without specific treatment
5. Identify symptomatic contacts	<ul style="list-style-type: none">• Symptomatic contacts may be an indication of an outbreak<ul style="list-style-type: none">• Contacts have direct contact with a confirmed case (symptomatic person who is epidemiologically linked)• Symptomatic contacts (with no laboratory confirmation) to a case should be investigated as “probable” cases• Symptomatic individuals in high-risk settings (food employees, healthcare workers, childcare workers/attendees) will need to be excluded. See “Symptomatic cases in high-risk settings” section below for specific control measures.• Most people with <i>Shigella</i> infection recover without specific treatment
6. Identify source of exposure	<ul style="list-style-type: none">• If source of exposure is suspected to be restaurant related (or childcare or long-term care), involve Environmental Health Specialist to ensure appropriate disinfection of contaminated areas.

<p>7. Implement Control Measures</p>	<ul style="list-style-type: none"> • Due to small infective dose exclude the following: <ul style="list-style-type: none"> • Food handlers, healthcare, and childcare workers until asymptomatic and one negative stool culture is collected not sooner than 48 hours after completion of antibiotic. • Childcare centers (single case) – Exclude until asymptomatic and 1 negative stool cultures is collected not sooner than 48 hours after completion of antibiotic. <ul style="list-style-type: none"> • Outbreak (two or more cases in the same facility) - Ill children should be excluded until asymptomatic and 1 negative stool culture not sooner than 48 hours after completion of antibiotic. Strict hand hygiene should be followed. The childcare center should be closed to new admissions during the outbreak. Also, prevent transfer of exposed children to other centers. Partner with Environmental Health Specialist by requesting they perform an assessment of practices associated with diapering, hand washing and food handling. • See Shigellosis Control Measures for Childcare Centers and K-12 Schools for detailed control measure guidance in these settings. • Involve Environmental Health Specialist to ensure appropriate disinfection of contaminated areas of restaurant, childcare center or long-term care facility.
<p>➤ Risk Communications</p>	<ul style="list-style-type: none"> ➤ Individual cases do not usually warrant risk communication. ➤ Outbreaks of cases may need additional alerts to various groups (e.g. clinicians, public health officials in other jurisdictions) and/or a press release. The state foodborne team is available to assist with these activities.
<p>*High-risk contacts include individuals at high-risk for severe illness or complications, healthcare workers, childcare workers and food handlers</p> <ul style="list-style-type: none"> ➤ Resources – Shigella – Shigellosis Shigella – Shigellosis CDC ➤ Shigellosis Control Measures for Childcare Centers and K-12 Schools 	
<h2>Critical Elements for NCEDSS</h2>	
<ul style="list-style-type: none"> ➤ Document if high risk (food worker, childcare attendee/worker or healthcare worker) ➤ Document if patient resides or has been in a congregate living situation (LTCF, Assisted Living, Camp, etc.) 	