

LOCAL HEALTH DEPARTMENT DISEASE INVESTIGATION STEPS

NC REPORTABLE DISEASE/CONDITION		INFECTIOUS AGENT(S)
Shigellosis		<i>Shigella</i> species
PREPARING FOR INVESTIGATION		
KNOW THE DISEASE/CONDITION	<ul style="list-style-type: none"> • Read about Shigellosis in the CD Manual. • See the case definition for Shigellosis in the CD Manual. • Study APHA <i>Control of Communicable Diseases Manual</i>, 20th Edition, pp 556 - 561. • Refer to CDC MMWR: Outbreaks of Multidrug-Resistant <i>Shigella sonnei</i> Gastroenteritis Associated with Day Care Centers – Kansas, Kentucky and Missouri, 2005. October 6, 2006; 55(39); pp 1068- 1071. Available from: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5539a3.htm • Print and review reporting forms: <ul style="list-style-type: none"> <i>Part 1: Confidential Disease Report (DHHS 2124)</i> <i>Part 2: Shigellosis (DHHS/EPI # 39)</i> 	
CONDUCTING INVESTIGATION		
COLLECT CLINICAL INFORMATION	<ul style="list-style-type: none"> • Review surveillance for completeness. If surveillance is not complete contact healthcare provider. • Before contacting the patient, verify what information the healthcare provider has shared with the patient/family. 	
REVIEW LABORATORY INFORMATION	<ul style="list-style-type: none"> • Evaluate laboratory result to determine if requirements of the case definition are met. • Ensure reporting laboratory has forwarded the specimen to the SLPH for serotyping. 	
APPLY THE CASE DEFINITION	<ul style="list-style-type: none"> • Use the case definition to determine if the information you have makes this a reportable case. 	
IMPLEMENTING CONTROL MEASURES		
ATTEMPT TO IDENTIFY SOURCE OF EXPOSURE	<ul style="list-style-type: none"> • Interview the patient (use the Part 2 Form). • Ask about contact to other individuals with similar symptoms. More than one case may be an outbreak. • Determine if the case is a childcare worker or attendee, healthcare worker or food handler. 	
IMPLEMENT CONTROL MEASURES TO PREVENT DISEASE AND ADDITIONAL EXPOSURES	<ul style="list-style-type: none"> • Strict attention to hand hygiene is essential to limit the spread of <i>Shigella</i>. • For any suspect or confirmed case(s) of <i>Shigella</i> associated with a childcare center or school please refer to the Shigellosis Control Measures for Childcare Centers and K – 12 Schools and call the Epi On Call at 919-733-3419 for further guidance. • Healthcare workers and child care workers – Due to the small infective dose, exclude from work until asymptomatic and have tested negative on stool 	

	<p>specimen per the “Readmission Testing Protocol” in the “Shigellosis Control Measures for Childcare Centers and K – 12 Schools” not sooner than 48 hours after completion of antibiotics if prescribed and taken. Provide instruction on best practice hand hygiene.</p> <ul style="list-style-type: none"> • Due to the small infective dose, exclude food employees from work. Inform Environmental Health Specialist and CD Branch if an ill food employee has been excluded. • Readmission for food employees should be determined in consultation with your Environmental Health Specialist, based on criteria set in the North Carolina Food Code Manual.
REPORTING INVESTIGATION	
REPORT TO THE NC COMMUNICABLE DISEASE BRANCH (CD)	<ul style="list-style-type: none"> • Enter Part 1 and Part 2 Communicable Disease Reports into NC EDSS as a new event, or update the existing event if already entered. • Assign event to State Disease Registrar when case investigation complete.
CASE FINDING	<ul style="list-style-type: none"> • During the course of the investigation, look for symptoms of disease in other exposed individuals (other infants in childcare or household contacts, for example). • Refer symptomatic individuals to healthcare provider for evaluation. • If two or more cases are found that are epidemiologically linked, report as an outbreak of Shigellosis. • If indicated, submit Outbreak Summary Report within 30 days from close of outbreak. • If additional testing is necessary advise individuals to bring specimens in to be processed ASAP after collection as the <i>shigella</i> organism remains viable for only a short time outside the body.
SPECIAL CONSIDERATIONS	
SMALL INFECTIVE DOSE	<ul style="list-style-type: none"> • <i>Shigella</i> is easily transmitted due to the small infectious dose.
MODE OF TRANSMISSION	<ul style="list-style-type: none"> • Although transmission is mainly fecal-oral, contaminated food and/or water has also been implicated.
HAND WASHING	<ul style="list-style-type: none"> • Hand washing is the single most important measure to prevent the spread of <i>shigellosis</i>. Include the importance of cleaning under the fingernails when educating.
ANTIBIOTIC USE	<ul style="list-style-type: none"> • Antibiotics may shorten the duration and severity of the illness as well as the duration of pathogen excretion. The decision to prescribe should be a clinical, not a public health one.

SPECIMEN SITES	<ul style="list-style-type: none"> • Shigellosis that is lab confirmed at sites other than the GI tract is reportable whether symptomatic or not.
RISK COMMUNICATION	<ul style="list-style-type: none"> • Outbreaks of this disease in child care or schools will generate concern among parents, health professionals, and the media. Be prepared to answer questions and offer preventative measures. • Consider using risk communication tools conservatively if this is a low profile case. • Outbreaks of cases will need NC HAN alerts, EPI-X reports, MD alerts, and probably a press release. • NC DHHS Public Information Office (919) 733-9190 is available to assist local health departments as needed.