

LOCAL HEALTH DEPARTMENT DISEASE INVESTIGATION STEPS

| NC REPORTABLE DISEASE/CONDITION | NC DISEASE CODE | INFECTIOUS AGENT(S) |
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| Shigellosis | 39 | <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 | |

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| | <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. • Do an “Event_Print” in NC EDSS after assigning to the state. Keep for one year along with any additional notes. Maintain as a surveillance file, not a medical record. |
| 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. |

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| 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. |