

Shigella

Site Applicability

All PHC Acute and Long Term Care Sites.

Practice Level

Basic: Physicians, NPs, Nursing, Clinical Nurse Leader, Clinical Site Coordinator, Bed Placement Coordinator

Standards

In addition to Routine Practices, <u>Contact Plus Precautions</u> will be initiated for all patients who are suspected to have infectious diarrhea while the causative pathogen has yet to be identified. Once Shigella has been confirmed by testing, then <u>Contact Precautions</u> will replace Contact Plus Precautions.

The patient will remain on Contact Precautions until 48 hours after symptoms resolve OR 7 days after the first dose of appropriate antibiotics.

Screening for Shigella will be initiated by the MRP after assessing for risk factors and reviewing the patient's clinical presentation.

Description of the Disease

Shigella spp. can cause an infection known as shigellosis. There are four species of Shigella, but two are commonly identified in BC: Shigella flexneri and Shigella sonnei. Other species may be acquired during international travel. Shigella is spread via the fecal-oral route, and it takes a very small amount of bacteria to cause an infection in an exposed individual. Once infected, the host develops gastrointestinal symptoms and diarrhea that may be bloody. Occasionally, the bacteria can get in the bloodstream. Shigellosis generally resolves without treatment, but antibiotics may be offered for severe illness or to limit the infectious period.

Signs & Symptoms

People with shigellosis may experience:

- Diarrhea that may be bloody
- Fever
- Abdominal pain
- Urgency and incontinence
- Nausea and vomiting

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Incubation Period

After exposure to Shigella, individuals most often develop symptoms in one to three days.

Period of Communicability

Individuals remain infectious and shed Shigella in stool usually for four weeks unless treated with antibiotics, which shortens the period of infectivity.

Routes of Transmission

Shigella bacteria can spread via direct contact with feces or via indirect contact with contaminated surfaces.

Populations at Risk

Patients at high risk for Shigellosis include:

- Those who live with someone infected with Shigella or in shared living facilities such as shelters especially when adequate sanitation is lacking.
- Those who have travelled to endemic areas
- Gay, bisexual, and other men who have sex with men for whom transmission may occur during sexual activity.
- Those who have weakened immune systems are prone to more serious infections.

Assessment and Intervention

Infection Control Precautions

 Additional Precautions: In addition to Routine Practices, <u>Contact Precautions</u> will be implemented for all patients with known or suspected shigellosis. Contact Plus Precautions may initially be ordered in Cerner due to documentation of syndromic symptoms or due to lab test (e.g., stool culture) being ordered but should be replaced by Contact Precautions once Shigella has been identified.

Precautions should be maintained until symptoms have resolved for 48 hours or 7 days after the first dose of appropriate antibiotics was given.

The most responsible nurse will ensure Contact Precautions are ordered in Cerner and post the appropriate sign on the door (i.e., Contact).

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- Hand Hygiene: Hands should be cleaned before and after every patient contact, as well as after touching potentially contaminated items in the environment (i.e. commodes). Using an alcohol based hand rub solution is preferred if hands are not visibly soiled.
- Patient Placement: Preferred accommodation in acute care for patients with known or suspected shigellosis is a single room with a dedicated toilet and patient sink. The door may remain open. If single rooms are unavailable, patients may be placed with other patients provided they have a dedicated commode or bathroom. In this situation, please contact IPAC
- **Equipment:** Dedicate equipment whenever possible. Clean and disinfect shared patient equipment routinely and between different patients/residents. Clean commodes regularly and wipe touchable surfaces (armrest, seat and back) with disinfectant wipes between patients.
- **Environment:** All high-touch surfaces in the patient's room must be cleaned and disinfected at least <u>three times daily</u>. The Infection Control Practitioner shall initiate a request for Enhanced Cleaning as soon as possible once patient placement is known. Following discharge of the patient, the room should have a terminal clean carried out prior to the next patient being admitted.
- **Visitors:** Education should be provided regarding hand hygiene, and visitors must perform hand hygiene before entry and on leaving the room. PPE (gown and gloves) is not required unless the visitor is providing <u>direct care</u>.
- **Patient Transport:** The patient will remain in their room unless absolutely necessary. When the patient is required to leave the room for diagnostic or rehabilitative purposes:
 - Notify receiving department <u>prior to transport</u> of the precautions in place.
 - Encourage and/or assist patient to clean their hands.
 - Assist the patient to use the bathroom prior to transport and use incontinence products as needed during transport.

Lab Testing

• The MRP will order a Stool C&S. Stool should be collected in an empty sterile container without preservatives (i.e., orange top sterile container). If collection is challenging, a rectal swab may be collected and sent for a PCR testing as an alternative.

Treatment

- Shigella may be treated empirically with antibiotics or once sensitivity is known.
- If the medical team has antibiotic therapy questions, they should consult Antimicrobial Stewardship or the ID consult team.

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Transfer/Discharge Planning

Notify the receiving facility, hospital, nursing home or community agency involved in the
patient's care of their status if patient is being discharged before resolution of symptoms or
completion of treatment.

Documentation

- Ensure order for Contact Precautions is in patient's Cerner chart and present in Cerner banner bar.
- Complete stool charting in Cerner Interactive View and I&O.

Patient and Family Education

HealthLinkBC Files: Shigellosis

Related Documents

- B-00-07-13074 Contact Plus Precautions Infection Control
- B-00-07-13029 Contact Precautions Infection Control

References

Centers for Disease Control. (2022). 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings. Retrieved from

https://www.cdc.gov/infectioncontrol/pdf/guidelines/isolation-guidelines-H.pdf

Kotloff, K. L., Riddle, M. S., Platts-Mills, J. A., Pavlinac, P., & Zaidi, A. (2018). Shigellosis. *Lancet (London, England)*, 391(10122), 801–812. https://doi.org/10.1016/S0140-6736(17)33296-8

Public Health Agency of Canada. (2020). Shigellosis (Shigella). Retrieved from

https://www.canada.ca/en/public-health/services/diseases/shigella.html

Definitions

"Direct care" includes providing hands-on care, such as bathing, washing, turning the patient, changing clothing, continence care, dressing changes, care of open wounds/lesions or toileting. Feeding and pushing a wheelchair are not classified as direct care.

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