

Shigella (Shigellosis)

Shigellosis is a highly contagious diarrheal disease caused by a group of bacteria called *Shigella*. *Shigella* can survive prolonged time periods in food and water and is spread very easily in places with crowded conditions, such as child care and institutions with congregate settings. There are four species of *Shigella*, *Shigella sonnei*, *Shigella flexneri*, *Shigella boydii*, and *Shigella dysenteriae*.

Transmission

Shigella is found in the intestinal tracks of infected people. Anyone can become ill from infection with the bacteria *Shigella*. However young children are most likely to be infected. *Shigella* is transmitted easily and the number of bacteria it takes to make someone ill is very small. It is spread by:

- **Environment to Person** when touching a surface or object that has been contaminated (e.g., toys, bathroom fixtures, changing tables, or preparing food with inadequately washed hands). Houseflies and cockroaches may also carry *Shigella* by physically transporting infected feces.
- **Contaminated food or water sources.** Ingesting contaminated food or water (e.g., lake water or an improperly treated pool)
- **Person to Person** through sexual contact with someone infected with *Shigella*.

Risk Factors:

- **People who travel to countries where the water and food may be unsafe**, and sanitation is poor are more likely to get shigellosis.

Past infection does not make a person immune to Shigellosis.

Symptoms

Symptoms can begin 12 hours to seven days following exposure but begin within two days on average and will last about five to seven days. People infected may experience:

- **Diarrhea (sometimes bloody)**
- **Nausea**
- **Vomiting**
- **Tenesmus** (painful sensation of needing to pass stools even when bowels are empty)
- **Fever**
- **Abdominal pain**
- **Cramps**

Some infected people may not experience symptoms at all but can still shed the bacteria in their stools for up to several weeks.

Diagnosis

Shigellosis is diagnosed by laboratory test of a stool sample (feces) taken from an infected individual.

Treatment

- **Most people recover on their own and do not require antibiotics**
- **Antibiotics may be prescribed to treat severe cases** or to **shorten the time a person is shedding *Shigella* in their stool**, which may be important for
 - Food handlers

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- Children in child care
- Institutionalized individuals
- **Infected people experiencing symptoms** should
 - Hydrate by drinking plenty of fluids and take electrolyte replacements
- **Do not take anti-diarrheal medicines**, such as Imodium, atropine, or diphenoxylate as these medicines may make symptoms worse

For more information about the treatment of shigellosis contact your health care provider or visit [Shigella – Shigellosis | CDC](#).

Prevention

- **Wash hands** thoroughly with soap and water
 - **Before** sexual activity
 - **Before** preparing food or eating
 - **After** going to the toilet, changing a diaper, or cleaning up after someone who used the toilet
- When **changing diapers**
 - Throw away dirty diapers in a **covered, lined garbage can**
 - Clean up any leaks or spills
 - **Wash hands** and the **child's hands** with soap and water immediately afterward
- **Avoid swallowing water** from lakes, ponds, or swimming pools
- **When traveling internationally**, [follow safe food and water habits](#) and wash hands often
- **If you or your partner has been diagnosed with shigellosis, do not have** sex for at least 2 weeks after symptoms have resolved

Exclusion Guidance

- **Exclude children from child care** until diarrhea ceases and one negative stool sample is obtained.
- **Exclusion from schools** should be handled on a case-by-case basis.
- **Health care workers and people who provide child care** should be excluded from caring for patients or children until diarrhea ceases and one negative stool sample is obtained.
- **Food handlers must be excluded from handling food** until diarrhea ceases **and** two consecutive negative stool samples are obtained at least 24 hours apart **and** at least 48 hours after finishing antibiotics, **or** until they have been asymptomatic for at least seven days. If a food handler was diagnosed with a Shigella infection but had no symptoms, he/she cannot return to work until seven days have passed since the diagnosis. Approval from the food establishment's regulatory authority is required before a food handler can return to work.

[General exclusions still apply](#) for other workers and those in schools.

For additional information about shigellosis, etc., contact the North Dakota Department of Health and Human Services', Division of Family Health, at 800.472.2286.

This disease is a reportable condition. As mandated by North Dakota law, any incidence of this disease shall be reported to the North Dakota Department of Health and Human Services.

Resources:

1. Kimberlin, D. W., Barnett, E. D., Lynfield, R., Sawyer, M. H. (2021) Red Book: 2021- Report of the Committee on Infectious Diseases. 31st ed. American Academy of Pediatrics. [Management and Prevention of Infectious Diseases] [668-672].
2. Centers for Disease Control and Prevention. (2023, February 24). *CDC – Shigella - Shigellosis*. Centers for Disease Control and Prevention. Retrieved May 25, 2023, from <https://www.cdc.gov/shigella/index.html>

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