



Shigellosis Concerns in the Evacuation Center Environment: Q&A

What is *Shigella*?

Shigella are a group of bacteria that cause an infectious disease called shigellosis. There are many different types of *Shigella* in the group. In the United States, over two thirds of shigellosis cases are caused by *Shigella sonnei*, and *Shigella flexneri* causes most of the remaining cases. Outbreaks of shigellosis in the United States are typically caused by *S. sonnei* and occur in crowded settings where personal hygiene may be limited, or where food or water is contaminated. Other types of *Shigella* are rare in the United States, including *Shigella dysenteriae* type 1, which is known for causing epidemics in developing countries.

What are the symptoms of shigellosis?

The symptoms of shigellosis usually include diarrhea, fever, and stomach cramps. The diarrhea may be bloody. People usually recover from shigellosis caused by *S. sonnei* within 5-7 days without treatment and the infection is rarely fatal. In some people, especially young children and the elderly, the severe diarrhea may lead to hospitalization. Rarely, a severe infection with high fever may cause seizures in children less than 2 years old.

Why could *Shigella* be associated with diarrheal illness in evacuation centers?

Evacuation centers house large numbers of people in one area after a major disaster, crowding may occur. This increases person-to-person contact and the likelihood of an infected person being present in a evacuation centers. If toilet and handwashing facilities are inadequate for the number of people present, maintaining proper hygiene is difficult. This facilitates transmission of shigellosis.

How do people catch *Shigella*?

The bacteria can be found in the stools of infected people. Infection occurs when a person swallows *Shigella* bacteria. This can happen if bacteria are transferred from stool to the fingers of one person, and then transferred to the hands and mouth of another person. This is particularly likely with toddlers. Washing hands well after bathroom use or changing diapers is critical to prevention. Children and toddlers who are not fully toilet-trained are particularly likely to become infected and to pass the infection to playmates and family members.

Shigella infections may occur through eating contaminated food. Contaminated food may look and smell normal. Food may become contaminated by infected food handlers who do not wash their hands with soap after using the bathroom. Vegetables can become contaminated if harvested from a field with sewage in it. If there are open latrines in the area, flies can breed in contaminated feces and then contaminate food. People can become infected with *Shigella* by drinking or swimming in contaminated water. Water in swimming pools, lakes or rivers may become contaminated if sewage spills into it, or if a swimmer with shigellosis defecates in it.

When do symptoms appear?

Symptoms usually begin 1-2 days following ingestion of the bacteria.

How are *Shigella* infections diagnosed?

Shigella infections are diagnosed by a laboratory test done on the stool of the patient. This test, called a stool culture, grows and identifies the bacteria from the stool specimen.

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What treatment is available for people with shigellosis?

People with mild *S. sonnei* infections typically recover without antibiotic treatment in 5 to 7 days. Antibiotic treatment may be recommended in severe cases or when the patient has a medical condition or is taking medication that prevents the body from fighting the infection. Antidiarrheal agents such as Imodium ® (loperamide) or Lomotil ® (diphenoxylate with atropine) may make the illness worse and should be avoided. Treatment in a hospital may be necessary in severe cases.

How long are people contagious?

Once an infected person recovers and has no more diarrhea, he or she is not likely to infect people if he or she maintains good hand hygiene. To reduce the risk of outbreaks, state or local health departments may require documentation of a negative stool culture after treatment has been completed and before allowing persons to return to work in sensitive occupations (e.g., food handlers) or crowded environments (e.g., day care centers).

How can you protect yourself from getting sick with a diarrheal illness like shigellosis in a evacuation center?

- Practice good hand hygiene
 - Wash hands with soap and water for at least 30 seconds at the following times:
 - Before preparing, serving or eating food
 - After using the bathroom or changing a child's diapers
 - Supervise the handwashing of toddlers and children after toilet use
 - Use alcohol-based hand gel if soap and water are not available

What should you do if you get sick with a diarrheal illness like Shigella in a shelter and how can you prevent the spread to others?

- Inform the evacuation center staff of your illness
- Drink plenty of fluids
- Move with your family to an area designated for those who are ill and their immediate families
- Practice good hand hygiene
 - Wash hands with soap and water for 30 seconds at the following times:
 - Before preparing or eating food
 - After using the bathroom or changing a child's diapers
 - Supervise the handwashing of toddlers and children after toilet use
 - Use alcohol-based hand gel if soap and water are not available
- Use toilets set aside for persons with diarrhea
- Dispose of diapers properly
- Use a disinfectant to clean diaper changing areas after use
- Do not prepare food for others
- Avoid use of small paddling pools – use hoses or sprinklers for cooling off

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or call CDC at 800-CDC-INFO (English and Spanish) or 888-232-6348 (TTY).