

Shigella

What is shigellosis?

Shigellosis (often just called shigella) is a bacterial infection of the intestinal tract. It is a fairly common disease. More cases occur during the summer months than at other times of the year. In Kansas City, August is the month when the largest number of cases tends to be reported.

Who gets shigellosis?

Anyone can get shigellosis, although children 4 years of age and younger are the most commonly affected group in Kansas City. The disease is about twice as common among minorities when compared to whites. Persons who are at greatest risk of getting shigellosis are:

- children in day care centers and their families
- travelers to certain foreign countries
- institutionalized persons (persons in hospitals and long term care)
- men who have sex with men

How are the bacteria spread?

The bacteria that cause shigellosis are spread by what is called the "fecal-oral route." This means one becomes infected by eating or drinking contaminated food or water, or by having direct contact with the poop of an infected person. The bacteria are found in the intestinal tracts of infected people. If these people do not properly wash their hands after using the toilet, their hands may be contaminated with the bacteria. This can lead to contamination of food or other objects that get placed in the mouth.

Where there is poor sanitation, the bacteria can get into the water supply and cause infection directly through drinking the water or when contaminated water is used to make ice cubes.

In addition, any direct contact with the poop of an infected person may result in spreading the bacteria. In day care centers, in particular, special attention needs to be taken when changing diapers, their disposal, cleaning of the diapering area, and hand washing. Any sexual practice that involves contact with poop or objects contaminated with poop also can result in infection.

What are the symptoms of shigellosis?

While some infected persons may not have any symptoms, most people experience mild to severe diarrhea, often with fever and traces of blood or mucus in the poop. In

addition, other symptoms that may occur include stomachache, nausea and vomiting.

Most people get ill within 1-3 days of infection, but shigella can cause illness anywhere from 12 hours to 7 days after the bacteria are swallowed. The symptoms usually last a few days to a week, even without treatment.

How long is a person able to spread shigellosis?

Most people pass shigella in their poop for 1 to 2 weeks. Certain antibiotics may shorten this time.

How is shigellosis treated?

The majority of infected persons will recover on their own. Some people may require intravenously administered fluids to prevent dehydration. Antibiotics are used, on occasion, to treat severe cases or to shorten the length of time that the bacteria are shed. This may be important for food handlers, children in day care, or persons in long term care or hospitals.

Should infected people be isolated or excluded from school or work?

Since the bacteria are passed in the poop of an infected person, people with active diarrhea or those who are unable to control their bowel habits, for example infants and young children, should be isolated. Most infected people may return to work or school when their diarrhea has stopped, provided they carefully wash their hands after using the toilet. However, some persons must obtain approval from the Kansas City Health Department before returning to their normal activities. The approval process requires testing to show that the bacteria are no longer present in the feces. The Health Department makes the decision on who needs approval based on individual circumstances.

What can be done to prevent the spread of shigellosis?

Since the bacteria are spread in the feces, the most important prevention activity is careful handwashing (soap and hot water for at least 30 seconds) after using the toilet and before preparing food.

In day care centers or other places where diaper changing occurs, it is important to clean the diapering area between children and to properly wash one's hands between children even if disposable gloves were worn. This is because even children who show no symptoms may have infectious viruses, bacteria or parasites in their poop. The changing area should be away from food preparation and feeding areas. The diaper-changing surface should be covered with a smooth, moisture-resistant, cleanable cover. After use, the changing surface should be cleaned with a detergent spray or soap and

water and allowed to dry. Dirty diapers should be properly disposed of in a leak proof container. Disposable gloves can be used when changing diapers, but they must be replaced between children.

Travelers to foreign countries should be careful of what they eat or drink. Beverages such as wine or beer, hot tea or coffee, and carbonated soft drinks or fruit juices that are bottled or otherwise packaged usually are safe to drink. Only bottled water should be drunk and ice cubes should not be placed in drinks unless they were made from pure water. Uncooked food, apart from fruit and vegetables that can be peeled or shelled, may be unsafe. Cooked food should be piping hot because cooked food held at room temperature for more than 4 to 5 hours is one of the greatest risks factors for food borne disease, since bacteria may multiply in it.