Preventing the Spread of Drug-Resistant Shigella Intestinal Infection



This Fact Sheet explains why the U.S. Centers for Disease Control and Prevention (CDC) recently issued a <u>health advisory</u> about an increase in the occurrence of intestinal infections caused by certain strains of shigella that are resistant to anti-bacterial drugs.

Diarrhea is a common cause of work absence. Most cases of acute diarrhea are caused by bacterial, viral or parasitic pathogens. Shigella infection (shigellosis) is caused by bacteria in contaminated food or water or transmitted via person-to-person (fecal-oral) contact.

Symptoms of shigellosis may include bloody stool, fever, abdominal cramping and an urge to move bowels. Infections are generally self-limiting. In some cases, antimicrobial treatment may be recommended to prevent complications or shorten the duration of illness. However, when infected with a drug-resistant strain, anti-microbial treatment is ineffective.

Resistant Strains

In 2022, about 5 percent of shigella infections reported to the CDC were caused by drug-resistant strains, compared to no reports of these cases in 2015. While the percentage of drug-resistant infections may seem inconsequential, certain strains (referred to as XDR) can spread antimicrobial resistance genes to other intestinal bacteria.

The CDC defines XDR shigella bacteria as strains that are resistant to all commonly recommended antibiotics (e.g., azithromycin, ciprofloxacin, ceftriaxone, trimethoprimsulfamethoxazole (TMP-SMX) and ampicillin). The CDC does not have recommendations for optimal antimicrobial treatment at this time due to a lack of clinical studies on resistant strains.

Because treatment options for XDR strains are limited, the CDC has asked health care professionals to be vigilant about suspecting and reporting cases of XDR shigella infection to local and state health departments and educating people about their health risks. Children under 5, men who have sex with men, and adults with weak immune systems are among those with higher risk for infection.



Prevention

To help prevent the spread of shigella infection:

- 1. Wash hands with soap and water before preparing and eating food, and after going to the restroom or changing a diaper.
- 2. Avoid swallowing or swimming in water that may contain bacteria, such as ponds, lakes, the ocean after storms or untreated swimming pools.
- 3. Take precautions when traveling to certain international destinations (refer to <u>Travelers' Health</u>).
- 4. Carefully supervise babies and young children; use sanitary diaper and wiper disposal methods.
- 5. If ill, stay home and avoid close contact with others, including sex with a partner for at least two weeks after recovery. Diagnosis is confirmed with a stool specimen test. Shigella can remain in stool for several weeks. Rest and fluids are recommended. If diarrhea lasts more than three days, contact your health care provider. Do not use anti-diarrheal medicine if stool is bloody.

Related Resources:

Shigella: CDC Questions & Answers

Shigella: National Center for Biotechnology Information
Shigella Infection Prevention & Control for Food Handlers
(San Diego County)