CONDITION

Shigellosis

Shigellosis is a contagious bowel infection caused by Shigella bacteria.

WHAT IT IS
Contagious bacterial bowel infection

BODY SYSTEM
Digestive system

MAIN SYMPTOMS
Diarrhoea, stomach cramps, fever, painful bowel movements

WHAT CAUSES IT
Infection with Shigella bacteria

HOW IT IS DIAGNOSED
Stool culture or molecular stool testing

MAIN TREATMENT
Fluids and, when needed, antibiotics

CAN IT BE CURED?
Yes - most infections clear completely

IS IT AN EMERGENCY?
Sometimes - severe dehydration or reduced urination

LONG-TERM OUTLOOK
Most recover fully; bowel or joint symptoms sometimes persist

Overview

Shigellosis is an infection of the intestines caused by a group of bacteria called Shigella . It often causes diarrhoea, stomach cramps and fever. The diarrhoea may contain blood or mucus.

The infection spreads when tiny traces of infected stool enter another person's mouth. This can happen through unwashed hands, contaminated food or water, shared surfaces, or sexual contact involving the anal area. Only a small amount of the bacteria is needed to cause infection, so shigellosis can spread easily.

Most people recover without lasting problems. Fluids are important because diarrhoea can cause dehydration, meaning the body loses more water and salts than it takes in. Some people need antibiotics like amoxicillin or doxycycline , particularly if symptoms are severe or they have a higher risk of complications.

Shigellosis also matters because some strains are resistant to antibiotics. Resistance means an antibiotic that would usually kill the bacteria may no longer work. Stool testing can help guide treatment when antibiotics are being considered.

Symptoms

Symptoms usually begin within a few days of exposure, although the timing is not the same for everyone. Some people have mild symptoms, while others develop more significant bowel inflammation.

Common symptoms include:

That repeated, painful urge to have a bowel movement is sometimes called tenesmus. It happens because the lower part of the bowel is inflamed.

Symptoms often improve within about a week. Diarrhoea or changes in bowel habits can last longer. A person may also continue passing Shigella in their stool after they feel better, which means they may still spread the infection.

Young children, older adults and people with weakened immune systems can become dehydrated more quickly. Signs include a dry mouth, unusual sleepiness, dizziness, dark urine or urinating less often.

- Frequent watery or loose stools
- Blood or mucus in the stool
- Stomach pain or cramping
- Fever
- Nausea or vomiting
- A strong urge to pass stool even when the bowel is empty

Causes and risk factors

Shigellosis is caused by Shigella bacteria. The main types include Shigella sonnei , Shigella flexneri , Shigella boydii and Shigella dysenteriae . The types found most often differ between regions.

The bacteria leave the body in stool. Infection occurs when they reach another person's mouth, even when the amount is too small to see. Possible routes include:

Anyone can develop shigellosis. Exposure is more likely among young children in childcare

settings and the people caring for them. Risk is also increased among people living in crowded settings, people without reliable access to clean water or toilets, and travellers to places where sanitation is limited.

Gay, bisexual and other men who have sex with men have experienced outbreaks linked to sexual transmission. People living with HIV or another condition that weakens the immune system may be more likely to develop a severe or prolonged infection.

Having shigellosis once does not provide dependable protection against every type of Shigella . Reinfection is possible.

- Changing a nappy and not washing hands thoroughly afterward
- Touching contaminated bathroom surfaces, toys or taps
- Eating food handled by someone carrying the bacteria
- Drinking or swallowing contaminated water
- Sexual contact that may involve exposure to stool

Diagnosis

Symptoms alone cannot confirm shigellosis because several infections and bowel conditions can cause bloody diarrhoea or cramps.

Diagnosis requires a stool sample. A laboratory may use a molecular test, sometimes called a PCR or nucleic acid test, to look for genetic material from Shigella . These tests can provide results relatively quickly.

A stool culture attempts to grow the bacteria in a laboratory. Culture can confirm that live bacteria are present and allows susceptibility testing. This checks which antibiotics are likely to work.

If a molecular test detects Shigella , a culture may still be needed, especially when antibiotic treatment is being considered or public health teams are investigating an outbreak.

Your healthcare professional may also assess your hydration, temperature, abdominal pain and general health. Blood tests are not needed for every case but may be used if there are signs of dehydration, bloodstream infection or another complication.

Because shigellosis can spread to other people, confirmed cases may be reported to public health authorities. Requirements differ by location.

Treatment and management

The main treatment is replacing lost fluid and salts. Water may be enough for mild diarrhoea, but an oral rehydration solution can be more helpful when losses are greater. These solutions contain a measured balance of water, sugar and salts. Small, frequent sips may be easier to manage if you feel sick.

Severe dehydration may need intravenous fluids, given directly into a vein in hospital.

Many otherwise healthy people recover without antibiotics. Antibiotics may be considered for severe symptoms, for people at higher risk of complications, or when reducing the length of infection is especially important. The choice should take account of test results and local patterns of antibiotic resistance.

Take an antibiotic exactly as directed if one is prescribed. Contact the prescriber if symptoms do not begin to improve, become worse or return after treatment. This may mean the bacteria are resistant or another condition is causing the symptoms.

Medicines that slow bowel movement, such as loperamide, are generally avoided when shigellosis or bloody infectious diarrhoea is suspected. They may keep the bacteria and their toxins in the bowel for longer and can make symptoms worse. Ask a healthcare professional before using any diarrhoea medicine.

Rest and eat according to your appetite. There is usually no need to follow a highly restricted diet, but bland foods may feel more comfortable while cramps or nausea continue.

Complications

Dehydration is the most common concern. It can become serious if fluid losses are not replaced, particularly in infants, young children, older adults and people who cannot drink enough.

Less common complications include:

HUS is a rare complication in which red blood cells and the kidneys are damaged. It is associated particularly with toxin-producing strains, including some Shigella dysenteriae . Warning signs include much less urine, unusual bruising, marked paleness and extreme tiredness.

Reactive arthritis can cause painful or swollen joints, eye irritation or pain when urinating. It begins after the bowel infection and may last for weeks or months. Some people also develop ongoing bowel sensitivity after infectious diarrhoea, sometimes called post-infectious irritable bowel syndrome.

- Bloodstream infection, especially in people with weakened immunity
- Seizures in young children with severe infection or high fever
- Severe inflammation and swelling of the colon
- Reactive arthritis, causing joint pain after the infection
- Haemolytic uraemic syndrome, or HUS

Prevention

There is no routinely used vaccine against shigellosis. Prevention focuses on keeping infected stool away from hands, food, water and other people.

Wash your hands with soap and running water after using the toilet, changing nappies and before preparing or eating food. Hand sanitiser may not remove every germ and is not a full substitute when hands may be contaminated with stool.

If you have diarrhoea:

The US Centers for Disease Control and Prevention advises waiting at least two weeks after diarrhoea ends before having sex. Washing hands, genitals and the anal area before and after sex, and cleaning sex toys, can reduce later transmission.

Food handlers, healthcare workers and childcare staff may need clearance or repeat testing before returning to work. Local public health rules apply because these jobs can create a higher risk of spread.

- Do not prepare food for other people
- Avoid swimming and shared water activities
- Stay away from sexual activity that could spread traces of stool
- Clean bathroom surfaces and nappy-changing areas regularly
- Follow local advice about returning to work, school or childcare

Living with it and what to expect

Most people begin to improve within several days and recover fully. Energy and appetite may return gradually rather than all at once. Loose stools, bowel urgency or sensitivity to certain foods can continue for a while after the main infection has settled.

Drink regularly while diarrhoea continues. Monitor how often you urinate and whether the urine

is becoming very dark. Children need closer observation because they may not be able to explain thirst, dizziness or weakness.

You may continue to pass the bacteria in your stool for weeks, even after symptoms stop. Careful handwashing remains important during recovery. Do not assume that feeling better means there is no longer any chance of spreading the infection.

Most people return to their usual activities without long-term limits. Return to work, school or childcare may need to wait until diarrhoea has stopped. People in higher-risk roles may have additional public health requirements.

Arrange routine follow-up if bowel symptoms do not steadily improve, return after treatment, or continue beyond the expected recovery period. Persistent joint pain, eye irritation or ongoing changes in bowel habits should also be assessed.

When to get medical help

Seek prompt medical advice if you have bloody diarrhoea, a high or continuing fever, worsening stomach pain, or diarrhoea that is not improving. Medical review is also important if you are pregnant, have a weakened immune system, or care for a young child or older adult with symptoms.

Contact a healthcare professional promptly if you cannot keep fluids down or have signs of dehydration, such as a very dry mouth, dizziness, dark urine or urinating much less than usual.

Get urgent or emergency help for:

These symptoms do not prove that a complication is present, but they need urgent assessment.

- Fainting, confusion or difficulty waking
- Little or no urine
- Severe or rapidly worsening abdominal pain
- Heavy rectal bleeding
- Trouble breathing or signs of shock, such as cold, clammy skin
- Unusual bruising, marked paleness and reduced urination

Common questions

Is shigellosis the same as food poisoning?

Shigellosis is one type of infectious diarrhoea. It can spread through contaminated food, but it also spreads through hands, surfaces, water and sexual contact. Food is therefore only one possible source.

How long is shigellosis contagious?

The greatest risk is while diarrhoea is present. However, Shigella may remain in stool for several weeks after symptoms improve. Continue careful handwashing and follow public health advice for work, childcare, swimming and sexual contact.

Will shigellosis go away without antibiotics?

Many infections clear without antibiotics. Fluids remain important. Antibiotics may be needed for severe illness or increased complication risk, and laboratory testing can help identify an effective option.

Can I take medicine to stop the diarrhoea?

Medicines that slow the bowel, including loperamide, are usually avoided when diarrhoea is bloody or shigellosis is suspected. Ask a healthcare professional before taking them.

Can I catch shigellosis more than once?

Yes. Several types of Shigella cause infection, and immunity after one infection may not protect you from the others. Repeat exposure can lead to another infection.

When can I go back to work or school?

This usually requires diarrhoea to have stopped, but the exact rule depends on local public health policy and your work or school setting. Food handlers, healthcare workers and childcare staff may need additional testing or clearance.

Sources

- Centers for Disease Control and Prevention. About Shigella Infection
- Centers for Disease Control and Prevention. Clinical Care of Shigellosis
- Centers for Disease Control and Prevention. Preventing Shigella Infection
- World Health Organization. Guidelines for the Control of Shigellosis, Including Epidemics Due to Shigella dysenteriae Type 1
- Infectious Diseases Society of America. 2017 Clinical Practice Guidelines for the Diagnosis and Management of Infectious Diarrhea