CONDITION

Campylobacteriosis

Learn how Campylobacter infection causes diarrhea, how it spreads, when testing or antibiotics may be needed, and which symptoms require urgent care.

WHAT IT IS
Intestinal infection caused by Campylobacter bacteria

BODY SYSTEM
Digestive

MAIN SYMPTOMS
Diarrhea, stomach cramps, fever, nausea

WHAT CAUSES IT
Infection with Campylobacter bacteria

HOW IT IS DIAGNOSED
Stool genetic testing or culture

MAIN TREATMENT
Fluid replacement

CAN IT BE CURED?
Yes, most recover with fluids, rest

IS IT AN EMERGENCY?
Sometimes, with little or no urination

LONG-TERM OUTLOOK
Most recover, with rare joint, nerve, or bowel problems

Overview

Campylobacter infection, also called campylobacteriosis, is an intestinal infection caused by Campylobacter bacteria. These bacteria are a common cause of foodborne illness. Infection often follows exposure to undercooked poultry, unpasteurized milk, untreated water, or animals carrying the bacteria.

The infection usually causes diarrhea, stomach cramps, and fever. Diarrhea may be watery or contain blood. Symptoms often begin two to five days after exposure and usually improve within about a week.

Most people recover with fluids, rest, and time. Antibiotics like amoxicillin or doxycycline are not needed for every case. They may be considered when illness is severe, is not improving, or affects someone at higher risk of complications.

Campylobacter infection matters because diarrhea can lead to dehydration. Rarely, the infection can spread to the bloodstream or trigger problems involving the joints or nerves. Recognizing dehydration and other concerning symptoms helps people seek care at the right time.

Symptoms

Symptoms can range from mild digestive upset to more severe intestinal illness. Some people may have few or no symptoms.

Common symptoms include:

Cramping can be intense and may come before diarrhea. In some cases, the pain can resemble appendicitis or another abdominal condition. A clinician may need to examine severe or localized pain rather than assuming it is caused by an infection.

Fluid loss from diarrhea or vomiting can cause dehydration. Signs include a dry mouth, strong thirst, dark urine, urinating less often, dizziness, or unusual weakness. Babies and young children may have fewer wet diapers, no tears when crying, or unusual sleepiness.

Contact a healthcare professional promptly if diarrhea is bloody, symptoms are severe, fever is persistent, or the illness is not beginning to improve. Earlier medical advice is also appropriate for infants, older adults, pregnant people, and people with weakened immune systems.

Seek urgent or emergency care for:

- Diarrhea, which may be watery or bloody
- Stomach pain or cramping
- Fever
- Nausea
- Vomiting
- Headache
- Tiredness or a general unwell feeling
- Fainting, confusion, severe weakness, or difficulty staying awake
- Inability to keep fluids down
- Little or no urination
- Severe or worsening abdominal pain

- Trouble breathing, swallowing, walking, or moving the arms or legs
- Other signs of severe dehydration or rapidly worsening illness

Causes and risk factors

Campylobacter infection most often results from swallowing the bacteria. Campylobacter jejuni causes many human infections, although other species can also cause illness.

Poultry can carry the bacteria without appearing sick. Eating raw or undercooked chicken is an important source of exposure. Even a small amount of raw poultry juice can contaminate hands, utensils, cutting boards, countertops, or foods that will not be cooked.

Other possible sources include unpasteurized milk, untreated water, and contact with infected animals. Puppies, kittens, livestock, and some birds can carry Campylobacter . People may become infected after handling an animal or cleaning up animal stool and then touching their mouth or food without washing their hands.

Person-to-person spread is less common but can occur through contact with stool. Careful handwashing is especially important after using the toilet, changing diapers, helping someone with diarrhea, or handling animals.

Factors that may increase the chance of exposure include:

Anyone can become infected. Infants, older adults, pregnant people, and people with weakened immune systems may have a greater risk of serious illness or may need earlier medical assessment.

Food-safety steps can lower risk. Keep raw poultry separate from ready-to-eat foods. Wash hands with soap and water after handling raw meat. Clean utensils and preparation surfaces, and cook poultry thoroughly. Do not wash raw chicken, because splashing water can spread bacteria around the kitchen.

- Eating poultry that has not been cooked thoroughly
- Using the same plate or utensils for raw and cooked meat
- Drinking unpasteurized milk or untreated surface water
- Preparing food on surfaces contaminated by raw poultry
- Working with poultry or farm animals
- Having close contact with an animal that has diarrhea
- Traveling where food and water sanitation may be limited

Diagnosis

A clinician may suspect Campylobacter infection based on the symptoms, recent foods, travel, animal contact, and whether other people became ill. The examination also looks for dehydration and other causes of abdominal pain or diarrhea.

Testing is not necessary for every short, mild illness. A stool test may be recommended when diarrhea is bloody or severe, symptoms continue, a person has a weakened immune system, or the result could affect treatment or public health decisions.

Some stool tests detect genetic material from Campylobacter and other germs. These are called culture-independent diagnostic tests. They can provide results more quickly than traditional culture.

A stool culture attempts to grow the bacteria in a laboratory. Culture may confirm the diagnosis and allow antibiotic susceptibility testing, which checks which medicines are likely to work. This can matter because resistance to some antibiotics is common. If a rapid stool panel detects Campylobacter, the laboratory or clinician may arrange a culture when additional information is needed.

Blood tests are not routinely required. They may be used to assess dehydration, kidney function, or possible bloodstream infection in someone who is seriously ill. Other tests may be needed when symptoms suggest appendicitis, inflammatory bowel disease, or another condition.

Treatment and management

Replacing lost fluids is the main treatment. People with mild illness may be able to drink water along with fluids that replace salts and sugar. Oral rehydration solution is designed for this purpose and can be especially helpful with frequent diarrhea.

Take small, frequent sips if nausea makes drinking difficult. Children should receive an age-appropriate oral rehydration product rather than homemade mixtures or sports drinks as their main rehydration treatment. Severe dehydration may require fluids through a vein in a clinic or hospital.

Food can usually be restarted as tolerated. Small portions may be easier at first. There is generally no need to fast. Foods that make nausea, cramping, or diarrhea worse can be avoided temporarily.

Antibiotics do not shorten every Campylobacter illness enough to justify routine use. A clinician may consider them for severe disease, symptoms that are worsening or prolonged,

bloodstream infection, or a person at increased risk of complications. The choice depends on local resistance patterns, test results, allergies, pregnancy status, age, and other medical factors. Because resistance is common, leftover antibiotics or medicines prescribed to someone else should not be used.

Anti-diarrheal medicines are not appropriate in every situation. Ask a clinician before using them when there is bloody diarrhea, fever, severe abdominal pain, or suspected bacterial infection. Children should not receive an anti-diarrheal medicine unless a healthcare professional recommends it.

To reduce spread during recovery, wash hands carefully with soap and water after using the toilet and before preparing food. Avoid preparing food for other people while you have diarrhea. Follow local advice about returning to childcare, healthcare, or food-handling work, because testing or work restrictions may apply in some settings.

Complications

Dehydration is the most immediate complication. It may develop when fluid losses are greater than the amount a person can drink. Young children, older adults, and people with ongoing vomiting can become dehydrated more quickly.

Rarely, Campylobacter can enter the bloodstream. This is more likely to cause serious illness in people with weakened immune systems, older adults, or those with certain chronic conditions. Bloodstream infection usually requires prompt medical treatment.

Some people develop reactive arthritis after the intestinal illness. Reactive arthritis is joint inflammation triggered by an infection elsewhere in the body. It may cause pain, swelling, or stiffness, often in the knees, ankles, or feet. Eye irritation or pain with urination can sometimes occur at the same time.

Campylobacter infection can also precede Guillain-Barré syndrome, a rare condition in which the immune system damages peripheral nerves. It can begin with tingling or weakness in the feet and legs and may progress upward. New weakness, trouble walking, facial weakness, difficulty swallowing, or breathing problems requires immediate medical attention.

Some people have ongoing bowel symptoms after the infection clears. These may include abdominal discomfort or changes in bowel habits consistent with post-infectious irritable bowel syndrome. Persistent symptoms should be assessed rather than assumed to be an active Campylobacter infection.

Follow up

Routine follow-up may not be needed when symptoms are mild, fluids are staying down, and the illness steadily improves. Continue drinking enough fluid and return gradually to usual meals and activities.

Contact a healthcare professional if diarrhea is not improving, returns after getting better, or lasts longer than expected. Follow-up is also appropriate for continued abdominal pain, weight loss, recurring fever, ongoing blood in the stool, or signs of dehydration.

If antibiotics were prescribed, take them exactly as directed and contact the prescriber if symptoms worsen or side effects occur. Repeat stool testing is not routinely needed after recovery, but it may be required for certain jobs, childcare settings, or public health investigations.

In the weeks after infection, arrange medical assessment for new joint swelling, persistent bowel changes, numbness, or tingling. Progressive weakness, trouble walking, difficulty swallowing, or breathing problems should be treated as an emergency.

Public health staff may contact people with a confirmed infection to identify possible food, water, workplace, or outbreak exposures. Sharing accurate information can help prevent additional illnesses.

Sources

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