

Fact sheet

Salmonellosis

What is salmonellosis?

Salmonellosis is a foodborne illness caused by the bacteria *Salmonella*, and results in a mild to severe diarrheal illness, known as acute gastroenteritis.

How is salmonellosis spread?

Salmonella live in the intestinal tracts of humans and animals, including poultry and other birds, amphibians, and reptiles. It is usually transmitted to humans by eating foods contaminated with small amounts of animal feces. People can also become infected if they do not wash their hands after contact with animals or animal feces.

What are the signs and symptoms of salmonellosis?

Symptoms of acute gastroenteritis due to infection with *Salmonella* can include:

- Sudden onset of diarrhea (which may be bloody)
- Abdominal cramps
- Fever (almost always present)
- Nausea, vomiting, and headache may occur, though less frequent

Infections may enter the bloodstream and be very serious in the very young or very old. Not all people infected with *Salmonella* will become sick. Even after symptoms are no longer obvious, *Salmonella* bacteria may be found in the stool for several weeks, and you can spread the infection to others.

How long after infection do symptoms appear?

Symptoms of infection usually appear 6–48 hours after eating a contaminated food, but can take much longer. In most cases, illness lasts 4–7 days.

Who is most at risk?

Some people may have severe diarrhea and need to be hospitalized. Although anyone can get a *Salmonella* infection, older adults, children younger than 5 years of age, and people with immune systems weakened from medical conditions such as diabetes, liver or kidney disease, and cancer, are more likely to develop a serious illness.

What type of health problems are caused by salmonellosis?

Most people with diarrhea due to a *Salmonella* infection recover completely, although it may be several months before their bowel habits are entirely normal.

When *Salmonella* infections become invasive, they can affect the bloodstream, bone, joint, brain, or nervous system, or other internal organs. Invasive *Salmonella* infections:

- Are rarely fatal.
- Can be severe and potentially life threatening.
- Occur in about 8% of persons with laboratory-confirmed *Salmonella* infection.

- May show up as:
 - Bacteremia (infection of the blood)
 - Meningitis (infection of the membranes lining the brain and spinal cord)
 - Osteomyelitis (infection of the bone)
 - Septic arthritis (infection of a joint).

How is salmonellosis diagnosed?

Diagnosing salmonellosis requires testing a specimen (such as stool or blood) from an infected person to tell the difference from other illnesses that can cause diarrhea, fever, and abdominal cramps. Once it is identified, additional testing can be done to further identify the type of *Salmonella*.

How is salmonellosis treated?

Most people do not require treatment other than oral fluids. People with severe diarrhea may require rehydration with intravenous fluids. Antibiotics are recommended only for people who:

- Have a serious illness (such as severe diarrhea, high fever, bloodstream infection, or condition requiring hospitalization).
- Are considered at high risk for serious disease or complications (such as infants, adults older than 65, and people with weakened immune systems).

How can salmonellosis be prevented?

To avoid salmonellosis, follow these tips.

- After purchase, refrigerate produce promptly.
- Do not eat raw or undercooked eggs, poultry, or meat. *Salmonella* can contaminate perfectly normal-looking eggs.
- Separate meat from produce, cooked foods, and ready-to-eat foods.
- Leftover food should be discarded if left at room temperature for more than 2 hours.
- Use a cooler with ice or use ice gel packs when transporting or storing food items outdoors.
- Wash hands, cutting boards, counters, knives, and other utensils thoroughly after touching uncooked foods.
- Wash hands before handling food, and between handling different food items.
- Wash hands after contact with animal feces or animals, including holding, cuddling, or kissing baby chicks and ducklings.
- People with salmonellosis should not prepare food or pour water for others until their diarrhea has resolved.

Where can I get more information?

- Your personal healthcare provider
- [Centers for Disease Control and Prevention \(CDC\)](https://www.cdc.gov)
- [Utah Department of Health and Human Services](https://www.health.utah.gov)