

## Fact Sheet

# Salmonella Infection

## What is Salmonella Infection?



Salmonella infection is a common bacterial disease that affects the intestinal tract. Salmonella bacteria typically live in animal and human intestines and are shed through feces. Humans become infected most frequently through contaminated water or food.

## How is it spread

*Salmonella* live in the intestinal tracts of humans and other animals, including birds. *Salmonella* are usually transmitted to humans by eating foods contaminated with animal feces. Contaminated foods usually look and smell normal. Contaminated foods are often of animal origin, such as beef, poultry, milk, or eggs, but any food, including vegetables, may become contaminated. Thorough cooking kills *Salmonella*. Food may also become contaminated by the hands of an infected food handler who did not wash hands with soap after using the bathroom.

*Salmonella* may also be found in the feces of some pets, especially those with diarrhea, and people can become infected if they do not wash their hands after contact with pets or pet feces. Reptiles, such as turtles, lizards, and snakes, are particularly likely to harbor *Salmonella*. Many chicks and young birds carry *Salmonella* in their feces. People should always wash their hands immediately after handling a reptile or bird, even if the animal is healthy. Adults should also assure that children wash their hands after handling a reptile or bird, or after touching its environment.

**Typically, people with salmonella infection have no symptoms. Others develop diarrhea, fever and abdominal cramps within eight to 72 hours. Most healthy people recover within a few days without specific treatment.**

## Signs and Symptoms

Salmonella infection is usually caused by eating raw or undercooked meat, poultry, eggs or egg products. The incubation period ranges from several hours to two days. Most salmonella infections can be classified as gastroenteritis. Possible signs and symptoms include:

- § Nausea
- § Vomiting
- § Abdominal cramps
- § Diarrhea
- § Fever
- § Chills
- § Headache
- § Blood in the stool

Signs and symptoms of salmonella infection generally last four to seven days, although it may take several months for your bowels to return to normal.

In some cases, the diarrhea associated with salmonella infection can be so dehydrating as to require prompt medical attention. Life-threatening complications also may develop if the infection spreads beyond your intestines. Your risk of acquiring salmonella infection is higher if you travel to countries with poor sanitation.

## Diagnosis

Many different kinds of illnesses can cause diarrhea, fever, or abdominal cramps. Determining that *Salmonella* is the cause of the illness depends on laboratory tests that identify *Salmonella* in the stool of an infected person. Once *Salmonella* has been identified, further testing can determine its specific type.

## Treatment

*Salmonella* gastrointestinal infections usually resolve in 5-7 days and most do not require treatment other than oral fluids. Persons with severe diarrhea may require rehydration with intravenous fluids. Antibiotic therapy can prolong the duration of excretion of non-typhoidal *Salmonella* and is recommended only for patients with severe illness (e.g., those with severe diarrhea, high fever, bloodstream infection, or who need hospitalization) or those at risk of severe disease or complications, including young infants, older adults (over 65 years old) and immunocompromised persons. Antibiotic resistance is increasing among some *Salmonella* bacteria; therefore, susceptibility testing can help guide appropriate therapy. Choices for antibiotic therapy for severe infections include fluoroquinolones, third-generation cephalosporins, and ampicillin (for susceptible infections).

## Prevention

The U.S. Department of Agriculture has created a Salmonella Action Plan, which involves updating the poultry slaughter inspection system and enhancing sampling and testing programs for poultry and meat. The plan's purpose is to cut the number of salmonella infections in the United States.

You can also take care to avoid spreading bacteria to others. Preventive methods are especially important when preparing food or providing care for infants, older adults and people with compromised immune systems. Be sure to cook food thoroughly and refrigerate or freeze food promptly.

### Wash your hands

Washing your hands thoroughly can help prevent the transfer of salmonella bacteria to your mouth or to any food you're preparing. Wash your hands after you:

- § Use the toilet
- § Clean up pet feces
- § Change a diaper
- § Touch reptiles or birds
- § Handle raw meat or poultry

### Keep things separate

To prevent cross-contamination:

- § Store raw meat, poultry and seafood away from other foods in your refrigerator
- § If possible, have two cutting boards in your kitchen — one for raw meat and the other for fruits and vegetables
- § Never place cooked food on an unwashed plate that previously held raw meat

### Avoid eating raw eggs

Cookie dough, homemade ice cream and eggnog all contain raw eggs. If you must consume raw eggs, make sure they've been pasteurized.



***For more sources of information on this topic visit:***

ST. CLAIR COUNTY HEALTH DEPARTMENT [www.scchealth.co](http://www.scchealth.co)

MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES [www.michigan.gov/mdhhs](http://www.michigan.gov/mdhhs)

CENTERS FOR DISEASE CONTROL AND PREVENTION [www.cdc.gov](http://www.cdc.gov)

THE MAYO CLINIC [www.mayoclinic.org](http://www.mayoclinic.org)