

FACT SHEET

Salmonella

Cause: Salmonellosis is bacterial infection caused by nontyphoidal organisms called *Salmonella*. *Salmonella* infection happens all over the world and is more common in infants and children under five (5) years of age. It occurs more often in the summer months (June, July, and August) than winter. It has been estimated by the CDC that in the United States around 1.2 million illnesses and about 450 deaths occur certain *Salmonella* organisms annually in the United States.

<http://www.cdc.gov/salmonella/general/index.html>

Symptoms: Commonly, people infected with *Salmonella* develop sudden onset of headache, fever, diarrhea, nausea, vomiting and abdominal cramps six (6) to 72 hours after infection. The illness usually lasts four (4) to seven (7) days, and most people recover without treatment. However, in some people the diarrhea may be so severe that they need to be hospitalized. In these patients, the *Salmonella* infection may spread from the intestines to the blood stream, and then to other body sites and can cause death unless the person is treated promptly with antibiotics. The elderly, infants, and those with impaired immune systems are more likely to have a severe illness.

Spread: *Salmonella* live in the intestinal tracts of humans and other animals, including birds. *Salmonella* is 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 all foods, including vegetables may become contaminated. Many raw foods of animal origin are frequently contaminated, but fortunately, thorough cooking kills *Salmonella*. Food may also become contaminated by the unwashed hands of an infected food handler, who forgot to wash his or her 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 these feces. Reptiles are particularly likely to harbor *Salmonella* and people should always wash their hands immediately after handling a reptile, even if the reptile is healthy. Adults should also be careful that children wash their hands after handling a reptile. *Salmonella* bacteria can be brought into the home on a pet's fur, via pet food or fecal material, or, in some cases, through direct consumption of pet food.

- Incubation:** From 6 to 72 hours, usually about 12 to 36 hours. For enteric fever, the incubation period is 3-60 days (usually 7-14 days)
- Contagious Period:** Throughout the course of infection: extremely variable, usually several days to several weeks. Infants can be carriers for 60 days.
- Precautions:** Use gloves and good hand washing for diapered or incontinent children <6 years if age for duration of illness.
- Reportable:** Salmonella infection is a reportable illness by the ordering provider or lab to the local or state health department within 7 days.
- Diagnosis and Treatment:** Lab testing is done to confirm infection with salmonella. *Salmonella* infections usually resolve in five (5) to seven (7) days and often do not require treatment unless the patient becomes severely dehydrated or the infection spreads from the intestines. Those with severe diarrhea may require rehydration, often with intravenous fluids. Antibiotics are not usually necessary unless the infection spreads from the intestines, then it can be treated with ampicillin, gentamicin, trimethoprim/sulfamethoxazole, or ciprofloxacin. Unfortunately, some *Salmonella* bacteria have become resistant to antibiotics, largely as a result of the use of antibiotics to promote the growth of feed animals.
- Prevention:** There is no vaccine to prevent salmonellosis. Since foods of animal origin may be contaminated with *Salmonella*, people should not eat raw or undercooked eggs, poultry, or meat. Cook poultry, ground beef, and eggs thoroughly before eating. Do not eat or drink foods containing raw eggs, or raw unpasteurized milk. If you are served undercooked meat, poultry or eggs in a restaurant, don't hesitate to send it back to the kitchen for further cooking. Wash hands, kitchen work surfaces, and utensils with soap and water immediately after they have been in contact with raw meat or poultry. Be particularly careful with foods prepared for infants, the elderly, and the immunocompromised. Wash hands with soap after handling reptiles or birds, or after contact with pet feces. Avoid direct or even indirect contact between reptiles (turtles, iguanas, other lizards, snakes) and infants or immunocompromised people. Don't work with raw poultry or meat, and an infant (e.g., feed, change diaper) at the same time. Mother's milk is the safest food for young infants.