

S a l m o n e l l o s i s

What is Salmonellosis?

Salmonellosis is an illness caused by infection with *Salmonella* bacteria. It is primarily an intestinal infection, but in a small number of cases, it can infect the bloodstream and cause focal infections, such as abscesses and meningitis, in nearly any part of the body. *Salmonella* bacteria are subdivided into serotypes based upon their biochemical properties. In the United States, *Salmonella Typhimurium* and *Salmonella enteritidis* are the most common. Although salmonellosis can occur throughout the year, most cases occur during the summer months.

Salmonella typhi is the serotype which causes Typhoid fever. This illness is different from that caused by the other serotypes of *Salmonella*, and is described separately (see Typhoid Fever).

Who gets Salmonellosis?

Anyone can get salmonellosis. Severe cases of illness requiring hospitalization are more often seen in infants, the elderly, and individuals with impaired immune systems.

How is Salmonellosis spread?

A person becomes infected with *Salmonella* by swallowing the bacteria. This can occur when an individual eats or drinks contaminated food or water, or has direct contact with another infected person who has poor personal hygiene. Less commonly, a person can become infected with *Salmonella* through direct contact with an infected animal (most commonly chicks and turtles kept as pets).

Because *Salmonella* can be found in the intestines of farm animals such as cattle and chicken, uncooked meat products, such as chicken and beef, can become contaminated with *Salmonella* during the slaughtering process. Thorough cooking

kills Salmonella organisms. Incompletely cooked meat products are a potential source for Salmonella caused illness.

What are the symptoms of Salmonellosis?

The most common symptoms of salmonellosis include diarrhea, fever, headache, abdominal cramps, nausea and sometimes vomiting. Some infected individuals may not have any symptoms. How soon do symptoms occur?

Symptoms usually appear within 6 to 72 hours after swallowing the bacteria, either through eating or drinking contaminated food or water, having direct contact with another infected person who has poor personal hygiene or through direct contact with an animal infected with Salmonella.

How is Salmonellosis diagnosed?

The diagnosis of salmonellosis is usually made by finding the Salmonella bacteria in a stool sample. This is most often accomplished by collecting a stool specimen from the ill individual and sending it to a laboratory for analysis. Sometimes more than one stool specimen must be obtained for examination because the bacteria may not be present in every stool sample.

Are there any long-term effects from a Salmonella infection?

While most individuals recover completely, a very small number of individuals may develop joint pains, irritation of the eyes, and painful urination known as Reiter's syndrome. This may last for months to years, and may even lead to chronic arthritis.

What is the treatment for Salmonellosis?

Uncomplicated Salmonella infections usually resolve in 5-7 days without any treatment. Individuals who have become dehydrated, or who have infections which have spread beyond the intestines will take longer. Antibiotics are usually

not prescribed. However, antibiotics are indicated in certain situations for infants, the elderly, anyone who is immunocompromised, and for those individuals who have infections which have spread beyond the intestines. Some Salmonella bacteria have become resistant to some commonly used antibiotics. This has been attributed to the use of these antibiotics as a feed additive to promote growth in farm animals.

How long is an infected person infectious to others?

An infected person is capable of transmitting Salmonellosis to others as long as the Salmonella bacteria are being passed in his/her stool. This usually continues for several days to several weeks after all symptoms of illness have resolved. In some individuals, especially infants, a carrier state may develop, meaning that the Salmonella bacteria persist in the stool for several months.

Should an infected person be excluded from work or school?

Most infected persons may return to work or school when they no longer have diarrhea and fever. Since the Salmonella bacteria may continue to be passed in their stool for several weeks, they must remember to carefully wash their hands with soap and water after every bathroom visit. Special precautions are indicated for food handlers, health-care workers, day-care providers and young children attending day care. Consult your local health department for further advice in these circumstances.

How can Salmonellosis be prevented?

- Always wash hands with soap and warm water before and after food preparation, and always wash kitchen work surfaces and utensils with soap and warm water immediately after they have been in contact with raw poultry or meat.
- Cook poultry, eggs and raw meat thoroughly before eating. Avoid eating and drinking raw eggs, unpasteurized milk and other dairy products that are unpasteurized.

- Wash fresh fruit and produce carefully if it is to be eaten raw.
- Wash hands carefully after changing diapers.
- Practice careful hand washing after handling pets, especially chicks and turtles.

Source: NJ Department of Health and Senior Services