

Salmonella

Salmonella is an infection caused by a gram-negative bacillus, a germ of the Salmonella genus. Infection with these bacteria may involve only the intestinal tract, or may spread from the intestines to the blood stream and then to other body sites. The source of infection is contaminated food or water, or close contact with other human beings carrying the infection.

SYMPTOMS AND DIAGNOSIS

Symptoms can vary greatly from person to person, may occur 12-72 hours after ingestion of contaminated food or water and may last 4-7 days. Most individuals experience two or more of the following symptoms: onset of severe headaches, abdominal cramps, diarrhea, nausea, vomiting, low grade fever and muscle aches. Some individuals experience no symptoms but harbor the bacteria in their intestines and are at risk of spreading it to other individuals. A diagnosis of Salmonella infection is made by testing a stool specimen for the presence of the bacteria.

TRANSMISSION

Salmonella live in the intestinal tracts of humans and other animals including birds, and are transmitted by the oral-fecal route. This means eating foods contaminated with animal feces. Contaminated foods usually look and smell normal. They are often of animal origin, such as beef, poultry, milk, or eggs, but all foods, including vegetables may become contaminated.

Person-to-person transmission can also occur. Individuals who carry Salmonella in their intestines may transmit Salmonella to another individual if good personal hygiene is not followed. For example, an infected food handler may transmit the Salmonella bacteria if he/she does not wash his/her hands after using the bathroom and before handling or preparing food. Transmission may also occur by handling pet turtles, baby chicks, frogs and snails that harbor the Salmonella bacteria.

TREATMENT

Severe forms of Salmonella infection may require hospitalization and isolation from other people. Patients with less severe infection and those who are recovering may be treated at home.

- Get plenty of rest until fever, diarrhea and any other symptoms have been gone for three days.
- Eat five or six small meals daily. Follow a progressive diet (clear liquids to full liquids to soft foods) as recommended by your provider.
- Use self-care measures such as comfortable room temperature and fresh air. You

may wish to try a hot water bottle for stomach cramps.

- Symptomatic treatment with acetaminophen (Tylenol or similar product) for pain and fever is usually all that is required.
- Antibiotics generally are not recommended unless the infection has spread from the intestines, because such medication can prolong rather than reduce the period of bacterial shedding in the intestine.
- Individuals usually feel better within 5-7 days.
- People who have Salmonellosis should not prepare food or pour water for others until they have been shown to no longer be carrying the Salmonella bacterium. Individuals working with food or in a health care facility, or day care center must have two negative stool cultures at least 72 hours apart before being allowed to return to work.

PREVENTION AND CONTROL

Good personal hygiene and handwashing techniques would prevent the majority of these transmissions. Wash hands thoroughly with warm, soapy water after visits to the restroom and before food preparation. Salmonella usually remains in the intestines for up to five weeks - and in some cases for many months. Be aware that some individuals can become chronic carriers of Salmonella bacteria and about 2% may develop chronic arthritis.

References:

CDC Health Topics, General Information, 3-30-00