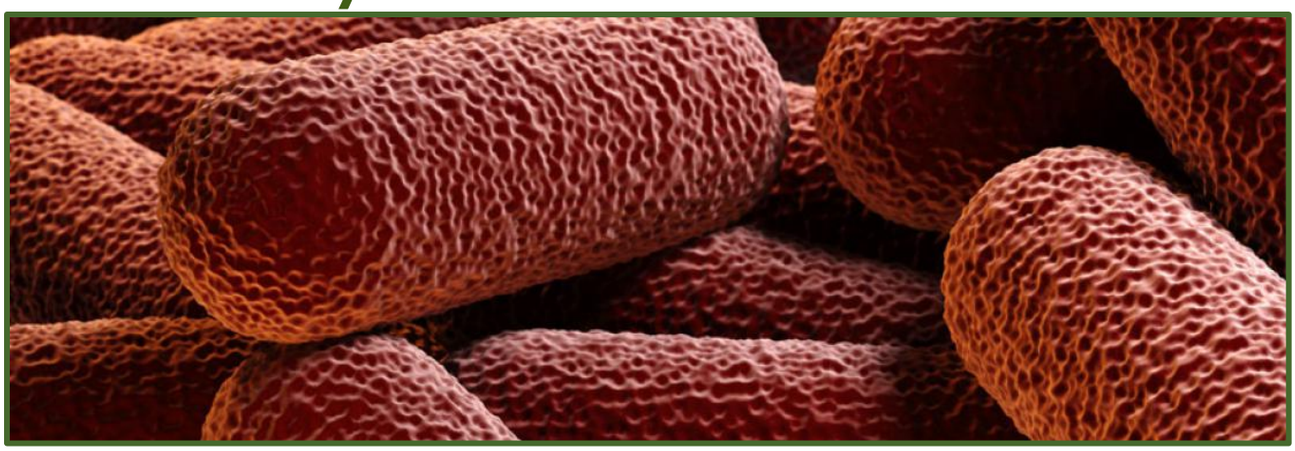
AGRILINKS

# Food Safety Hazard: Salmonella



## Characteristics/description

Salmonella are rod-shaped bacteria of the Enterobacteriaceae family.

## Source

Salmonella live in the intestinal tracts of both humans and animals. As a result, Salmonella infection can come from a variety of sources. Salmonella is transmitted through fecal contamination of food, water and surfaces in contact with fecal materials. Contaminated foods are often foods of animal origin, such as beef, poultry, milk, fish or eggs, and may appear wholesome. Given the possibility of cross-contamination between raw and cooked food or irrigation with contaminated water, any food, including vegetables, fruit and processed foods may contain the organism.

## Effects on humans

Most people infected with Salmonella develop diarrhea, fever and abdominal cramps (salmonellosis).

## Incubation

Most illnesses caused by salmonella occur 12-72 hours after infection.

## Treatment for patients

Salmonella gastrointestinal infections usually resolve in 5-7 days. Most do not require treatment other than fluids. People with severe diarrhea may require rehydration and electrolyte replacement therapy (orally or intravenously).

## Key links

Centers for Disease Control and Prevention Salmonella site: http://www.cdc.gov/salmonella/

Food and Agriculture Organization (FAO): "Microbiological Hazards and Melons," ftp://ftp.fao.org/ag/agn/jemra/Microbiological_hazards_and_melons_Nov08.pdf

World Health Organization (WHO): "Salmonella and Campylobacter in Chicken Meat," http://apps.who.int/iris/bitstream/10665/44211/1/9789241547901_eng.pdf?ua=1

## Risk reduction strategies

- There is no vaccine to prevent salmonellosis. Because foods of animal origin may be contaminated with Salmonella, people should not eat raw or undercooked eggs, poultry or meat. Poultry and meat should be well-cooked.
- To minimize the risk of infection, milk should be pasteurized or acidified.
- Produce should be thoroughly washed with uncontaminated water. Measures to reduce the levels of Salmonella should be in place in egg production units and poultry houses, during fresh produce growth and harvest, and during transport of raw commodities. These prevention measures are especially important for products that will not be cooked prior to consumption.

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