



## Salmonella

### 1.0 Introduction

*Salmonella* are a diverse group of bacteria which affect the gastrointestinal tract of humans and animals. They were first discovered by an American scientist named Dr. Daniel E Salmon in 1885. Most types of *Salmonella* cause an illness called salmonellosis. Although more than 2500 serotypes of *Salmonella* have been identified, fewer than 100 are known to cause human infections.

### 2.0 People at Risk

People who are immunosuppressed or who have had surgery or disease of the gastrointestinal tract may be at higher risk of acquiring the disease. The very old and young are also more likely to contract *Salmonella*.

### 3.0 Transmission

Dogs, cats, domestic livestock, nonhuman primates, birds, and reptiles are all sources of *Salmonella*. There are also reports of *Salmonella* being carried in the pet rodent population. People can also acquire *Salmonella* by ingestion of the bacteria either through contaminated food or direct contact with feces of infected live animals. The bacteria cannot penetrate intact skin, but can gain entrance to the body if a contaminated object comes in contact with a mucous membrane (i.e. mouth, nose, and eye lids)

### 4.0 Signs and Symptoms

Signs and symptoms of *Salmonella* infection include diarrhea, fever, and stomach cramps. Symptoms usually begin six hours to six days after infection and last four to seven days. However, some people do not develop symptoms for several weeks after infection and others experience symptoms for several weeks. The bacteria may spread throughout the body causing infection in urine, blood, bones, joints, or the nervous system (spinal fluid and brain), and can cause severe disease. Death is possible with severe infections.

### 5.0 Diagnosis, Prevention and Treatment

**Diagnosis-***Salmonella* bacteria are detected by culturing the organism in affected people.

**Prevention-**Prevention of *Salmonella* transmission from animals to personnel working with animals should focus on personal protective clothing such as lab coats and gloves, facility sanitization, and proper personal hygiene focused on washing hands after contact with live animals or their environment, cages and food dishes.

**Treatment-**Most people recover from *Salmonella* infection within four to seven days without antibiotics. People who are sick with a *Salmonella* infection should drink extra fluids as long as diarrhea lasts.

Antibiotic treatment is recommended for:

- People with severe illness
- People with a weakened immune system, such as from HIV infection or chemotherapy treatment
- Adults older than 50 who have medical problems, such as heart disease
- Infants (children younger than 12 months).
- Adults age 65 or older

## 6.0 Resources

[CDC Salmonella link](#)

For further information related to possible zoonotic disease exposure, or further related resources, please contact UT Occupational Health Nurse Bryan Cranmore RN, COHN at [bcranmore@utk.edu](mailto:bcranmore@utk.edu), or for urgent response the OHP nurse can be reached at 865-755-8924

Reviewed and Approved 6/18/2021

A handwritten signature in blue ink that reads "Bryan Cranmore RN". The signature is written in a cursive style.

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Bryan Cranmore RN, COHN  
Occupational Health Nurse