# Salmonellosis (Salmonella infections)

It is an intestinal infectious disease caused by Salmonella bacteria. It is spread worldwide.

## The cause

The causative agents are bacilli belonging to the Enterobacteriaceae family. More than 2,400 serotypes are known. They are divided into typhoidial Salmonellae (Salmonella Typhi and Salmonella Paratyphi) and non-typhodial Salmonellae, which are common causative agents of diarrhoea.

## **Incubation period**

The incubation period, the time from infection to onset of illness, is 6 to 72 hours, usually 12 to 36 hours.

## Transmission

Salmonellosis is a zoonosis, an infectious disease whose causative agent is transmitted directly or indirectly from animals to humans. Salmonella can contaminate e.g. raw meat, most commonly poultry, eggs. If these foods are not cooked well before consumption, they can become infected.

Salmonella is spread by contact with infected and sick people. The patient/infected person excretes Salmonella in the faeces. From here they get on their hands or into the environment and onto other people.

Salmonella can (theoretically) also be contracted by drinking water, which is extremely rare in Slovenia.

Okužba se lahko pojavi tudi zaradi neposrednega stika z okuženimi živalmi.

## Susceptibility to infection

Susceptibility to infection is universal. More susceptible are people taking drugs to reduce stomach acidity, immunocompromised people.

## Symptoms and signs of the disease

The infection is often asymptomatic. Symptomatic infections present as acute gastrointestinal inflammation: diarrhoea, abdominal pain, vomiting and fever may occur. Diarrhoea may be watery or bloody with mucus. Most sufferers experience a gradual resolution within a few days, but problems can persist for several weeks in people with chronic illnesses. Rarely, intestinal Salmonella infections are also complicated; the bacterium gets into the blood, causing sepsis, an inflammation in the internal organs. After infection, Salmonella is shed in the stool for an average of five weeks. In children under five years of age, the bacterial shedding time is longer.

## Infectiousness

Patients and germ-carriers are infectious as long as they excrete the bacterium in their faeces.

## Treatment

Treatment is symptomatic: the main concern is to ensure sufficient fluid intake. No special diet is needed; the patient should consume light food. If the patient is at risk of dehydration, medical attention should be sought. Good hygiene is important, which means washing hands thoroughly and regularly cleaning toilets and other surfaces that may become contaminated with contaminated excreta. It is also very important that patients stay at home as long as they have digestive problems.

## Prevention of the disease

Salmonellosis is prevented by the following measures:

- Good personal hygiene, washing hands after using the toilet, after changing nappies, after handling raw foods, especially raw poultry; or before and during food preparation, before eating, etc.
- To prevent cross-contamination of foodstuffs in the kitchen, special utensils and boards are used to process raw meat, which may contain salmonella and/or other microbes.
- Proper storage of foodstuffs. Refrigerate perishable foods at a temperature below 4 °C. Store raw foods so that they do not touch ready-to-eat foods in the refrigerator.
- Good heat treatment of foodstuffs, especially raw meat, is important.
- Before travelling to places where typhoid fever is endemic, you can protect yourself by getting vaccinated. (Typhoid fever has not been reported in Slovenia for several decades, except for a few cases introduced during travel and/or stays in Africa, Asia, etc.).