Salmonella infection (salmonellosis)

Salmonella infection (salmonellosis) is a type of gastroenteritis caused by Salmonella bacteria. In Australia, most Salmonella infections occur after eating contaminated food but also sometimes after contact with another person with the infection. Over 2000 cases of Salmonella infection are reported in Queensland each year. There are about 2,500 different strains of Salmonella, many of which cause infection in both animals and humans. Two strains, Salmonella Typhi and Salmonella Paratyphi, cause typhoid and paratyphoid fever respectively (see separate typhoid and paratyphoid fever fact sheet).

Signs and Symptoms:

Symptoms of Salmonella infection include fever, headache, diarrhoea, abdominal pain, nausea and vomiting. Symptoms usually develop 6–72 hours after exposure to the bacteria, but sometimes up to 2 weeks. Symptoms typically last between 4–7 days but can sometimes last much longer.

Treatment:

Most people recover with rest and fluids. Sometimes admission to hospital is required e.g. for intravenous fluids to treat dehydration. Antibiotics are not usually given as they can make the illness worse, but are sometimes recommended in complicated cases.

Transmission:

Salmonella bacteria are mainly spread to humans via poorly cooked food made from infected animals e.g. meat, poultry, eggs and their by-products. Spread by 'cross-contamination' can occur when the bacteria contaminate ready-to-eat food, e.g. when food that will not be cooked further is cut with a contaminated knife. Salmonella can spread from person to person if hands are not washed properly, particularly after going to the toilet or changing nappies. It can also spread from animals to humans.

Prevention:

Cook minced meat, sausages, hamburgers and poultry thoroughly until the juices run clear and there are no pink areas inside. Steaks only need to be seared on the outside and can be rare inside. Wash raw fruit and vegetables thoroughly before eating. Do not drink unpasteurised milk and its products.

Discard cracked or dirty eggs. Don’t serve foods containing raw eggs to children less than 2 years of age, pregnant women, people over 65 years of age and those with serious illness. To minimise risk, cook eggs until the white is completely firm and yolks begin to thicken.

Use different chopping boards, utensils and plates when preparing raw foods and ready to eat food. If you have only one chopping board wash it well in hot soapy water before reusing. Dry dishes with a different cloth to that used for wiping hands or bench tops and wash dish cloths regularly.

Store raw foods such as meat in sealed containers in the bottom of the fridge to prevent any fluid dripping onto other ready-to-eat food. The fridge temperature should be less than 5°C. Thaw frozen foods in a fridge or microwave and reheat foods until steaming hot. Don’t eat food meant to be stored in the fridge if left out for more than 2 hours. The longer you leave food at room temperature the more Salmonella bacteria can multiply.

Always wash your hands thoroughly with soap and water after going to the toilet, changing nappies, touching animals, before and after handling food and before eating.

People who work as food handlers (e.g. kitchen staff and butchers) or who care for children, patients or the elderly (e.g. doctors, nurses, child care workers) should not return to work until they are well and have had no diarrhoea for 48 hours. All other people with infection should not return to work or school until they have been well and had no diarrhoea for 24 hours.

Health outcome:

Salmonella can make some people (particularly young children and older people and people with impaired immune systems) seriously ill. Occasionally infection can be life threatening.

Other resources:

Related Content

Queensland Health fact sheets:

- Gastroenteritis (/HealthConditions/2/Infections-Parasites/6/Bacterial-Infections/239/Gastroenteritis)
- Typhoid and paratyphoid fever (/HealthConditions/2/Infections-Parasites/6/Bacterial-Infections/660/Typhoid-Paratyphoid-Fever)

Help and assistance:

For further information please contact your local doctor or nearest public health unit (https://www.health.qld.gov.au/system-governance/contact-us/contact/public-health-units) or the 13HEALTH information line (13 43 25 84).
If you are in an emergency situation, call 000

References

Health Insite: