# Shigella infection



This is a type of gastroenteritis (also known as 'gastro') caused by *Shigella* bacteria.



Shigella infection is a notifiable condition<sup>1</sup>

## How Shigella is spread

Spread takes place when hands, objects or food become contaminated with faeces of people who are infected and the bacteria are taken in by mouth. Transmission of *Shigella* can also occur with certain types of sexual activity where faecal matter is present. Only small numbers of *Shigella* bacteria are enough to cause an infection, so stringent control measures are required.

The only significant source of infection is other people, as *Shigella* does not infect animals and does not survive very long outside of the human body. However, flies can carry the bacteria on their legs and contaminate uncovered food. Infections can occur when people ingest food or water freshly contaminated with faeces.

# Signs and symptoms

Symptoms may include:

- > diarrhoea (sometimes with blood or mucus)
- > fever
- > vomiting
- > stomach cramps.

Mild infections or infections without symptoms may occur. The most severe infections occur in the very young, the elderly and malnourished people.

# **Diagnosis**

The infection is diagnosed by growth of Shigella from a faecal sample or by detecting Shigella in a faecal specimen using a PCR (polymerase chain reaction) test in a pathology laboratory.

## **Incubation period**

(time between becoming infected and developing symptoms)

1 to 7 days, usually 1 to 3 days.

## Infectious period

(time during which an infected person can infect others)

While symptoms are present and until *Shigella* are no longer present in the faeces (usually within 4 weeks after illness). Rarely, people without symptoms can shed *Shigella* in their faeces for many months. After appropriate antibiotics, *Shigella* stop being shed in the faeces within a few days.

#### **Treatment**

Specific antibiotic therapy is available and will reduce the duration and severity of symptoms and the spread of infection.

Gastroenteritis is a common illness which can be serious in young children.

The following are general recommendations for the treatment of gastroenteritis:

- give plenty of fluids. Oral rehydration solution is highly recommended for children with mild to moderate dehydration. It is available at pharmacies and should be given following the instructions on the packaging
- mildly unwell children should be given their usual fluids more often.
   Carbonated (fizzy) drinks or undiluted juice should be avoided
- medicines to prevent vomiting or diarrhoea should not be given (especially in children), except where specifically advised by a doctor

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- breastfed babies should continue to be breastfed throughout their illness
- children on formula or solid diets should restart their normal diet (including full strength lactose containing milk) following rehydration with oral rehydration solution
- children who are hungry or ask for food should be given small portions of their usual foods, but avoid foods high in sugar or fat.

## When to seek medical advice

Seek medical advice if there are any of the following symptoms:

#### **Adults**

- signs of dehydration, such as thirst and decreased urination, lethargy, dry mouth, feeling faint on standing
- > fever
- > severe abdominal pain
- > bloody diarrhoea.

#### Children

- signs of dehydration, such as thirst and decreased urination, lethargy, dry mouth, sunken eyes, feeling faint on standing
- > fever
- > abdominal pain
- > bloody diarrhoea
- any symptoms in a child less than 12 months of age.

### **Prevention**

- Exclude people with Shigella infection from childcare, preschool, school and work until there has been no diarrhoea for 24 hours. If working as a food handler in a food business, the exclusion period should be until there has been no diarrhoea or vomiting for 48 hours.
- Infants, children and adults with Shigella infection should not swim until there has been no diarrhoea for 24 hours.
- Infected people without symptoms who are involved in food preparation or in caring for patients in hospital, the elderly or children should take special care with hand washing. They may require proof that they are no longer infectious (by providing a faecal specimen) before returning to work.
- Infected people should refrain from sexual activity, particularly activities which involve potential contact with faecal matter (i.e. anal sex) for at least seven days after symptoms cease.
- Follow good hand washing procedures. Good cleaning procedures should be used, including for objects such as toys that may be shared.
- When several people in one group are ill with Shigella, the local health authority may review sanitary and hygienic aspects of the areas commonly used by affected people to reduce the chance of repeat infection.
- > Babies and small children without diarrhoea who are not toilet trained should wear tight fitting waterproof pants or swimming nappies in swimming pools and be changed regularly in the change room. When faecal accidents occur, swimming pools should be properly disinfected.

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## **Useful links**

Food Safety website – www.sahealth.sa.gov.au/foodsafety

> Preventing food poisoning at home

SA Health website – www.sahealth.sa.gov.au

- Collecting a faecal sample
- Exclusion periods from childcare, preschool, school and work
- > Hand hygiene
- Keeping areas clean
- > When you have a notifiable condition

1 – In South Australia the law requires doctors and laboratories to report some infections or diseases to SA Health. These infections or diseases are commonly referred to as 'notifiable conditions'.

### You've Got What? 5th Edition

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The SA Health Disclaimer for this resource is located at

www.sahealth.sa.gov.au/youvegotwhat





