FACT*SHEET*

S A L M O N E L L O S I S

WHAT IS SALMONELLOSIS?

Salmonellosis is caused by infection with bacteria called *Salmonella*. In Australia, most *Salmonella* infections occur after eating contaminated food or sometimes after contact with another person with the infection.

WHAT ARE THE SYMPTOMS AND HOW IS IT DIAGNOSED?

People infected with *Salmonella* commonly develop headache, fever, stomach cramps, diarrhoea, nausea, and vomiting. Symptoms often start 6–72 hours after infection. Symptoms usually last for 4–7 days, sometimes much longer. Infants, the elderly, and people with poor immune systems, are more likely to have a severe illness. To diagnose it, your general practitioner or local hospital will send a stool sample to a laboratory for *Salmonella* testing.

HOW IS IT SPREAD?

Salmonella is mainly spread to humans by eating poorly cooked food made from infected animals (that is, meat, poultry, eggs, and their by-products). Spread by 'cross-contamination' occurs when *Salmonella* contaminates ready-to-eat food: for example, when food that will not be cooked further is cut with a contaminated knife or via the hands of an infected food handler. *Salmonella* can spread from person–to-person via the hands of an infected person. It can also be spread from animals to humans.

HOW IS IT TREATED?

Most people recover with rest and fluids. Some people may require hospitalisation due to dehydration, or if the infection spreads from the intestines to the blood stream or another part of the body. Antibiotics are not usually recommended, except in complicated cases.

HOW IS SALMONELLOSIS CONTROLLED AND PREVENTED?

Cooking

Thorough cooking of food kills *Salmonella*. Avoid raw or undercooked meat, poultry, or eggs. Poultry and meat—such as hamburgers, sausages, and rolled roasts—should not be eaten if pink in the middle.

Food handling

Because *Salmonella* can be carried on the hands, it is very important to always wash hands thoroughly after using the toilet and before preparing food. Hands should be washed with soap and water for at least 20 seconds, rinsed, and dried well. Particular attention should be given to the area under the fingernails and between fingers.

Infected food handlers can shed large numbers of *Salmonella*; they should not handle or serve food until the diarrhoea has stopped and their stools test is clear of *Salmonella*.

Temperature control

Poor food storage can allow *Salmonella* to grow. Refrigerated food should be kept at less than five degrees Celsius. Hot foods should be kept hot at above 60 degrees Celsius. Reheated foods should be quickly reheated until all parts of the food are steaming hot. Thawing frozen foods should be done in a fridge or microwave. The longer you leave food at room temperature the more *Salmonella* can multiply.

Food contamination

To prevent the contamination of food:

- store raw foods (such as meat) in sealed containers in the bottom of the fridge or freezer to prevent any fluid dripping or spilling onto other ready-to-eat food. Cover all foods in the refrigerator and freezer to protect them from contamination;
- wash hands immediately after going to the toilet or handling raw foods and before handling cooked or ready-to-eat food;
- use different chopping boards, trays, 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 reuse;
- thoroughly wash all dirt off any raw vegetables and fruits before preparing and eating them;
- dry dishes with a different cloth to that used for wiping hands or bench tops; wash dish cloths regularly.

Consumers with concerns about how a food business manages its food preparation or storage can contact the nearest public health unit for advice.

NSW HEALTH Working as a Team

WHAT IS NSW HEALTH DOING ABOUT SALMONELLOSIS?

NSW Health works with other state and national organisations on strategies such as:

- surveying food types across the states. High-risk foods are surveyed for the presence of bacteria such as *Salmonella*. Findings are reported to the government and the food industry to improve food standards;
- monitoring frequency of salmonellosis and investigating cases to determine the cause of infection;
- intervening to stop the spread of salmonellosis: for example, correcting food preparation practice in kitchens; public education (for example, fact sheets); withdrawing infected foods from the market; and auditing food outlets.

For further information please contact your local public health unit, community health centre, or doctor.

May 2002

COMMUNICABLE DISEASES, NSW: MAY 2002

TRENDS

The first quarter of 2002 saw relatively few notifications of people diagnosed with **arbovirus infections**, **meningococcal disease**, and **shigellosis** in NSW (Figure 1). The epidemic of **pertussis** continued to decline throughout the state. The increase in **hepatitis A** identified in December 2001 in Sydney among men-who-have-sex-with-men did not continue, with notifications of hepatitis A subsequently declining (20 cases notifications were received in March, Table 1). On the other hand, notifications of **cryptosporidiosis** remained relatively high in the first quarter of 2002, including 57 cases that were notified in March. Most cases are from rural areas, and children under five years of age are disproportionately affected.

MEASLES CASES REPORTED

Two cases of measles were reported in April, ending a five-month measles-free period in NSW. Both cases became infected while travelling overseas. The South Eastern, South Western, and Central Sydney Public Health Units investigated both cases.

Case 1 is a 23-year-old woman who travelled to Bali in March. After returning to Australia, she developed a fever, aches and pains, and headache, followed by a cough and sore throat. A rash appeared five days later. The rash began on the face and then spread to the neck, chest, arms, and legs. Case 1 made four visits to medical clinics before the rash appeared and the diagnosis was made. Case 1 had no clear history of measles vaccination, but states she had received her usual vaccines as a baby. Serology was taken four days after the rash first appeared and tested positive for measles IgM.

Case 2 is an 11-month-old girl who travelled in Asia until late March. While travelling, she developed some intermittent diarrhoea and a runny nose. In early April she developed a fever, anorexia, and was miserable. She developed a cough and a rash began on her forehead and back of neck. The rash spread to her face, neck, trunk, and limbs and she developed conjunctivitis. Case 2 made several visits to medical facilities before the rash appeared and diagnosis was made. Case 2 had not been vaccinated against measles. Serology and nasopharyngeal aspirates were taken in early April. The serum tested positive for measles IgM and the nasopharyngeal aspirate tested positive for measles on immuno-fluorescence testing.

The cases highlight two important public health messages:

- Measles is now rare in Australia but remains common overseas. The MMR vaccine (that protects against measles, mumps and rubella) should now be considered to be part of the overseas travellers' routine pre-travel health check, especially for anyone born after 1970.
- Because it is rare, measles is not often considered as a diagnosis by health care workers. The diagnosis should be considered in patients presenting with a rash-illness that includes cough, and fever at the onset of the rash, or if there is a history of possible exposure to measles (for example, contact with a suspected case or travel to an endemic area in the 7–18 days before onset of fever). Confirmation of the diagnosis with serology