

Measles is a serious disease that is easily spread through the air. Immunisation is effective in preventing the disease. All children and adults born during or after 1966 should be vaccinated with 2 doses of MMR vaccine if not already immune.

Measles

Issued:

What is measles?

Measles is an acute viral disease that may have serious complications. In the past, measles infection was very common in childhood. Now, due to immunisation, measles infection is rare in Australia.

What are the symptoms?

- The first symptoms of infection with measles are fever, tiredness, runny nose, cough and sore red eyes. These symptoms usually last for a few days before a red blotchy rash appears. The rash starts on the face over 1-2 days and spreads down to the body. Sometimes the rash peels. The rash will last for 4-7 days.
- Up to a third of people infected with measles will experience a complication. Complications are more common in young children and in adults. Complications include ear infections, diarrhoea and pneumonia, and may require hospitalisation. About one in every 1000 people with measles develops encephalitis (swelling of the brain).

How is it spread?

- Measles is usually spread when a person breathes in the measles virus that has been coughed or sneezed into the air by an infectious person. Measles is one of the most easily spread of all human infections. Just being in the same room as someone with measles can result in infection.
- People with measles are usually infectious from just before the symptoms begin until four days after the rash appears. The time from exposure to becoming sick is usually about 10 days. The rash usually appears around 14 days after exposure.

Who is at risk?

- Anyone who comes in contact with measles during the infectious phase and has not been infected with measles in the past or has not received two doses of vaccine is at risk of measles infection.
- **If it is less than three days** since you came into contact with measles, immunisation with **MMR** (measles, mumps and rubella vaccine) can prevent infection.
- **If it is more than three days and less than seven days** have passed since coming into contact with measles, an injection called **immunoglobulin** can protect you. Immunoglobulin contains antibodies against the measles virus and is especially recommended for young children and people with underlying illnesses who have a greater risk of developing complications if they catch measles. Subsequent immunisation with MMR and chickenpox vaccines should not be given until five months after immunoglobulin as the immunoglobulin antibodies can prevent the vaccine from working.

How is it prevented?

- While a person is infectious with measles (i.e., up to 4 days after the onset of the rash) it is important that they remain at home to reduce the possibility of spread to other people.
- The best protection against measles is through immunisation with a vaccine called MMR. This vaccine provides protection against infection with measles, as well as against mumps and rubella.
- MMR vaccine is currently recommended for children at age 12 months and a second dose at age four years. These two doses of MMR provide protection against measles to over 98% of those immunised.
- MMR vaccine is a safe and effective vaccine that has been used worldwide for many years. It is safe to have the vaccine even in those who have had previous measles or vaccination.

- While many older adults are immune to measles because they were infected as children, young adults may have not either had measles or received measles immunisation.
- Anyone born in or after 1966 that is not immune to measles should have 2 doses of MMR immunisation. This especially applies to **health care workers, child care workers** or people who plan to travel overseas.
- Unimmunised children who have come into contact with measles and who do not receive MMR or immunoglobulin should not attend school until 14 days after the rash appeared in the person with measles.

How is it diagnosed?

- Measles can be difficult to diagnose early in the illness because there are many other viruses that cause similar illnesses with fever and a rash. Sometimes the presence of white spots inside the mouth, called Koplik spots, the timing of the fever and the rash, and the characteristics of the rash can help a doctor to make the diagnosis.
- Whenever measles is suspected, a blood test or samples from the nose, throat or urine can be collected to confirm the diagnosis in the laboratory. Confirming the diagnosis is important so that other people who may be at risk of measles can be identified.

How is it treated?

- There is no specific treatment for measles. The treatment includes rest, plenty of fluids, and paracetamol for fever.
- While a person is infectious with measles it is important that he or she remains at home to reduce the possibility of spreading it to other people.

What is the public health response?

- Doctors, hospitals and laboratories must notify cases of measles to the local Public Health Unit. Public Health Unit staff will interview the doctor or patient (or carers) to find out how the infection occurred, identify other people at risk of infection, implement control measures (such as immunisation and restrictions on attending school or work) and provide other advice.
- Your local Public Health Unit can advise further regarding the need for immunisation, immunoglobulin and exclusions from work and school in the case of exposure to measles.

Further information – Public Health Units