

Public Health South

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Communicable Disease Factsheet: Measles Information for Contacts

Measles is a serious disease that is easily spread through the air. Immunisation is effective in preventing the disease.

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 New Zealand.

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 measles 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.

What is a measles contact?

“Contacts” are people who shared the same air with someone while they were infectious with measles (for example, by being in the same room as someone with measles). If a person becomes infected with the measles virus, they will develop measles symptoms in 7 to 18 days.

Many contacts will be immune to measles because of past measles infection or immunisation and will not get the disease. Other contacts who are not immune may become infected with the virus and may then spread the virus to others.

Who is at risk of measles infection?

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.

People who are regarded as at risk (not immune) to measles include:

- People born since 1969 who have not had two doses of the measles-mumps-rubella MMR vaccine
- Babies under the age of 15 months who have not received their first dose of MMR vaccine, and children 15 months to 3 years who have not had their first dose of MMR.

- Any people who have a weakened immune system (for example, people who are receiving chemotherapy or radiotherapy for cancer or people who take high-dose steroid medications) even if they have been fully immunised or have had past measles infection.
- Children over four years who have not received their second dose of MMR vaccine.

A small proportion of people who have had the right number of immunisations might not have developed immunity and are at risk of measles, but as this is a low proportion they are not considered at risk.

What should you do?

If you or your child is not immune to measles you need to stay at home and away from school/work, group and social activities, sports and recreation events and public places such as cinemas and shopping malls **for 18 days from the last day of exposure to the confirmed infectious case of measles.**

If you are pregnant, have a compromised immune system (from a medical condition or medication) or your child is less than 15 months old, please contact your GP for advice.

To break the chain of transmission of measles it is important that anyone at risk of developing measles does not have any contact with vulnerable and susceptible people (people who are not immune to measles).

- If your child does not develop measles in 18 days from the date of exposure to measles and is 12 months or older you may arrange for the first MMR at your GP after the 18th day.
- If your child has only had one MMR you may arrange for the second MMR at your GP as long as there has been one month from the first.
- If you think you have only had one MMR (especially those born between 1970 and 1992) please arrange for a second MMR at your GP.
- If you are pregnant and have not had 2 MMR please check your immune status with your GP.
- If it is less than three days since you came into contact with measles, immunisation with the measles-mumps-rubella (MMR) may prevent infection.
- Infants under one year of age can receive an injection called immunoglobulin to prevent infection, if six days or less have passed since contact with measles. MMR vaccination for infants this age should be discussed between your doctor and a Medical Officer of Health.

If you/your child develops symptoms of measles:

- See your general practitioner, as soon as possible so a diagnosis can be confirmed. Take this fact sheet along. However, **phone the surgery ahead** to alert them of your child's symptoms and to allow them to make arrangements to assess your child safely and without infecting other people.
- 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.
- Look out for the signs and symptoms including:
 - a runny nose
 - cough
 - sore eyes
 - fever over 38°
 - a raised red rash that starts on the face and moves to cover the rest of the body.

How is measles prevented?

- While a person is infectious with measles (i.e. up to 5 days before and 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 (measles, mumps and rubella) vaccine. This vaccine provides protection against infection with measles, as well as against mumps and rubella.
- MMR vaccine should be given to children at age 15 months, and a second dose at age four years. These two doses of MMR provide protection against measles to over 95% 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, some young adults may have either not had measles, nor received measles immunisation.
- 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. It is recommended that susceptible adults also do not attend work during this period. This is because non-immune people can unknowingly spread the infection to others.

How is measles 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. Confirming the diagnosis is important so that other people who may be at risk of measles can be identified.

How is measles treated?

- There is no specific treatment for measles. Supportive 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.

Public Health South's role is to limit the spread of measles as much as possible, particularly to protect vulnerable people in the community, including:

- children too young to be immunised
- pregnant women
- those with suppressed immunity (such as people with immune diseases or on treatment such as chemotherapy).