

How is measles diagnosed?

Measles can be difficult to diagnose early on because there are many other viral illnesses that cause similar symptoms of fever and a rash. The presence of white spots inside the mouth (called Koplik's spots), the timing of the fever and the rash, and the characteristics of the rash can make a doctor suspect measles.

If measles is suspected, a blood test or samples from the nose, throat or urine is required to confirm the diagnosis.

How is measles treated?

There is no specific treatment for measles.

Supportive treatment includes rest, plenty of fluids and paracetamol for fever.

How can measles be prevented?

The best protection against measles is through immunisation with MMR vaccine. This vaccine also provides protection against mumps and rubella.

MMR vaccine is normally given to children at 15 months and at 4 years. Two doses of MMR provide protection against measles to over 95% of those immunised. Unimmunised people of any age are eligible to receive two doses of MMR free of charge.

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.

Why is Public Health involved?

Public Health South's role is to limit the spread of measles as much as possible, particularly to more vulnerable people including children too young to be fully immunised and those with suppressed immunity. Public health unit staff interview the doctor and patient (or carer) 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.



Measles – what you need to know



What is measles?

Measles results from infection with the measles virus. It is highly contagious, affects both children and adults, and it can have serious complications. In the past measles was very common in childhood, but infection rates have dropped because of immunisation. However, because children don't receive their first vaccination until 15 months of age, and not everyone chooses to be vaccinated, measles can still be spread around the community

How is measles spread?

Measles is spread when a person breathes in measles virus in droplets that have been coughed or sneezed into the air by an infectious person. Just being in the same room with someone who is infectious can result in infection. A person with measles is infectious from 5 days before to 5 days after the appearance of the rash. The time between catching the virus and developing symptoms is usually 10-12 days, but it can take up to 18 days.

What are the signs and symptoms?

- The first symptoms include **fever, tiredness, runny nose, cough and sore red eyes.**
- After 2-4 days the **rash** appears, starting on the face and spreading down the body over the next few days. 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, including ear infections, diarrhoea and pneumonia, and may require hospitalisation. About 1 in every 1000 people with measles develops encephalitis (swelling of the brain).

What is a measles contact?

A **contact** is any person who has been in a confined space with a case of measles during their infectious period, including:

- *An early childcare service
- *Transportation
- *Institution
- *Household
- *work or social contact
- *Classroom

Who is at risk of measles infection?

Contacts who are **at risk** (not immune) include:

- Anyone **born since 1969** who has not had the measles or has not had **two doses** of the MMR vaccine, including:
- babies under the age of 15 months who have not received their first dose of MMR vaccine, and
- children between 15 months and 4 years who have not had their second 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.
- A very small number of people who have had two MMR 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?

To break the chain of transmission, it is important that any contact who is not immune to measles does not interact with other non-immune people.

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 14 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.

- 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.

- In the Southern District, we are encouraging parents and GPs to stick to the current immunisation schedule (1x MMR at 15 months and 1x MMR at 4 years). If travelling to Canterbury, children older than 12 months can get their first MMR early. Children aged 6-12 months need to be discussed with your GP.

- 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 you/your child develops symptoms of measles:

See your general practitioner as soon as possible so a diagnosis can be confirmed. **You must phone the surgery ahead of time** 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. Take this fact sheet along with you.

Exclusion

- While a person is infectious with measles (5 days before and 5 days after the onset of the rash) they should remain at home to reduce the possibility of spread to other people.
- Unimmunised children and adults who have come into contact with measles should not attend school/work until 14 days after their last exposure to the person with measles. This is because non-immune people can unknowingly spread the infection to others.