

Measles, mumps, rubella and the MMR vaccine

- Measles, mumps and rubella are infectious viral diseases.
- Most people recover from these diseases; however some get very unwell and require hospitalisation.
- Antibiotics will not treat these infections as they are caused by viruses.

What are the symptoms?

Measles: Fever, cough, runny nose, sore red eyes followed by rash that starts behind the ears and spreads to the rest of the body.

Mumps: Fever, headache, muscle aches, tiredness, and loss of appetite followed by painful swelling of the salivary glands on one or both sides of the face, cheeks or jaw.

Rubella: Fever, tiredness, runny nose, sore throat, and swollen neck glands followed by a rash that starts on the face and spreads to the rest of the body.

Some people may not be aware they are infected with these diseases because they have mild or no symptoms.

How is measles, mumps and rubella spread?

- They are spread by from an infected person by saliva or mucous when coughing, sneezing or talking. It can be spread via face to face contact within a metre, or by touching an object infected from droplets such as a used tissue or keyboard.
- Measles can also be caught by breathing in the same air as an infected person such as walking past someone who has the disease.

Who has immunity to measles, mumps or rubella?

- People develop immunity to measles, mumps and rubella either by catching the disease or through immunisation with the measles-mumps-rubella (MMR) vaccine.
- People are considered immune to measles, mumps and rubella if:
 - They were born before 1969 (measles), born before 1981 (mumps) or born before 1970 (rubella) or;
 - They have been previously diagnosed and recovered from measles, mumps or rubella or;
 - They have received two documented doses (recorded in well-child book or confirmation with GP practice) of the MMR vaccine after their first birthday.

How can immunisation prevent an outbreak of measles, mumps or rubella?

- Immunisation with the MMR vaccine is the best way to protect against measles, mumps and rubella.
- Two doses of MMR are 97% effective at preventing measles, 88% effective for mumps and 97% for rubella.
- The speed at which the infection can spread in the community is directly related to the number of people who are not immunised. Measles, mumps and rubella will not spread if enough people are immunised. This is called 'herd immunity'.
- Immunisation protects individuals and their families and prevents the spread of disease in the community. It also protects the health of those who are unable to be immunised, for example, because their immune system is weakened by medications or disease.

Immunisation with the MMR vaccine

- The MMR vaccine is an injection to vaccinate people against measles, mumps and rubella.
- Two doses of MMR are routinely scheduled at ages 15 months and four years.
- In an outbreak:
 - The first vaccine, MMR 1, is given to anyone over the age of 12 months.
 - The second dose, MMR2, is given 28 days later.
- Anyone who does not have two documented doses of MMR vaccine is eligible for free vaccines.

Who should not receive the MMR vaccine?

People who should **not** receive the MMR vaccine are:

- Babies aged less than 12 months.
- Non immune pregnant women.
- Those who are allergic to components of the MMR vaccine i.e. gelatin or the antibiotic neomycin.
- People with medical conditions or medication that can cause a weakened immune system (immune compromised)*. These include:
 - transplant patients;
 - those with illnesses such as leukaemia or HIV;
 - cancer patients receiving chemotherapy or radiotherapy;
 - people taking high-dose steroid or immune suppressive medication.

*please discuss with your GP

Possible side effects of the MMR vaccine

- The MMR vaccine has an excellent safety record so most people will have no side effects.

- Side effects are few and usually mild in comparison to the serious consequences of having measles, mumps, or rubella.
- Side effects can arise up to 1 month after receiving the MMR vaccine. These include fever, mild rash, joint pains, mild swelling on the side of the face, cheeks, jaw, or neck.
- Fits caused by having a fever (febrile convulsions) occur in about one in every 3,000 infants around 6-12 days after receiving a MMR vaccine. Febrile convulsions do not cause any long term harm.
- Approximately one child in a million develops encephalitis (inflammation of the brain) after receiving the MMR vaccine. However, if an unimmunised child catches measles the chance of developing encephalitis is much higher at one in 1000.

If you suspect mumps call your doctor or Healthline on 0800 611 116

For information on immunisation call the Immunisation Advisory Centre on 0800 Immune (0800 466 863) or visit www.immune.org.nz

For further information contact the Auckland Regional Public Health Service on 09 623 4600

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