Measles, Mumps, Rubella, and Immunisation with the MMR vaccine

What is Measles, Mumps and Rubella?

- Measles, Mumps and Rubella are separate infectious viral diseases that are spread from person to person by saliva or mucous from the mouth, nose or throat of an infected person through coughing, sneezing or talking or through direct contact with infected saliva.
- Some people have very mild or no symptoms, and may not be aware they have an infection.
- Although most people recover from these diseases, some can get very sick and require hospitalisation. In rare cases, death may occur.
- Antibiotics will not treat these infections, as they are caused by viruses.

Early symptoms of these diseases are:
- **measles** - fever, cough runny nose, and 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.

What is Measles Mumps Rubella immunisation?

- People develop immunity to measles, mumps and/or rubella by catching each disease or by being immunised with the Measles, Mumps, Rubella (MMR) vaccine.
- You are considered immune to measles, mumps and/or rubella if:
  - You were born before 1969 (measles), 1982 (mumps), 1970 (rubella); or
  - You were diagnosed and recovered from measles, mumps and/or rubella; or
  - You received two doses of the MMR vaccine after your first birthday.

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

- The best way to protect against measles, mumps and rubella is vaccination with MMR.
- Two doses of MMR are effective at preventing measles (97%), mumps (88%) and rubella (97%).
- The speed at which the infection can spread in the community is directly related to the number of people who have not been immunised. If enough people are immunised, then measles, mumps and rubella will not spread.
- Low rates of immunisation mean that the risk of further outbreaks is high.
- By getting immunised you are protecting yourself and/or your child, and also helping prevent the spread of these diseases in the community. You are also helping to protect people in our community who have serious chronic illnesses that prevent them from receiving the MMR vaccination (see below for more details).
What are the recommendations for immunisation with the MMR vaccine?

- The MMR vaccine is an injection that immunises people against measles, mumps and rubella.
- Two doses of MMR are recommended at age 15 months and age four years.
- For protection during an outbreak of measles, mumps or rubella, those who are considered not immune (have not received or only received one dose of MMR), should receive a dose of MMR immediately. A second dose of MMR can be received 28 days later, for those who have only received one dose of MMR in the past.
- In large outbreaks a third dose of MMR may be required.
- All those aged 12 months and above, who do not have two documented doses of MMR vaccine, are eligible for free MMR vaccination.
- Another vaccine, the measles, mumps, rubella, varicella-chicken pox (MMRV) vaccine also protects people against measles, mumps, rubella and chicken pox. MMRV vaccine is not free.

Who should not receive the MMR vaccine?

- There are some people who cannot receive the MMR vaccine. However, it is important that their family and close contacts are immunised to help protect them.
- People who should not receive the MMR vaccine are:
  - Pregnant women
  - People with a weakened immune system, e.g. those who are receiving chemotherapy or radiotherapy for cancer, or people who take high-dose steroid medication.
  - Anyone who has had an anaphylactic reaction to gelatin, or the antibiotic neomycin.

Possible side effects of the MMR vaccine

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

If you suspect you/your child is sick with measles, mumps, or rubella phone your GP or HEALTHLINE on 0800 611 116.

For more information on immunisation, please call the Immunisation Advisory Centre free on 0800 IMMUNE (0800 466 863) or visit their website www.immune.org.nz