

Measles, Mumps and Rubella (MMR) Vaccine

Measles

Measles is caused by the Measles virus and spreads through the air by droplet or direct contact with nasal or throat secretions of infected persons, and less commonly, by articles soiled with nose and throat secretions. Affected persons will present initially with tiredness, fever, cough, red eyes and white spots inside the mouth. This is followed by a red blotchy skin rash 3-7 days later. The rash usually spreads from the face down to the rest of the body. In severe cases, middle ear, lungs and brain can get involved and lead to serious consequences or even death.

Mumps

Mumps is caused by the Mumps virus which affects the salivary glands and sometimes the nerve tissue. It is spread by droplet and direct contact with the saliva of an infected person. The disease is characterized by painful swelling of the salivary glands, usually at the cheek(s), and fever. Sometimes, there may be complications like deafness, or infection of the brain. Adolescents might develop infection of the testicles or ovaries, which can affect fertility.

Rubella

Rubella, also known as “German Measles”, is caused by Rubella virus. It can be transmitted by contact with secretions from nose and pharynx of infected persons through droplet spread or direct contact with patients. Symptoms are usually mild. Children usually present with fever, headache, diffuse rash and enlargement of lymph nodes behind the ears or in the neck. Sometimes there may be no symptom at all. Complications include arthritis, thrombocytopenia and encephalitis.

Rubella infection produces anomalies in the developing fetus. **Congenital rubella syndrome (CRS)** is likely to occur in infants born to women who got infected during the first 3 months of pregnancy. CRS is characterized by deafness, blindness, heart malformations and mental retardation.

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A. Why get vaccinated?

MMR vaccine can effectively prevent the above 3 infectious diseases. In Hong Kong, MMR vaccine is included in the Hong Kong Childhood Immunisation Programme. Women of childbearing age who are not previously immunised should receive MMR before pregnancy, to protect the health of her fetus.

B. When should my child get vaccinated?

Children should receive two doses of MMR. The first dose should be given at one year of age. A second dose of MMR is given to all primary one students. MMR can be given at the same time with other live vaccines or separated by an interval of 4 weeks.

C. The following individuals should NOT receive MMR or should wait

1. serious allergic reaction to a previous dose of MMR vaccine
2. known history of severe allergy to gelatin or certain antibiotics
3. individuals with the following conditions :
 - cancer
 - on long term corticosteroids
 - immunodeficiency
4. pregnancy*
5. has received immunoglobulin or other blood products (e.g. blood transfusion) within the past 11 months
6. has received other live vaccines in the past four weeks

*women should **avoid pregnancy for three months** after vaccination

D. What are the side effects?

- Some children may develop fever 5-12 days after vaccination, but the fever will usually subside within 2-5 days. Parents can use anti-fever medication to relieve the symptoms. A small number of children may also develop a rash 1-2 weeks after vaccination, but it will usually disappear within 1-2 days. A minority of children may develop transient swelling of salivary glands behind the cheeks, swelling of lymph glands (in the head or neck) or infection of the testicles.
- There is a 1 in 3 million chance of developing encephalitis or meningitis after receiving MMR vaccine, but this does not usually have long lasting ill effects on the child after recovery.

If you have any query, please contact Maternal & Child Health
Centre of the Department of Health.