Prince Edward Island Health and Wellness CANADA

Health PEI

Fact Sheet - Measles, Mumps, Rubella and Varicella Vaccine (MMRV)

1. What are Measles, Mumps, Rubella and Varicella?

These four diseases are caused by different viruses.

Measles (Red Measles) is a very contagious disease which can cause a rash, high fever, cough, runny nose and watery eyes. Measles can last for one to two weeks. It can also cause swelling of the brain, pneumonia, convulsions, deafness, brain damage and death. Measles is spread like a cold, by coughing and sneezing. It can be spread from person to person in households, classrooms, and areas of large gatherings of people.

Mumps can cause fever, headache, and swollen painful cheeks and neck. It can also cause deafness, sterility and meningitis (infection of the lining around the spinal cord and brain). Mumps is spread like a cold, by coughing and sneezing.

Rubella (German Measles) can cause fever and a rash. Rubella usually lasts for less than a week. Rubella is spread like a cold, by coughing and sneezing. If a pregnant woman who has never had Rubella or never received the vaccine, becomes infected with this virus, she could have a miscarriage. Her baby could be born with cataracts, deafness, heart defects and/or brain damage. Before becoming pregnant, ask your doctor if you need this vaccine.

Varicella or Chickenpox is a very contagious disease which causes an aggravating, itchy rash. The chickenpox rash may appear in crops of small red areas that look like pimples, then develop into small blisters or vesicles. The rash usually develops over a three-day period. After about four to five days the blisters usually dry up and scab over but can last up to 10 days.

About one in 20 children with chickenpox develops complications such as a bacterial infection in the skin/blood or chickenpox infection in the heart, joints, lungs (pneumonia) or brain (meningitis). A more serious complication is the development of Reye's Syndrome, a brain disease which can occur when a child who has chickenpox is given a medication containing **salicylates** (the most common being **Aspirin**).

Chickenpox in pregnancy can result in birth defects in the baby. If a woman develops chickenpox a few days before or after delivery, the newborn is at increased risk of developing severe chickenpox disease.

2. What are the contents of the MMRV vaccine?

The vaccine contains live weakened Measles, Mumps, Rubella (German Measles), and Varicella (chickenpox) virus to protect against these 4 illnesses. Additional components include amino acids for injection, lactose, mannitol, neomycin sulphate, sorbitol and water for injections. Very minute traces of egg protein may be contained in this vaccine.

3. What are the possible reactions from the vaccine and how should they be managed?

The most serious but rare side effect is a severe allergic reaction (anaphylaxis) which can be life-threatening and occurs within 15 to 20 minutes of receiving the vaccine. Procedures are in place to quickly respond to anaphylaxis. Public Health Nurses are trained to treat the condition by giving adrenaline and closely monitoring the situation.

The most common reactions are pain, swelling and/or redness at the injection site, fever, irritability and rash. These reactions may occur up to 2 weeks after the immunization is given. The rash may be red, blotchy or like small blisters and it may appear up to 45 days after the immunization is given.

It is not necessary to give acetaminophen (Tempra or Tylenol) after immunization. However, if your child is experiencing discomfort or fever, acetaminophen can relieve these symptoms.

Salicylates (such as aspirin) should not be given to a person who has received MMRV Vaccine for at least 6 weeks after vaccination due to the increased risk of Reye's Syndrome.

Please remain in the waiting room for 15 minutes after immunization

4. What are the situations in which MMRV should not be given?

- Persons who have a known anaphylactic (severe or life threatening) reaction to any component of the vaccine. However, those who have a known reaction to eggs may be immunized.
- Persons who have had a previous anaphylactic reaction to the vaccine.
- Persons with decreased immunity should consult their physician before receiving this vaccine.
- Persons who have received human blood products should wait at least 3 months before receiving MMRV.

5. What are the alternatives to not receiving the vaccine?

Chickenpox
The chances of acquiring chickenpox is very high in the non-immunized person. The disease is more serious for persons with decreased immunity, (or any reason including cancer, leukemia or lymphoma) those on high doses of steroids, or an inherited disease of immunity, or in pregnant women without immunity. (In these cases, it is recommended that persons avoid exposure in times of known outbreaks). If exposure occurs, persons should see their doctor.

NOTE: A person who is non-immune to chickenpox and is exposed to a person with chickenpox disease may receive the vaccine up to five days after being exposed, and thus decrease the chance of acquiring the disease.

Measles, Mumps & Rubella
A person who does not receive the Measles, Mumps, & Rubella vaccine is at increased risk for becoming sick if he/she is exposed to these diseases. At times of disease outbreaks, the non-immunized person should remain at home, avoiding day care or school, until advised to return.