



PUBLIC HEALTH SERVICES

Measles, Mumps, Rubella Vaccine (MMR) - Priorix

What are measles, mumps, and rubella?

Measles, mumps and rubella are diseases caused by viruses. The viruses are easily spread through the air by sneezing and coughing.

Measles (Red measles) causes fever, rash and cold-like symptoms and can lead to ear infection or pneumonia. More serious complications, occurring in 1 in 1,000 children, include inflammation of the brain (encephalitis). This can lead to convulsions, deafness or permanent brain damage. One in 3,000 people with measles can die from complications.

Mumps causes fever, headaches, and swelling of the salivary glands and cheeks. More serious complications include encephalitis, which can lead to permanent brain damage. About 1 in 20 people with mumps get mumps meningitis. Mumps can also cause temporary deafness. Permanent deafness occurs in less than 5 of 100,000 people with mumps. About 1 in 4 adult men and post-pubertal boys develop painful swelling of the testicles.

Rubella (German measles) causes fever, rash and headache. Encephalitis occurs in 1:6000 cases and occurs in a higher frequency in adults. Rubella can cause serious complications and birth defects, liver damage, and brain damage. This is called congenital rubella syndrome (CRS). It occurs in 9 in 10 babies born to women who become infected with the virus in the first three months of their pregnancy. Rubella can also cause miscarriage or stillbirth.

These diseases are now rare in Saskatchewan because of routine childhood vaccination programs.

What is MMR vaccine?

- The MMR vaccine protects against measles, mumps, and rubella.
- The vaccine is very effective. Approximately 99% of children given **two** doses of measles, mumps, rubella (MMR) vaccine, started on or after their first birthday will have lifelong immunity.
- When you/your child get vaccinated, you are helping protect others as well.

Who should get the vaccine?

- The MMR vaccine is now given to children as a series of two doses. The vaccine is given at the same time as other childhood immunizations.

MMR vaccine	Child's Age at vaccination
1 st dose	12 months
2 nd dose	18 months

- Grade 8 and Grade 12 students that have not received two doses of MMR.
- Adults born since 1970 should consider MMR immunization when there is: no medical confirmation of having had measles, mumps and rubella; no history of immunization with MMR vaccine; no immunity against these diseases.
- Women of childbearing age who are non-immune to measles, mumps and / or rubella.

Who should NOT get the MMR vaccine?

A mild illness, with or without a fever, is not a reason to avoid immunization.

- Children who have a serious illness, with or without fever, should delay immunization.
- Speak with a public health nurse or doctor if you or your child have had:
 - a life-threatening reaction to a previous dose of measles, mumps, or rubella vaccine, or any component of the vaccine .
 - an immune system weakened by disease or medical treatment,
 - a drop in the blood cells (platelets) that help prevent bleeding after getting a previous dose of MMR vaccine,
 - a blood transfusion or received other blood products within the past 12 months, or
 - are a woman who is pregnant, think you may be pregnant or are planning a pregnancy within 1 month.

Possible reactions after the vaccine.

Vaccines are very safe. It is much safer to get the vaccine than to get measles, mumps or rubella disease.

Common reactions to the vaccine may include soreness, redness and swelling at the injection site. A mild fever, a rash (that looks like measles) and swelling of glands in the cheeks or neck can occur about 7 to 12 days after getting the vaccine. Temporary joint pain may occur in teenage and adult women.

More serious reactions can include seizures caused by fever (about 1 in 3,000 people), a temporary drop in the blood cells that help prevent bleeding (about 1 in 30,000 people), and, inflammation of the brain (encephalitis – about 1

in a million people). The possibility of getting encephalitis from measles is about 1 in 1,000, which is much higher than from the vaccine.

What does the MMR vaccine contain?

Measles, mumps and rubella virus strains.

Priorix[®] vaccine contains:

- Amino acids, lactose, mannitol, neomycin sulfate and sorbitol. It is grown on chick embryo or MRC-5 human diploid cells.
- Does not contain latex.

Who should you report reaction to?

Report any adverse or unexpected reactions to your local public health nurse or your doctor as soon as possible.

Your immunization information will be recorded in a computerized system known as the Saskatchewan Immunization Management System (SIMS). Information collected in SIMS may be used to:

- Manage immunization records;
- Notify you if you or your child needs an immunization;
- Monitor how well vaccines work in preventing vaccine preventable diseases.

Your immunization records may also be shared with health care professionals in order to provide public health services; assist with diagnosis and treatment; and to control the spread of vaccine preventable diseases.

**For more information contact:
your local Public Health Office,
OR your physician,
OR HealthLine at 811**

References: Canadian Immunization Guide, 7th ed., (2006); Red Book, 28th ed. 2009; Product Monograph, 2007; HealthLink BC, 14a, 2009.

For more information call: 306-765-6506

