
Measles-Mumps-Rubella-Varicella (MMRV) Vaccine

Questions & Answers for Parents and Caregivers

This fact sheet provides basic information for parents and caregivers. It is not intended to provide or take the place of medical advice, diagnosis or treatment. Always talk to a health care professional about any health concerns you may have before you make any changes to your current diet, lifestyle or treatment.

Immunization is one of the most effective ways to protect yourself and your family against vaccine preventable diseases.

The Ministry of Health and Long-Term Care is introducing a new measles, mumps, rubella, varicella (MMRV) vaccine to the *Publicly Funded Immunization Schedules for Ontario* to protect children against measles, mumps, rubella and varicella infection.

What is measles?

Measles can be a serious infection. It causes high fever, cough, rash, runny nose and watery eyes. Measles lasts for one to two weeks. Ear infections or pneumonia (lung infection) can happen in one out of every 10 children with measles. Measles can also be complicated by encephalitis, an infection of the brain, in about one out of every 1,000 children with measles. This may cause brain damage and developmental delays. Measles can also make a pregnant woman have a miscarriage or give birth prematurely.

Measles spreads from person to person very easily and quickly. People can get measles from an infected person coughing or sneezing around them or simply talking to them.

What is mumps?

Mumps is a viral infection that is characterized by fever, headache and swelling of the cheek, jaw and neck. It usually happens in children between five and nine years of age, but can also affect very young children and can result in more serious complications such as meningitis. Fortunately, mumps meningitis does not usually cause permanent damage. Recently, disease outbreaks have

occurred more often among adolescents and young adults.

Mumps can cause very painful, swollen testicles in about one out of four teenage boys or adult men, and painful infection of the ovaries in one out of 20 women. Mumps infection during the first three months of pregnancy may increase the risk of miscarriage. Mumps can cause deafness in some people.

People can get mumps from an infected person coughing or sneezing around them or simply talking to them. It can also be spread through contact with the saliva of an infected person.

What is rubella (German measles)?

Rubella is usually a mild illness in children; up to half of the infections with rubella occur without a rash. Rubella may cause fever, sore throat, swollen glands in the neck and a rash on the face and neck. Temporary aches and pains and swelling of the joints are common in adolescents and adults, especially females, with rubella infection. Rubella can be followed by chronic arthritis (inflamed joints). It can also cause temporary blood clotting problems and encephalitis.

Rubella is very dangerous in pregnant women. If a woman gets rubella in the early part of a pregnancy, it is very likely that her baby will develop congenital rubella syndrome and be severely disabled or die.

Rubella spreads by contact with an infected person through coughing, sneezing or talking to them. It can also be spread by contact with the saliva of infected people.

What is varicella (chickenpox)?

Chickenpox is caused by the *varicella-zoster virus*. Children with chickenpox will feel sick with fatigue, mild headache, fever up to 39°C, chills and muscle or joint aches a day or two before the red rash begins. The raised itchy red blisters can be anywhere on the body. Blisters dry up and form scabs in four to five days.

Complications of chickenpox can include skin, ear and spinal cord infections, pneumonia and encephalitis. The risk of these complications increases with age. Please see the fact sheet for *Varicella (Chickenpox) Vaccine, Questions & Answers for Parents and Caregivers* for more information.

Chickenpox spreads very easily from person to person. It is passed from an infected person to others through coughing, sneezing and even talking. You can also get chickenpox if you touch a blister or the liquid from a blister.

Why is the MMRV vaccine important?

The MMRV vaccine offers parents an option to have their child immunized against four diseases in one vaccine. This vaccine reduces the number of injections for children.

In Ontario, measles, mumps and rubella vaccination is required for school attendance under the *Immunization of School Pupils Act (ISPA)*. Parents are required to provide a record of immunization or a valid exemption for measles, mumps and rubella before attending school.

How well does the MMRV protect against measles, mumps, rubella and/or chickenpox?

Almost all children who receive two doses of vaccine against these four diseases are protected against all of them. Protection from measles, mumps and rubella after getting the vaccine is probably lifelong. However, sometimes children may acquire the infection after vaccination, but the disease will be milder.

Who is eligible to receive the publicly funded vaccine?

In Ontario, children are eligible to receive the publicly funded MMRV vaccine from four to 11 years of age to protect against measles, mumps, rubella and chickenpox.

At what age should the MMRV vaccine be given?

The MMRV vaccine will be offered to children between four to six years of age as part of their routine immunization schedule. It is recommended that your child receive immunization against these diseases before entering school. The vaccine is currently approved for children up to 12 years of age.

Who should not get the MMRV vaccine?

Children should not receive the vaccine if they have:

- allergies to the vaccine or any component of the vaccine;
- known allergies to neomycin; or
- previously experienced an allergic reaction to any measles, mumps, rubella and/or varicella vaccines.

Please consult with your health care provider if you have:

- a weakened immune system or take medications that suppress the immune system;
- a personal or family history of febrile seizures;
- previously had a severe allergic reaction to eggs, or anything that contained eggs;
- received blood or blood products; or
- a severe infection with a high fever greater than 38°C.

You should always discuss the benefits and risks of any vaccine with your health care provider or local public health unit prior to receiving the vaccine.

Is the MMRV vaccine safe?

The MMRV vaccine is considered a safe vaccine; most children will have no side effects. Some common side effects from the MMRV include redness, swelling and tenderness in the area where the needle is given. Fever, and/or a rash can occur four to 12 days after getting the vaccine. The rash can be a blotchy red rash (measles-like) and/or spots that look like blisters (chickenpox). Severe reactions are rare.

There have been studies that showed a possible increased risk of febrile seizures in children who received the MMRV vaccine as a first dose when younger than two years of age. These studies were conducted in the United States for the MMRV vaccine ProQuad™. This vaccine is not approved for use in Canada. The MMRV vaccine approved for use in Canada is Priorix-Tetra™. The rate of febrile seizures with Priorix-Tetra™ has not been reported to be higher than if MMR and varicella vaccines are given separately.

As children get older their risk for febrile seizures lessens. Children who are four to six years of age do not experience febrile seizures as often as children less than four years of age.

There is a minimum risk of a pregnant woman or anyone else catching measles, mumps, rubella or chickenpox from a child who has been vaccinated recently.

Please report any side effects or severe vaccine reaction to your health care provider or local public health unit.

Do not give aspirin (acetylsalicylic acid, ASA) for pain or fever. The use of aspirin has been associated with an increased risk of Reye's syndrome (a severe disorder of the liver and brain) after vaccination.

When should I call my health care provider?

Call your health care provider or go to the nearest hospital emergency department if your child has any of the following reactions within three days of receiving the vaccine:

- hives;
- swelling of the face or mouth;
- trouble breathing, hoarseness or wheezing;
- high fever (over 40°C);
- convulsions or seizures; or
- other serious symptoms (e.g., paraesthesia).

Who should I talk to if I have any questions?

For more information please contact your health care provider or your local public health unit.

How should my child's immunization be recorded?

After your child receives any immunization, make sure his/her personal immunization record (i.e., the "Yellow Card") is updated. Keep it in a safe place!