

Vaccines (also called “needles” or “baby shots”) are the best way to protect against some very serious infections. The Canadian Paediatric Society and the National Advisory Committee on Immunization strongly recommend routine immunization.

The MMR vaccine is a three-in-one needle that protects against measles, mumps and rubella (German measles). Two doses of vaccine are required.

Vaccination against measles, mumps, and rubella is required by law for all children attending daycare or school in Ontario (unless exempted).

This vaccine should also be given to adults who are not protected against measles, mumps or rubella. Pregnant women who have been told that they are not protected against rubella should receive MMR vaccine as soon as they have given birth.

### What is Measles (Red Measles)?

Measles is a serious viral infection. It spreads very easily from an infected person to others through coughing, sneezing and even talking. It causes high fever, cough, rash, runny nose and watery eyes. Measles lasts for one to two weeks. It can be complicated by ear infections or pneumonia 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 often causes brain damage and developmental disability. Measles causes death in one in about 3,000 cases. In very rare cases, measles is complicated by a disease called SSPE (subacute sclerosing panencephalitis), a fatal brain infection. Measles can also make a pregnant woman have a miscarriage or give birth prematurely.

### What is Mumps?

Mumps is also a serious viral infection. It spreads the same way as measles. Mumps can cause fever, headaches, and swelling of the cheeks and jaw. The swelling is caused by an infection of the salivary glands. Mumps can cause meningitis, an infection of the fluid and lining covering the brain and spinal cord. About one in every 10 people with mumps gets meningitis. Fortunately, mumps meningitis is usually mild.

Mumps can cause deafness in some children. It can also cause very painful, swollen testicles in about one out of every four teenage boys or adult men. Mumps can cause a painful infection of the ovaries in one out of every 20 women. Both of these conditions are temporary and rarely result in permanent damage or sterility.

### What is Rubella (German Measles)?

Rubella is usually a mild illness in children, but can be more severe in older children and adults (especially women). Rubella spreads by contact with an infected person through coughing, sneezing, or talking to them. Rubella may cause fever, sore throat, swollen glands in the neck, and a rash on the face and neck. As many as three in five teenage girls and women with rubella get aches, pains, and swelling of the joints. Rubella can be followed by chronic arthritis. It can also cause temporary blood clotting problems and swelling of the brain.

Rubella is very dangerous in pregnant women. If a woman gets rubella in the early part of a pregnancy, the virus can infect the fetus causing birth defects such as heart disease, cataracts, deafness, and mental disabilities. In some cases it can cause death of the fetus.

### **At what age should my child be vaccinated with the Measles, Mumps and Rubella vaccine?**

Children are routinely immunized with MMR at 12 months and again at 18 months of age. This vaccine may be given with other vaccines at separate sites using separate needles. If your child misses a needle, you should get the next needle as soon as possible. Your family health care provider will tell you when to return for future needles.

**Your child should not receive any other vaccines for at least 28 days.**

### **How well does MMR vaccine protect my child?**

When given in the recommended number of doses, the vaccine protects about 99 per cent of people against measles, 95 per cent of people against mumps, and about 98 per cent of people against rubella.

### **Is the MMR vaccine safe?**

Yes. Most children will have no side effects. MMR vaccine can cause a rash or fever in some children six to 10 days after the needle is given. This may last for one to three days. Occasionally, a high fever can cause a convulsion. The convulsion comes from the high fever caused by the vaccine rather than the vaccine itself. This does not make the child any more likely to get epilepsy, brain damage or any other nerve problems. Convulsions caused by high fever are more likely to occur in children who have had convulsions before or if other family members have had convulsions. The benefits of the vaccine are much greater than the risks.

There is no risk of a pregnant woman or anyone else catching measles, mumps or rubella from a child who has been vaccinated recently. It is safe to give this vaccine to women who are breastfeeding.

The mumps part of the vaccine may cause fever and swelling of the glands in the neck. Meningitis may occur in one in 62,000 people who get the vaccine. The meningitis caused by mumps vaccine is mild, and permanent brain damage does not occur.

The rubella part of the vaccine may cause a mild fever, rash, or swelling of the glands in the neck in one out of seven children. This usually happens six to 10 days after getting the shot and lasts for one to two days. Less than one in 100 children may develop swelling and pain in some joints after the vaccine. One in four teenage girls and adult women may get painful swelling of some joints within one to three weeks after vaccination. The joint pain and swelling usually lasts only a few days. Very rarely, chronic arthritis may occur.

**Call your family health care provider or local hospital if your child has any of the following within three days of getting the needle:**

- high fever (over 40°C or 104°F)
- crying for more than three hours
- convulsions or seizures
- very pale color and serious drowsiness
- hives (itchy rash)
- swelling of the face or mouth
- trouble breathing
- other serious problems

### **Who should not get the MMR?**

Your family health care provider may decide not to give your child's needle or may give a different vaccine if your child has:

- a high fever or serious infection worse than a cold
- had an allergic reaction to a previous dose of MMR vaccine
- a severe allergy to any parts of the vaccine including: human albumin, lactose, mannitol, sorbitol, sulphate, sugar, gelatin, bovine serum, glutamate or neomycin (Priorix) OR neomycin, gelatin, or sorbitol (MMR II)
- religious or philosophical objections to any part of the vaccine
- a disease or condition that lowers the body's ability to fight infections
- recently received a blood transfusion or immune globulin in past 3-12 months
- anyone who is less than one year of age

- Women should wait at least one month to conceive following an MMR immunization. If a woman gets the MMR vaccine and then discovers that she is pregnant, she should consult her family health care provider.
- if you have an anaphylactic hypersensitivity to eggs you can be safely immunized with the MMR vaccine. However it is recommended that you are closely observed in the clinic for 30 minutes after receiving the vaccine.

### **Whom should I talk to if I have any more questions about the MMR vaccine?**

Talk to your family health care provider or the Huron County Health Unit (519-482-3416) for more information.

### **Your Record of Protection**

After your child receives any immunization, make sure the doctor updates the yellow personal Immunization Record card. Keep it in a safe place!