MMR (Measles Mumps Rubella) Vaccine

You can protect your child from 3 diseases by giving them 1 easy shot called the MMR. It protects children against measles, mumps, and rubella.

In Canada, children should get the MMR shot twice. They can get it when they are:

- 12 months old and 18 months old, OR
- 12 months old and before they start school (between ages 4 to 6)

It is safe to give the second MMR shot one month after the first MMR shot.

What is measles?

- It is a disease caused by a virus. A virus is a kind of germ that can make people sick.
- Sometimes it is called "red measles" (or rubeola) so it will not be confused with "German measles" (or rubella).
- Measles begins with a fever, runny nose, a cough and very red eyes. You may think your child has a cold.
- In a few days, a rash begins around the face and spreads to the chest, arms and legs. The eyes may hurt in bright light.
- Measles can cause an ear infection or pneumonia (a serious disease where fluid fills the lungs).
- Out of 1,000 children who get measles, 1 will also get a swelling of the brain called encephalitis. This can lead to seizures, hearing loss, mental retardation or death.
- There is no treatment for measles.


How is measles spread?
It spreads quickly by sneezing and coughing. It is very easy to catch measles.

What is mumps?

- It is a disease caused by a virus. A virus is a kind of germ that can make people sick.
- Mumps is most common in children, although sometimes adults get it, too.
- Mumps causes fever, headache and swelling of the saliva glands (inside the mouth). This swelling is painful and makes the cheeks puff out.
- Sometimes, mumps can cause meningitis, a serious disease that infects the fluid around the brain and spinal cord.
- Mumps can cause deafness.
- In adults, mumps can affect a woman’s eggs or a man’s sperm. A man who gets mumps may become sterile (not be able to have children). For both men and women, mumps can be very painful.

How is mumps spread?
It is spread by close contact between people. Sneezing and coughing can spread the disease.
What is rubella?

- It is also called German measles. Like red measles, rubella is caused by a virus. A virus is a kind of germ that can make people sick.
- It is milder than red measles. Children get a low fever and a mild cold. A rash may follow. Glands in the neck may swell up. The sickness lasts about 3 days.

How is rubella spread?

It is spread by close contact between people. Sneezing and coughing can spread the disease.

What about pregnant women and rubella?

- A pregnant woman who catches rubella during the first 5 months of pregnancy can pass the disease on to her baby (or fetus) while it is in the womb. The chances of this happening are very high. In 8 out of 10 cases where a pregnant woman has rubella in the first 5 months of pregnancy, the fetus will get rubella before it is born.
- If the fetus gets rubella during the first 12 weeks of pregnancy, it will be born with many problems. The baby may be blind, deaf or have heart damage.
- If the fetus gets rubella between 16 and 20 weeks of pregnancy, the baby will probably be born deaf.
- 1 out of 10 babies who are born with rubella will die during the first 12 months of life.
- There is no treatment for rubella in babies. The damage that happens to the fetus will last for the child’s whole life.

What can you do?

- Don’t wait until you are pregnant. You can NOT have the MMR shot when you are pregnant.
- Before you get pregnant, have a simple blood test. It will tell you if you had rubella as a child.
- If the blood test shows you did NOT have rubella as a child, you should get the rubella shot or the complete MMR shot right away.
- Speak to your doctor if you are planning to get pregnant.

How safe is the MMR vaccine?

- It is very safe. The only children who should not get the MMR shot are those who had trouble breathing OR had severe swelling on the skin or in the mouth after their first shot.
- With any vaccine, there may be some redness, swelling, or pain at the place where the needle went into the arm or leg. Some children will have a fever and a rash. Some have joint pains that last a little while. Your doctor can tell you what to give to control the fever or pain.
- If you have questions about the MMR vaccine, ask your doctor.

For more information:

- Autistic spectrum disorder: No causal relationship with vaccines, a statement of the Canadian Paediatric Society
- Vaccine safety

For complete information on vaccinations in Canada, read Your Child’s Best Shot: A Parent’s Guide to Vaccination.

Developed by the CPS Infectious Diseases and Immunization Committee

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