Measles, Mumps, Rubella (MMR) Vaccine

Get protected, get immunized.

- Vaccines make your immune system stronger. They build antibodies to help prevent diseases.
- Immunization is safe. It is much safer to get immunized than to get these diseases.

What is the MMR vaccine?
The MMR vaccine protects against the diseases measles, mumps, and rubella.

What is measles?
Measles is a virus that spreads easily through the air when someone who has measles coughs or sneezes. It can cause:
- a high fever
- a cough
- a runny nose
- red eyes
- a blotchy, red rash

Measles can be dangerous because:
- 1 in 10 people with measles will get middle ear or lung infections.
- 1 in 1,000 people with measles will get encephalitis (swelling of the brain), which can lead to seizures, deafness, or brain damage.
- 2 to 3 of every 1,000 people with measles could die.

What is mumps?
Mumps is a virus that spreads by coughing, sneezing, or having contact with saliva (such as kissing or sharing toys).

You can have no symptoms but still spread mumps. It can cause:
- a fever
- a headache
- swelling of the glands around your jaw
- swelling of the testicles or ovaries
- deafness
- encephalitis
- meningitis (infection of the fluid and lining that cover the brain and spinal cord)

What is rubella?
Rubella is a virus that spreads by coughing or sneezing. It is usually mild. It can cause:
- a fever
- a sore throat
- swollen neck glands
- a rash with red, raised bumps
- painful, swollen joints
- encephalitis
- a bleeding disorder

If you get rubella while you are pregnant, it can cause loss of a baby during pregnancy (miscarriage or stillbirth) or the baby may be born with disabilities.

Who should get the MMR vaccine?
The following people can get this vaccine:
- children starting at age 12 months who are not getting MMR-Var, which is the MMR and varicella (chickenpox) vaccines together
- younger babies (ages 6 to 11 months) who are having an organ transplant, travelling to areas where there is risk of measles, or who have had contact with measles
- adults and children whose immunization records do not show they have had the recommended number of doses of measles, mumps, or rubella vaccines

Your healthcare provider may suggest you have the MMR vaccine if you are having a stem cell transplant.

How many doses do I need?
The number of doses you get of the MMR vaccine depends on your age and risk of contact with these diseases.

Children – measles, mumps, rubella
Children need 2 doses of an MMR vaccine. As of January 1, 2021, children get their first dose at age 12 months and the second dose at age 18 months. Children usually get an MMR vaccine that is combined with the varicella vaccine (MMR-Var). If a child did not get an MMR or MMR-Var vaccine at age 18 months, they will get it at age 4 years.

Any doses a child gets before age 12 months do not count towards the 2 doses that they need to protect them against these diseases.

Adults - measles and mumps
Adults born in 1970 or later need 2 doses of measles and mumps vaccine.

If you were born before 1970, you likely do not need this vaccine. That is because there is a high chance you had contact with measles and mumps when you were younger. Your body remembers these viruses and knows how to fight them.

You may need extra protection if you have a high risk of contact because of where you work, where you travel, or what you study (if you are a student). If you are born before 1970 and are:
- a healthcare worker or a post-secondary healthcare student, you need 2 doses of a measles and mumps vaccine
- a post-secondary student (not in healthcare), you need 1 dose of a measles and mumps vaccine
- travelling to areas where there is a high risk of measles, you need 1 dose of a measles vaccine
Adults – rubella
Adults born in 1957 or later need at least 1 dose of rubella vaccine.

Most adults born before 1957 are thought to be protected against rubella and do not need this vaccine. You may need extra protection if you have a high risk of contact because of where you work. You will need 1 or more doses of this vaccine if you were born before 1957 and are a healthcare worker or a daycare worker.

Your healthcare provider may also suggest you get a second dose of rubella vaccine if a blood test shows that you are not protected.

If you are having an organ transplant, ask your healthcare provider how many doses of measles, mumps, and rubella vaccine you need.

Are there other vaccines that protect against measles, mumps, and rubella?
The MMR-Var vaccine protects against measles, mumps, rubella, and varicella.

How well does the vaccine work?
After 1 dose, protection is about:
- 85% to 95% for measles (2 doses: almost 100%)
- 62% to 91% for mumps (2 doses: 76% to 95%)
- 95% for rubella

Where can I get the MMR vaccine?
You can get the vaccine at your local public health or community health centre.

Are there side effects from the MMR vaccine?
There can be side effects from the MMR vaccine. They tend to be mild and go away in a few days, but side effects can happen up to 6 weeks after having this vaccine. They may include:
- redness, swelling, or feeling sore where you had the needle
- getting upset easily
- a fever
- body aches or sore joints
- a rash that may be measles-like (a blotchy, red rash)

At least 1 out of 100 people who got this vaccine reported 1 or more of these side effects. In some cases, it is unknown if the vaccine caused these side effects.

It is important to stay at the clinic for 15 minutes after your vaccine. Some people may have a rare but serious allergic reaction called anaphylaxis. If anaphylaxis happens, you will get medicine to treat the symptoms.

It is rare to have a serious side effect after a vaccine. Call Health Link at 811 to report any serious or unusual side effects.

How can I manage side effects?
- To help with soreness and swelling, put a cool, wet cloth over the area where you had the needle.
- There is medicine to help with a fever or pain. Check with your doctor or pharmacist if you are not sure what medicine or dose to take. Follow the directions on the package.
- Some people with health problems, such as a weak immune system, must call their doctor if they get a fever. If you have been told to do this, call your doctor even if you think the fever is from the vaccine.
- The rashes you could get after this vaccine are not contagious (you cannot spread them to others).

Who should not get the MMR vaccine?
You may not be able to get this vaccine if:
- You have an allergy to any part of the vaccine.
- You had a severe (serious) or unusual side effect after this vaccine or one like it.
- You have a weak immune system (because of a medicine you take or a health problem).
- You have a family history of a weak immune system.
- You had a blood product in the past 11 months.
- You had another live vaccine in the past 6 weeks.
- You are pregnant.

If you are planning to get pregnant, wait 1 month after getting this vaccine before you start trying to get pregnant.

If you have allergies or have had a side effect from this vaccine, check with your doctor or a public health nurse before you get the vaccine.

Although you can get the vaccine if you have a mild illness such as a cold or fever, you should stay home until you are feeling better to prevent spreading your illness to others.

I have a fear of needles. How can I prepare for my immunization?
Many adults and children are afraid of needles. You can do many things before, during, and after immunization to be more comfortable.

Scan the QR code, visit ahs.ca/vaccinecomfort, or call Health Link at 811 for information.

For more information about immunization
Call Health Link at 811

Scan the QR code or go to ahs.ca/immunize