

Measles, Mumps, & Rubella Vaccine (MMR)

One vaccine that protects against measles, mumps and rubella disease.

Measles, mumps, and rubella are diseases caused by viruses. The viruses are spread easily through the air when an infected person coughs or sneezes. You can become infected when you breathe in this air or touch a surface contaminated with virus. The viruses can also spread through contact with an infected person's saliva when sharing food, drinks, cigarettes or by kissing.

What is Measles?

Measles, also known as red measles, causes fever, rash, red eyes that are sensitive to light, and cold-like symptoms. It can lead to ear infections and pneumonia (infection of the lungs). Encephalitis (inflammation of the brain) occurs in 1 in 1,000 cases, which can lead to seizures, deafness or permanent brain damage. About 1 in 1,000 people with measles can die.

What is Mumps?

Mumps causes fever, headache and swelling of the salivary glands and cheeks. More serious complications include encephalitis, which is swelling of the brain. About 1 in 20 people with mumps get mumps meningitis, an infection of the lining of the brain. Permanent deafness occurs in less than 1 in 20,000 people with mumps. Adults and teens with mumps can have painful swelling of the testicles (about 1 in 4 cases) or ovaries (about 1 in 20 cases).

What is Rubella?

Rubella, also known as German measles, can cause serious health issues for an unborn baby including deafness, eye problems, heart defects, and brain damage. This is called Congenital Rubella Syndrome (CRS). It occurs in about 9 out of 10 babies born to women who have rubella within the first 3 months of their pregnancy. Rubella can also cause miscarriage or stillbirth.

Why get vaccinated?

Immunization is the best way to protect you and your family against serious diseases. This vaccine is most effective when given before exposure to the disease.

After two doses of MMR vaccine, 97% of individuals are protected against measles, 95% against mumps and about 98% against rubella. Protection is considered life-long after 2 doses.

MMR vaccination is required to attend school and child care settings in Ontario. Parents are required to provide a record of immunization or valid exemption before their child attends.

Who is eligible to be vaccinated?

- Infants and young children are routinely immunized at 12 months of age (on or after their first birthday). A second dose is given at 4-6 years of age and is given as a combination vaccine called MMRV, which also protects against Varicella (Chickenpox).
- Some adults may have only received one dose of the vaccine in the past. A second dose of MMR is recommended for anyone born in or after 1970. Those born before 1970 are generally presumed to have natural immunity.
- A second dose is also recommended for students at post-secondary institutions, health care workers, travelers, and military personnel regardless of the birth year.
- Infants from 6 to 11 months of age who are traveling to countries where there is measles disease or are known to have been contact with someone with measles may receive a dose prior to their first birthday. These children will need two additional doses after their first birthday.
- Susceptible, healthy, non-pregnant persons who

are not immune and have been exposed to someone who is contagious with measles can receive the vaccine within 72 hours after exposure to prevent or reduce the severity of measles infection.

MMR vaccine is safe for breastfeeding women.

Who should not get the vaccine?

- Anyone with a severe allergic reaction to any part of the vaccine or its container.
- Anyone who has had a serious allergic reaction to this vaccine in the past.
- Anyone with a high fever or serious infection worse than a cold.
- Anyone who is pregnant or trying to become pregnant. Women should not get pregnant for one month after receiving MMR vaccine.
- Anyone with a severely weakened immune system, such as human immunodeficiency virus (HIV), cancer or taking medications that weaken the immune system.
- Infants less than 6 months of age.
- Individuals with active or untreated tuberculosis.

Your health care provider may delay giving this vaccine if you have received any blood product (i.e. blood transfusion or immune globulin) within the last year or received a live vaccine (i.e. MMRV or chickenpox) in the last four weeks.

TB skin testing should be completed on the same day as MMR vaccination. If a live vaccine has been given, delay TB skin testing for at least 4 weeks.

What to expect after vaccination?

MMR vaccine is safe and well tolerated.

Side effects, if they occur, are usually mild and go away in a few days. Common side effects include redness, swelling and/or pain at the injection site.

Headache, fever, tiredness, dizziness, nausea and muscle aches may also occur, but are less common.

A fever, rash, and swollen glands may occur 1 to 3 weeks after the vaccine was given. The rash is not contagious and goes away in a few days.

Severe allergic reactions (i.e. anaphylaxis), although rare, are a risk with the administration of any vaccine. It is recommended that you remain in a clinic setting for 15 minutes following immunization as this is the most common timeframe when anaphylaxis will occur.

Stay up to date with your vaccinations

Make sure your healthcare provider updates your personal immunization record (yellow card) after you receive a vaccine. Keep your records in a safe place.

If your child attends licensed child care or school, please notify Public Health when a vaccine is given. You can report the vaccines in one of the following ways:

- **Online:** The Immunization Connect Ontario (ICON) tool available at immunizewdg.ca allows you to report and view your child's immunization record.
- **Email:** vaccine.records@wdgpublichealth.ca
- **Phone:** 1-800-265-7293 ext. 4396
- **Fax:** 1-519-836-2986

For more information visit:

- Wellington-Dufferin-Guelph Public Health: wdgpublichealth.ca
- Ontario Ministry of Health: www.ontario.ca/page/vaccines
- Immunize Canada: www.immunize.ca
- Publicly Funded Immunization Schedules for Ontario: www.health.gov.on.ca/en/pro/programs/immunization/schedule.aspx