

## Measles, Mumps, and Rubella: Diseases and Vaccines



# Measles, Mumps, and Rubella: Diseases and Vaccines

## What is measles?

- Measles is a severe (very bad) disease caused by a virus. Measles spreads very easily and quickly from person to person. Both children and adults can get measles.
- Measles is also called red measles or rubeola. It causes symptoms that usually last about 7 to 14 days (1 to 2 weeks), like:
  - › Rash
  - › High fever (temperature above 39.5 °C/103 °F)
  - › Cough
  - › Runny nose
  - › Watery eyes
  - › Koplik spots (white spots inside the mouth)
- Measles may lead to ear infections and pneumonia (lung infection).
- It may also lead to encephalitis. Encephalitis is inflammation (swelling and irritation) in the brain. Encephalitis happens in about 1 in 1,000 people who get measles. Encephalitis can cause seizures or deafness.
- Measles can sometimes cause death.

**Measles can be prevented by getting vaccinated.**

## What is mumps?

- Mumps is a severe disease caused by a virus. Mumps spreads very easily and quickly from person to person. Both children and adults can get mumps. It causes:
  - › Fever (temperature above 38.5 °C or 101.3 °F)
  - › Headache
  - › Inflamed (swollen and irritated) salivary glands (glands in front of and below each ear), which cause your cheeks to swell
  - › Pain and swelling of the testicles, ovaries, and breasts
  - › Encephalitis (see section above)
  - › Abdominal (belly) pain
  - › Deafness
  - › Mild meningitis (the tissue that covers your brain and spinal cord gets inflamed)

**Mumps can be prevented by getting vaccinated.**

## What is rubella?

- Rubella is a severe disease caused by a virus. Rubella spreads very easily and quickly from person to person. Both children and adults can get rubella.
- Rubella is also called German measles. It causes symptoms that last for about 3 days, like:
  - › Low fever (temperature above 37.5 °C or 99.5 °F)
  - › Rash
  - › Swelling of the lymph nodes (glands) in your neck
- Rubella may also cause:
  - › Swelling and aching in your joints (this can last for about 1 to 2 weeks)
  - › Encephalitis
  - › Arthritis (in half of all teenage and adult women who get rubella)
- It can also cause deformities in your baby if you have rubella during pregnancy.

**Rubella can be prevented by getting vaccinated.**

## What is the measles, mumps, and rubella (MMR) vaccine?

- The MMR vaccine is 3 vaccines in 1 needle. Getting the MMR vaccine is the best way to prevent measles, mumps, and rubella.
- The MMR vaccine has a very small amount of live virus in it. The live virus has been treated so it will not cause these diseases in healthy people.
- The vaccine is injected under the skin.
- **The MMR vaccine is very effective in preventing measles, mumps, and rubella.** Almost everyone who gets 2 doses of the vaccine will be fully protected. Most people (9 out of 10) who get two doses of the vaccine will have full protection from MMR for life.
- If you have received only 1 dose of the MMR vaccine, you are **NOT** fully protected. You may still get measles, mumps, or rubella if you are exposed to these diseases, but your illness will be milder than if you had not received any vaccine.

## Who should get the MMR vaccine?

- Anyone born in 1970 or later should get 2 doses of the MMR vaccine. Each dose must be documented. This means that a record of each vaccine you get is on file with Public Health or a health care provider.
- If you have given birth recently, you may need this vaccine. Talk to your primary health care provider (family doctor or nurse practitioner) for more information.
- Anyone at risk for these diseases may need a booster vaccine if there is an outbreak of measles, mumps, or rubella.
- Any child aged 6 to 11 months who is travelling to a place where they could come into contact with measles should get this vaccine. The child should then get 2 more doses of the vaccine after they turn 1 year old.

It is safe for people who chest or breastfeed to receive the MMR vaccine.

### Caution

Check with a health care provider before you get this vaccine if:

- › your immune system is weak because of a medical condition, a disease, or medication.
- › you have had immunoglobulin (IG) or any other injection or transfusion within the last 3 to 11 months.

If these apply to you, your health care provider may tell you that you should wait to have the MMR vaccine.

## Who should NOT get the MMR vaccine?

- Babies younger than 1 year old (except babies aged 6 to 11 months who are travelling to a place where they could come into contact with measles).
- People who may have immune system problems caused by a medical condition or medication they are taking.
- People who have had a live vaccine within the last 4 weeks (1 month).
- People who have had a serious allergic reaction to a past dose of the MMR vaccine, or any part of the MMR vaccine.
- People who are sick or who have a high fever (temperature above 39.5 °C or 103 °F).
- People who are pregnant. You should wait at least 1 month after getting the MMR vaccine before getting pregnant.

MMR and varicella vaccines can be given at the same time. If they are not given on the same day, you should wait 4 weeks before getting the other vaccine.

## **What will happen after getting the MMR vaccine?**

- Like any vaccine, there is a very small chance that you or your child could have a serious reaction. You or your child should stay in the clinic for at least 15 minutes in case there is a reaction. If a reaction happens, the health care provider can monitor and treat you or your child right away.

## **What are the possible side effects of the MMR vaccine?**

- Common side effects:
  - › Redness, swelling, and pain at the injection site (where the needle was put in).
  - › Fever, rash, sore throat, or headache. These symptoms may happen about 5 to 12 days after getting the vaccine and may last for 1 to 2 days.
  - › Pain or swelling of the testicles (rare).
- **Make sure you have acetaminophen (Tylenol®) or ibuprofen (Advil®) at home in case you or your child has a fever.** Follow the instructions on the medication labels.
  - › People who have certain medical conditions should not take these medications. Talk to your primary health care provider before using these medications.

## **What are the possible risks of the MMR vaccine?**

- Some people may faint before, during, or after getting a vaccine. If you sometimes faint when you get a vaccine, tell the health care provider before you get the MMR vaccine.
- Sitting or lying down for 15 minutes after getting the vaccine can help prevent fainting, or injuries caused by a fall.
- Tell the health care provider if you have any of these symptoms after getting the vaccine:
  - › Dizziness
  - › Trouble seeing
  - › Ringing in your ears

- Some people (about 5 to 15%) with a higher risk of a reaction to the vaccine will get a low fever or a mild rash 7 to 12 days after getting the MMR vaccine. People who have this reaction are not infectious (they cannot spread the rash or fever to others).

### **Call your primary health care provider if:**

- › You or your child have a fever for more than 24 hours (1 day)
- › You or your child have a temperature of 39.5 °C or 103 °F or higher
- › Your fever or your child's fever does not get better after taking acetaminophen or ibuprofen
- › You or your child have a seizure
- › You or your child have other symptoms that start after getting the MMR vaccine

**If you think the person who got the vaccine is having a severe allergic reaction (anaphylaxis), call 911 right away.**

### **What if there is a severe allergic reaction?**

- Severe allergic reactions to the MMR vaccine are rare. If needed, the health care provider can give you or your child medication (epinephrine) to help if you or your child have any of the following symptoms (see below). They will then call 911.
- Symptoms of a severe allergic reaction:
  - › Itchy skin or hives
  - › Sneezing
  - › Stuffy nose
  - › Watery eyes
  - › Coughing or wheezing
  - › Swelling of the face and throat
  - › Flushed skin
  - › Trouble breathing
  - › Stomach (belly) cramps or vomiting (throwing up)
  - › Fast heartbeat
  - › Dizziness or weakness

Symptoms usually start a few minutes after getting the vaccine, but may start up to a few hours after.

### **Questions?**

If you have questions about measles, mumps, or rubella, or about the MMR vaccine, please call Public Health or your primary health care provider.

### **Public Health phone numbers:**

- › [www.nshealth.ca/public-health-offices](http://www.nshealth.ca/public-health-offices)

**Visit these websites for more information about vaccines, including the benefits and risks:**

**Immunize Canada**

- › [www.immunize.ca/diseases-vaccines](http://www.immunize.ca/diseases-vaccines)
- › [www.immunize.ca/parents](http://www.immunize.ca/parents)

**Public Health Agency of Canada**

- › [www.phac-aspc.gc.ca](http://www.phac-aspc.gc.ca)

**Canadian Paediatric Society**

- › [www.cps.ca](http://www.cps.ca)

**Immunize.org**

- › [www.immunize.org/handouts/discussing-vaccines-parents.asp](http://www.immunize.org/handouts/discussing-vaccines-parents.asp)

**811**

Call 811 to talk with a registered nurse 24 hours a day, 7 days a week. They can help with non-urgent, health-related issues.

- › <https://811.novascotia.ca>

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Find this pamphlet and all our patient resources here: <https://library.nshealth.ca/PatientEducation>

Contact your local public library for books, videos, magazines, and other resources.

For more information, go to <http://library.novascotia.ca>

Connect with a registered nurse in Nova Scotia any time: call 811 or visit <https://811.novascotia.ca>

Learn about other programs and services in your community: call 211 or visit <http://ns.211.ca>

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[www.nshealth.ca](http://www.nshealth.ca)

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If you have any questions, please ask your health care provider.