# MMR Vaccine – What You Need to Know: Public FAQ



To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email <a href="mailto:doh.information@doh.wa.gov">doh.information@doh.wa.gov</a>.

#### **Table of Contents**

MMR Vaccine – What You Need to Know: Public FAQ	
	1
General measles questions	2
MMR for children	7
MMR for adults	8
MMR and travel	11

# General measles questions

#### I think I have measles. What should I do?

Call your healthcare provider right away and tell them about your symptoms.
 They can guide you on the next steps and, if needed, arrange a safe way to evaluate you without exposing others.

#### I've been told I have measles: what should I do?

- Stay home for 4 days after the rash appears to avoid spreading the virus. Ask your doctor when it's safe to be around others.
  - Also:
- Cover coughs and sneezes with a tissue or your elbow.
- Wash hands often with soap and water.
- Don't share food or drinks.
- Disinfect commonly touched surfaces.
- o Call your doctor if the symptoms worsen.

#### What should I do if I have been exposed to measles?

Call your healthcare provider right away if you've been exposed to measles. They can check if you're immune, advise on the next steps, and arrange for care without exposing others if needed. If you're not immune, the MMR vaccine or measles immune globulin may reduce your risk. If you don't receive either, stay at home and avoid places with vulnerable people (like schools or hospitals) until your provider clears you.

#### How can I find out my vaccination status?

You can check to make sure you have been vaccinated with the MMR vaccine by obtaining vaccination records from your doctor's office, pharmacy, or the provider that vaccinated you. You can also try checking with a school to see if they have your

immunization record that you submitted when registering for school. Finally, you can sign up for MyIR to obtain an electronic immunization record from the Washington State immunization registry or contact the Department of Health.

#### How can I get tested for measles?

A doctor or health care provider can test for measles with a throat or nasal swab.

#### Should I throw a measles party?

No! DOH strongly advises against intentionally exposing anyone to infectious diseases like measles. Measles can be spread easily and can cause severe complications and death, even in healthy people. You can't predict how severe the symptoms will be. Exposing kids on purpose puts others at risk, especially those who are unvaccinated and people with weakened immune systems. Vaccination is the safest way to protect children against measles.

#### Can vitamin A help treat or prevent measles?

Vitamin A doesn't prevent measles, but may help as a supplement during infection, especially in severe cases or people with low levels. Most people in the US get enough through food. Too much vitamin A can be harmful, especially during pregnancy. Always check with your doctor before taking supplements. The best protection against measles is 2 doses of the MMR vaccine.

#### What kind of vaccine is the MMR?

The measles, mumps, and rubella (MMR) vaccine contains live but weakened strains of the measles, mumps, and rubella viruses. After vaccination, the immune system makes virus-fighting antibodies against the weakened vaccine virus. Measles vaccine protects against measles because if you have been vaccinated and then are exposed to someone with measles, your body remembers how to fight off the virus. That's because the vaccine trained your immune system. The vaccine does not cause disease but works to produce a strong and long-lasting immune response.

#### Why are vaccines so important to prevent measles?

The MMR vaccine is highly effective in preventing measles. If we have high rates of MMR vaccinations in a community, we can prevent outbreaks that require us to take time away from work and school. We can protect those who are not able to be vaccinated, such as those with weakened immune systems or infants too young to be vaccinated.

#### Who recommends the MMR Vaccine?

 The Centers for Disease Control and Prevention (CDC), the American Academy of Pediatrics (AAP), the American Academy of Family Physicians (AAFP), the American College of Obstetricians and Gynecologists, the American College of Physicians (ACP), and the Washington State Department of Health all recommend this vaccine.

#### How effective is the MMR vaccine?

 The MMR vaccine is very effective. One dose of the MMR vaccine is 93% effective in preventing measles. A second dose increases effectiveness to 97%.

#### Who should receive the MMR vaccine?

- All children should receive 2 doses of the MMR vaccine at 12-15 months of age, and again at 4-6 years of age.
- Adults born after 1957 who have never been vaccinated should get at least 1 dose of the MMR vaccine, unless at high risk.
- High risk persons include healthcare workers, school-age children, international travelers, and students attending college or vocational programs. If they have never been vaccinated or are not immune, they should get 2 doses of the MMR vaccine, given at least 28 days apart.

## How long does it take for someone to be protected from measles after vaccination?

 For the measles vaccine to work, the body needs time to produce protective antibodies. It takes about 2-3 weeks for people to be fully protected. If you travel outside of the US, you should plan to be fully vaccinated at least 2 weeks before leaving.

#### Is there anyone who should not receive the MMR vaccine?

 Pregnant women, anyone with a severe allergy to any component of the MMR vaccine, people with active tuberculosis, and anyone with a weakened immune system, should not receive the MMR vaccine.

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

Common side effects include redness or soreness at the vaccination site,
 temporary joint or muscle pain, mild rash, or fever. These symptoms are

usually mild and last 24-48 hours.

#### Can people who are fully vaccinated still get measles?

The vaccine is 97% effective after 2 doses, so that leaves 3 out of 100 people who may not have made antibodies to the vaccine who can get measles. Vaccines, like medications, are not 100% effective. Some people's immune system may not have responded well to the vaccine. But fully vaccinated people who get measles are more likely to have a milder illness and less likely to spread the disease to other people, especially those who can't get vaccinated.

#### What should I do if I'm not sure whether I'm immune to measles?

o If you're unsure about your immunity to measles, start by checking your vaccination records to see if you received the MMR (measles, mumps, and rubella) vaccine. If you were tested for measles in the past, try to locate the lab results. If you don't have records of either vaccination or a blood test confirming immunity, its recommended that you get vaccinated with the MMR vaccine. There is no harm in receiving another dose, even if you were previously vaccinated but don't have documentation.

# I was not vaccinated with MMR but was exposed to somebody with measles. Should I receive a vaccine?

o Yes. An MMR vaccine can be effective if given within 3 days of being exposed.

# • If I'm exposed to someone with measles and I can't get the MMR vaccine, is it possible to get immune globulin?

 Yes, measles immune globulin can be given to pregnant people and people who have a weakened immune system who can't get the MMR vaccine. Talk to your provider about this option.

#### What is an MMR titer?

 A titer is a blood test that checks for antibodies (immunity) against specific diseases. An MMR titer checks for immunity to measles, mumps, and rubella.

#### Should I get a blood test to check for measles immunity?

 The CDC does not recommend measles antibody testing before or after MMR vaccination to assess immune response. 97% of people are protected against measles when they get 2 MMR vaccines, so antibody testing is not needed. Patients who haven't been vaccinated or have no documented immunity should receive 1 or more doses of the MMR vaccine.

#### Does the MMR vaccine cause autism?

- No. There is no scientific evidence that any vaccine causes autism. There
  have been many studies and research conducted and all of them have found
  no association between vaccines and autism.
- The MMR vaccine prevents dangerous measles infection and saves lives. It continues to be monitored for safety and it remains our best defense against measles, mumps, and rubella.
- Check out these resources for more information: <u>Vaccines and Autism</u> <u>|</u>
   <u>Children's Hospital of Philadelphia</u> and <u>Autism and Vaccines | Vaccine Safety</u> <u>| CDC</u>

# My family is unsure if vaccines are safe. What can I tell them to make them change their mind about getting the MMR vaccine?

- Talking to family members who are unsure about vaccines requires time to listen and hear about their specific concerns. You can provide information to family members about why you vaccinate and reasons to get vaccinated. For example, you can tell them that measles is highly contagious and can cause children to be very sick, such as getting pneumonia, swelling of the brain, deafness and even death. About 1 in 5 people who are not vaccinated will need to be hospitalized.
- The MMR vaccine has been licensed since the 1970s. It's been monitored for safety for many years with minor side effects.
- Many large studies show no connection between MMR vaccine and autism.
   The causes of autism spectrum disorder are not known, but genetics plays a strong role. Autism develops before birth or early in life.
- MMR vaccine is the best way to be protected against measles, mumps, and rubella. One dose is 93% effective, and 2 doses are 97% effective to prevent measles infection.
- Vaccination is the best defense to maintain your immune system's strength and protect against these serious health risks.
- Helpful resource: check out our <u>Plain Talk About Immunizations</u> booklet.

#### MMR for children

#### When should my child get the MMR vaccine?

 Children should get 2 doses to develop life-long immunity. The first dose should be given at 12-15 months of age and the second dose at 4-6 years of age.

#### Can my baby get the MMR vaccine before 12 months?

Yes, in special situations – infants 6-11 months old may receive 1 dose during a measles outbreak, prior to internation travel, or travel to an area of the United States that is experiencing an outbreak. If your baby gets the MMR vaccine before 12 months, make sure the baby gets 2 more vaccines to make sure they are fully protected against measles.

# There is a measles outbreak in my community. Can my child be vaccinated if s/he is younger than 12 months?

 Children as young as 6 months can safely receive the MMR vaccine. Ask your provider to see if they recommend the MMR vaccine before 12 months if there's an outbreak in your area. These children will still need to receive 2 additional MMR vaccines starting at the age of 12 months to be considered immune to measles.

### How soon after my child gets the first MMR vaccine can they receive the second vaccine?

The second dose of the MMR vaccine is usually given at age 4-6 years old.
 However, it is safe to receive the second dose after at least 28 days have passed since receiving the first dose if you are travelling outside of the US or if your child is exposed to someone with measles.

#### Is it better for my child to get the disease rather than the vaccine?

- The MMR vaccine is our best defense against measles, mumps and rubella.
   It is constantly monitored for safety and effectiveness, and the benefits outweigh any potential risks. Hundreds of millions of doses of the MMR vaccine have been given in the U.S. since it was developed, with an excellent record of safety.
- Measles can be a serious disease, with 1 in 3 people experiencing 1 or more complications. Complications from measles are more common among very young children (younger than 5 years), people over age 20, pregnant people, or those with weakened immune systems. Death from measles occurs in 1 to 3 per 1,000 people with measles in the United States.

The most common complication of measles include ear infections (1 in 10 children) and diarrhea (fewer than 1 in 10 people). Pneumonia (1 in 20 children) is the most common cause of measles-related death. About 1 out of 1,000 infected people will develop acute encephalitis, an inflammation of the brain that can lead to permanent brain damage.

#### My child has an egg allergy: is it safe to give the MMR vaccine?

Yes, it is safe to give the MMR vaccine to children with egg allergies. Several studies show that the MMR vaccine is safe in children who are severely allergic to eggs. Both the American Academy of Pediatrics and the federal Advisory Committee on Immunization Practices (ACIP) recommend giving the MMR vaccine to children, regardless of egg allergy.

# My child received the MMR vaccine and developed a rash. Did the vaccine give my child measles?

O About 5 percent of people who receive the MMR vaccine develop a mild rash. When it occurs, the rash usually appears 7 to 12 days after vaccination. This rash is *not* an infection and cannot be spread to others. The vaccine viruses are not spread from a vaccinated person, even if they develop a rash. No special precautions, such as exclusion from school, are needed.

#### MMR for adults

#### • Do adults who already received the MMR vaccine need a booster?

Most vaccinated adults are immune to measles and do not need a booster. Check for the MMR vaccine on your immunization record. If you were born before 1957, you likely had measles disease and developed life-long immunity and do not need MMR vaccines. If you are not sure of your immunity or vaccination status, it is safe to get an MMR vaccine.

#### • Who is considered a "high risk" adult who needs 2 MMR vaccines?

- People attending college or other post-high school educational institutions, healthcare workers, and international travelers
- I'm a college student without vaccination records. My titer results show I'm immune to rubella and mumps, but not measles. What type of vaccine should I receive?
  - Single measles, mumps, and rubella vaccine are no longer available in the U.S.; you will need get the combined MMR vaccine. You should receive 2 doses of MMR since you are at higher risk of measles infection as a college

student.

#### I was born before 1957; do I still need an MMR vaccine?

No. If you were born before 1957, you are considered immune to measles.
 This is because you lived through many years of epidemic measles before the first vaccines were developed and are very likely to have had the disease.

### I was born before 1957 and my blood test isnegative for measles. Should I get the MMR vaccine now?

 People born before 1957 are considered immune to measles. However, if your blood test shows you are not immune to measles, you can receive 1 or more MMR vaccines.

### I'm a healthcare worker and I was born before 1957. How many MMR vaccines do I need?

Although people born before 1957 are considered to have measles immunity, healthcare workers are in a high-risk category. If there is no measles outbreak in your area, you may consider getting 2 doses of the MMR vaccine. During an outbreak, it is recommended that all healthcare workers - including those born before 1957 - receive 2 doses of the MMR vaccine.

# • I was told that I had measles in my childhood. Am I immune or do I need to get vaccinated?

 If you have a lab result that shows that you had measles infection, you don't need to get vaccinated. If you don't have documentation of measles infection, measles antibodies through a blood test, or MMR vaccination, you should receive the MMR vaccine.

# I do not have my immunization record but think I have received the MMR vaccine in the past. How many MMR vaccines do I need?

- If you don't have documentation of previous MMR vaccination or documentation of immunity, the recommendations are:
  - 1 dose of the MMR vaccine:
    - Adults born in 1957 or later who are at low risk (not international travelers, healthcare workers, or attending college/vocational program).
  - o 2 doses of the MMR vaccine:

 High-risk adults: healthcare personnel, international travelers born in 1957 or later, and people attending college/vocational program.

# I received my measles vaccine between 1963-1967, but am not sure which type of vaccine I received. Do I need to get a blood test to check for immunity?

No, you don't need a blood test to check for immunity. Two types of measles vaccines were used in the 1960s: live virus, and inactivated (killed) virus. The inactivated version was later found to be not as effective in promoting immunity. If you do not know which type you received, or you do not have any records, you should receive at least 1 dose of the MMR vaccine. If you are at higher risk, 2 doses are recommended.

### I had my blood tested for measles immunity and it was negative. What should I do?

o If you have an immunization record showing that you received 2 MMR doses, you are considered immune even with a negative titer and do not need an additional vaccine. If you don't have an immunization record showing that you received the MMR vaccine, you can get vaccinated. There is no harm in getting additional MMR vaccines even if you were vaccinated in the past but just don't have your records.

#### • Which people don't need additional MMR vaccine doses?

- Preschool-aged children with at least 1 MMR dose given on or after the first birthday.
- Low-risk adults with at least 1 MMR vaccine.
- School-aged children, adolescents, and high-risk adults, with 2 MMR doses.
- People born before 1957.

#### • Am I a "high risk" adult who needs 2 MMR vaccines?

 If you are a college student, healthcare worker, or international traveler you are considered high risk and should receive 2 MMR vaccines.

#### • I have HIV; can I get the MMR vaccine?

- Yes. The MMR vaccine can be safely given to people with HIV who are not severely immunocompromised, as demonstrated by their labs.
- I received 2 doses of the MMR vaccine as a child. During pregnancy, my labs showed I wasn't immune to rubella. Should I get another vaccine?

o If your labs showed you're not immune to rubella despite receiving 2 MMR vaccines, you should get another dose after pregnancy. The MMR vaccine isn't recommended during pregnancy since it is a live vaccine. Standalone rubella vaccines are not available in the U.S., but it is safe and effective to receive a third MMR dose in this case. Rubella is very dangerous during pregnancy and puts the pregnant person at risk for miscarriage or stillbirth. The developing baby is at risk for severe birth defects with devastating, lifelong consequences.

#### I'm breastfeeding. Is the MMR vaccine safe to take?

 Yes. Breastfeeding does not interfere with the MMR vaccine's effectiveness and does not affect the health of the baby. It is safe to continue breastfeeding after receiving the vaccine.

#### MMR and travel

- I was born before 1957, am not a healthcare worker, and want to get the MMR vaccine before international travel. Can I still get the MMR vaccine?
  - It is not necessary, as individuals born before 1957 are generally considered immune. However, the MMR vaccine may be given to anyone born before 1957 if desired. Blood work is not required before MMR vaccination.
- I am planning to travel abroad and have already received 2 MMR vaccines after the age of 12 months. Do I need a booster?
  - No. If you have received 2 MMR doses at age 12 months or later, you are considered immune and do not need another dose before traveling.
- I'm planning to travel within the U.S. What are the recommendations for MMR vaccination?
  - Everyone should follow the CDC's recommended MMR vaccination schedule. Talk with your healthcare provider or check the state health department's website for specific recommendations if there is a communitywide outbreak in the area that you're travelling. If you haven't received any MMR vaccine and you're traveling to an area with a measles outbreak, get the MMR vaccine at least 2 weeks before travel.
- We're traveling internationally, and our baby is under 12 months old. Should they receive the MMR vaccine early?

 Yes. Children 6-11 months old should receive 1 dose of the MMR vaccine before traveling internationally. Your child should get 2 more doses at 12 months of age and at 4 years of age.

# • I'm traveling abroad, and my trip is less than 2 weeks away. Should I get the MMR vaccine?

 Yes. MMR vaccination is recommended at least 2 weeks before international travel. However, even if your trip is sooner, getting vaccinated before travel is still advised.