MMR Vaccine (Measles, Mumps, and Rubella): What You Need to Know

Why get vaccinated?

MMR vaccine can prevent measles, mumps, and rubella.

- MEASLES (M) can cause fever, cough, runny nose, and red, watery eyes, commonly followed by a rash that covers the whole body. It can lead to seizures (often associated with fever), ear infections, diarrhea, and pneumonia. Rarely, measles can cause brain damage or death.
- MUMPS (M) can cause fever, headache, muscle aches, tiredness, loss of appetite, and swollen and tender salivary glands under the ears. It can lead to deafness, swelling of the brain and/or spinal cord covering, painful swelling of the testicles or ovaries, and, very rarely, death.
- RUBELLA (R) can cause fever, sore throat, rash, headache, and eye irritation. It can cause arthritis in up to half of teenage and adult women. If a woman gets rubella while she is pregnant, she could have a miscarriage or her baby could be born with serious birth defects.

Most people who are vaccinated with MMR will be protected for life. Vaccines and high rates of vaccination have made these diseases much less common in the United States.

MMR vaccine

Children need 2 doses of MMR vaccine, usually:

- First dose at 12 through 15 months of age
- Second dose at 4 through 6 years of age

Infants who will be traveling outside the United States when they are between 6 and 11 months of age should get a dose of MMR vaccine before travel. The child should still get 2 doses at the recommended ages for long-lasting protection.

Older children, adolescents, and adults also need 1 or 2 doses of MMR vaccine if they are not already immune to measles, mumps, and rubella. Your health care provider can help you determine how many doses you need.

A third dose of MMR might be recommended in certain mumps outbreak situations.

MMR vaccine may be given at the same time as other vaccines. Children 12 months through 12 years of age might receive MMR vaccine together with varicella vaccine in a single shot, known as MMRV. Your health care provider can give you more information.

Talk with your health care provider

Tell your vaccine provider if the person getting the vaccine:

- Has had an allergic reaction after a previous dose of MMR or MMRV vaccine, or has any severe, life-threatening allergies.
- Is pregnant, or thinks she might be pregnant.
- Has a weakened immune system, or has a parent, brother, or sister with a history of hereditary or congenital immune system problems.
- Has ever had a condition that makes him or her bruise or bleed easily.
- Has recently had a blood transfusion or received other blood products.
- Has tuberculosis.
- Has gotten any other vaccines in the past 4 weeks.

In some cases, your health care provider may decide to postpone MMR vaccination to a future visit.

People with minor illnesses, such as a cold, may be vaccinated. People who are moderately or severely ill should usually wait until they recover before getting MMR vaccine.

Your health care provider can give you more information.
4 Risks of a vaccine reaction

- Soreness, redness, or rash where the shot is given and rash all over the body can happen after MMR vaccine.
- Fever or swelling of the glands in the cheeks or neck sometimes occur after MMR vaccine.
- More serious reactions happen rarely. These can include seizures (often associated with fever), temporary pain and stiffness in the joints (mostly in teenage or adult women), pneumonia, swelling of the brain and/or spinal cord covering, or temporary low platelet count which can cause unusual bleeding or bruising.
- In people with serious immune system problems, this vaccine may cause an infection which may be life-threatening. People with serious immune system problems should not get MMR vaccine.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

5 What if there is a serious problem?

An allergic reaction could occur after the vaccinated person leaves the clinic. If you see signs of a severe allergic reaction (hives, swelling of the face and throat, difficulty breathing, a fast heartbeat, dizziness, or weakness), call 9-1-1 and get the person to the nearest hospital.

For other signs that concern you, call your health care provider.

Adverse reactions should be reported to the Vaccine Adverse Event Reporting System (VAERS). Your health care provider will usually file this report, or you can do it yourself. Visit the VAERS website at www.vaers.hhs.gov or call 1-800-822-7967. VAERS is only for reporting reactions, and VAERS staff do not give medical advice.

6 The National Vaccine Injury Compensation Program

The National Vaccine Injury Compensation Program (VICP) is a federal program that was created to compensate people who may have been injured by certain vaccines. Visit the VICP website at www.hrsa.gov/vaccinecompensation or call 1-800-338-2382 to learn about the program and about filing a claim. There is a time limit to file a claim for compensation.

7 How can I learn more?

- Ask your healthcare provider.
- Call your local or state health department.
- Contact the Centers for Disease Control and Prevention (CDC):
  - Call 1-800-232-4636 (1-800-CDC-INFO) or
  - Visit CDC’s www.cdc.gov/vaccines
1 Why get vaccinated?

DTaP vaccine can help protect your child from diphtheria, tetanus, and pertussis.

- DIPHTHERIA (D) can cause breathing problems, paralysis, and heart failure. Before vaccines, diphtheria killed tens of thousands of children every year in the United States.
- TETANUS (T) causes painful tightening of the muscles. It can cause “locking” of the jaw so you cannot open your mouth or swallow. About 1 person out of 5 who get tetanus dies.
- PERTUSSIS (aP), also known as Whooping Cough, causes coughing spells so bad that it is hard for infants and children to eat, drink, or breathe. It can cause pneumonia, seizures, brain damage, or death.

Most children who are vaccinated with DTaP will be protected throughout childhood. Many more children would get these diseases if we stopped vaccinating.

2 DTaP vaccine

Children should usually get 5 doses of DTaP vaccine, one dose at each of the following ages:

- 2 months
- 4 months
- 6 months
- 15–18 months
- 4–6 years

DTaP may be given at the same time as other vaccines. Also, sometimes a child can receive DTaP together with one or more other vaccines in a single shot.

3 Some children should not get DTaP vaccine or should wait

DTaP is only for children younger than 7 years old. DTaP vaccine is not appropriate for everyone—a small number of children should receive a different vaccine that contains only diphtheria and tetanus instead of DTaP.

Tell your health care provider if your child:

- Has had an allergic reaction after a previous dose of DTaP, or has any severe, life-threatening allergies.
- Has had a coma or long repeated seizures within 7 days after a dose of DTaP.
- Has seizures or another nervous system problem.
- Has had a condition called Guillain-Barré Syndrome (GBS).
- Has had severe pain or swelling after a previous dose of DTaP or DT vaccine.

In some cases, your health care provider may decide to postpone your child’s DTaP vaccination to a future visit.

Children with minor illnesses, such as a cold, may be vaccinated. Children who are moderately or severely ill should usually wait until they recover before getting DTaP vaccine.

Your health care provider can give you more information.
4 Risks of a vaccine reaction

- Redness, soreness, swelling, and tenderness where the shot is given are common after DTaP.
- Fever, fussiness, tiredness, poor appetite, and vomiting sometimes happen 1 to 3 days after DTaP vaccination.
- More serious reactions, such as seizures, non-stop crying for 3 hours or more, or high fever (over 105°F) after DTaP vaccination happen much less often. Rarely, the vaccine is followed by swelling of the entire arm or leg, especially in older children when they receive their fourth or fifth dose.
- Long-term seizures, coma, lowered consciousness, or permanent brain damage happen extremely rarely after DTaP vaccination.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

5 What if there is a serious problem?

An allergic reaction could occur after the child leaves the clinic. If you see signs of a severe allergic reaction (hives, swelling of the face and throat, difficulty breathing, a fast heartbeat, dizziness, or weakness), call 9-1-1 and get the child to the nearest hospital.

For other signs that concern you, call your child’s health care provider.

Serious reactions should be reported to the Vaccine Adverse Event Reporting System (VAERS). Your doctor will usually file this report, or you can do it yourself. Visit www.vaers.hhs.gov or call 1-800-822-7967. VAERS is only for reporting reactions, it does not give medical advice.

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Vaccine Information Statement (Interim)
DTaP (Diphtheria, Tetanus, Pertussis) Vaccine
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