1. Measles, Mumps, Rubella and Varicella (Why get vaccinated?)

Measles, Mumps, Rubella, and Varicella (chickenpox) can be serious diseases:

Measles
- Causes rash, cough, runny nose, eye irritation, fever.
- Can lead to ear infection, (diarrhea) pneumonia, seizures, brain damage, and death.

Mumps
- Causes fever, headache, swollen glands. (muscle aches, tiredness, loss of appetite)
- Can lead to deafness, (encephalitis) meningitis (infection of the brain and spinal cord covering), infection of the pancreas, painful swelling of the testicles or ovaries, and, rarely, death.

Rubella (German Measles)
- Causes rash and mild fever (sore throat, rash, headache, eye irritation); and can cause arthritis, (mostly in (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.

Varicella (Chickenpox)
- Causes rash, itching, fever, tiredness. (loss of appetite, and headache)
- Can lead to severe skin infection, scars, pneumonia, (inflammation of blood vessels) brain damage, or death.
- Can re-emerge years later as a painful rash called shingles.

These diseases (are easily spread) can spread from person to person through the air (coughing and sneezing). Varicella can also be spread through contact with fluid from chickenpox blisters. (direct contact with an infected person)

Before vaccines, these diseases were very common in the United States. (Vaccination programs have made these diseases much less common in the U.S. But if we stopped vaccinating, these diseases could return and cause a lot of people to become ill.)

2. MMRV Vaccine
**MMRV vaccine** may be given to children from 1 (12 months) through 12 years of age to protect them from these four diseases.

Two doses of MMRV vaccine are recommended:
The first dose at **12 through 15 months of age**
The second dose at **4 through 6 years of age**

These are recommended ages. But children can get the second dose up through 12 years as long as it is at least 3 months after the first dose. (The second dose may be given earlier, but at least 3 months after the first dose.)

Box below is eliminated (Children may also get these vaccines as 2 separate shots: MMR (measles, mumps and rubella) and chickenpox (varicella) vaccines. There are separate Vaccine Information Statements for MMR vaccine and varicella vaccine, Ask your doctor for more information.)

<table>
<thead>
<tr>
<th>1 Shot (MMRV) or 2 Shots (MMR &amp; Varicella)?</th>
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<tbody>
<tr>
<td>Both options give the same protection.</td>
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<tr>
<td>One less shot with MMRV.</td>
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<tr>
<td>Children who got the first dose as MMRV have had more fevers and fever-related seizures (about 1 in 1,250) than children who got the first dose as separate shots of MMR and varicella vaccines on the same day (about 1 in 2,500).</td>
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<tr>
<td>Your doctor can give you more information, including the Vaccine Information Statements for MMR and Varicella.</td>
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Anyone 13 or older who needs protection from these diseases should get MMR and varicella vaccines as separate shots.

**MMRV may be given at the same time as other vaccines.** (There are no known risks to getting MMRV vaccine at the same time as other vaccines.)

3. Some **children should not get MMRV vaccine or should wait** (people should not get this vaccine)

(Tell the person who is giving your child the vaccine if your child:

**Children should not get MMRV vaccine if they:** (the organization is new but same points)

- Have ever had a life-threatening allergic reaction to a previous dose of MMRV vaccine, or to either MMR or varicella vaccine.
• Have ever had a life-threatening allergic reaction to any component of the vaccine, including gelatin or the antibiotic neomycin. Tell the doctor if your child has any severe allergies.
• Have HIV/AIDS, or another disease that affects the immune system.
• Are being treated with drugs that affect the immune system, including high doses of oral steroids for 2 weeks or longer.
• Have any kind of cancer.
• Are being treated for cancer with radiation or drugs.

Check with your doctor if the child:
• Has a history of seizures, or has a parent, brother or sister with a history of seizures.
• Has a parent, brother or sister with a history of immune system problems.
• Has ever had a low platelet count, or another blood disorder.
• Recently had a transfusion or received other blood products. (You might be advised to postpone MM vaccination of your child for at least 3 months)
• Might be pregnant. (MMRV vaccine should not be given during pregnancy)
• (Has gotten any other vaccines in the past 4 weeks. Live vaccines given too close together might not work as well.)

Children who are moderately or severely ill at the time the shot is scheduled should usually wait until they recover before getting MMRV vaccine. Children who are only mildly ill may usually get the vaccine.

Ask your doctor for more information.

4. What are the risks from MMRV vaccine?

A vaccine, like any medicine, is capable of causing serious problems, such as severe allergic reactions. The risk of MMRV vaccine causing serious harm, or death, is extremely small.

(With any medicine, including vaccines, there is a chance of side effects. These are usually mild and go away on their own, but serious reactions are also possible.)

Getting MMRV vaccine is much safer than getting measles, mumps, rubella, or chickenpox (disease).

Most children who get MMRV vaccine do not have any problems with it.

Mild (minor) problems (following MMRV vaccine include)
• Fever (about 1 child out of 5).
• Mild rash (about 1 child out of 20).
• Swelling of glands in the cheeks or neck (rare).

If these problems happen, it is usually within 5–12 (6-14) days after the first dose (shot). They happen less often after the second dose.

Moderate problems (following MMRV vaccine include)

• Seizure (jerking or staring) caused by fever (about 1 child in 1,250 who get MMRV), usually 5–12 days after the first dose. They happen less often when MMR and varicella vaccines are given at the
same visit as separate shots (about 1 child in 2,500 who get these two vaccines), and rarely after a 2nd dose of MMRV. (The risk of these seizures is higher after MMRV than after separate MMR and varicella vaccines when given as the first dose of the series. Your doctor can advise you about the most appropriate vaccines for your child)

• Temporary pain and stiffness in the joints, mostly in teenage or adult women.
• Temporary low platelet count, which can cause a bleeding disorder (about 1 child out of 40,000).

Severe problems (very rare)

Several severe (and very rare) problems have been reported following MMR vaccine, and might also happen after MMRV. These include severe allergic reactions (fewer than 4 per million), and problems such as:
• Deafness.
• Long-term seizures, coma, lowered consciousness.
• Permanent brain damage.
(These reactions happen so rare that it is difficult to tell whether they are caused by the vaccine.)

(Other problems that could happen after this vaccine:
• People sometimes faint after medical procedures, including vaccination. Sitting or lying down for about 15 minutes can help prevent fainting and injuries caused by a fall. Tell your provider if you feel dizzy, or have vision changes or ringing in the ears.
• Some people get shoulder pain that can be more severe and longer-lasting than the more routine soreness that can follow injections. This happens very rarely.
• Any medication can cause a severe allergic reaction. Such reactions from a vaccine are very rare, estimated at about 1 in a million doses, and would happen within a few minutes to a few hours after the vaccination.

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

The safest of vaccines is always being monitored. For more information visit: www.cdc.gov/vaccinesafety/  

5. What if there is a serious reaction (problem)?

What should I look for?

• Look for anything that concerns you, such as signs of a severe allergic reaction, very high fever, or behavior changes. (unusual behavior)

Signs of a severe allergic reaction can include hives, swelling of the face and throat, difficulty breathing, a fast heartbeat, dizziness, and weakness. These would start a few minutes to a few hours after the vaccination.

What should I do?

• If you think it is a severe allergic reaction or other emergency that can’t wait, call 9-1-1 or get the person to the nearest hospital. Otherwise, call your doctor (clinic)
• Afterward, the reaction should be reported to the Vaccine Adverse Event Reporting System (VAERS). Your doctor might (should) file this report, or you can do it yourself through the VAERS website at www.vaers.hhs.gov, or by calling 1-800-822-7967.

VAERS is only for reporting reactions. They do not give medical advice (does 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.

Persons who believe they may have been injured by a vaccine can learn about the program and about filing a claim by calling 1-800-338-2382 or visiting the VICP website at www.hrsa.gov/vaccinecompensation. (There is a time limit to file a claim for compensation)

7. How can I learn more? Ask your doctor.
(Ask our healthcare provider. He or she can give you the vaccine package insert or suggest other sources of information)
• 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 website at www.cdc.gov/vaccines

Vaccine Information Statement (Interim)
MMRV Vaccine
(5/21/2010)
42 U.S.C. § 300aa-26

Department of Health and Human Services
Centers for Disease Control and Prevention

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