

Rubella (German Measles)

Your blood tests have indicated that you are not immune to Rubella. This means that you do not have antibodies to Rubella – so if you are exposed, you may develop an infection.

What is rubella?

- It is also called German measles. Like red measles, rubella is caused by a virus. A virus is a kind of germ that can make people sick.
- It is milder than red measles. Children get a low fever and a mild cold. A rash may follow. Glands in the neck may swell up. The sickness lasts about 3 days.

How is rubella spread?

It is spread by close contact between people. Sneezing and coughing can spread the disease.

What about pregnant women and rubella?

- A pregnant woman who catches rubella during the first 5 months of pregnancy can pass the disease on to her baby (or fetus) while it is in the womb. The chances of this happening are very high. In 8 out of 10 cases where a pregnant woman has rubella, the fetus will get rubella before it is born.
- If the fetus gets rubella during the first 12 weeks of pregnancy, it may be born with many problems. It may be blind, deaf or have heart damage.
- If the fetus gets rubella between 16 and 20 weeks of pregnancy, it may be born deaf.
- 1 out of 10 babies who are born with rubella will die during the first 12 months of life.
- There is no treatment for rubella in babies. The damage that happens to the fetus will last for the child's whole life.

What can you do?

- Don't wait until you are pregnant. You can NOT have the MMR shot when you are pregnant.
- Before you get pregnant, have a simple blood test. It will tell you if you had rubella as a child.
- If the blood test shows you did NOT have rubella as a child, you should get the rubella shot or the complete MMR shot right away.

Questions & Answers about the rubella vaccine (MMR)

When did rubella vaccine become available?

Three rubella vaccines were licensed in the United States in 1969. In January 1979, the currently used rubella vaccine was licensed and the others were discontinued.

What kind of vaccine is it?

The rubella vaccine is a live attenuated (weakened) virus. Although it is available as a single preparation, it is recommended that in most cases rubella vaccine be given as part of the MMR vaccine (protecting against measles, mumps, and rubella). In 2005, a combination MMRV (measles-mumps-rubella-varicella) vaccine was licensed.

How is this vaccine given?

This vaccine is a shot given subcutaneously (in the fatty tissue of the arm or leg).

Who should get this vaccine?

Rubella vaccine is recommended for all children and for adolescents and adults without documented evidence of immunity. It is especially important to verify that all women of child-bearing age are immune to rubella before they get pregnant.

How safe is this vaccine?

Rubella is a very safe vaccine. Most adverse events are mild and related to the measles component of the MMR vaccine (fever, rash).

What side effects have been reported with this vaccine?

Fever is the most common reaction, occurring in 5-15% of vaccine recipients. About 5% of persons develop a mild rash. About 25% of adult women who are not immune to rubella and who receive MMR vaccine develop temporary joint symptoms such as pain, redness, or swelling.

More severe reactions, including allergic reactions, are rare.

How effective is this vaccine?

Approximately 95% of individuals become immune to rubella after a single dose of vaccine. The second dose of MMR vaccine is intended to produce immunity in the 5% of persons who did not respond to the first dose.

Who should NOT receive rubella vaccine?

Anyone who experiences a severe allergic reaction (e.g., hives, swelling of the mouth or throat, difficulty breathing) following the first dose of MMR should not receive a second dose.

Women known to be pregnant should not receive the MMR vaccine, and pregnancy should be avoided for four weeks following vaccination with MMR. This is because the vaccine contains live virus. (See the following question for further information on pregnancy and rubella vaccination.)

Severely immunocompromised persons should not be given MMR vaccine. This includes persons with a variety of conditions, including congenital immunodeficiency, AIDS, leukemia, lymphoma, generalized malignancy, or those undergoing immunosuppressive therapy or taking large doses of steroids. However, healthy people who live in the same household of an immunocompromised person can AND SHOULD receive MMR vaccine. There is no risk of transmission of the vaccine virus to the immunocompromised person.

Persons with asymptomatic HIV infection should be considered for rubella vaccination.

What if I were pregnant but didn't know it and got vaccinated against rubella?

Women are advised not to receive the rubella vaccine during pregnancy as a safety precaution based on the theoretical possibility of a live vaccine causing disease, in this case "congenital rubella syndrome" (CRS).

Because a number of women have inadvertently received this vaccine while pregnant or soon before conception, the Centers for Disease Control and Prevention has collected data about the outcomes of their births. From 1971-1989, no evidence of CRS occurred in the 324 infants born to 321 women who received rubella vaccine while pregnant and continued pregnancy to term.

As any risk to the fetus from rubella vaccine appears to be extremely low or zero, individual counseling of women in this situation is recommended, rather than routine termination of pregnancy.

I was born before 1957. Can I assume I've had rubella?

While individuals can generally assume they are immune to rubella if born before 1957, *birth before 1957 is not acceptable evidence of rubella immunity for women who might become pregnant.*

Because CRS is such a serious consequence of rubella infection in pregnant women, it is very important that every woman of child-bearing age be immune to rubella before becoming pregnant. A past history of rubella is not reliable, because other rash illnesses may look like rubella infection.

A woman without a documented history of appropriate vaccination against rubella should either be tested for evidence of antibodies and vaccinated if needed, or just vaccinated without prior screening.

Can the vaccine cause rubella?

No.

Does the MMR vaccine cause autism?

There is no scientific evidence that MMR or any other vaccine causes autism.