

# PUBLIC HEALTH FACT SHEET

## Rubella (German Measles)

Massachusetts Department of Public Health, 305 South Street, Jamaica Plain, MA 02130

### What is rubella?

Rubella (also called German measles) is a disease caused by a virus that may easily spread among people who have never had it and haven't been vaccinated. The most common symptoms are mild fever, headache, swelling of the lymph glands (often in the back of the neck), and a rash that lasts about three days. About half of all people who get the disease do not get the rash. Some people (especially women) can get swollen and painful joints, but these symptoms don't last long. The disease can also cause swelling of the brain (encephalitis), but this is very rare. Fortunately, because of rubella vaccine, rubella itself has become rare in the United States.

### Is rubella dangerous?

While usually a mild disease, rubella can be very dangerous if a woman who is not immune gets rubella while she is pregnant. Rubella can cause birth defects like hearing difficulties, blindness, heart problems, mental retardation, or bone problems in babies before they are born. Rubella can also cause miscarriages. Because of this, all women who want to have children should have their blood tested to make sure they are immune to rubella and can't get rubella, even if they were born before 1957, when most people had the disease.

### How is rubella spread?

The virus that causes rubella lives in the nose and throat and is sprayed into the air when an infected person sneezes, coughs or talks. Other people nearby can then inhale the virus. Touching tissues or sharing a cup used by someone with rubella also spreads the virus. People with rubella can spread the disease starting 7 days before until 7 days after the rash starts. The first symptoms appear about 16 - 18 days after a person is exposed.

### Who gets rubella?

- Anyone who has never had rubella or who has never been vaccinated.
- Babies younger than 12 months, because they are too young to be vaccinated.

### How is rubella diagnosed?

Because rubella can look like many other diseases that cause a rash, the only sure way to know if you have rubella is to get a blood test. Sometimes throat and urine tests will also be done.

### How can you prevent rubella?

- Rubella vaccine is usually given in a shot called MMR, which protects against measles, mumps and rubella. There are now many fewer cases of these three diseases because children get the MMR vaccine. Protect your children by having them vaccinated when they are 12 - 15 months old, and again when they are about to enter kindergarten.
- State regulations require certain groups to be vaccinated against rubella. Some healthcare workers are required to be vaccinated. All children in kindergarten – 12<sup>th</sup> grade and college need to have 2 doses of MMR vaccine for school entry. Children in child care and preschool need 1 dose of MMR and childcare workers also need to have 1 or 2 doses of rubella containing vaccine, depending on their age and other factors. A blood test that proves immunity can also be used to fulfill this requirement for all groups.
- Adults born in or after 1957 should have at least 1 dose of MMR.

- Women who plan to have children and are not immune should get MMR at least 4 weeks before getting pregnant. Pregnant women who are not immune should be vaccinated after giving birth, before discharge from the hospital.
- People with rubella should be kept away from people who are not immune until they are well again. State regulations require anyone who catches rubella to be isolated for 7 days after the rash appears. That means they must be kept away from public places like day care centers, school and work.
- For the best protection against measles, mumps and rubella, 2 doses of MMR are recommended for people in high risk groups, including:
  - Healthcare workers (paid, unpaid and volunteer)
  - Health science students
  - International travelers

## **Is MMR vaccine safe?**

Yes. It is safe for most people. However, a vaccine, like other medicines, can cause side effects in some people. The MMR vaccine can cause fever, mild rash, temporary pain or stiffness of the joints. More severe problems, such as seizures, bleeding problems or allergic reactions are very rare. Getting MMR vaccine is much safer than getting rubella, and most people do not have any problems with the vaccine.

## **Who should not get MMR vaccine?**

- People who have serious allergies to gelatin, the antibiotic neomycin or a previous dose of the vaccine.
- Pregnant women or women who are trying to get pregnant within 4 weeks should not get MMR vaccine until after they deliver their babies.
- People with cancer, HIV/AIDS, or other problems or treatments that weaken the immune system should check with their doctor or nurse before being vaccinated.
- People who have recently had a transfusion or were given other blood products should check with their doctor or nurse before being vaccinated.
- People with high fevers should not be vaccinated until after the fever and other symptoms are gone.

## **Should healthcare workers be extra careful about rubella?**

Yes. Healthcare workers who are not immune to rubella can inhale the virus, become infected, and spread the virus to their coworkers and patients. The results could be tragic if one of their contacts is pregnant and not immune. That is why it is required that all health care workers who are exposed to rubella and have no record of rubella vaccination or whose blood tests show that they are not immune stay out of work from the 7th day through the 21st day after being exposed to the disease. Healthcare workers should have proof of immunity to rubella, either through vaccination or blood test.

## **Where can I get more information?**

- Your doctor, nurse or clinic, or your local board of health (listed in the phone book under local government).
- The Massachusetts Department of Public Health, Immunization Program (617) 983-6800 or toll-free at (888) 658-2850 or on the MDPH Website at [www.state.ma.us/dph/](http://www.state.ma.us/dph/).
- Boston providers and residents may also call the Boston Public Health Commission at (617) 534-5611.
- CDC National Immunization Information Hotline:
  - English: 1-800-232-2522 or Spanish: 1-800-232-0233 (Mon – Fri, 8am – 11pm)
  - TTY: 1-800-243-7889 (Mon – Fri, 10am – 10pm)