

Rubella

also known as German Measles

What is Rubella?

Rubella, sometimes called “German measles,” is a contagious disease caused by a virus. Unlike measles, rubella almost never causes serious illness or complications in infants and young children. However, rubella infection in pregnant women can cause unborn babies to have serious birth defects with devastating, life-long consequences, or even die before birth.

Rubella in Children

Children infected with the rubella virus sometimes have a mild rash. But it might be hard to know if a child has rubella, because up to half of people who have rubella may not have a rash or other symptoms. The rash usually starts on the face and then spreads to the neck, chest, arms, and legs, and it lasts for about 3 days. Swelling of the lymph nodes, particularly behind the ears or on the back of the neck, may occur before the rash breaks out. A child with rubella might also have a slight fever or other symptoms like a cold. In fact, rubella spreads through coughing or sneezing.

What Are the Dangers of Rubella to Unborn Babies?

Rubella infection during pregnancy can lead to miscarriage, stillbirth, premature delivery, and birth defects. The danger is highest for women who get rubella during the first 12 weeks of pregnancy. Birth defects caused by rubella include deafness, cataracts, and heart defects. Babies also may have mental retardation. This group of health problems is called Congenital Rubella Syndrome (CRS).

The last large U.S. epidemic of rubella occurred from 1962 through 1965. During those years, rubella caused about 11,250 deaths of unborn babies and 2,100 deaths of newborns. Approximately, 20,000 babies were born with CRS. Of these babies, 8,000 were deaf, 3,600 were deaf-blind, and 1,800 were mentally retarded.

“Today, families are still living with the health effects and painful memories of this epidemic,” said Dr. Jane Seward of the Centers for Disease Control and Prevention (CDC). “The devastating consequences of the rubella epidemic made it clear that a vaccine was needed, and before the end of the decade, a very safe and effective vaccine had been invented, tested, and licensed.”

Why Do We Vaccinate Children If Rubella Doesn't Cause Serious Illness in Children?

Stopping the spread of rubella is the best way to protect mothers and their unborn babies from the devastating effects of rubella infection during pregnancy. The best way to stop

rubella from spreading is vaccinating children.

The vaccine is safe to give to children along with their other vaccines. Studies show that children have fewer side effects from rubella vaccine than teen or adult females who get vaccinated.

According to Dr. Susan Reef, a pediatrician at CDC, “Years of experience in the United States and around the world has shown that vaccinating children is the most effective way to stop the spread of rubella.”

In 1969, the United States was one of the first countries to begin to use rubella vaccine. Since then, countries around the world have also added rubella to their vaccine schedules.

“Many strategies for vaccinating different age groups have been tried, for example, vaccinating only teen girls. But no strategy works as well to stop rubella as routinely vaccinating all young children,” explained Dr. Reef.

So, in the United States, the first dose of rubella vaccine, which is part of the measles, mumps, and rubella vaccine (MMR), is recommended at age 12 through 15 months old. A second dose is recommended at age 4 through 6 years.

It is also important to note that protection from rubella vaccine lasts for life. Children who are vaccinated against rubella are very unlikely to catch or spread the disease when they are adults and may become parents themselves.

Elimination of Rubella in the United States

In October 2004, 35 years after the United States began to use rubella vaccine, international experts agreed that rubella was no longer a disease that circulated in this country.



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“We do everything we can to make sure women have healthy babies. Although people might not know it, keeping childhood vaccination against rubella at high levels has a tremendous impact in making sure that babies are born healthy,” added Dr. Doug Campos-Outcalt of the American Academy of Family Physicians.

Without rubella vaccination, the devastation of rubella and CRS would return to the United States because rubella still circulates in other parts of the world. And you don’t have to travel to become infected.

Unvaccinated people who do travel—either members of your community or visitors from other countries, can become infected in places where rubella still circulates. Then when they are in the United States, they can spread the disease. You and your family can come into contact with an infected traveler anywhere in your community, from the grocery store to a sporting event.

Measles, Mumps, and Rubella Vaccine

The measles, mumps, and rubella vaccine (MMR) is the best way to protect against getting rubella. Serious side effects after MMR vaccination are rare. The benefits of using MMR vaccine to prevent rubella, as well as measles and mumps infections, far outweigh the risks of getting the vaccine. In the United States, the first dose of MMR vaccine is recommended at age 12 through 15 months old. A second dose is recommended at age 4 through 6 years.

Benefits of MMR Vaccine

In addition to protecting from measles and mumps, getting MMR vaccine as recommended to protect against rubella—

- Reduces the spread of rubella, protecting unborn children who can die or develop life-long health problems if the mother is infected while pregnant.
- Protects vaccinated children from the rare complications of rubella infection in childhood.
- Protects vaccinated people for a lifetime, including keeping unborn children safe by preventing rubella infection in pregnant women.

Risks of MMR Vaccine

- Mild side effects are fever, mild rash, and, rarely, swelling of the glands in the cheeks or neck.
- Moderate side effects are rare. For example, about 1 out of 3,000 vaccinated children gets a fever that is high enough to cause a seizure. About 1 out of 30,000 children could develop a temporary low platelet count, which could cause bruising.
- Severe side effects are very rare. For example, fewer than one in 1 million children have a serious allergic reaction.

All Reputable Studies Have Found No Link Between MMR Vaccine and Autism

Some parents of children with autism believe the condition is linked to vaccination because their child’s diagnosis of autism came after their child got MMR vaccine. According to Dr. Anne Schuchat, who directs CDC’s immunization program, “As you sort out risks and benefits of the MMR vaccine for your child, you should know that the possibility of a link between MMR vaccine and autism has been studied since 1998—beginning immediately when the concern first came up.” Dr. Schuchat added that “Large studies of children done in the United States, the United Kingdom, and Denmark found no link between MMR vaccine and autism. CDC and its partners support continued research to find the causes of autism. I encourage parents who are concerned about autism to visit CDC’s ‘Learn the Signs, Act Early’ website at <http://www.cdc.gov/autism/actearly/> to find out more about child development. Most importantly, parents who have questions about the MMR vaccine should talk to their child’s doctor.

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The Centers for Disease Control and Prevention, the American Academy of Family Physicians, and the American Academy of Pediatrics strongly recommend vaccines.
800-CDC-INFO (800-232-4636)
<http://www.cdc.gov/vaccines>