



RUBELLA (GERMAN MEASLES)

ABOUT THIS DISEASE

Rubella, sometimes called “German measles,” is a contagious disease caused by a virus. Most people who get rubella usually have a mild illness. However, rubella infection in pregnant women can cause miscarriage, stillbirth, premature delivery, and serious birth defects in an unborn baby (known as Congenital Rubella Syndrome), with devastating, life-long consequences. These congenital defects include:

- Deafness
- Blindness
- Intellectual disability
- Heart defects
- Liver or spleen damage

Serious birth defects are common if a woman is infected early in her pregnancy, especially in the first trimester. Women should make sure they are protected from rubella before they get pregnant.

Although eliminated from the United States in 2004, rubella remains a problem in other parts of the world and can still be brought into the U.S. by people who get infected in other countries.

SIGNS AND SYMPTOMS

In children, rubella is usually mild, with few noticeable symptoms. For children who do have symptoms, a red rash is typically the first sign. The rash is often more prominent after a hot shower or bath and generally first appears on the face and then spreads to the rest of the body, lasting about three days. Other symptoms that may occur 1 to 5 days before the rash appears include:

- Low-grade fever (less than 101 degrees)
- Headache
- Mild pink eye (redness or swelling of the whites of the eyes)
- General discomfort
- Swollen and enlarged lymph nodes
- Cough
- Runny nose

Most adults who get rubella usually have a mild illness, with low-grade fever, sore throat, and a rash that starts on the face and spreads to the rest of the body. Before the rash appears, some adults may also have:

- Headache
- Pink eye
- General discomfort
- Aching joints (especially young women)

About half of the people who get rubella do not have any symptoms.

TRANSMISSION

Rubella spreads when an infected person coughs or sneezes. Also, if a woman is infected with rubella while she is pregnant, she can pass the virus to her developing baby and cause serious harm. An infected person is most contagious when he/she has a rash. However, rubella can spread up to 7 days before to 7 days after the rash appears. People without symptoms can still spread rubella.

Hawaii State Law requires persons infected with rubella to stay home from school, work, or other public places for 7 days after appearance of the rash. Contacts of infected persons without documentation of immunity (see "Immunity" below) must be excluded from school, workplace and other group settings from the 14th through the 23rd day after exposure.

DIAGNOSIS

Symptoms of rubella are often mild and non-specific, therefore, rubella must be diagnosed by laboratory testing. People with symptoms of rubella, especially if they have recently traveled internationally or were exposed to a person with a rash illness with fever, should contact a healthcare provider immediately.

TREATMENT

There is no specific treatment for rubella. Mild symptoms may be managed with bed rest and medicines for fever.

IMMUNITY

In general, persons with at least one of the following may be considered protected from rubella:

- Written documentation of at least one dose of live rubella virus-containing vaccine administered on or after one year of age
- Blood test showing they are immune to rubella or have had the disease
- Birth before 1957 (except women of childbearing age who could become pregnant)[§]

[§]Unvaccinated healthcare personnel born before 1957, without laboratory evidence of immunity, should not be presumed to be immune. Medical facilities should consider recommending administration of at least one dose of MMR vaccine.

RISK IN HAWAII

Summary of Reported Cases of Notifiable Diseases:

<http://health.hawaii.gov/docd/resources/reports/summary-of-reported-cases-of-notifiable-diseases/>

PREVENTION

Rubella can be prevented with rubella-containing vaccine. One dose of the Measles-Mumps-Rubella (MMR) vaccine is about 97% effective at preventing rubella.

Vaccine Recommendations:

Children:

All children should routinely receive two doses of MMR vaccine. The first dose is given at age 12–15 months and the second dose at 4–6 years of age.

Adults:

All adults born during or after 1957 should receive at least one dose of MMR vaccine, unless they have had a blood test showing they are immune to rubella or have had the disease.

Women of childbearing age:

Health care providers should routinely check women of childbearing age for immunity to rubella (see “Immunity” above).

- Those who lack immunity and are NOT pregnant should be vaccinated.
- Pregnant women should NOT get the MMR vaccine. Pregnant women without rubella immunity should be vaccinated immediately AFTER giving birth.

ADDITIONAL RESOURCES

- CDC Website: <https://www.cdc.gov/rubella/index.html>
- Measles, Mumps, Rubella (MMR) Vaccine Information Statement: <https://www.cdc.gov/vaccines/hcp/vis/vis-statements/mmr.pdf>
- Travelers’ Health: <https://wwwnc.cdc.gov/travel/yellowbook/2018/infectious-diseases-related-to-travel/rubella>

INFORMATION FOR CLINICIANS

- CDC Website: <https://www.cdc.gov/rubella/hcp.html>