

RUBELLA (GERMAN MEASLES)

1. Cause/Epidemiology

Rubella is a highly contagious disease caused by the rubella virus. It is also known as German Measles. It is caused by a different virus than measles (rubeola).

Rubella is a vaccine-preventable disease. It can be prevented with the MMR (Measles, Mumps, Rubella) or MMRV (Measles, Mumps, Rubella, Varicella) vaccine. In Manitoba, the first vaccine dose is given at 12 months of age, and second dose at 4 to 6 years of age. ^[9.3]

Additional doses of MMR vaccine may be recommended if an individual is considered susceptible based on specific criteria as per the Manitoba Health immunization schedule. Available at:

<http://www.gov.mb.ca/health/publichealth/cdc/div/not.html>.

2. Clinical Presentation

Some people infected with rubella may not show any signs and symptoms. For others, symptoms may present 14 to 21 days after infection. ^[9.1]

In children symptoms can include: ^[9.4]

- A maculopapular ^[9.6] rash that starts on the face and spreads to the rest of the body
- A low-grade fever (under 39°C)
- Nausea
- Inflammation of the lining of the eye (conjunctivitis)

Symptoms in older children and adults include: ^[9.4]

- Swollen glands behind the ears and neck
- Cold-like symptoms (cough, runny nose) before a rash appears
- Aching joints

Infants under the age of one:

- Congenital Rubella Syndrome ^[9.6]

While not usually serious, sometimes a rubella infection can cause complications including internal bleeding, inflammation of the brain and viral infection of the brain leading to neurological problems.

A pregnant woman and her unborn baby are most at risk of complications if they become infected with rubella (especially in the first twelve weeks) ^[9.5]. Maternal rubella during pregnancy can result in miscarriage, fetal death and congenital anomalies called Congenital Rubella Syndrome/Infection (CRS/CRI). CRS/CRI occurs in infants under the age of one. Babies with CRS/CRI can suffer from deafness, eye, heart and brain defects, as well as other lifelong mental and physical disabilities. ^[9.4]

3. Incubation Period

Symptoms can appear between 14 to 21 days after a person is infected with the rubella virus. ^[9.1]

Individuals are communicable from 7 days before the onset of rash until 7 days afterwards.

Infants with Congenital Rubella Syndrome may continue to shed the virus in nasopharyngeal secretions and urine for a year or longer. ^[9.2]

4. Transmission

Spread by droplet and direct contact with nasopharyngeal secretions of infected person. Infants shed large quantities of virus in nasopharyngeal secretions as well as urine ^[9.3].

5. Infection Prevention and Control Practices

Contact Site Infection Control Professional (ICP).

Rubella

Implement [Droplet Precautions](#) immediately for a patient with Rubella:

- Post [Droplet Precautions Sign](#) in a visible location
- Roommates should be immune to Rubella and should not be pregnant. ^[9.6]
- Discontinue [Droplet Precautions](#) 7 days after onset of the rash. ^[9.2]
- Refer to [Droplet Precautions](#) in the Additional Precautions section of the [Acute Care Infection Prevention and Control Manual](#) for additional information

Congenital Rubella Syndrome/Infection

Implement [Droplet/Contact Precautions](#) immediately for a patient with Congenital Rubella Syndrome/Infection:

- Post [Droplet/Contact Precautions Sign](#) in a visible location
- Discontinue [Droplet/Contact Precautions](#) after one year of age, unless two consecutive nasopharyngeal and urine culture specimens are negative after three months of age ^[9.2]
- Refer to [Droplet/Contact Precautions](#) in the Additional Precautions section of the [Acute Care Infection Prevention and Control Manual](#)

Exposed susceptible contacts: ^[9.6]

- Implement [Droplet Precautions](#) 7 days after first contact
- Discontinue [Droplet Precautions](#) 21 days after last contact
- Administer vaccine to exposed susceptible non-pregnant persons within 3 days of exposure.

6. Reporting

Rubella is a notifiable disease within Manitoba. Report to Manitoba Health using the [Clinical Notification of Communicable Diseases and Conditions form](#) at: http://www.gov.mb.ca/health/publichealth/cdc/protocol/mhsu_0013.pdf. It requires reporting to Manitoba Health on the date that the clinical case is suspected and/or when the positive lab results are received, whichever is first. Reporting is completed by faxing back the notification form as well as calling the surveillance unit (204-788-6736) during office hours or the Medical Officer of Health (204-788-8666) if after hours/holidays/weekends. For additional information, Refer to WRHA [Reporting of a Communicable Disease to Manitoba Health by Infection Prevention & Control](#).

7. Occupational Health

Only immune Healthcare workers (HCWs), caretakers and visitors should enter the room.^[9.6] Pregnant HCWs should not care for rubella patients regardless of their immune status.^[9.6] HCWs, roommates and caregivers should be immune to Rubella.^[9.6]

Exclude susceptible HCWs from duty from day 7 after first exposure to day 21 after last exposure, regardless of post-exposure vaccination.^[9.6]

Contact Occupational and Environmental Safety and Health (OESH) for staff assessment and/or concerns.

8. Visitors^[9.6]

Only immune visitors and caregivers should enter the room. Pregnant women, regardless of their immune status, should not visit rubella patients.

Specific Disease Protocol Contact:
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WRHA Infection Prevention & Control Program

9. References

- 9.1 Manitoba Health. Available online at:
<https://www.gov.mb.ca/health/publichealth/diseases/rubella.html>.
- 9.2 Manitoba Health. Rubella and Congenital Syndrome/Infection Communicable Disease Management Protocol. Available online at:
<https://www.gov.mb.ca/health/publichealth/cdc/protocol/rubella.pdf>.
- 9.3 Manitoba Health. Measles, Mumps, Rubella, Varicella Vaccine. Public Health Factsheet. Available online at:
<https://www.gov.mb.ca/health/publichealth/factsheets/mmriv.pdf>.
- 9.4 Public Health Agency of Canada Available online at:
<https://www.canada.ca/en/public-health/services/diseases/rubella.html>.
- 9.5 Centers for Disease Control and Prevention. Available online at:
<https://www.cdc.gov/rubella/index.html>.
- 9.6 Routine Practices and Additional Precautions: Preventing the Transmission of Infection in Health Care. (2012, April). Manitoba Health. Available at:
<http://www.gov.mb.ca/health/publichealth/cdc/docs/ipc/rpap.pdf>.