# Rubella (German Measles)



#### **Clinical Description:**

Rubella is a mild rash illness caused by the rubella virus. Rubella is characterized by a rash that often fades or turns red and is most evident after a hot shower. Symptoms can include fever, joint pain (in adolescents and adults), and enlarged and tender lymph nodes at the back of the neck. Rubella is also the cause of significant congenital defects in infants whose mothers are exposed during pregnancy.

#### **Incubation Period:**

The incubation period is normally from 12 - 23 days, usually from 16 - 18 days.

#### Mode of Transmission:

Transmission occurs through direct or droplet contact with infectious nasopharyngeal secretions.

### **Period of Communicability:**

An infected person is contagious from seven days prior to the appearance of the rash through seven days after the rash appears.

#### **Exclusion/Reporting:**

Whenever rubella is strongly suspected or confirmed, notify the local health department <u>immediately</u>. Infected persons are excluded from school and contact with other individuals outside the household for seven days after the onset of rash. Students who have not presented proof of immunity against rubella are excluded until acceptable proof of immunity is presented, or in the case of medical or religious exemptions, until 23 days after the onset of the last reported rubella case. For information on laws and rules regarding rubella, see the ISDH Communicable Disease Reporting Rule (410 IAC 1-2.3-95) at <a href="http://www.in.gov/isdh/files/comm">http://www.in.gov/isdh/files/comm</a> dis rule(1).pdf.

#### Prevention/Care:

- Vaccinate with rubella vaccine at 12 15 months of age and again at 4 6 years of age. School immunization requirements can be found at http://bit.ly/1rFzDxD. If given as a single antigen vaccine, only one dose of rubella is required.
- Check immunization records for <u>all students and staff</u> to assure they have received one dose of a rubella containing vaccine. To prevent transmission, identify non immune students (medical or religious exemptions) for possible exclusion.
- Inform high risk people within the school when a case of rubella has been identified. Exposed pregnant women should be tested for rubella immunity, if unknown, and should consult their healthcare provider.
- School personnel planning a pregnancy should be vaccinated 28 days prior to pregnancy.
- Call caregiver of a suspect case to ensure child has been evaluated by a health care provider.

#### **Outbreaks:**

According to the ISDH Communicable Disease Reporting Rule (410 IAC 1-2.3), an outbreak is defined as the number of cases of disease occurring in a community, region, or particular population that exceeds what is normally expected. If an outbreak is suspected, contact your local health department. For rubella, one case constitutes an outbreak. Any case or suspected case must be <a href="immediately">immediately</a> reported to the local health department and/or the ISDH. All women of childbearing age who are contacts of a person with a suspected or confirmed case should have their pregnancy status determined. If a pregnant woman is infected with rubella, immediate medical consultation is necessary. If a pregnant woman lacks laboratory evidence of rubella immunity, precautions should be taken to prevent any type of exposure to persons infected with rubella. For additional information and recommendations regarding the preparation for, and the management of an outbreak situation in a school setting, see Appendix A, "Managing an Infectious Disease Outbreak In a School Setting."

#### IgM and IgG at the time of first visit (Save sera). IgM-/IgG-IgM-/IgG+ IgM+/IgG+ IgM+/IgG -Acute infection or false Susceptible **Immune** IgM positive Repeat IgM/IgG 3-4 weeks Collect 2nd serum 5-10 days later. from suspected exposure IgM, IgG and avidity testing to be conducted (Test concurrently with first specimen) High avidity, no rise in Low avidity, rise **Positive** Negative in IgG titers IgG titers IgM+, IgG+ (tested together with (tested together with first serum) first serum) Likely false-positive Acute Infection Repeat IgM/IgG in 6 weeks if risk of exposure continues to exist (Test concurrently with first specimen) Discuss options for Positive Acute Negative pregnancy IgM+, IgG+ Infection outcome

## Algorithm for serologic evaluation of pregnant women exposed to rubella:

#### **Other Resources:**

Centers for Disease Control and Prevention (CDC):

http://www.cdc.gov/vaccines/pubs/pinkbook/rubella.html

http://www.cdc.gov/vaccines/vpd-vac/rubella/default.htm

Indiana State Department of Health Quick Facts Page (found on disease/condition page):

http://bit.ly/12lJLfD

Infection Discarded