



Merlin disease code: 05690 Rubella



Specimens for all cases must be sent to the Bureau of Public Health Laboratories

[Paper case report form](#)

Merlin extended data required

Clinical criteria for case classification

Confirmatory:

All of the following:

- Acute onset of generalized maculopapular rash,
- **And** temperature greater than 99.0 F (greater than 37.2 C), if measured,
- **And** arthralgia/arthritis, lymphadenopathy, or conjunctivitis
- **And** absence of another known cause.

Supportive:

Both of the following:

- Any generalized rash illness of acute onset
- **And** absence of another known cause.

Laboratory criteria for case classification

One or more of the following:

- Isolation of rubella virus,
- **Or** detection of rubella virus-specific nucleic acid by polymerase chain reaction (PCR),
- **Or** positive serologic test for rubella IgM antibody,^{1,2}
- **Or** IgG seroconversion¹ or a significant rise between acute- and convalescent-phase titers in serum rubella IgG antibody level by any standard serologic assay.

¹ Not explained by MMR vaccination during the previous 6-45 days.

² Not otherwise ruled out by a more specific testing in a public health laboratory.

Epidemiological criteria for case classification

A person who is epidemiologically linked to a rubella case with laboratory criteria.

Case classification

Confirmed:

Either of the following:

- A person with laboratory criteria, excluding asymptomatic pregnant women who have no risk factors for disease
- **Or** a person with confirmatory clinical criteria and epidemiologic criteria.

Probable:

A person with confirmatory clinical criteria who has noncontributory or no serologic or virologic testing.

Suspect:

A person with confirmatory clinical criteria.

Criteria to distinguish a new case from previous reports

Not applicable.

Comments

Pregnant women that are rubella IgM positive without compatible symptoms or risk factors for rubella infection should **not** be reported as a rubella case. Confirmatory testing at BPHL for these situations is not recommended. If such a case is entered in Merlin, it should be submitted with a dx status of “not a case”.

Epidemiologic classification of internationally imported and U.S.-acquired cases

- **Internationally imported case:** An internationally imported case is defined as a case in which rubella results from exposure to rubella virus outside the U.S. as evidenced by at least some of the exposure period (12–23 days before rash onset) occurring outside the U.S. and the onset of rash within 23 days of entering the U.S. and no known exposure to rubella in the U.S. during that time. All other cases are considered U.S.-acquired cases.
- **U.S.-acquired case:** A U.S.-acquired case is defined as a case in which the patient had not been outside the U.S. during the 23 days before rash onset or was known to have been exposed to rubella within the U.S.

U.S.-acquired cases are subclassified into four mutually exclusive groups:

- **Import-linked case:** Any case in a chain of transmission that is epidemiologically linked to an internationally imported case.
- **Imported-virus case:** A case for which an epidemiologic link to an internationally imported case was not identified but for which viral genetic evidence indicates an imported rubella genotype, i.e., a genotype that is not occurring within the U.S. in a pattern indicative of endemic transmission. An endemic genotype is the genotype of any rubella virus that occurs in an endemic chain of transmission (i.e., lasting ≥ 12 months). Any genotype that is found repeatedly in U.S.-acquired cases should be thoroughly investigated as a potential endemic genotype, especially if the cases are closely related in time or location.
- **Endemic case:** A case for which epidemiological or virological evidence indicates an endemic chain of transmission. Endemic transmission is defined as a chain of rubella virus transmission continuous for ≥ 12 months within the U.S.
- **Unknown source case:** A case for which an epidemiological or virological link to importation or to endemic transmission within the U.S. cannot be established after a thorough investigation. These cases must be carefully assessed epidemiologically to assure that they do not represent a sustained U.S.-acquired chain of transmission or an endemic chain of transmission within the U.S.

Serum rubella IgM test results that are false positives have been reported in persons with other viral infections (e.g., acute infection with Epstein-Barr virus [infectious mononucleosis], recent cytomegalovirus infection, and parvovirus infection) or in the presence of rheumatoid factor. Patients who have laboratory evidence of recent measles infection are excluded.