

North Carolina Department of Health and Human Services
Division of Public Health • Epidemiology Section
Communicable Disease Branch

ATTENTION HEALTH CARE PROVIDERS:
Please report relevant clinical findings about this
disease event to the local health department.



RUBELLA
Confidential Communicable Disease Report—Part 2
NC DISEASE CODE: 36

REMINDER to Local Health Department staff: If sending this form to the Health Care Provider, remember to attach a cover letter from your agency indicating the part(s) of the form the provider should complete.

Patient's Last Name First Middle Suffix Maiden/Other Alias Birthdate (mm/dd/yyyy) SSN

NC EDSS LAB RESULTS Verify if lab results for this event are in NC EDSS. If not present, enter results.

Was testing for rubella or measles done? Please specify disease
Date IgM specimen taken IgM result
Date IgG acute specimen taken IgG result
Date IgG convalescent specimen taken Other results

NC EDSS PART 2 WIZARD COMMUNICABLE DISEASE

Is/was patient symptomatic for this disease?
If yes, symptom onset date (mm/dd/yyyy):
CHECK ALL THAT APPLY:
Fever
Skin rash
Anatomic site rash began:
Location:
Appearance of rash
Skin itching (pruritis)
Conjunctivitis
Runny nose and/or teary eyes (coryza)
Thrombocytopenia
Encephalitis
Joint pains (arthralgias)
Arthralgia/arthritis
Lymphadenopathy
Other symptoms, signs, clinical findings, or complications consistent with this illness?
If yes, specify:
PREGNANCY
Is the patient currently pregnant?
Estimated delivery date (mm/dd/yyyy):
Give number of weeks gestation at onset of illness:
Has the mother received prenatal care?
Prenatal provider name
OB Name
Street address
City
State
Zip code
Phone
Does the patient have prior evidence of serological immunity to rubella?
Test date (mm/dd/yyyy):
Result:
Was previous rubella disease confirmed serologically?
Date of disease (mm/dd/yyyy):
MATERNAL INFORMATION
Please complete if the child is 12 months of age or younger:
Was the biologic mother born outside the US?
If yes, country:
Date of biologic mother's arrival in the US (mm/dd/yyyy):
Did the biologic mother ever have evidence of serological IgG immunity?
Test date (mm/dd/yyyy):
Result:

(CONTINUED NEXT PAGE)

Patient's Last Name	First	Middle	Suffix	Maiden/Other	Alias	Birthdate (mm/dd/yyyy) / /
						SSN / /

**NC EDSS PART 2 WIZARD COMMUNICABLE DISEASE (CONTINUED)**

Was the child's biologic mother immunized with vaccine against this specific disease?  Y  N  U

If yes, type of vaccine:  
 Vaccine #1:  
 Date of vaccination (mm/dd/yyyy): \_\_\_/\_\_\_/\_\_\_  
 Vaccine type: \_\_\_\_\_  
 Manufacturer: \_\_\_\_\_  
 Product/trade name: \_\_\_\_\_  
 Lot number: \_\_\_\_\_  
 Vaccine #2:  
 Date of vaccination (mm/dd/yyyy): \_\_\_/\_\_\_/\_\_\_  
 Vaccine type: \_\_\_\_\_  
 Manufacturer: \_\_\_\_\_  
 Product/trade name: \_\_\_\_\_  
 Lot number: \_\_\_\_\_

Manufacturer: \_\_\_\_\_  
 Product/trade name: \_\_\_\_\_  
 Lot number: \_\_\_\_\_  
 Vaccine date unknown  Y  N

- If no, reason for inadequate vaccination:**
- Religious exemption
  - Medical exemption
  - Medical contraindication
  - Philosophical exemption (outside NC only)
  - Laboratory evidence of previous disease
  - Physician diagnosis of previous disease
  - Under age for vaccination
  - Parental refusal
  - Missed opportunities
  - Unknown
  - Other, specify: \_\_\_\_\_

- Source of vaccine information:**
- Patient's or Parent's verbal report
  - Physician
  - Medical record
  - Certificate of immunization record
  - Patient vaccine record
  - School record
  - Other, specify: \_\_\_\_\_
  - NCIR record
  - Unknown

If yes, number of doses received on or after first birthday: \_\_\_\_\_

**Reason for inadequate vaccination:**

- Religious exemption
- Medical exemption
- Medical contraindication
- Philosophical exemption (outside NC only)
- Laboratory evidence of previous disease
- Physician diagnosis of previous disease
- Under age for vaccination
- Parental refusal
- Missed opportunities
- Unknown
- Other, specify: \_\_\_\_\_

**Source of vaccine information:**

- Patient's or Parent's verbal report
- Physician
- Medical record (Note: Any vaccine on a medical record should be recorded in the NCIR)
- Certificate of immunization record (Note: Any vaccine on a certificate of immunization should be recorded in the NCIR)
- Patient vaccine record
- School record
- Other, specify: \_\_\_\_\_
- NCIR record
- Unknown

Was patient hospitalized for this illness >24 hours?  Y  N  U

Hospital name: \_\_\_\_\_  
 City, State: \_\_\_\_\_  
 Hospital contact name: \_\_\_\_\_  
 Telephone: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_  
 Admit date (mm/dd/yyyy): \_\_\_/\_\_\_/\_\_\_  
 Discharge date (mm/dd/yyyy): \_\_\_/\_\_\_/\_\_\_

Does the patient know anyone else with similar symptoms?  Y  N  U  
 If yes, specify name and relationship to person: \_\_\_\_\_

Is the patient part of an outbreak of this disease?  Y  N

**VACCINE**

Has patient/contact ever received rubella-containing vaccine?  Y  N  U

**If yes, date of vaccination #1**  
 (mm/dd/yyyy) \_\_\_\_\_  
 Vaccine type: \_\_\_\_\_  
 Manufacturer: \_\_\_\_\_  
 Product/trade name: \_\_\_\_\_  
 Lot number: \_\_\_\_\_  
**If yes, date of vaccination #2**(mm/dd/yyyy) \_\_\_\_\_  
 Vaccine type: \_\_\_\_\_

**PREDISPOSING CONDITIONS**

Any immunosuppressive conditions?  Y  N  U  
 Specify \_\_\_\_\_

Autoimmune disease  Y  N  U  
 Specify \_\_\_\_\_

Other underlying illness  Y  N  U  
 Please specify: \_\_\_\_\_

Was the patient receiving any of the following treatments or taking any medications?

Antibiotics  Y  N  U  
 For what medical condition? \_\_\_\_\_

Chemotherapy  Y  N  U  
 If yes, was therapy within the last 30 days before this illness?  Y  N  U  
 For what medical condition? \_\_\_\_\_

Radiotherapy  Y  N  U  
 If yes, was therapy within the last 30 days before this illness?  Y  N  U  
 For what medical condition? \_\_\_\_\_

Systemic steroids/corticosteroids, including steroids taken by mouth or injection  Y  N  U  
 If yes, was medication taken within the last 30 days before this illness?  Y  N  U  
 For what medical condition? \_\_\_\_\_

Immunosuppressive therapy, including anti-rejection therapy  Y  N  U  
 If yes, specify: \_\_\_\_\_  
 If yes, was medication taken within the last 30 days before this illness?  Y  N  U  
 For what medical condition? \_\_\_\_\_

Aspirin or aspirin-containing product  Y  N  U  
 If yes, was medication taken within the last 30 days before this illness?  Y  N  U  
 For what medical condition? \_\_\_\_\_

**REASON FOR TESTING**

- Why was the patient tested for this condition?**
- Symptomatic of disease
  - Screening of asymptomatic person with reported risk factor(s)
  - Exposed to organism causing this disease (asymptomatic)
  - Household / close contact to a person reported with this disease
  - Other, specify \_\_\_\_\_
  - Unknown

**CLINICAL OUTCOMES**

**Discharge/Final diagnosis:** \_\_\_\_\_

Survived?  Y  N  U  
 Died?  Y  N  U  
 Died from this illness?  Y  N  U  
 Patient died in North Carolina?  Y  N  U  
 County of death: \_\_\_\_\_  
 Died outside NC?  Y  N  U  
 Specify where: \_\_\_\_\_  
 Autopsy performed?  Y  N  U  
 Facility where autopsy was performed: \_\_\_\_\_

Patient autopsied in NC?  Y  N  U  
 County of autopsy: \_\_\_\_\_  
 Autopsied outside NC, specify where: \_\_\_\_\_

Source of death information (select all that apply):  
 Note: The death certificate, autopsy report, hospital/physician discharge summary, and/or other documentation should be attached to this event.

- Death certificate
- Autopsy report final conclusions
- Hospital/physician discharge summary
- Other: \_\_\_\_\_

Cause of death: \_\_\_\_\_  
 Death date (mm/dd/yyyy): \_\_\_\_\_

**TREATMENT**

Did patient take an antibiotic as treatment for this illness?  Y  N  U

If yes, specify antibiotic name: \_\_\_\_\_  
 Dose \_\_\_\_\_

Date antibiotic began (mm/dd/yyyy): \_\_\_\_\_  
 Date antibiotic ended (mm/dd/yyyy): \_\_\_\_\_

Did the patient receive medical care for this illness?  Y  N  U

Specify level(s) of care (check all that apply):

- Outpatient
- Emergency department
- Inpatient
- Other
- Unknown

Patient's Last Name	First	Middle	Suffix	Maiden/Other	Alias	Birthdate (mm/dd/yyyy) / /
						SSN

**TRAVEL/IMMIGRATION**

**The patient is:**

Resident North Carolina  
 Resident of another state or US territory  
 Foreign visitor  
 Refugee  
Refugee camp(s)? .....  Y  N  U  
Name of camp \_\_\_\_\_  
Location of camp \_\_\_\_\_  
Country of birth \_\_\_\_\_  
Last country prior to arrival in US \_\_\_\_\_  
Date of entry to US \_\_\_\_\_  
 Recent immigrant  
Country of birth \_\_\_\_\_  
Last country prior to arrival in US \_\_\_\_\_  
Date of entry to US \_\_\_\_\_  
 Foreign adoptee  
Country of birth \_\_\_\_\_  
Last country prior to arrival in US \_\_\_\_\_  
Date of entry to US \_\_\_\_\_  
 None of the above

**Did patient have a travel history during the 7 days prior to onset of symptoms until 4 days after rash onset?** .....  Y  N  U  
Travel dates: From: \_\_\_\_\_ until \_\_\_\_\_  
To city: \_\_\_\_\_ State: \_\_\_\_\_  
To country: \_\_\_\_\_  
Reason(s) for travel:  
 Vacation / tourism       Airline / Ship crew  
 Organized tour           Missionary or dependent  
 Business related, specify \_\_\_\_\_  
 Military related           Refugee / Immigrant  
 Visit to family / friends       Student / Teacher  
 Peace corps                   Unknown  
 Other \_\_\_\_\_

Mode(s) of transportation (check all that apply)  
 Airplane  
 Ship / boat / ferry  
Cruise ship? .....  Y  N  U  
Specify cruise line \_\_\_\_\_  
 Train / subway  
 On foot  
 Bus/taxi/shuttle  
 Automobile / motorcycle  
 Other, specify: \_\_\_\_\_

**Was patient pregnant while traveling?** .....  Y  N  U  
If yes, was travel during the first trimester of pregnancy? .....  Y  N  U

**Does patient know anyone else with similar symptom(s) who had the same or similar travel history?** .....  Y  N  U  
Name: \_\_\_\_\_

**Did patient have contact with a person with travel history during the period of interest?** .....  Y  N  U  
Contact's name: \_\_\_\_\_  
Travel dates: From: \_\_\_\_\_ until \_\_\_\_\_  
To city: \_\_\_\_\_  
To state: \_\_\_\_\_  
To country: \_\_\_\_\_  
Is contact a:  
 Resident of another state or US territory  
 Foreign visitor  
 Recent immigrant  
 Refugee  
 Foreign adoptee  
 Unknown  
 Other, specify: \_\_\_\_\_

**Notes:**

**CHILD CARE/SCHOOL/COLLEGE**

**Patient in child care?** .....  Y  N  U  
Name of care provider: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_  
Zip code: \_\_\_\_\_ County: \_\_\_\_\_  
Contact name: \_\_\_\_\_  
Telephone: (\_\_\_\_\_) \_\_\_\_\_

**Patient a child care worker or volunteer in child care?** .....  Y  N  U  
Name of child care provider: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_  
Zip code: \_\_\_\_\_ County: \_\_\_\_\_  
Contact name: \_\_\_\_\_  
Telephone: (\_\_\_\_\_) \_\_\_\_\_

**Patient a parent or primary caregiver of a child in child care?** .....  Y  N  U  
Name of child care provider: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_  
Zip code: \_\_\_\_\_ County: \_\_\_\_\_  
Contact name: \_\_\_\_\_  
Telephone: (\_\_\_\_\_) \_\_\_\_\_

**Is patient a student?** .....  Y  N  U  
Type of school:  
 NC Public School (preK-12)  
 NC Private School (preK-12)  
 Other School (preK-12)  
 Community College/College/University  
 Other academic institution (i.e. trade school, professional school, etc)  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_  
Zip code: \_\_\_\_\_ County: \_\_\_\_\_  
Contact name: \_\_\_\_\_  
Telephone: (\_\_\_\_\_) \_\_\_\_\_  
Specify grade: \_\_\_\_\_

**Is patient a school WORKER / VOLUNTEER in NC school setting?** .....  Y  N  U  
Type of school:  
 NC Public School (preK-12)  
 NC Private School (preK-12)  
 Other School (preK-12)  
 Community College/College/University  
 Other academic institution (i.e. trade school, professional school, etc)  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_  
Zip code: \_\_\_\_\_ County: \_\_\_\_\_  
Telephone: (\_\_\_\_\_) \_\_\_\_\_

**Notes:**

**BEHAVIORAL RISK & CONGREGATE LIVING**

**During the 7 days prior to onset of symptoms until 4 days after rash onset did the patient live in any congregate living facilities (correctional facility, barracks, shelter, commune, boarding school, camp, dormitory/sorority/fraternity)?** .....  Y  N  U  
Name of facility: \_\_\_\_\_  
Dates of contact: \_\_\_\_\_

**During the 7 days prior to onset of symptoms until 4 days after rash onset, did the patient attend social gatherings or crowded settings?** .....  Y  N  U  
If yes, specify: \_\_\_\_\_

**In what setting was the patient most likely exposed?**

<input type="checkbox"/> Restaurant	<input type="checkbox"/> Place of Worship
<input type="checkbox"/> Home	<input type="checkbox"/> Outdoors, including woods or wilderness
<input type="checkbox"/> Work	<input type="checkbox"/> Athletics
<input type="checkbox"/> Child Care	<input type="checkbox"/> Farm
<input type="checkbox"/> School	<input type="checkbox"/> Pool or spa
<input type="checkbox"/> University/College	<input type="checkbox"/> Pond, lake, river or other body of water
<input type="checkbox"/> Camp	<input type="checkbox"/> Hotel / motel
<input type="checkbox"/> Doctor's office/ Outpatient clinic	<input type="checkbox"/> Social gathering, other than listed above
<input type="checkbox"/> Hospital In-patient	<input type="checkbox"/> Travel conveyance (airplane, ship, etc.)
<input type="checkbox"/> Hospital Emergency Department	<input type="checkbox"/> International Community
<input type="checkbox"/> Laboratory	<input type="checkbox"/> Other (specify) _____
<input type="checkbox"/> Long-term care facility /Rest Home	<input type="checkbox"/> Unknown
<input type="checkbox"/> Military	
<input type="checkbox"/> Prison/Jail/Detention Center	

**Does the patient have any other risk factors for this disease?** .....  Y  N  U  
Specify: \_\_\_\_\_

**ISOLATION/QUARANTINE/CONTROL MEASURES**

**Restrictions to movement or freedom of action?** .....  Y  N  
Check all that apply:  
 Work       Sexual behavior  
 Child care       Blood and body fluid  
 School       Other, specify \_\_\_\_\_

Date control measures issued: \_\_\_\_\_  
Date control measures ended: \_\_\_\_\_  
Was patient compliant with control measures? .....  Y  N

**Did local health director or designee implement additional control measures?** (example: cohort classrooms, special cleaning, active surveillance, etc.) .....  Y  N  
If yes, specify: \_\_\_\_\_

**Were written isolation orders issued?** .....  Y  N  
If yes, where was the patient isolated? \_\_\_\_\_  
Date isolation started? \_\_\_\_\_  
Date isolation ended? \_\_\_\_\_  
Was the patient compliant with isolation? .....  Y  N

**Were written quarantine orders issued?** .....  Y  N  
If yes, where was the patient quarantined? \_\_\_\_\_  
Date quarantine started? \_\_\_\_\_  
Date quarantine ended? \_\_\_\_\_  
Was the patient compliant with quarantine? .....  Y  N

Patient's Last Name	First	Middle	Suffix	Maiden/Other	Alias	Birthdate (mm/dd/yyyy) / /
						SSN / /

### HEALTH CARE FACILITY AND BLOOD & BODY FLUID EXPOSURE RISKS

During the 7 days prior to onset of symptoms until 4 days after rash onset, did the patient have any of the following health care exposures?

**Emergency Dept.** (not hospitalized) ...  Y  N  U  
 Visit/admit date (mm/dd/yyyy): \_\_\_\_\_  
 Facility name \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_  
 Country \_\_\_\_\_  
 Was facility notified regarding ill patient?  
 Yes  No  Unknown  
 Not applicable  
 Name of person notified \_\_\_\_\_  
 Date notified (mm/dd/yyyy): \_\_\_\_\_

**Hospital** .....  Y  N  U  
 Visit/admit date (mm/dd/yyyy): \_\_\_\_\_  
 Facility name \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_  
 Country \_\_\_\_\_  
 Has patient been discharged? .....  Y  N  U  
 Discharge date (mm/dd/yyyy): \_\_\_\_\_  
 Was facility notified regarding ill patient?  
 Yes  No  Unknown  Not applicable  
 Name of person notified \_\_\_\_\_  
 Date notified (mm/dd/yyyy): \_\_\_\_\_

**LTC facility—resident** .....  Y  N  U  
 Visit/admit date (mm/dd/yyyy): \_\_\_\_\_  
 Facility name \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_  
 Country \_\_\_\_\_  
 Has patient been discharged? .....  Y  N  U  
 Discharge date (mm/dd/yyyy): \_\_\_\_\_  
 Was facility notified regarding ill patient?  
 Yes  No  Unknown  Not applicable  
 Name of person notified \_\_\_\_\_  
 Date notified (mm/dd/yyyy): \_\_\_\_\_

**Outpatient facility—patient** .....  Y  N  U  
 Visit date (mm/dd/yyyy): \_\_\_\_\_  
 Facility name \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_  
 Country \_\_\_\_\_  
 Was facility notified regarding ill patient?  
 Yes  No  Unknown  Not applicable  
 Name of person notified \_\_\_\_\_  
 Date notified (mm/dd/yyyy): \_\_\_\_\_

**Visitor to health care setting** .....  Y  N  U  
 Visit date (mm/dd/yyyy): \_\_\_\_\_  
 Until date (mm/dd/yyyy): \_\_\_\_\_  
 Frequency:  
 Once  
 Multiple times within this time period  
 Daily  
 Facility name \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_  
 Country \_\_\_\_\_  
 Was facility notified regarding ill patient?  
 Yes  No  Unknown  Not applicable  
 Name of person notified \_\_\_\_\_  
 Date notified (mm/dd/yyyy): \_\_\_\_\_

**Worked or volunteered in health care or clinical setting** .....  Y  N  U  
 Facility name \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_  
 Country \_\_\_\_\_  
 Occupation:  
 Physician  
 Physician's assistant or nurse practitioner  
 Nurse  
 Laboratory  
 Other  
 Unknown  
 Specify work setting or volunteer duties: \_\_\_\_\_

Was facility notified regarding ill patient?  
 Yes  No  Unknown  N/A  
 Name of person notified \_\_\_\_\_  
 Date notified (mm/dd/yyyy): \_\_\_\_\_

**Other, specify** \_\_\_\_\_

**Has the patient ever worked in a healthcare or clinical laboratory setting?** .....  Y  N  U  
 If yes, specify and give details: \_\_\_\_\_

**During the timeframe displayed above, has the patient had other blood and body fluid exposures?** .....  No  Other  Unknown  
**Human saliva/oral secretions exposure**  
 (e.g. shared water bottle, cigarettes, eating utensils, kissing)? .....  Y  N  U  
**If yes, specify and give details:** \_\_\_\_\_

### CASE INTERVIEWS/INVESTIGATIONS

**Was the patient interviewed?** .....  Y  N  U  
 Date of interview (mm/dd/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_  
**Were interviews conducted with others?** .....  Y  N  U  
 Who was interviewed? \_\_\_\_\_

**Were health care providers consulted?** .....  Y  N  U  
 Who was consulted? \_\_\_\_\_

**Medical records reviewed (including telephone review with provider/office staff)?** .....  Y  N  U  
**Specify reason if medical records were not reviewed:** \_\_\_\_\_

**Notes on medical record verification:** \_\_\_\_\_

### GEOGRAPHICAL SITE OF EXPOSURE

**In what geographic location was the patient MOST LIKELY exposed?**  
 Specify location:  
 In NC  
 City \_\_\_\_\_  
 County \_\_\_\_\_

Outside NC, but within US  
 City \_\_\_\_\_  
 State \_\_\_\_\_  
 County \_\_\_\_\_

Outside US  
 City \_\_\_\_\_  
 Country \_\_\_\_\_

Unknown

**Notes:** \_\_\_\_\_

# Rubella (German measles)

## 2013 Case Definition

CSTE Position Statement(s): 12-ID-09

## Case Classification

### Suspected

Any generalized rash illness of acute onset that does not meet the criteria for probable or confirmed rubella or any other illness.

### Probable

In the absence of a more likely diagnosis, an illness characterized by all of the following:

- Acute onset of generalized maculopapular rash; **and**
- Temperature greater than 99.0° F or 37.2° C, if measured; **and**
- Arthralgia, arthritis, lymphadenopathy, or conjunctivitis; **and**
- Lack of epidemiologic linkage to a laboratory-confirmed case of rubella; **and**
- Noncontributory or no serologic or virologic testing.

### Confirmed

A case with or without symptoms who has laboratory evidence of rubella infection confirmed by one or more of the following laboratory tests:

- Isolation of rubella virus; **or**
- Detection of rubella-virus specific nucleic acid by polymerase chain reaction; **or**
- IgG seroconversion† or a significant rise between acute- and convalescent-phase titers in serum rubella IgG antibody level by any standard serologic assay; **or**
- Positive serologic test for rubella IgM antibody\*<sup>†</sup>

OR

An illness characterized by all of the following:

- Acute onset of generalized maculopapular rash; **and**
- Temperature greater than 99.0°F or 37.2°C; **and**
- Arthralgia, arthritis, lymphadenopathy, or conjunctivitis; **and**
- Epidemiologic linkage to a laboratory-confirmed case of rubella.

†Not explained by MMR vaccination during the previous 6–45 days.

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

## Epidemiologic Classification

**Internationally imported case:** An internationally imported case is defined as a case in which rubella results from exposure to rubella virus outside the United States as evidenced by at least some of the exposure period (12–23 days before rash onset) occurring outside the United States and the onset of rash within 23 days of entering the United States and no known exposure to rubella in the United States 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 United States during the 23 days before rash onset or was known to have been exposed to rubella within the United States. These 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 United States 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 United States.

## Epidemiologic Classification, continued

- **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.

Note: Internationally imported, import-linked, and imported-virus cases are considered collectively to be import-associated cases. States may also choose to classify cases as “out-of-state-imported” when imported from another state in the United States. For national reporting, however, cases will be classified as either internationally imported or U.S.-acquired.

### Comment(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.