

**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, CONGENITAL SYNDROME
Confidential Communicable Disease Report—Part 2
NC DISEASE CODE: 37**

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.

LABORATORY

Specimens for viral study Yes No

(check one) Mother Infant	Type Specimen	Date Collected / /	Laboratory	Specific Test Methods Used (see below)*	Test Results
<input type="checkbox"/> <input type="checkbox"/>		/ /			
<input type="checkbox"/> <input type="checkbox"/>		/ /			
<input type="checkbox"/> <input type="checkbox"/>		/ /			
<input type="checkbox"/> <input type="checkbox"/>		/ /			
<input type="checkbox"/> <input type="checkbox"/>		/ /			
<input type="checkbox"/> <input type="checkbox"/>		/ /			
<input type="checkbox"/> <input type="checkbox"/>		/ /			
<input type="checkbox"/> <input type="checkbox"/>		/ /			

LAB TEST METHODS

a) Viral Cultures d) ELISA g) Passive Hemagglutination (PHIA)
 b) RIA e) Hemagglutination Inhibition (HAI) h) Other, specify _____
 c) IFA f) Latex Agglutination

*If antibody was performed, please specify which rubella-specific immunoglobulin antibody (IgM or IgG) was used.

NC EDSS PART 2 WIZARD COMMUNICABLE DISEASE

PERIOD OF INTEREST: BIRTH OF INFANT UP TO ONE YEAR AFTER BIRTH

Is/was patient symptomatic for this disease? Y N U
 If yes, symptom onset date (mm/dd/yyyy): ___/___/___

CHECK ALL THAT APPLY:

Cataracts Y N U
 Hearing impairment Y N U
 Developmental delay Y N U
 Congenital heart defect Y N U
 If yes, specify:
 Patent Ductus Arteriosus Y N U
 Peripheral Pulmonic Stenosis Y N U
 Congenital Heart Disease Y N U
 Pigmentary Retinopathy Y N U
 Meningoencephalitis Y N U
 Microcephaly Y N U
 Thrombocytopenic purpura
 'Blueberry Muffin' Y N U
 Enlarged Spleen Y N U

Enlarged Liver Y N U
 Radiolucent bone disease Y N U
 Hepatosplenomegaly Y N U
 Other Abnormalities: if yes, specify: _____

Was the mother of this infant/child case diagnosed with this disease? Y N U
 If yes:
 Date of diagnosis (mm/dd/yyyy): _____
 Time frame of diagnosis:
 Prior to pregnancy
 During pregnancy
 At delivery
 After delivery
 Before birth - exact period unknown
 Time frame unknown

If no:
 Was mother known not to have disease after the birth of this child? Y N U

Clinical classification
 Confirmed Stillbirth
 Infection only Suspect
 Not CRS Unknown
 Probable

INFANT BIRTH DETAILS
Infant gestational age at birth:
 Full term Premature Unknown
Number of weeks gestation _____
Birth weight _____
 Grams Pounds/ounces
 Birth weight unknown

MATERNAL INFORMATION
Date of birth of biologic mother _____
 If date of birth is unknown, provide biologic mother's age in years _____

(CONTINUED)

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

NC EDSS PART 2 WIZARD
COMMUNICABLE DISEASE (CONTINUED)

Biologic mother's race:

- American Indian Native Hawaiian Pacific Islander
 Alaskan Native White
 Asian Other _____
 Unknown Black African American

Biologic mother's Hispanic ethnicity .. Y N U

Was the child breastfed? Y N U

Was the biologic mother born outside the US? Y N U

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? Y N U

Test date (mm/dd/yyyy): _____

Result:

- Positive
 Negative
 Equivocal
 Unknown

Was rubella serology performed on infant's biologic mother during pregnancy? Y N U

Date: _____

Did the biologic mother have a rubella-like illness during pregnancy? Y N U

Month of pregnancy _____

Did the mother have a rash? Y N U

Did the mother have a fever? Y N U

Did the mother have lymphadenopathy? Y N U

Did the mother have arthralgias/arthritis? Y N U

Was mother diagnosed with rubella by a health care provider at time of illness? Y N U

Was rubella serologically confirmed (IgG/IgM) in mother at time of illness? Y N U

Was infant's biologic mother directly exposed to a known rubella case? Y N U

Specify mother's relationship to the case: _____

Exposure from date: _____

Until date: _____

Frequency:

- Once
 Multiple times within this time period
 Daily

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

Type of vaccine:

- MMR (combined vaccine)
 Measles
 Mumps
 Rubella

If NOT vaccinated why: _____

Vaccine date #1 (mm/dd/yyyy): ____/____/____

Vaccine date #2 (mm/dd/yyyy): ____/____/____

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: _____
 Unknown

Did the biologic mother travel outside the US during the period of interest? Y N U

Travel dates: _____

Has the infant's biological mother had any previous pregnancies..... Y N U

If yes list the country where the pregnancy occurred and the year the pregnancy occurred:

Country	Year

Give the number of children <18 years of age who were living in the household during the biologic mother's pregnancy _____

Were any of these children immunized with the rubella vaccine? Y N U

Number of children immunized _____

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): ____/____/____

Discharge/Final diagnosis: _____

Survived? Y N U

Died? Y N U

If yes:

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): _____

Final anatomical diagnosis: _____

Does the patient know anyone else with similar symptoms? Y N U

If yes, specify and list relationship to person(s): _____

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: _____

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 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

PREDISPOSING CONDITIONS

Any immunosuppressive conditions? Y N U

Specify _____

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

INFANT BIRTH DETAILS

Where was the child born?
 Hospital Home
 Unknown Other _____
 Hospital or facility where child was born _____

Street address of child's residence at time of birth _____

City/Town of child's residence at time of birth _____

State of child's residence at time of birth _____

Zip code of child's residence at time of birth _____

Country of child's residence at time of birth _____

Type of birth:
 Singleton >2
 Twin Unknown

Type of delivery
 Vaginal Caesarian—type unknown
 Elective Caesarian Unknown
 Non-elective Caesarian

Did the child have any underlying or previous medical conditions? Y N U
 Specify _____

TREATMENT

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

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

Notes:

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 period of interest? 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: _____

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: (_____) _____

BEHAVIORAL RISK & CONGREGATE LIVING

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

Does the patient have any other risk factors for this disease? Y N U
 Specify: _____

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 period of interest, 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
 Not applicable
 Name of person notified _____
 Date notified (mm/dd/yyyy): _____

Hospitalized 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 _____

During the period of interest, did the patient have 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, Congenital

2010 Case Definition

CSTE Position Statement Number: 09-ID-61

Case classification

Suspected: An infant that does not meet the criteria for a probable or confirmed case but who has one of more of the following clinical findings:

- cataracts or congenital glaucoma,
- congenital heart disease (most commonly patent ductus arteriosus or peripheral pulmonary artery stenosis),
- hearing impairment,
- pigmentary retinopathy
- purpura,
- hepatosplenomegaly,
- jaundice,
- microcephaly,
- developmental delay,
- meningoencephalitis, or
- radiolucent bone disease.

Probable*: An infant without an alternative etiology that does not have laboratory confirmation of rubella infection but has at least 2 of the following:

- cataracts or congenital glaucoma,*
- congenital heart disease (most commonly patent ductus arteriosus or peripheral pulmonary artery stenosis),
- hearing impairment, or
- pigmentary retinopathy;

OR

An infant without an alternative etiology that does not have laboratory confirmation of rubella infection but has at least one or more of the following:

- cataracts or congenital glaucoma,*
- congenital heart disease (most commonly patent ductus arteriosus or peripheral pulmonary artery stenosis),
- hearing impairment, or
- pigmentary retinopathy

AND one or more of the following:

- purpura,
- hepatosplenomegaly,
- jaundice,
- microcephaly,
- developmental delay,
- meningoencephalitis, or
- radiolucent bone disease.

Confirmed: An infant with at least one symptom (listed above) that is clinically consistent with congenital rubella syndrome; and laboratory evidence of congenital rubella infection as demonstrated by:

- isolation of rubella virus, or
- detection of rubella-specific immunoglobulin M (IgM) antibody, or
- infant rubella antibody level that persists at a higher level and for a longer period than expected from passive transfer of maternal antibody (i.e., rubella titer that does not drop at the expected rate of a twofold dilution per month), or
- a specimen that is PCR positive for rubella virus.

Case classification (cont.)

Infection only: An infant without any clinical symptoms or signs but with laboratory evidence of infection as demonstrated by:

- isolation of rubella virus, or
- detection of rubella-specific immunoglobulin M (IgM) antibody, or
- infant rubella antibody level that persists at a higher level and for a longer period than expected from passive transfer of maternal antibody (i.e., rubella titer that does not drop at the expected rate of a twofold dilution per month), or
- a specimen that is PCR positive for rubella virus.

*In probable cases, either or both of the eye-related findings (cataracts and congenital glaucoma) count as a single complication. In cases classified as infection only, if any compatible signs or symptoms (e.g., hearing loss) are identified later, the case is reclassified as confirmed.

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

Congenital Rubella Syndrome (CRS) cases will be classified epidemiologically as internationally imported or U.S.-acquired, according to the source of infection in the mother, using the definitions below, which parallel the classifications for rubella cases.

Internationally imported case: To be classified as an internationally imported CRS case, the mother must have acquired rubella infection outside the U.S. or in the absence of documented rubella infection, the mother was outside the United States during the period when she may have had exposure to rubella that affected her pregnancy (from 21 days before conception and through the first 24 weeks of pregnancy).

U.S.-acquired case: A US-acquired case is one in which the mother acquired rubella from an exposure in the United States. 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.
- **Import-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.
- **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.