08-ID-02 (revised 6/11/2008 10AM)

Committee: Infectious Disease

Title: Revision of Rubella Case Definition and Enhancing Timeliness of Reporting to NNDSS

I. Statement of the Problem:

The laboratory criteria for diagnosis of rubella do not include PCR testing, which has been shown to be specific for rubella virus.

II. Background and Justification:

1. Because of successful implementation of rubella vaccination programs, endemic rubella transmission was declared eliminated in the United States in 2004. Despite significant advances in global rubella control, the US remains at risk for rubella importations and rubella outbreaks, especially if importations occur into unvaccinated communities. To maintain rubella elimination and prevent re-establishment of endemic disease transmission, sustained high vaccine coverage and sensitive rubella surveillance with rapid and robust public health response to every rubella case is needed. All rubella cases in the U.S. are a cause for concern. Delayed reporting of rubella cases to NNDSS does not allow timely reporting of current rubella cases to state, national and international partners.

2. Rubella is currently nationally notifiable, with laboratory criteria for diagnosis including isolation of the virus, significant rise in IgG titer, or positive IgM titer — but not a positive PCR test, which is also a reliable indicator of rubella virus.

III. Statement of the desired action(s) to be taken:

Modify the laboratory criteria for rubella to read as follows:

- Isolation of rubella virus from a clinical specimen, or
- Detection of rubella-virus-specific nucleic acid by polymerase chain reaction, or
- Significant rise in serum rubella immunoglobulin G antibody level between acute- and convalescent-phase specimens, by any standard serologic assay, or
- Positive serologic test for rubella immunoglobulin M antibody.

IV. Goals of Surveillance:

(unchanged)

V. Methods for Surveillance:

(unchanged)

VI. Criteria for Reporting

If the method for surveillance described in the previous section includes case ascertainment by reports of individual cases from traditional partners (e.g., clinicians, labs, hospitals) to governmental public health agencies, then describe the reporting criteria which trigger the case reports. [If the case ascertainment method is not based on reporting of individual cases, leave the “Reporting” subsections blank.] This section should specify the criteria to be used by both humans (described below under “Narrative”) and machines (described below under “Tables”). “Human-based” criteria are applied by medical care providers (i.e., based on clinical judgment and clinical diagnosis) and laboratory staff. Machine-based criteria are applied using computerized algorithms which operate in electronic health record systems, including computerized lab test orders and lab test results.

A. Narrative:

1. Timely reporting of rubella cases is important to allow appropriate reporting of rubella cases to state, national and international partners.

2. In addition to current reporting criteria, clinicians and laboratories should report positive PCR results.

B. Tables:
In this subsection, use two-column tables to express the criteria for reporting as machine-based criteria appropriate to guide development of computerized algorithms for electronic case-reporting processes. The machine-based criteria, where appropriate, should follow the human-based criteria in the above subsection: place each human-based criterion in the left column and the corresponding machine-based criterion in the right column.

C. Reporting disease-specific data elements:
(unchanged)

VII. Case Definition

A. Narrative:

As noted in §III above, only the laboratory criteria are being changed — viz., adding positive PCR tests.

B. Classification Tables:
(unchanged)

VIII. Period of Surveillance:
(unchanged)

IX. Data sharing/release and Print criteria:
(unchanged)

X. References:
Current rubella case definition:
http://www.cdc.gov/ncphi/disss/nndss/casedef/measles_current.htm

XI. Coordination:

Agencies for Response:

(1) Julie L. Gerberding, MD, MPH
Director
Centers for Disease Control and Prevention
1600 Clifton Rd., MS D-12
Atlanta, GA 30333
404-639-7000
julie.gerberding@cdc.hhs.gov

XII. Submitting Author:

(1) Paul R. Cieslak, MD
Manager, Acute & Communicable Disease Prevention
Oregon Public Health Division
800 NE Oregon St., Ste. 772
Portland, OR 97232
971-673-1111
paul.r.cieslak@state.or.us

Table 1. Common core data elements for case reporting to a public health agency from a healthcare provider: To be included in the initial case report.

	Non Condition Specific Data Elements	***Core Data Set***
Reporting Information		
	Date of report	X
	Reporter name	X
Reporter Contact Information		
	Telephone	X
	Address	X
Health Care Provider Information		
	Health care provider name	X
	Facility Name	X
Facility/Provider Contact Information		
	Phone number	X
	Address	X
Subject Information		
	First Name	X
	Middle Name	X
	Last Name	X
	Street	X
	City	X
	State	X
	ZIP	X
	Telephone	X
	Age	X
	Date of birth	X
	Gender	X
Clinical Information		
	Name of Condition	X
	Date of onset	X