08-ID-03 (revised 6/11/2008 10AM)

Committee: Infectious Disease

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

I. Statement of the Problem:

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

II. Background and Justification:

1. Because of successful implementation of measles vaccination programs, endemic measles transmission was declared eliminated in the United States in 2000 and in the World Health Organization (WHO) Region of the Americas in 2002. Despite significant advances in global measles control, the US remains at risk for measles importations and measles outbreaks, especially if importations occur into unvaccinated communities. To maintain measles elimination and prevent re-establishment of endemic disease transmission, sustained high vaccine coverage and sensitive measles surveillance with rapid and robust public health response to every measles case is needed. All measles cases in the Americas are a cause for concern. Delayed reporting of measles cases to NNDSS does not allow timely reporting of current measles cases to state, national and international partners.

2. Measles 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 measles virus.

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

Modify the laboratory criteria for measles to read as follows:

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

IV. Goals of Surveillance:

(unchanged)

V. Methods for Surveillance:

(unchanged)

VI. Criteria for Reporting

A. Narrative:

1. Timely reporting of measles cases is important to allow appropriate reporting of measles 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 measles 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