Measles (Rubeola)

2010 Case Definition

Case classification

Suspected: any febrile illness that is accompanied by rash and that does not meet the criteria for probable or confirmed measles or any other illness

***Probable*:**

- In the absence of a more likely diagnosis, an illness characterized by:
    - generalized rash lasting ≥3 days; and
    - temperature ≥101°F or 38.3°C; and
    - cough, coryza, or conjunctivitis; and
- no epidemiologic linkage to a confirmed case of measles; and
- noncontributory or no serologic or virologic testing.

***Confirmed*:**

- Laboratory confirmation by any of the following:
    - positive serologic test for measles immunoglobulin M antibody;
    - significant rise in measles antibody level by any standard serologic assay;
    - isolation of measles virus from a clinical specimen; or
    - detection of measles-virus specific nucleic acid by polymerase chain reaction
    - Note: A laboratory-confirmed case does not have to have generalized rash lasting ≥3 days; temperature ≥101°F or 38.3°C; cough, coryza, or conjunctivitis.

  OR

- An illness characterized by:
    - generalized rash lasting =3 days; and
    - temperature =101°F or 38.3°C; and
    - cough, coryza, or conjunctivitis; and
    - epidemiologic linkage to a confirmed case of measles.

Epidemiologic Classification of Internationally-Imported and U.S-Acquired

Internationally imported case: An internationally imported case is defined as a case in which measles results from exposure to measles virus outside the United States as evidenced by at least some of the exposure period (7–21 days before rash onset) occurring outside the United States and rash onset occurring within 21 days of entering the United States and there is no known exposure to measles in the U.S. during that time. All other cases are considered U.S.-acquired.

U.S.-acquired case: An U.S.-acquired case is defined as a case in which the patient had not been outside the United States during the 21 days before rash onset or was known to have been exposed to measles within 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.

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 measles 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 measles 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 measles virus transmission that is 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.