

## Health Advisory:

### High Number of Reported Measles Cases in the U.S. in 2011—Linked to Outbreaks Abroad

June 24, 2011

This document will be updated as new information becomes available. The current version can always be viewed at <http://www.health.mo.gov>

The Missouri Department of Health & Senior Services (DHSS) is now using 4 types of documents to provide important information to medical and public health professionals, and to other interested persons:

**Health Alerts** convey information of the highest level of importance which warrants immediate action or attention from Missouri health providers, emergency responders, public health agencies, and/or the public.

**Health Advisories** provide important information for a specific incident or situation, including that impacting neighboring states; may not require immediate action.

**Health Guidances** contain comprehensive information pertaining to a particular disease or condition, and include recommendations, guidelines, etc. endorsed by DHSS.

**Health Updates** provide new or updated information on an incident or situation; can also provide information to update a previously sent Health Alert, Health Advisory, or Health Guidance; unlikely to require immediate action.

---

Office of the Director  
912 Wildwood  
P.O. Box 570  
Jefferson City, MO 65102  
Telephone: (800) 392-0272  
Fax: (573) 751-6041  
Web site: <http://www.health.mo.gov>

Health Advisory  
June 24, 2011

**FROM: MARGARET T. DONNELLY  
DIRECTOR**

**SUBJECT: High Number of Reported Measles Cases in the U.S. in 2011—  
Linked to Outbreaks Abroad**

On June 22, the Centers for Disease Control and Prevention (CDC) issued a Health Advisory entitled “High Number of Reported Measles Cases in the U.S. in 2011—Linked to Outbreaks Abroad.” The contents of this Health Advisory, along with some additional information, are provided here.

#### Summary and Background

The United States is experiencing a high number of reported measles cases in 2011, many of which were acquired during international travel. From January 1 through June 17 this year, 156 confirmed cases of measles were reported to CDC. This is the highest reported number since 1996. Most cases (136) were associated with importations from measles-endemic countries or countries where large outbreaks are occurring. The imported cases involved unvaccinated U.S. residents who recently traveled abroad, unvaccinated visitors to the United States, and people linked to these imported cases. To date, 12 outbreaks (3 or more linked cases) have occurred, accounting for 47% of the 156 cases. Of the 139 case-patients who were U.S. residents, 86 (62%) were unvaccinated, 30 (22%) had undocumented vaccination status, 11 (8%) had received 1 dose of measles-mumps-rubella (MMR) vaccine, 11 (8%) had received 2 doses, and 1 (1%) had received 3 (documented) doses.

As of June 21, no measles cases have been reported in Missouri in 2011.

Measles was declared eliminated in the United States in 2000 due to our high 2-dose measles vaccine coverage, but it is still endemic or large outbreaks are occurring in countries in Europe (including France, the United Kingdom, Spain, and Switzerland), Africa, and Asia (including India). The increase in measles cases and outbreaks in the United States this year underscores the ongoing risk of importations, the need for high measles vaccine coverage, and the importance of prompt and appropriate public health response to measles cases and outbreaks.

Measles is a highly contagious, acute viral illness that is transmitted by contact with an infected person through coughing and sneezing. After an infected person leaves a location, the virus remains contagious for up to 2 hours on surfaces and in the air. Measles can cause severe health complications, including pneumonia, encephalitis, and death.

#### Recommendations for Health Care Providers

Although there have been no reported cases in Missouri, the best defense for continued protection is immunization.

- Ensure all patients are up to date on the MMR vaccine\* and other vaccines.
- Exposure to measles is not a contraindication to immunization. Available data suggest that the measles vaccine, if given within 72 hours of measles exposure, will provide protection in some cases. If the exposure does not result in infection, the vaccine should induce protection against subsequent measles exposures. (AAP. *Red Book*, 2009; p. 447)

- For those who travel abroad, CDC recommends that all U.S. residents older than 6 months be protected from measles and receive the MMR vaccine, if needed, prior to departure.
  - Infants 6 through 11 months old should receive 1 dose of the MMR vaccine before departure.<sup>†</sup>
  - Children 12 months of age or older should have documentation of 2 doses of the MMR vaccine (separated by at least 28 days).
  - Teenagers and adults without evidence of measles immunity\*\* should have documentation of 2 appropriately spaced doses of the MMR vaccine.
- Consider measles as a diagnosis in anyone with a febrile rash illness lasting 3 days or more, a temperature of 101°F (38.3°C) or higher, and clinically compatible symptoms (cough, coryza, and/or conjunctivitis) who has recently traveled abroad or who has had contact with someone with a febrile rash illness. Immunocompromised patients may not exhibit rash or may exhibit an atypical rash. The incubation period for measles from exposure to fever is usually about 10 days (range, 7 to 12 days) and from exposure to rash onset is usually 14 days (range, 7 to 21 days).
- Isolate suspect measles case-patients and immediately report cases to the local public health agency, or to the Missouri Department of Health and Senior Services (DHSS) at 866-628-9891, to ensure a prompt public health response.
- Obtain a single blood/serum specimen for IgM serology testing. Specimens may be referred to the Missouri State Public Health Laboratory after consultation with the local public health agency or DHSS representative. Viral specimens may be collected for confirmation and viral genotyping. For more information, go to <http://health.mo.gov/lab/>.
- The sensitivity of measles IgM assays varies and may be diminished during the first 72 hours after rash onset. If the result is negative for measles IgM and the patient has a generalized rash lasting more than 72 hours, a second serum specimen should be obtained and the measles IgM test should be repeated. (AAP. *Red Book*, 2009; p. 446)

\* Children 1 through 12 years of age may receive the MMRV vaccine for protection against measles, mumps, rubella, and varicella; however, MMRV vaccine is currently unavailable.

<sup>†</sup> Infants who receive a dose of MMR vaccine before their first birthday should receive 2 more doses of MMR vaccine, the first of which should be administered when the child is 12 through 15 months of age and the second at least 28 days later.

\*\* One of the following is considered evidence of measles immunity for international travelers: 1) birth before 1957, 2) documented administration of 2 doses of live measles virus vaccine (MMR, MMRV, *or* measles vaccines), 3) laboratory (serologic) proof of immunity, *or* 4) documentation of physician-diagnosed measles.

Questions should be directed to the DHSS Bureau of Immunization Assessment and Assurance at 573-751-6124.

**For more information:**

CDC. Measles among Unvaccinated U.S. Residents Aged 6–23 Months Who Have Traveled Outside the United States, 2001–2011. *MMWR*. 2011;60:397–400.

[http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6013a1.htm?s\\_cid=mm6013a1\\_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6013a1.htm?s_cid=mm6013a1_w)

CDC. Measles—United States, January–May 20, 2011. *MMWR*. 2011;60:666–8.

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6020a7.htm>

CDC. Notes from the Field: Measles Outbreak—Hennepin County, Minnesota, February–March 2011. *MMWR*. 2011;60:421.

[http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6013a6.htm?s\\_cid=mm6013a6\\_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6013a6.htm?s_cid=mm6013a6_w)

DHSS' Immunizations website

<http://health.mo.gov/living/wellness/immunizations/index.php>

CDC's Measles (Rubeola) website

<http://www.cdc.gov/measles/index.html>

CDC's Measles Vaccination website

<http://www.cdc.gov/measles/vaccination.html>

CDC's Travelers' Health: In the News, 2011 Measles Update

<http://wwwnc.cdc.gov/travel/notices/in-the-news/measles.htm>

MedScape Today: CDC Expert Commentary: Measles: What You Might Not Know Recognizing, diagnosing, and preventing measles (running time: 5:20 mins)

<http://www.medscape.com/viewarticle/741206>