

Health Advisory:

Measles Case in Missouri

June 4, 2015

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 4, 2015

**FROM: GAIL VASTERLING
DIRECTOR**

SUBJECT: Measles Case in Missouri

On May 31, 2015, the Missouri Department of Health and Senior Services (DHSS) received a report of a possible case of measles in Branson, Missouri involving a foreign traveler. The individual presented to the Cox Medical Center Branson Emergency Department on Sunday, May 31, 2015, with reported symptoms consistent with measles and a possible exposure to measles prior to arrival in the United States. The individual was promptly isolated from the public on May 31, and remained in isolation until no longer infectious to others. The initial serological test for measles was negative; however, measles virus was subsequently identified through molecular detection by RT-PCR on June 3, 2015.

Measles is a highly contagious, acute viral illness that is transmitted by contact with an infected person through coughing and sneezing. Patients are considered to be contagious from 4 days before until 4 days after the rash appears.

On May 31, a public health investigation was initiated by the Taney County Health Department and DHSS to identify and contact persons known to be potentially exposed to measles. Persons identified with potential exposures and determined to be susceptible to measles, were given MMR vaccine. 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. (*MMWR*, June 14, 2013 / 62(RR04);1-34.) However, potential transmission of the measles virus to unknown susceptible persons who had contact with the case may have occurred.

Health-care providers should maintain a high index of suspicion for measles among febrile patients with a rash. Patients with clinical symptoms compatible with measles (febrile rash plus cough, coryza, and/or conjunctivitis) should be asked about recent travel abroad and contact with returning travelers, or contact with someone with a febrile rash illness. Their vaccination status should also be verified. Immunocompromised patients may not exhibit a rash, or may exhibit an atypical rash. The incubation period for measles from exposure to fever is usually about 10 days (range, 7 to 14 days) and from exposure to rash onset is usually 14 days (range, 7 to 21 days).

Persons who have been exposed to measles should contact their healthcare provider if they develop cold-like symptoms with a fever and/or rash. They should **NOT** go to any healthcare facility without calling first. The suspect case should be kept separate from others to prevent further spread. (Note that measles virus can remain infectious in the air for up to 2 hours after an infected person leaves an area such as a waiting room.) Isolate suspect measles case-patients and immediately report suspected cases to the

local public health agency, or to DHSS at 573/751-6113 or 800/392-0272 (24/7). To ensure a prompt public health response, do not wait for laboratory confirmation.

The Missouri State Public Health Laboratory (MSPHL) provides laboratory support for the diagnosis of measles infections occurring in Missouri. In addition, the laboratory may refer specimens to a Vaccine Preventable Disease (VPD) Reference Laboratory for further diagnostic testing and characterization. (VPD laboratories are established in cooperation with public health laboratories and the Centers for Disease Control and Prevention [CDC] to provide reference testing and surge capacity.) In all cases, please collect and submit a serum specimen (collected at least 72 hours after rash onset) for a measles IgM serological test. This serum specimen, submitted to MSPHL, will be tested for measles IgM and rubella IgM as requested by the investigating epidemiologist.

In addition, a specimen for molecular detection by RT-PCR should be collected and submitted to MSPHL along with the initial serum specimen, and include NP swab, throat swab, or urine (see the CDC instructions below). Please note that a RT-PCR specimen should NOT be substituted for a serum specimen. The RT-PCR specimen will be referred to a VPD laboratory.

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*, 2012; p. 491.)

Measles serology instructions:

<http://health.mo.gov/lab/measlesrubella.php>

CDC measles RT-PCR instructions (do NOT ship specimens directly to CDC):

<http://www.cdc.gov/measles/lab-tools/rt-pcr.html>

For further guidance, please refer to:

http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6204a1.htm?s_cid=rr6204a1_w

Taney County Press Releases:

<http://www.taneycohealth.org/pressreleases.php>

Questions should be directed to DHSS' Bureau of Communicable Disease Control and Prevention at 573/751-6113 or 800/392-0272 (24/7).