**Information Sheet**

**Date:**

### **Subject:** Measles Case reported in XXXX County in an out of state visitor

**Background:** A measles case in an unvaccinated child visiting from out of state has been confirmed in XXXX County. At this time, the XXXX County Health Department is working closely with the family to identify any potential contacts and ensure that contacts are up to date with their measles vaccination, offered vaccine, or assessed for other possible interventions. The individual was considered infectious from approximately [insert date range] and initial investigation shows that exposure would likely be limited to the immediate XXXX County area.

**Information:** The last case of measles confirmed in Montana was in 1990. Immediate reporting of any suspect measles cases **before lab confirmation** is essential for Public Health control efforts. The highly contagious nature of the disease and the short period of time to notify contacts to provide post-exposure prophylaxis (72 hours), if necessary, provide a narrow window of opportunity to implement control measures. Please review your contact information for your local health agency to ensure you have their business and after-hours contact information readily available.

**Recommendations:**

Health Care Providers

* **Immediately report patients “suspected” of having measles to your local health department.**
  + *Please do not wait for lab confirmation* before reporting a suspected case. Delays in reporting impact public health officials’ ability to evaluate possible exposures.
  + *Due to the airborne nature of transmission, the presence of an infected person in any indoor area can constitute an exposure risk that may remain present up to two hours after the case has left the premises*.
  + *Ensure assessment for relevant symptoms, immunization, and travel history* and share this information with public health officials.

### When evaluating a patient for measles, please consider the following recommendations to minimize risk of exposure to other patients when possible:

* + *Train intake staff to recognize symptoms of possible measles and to inquire when patients call for appointments. Establish procedures for appointment systems to minimize patient exposure to others when symptoms are consistent with measles.*
  + *Have patient enter/exit the clinic through side doors or even consider assessing patient away from facility. Do not have patient present to the waiting/reception are. If patient has already entered a public area, isolate the patient immediately to a closed private room.*
  + Close the patient room door and discontinue use of that room for a minimum of two hours after the patient has vacated the room and implement additional sanitizing precautions.
* Consider measles as a diagnosis in anyone with a febrile rash illness 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).
* If necessary, contact the Montana Public Health Laboratory (MTPHL) at 800-821-7284 (24/7) regarding submission of laboratory specimens for Rubeola PCR, viral culture and serologic testing. Upon consultation DPHHS can assist with payment as payor of last resort. **(See attached testing guidance)**
* Ensure all clinic staff and patients are immune by referring to the attached guidance. Contact your local health department or the State Immunization Program (406-444-5580) for additional vaccine consultation. **(See attached guidance regarding immunity.)**
* Contact your local health department or the Montana Immunization Program if you have concerns regarding individual patient immunization status. Records may be available to assist you.

Health Departments

* Ensure local healthcare providers have your 24/7 emergency contact information.
* Inform DPHHS CDEpi of any suspected cases of measles as soon as possible so consultation with providers and MTPHL can be facilitated as indicated by an initial assessment of the clinical picture of any suspected cases.
* Consider distributing information to staff in key settings with a higher likelihood of exposure, such as schools and health care settings, regarding the need to know their own vaccination/immunity status.

More information is available at: **dphhs.mt.gov**

# Measles Immunization Technical Guidance

#### Recommendations for Health Care Providers

**Ensure all patients are up to date on MMR vaccine and other vaccines**.

* Children should receive two doses of MMR vaccine–the first dose at 12 through 15 months of age and the second dose 4 through 6 years of age. Giving the second dose of the vaccine earlier is allowed at any time as long as it is at least 28 days after the first dose.
* Unless they have evidence of measles immunity, college and other students, health care personnel, and international travelers need 2 appropriately spaced doses and other adults need 1 dose.
* All adults born during 1957 or later should have documentation of 1 or more doses of MMR vaccine unless they have a medical contraindication to the vaccine or laboratory evidence of immunity\* to each of the three diseases.
* People who received two doses of MMR vaccine as children according to the U.S. vaccination schedule do not ever need a booster dose.

**International travelers**: CDC recommends that all U.S. residents older than 6 months be protected from measles and receive MMR vaccine, if needed, prior to departure.

* Infants 6 through 11 months old should receive 1 dose of MMR vaccine before departure.†
* Children 12 months of age or older should have documentation of 2 doses of 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 MMR vaccine.

\***Evidence of Immunity** <http://www.cdc.gov/measles/vaccination.html>

Acceptable presumptive evidence of immunity against measles includes at least one of the following:

* written documentation of adequate vaccination:
  + one or more doses of a measles‐containing vaccine administered on or after the first birthday for preschool‐age children and adults not at high risk
  + two doses of measles‐containing vaccine for school‐age children and adults at high risk, including college students, healthcare personnel, and international travelers
* laboratory evidence of immunity
* laboratory confirmation of disease
* born in the United States before 1957*††*

Healthcare providers should not accept verbal reports of vaccination without written documentation as presumptive evidence of immunity.

*† 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.*

*†† Although birth before 1957 generally is considered acceptable evidence of measles, mumps, and rubella immunity, 2 doses of MMR vaccine should be considered for unvaccinated HCP born before 1957 who do not have laboratory evidence of disease or immunity to measles.*

Montana Immunization Program 02/2017

# Montana Public Health Laboratory Guidance on Measles Testing

#### Specimen Criteria

Collect the following specimens to test for measles infection:

* Respiratory Specimen\* (Throat, NP, Nasal Swab)
* Urine
* Serum ‐ tests will only be performed for IgG and IgM if the PCR result is not definitive
* *If only one specimen is obtained, the respiratory specimen in viral transport media is the most important.*

#### Specimen Collection for PCR Testing:

Collect specimens as soon as possible after appearance of rash, and ideally within 3 days of rash onset. Detection can be possible up to day 7 following onset of rash. Collection of urine increases the likelihood of detecting the virus.

* + *Respiratory Specimen*: Throat, Nasopharyngeal or Nasal Dacron swabs in viral transport media.
  + *Urine*: 10‐50 ml of urine collected in a sterile container, processed by centrifuging at 500 x g for 15 minutes at 4°C. Resuspend the sediment in 2‐3 ml of viral transport medium.

*Consult with Public Health authorities regarding PCR testing prior to rash development of individuals who may have had a recent exposure to measles.*

#### Specimen Collection for IgG and IgM Testing:

For IgM testing, specimens must be collected >48 hours post rash onset.

* + *Serum*: 1 – 2 ml of serum. Can be sent in a spun serum separator tube, or can be poured off into a transport tube.

#### Transport Conditions:

* + Keep *PCR specimens* cold, and transport with cold packs as soon as possible following specimen collection. Avoid repeat freeze‐thaw cycles or freezing at ‐20ºC. If specimen transport is going to be delayed, freeze the sample at ‐70°C and ship on dry ice. If ‐70°C is not available, it is better to maintain the specimen at 4°C.
  + *Serum* specimens can be shipped cold (preferable) or at room temperature.

#### Submission Reminders:

Complete a blue MTPHL laboratory requisition, and be sure to include the date of rash onset, along with the collection date and two patient identifiers (Name and DOB or medical record#).

Specimens can be transported by courier (if available), UPS, or FedEx to:

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| --- | --- | --- |
| Montana Public Health Laboratory |  | Montana Public Health Laboratory |
| 1400 Broadway | or | PO Box 4369 |
| Helena, MT 59601 |  | Helena, MT 59601 |

#### Please contact the Montana Public Health Laboratory at 1‐800‐821‐7284 for more information and remember to report any suspect measles to your local health department.

Montana Public Health Laboratory Guidance for Measles Testing, Revised 02/2017