DATE: February 7, 2019

SUBJECT: Increasing threat of measles in Montana

INSTRUCTIONS:

**DISTRIBUTE** to your local HAN contacts. This HAN is intended for general sharing of information.

- Time for Forwarding: **As Soon As Possible**
- Please forward to DPHHS at hhshan@mt.gov
- Remove this cover sheet before redistributing and replace it with your own

Please ensure that DPHHS is included on your HAN distribution list.

**hhshan@mt.gov**

Categories of Health Alert Messages:

- **Health Alert**: conveys the highest level of importance; warrants immediate action or attention.
- **Health Advisory**: provides important information for a specific incident or situation; may not require immediate action.
- **Health Update**: provides updated information regarding an incident or situation; unlikely to require immediate action.
- **Information Service**: passes along low level priority messages that do not fit other HAN categories and are for informational purposes only.

Please update your HAN contact information on the Montana Public Health Directory.
Increasing threat of measles in Montana

Date: February 7, 2019

Subject: Increasing threat of measles in Montana

Background: In 2018, 372 cases of measles were reported from 26 states in the U.S., with an additional 79 cases reported in 10 states since January 1, 2019. Recent outbreaks in New York and Washington State have increased concern about the likelihood of a measles case diagnosed in Montana. State and local public health officials have been contacted by Washington State Department of Health about a small number of Montana residents who may have been exposed to measles in WA. To date, none have become symptomatic of measles but we expect these calls to continue as transmission continues to occur.

Information: Providers and public health are asked to increase their level of suspicion during this period and be prepared to act quickly and effectively if measles is suspected. Immediate reporting of suspect measles before lab confirmation is essential for Public Health Control efforts.

Immunization still represents the most effective prevention measure that can be taken. Citizens, providers, and public health should take action to ensure high immunization rates, particularly targeting the most vulnerable populations.

Recommendations:

Public health departments

• Ensure local healthcare providers have your 24/7 emergency contact information. Contact your local providers and distribute attached information on measles reporting in the event of patients presenting with symptoms of measles or reporting an exposure to a measles case.
  Items to emphasize include:
  o Ideally, suspect cases should be recognized prior to presenting in a clinical setting. Appropriate protocols should be in place to anticipate this type of situation (e.g., phone-based assessment of risk to reduce the possibility of a patient presenting in a clinical setting).
  o Emphasize the highly contagious nature of measles including to individuals that may occupy the space of an infected person up to 2 hours after they have left.
  o Review and update protocols for assessment including testing and submitting a specimen to the Montana Public Health Laboratory and reporting to local public health immediately upon suspicion.

• Report suspect cases as soon as possible to the state health department.

Providers

• Increase your level of suspicion regarding the potential for measles.
• Assess patients appropriately with high priority surrounding recent travel history, symptom onset, and immunization status.
• Have a protocol in place to include:
Training staff to mitigate the possibility of patients presenting to enclosed clinical settings until appropriate precautions can be put in place. Phone assessment is the optimal method for determining initial risk.

- Appropriate assessment of presenting patients including: clinical signs and symptoms of measles, recent travel history, immunization status, and submission of a specimen to the state public health laboratory for testing when suspicion is high.
- The ability to determine, with contact information, individuals that might have been in a clinical setting where a case of measles has presented.
- Assess the immunization status of staff to ensure immunity in the event a potential or conformed case is identified in your setting.

- **Report all suspect cases immediately to your local health department.**

Public Messaging

- Ensure that you and your family are up to date with MMR vaccine *(Note: Individuals outside of healthcare settings born prior to 1957 are presumed to be immune due to past infection).*
- If you receive a dose of MMR vaccine, remember that it usually provides protection within 10 to 14 days of administration.
  - Be aware of local measles risk in places you intend to travel.
  - Do **NOT** go to a clinic or doctor’s office if you suspect that you may have measles. Call ahead and to make arrangements to be safely assessed.

**Additional Information:** For more information regarding measles, please refer to these resources:

Measles Testing Guidance and Measles Flowchart for Healthcare Provider (Attached)

**Other resources**

[Local Health Departments Contact Information](https://dphhs.mt.gov/publichealth/FCSS/countytribalhealthdepts)

[Montana DPHHS: Measles](https://dphhs.mt.gov/publichealth/cdepi/diseases/measles)

[CDC: measles cases and outbreaks](https://www.cdc.gov/measles/cases-outbreaks.html)

[CDC: information for Healthcare Professionals](http://www.cdc.gov/measles/hcp/index.html)
MEASLES
Thinking measles? Use the flowchart below for guidance.

Skin rash? Thinking measles?

What is the exposure?
If possible, consult prior to seeing patient at the clinic

Clinical case definition
Generalized maculopapular rash that spreads from head downward to toes AND fever (at least 100.4 F) present at rash onset AND cough or conjunctivitis or Koplik spots

Infection control
Airborne precautions should be used immediately with all suspect cases.
Patients should be given a surgical mask to wear at all times and placed in a private negative air pressure room (or if unavailable, in a private room with the door closed)

Meets clinical case definition?

Notify local public health to report and consult on laboratory testing for measles

Differential diagnoses
- Rubella
- Roseola infantum
- Human parvovirus
- Enteroviruses
- Arboviruses
- Kawasaki syndrome
- Drug hypersensitivity rash
- Group A streptococcal disease (scarlet fever)

Laboratory testing:
- 0-3 days after rash onset: throat or nasopharyngeal swab for PCR
- 3-7 days after rash onset: throat or nasopharyngeal swab for PCR & blood for serology (IgM/IgG)
- 0-7 days after rash onset: urine for PCR
- >7 days after rash onset: blood for serology (IgM/IgG)

QUESTIONS? CALL YOUR LOCAL HEALTH DEPARTMENT:
MT DPHHS REV. 01/2019
Montana Public Health Laboratory Guidance: 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 -20°C. If specimen transport is going to be delayed >24 hours, 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 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:

Montana Public Health Laboratory
1400 Broadway, Room B126
Helena, MT 59601

OR

Montana Public Health Laboratory
PO Box 4369
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.