

Communicable Disease Advisory:

From the office of the Medical Officer of Health

Measles Alert

Date: February 18, 2015

Context:

With spring holidays approaching, many people will be travelling within and outside of Canada. Measles is again in the news with cases reported in the US – a multistate outbreak with cases first identified in Disneyland, California – and in Canada (Ontario, Quebec and Manitoba). Measles activity remains an issue globally. No cases of measles have been identified in Alberta in 2015 to date.

Please triage and isolate patients with fever and rash illness immediately to a negative pressure room (if available) and use airborne precautions. In clinic settings, schedule patients with fever and rash illness to the last appointment of the day if possible.

Please maintain a high level of suspicion for possible cases of measles in the weeks ahead. Confirmed and Probable measles cases are reportable to public health as soon as possible.

Case Definitions:

Confirmed Case of Measles:

Laboratory confirmation of infection (in the absence of recent immunization with measles-containing vaccine) from appropriate serological and molecular tests, or **clinical illness** in a person who is epidemiologically linked to a lab-confirmed case.

Probable Case of Measles:

Clinical illness: in the absence of appropriate lab tests or epidemiological link to a lab-confirmed case; **or** in a person who has recently travelled to an area of known measles activity.

Measles clinical illness is characterized by ALL of the following features:

- **Fever 38.3° C or greater, AND**
- **Cough, coryza or conjunctivitis, AND**
- **Generalized maculopapular rash for at least 3 days** (red blotchy rash appears 3-7 days after symptom onset, beginning behind the ears and on the face and spreading down to the trunk and then to the extremities)

Actions:

1. **Report all confirmed and probable cases immediately to the MOH on call at (403) 264-5615.** Suspected cases (clinical illness only) should also be reported. Public health will ask you for a list of all possible contacts of the case while they were in your facility and for two hours afterward.
2. Advise patient to remain at home with no visitors for 4 days after the rash onset. Also advise the patient that public health will be calling them for assistance in identifying contacts.
3. Arrange for testing of clinical specimens as outlined in laboratory tests section below.
4. Remind patients about the importance of pre-travel immunizations, especially adequate measles immunization. Children aged 6 months to 6 years may be eligible for an earlier dose of MMR vaccine than the routine schedule, and adults born before 1970 may also warrant a dose of MMR vaccine, dependent on travel plans. Patients can contact their local public health clinic or call Health Link (1-866-408-5465) for specific measles immunization advice.

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Laboratory Tests:

Collect specimens from a suspected measles case at the time of first contact to ensure earliest confirmation of diagnosis. **NP swabs should be collected in your facility (not in the lab).**

For blood and urine tests in the community, **the laboratory collection site must be contacted for instructions prior to patient arrival to ensure other patients are not exposed.**

Order **STAT** testing on a ProvLab Virology requisition.

1. **NP (nasopharyngeal) Swab** (in viral transport medium [pink]): For PCR for measles virus; collect as soon as possible, but within 7-10 days of rash onset. [NP collection kits and instructions are available from the ProvLab at (403) 944-2583.]
2. **Urine:** For PCR for measles virus; collect as soon as possible and within 7-10 days of rash onset (10-20 mL – keep refrigerated and transport to ProvLab for processing within 48 hours of collection)
3. **Blood:** For measles IgM and IgG serology; collect as soon as possible (if collected within first 3 days of rash, additional specimen may be needed later)

Provide symptoms, onset date, recent travel history, measles vaccination history on lab requisition.

Infection Control Recommendations:

- Measles is highly communicable from person to person via the airborne route from about five days prior to rash onset until four days after appearance of the rash.
- Persons sharing the same airspace as a probable/confirmed case for any duration, including **up to two hours** after the case has left the airspace, are considered exposed and potentially at risk if not immune.
- An examination room should not be used for two hours, (negative pressure room 45 minutes) after a suspected case has left the room to allow suspended virus to settle. A routine cleaning prior to re-use is advised.

Additional References:

- Alberta Health. Public Health Management Guidelines: Measles. <http://www.health.alberta.ca/documents/Guidelines-Measles-2013.pdf>
- Public Health Agency of Canada. Vaccine Preventable Childhood Infectious Diseases www.phac-aspc.gc.ca/im/vpd-mev/measles-eng.php
- Alberta Health Services. Medical Officers of Health webpage. www.albertahealthservices.ca/7082.asp

If you have further questions, please contact the Communicable Disease Unit at (403) 955-6750 or the Medical Officer of Health at (403) 955-6800.