

Date: Wednesday, November 29, 2023

To: Physicians

From: Medical Officers of Health

Subject: Measles Case in Alberta

AHS Calgary Zone is reporting a lab-confirmed case of measles in an infant. This case is travel-related and was not acquired in Alberta. However, the case was infectious from November 21-28, 2023 and may have exposed others in several locations during their infectious period. Public Health is following up directly with individuals who have a known exposure. In addition, please consider measles in your differential diagnosis for non-immune individuals who were present in any of the following locations:

November 23

Exposure location: Air Canada flight AC206 Vancouver (YVR) to Calgary (YYC)

Exposure time period: Departed 11:20 am MST, arrived 12:48 pm MST

Exposure location: Calgary International Airport, domestic arrivals

Exposure Time period: 12:45pm to 3:15 pm MST

November 24

Exposure location: Alberta Children's Hospital Emergency Room, waiting room

Exposure time period: 4:00 pm to 9:30 pm

November 27

Exposure location: Alberta Children's Hospital Emergency Room, waiting room

Exposure time period: 1:15 pm to 4:15 pm

- Measles clinical illness includes the following:
 - Fever 38.3° C or greater,
 - 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)
- The incubation period from exposure to prodrome is approximately 10 days with a range of 7–18 days. The incubation period from exposure to rash onset averages 14 days with a range of 7–21 days.
- The efficacy of two doses of measles vaccine in immunocompetent individuals is close to 100%. Individuals are generally considered immune to measles if they:
 - received two documented doses of measles containing vaccine after one year of age,
 - have serologic proof of immunity (i.e., a positive IgG),
 - have had prior lab-confirmed measles disease, and/or
 - were born before 1970.

Actions for physicians:

- **Report all suspected cases immediately to the MOH on call** prior to ordering testing.
- Arrange for testing of clinical specimens as outlined in the Provlab guidance available here: <https://www.albertahealthservices.ca/assets/wf/plab/if-provlab-laboratory-testing-for-measles.pdf>
 - Please use the lab tracking number 2023-EI-1645 on any samples submitted related to exposures to this case.
- Ensure you and your staff are immune to measles.

Infection Control Recommendations:

- Measles is highly communicable from person-to-person via the airborne route from one day prior to onset of the prodromal period until four days after appearance of the rash.
- Physicians working in an AHS facility – please contact your site IPC for direction.
 - Patients suspected to have measles should not spend time in the waiting room and should be assessed in a negative pressure room whenever possible.
- Persons sharing the same airspace as a probable/confirmed case for any duration, including **up to two hours after the case has left a closed area**, are considered exposed and potentially at risk if not immune.
- A non-negative pressure examination room should not be used for two hours after a potential case has left the room to allow suspended virus to settle. Routine cleaning prior to re-use is advised.
- For physicians practicing in the community, ideally see patients with fever and rash that could be measles at the end of the day, and in a private room with a door, to limit potential exposures at your clinic.

In Alberta, measles vaccine is offered, free of charge, through Alberta's publicly funded immunization program. Children in Alberta typically receive their first dose of measles vaccine at 12 months of age, and their second dose at eighteen months of age.

Albertans uncertain of their immunization history, or their child's immunization history, can call Health Link at 811 to discuss.

Additional References:

- Alberta Health. Public Health Management Guidelines: Measles. <https://open.alberta.ca/publications/measles>
- Public Health Agency of Canada. Vaccine Preventable Childhood Infectious Diseases www.phac-aspc.gc.ca/im/vpd-mev/measles-eng.php

If you have further questions, please contact the Communicable Disease Unit at 1-855-444-2324 or your Zone Medical Officer of Health on Call.