

Important Health Notice

Information for Health Care Professionals

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Measles cases in Ontario

Highlights:

- **Information about four recent Measles cases in the GTA**
- **Risk of Measles**
- **Immunization**

Dear Colleagues,

As of November 1st, four cases of Measles have been reported to the Public Health Division, Ministry of Health and Long-Term Care. The cases reside in York Region, Toronto and Halton health unit areas. Three of the cases developed in non-immunized children; none of these cases is travel related.

The Ministry of Health and Long-Term Care is assisting the three health units in the public health response to the cases. Control efforts are directed at reducing further spread of the disease, especially to children too young to be immunized.

Prodromal symptoms may include cough, fever, coryza, malaise and conjunctivitis that occur 3 to 7 days prior to the appearance of the rash. Koplik spots on the buccal mucosa emerge shortly before the rash. On average, 14 days after exposure to an infected person a maculopapular rash appears first on the face and behind the ears, and then spreads downwards to the trunk and extremities.

The incubation period can be 7 to 18 days until onset of fever, usually 14 days until the rash appears, and rarely as long as 21 days.

Measles is highly contagious and is spread by airborne droplet nuclei, close personal contact, or direct contact with the nasal or throat secretions of infected persons. The measles virus can remain active and contagious in the air or on infected surfaces for up to two hours

Measles is communicable from 1 day prior to the prodromal period (about 4 days before rash onset) to 4 days after the onset of rash.

Measles is a reportable disease under the Health Protection and Promotion Act 1990, Chapter H.7, Ontario Regulation 559/91. If you suspect a case of Measles, please contact your local medical officer of health immediately.

Immunization

Routine immunization includes two doses of MMR (measles, mumps, rubella) vaccine, the first dose given usually to infants after their first birthday. The second dose should be given at least one month after the first dose and before school entry.

Risk of Measles

Measles infection can lead to serious consequences including encephalitis, otitis media, severe diarrhea, pneumonia and death. Encephalitis is estimated to occur in 1/1000 cases, while otitis media (middle ear infection) is reported in 5-15% of cases and pneumonia in 5-10% of cases. The disease is more severe in infants and adults over 20 years of age.

In Ontario, where measles has been largely eliminated, cases imported from other countries remain a primary source of infection, especially for children under one year of age.

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Diagnosis of Measles

Clinicians should consider a diagnosis of Measles in any person with a maculopapular rash, fever and coryza and/or conjunctivitis. Laboratory diagnosis of Measles is required for sporadic cases (enhanced measles surveillance).

Laboratory testing of suspect Measles should include both serology and virus isolation/detection:

Serology: Acute and convalescent

- a) Acute: A blood specimen, to test for Measles antibodies (IgM and IgG) at first contact and ideally obtained within 7 days after the rash onset.
- b) Convalescent: A second blood specimen drawn >10 days after the first to check for seroconversion or a significant rise in Measles specific IgG antibodies between acute and convalescent sera. A significant rise in IgG is indicative of recent infection.

Virus isolation:

- c) A nasopharyngeal swab or aspirate, or throat swab obtained within 4 to 7 days of rash onset, and /or approximately 50 ml of urine within 7 days of rash onset.

When requesting Measles specific IgM and IgG testing, please provide relevant clinical information and the purpose of the testing i.e. suspect Measles, recent vaccination history and recent travel history. If the results of testing in a patient with known or suspected exposure to Measles shows low or negative IgM and IgG, repeat testing in one to two weeks should be ordered.

Infection Control

It is recommended that individuals working in health care settings have documented evidence of immunization against Measles. Health care workers should ensure airborne precautions for suspect/confirmed cases to reduce the risk of transmission to high-risk patients.

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For further information

Public Health Agency of Canada information about Measles:

http://www.phac-aspc.gc.ca/im/vpd-mev/measles_e.html

Public Health Agency of Canada information about Measles Surveillance: Guidelines for Laboratory Support is available at:

<http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/99pdf/cdr2524.pdf>

MOHLTC Healthcare Providers Hotline:

1-866-212-2272

Sincerely,

(original signed by)

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(original signed by)

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