Measles Case Confirmed in York Region: Reminders for Clinical Assessment

Update to York Region health care professionals as of March 1, 2024

Measles case in York Region

York Region is investigating a confirmed case of measles in an individual who has not travelled recently or been in contact with anyone who is ill. York Region Public Health is following up with known contacts of this case who may have been exposed.

Measles outbreaks are occurring in many regions of the world, including the United States and many parts of Europe. In Ontario, six cases of measles have been reported in the past two months.

Suspected measles cases should be tested and reported to public health immediately

Measles is a reportable disease of public health significance under the *Health Promotion and Protection Act (HPPA).*

- Please call us at **1-877-464-9675 ext. 73588** (Monday to Friday 8:30 a.m. to 4:30 p.m.) or **905-953-6478** after hours (before 8:30 a.m. or after 4:30 p.m. Monday to Friday or 24 hours per day on weekends/holidays)

For any suspect cases of measles, it is crucial to test promptly with **ALL** of the following diagnostic tests:

Tests	Testing Period
Urine (50 ml) – PCR PHOL Measles Diagnostic PCR	Within 14 days after the onset of rash
Nasopharyngeal (NP) swab OR throat swab – PCR PHOL Measles Diagnostic PCR	Within 7 days after the onset of rash
Acute Serology IgM and IgG PHOL Measles Diagnostic Serology	Within 7 days after the onset of rash

To expedite the processing of specimens, please call York Region Public Health at 905-830-4444, ext. 73588, Monday to Friday, 8:30 a.m. to 4:30 p.m. or after hours at 905-953-6478 to arrange transportation of specimens to the Public Health Ontario Laboratory in Toronto.

Please use this form to order specimen collection kits from the Public Health Ontario Laboratory.

Please instruct your patient to **isolate** at home after leaving your clinical facility and notify them that public health will contact them with further direction and support.

Infection prevention and control measures to mitigate the risk of measles exposure

Patients with suspected measles should be **promptly isolated in a single room with negative air flow (airborne infection isolation room) with the door closed**. If you do not have an airborne infection isolation room, the patient should wear a surgical mask and be immediately placed in a single room with the door closed.

The measles virus can remain in the air for two hours. Therefore, no other patients should be placed in the same room for **two hours** afterwards. Patient movement should be limited unless absolutely required.

Ensure **all** health care staff are up to date with either **two doses** of documented measles immunization **or** documented laboratory evidence of immunity. Only fully immunized staff should care for a patient suspected of measles.

Room cleaning and disinfection are required when the patient leaves the clinical facility. An N95 respirator is not necessary for health care professionals with documented immunity. Additional information on infection prevention and control measures can be found here.

Post-exposure prophylaxis

Close contacts of a confirmed case of measles may be eligible for post-exposure prophylaxis (PEP). York Region Public Health facilitates eligible contacts to receive PEP with a health care provider in the community and/or at York Region vaccine clinics. PEP includes the administration of the Measles, Mumps and Rubella (MMR) vaccine or serum immunoglobulin (Ig), depending on the age and underlying health of the contact person.

MMR Vaccine

- Immunocompetent susceptible contacts **six months of age and older** who have no contraindications should be given the MMR vaccine **within 72 hours** of the exposure. **IMPORTANT:** If the MMR vaccine is given before 12 months of age as PEP, two additional doses of measles-containing vaccine must be administered after the child is 12 months of age to ensure long-lasting immunity to measles
- Some adults born after 1970 and who have only received one documented dose of MMR vaccine may still be susceptible to measles, as a single dose of MMR vaccine has a vaccine effectiveness of between 85-95%. In terms of contact management, consideration should be given to offering adults a second dose of MMR
- Individuals born before 1970 are generally presumed to have natural immunity; however, consideration may be given to providing an adult born before 1970 with a single dose of MMR

Immunoglobulin (Ig)

- Ig may provide some protection or modify the clinical course of disease among susceptible contacts if administered **within six days** of exposure
- Ig for measles PEP is recommended for susceptible, high-risk groups, which includes:
    - Infants 0 to six months of age

- Susceptible immunocompetent infants six to 12 months of age who are identified after 72 hours and within six days of exposure
- Susceptible pregnant individuals (i.e., those without documentation of 2 doses of measles vaccine or immunity)
- Immunocompromised[1] individuals six months of age and older

Consider measles in your differential when assessing patients with risk factors and compatible symptoms

Please consider measles when assessing patients, especially those who are unvaccinated, have a recent travel history, or present with the signs and symptoms compatible with measles including:

- Fever, cough, runny nose, conjunctivitis
- Small spots in the mouth with white or bluish-white centres on an erythematous base (Koplik spots)
- Dusky, red, blotchy maculopapular rash that begins on the face and spreads all over the body
- Rash begins on the third to seventh day of illness and lasts four to seven days

Patients with measles are infectious from one day before the start of the prodromal period, which is usually about four days before rash onset, to four days after the onset of the rash.

Promote immunization

Please support your patients in remaining up to date on measles vaccines, especially before any upcoming travel. Measles vaccine may be given to infants aged **six to 11 months** if travelling to areas where measles is circulating; however, two additional doses of measles-containing vaccine must be administered after the child is 12 months old to ensure long-lasting immunity to measles.

All Ontarians are eligible for two publicly funded doses of the MMR vaccine based on the health care provider's clinical judgment and the patient's needs.

Please see the Canadian Immunization Guide for more information.

Encourage parents to report their children's immunizations to public health through the Immunization Connect Ontario Tool (ICON), so we have the most up to date information for York Region.

Thank you for your continued efforts to provide life saving vaccines.

Additional resources

- Measles Information for Clinicians (Public Health Ontario)
- Publicly Funded Immunization Schedules for Ontario
- Measles Serology Testing (Public Health Ontario)
- Measles PCR Testing (Public Health Ontario)
- Ordering Form for Specimen Collection Kits (Public Health Ontario Laboratory)
- Infection Prevention and Control for Clinical Office Practice (Provincial Infectious Diseases Advisory Committee)

[1] Certain immunocompromising conditions make it unlikely for an individual to have developed or maintained protective levels of anti-measles antibodies, despite previous vaccination. This includes individuals with advanced HIV with severe immunosuppression and hematopoietic stem cell transplantation (HSCT) recipients. These individuals should be offered Ig as measles PEP within 6 days of exposure.

- Measles Fact Sheet for Patients

Contact Us

If you have any questions, please call please call our Control of Infectious Diseases (CID) team at 1-877-464-9675 ext. 73588.