

## HALTON REGION PUBLIC HEALTH • Office of the Medical Officer of Health

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TO: Halton Physicians, Nurse Practitioners, Emergency Departments, other Healthcare Providers

FROM: Dr. Joanna Oda, Associate Medical Officer of Health

DATE: March 28, 2025

RE: Measles: Ensure staff measles vaccinations up-to-date, reduce exposure risk, how to test and more during Ontario measles outbreak

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### KEY FACTS

- Ontario is experiencing an outbreak of measles, concentrated in southwestern Ontario (see map below).
- As of [March 26, 2025](#), **557 cases** of measles (464 confirmed, 93 probable) have been reported in Ontario in association with this outbreak.
- Outbreak cases have now occurred in **13** Public Health Units and unrelated, sporadic cases have been identified in several other health units, including Peel and Hamilton.
- Ensure that you, your staff and patients are up to date with their measles vaccinations. If staff are not up to date on their measles immunizations, they may need to isolate if they are exposed.
- There are additional vaccine recommendations for people who live, work, travel, worship, or spend time in affected regions.
- Consider measles in the differential diagnosis if a patient presents with a fever, respiratory symptoms, conjunctivitis, and/or a maculopapular rash that begins on the face and spreads downwards (typically appears 3-5 days after onset of prodromal symptoms). This is particularly important if they have a history of recent travel to areas with increased measles activity, and/or are not fully vaccinated.
- **Immediately** report suspected/confirmed cases to Public Health by calling 311 or 905-825-6000. Do not wait for lab confirmation

### KEY MESSAGES FOR HEALTHCARE PROVIDERS

#### *Diagnostic Testing*

- **Immediately** report suspected/confirmed cases to Public Health by calling 311 or 905-825-6000. If needed, Public Health will facilitate specimen transport to Public Health Ontario (PHO).
- All physicians can test for measles. If you suspect measles, reduce exposure risks by:
  - Placing your patient in a single room (with negative air flow if available).
    - The patient should wear a mask and immediately be placed in a single closed room upon arrival to clinic and be assessed at the end of the day.
  - Post-visit: Keep the room unused for 2 hours. **Advise patient to self-isolate until results are available.**
  - Send patients to a hospital ER only if clinically indicated and after calling ahead to minimize high-risk exposures in hospital settings.
- **Specimen Collection:**
  - Indicate STAT on lab requisitions. Include travel history and vaccination status on the requisition.
  - **Recommended samples:**

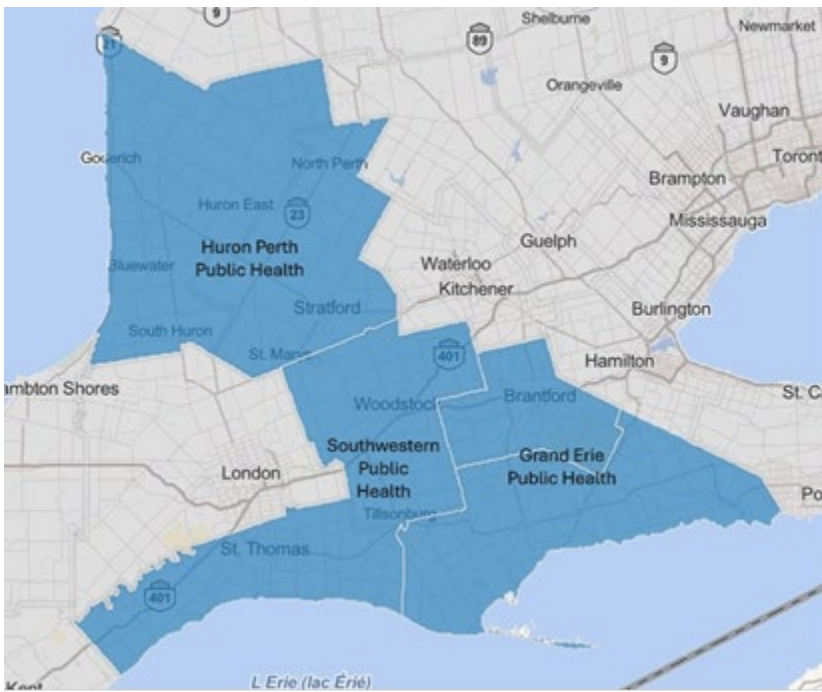
- Nasopharyngeal and/or throat swab PCR (within 7 days of rash onset) **AND** urine PCR (within 14 days of rash onset)
- Aim to collect all specimens during the initial assessment to minimize the need for patients to return to the clinic, thereby reducing the risk of further exposure to patients and staff.
- Refer to [PHO Measles-Diagnostic-PCR](#) guidelines for details
- Serology testing is **not** recommended for diagnosing acute infection. Refer to [PHO Measles – Serology](#) for details.
- To facilitate timely testing when needed, ensure specimen collection supplies, including viral swabs, are readily available. To order specimen collection supplies, use the PHOL [Requisition for Specimen Containers and Supplies](#). See [PHOL Kit and Test Ordering Instructions](#) for more information.

### ***Measles Immunization***

- Continue to provide immunizations to susceptible patients as per the Ontario Publicly Funded Immunization Schedule and the Canadian Immunization Guide.
- Ensure that measles-containing vaccines are readily available in your office. Vaccines can be ordered from Halton Region Public Health through the online [Vaccine Order Form](#).
- Efficacy of a single dose of measles vaccine, given at 12 or 15 months of age, is estimated to be 85% to 95%, and is almost 100% with a second dose.
- Current Ontario recommendations are that children receive two doses of an appropriate measles-containing vaccine:
  - First dose on/after their first birthday.
  - Second dose at 4 to 6 years old.
- Additional publicly funded recommendations:
  - **Health care workers or military personnel: Two doses of the measles vaccine are recommended regardless of year of birth.**
  - Born in 1970 or later: Should have at least one dose of the measles vaccine. A second dose is recommended for travellers to risk areas and post-secondary students.
  - Born before 1970: considered to be immune to measles based on probable exposure earlier in life. One dose of the measles vaccine is recommended for travellers to risk areas and post-secondary students.

### ***Outbreak-Related Immunization Recommendations***

- The following is advised **for individuals who live, work, travel (e.g., family visit), worship, or spend time in affected regions and communities with measles cases and where the risk of exposure is higher**. This currently includes the Grand Erie, Southwestern and Huron-Perth Public Health Units (see map below) and will be reassessed as needed:
  - Infants (six to 11 months): Should receive one dose of the measles, mumps, rubella (MMR) vaccine. Two additional doses continue to be recommended after the age of one year.
  - Children (one to four years): Children who have received their first dose of measles-containing vaccine are encouraged to receive a second dose as soon as possible (at a minimum of four weeks from the first dose).
  - Adults (18+ years) born on or after 1970: A second dose of MMR vaccine is recommended.
- Advise patients and/or their parents/guardians to report all immunizations they receive to Public Health via [online reporting](#) or by calling 311.



## ADDITIONAL RESOURCES

- [PHO ENHANCED EPIDEMIOLOGICAL SUMMARY - Measles in Ontario](#) (March 27, 2025)
- [Publicly Funded Immunization Schedule for Ontario](#), Ministry of Health
- [Statement from the Chief Public Health Officer of Canada on Measles and the Risk to Canadians](#) - Canada.ca (Jan 29, 2025)
- [Measles: Information for Health Care Providers, 2nd Edition](#) (Aug 30, 2024)
- Halton CME: [Public Health Updates for Halton Physicians: Focus on Measles - April 24, 2024](#)
- [Appendix 1: Case Definitions and Disease-Specific Information - Measles](#) (March 2024)
- Ontario Health [Information Session: Measles](#) (<https://youtu.be/dU66yr1NibE?si=ScEqVKI6qS2Dvd8J>)
- [Measles Clinical Resource](#) – Ontario College of Family Physicians (March 7, 2025)

Please report all suspected/confirmed cases of [Diseases of Public Health Significance](#) (only report COVID-19 cases occurring in high-risk settings) to Public Health immediately by calling 311, 905-825-6000 or toll free at 1-866-442-5866.

PLEASE PROVIDE A COPY TO ALL PHYSICIANS IN YOUR OFFICE AND/OR POST IN EMERGENCY DEPARTMENTS AND PHYSICIAN LOUNGES. IF YOU HAVE ANY ISSUES WITH THIS ATTACHMENT, PLEASE EMAIL [DOCTORS@HALTON.CA](mailto:DOCTORS@HALTON.CA).

## Measles resources for healthcare professionals

### General information about Measles

[Measles resource for family physicians](#), Ontario College of Family Physicians, March 7, 2025

[Measles: Information for Health Care Providers](#), Public Health Ontario, September 2024

[Infectious Disease Protocol for Measles](#), Ontario Ministry of Health, March 2024

[Measles in Ontario surveillance report](#), Public Health Ontario, March 20, 2025

[Measles Exposures in Ontario](#), Public Health Ontario, March 25, 2025

### Post-Exposure Prophylaxis

[Measles: Post-Exposure Prophylaxis for Contacts](#), Public Health Ontario, March 2025

[Measles Post-Exposure Prophylaxis for Individuals Who Are Immunocompromised Due to Disease or Therapy](#), Public Health Ontario, March 2025

[Summary of NACI statement of February 13, 2025: Updated recommendations on measles post-exposure prophylaxis](#), NACI, February 13, 2025

### Testing for Measles

[Measles – Diagnostic – PCR](#), Public Health Ontario

[General test requisition](#), Public Health Ontario

[Requisition for specimen containers and supplies](#), Public Health Ontario

### IPAC

[Interim IPAC recommendations and use of PPE for care of individuals with suspect or confirmed measles](#), Public Health Ontario, March 2024

### Immunization

[Measles vaccines: Canadian Immunization Guide](#), September 2020

[Publicly Funded Immunization Schedules for Ontario](#), Ontario Ministry of Health, June 2022

[Immunization of immunocompromised persons: Canadian Immunization Guide](#), September 2020

[Adverse Event Following Immunization \(AEFI\) fact sheet](#), Public Health Ontario

[AEFI reporting form](#), Public Health Ontario

### Patient Resources

[Reporting immunization to Halton Region Public Health](#), Halton Region

[About Measles \(one page tool for patients\)](#), Ontario College of Family Physicians, March 7, 2025



# Measles

This resource provides the most up-to-date information on prevention and management of suspected cases in your practice.

## What you need to know:

- See here for Public Health Ontario's resources; [Measles Information for Health Care Providers](#) and [clinic checklist](#).
- If patients call or attend clinic with febrile and/or respiratory rash illness, expedite evaluation in a private room to minimize patient and health care workers' exposures.
- All health care workers, regardless of immune status, should wear an **N95 mask**. This recommendation from PHO comes in light of documented cases of measles transmission to health care workers with presumptive evidence of immunity.
- Order N95 respirators and other PPE through the [Ontario PPE Supply Portal](#).

**All suspected cases should immediately be reported to your local public health unit**, which will facilitate a public health case and contact management.

## Immunization Recommendations

Consider reviewing immunization records during routine appointments, with a particular focus on school-aged children. Counsel parents and caregivers about the importance of vaccination, particularly for children under five who are at the highest risk for severe outcomes.

Everyone in Ontario is recommended to stay up-to-date with measles-containing vaccines according to the [Publicly Funded Immunization Schedules for Ontario](#).

### Children

- Standard two-dose regimen – the first given at 12 months (MMR vaccine) and the second between ages four to six (MMRV vaccine).
- Some children may have missed a shot due to the COVID-19 pandemic – it is important children are fully vaccinated against measles.

### Adults born before 1970

- Generally assumed to have natural immunity.
- One dose of MMR vaccine is recommended prior to travel outside of Canada, unless there is lab evidence of immunity or history of lab-confirmed measles.

### Travelling

- Individuals travelling outside Canada to high-risk areas should ensure they're adequately vaccinated against measles prior to travel. This includes infants six to 11 months (note: an additional two doses of measles-containing vaccine are still required after the first birthday for long-term protection).
- See [chart on page 3](#) summarizing recommendations for measles vaccination prior to travel outside of Canada.

## Immunization Recommendations

### Born in 1970 or later

- Adults born in or after 1970 likely received one dose of a measles-containing vaccine. In 1996, two doses became standard in Ontario.
- Those who have only received one dose of MMR vaccine are eligible to receive a second dose if they meet any of the criteria below or based on the health care provider's clinical judgment.
  - Health care workers
  - Post-secondary students
  - Planning to travel outside of Canada

### Unknown immunization history

- There is no harm in giving measles-containing vaccine to an individual who is already immune.
- If a patient's immunization records are unavailable, vaccination is preferable to ordering serology to determine immune status.

## Screen Patient by Asking: Do you have symptoms of measles?



Fever



Cough



Conjunctivitis



Runny Nose



Koplik spots



Rash

- The infectious period for measles is four days before rash onset until four days after rash onset.
- Measles can resemble other viruses, including Mpox, varicella, and hand, foot and mouth disease.
- Symptoms generally start around 10 days after being exposed but can start anywhere from seven to 21 days after exposure and typically last for one to two weeks.
- The characteristic red maculopapular rash typically appears after three to seven days of initial symptoms.
- Rash first appears on the face and spreads downwards over the body, lasting five to six days.

Yes

## Do you have risk factors for measles?



Recent travel



No/unknown immunity



Links to a known outbreak or case

Yes



## Providing Care for Symptomatic Patients

When patients call for appointments with symptoms of febrile and/or respiratory rash illnesses, consider measles in differential diagnoses, particularly in patients returning from travel.

- Routine practices and airborne precautions are recommended.
- Only health care workers with presumptive immunity should care for a patient suspected of measles (two doses of measles-containing vaccine or lab evidence of immunity).
- All health care workers and staff should wear an N95 mask, regardless of immune status.
- Health care workers should also conduct a personal care risk assessment (PCRA) to determine whether additional PPE is recommended (e.g., gloves, gown, eye protection).

## Patient flow

- Where possible, schedule symptomatic patients separately from other patients—ideally at the end of the day since no other patients should be placed in the same room for two hours afterwards.
- Require symptomatic patients to wear medical masks.
- Promptly isolate symptomatic patients in a negative pressure room, if available, or single patient room with the door closed.

For more guidance, refer to [PHO's new Interim IPAC Recommendations](#).



## Testing

**Note: All suspect cases of measles should immediately be reported to your local public health unit. Do not wait for laboratory confirmation.**

## Collect samples for testing

- To optimize test turnaround time, ensure use of valid (non-expired) collection kits (if you require specimen collection supplies for your clinic, order [through PHO](#)).
  - Collect [PCR](#) nasopharyngeal / throat swab
  - **AND** urine as well as diagnostic [serology](#).
- If you cannot collect samples in your office, provide the patient with a requisition and refer to a lab for testing.
- If you are referring a patient for further assessment or diagnostic testing, advise the patient to contact the health care facility prior to arrival (if possible) so appropriate IPAC precautions can be implemented.