

NUNAVIK PUBLIC HEALTH NEWSLETTER

Measles: New Outbreak in Quebec

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Epidemiological Situation

In 2024, Quebec experienced a measles outbreak from February to June, during which 51 cases were recorded. Since then, a few cases with overseas acquisition have been reported. However, Quebec is currently facing a new outbreak that began in December. To date, four cases have been reported, and an epidemiological link has been established between them. Furthermore, according to the information received, none of the individuals involved were vaccinated against measles.

As of January 3rd, no cases have yet been reported in Nunavik, but increased vigilance among clinicians is recommended.

The list of exposure locations for the measles virus is available here: [Measles Outbreak | Government of Quebec](#).

Information

For general information on measles (symptoms, incubation period and contagiousness, individuals considered protected and those at risk of complications), see the **appendix**.

RECOMMENDATIONS

1. Be alert when scheduling appointments, at reception and during triage:

- Identify any inadequately protected individual* who presents the following clinical signs:
 - fever ($\geq 38.3^{\circ}\text{C}$) **and**
 - generalized maculopapular rash **and**
 - cough, coryza or conjunctivitis.

**It is important to remain alert for individuals who are adequately protected and considered as contacts or who have symptoms suggestive of measles, as the clinical presentation of measles in such individuals can be atypical. As the vaccine is not 100% effective, cases of measles have been reported in Quebec among individuals considered protected.*

2. Quickly apply measures to prevent and control infections:

- Ask the patient to exercise hand hygiene and wear a medical mask.
- Isolate the patient in a negative-pressure room or, if unavailable, an examination room with the door closed.
- Apply additional airborne precautions.
- In the presence of a suspected measles case, wear an APR N95 if you are a healthcare professional.
- Establish, if necessary, the list including the contact details of exposed individuals, including patients and their caregivers, as well as staff.

3. Request the appropriate laboratory tests according to the medical evaluation:

- Follow the [MSSS recommendations](#) below:

Take advantage of every opportunity to update the vaccination status of individuals, especially children aged 1 to 4 years, who are at higher risk of measles complications. The measles vaccine is 85 to 95% effective after the first dose and over 95% effective after the second dose.

A health worker without adequate protection or without proof of vaccination against measles and identified as a contact in a health-care setting will be withdrawn from provision of care for patients from the 5th to the 21st day. We strongly encourage all Nunavik workers to check their immunization status and to get vaccinated if necessary. For full information on immunization status, contact your CLSC or local point of service or call 1-877-644-4545.

		Exposure to a case or a known place of exposure	Exposure during travel	No documented exposure
Typical clinical presentation ¹	Not protected ² or protected	To be tested	To be tested	To be tested
Atypical clinical presentation	Not protected	To be tested	To be tested	No indication for measles test
Atypical clinical presentation	Protected	To be tested ³	No indication for measles test	No indication for measles test

¹ Presence of the following three criteria: fever **AND** cough and/or coryza and/or conjunctivitis **AND** generalized maculopapular rash.

² See **appendix** for the definition of “protected” status.

³ If contact with a known case or if place of exposure is a day-care, an academic setting or a health-care setting or if the individual to be tested is a health worker.

- If a measles diagnosis is suspected, it is necessary to confirm it with an appropriate test:

Diagnostic test	Specimen	Period for taking the specimen ⁴
Nucleic Acid Amplification Testing (NAAT)	Nasopharyngeal secretions OR Urine (50-100ml)	≤ 7 days after onset of rash
IgM serology for measles ⁵	Blood (≥ 3 ml)	3 to 28 days after onset of rash

⁴ Specimens taken later will be accepted, but the test’s sensitivity will not be optimal.

⁵ If the NAAT result is positive, it is not necessary to perform the serological test if already taken.

**** IgM serology for parvovirus B-19 and rubella is also recommended to exclude these diagnoses.**

* If possible, perform the NAAT and the serological tests at the same time to avoid having a potentially contagious individual visit the premises again.

4. Identify the contacts of the case who are at risk of complications and administer the appropriate prophylaxis:

- Vaccinate individuals aged 6 months or older who are considered unprotected within 72 hours of the initial contact with a case of measles. See the section [RRO : vaccin contre la rougeole, la rubéole et les oreillons](#) of the [Protocole d’immunisation du Québec \(PIQ\)](#).
- Some at-risk individuals must receive [immunoglobulins \(Ig\)](#) if the initial exposure to the contagious case goes back fewer than 7 days. See the **appendix** as well as the section on measles post-exposure of the *PIQ*.

5. Quickly report any suspected case of measles responding to the indications for testing to the entities below:

- the Department of Public Health of the case’s region of residence. **For Nunavik**, contact the physician on duty for infectious diseases **by telephone at 1 855 964-2244 (toll free)** or 1 819 299-2990 (alternate number in case of problems with the toll-free number). Proceed with reporting without waiting for laboratory results in order to accelerate public-health interventions including the search for contacts and to enable administration of prophylaxis to individuals at risk of complications within the short time periods established;
- the Infection Prevention and Control (IPC) team of your institution.
- If the case does not require hospitalization, ask him or her to isolate at home until the laboratory test results are available and then, if the diagnosis is confirmed, for 4 days after the onset of the maculopapular rash.

Useful links

- [Rougeole - Professionnels de la santé - MSSS \(gouv.qc.ca\)](#)
- [L’affiche Alerte! Rougeole!](#)
- [Measles outbreak | Gouvernement du Québec \(quebec.ca\)](#)
- [Protocole d’immunisation du Québec \(PIQ\)](#)
- [Outil d’aide à la décision-Repérage et diagnostic de la rougeole \(INESSS\)](#)

APPENDIX: MEASLES

SIGNS AND SYMPTOMS OF MEASLES:

- **Prodrome**
 - Fever
 - Conjunctivitis
 - Coryza
 - Cough
 - Koplik spots (1 or 2 days before the rash)
- **Maculopapular rash**
 - 2 to 4 days after the onset of prodrome
 - Starts on the face and neck and then becomes generalized
 - Lasts at least 3 days and up to seven days

INCUBATION PERIOD:

The incubation period of measles is normally 10 to 14 days (exceptionally up to 21 days) between the time of contact and the onset of prodrome. The skin rash then appears 2 to 4 days later.

PERIOD OF COMMUNICABILITY:

The period of communicability starts 4 days before the onset of the skin rash and lasts up to 4 days afterward.

INDIVIDUALS CONSIDERED PROTECTED AGAINST MEASLES:

- **Individuals born before 1970**
- **Individuals with serology indicating the presence of measles antibodies**
- **Individuals with a medical attestation confirming they had measles before January 1, 1996**
- **Individuals with written proof of vaccination against measles:**
 - the number of doses required to consider an individual as being protected varies:
 - 2 doses:
 - individuals born since 1980.
 - individuals born between 1970 and 1979 and who are interns in the health sector, health workers or military recruits or those who intend to travel outside Canada.
 - 1 dose:
 - individuals born between 1970 and 1979 who are neither interns in the health sector, health workers nor military recruits and not intending to travel outside Canada.
 - pregnant individuals born between 1970 and 1979 and who received only one dose of the measles vaccine should receive immunoglobulins after significant exposure.

INDIVIDUALS AT RISK OF COMPLICATIONS and for whom post-exposure prophylaxis (PEP) may be indicated:

- Children under 12 months.
- Pregnant receptive individuals born in or after 1970 (including pregnant individuals born between 1970 and 1979 who received only one dose of the vaccine).
- The following immunosuppressed individuals:
 - those who have undergone a bone graft, regardless of their age or immunization status or whether they have already had measles.
 - immunosuppressed individuals born in or after 1970 and who have never had measles (or who have no proof they have had the disease), regardless of their immunization status.