

Info-Vaccin

Nunavik Vaccination Newsletter

Nunavik Department of Public Health

VACCINATION AGAINST MEASLES: *Call for urgent action*

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Context

The COVID-19 pandemic disrupted basic vaccination efforts worldwide, the direct consequence of which was a serious recrudescence in measles cases and outbreaks. In fact, the CDC reports that 61 million doses of the measles vaccine were postponed or omitted worldwide between 2020 and 2022.

Current epidemiology in Québec and Canada

Measles is endemic in many parts of the world (Latin America, Africa, Asia, the Middle East, New Zealand and several European countries). In Canada, 12 cases of measles were reported in 2023 (QC, ON, AB), all of which were acquired outside the country. In 2024, up to now, five cases have been reported (ON, SK, QC), two of which were confirmed in the same family in Montréal in February 2024, also acquired during a trip outside the country.

Infectiousness of measles

The measles virus is **among the most infectious in existence**; unprotected individuals have a 90% chance of being infected after exposure to the disease, and a single case of measles can infect up to 15 other non-immunized or insufficiently immunized individuals. Moreover, a single case is sufficient to declare an outbreak in a given setting (e.g., in a school or day-care).

Vaccination is the best means of prevention

There are few tools in the medical world as effective as childhood vaccination for preventing both deaths and severe, infectious diseases. As per the regular vaccination calendar of Québec, primary vaccination against measles (two doses) is provided for all children at 12 months and again at 18 months. The measles vaccine (MMR or MMR-chickenpox) is live attenuated, and provides robust protection against the disease and its potential complications (otitis, pneumonia, convulsions, permanent brain damage, death). In fact, its effectiveness is excellent: 99% of individuals are protected against the disease after two doses. In Québec, the measles vaccine has been used since 1970 and is considered very safe.

Since the pandemic, a drop in immunization coverage has been documented among very young children in Nunavik, and this for several reasons: service interruptions, shaken trust in vaccination, etc. The region's greatest gap in terms of protection against measles is found among the population segment aged zero to five years: **delays**, much more than refusals, account for the **present low rates of immunization**.

In fact, as of February 1, 2024, we estimate that **immunization coverage of children aged 15 months** deemed adequately protected against measles is **52.2%**. For the same period, we estimate that **immunization coverage of children aged 24 months** deemed adequately protected against measles is **52.9%**. With the objective of immunization coverage set at 95%, the present immunization coverage of Nunavik's children confers inadequate herd immunity.

Measles and its complications are also most severe among the segment aged zero to five years. Thus, there is **urgency for action** in Nunavik: we must make all possible efforts to reach parents and protect very young children in order to reduce the risk of a measles outbreak occurring on the territory. Further, Nunavik elders still recall all too well the ravages caused by this virus in the 1950s.

As reminder, all individuals belonging to any of the categories below are considered **adequately protected**:

- born **before 1970** (considered protected due to the endemicity of measles during that period);
- born **between 1970 and 1979** and received **one dose** of the measles vaccine (except interns and workers in the health sector, military recruits and travellers, who require two doses);
- born **since 1980** and received **two doses** of the measles vaccine;
- contracted measles in the past (whose serology confirms the **presence of measles antibodies** or who have **medical attestation** confirming they contracted measles before January 1, 1996).

Vaccination is the best protection against measles and its complications. It is essential to take all opportunities to check immunization status and offer vaccination to all clientele deemed inadequately protected.

Post-exposure intervention in the context of a measles outbreak

Any suspected measles case must be reported immediately to the DPH in order to launch an epidemiological investigation jointly with the health centres. Isolation of the case remains the most effective measure for containing an outbreak, and post-exposure prophylaxis (PEP) will be provided for susceptible contacts as soon as possible (vaccine or immunoglobulins).

Useful links

- [Info-MADO Vol 11 no 4 - Appel à la vigilance Rougeole 13-10-2023 En.pdf \(nrhss.ca\)](#)
- [Global Measles Outbreaks](#), CDC
- Ministère de la Santé et des Services sociaux (2015). Orientations du directeur national de santé publique sur le retrait en milieu scolaire lors d'une éclosion de rougeole. Consulted at <https://publications.msss.gouv.qc.ca/msss/fichiers/2015/15-278-01W.pdf>
- Protocole d'immunisation du Québec (PIQ)
 - [Immunoglobulines post-exposition à la rougeole](#)
 - [Vaccination rougeole](#) (préexposition / postexposition)
 - [Description des maladies évitables par la vaccination - Rougeole](#)
- [The measly measles: what you need to know](#), Montreal Children's Hospital factsheet on measles
- Watt, L., & Bryant, R. (2023). *Johnny Watt – His Life, His World, His Ways*. Nunavik, Québec: Publications Nunavik. (p. 55 to 57)