

Nova Scotia Measles Immunization

Information for Health Care Professionals

March 2024 Eligibility Policy Update

Q1. How do I explain the measles eligibility policy change and current interest in measles immunization?

Measles activity is increasing globally, and we are seeing more cases in Canada and the US. Within Nova Scotia, the risk of community spread of measles is low and depends on several factors, including vaccination coverage, travel patterns, outbreaks in neighboring countries and rapid outbreak response measures when a case is identified. With increasing travel and global disease burden, we anticipate that we will have measles cases in Nova Scotia. The increase in travel expected in the coming months raises the risk of measles arriving here.

The Nova Scotia [Publicly Funded Vaccine/Immunoglobulin Eligibility Policy](#) was updated February 29, 2024. Adults born before 1970 without measles immunity that are travelling to regions where measles is endemic or there is ongoing community-based transmission are now eligible for 1 dose of measles vaccine.

Q2. Who is now eligible to receive routine publicly funded measles-containing vaccines?

Measles-containing vaccine, given as measles, mumps, rubella, varicella (MMRV) vaccine is routinely provided to children in Nova Scotia at 12 and 18 months of age. However, other groups are also eligible to receive vaccine.

Individuals born BEFORE 1970 who are **travelling** to areas where measles is a concern **(NEW)**:

- should make sure they have received **1 dose** of MMR vaccine: or
- have laboratory evidence of immunity (e.g. serology); or
- are considered immune due to a history of laboratory-confirmed measles disease.

Individuals born in 1970 or AFTER (12 months or older):

- should make sure they have received **2 doses** of the MMR vaccine as per the routine immunization schedule: or
- have laboratory evidence of immunity (e.g. serology); or
- are considered immune due to a history of laboratory-confirmed measles disease.

Infants (6 months to less than 12 months of age) who are **travelling** to regions where measles is a concern:

- MMR vaccine may be given as early as 6 months of age. If an early dose is given, the routine 2-dose series of measles vaccine must be given on or after the first birthday as per the [routine immunization schedule](#). A total of 3 doses are required to be fully protected.

See the full [The Nova Scotia Publicly Funded Vaccine/Immunoglobulin Eligibility Policy](#).

Q3. Why are we focusing on travellers?

While in many parts of the world measles spreads routinely (i.e., is endemic or there are outbreaks), it does not naturally circulate in Canada (i.e., it has been eliminated). Cases have been reported in Canadians returning from countries where measles is a concern. An infected person can then spread measles to others who are susceptible to infection (e.g., those not fully vaccinated) including those who are most vulnerable (e.g. very young infants and immunocompromised people who cannot be vaccinated).

Travellers are at an increased risk of measles infection if they:

- have not had measles.
- are not fully vaccinated (for most people this is two doses of vaccine).
- travelling to places in the world where measles is circulating.

Q4. What do I do if I'm unsure whether my patient has immunity to measles?

Your patient should first try to find their vaccination records or documentation of measles immunity. If they do not have written documentation of measles immunity or vaccination and no history of having measles in the past, they should get vaccinated with MMR vaccine, rather than having serology taken to determine immunity. There is no harm in getting another dose of MMR vaccine if they may already be immune to measles (or mumps or rubella). The number of doses required depends on their age. If someone has a history of laboratory-confirmed measles, they do not need to be vaccinated.

In general, persons born before 1970 are presumed to have immunity from past exposure to the measles virus. However, someone of this age who is travelling to an area where measles is circulating, may now be eligible to receive a dose of measles containing vaccine.

Q5. If there is no documentation of appropriate vaccination, history of laboratory confirmed measles, or laboratory evidence of immunity, is serology required?

No. Serologic testing for measles immunity is not recommended before or after receiving measles-containing vaccine. See the [Canadian immunization guide - Canada.ca](#).

Q6. If a patient born after 1970 cannot confirm they had two documented doses of measles-containing vaccine, do I immunize?

Yes. The Nova Scotia Publicly Funded Vaccine Eligibility policy defines measles immunity as:

Born in or after 1970: 2 doses.

OR

History of laboratory-confirmed infection

OR

Laboratory evidence of immunity (e.g. serology).

It is important to schedule a minimum interval of 4 weeks between doses of MMR. For additional information on the administration of MMR see [Measles vaccines: Canadian immunization guide - Canada.ca](#).

See the full Nova Scotia [Publicly Funded Vaccine/Immunoglobulin Eligibility Policy](#).

Q7. Can a patient receive the live measles-containing vaccine with other vaccines?

Yes. A separate injection site should be used if more than one vaccine is given at the same time. MMR vaccine should never be mixed with another vaccine in the same syringe. MMR vaccine may be administered concurrently with, or at any time before or after, non-live vaccines or live oral vaccines. MMR vaccine may be administered concurrently with other routinely provided live parenteral vaccines. If not given concurrently, a minimum interval of 4 weeks is recommended between the administration of live parenteral vaccines. For more information, see the [Canadian immunization guide - Canada.ca](#).

Q8. What if I don't have a supply of measles-containing vaccines?

Please follow the current ordering processes with Public Health and carefully monitor your supply to ensure you place an appropriate monthly order.

Q9. If I run out of MMR vaccine, can I give MMRV instead?

MMRV cannot be used in place of MMR for all age groups as MMRV is only indicated for children 12 months to less than 13 years of age. See product monograph at [\[Product Monograph Template - Standard\] \(merck.ca\)](#)

Q10. How do I document measles-containing vaccine immunizations for my patient?

Nova Scotia immunization documentation for a measles-containing vaccine can be one of the following: a provider's EMR, Public Health Immunization reciprocal forms, CANImmunize, or the immunization module of the Drug Information System (DIS).

Q11. When is it best to immunize with measles-containing vaccine before travel?

Optimally, measles-containing vaccine should be given at least two weeks before departure, but there are still benefits if given less than two weeks before travelling.

Q12. Do babies (age 6- 12 months) get another dose of a measles-containing vaccine after one year?

Infants receiving an early dose of MMR vaccine between 6 to 12 months of age for travel still require their routine MMRV immunizations at 12 and 18 months of age (as long as it has been 4 weeks since the administration of their MMR dose). See the Nova Scotia Routine Immunization schedules at [Routine-Immunization-Schedules-for-Children-Youth-Adults.pdf \(novascotia.ca\)](#)

Q13. Are there situations where a third dose of MMR vaccine would be recommended for my patient?

Two doses of measles containing vaccine generally provides life-long protection. A third dose is not necessary unless the dose was given prior to 12 months of age, or the minimum interval between doses was not maintained or the individual is determined to be non-immune.

Q14. If I have a pregnant patient who is not immune to measles. What should I do?

If your patient is not immune to measles, they should receive the measles-containing vaccine as soon as possible **after** the baby is born. Pregnant individuals cannot receive a live measles-containing vaccine.

Q15. Who should NOT receive the live measles-containing vaccine?

Measles-containing vaccine should not be given to:

- pregnant individuals.
- individuals with weakened immune systems due to disease or medications.
- individuals who have had severe allergic reactions to previous doses of vaccine or any of its components.

Q16. Are individuals who come to Nova Scotia from other provinces eligible for the Measles containing vaccines?

As per [policy directive 5.2.1](#), vaccines are not routinely provided through the publicly funded immunization program to visitors or temporary residents of Nova Scotia. Further details are outlined in [Section 5.2](#) of the policy.

Q17. Are there any special considerations for my patients travelling to visit friends and relatives?

Health care providers should evaluate immunization status of all travellers including those visiting friends and relatives (VFR) to ensure routine vaccinations of both children and adults are up to date before travel. The risk of travel-related illness tends to be higher in people with VFR for a number of reasons. See the following resource: [Statement on international travelers who intend to visit friends and relatives - Canada.ca](#).

Q18. How should measles-containing vaccines be stored and handled?

Store your measles-containing vaccines in a monitored vaccine refrigerator at +2°C to +8°C. Do not freeze and do not use vaccine that may have been frozen. Protect from light and do not use after the expiry date. If the vaccine has been exposed to temperatures outside this range, isolate the vaccine and contact your local Public Health office for further instructions prior to administration.

Q19. When should I report an adverse event?

Adverse events following immunization (AEFI) are classified as any serious or unexpected adverse event related to vaccination. An unexpected AEFI is an event that is not listed in available product information but may be due to the immunization, or a change in the frequency of a known AEFI.

Vaccine providers are required by law to report the AEFI following immunization to Public Health. See the following for more information: [It's the Law: Report Adverse Events](#).

Q20. If I have a patient between 12 months and 12 years who is not up to date for vaccine, which vaccine should I use?

MMRV if available

Q21. Can people develop a rash after receiving measles containing vaccine?

MMR is a live attenuated vaccine, and approximately 5% may develop fever and malaise with or without a rash which typically occurs 7 to 10 days post vaccination. Measles virus can be detected in PCR and further testing is needed to distinguish between vaccine and wild-type measles.