

Approver:

Vaccine Clinic Resource for Immunizers				
<b>Disclaimer:</b> This Quick Reference is not intended to replace other product specific vaccine references. The document is intended as a quick				
reference for frequently referred to information. Please refer to the product monograph and vaccine specific resources for all current and				
complete information				
Title:	Measles, Mumps, Rubella (MMR) and			
	Measles, Mumps, Rubella and Varicella (MMRV) Vaccine Quick Reference Guide			
Effective Date:	May 21, 2025			

### **MMR and MMRV Vaccine Resources:**

Fact sheets https://www.gov.mb.ca/health/publichealth/factsheets/mmr.pdf https://www.gov.mb.ca/health/publichealth/factsheets/mmrv.pdf

Final

Product Monographs <u>MMR</u> Priorix<sup>®</sup> : <u>https://ca.gsk.com/en-ca/products/priorix/</u> <u>M-M-R<sup>®</sup> II:</u> <u>https://www.merck.ca/en/wp-content/uploads/sites/20/2021/04/MMR\_II-PM\_E.pdf</u>

<u>MMRV</u> <u>Priorix-Tetra®</u> <u>https://ca.gsk.com/en-ca/products/priorix-tetra/</u> <u>ProQuad®</u> <u>https://www.merck.ca/en/wp-content/uploads/sites/20/2021/04/PROQUAD-PM\_E.pdf</u>

#### **Eligibility Criteria**

For the most up to date information on eligibility criteria refer to: https://www.gov.mb.ca/health/publichealth/cdc/vaccineeligibility.html

#### Canadian Immunization Guide:

For additional guidance on contraindications, precautions and special populations refer to the vaccine specific section: <a href="https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines.html">https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines.html</a>

# Measles, Mumps, Rubella Vaccine (MMR)

Product	Storage and Handling	Eligibility Criteria	Recommendations for Use
Priorix® Measles, Mumps, and Rubella vaccine (live, attenuated) Format: Single dose vial of lyophilized white powder; and diluent in a prefilled syringe or ampoule 10/per box After reconstitution: 0.5 ml (approximately) Note: After reconstitution, the vaccine volume is approximately 0.5 mL; however, the actual volume may vary slightly. Regardless of the final volume, the entire contents of the reconstituted vaccine should be administered. Product is latex, preservative and adjuvant free. Potential Allergens***: Neomycin Other Ingredients: amino acids, lactose, mannitol, sorbitol	Storage:         Refrigerate at 2°to 8°C until expiry date on label.         Protect from light.         Handling: Reconstitution required. Withdraw the entire contents of the diluent from the ampoule. Add the diluent withdrawn from the ampoule, or the entire contents of the pre-filled syringe of diluent, to the vial containing the powder.         Shake the vial gently until the powder is completely dissolved in the diluent.         Entire content of the reconstituted vaccine should be administered.         After reconstitution, the vaccine should be used promptly; or within 8 hours of reconstitution if it is stored refrigerated at 2°to 8°C	<ul> <li>Children 6 months to under 12 months of age are eligible to receive 1 dose*:         <ul> <li>If travelling to a measles endemic country</li> <li>Manitoba's Measles Outbreak Eligibility:</li> <li>living in SH-SS or IERHA, or</li> <li>traveling regularly to AND having close contact with residents of SH-SS or IERHA.</li> <li>Those who have been evacuated from their home communities due to wildfires in Manitoba</li> </ul> </li> <li>All children ≥ 12 months of age are eligible to receive 2 doses**.</li> <li>All adults born in or after 1985 are eligible to receive 2 doses of the MMR vaccine.</li> <li>Adults born between 1970 and 1984 are eligible to receive one dose if they do not have documentation of receiving one dose of an MMR vaccine or a history of a laboratory-confirmed infection or laboratory evidence of immunity.</li> <li>Health care workers are eligible for 2 doses of MMR vaccine or a history of a laboratory-confirmed infection or laboratory evidence of immunity.</li> <li>Students born before 1970 are eligible for 1 dose; and Students born in or after 1970 are eligible for 2 doses of a baboratory-confirmed infection or laboratory evidence of immunity.</li> </ul>	Regimen: 1, 2, or 3 doses (depending on eligibility)         Dosage: 0.5 ml         Note: After reconstitution, the vaccine volume is approximately 0.5 mL; however, the actual volume may vary slightly. Regardless of the final volume, the entire contents of the reconstituted vaccine should be administered.         Route: SC (5/8" 25g needle) or IM (1" 25g needle)         Interval:         •       Minimum: 28 days (4 weeks) apart and ≥ 12 months of age         Priorix <sup>®</sup> and M-M-R <sup>®</sup> II         Are live vaccines, therefore they can only be administered         concurrently (i.e., same day) or 28 days (before or after) from other live vaccines.         Priorix <sup>®</sup> and M-M-R <sup>®</sup> II         can be given on the same day or at any time before or after a non-live (inactivated) vaccine.         For an optimum immune response to MMR, the vaccine should be administered at least 14 days prior to administration of an Immune Globulin (Ig) preparation or blood product, or the vaccine administration delayed until the antibodies in the Ig preparation or blood product, human immune globulin and timing of immunization-Table 1 for interval to receive an MMR vaccine post receipt of an Ig.
M-M-R®II measles, mumps and rubella vaccine (live attenuated) Format: Single dose vial of lyophilized white powder; and diluent in a prefilled syringe or ampoule 10/per box After reconstitution: 0.5 ml (approximately) Note: After reconstitution, the vaccine volume is approximately 0.5 mL; however, the actual volume may vary slightly. Regardless of the final volume, the entire contents of the reconstituted vaccine should be administered. Product is latex, preservative and adjuvant free. Potential Allergens***: Neomycin Phenol red, Porcine gelatin, Residual components of chick embryo cell cultures	Storage:         Refrigerate at 2°to 8°C until expiry date on label.         The vaccine may also be stored in a freezer at temperatures above -50°C;         Protect from light.         Handling: Reconstitution required. Withdraw the entire contents of the diluent. Add the diluent withdrawn from the ampoule, or the entire contents of the diluent, to the vial containing the powder.         Shake the vial gently until the powder is completely dissolved in the diluent.         Entire content of the reconstituted vaccine should be administered.         After reconstitution, the vaccine should be used promptly; or within 8 hours of reconstitution if it is stored refrigerated at 2°to 8°C	<ul> <li>Hematopoietic stem cell transplant recipients (as per Cancer Care Manitoba Blood and Marrow Transplant (BMT) Immunization Schedule)</li> <li>CAR T-cell therapy recipients (as per Cancer Care Manitoba CAR-T Immunization Schedule)</li> <li>Patients currently under the care of a hematologist or oncologist from Cancer Care Manitoba (CCMB) who have been provided a CCMB directed Immunization Schedule.</li> <li>For the most current eligibility criteria refer to: https://www.gov.mb.ca/health/publichealth/cdc/vaccineeligibility.html</li> <li>Note: Adults born before 1970 are generally considered immune to measles, mumps and rubella due to previous exposure to these infections. They are not eligible for any doses of MMR vaccines unless they are a health care worker or a student.</li> </ul>	Measles Post- Exposure Prophylaxis (PEP): <ul> <li>1 dose within 72 hrs. from first exposure to a measles case for those ≥ 6 months of age</li> </ul> Contraindications ***: <ul> <li>&lt; 6 mos. of age </li> <li>Pregnant individuals <ul> <li>Immunocompromised</li> <li>History of anaphylaxis to the vaccine or its components</li> </ul></li></ul>

\* The early dose is MMR as MMRV is not recommended for use in infants less than 12 months of age.

\*\* The recommended routine immunization for children aged 12 months and older is two doses of a varicella-containing vaccine, such as the combined measles-mumps-rubella-varicella (MMRV) vaccine, to ensure protection against varicella (and at least 4 weeks after the previous dose of measles-containing vaccine).

\*\*\*MR and MMR vaccines are produced using chick embryo cell cultures and may contain trace amounts of egg protein, which has been identified as a potential allergen on the product monograph. However, studies have shown that these minimal quantities are insufficient to trigger allergic reactions in individuals with egg allergies. Consequently, egg allergy is not considered a contraindication for MMR or MMRV vaccination, and skin testing prior to administration is unnecessary. These vaccines can be safely administered to individuals with a history of egg allergy without special precautions. https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-12-measles-vaccine.html#p4c11a10e

## Measles, Mumps, Rubella, and Varicella Vaccine (MMRV)

Product	Storage and Handling	Eligibility Criteria	Recommendations for Use
Driorix Totra®	Storago:	Children > 12 months to 12 years of are are aligible to receive 2 deses including:	Pagimon: 2 docor
<ul> <li>Priorix-Tetra*</li> <li>Measles, Mumps, Rubella and Varicella vaccine (live, attenuated)</li> <li>Format:</li> <li>Single dose vial of lyophilized white powder; and diluent in a prefilled syringe or ampoule</li> <li>10/per box</li> <li>After reconstitution: 0.5 ml (approximately)</li> <li>Note: After reconstitution, the vaccine volume is approximately 0.5 ml; however, the actual volume may vary slightly. Regardless of the final volume, the entire contents of the reconstituted vaccine should be administered.</li> <li>Product is latex, preservative and adjuvant free.</li> <li>Potential Allergens*: Neomycin Other Ingredients: amino acids, lactose, mannitol, sorbitol</li> </ul>	Storage:         Refrigerate at 2°to 8°C until expiry date on label.         Protect from light.         Handling: Reconstitution required. Withdraw the entire contents of the diluent from the ampoule. Add the diluent withdrawn from the ampoule, or the entire contents of the pre-filled syringe of diluent, to the vial containing the powder.         Shake the vial gently until the powder is completely dissolved in the diluent.         Entire content of the reconstituted vaccine should be administered.         After reconstitution, the vaccine should be used promptly; or within 8 hours of reconstitution if it is stored refrigerated at 2°to 8°C	<ul> <li>Children ≥ 12 months to 12 years of age are eligible to receive 2 doses including:         <ul> <li>Hematopoietic stem cell transplant recipients (as per Cancer Care Manitoba Blood and Marrow Transplant (BMT) Immunization Schedule)</li> <li>CAR T-cell therapy recipients (as per Cancer Care Manitoba CAR-T Immunization Schedule)</li> <li>Patients currently under the care of a haematologist or oncologist from Cancer Care Manitoba (CCMB) who have been provided a CCMB directed Immunization Schedule.</li> </ul> </li> <li>For the most current eligibility criteria refer to:         <ul> <li><u>https://www.gov.mb.ca/health/publichealth/cdc/vaccineeligibility.html</u></li> </ul> </li> </ul>	Regimen: 2 doses         Dosage: 0.5 ml (approximately)         Note: After reconstitution, the vaccine volume is approximately 0.5 mL; however, the actual volume may vary slightly. Regardless of the final volume, the entire contents of the reconstituted vaccine should be administered.         Route: SC (5/8" 25g needle) or IM (1" 25g needle)         Interval:         • Recommended: 12 months and at 4-6 years of age         • Minimum: 28 days (4 weeks) apart and ≥ 12 months of age         Priorix-Tetra® and ProQuad®         are live vaccines; therefore, they can only be administered concurrently (i.e., same day) or 28 days (before or after) from other live vaccines.         Priorix-Tetra® and ProQuad®         can be given on the same day or at any time before or after a non-live (inactivated) vaccine.         For an optimum immune response to MMRV, the vaccine should be administered at least 14 days prior to administration of an Immune Globulin (lg) preparation or blood product, or the vaccine administration delayed until the antibodies in the Ig preparation or blood product have degraded.
ProQuad® Measles, Mumps, Rubella and Varicella vaccine (live, attenuated) Format: single-dose vials of lyophilized vaccine; and a separate vial of diluent. 10 per box After reconstitution 0.5ml (approximately) Note: After reconstitution, the vaccine volume is approximately 0.5 mL; however, the actual volume may vary slightly. Regardless of the final volume, the entire contents of the reconstituted vaccine should be administered. Product is latex, preservative and adjuvant free.	Storage:         Refrigerate at 2°to 8°C until expiry date on label.         The vaccine may also be stored in a freezer at temperatures above -50°C;         Protect from light.         Handling: Reconstitution required.         Withdraw the entire volume of solvent into a syringe. Inject the entire content of the syringe into the vial containing the powder.         Gently agitate to dissolve completely.         Withdraw the entire content of the reconstituted vaccine from the vial into the same syringe and inject the entire volume.		Refer to the <u>Canadian Immunization Guide: Blood products, human immune</u> <u>globulin and timing of immunization-Table 1</u> for interval to receive an MMRV vaccine post receipt of an Ig. <b>Contraindications and Precautions*</b> • < 6 mos. of age • ≥ 13 years of age • Pregnant individuals • Immunocompromised • History of anaphylaxis to the vaccine or its components • Not recommended for measles post-exposure prophylaxis
Potential Allergens*: Gelatin, Neomycin	Administer vaccine immediately after reconstitution. Discard if not used within 30 minutes to maintain potency		

\*MMR and MMRV vaccines are produced using chick embryo cell cultures and may contain trace amounts of egg protein, which has been identified as a potential allergen in the product monograph. However, studies have shown that these minimal quantities are insufficient to trigger allergic reactions in individuals with egg allergies. Consequently, egg allergy is not considered a contraindication for MMR or MMRV vaccination, and skin testing prior to administration is unnecessary. These vaccines can be safely administered to individuals with a history of egg allergy without special precautions. <a href="https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-quide-part-4-active-vaccines/page-12-measles-vaccine.html#p4c11a10e">https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-quide-part-4-active-vaccines/page-12-measles-vaccine.html#p4c11a10e</a>