

# Storage & Reconstitution

## Merck's MMRV Family

**M-M-R® II**


























Measles, Mumps,  
& Rubella Virus  
Vaccine Live

**VARIVAX®**

VARICELLA VIRUS  
VACCINE LIVE

**ProQuad®**

Measles, Mumps,  
Rubella and Varicella  
Virus Vaccine Live

How Supplied		BEFORE Reconstitution			Reconstitution	AFTER Reconstitution	
Appearance	NDC	Storage of Lyophilized Vaccine	Storage of Sterile Diluent	Color of Lyophilized Vaccine	Video Instructions	Storage of Reconstituted Vaccine	Color of Reconstituted Vaccine
<b>M-M-R® II</b>  Not shown actual size. <b>Vial Cap Color:</b> ●	<b>Box of 10 single-dose vials of lyophilized vaccine:</b> NDC 0006-4681-00 <b>Box of 10 prefilled syringes of sterile diluent:</b> NDC 0006-4175-88	 Refrigerated or frozen, between -58°F and +46°F (-50°C to +8°C)  Protected from light  Before reconstitution, store refrigerated at 36°F to 46°F (2°C to 8°C)		Light yellow compact crystalline plug	<b>Scan here</b> to watch video instructions on how to reconstitute <b>M-M-R® II</b> 	 Refrigerated 36°F to 46°F (2°C to 8°C)  Up to 8 hours  Discard if not used within 8 hours	Clear yellow liquid
<b>VARIVAX</b>  Not shown actual size. <b>Vial Cap Color:</b> ●	<b>Box of 10 single-dose vials of lyophilized vaccine:</b> NDC 0006-4827-00 <b>Box of 10 prefilled syringes of sterile diluent:</b> NDC 0006-4175-88	 Frozen, in a reliably maintained freezer -58°F to +5°F (-50°C to -15°C)  Protected from light  Up to 72 hours before reconstitution, store refrigerated (36°F to 46°F, 2°C to 8°C). Discard if not used within 72 hours	Room temperature (68°F to 77°F, 20°C to 25°C), or in a refrigerator (36°F to 46°F, 2°C to 8°C)  Do NOT Freeze	White compact crystalline plug	<b>Scan here</b> to watch video instructions on how to reconstitute <b>VARIVAX</b> 	 Room temperature  Discard if not used within 30 minutes  Do NOT freeze	Clear, colorless to pale yellow liquid
<b>ProQuad</b>  Not shown actual size. <b>Vial Cap Color:</b> ○	<b>Box of 10 single-dose vials of lyophilized vaccine:</b> NDC 0006-4171-00 <b>Box of 10 prefilled syringes of sterile diluent:</b> NDC 0006-4175-88	 Frozen, in a reliably maintained freezer -58°F to +5°F (-50°C to -15°C)  Protected from light  Up to 72 hours before reconstitution, store refrigerated (36°F to 46°F, 2°C to 8°C). Discard if not used within 72 hours		White to pale yellow compact crystalline plug	<b>Scan here</b> to watch video instructions on how to reconstitute <b>ProQuad</b> 	 Room temperature  Discard if not used within 30 minutes  Do NOT freeze	Clear pale yellow to light pink liquid

## Indications and Usage

**ProQuad** is a vaccine indicated for active immunization for the prevention of measles, mumps, rubella, and varicella in children 12 months through 12 years of age.

**VARIVAX** is a vaccine indicated for active immunization for the prevention of varicella in individuals 12 months of age or older.

**M-M-R® II** is indicated for active immunization for the prevention of measles, mumps, and rubella in individuals 12 months of age or older.

## Selected Safety Information

- Hypersensitivity:** **ProQuad**, **M-M-R® II**, and **VARIVAX** are contraindicated in patients with a history of anaphylactic reaction or hypersensitivity to any component of the vaccine (including gelatin or neomycin) or to a prior dose of measles, mumps, rubella, or varicella-containing vaccine. Use caution when administering **ProQuad** and **M-M-R® II** to individuals with anaphylaxis or immediate hypersensitivity to eggs.
- ProQuad**, **M-M-R® II**, and **VARIVAX** are contraindicated in certain individuals, including those with: immunodeficiency or who are immunosuppressed; an active febrile illness; untreated tuberculosis.

- Pregnancy:** **ProQuad**, **M-M-R® II**, and **VARIVAX** are contraindicated for use in pregnant women. Do not administer **ProQuad** or **VARIVAX** to individuals who are planning to become pregnant in the next 3 months. Do not administer **M-M-R® II** to individuals who are planning to become pregnant in the next month.
- Febrile Seizures:** Administration of **ProQuad** (dose 1) to children 12 to 23 months old who have not been previously vaccinated against measles, mumps, rubella, or varicella, nor had a history of the wild-type infections, is associated with higher rates of fever and febrile seizures at 5 to 12 days after vaccination when compared to children vaccinated with a first dose of both **M-M-R® II** and **VARIVAX** administered concomitantly.

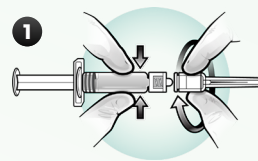
*Selected Safety Information continues on next page.*

# Merck's MMRV Family

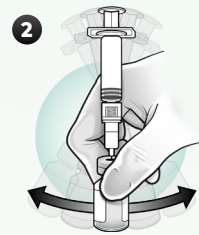
<b>M-M-R® II</b> Measles, Mumps, & Rubella Virus Vaccine Live	<b>VARIVAX®</b> VARICELLA VIRUS VACCINE LIVE	<b>ProQuad®</b> Measles, Mumps, Rubella and Varicella Virus Vaccine Live
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M-M-R® II, VARIVAX, and ProQuad come with a prefilled diluent syringe

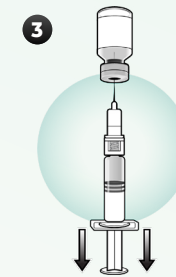
## Preparation for administration using a prefilled diluent syringe



1 Attach a needle to the prefilled syringe.



2 Visually inspect the vaccine for discoloration. Slowly inject the entire volume of sterile diluent prefilled syringe into the lyophilized vaccine vial. Gently agitate to dissolve completely. Discard if the lyophilized vaccine cannot be dissolved. Do not use the product if particulates are present or if it appears discolored.



3 Visually inspect the vaccine again for discoloration. Withdraw and administer the entire volume of the reconstituted vaccine.

## Selected Safety Information (continued)

- **Febrile Seizures:** Use caution when administering **ProQuad** and **M-M-R® II** to individuals with a history of febrile seizures.
- **Family History of Immunodeficiency:** Vaccination with **ProQuad**, **M-M-R® II**, and **VARIVAX** should be deferred in individuals with a family history of congenital or hereditary immunodeficiency until the individual's immune status has been evaluated and the individual has been found to be immunocompetent.
- **Thrombocytopenia:** Transient thrombocytopenia has been reported within 4-6 weeks following vaccination with measles, mumps, and rubella vaccine. Carefully evaluate the potential risk and benefit of vaccination in children with thrombocytopenia or in those who experienced thrombocytopenia after vaccination with a previous dose of a measles, mumps, and rubella-containing vaccine.
- **Varicella Transmission and Precautions:** Advise vaccinees administered **ProQuad** or **VARIVAX** to avoid: close contact with high-risk individuals susceptible to varicella for up to 6 weeks following vaccination since transmission of varicella vaccine virus to susceptible contacts has been reported. Varicella vaccine virus transmission may occur between vaccine recipients and contacts susceptible to varicella including healthy individuals.
- **Immune Globulins and Transfusions:** Immune Globulins and other blood products should not be given concomitantly with **ProQuad**, **M-M-R® II**, or **VARIVAX**.
- **Use of Salicylates:** Avoid use of salicylates in children and adolescents administered **ProQuad** or **VARIVAX** for 6 weeks following vaccination due to the association of Reye Syndrome with salicylate therapy and wild-type varicella infection.
- **Adverse Events:** The following adverse events have been reported for both subcutaneous and intramuscular injections of **ProQuad**, **M-M-R® II**, and **VARIVAX**: fever, injection-site reactions (pain/tenderness/soreness, erythema, and swelling); and rash on the body or at the injection site. Additionally, irritability has been reported for the subcutaneous injections of **ProQuad**, **M-M-R® II**, and **VARIVAX**.
- **ProQuad Systemic Vaccine-Related Adverse Events:** Systemic vaccine-related adverse events that were reported at a significantly greater rate in recipients of subcutaneous **ProQuad** than in recipients of the component vaccines administered concomitantly were fever and measles-like rash.
- **VARIVAX Dose-related Adverse Events:** In a clinical trial involving children who received 2 doses of **VARIVAX** 3 months

apart, the incidence of injection-site clinical complaints observed in the first 4 days following vaccination was slightly higher post-dose 2 (overall incidence 25.4%) than post-dose 1 (overall incidence 21.7%), whereas the incidence of systemic clinical complaints in the 42-day follow-up period was lower post-dose 2 (66.3%) than post-dose 1 (85.8%).

- **Concomitant Vaccines With ProQuad:** **ProQuad** may be administered concomitantly with diphtheria and tetanus toxoids and acellular pertussis vaccine adsorbed (DTaP), *Haemophilus influenzae* type b conjugate (meningococcal protein conjugate) and hepatitis B (recombinant) vaccine. It may also be administered concomitantly with pneumococcal 7-valent conjugate vaccine and/or hepatitis A vaccine (inactivated) at separate injection sites.
- **Concomitant Vaccines With VARIVAX:** **VARIVAX** can be administered with other live viral vaccines. If not given concurrently, at least 1 month should elapse between a dose of a live attenuated measles virus-containing vaccine and a dose of **VARIVAX**. In children, at least 3 months should elapse between administration of 2 doses of a live attenuated varicella virus-containing vaccine.
- **Tuberculin Testing:** If a tuberculin test is to be done with **M-M-R® II** and **ProQuad**, it should be administered either any time before, simultaneously with, or at least 4 to 6 weeks after vaccination. With **VARIVAX**, tuberculin testing may be performed before the vaccine is administered or at least 4 weeks following vaccination.
- **Additional M-M-R® II Precautions:** Additional adverse reactions, which have been reported without regard to causality, include febrile convulsions, arthritis, thrombocytopenia, anaphylaxis, anaphylactoid reactions, arthritis, encephalitis and encephalopathy in their diverse clinical presentations.
- **Additional VARIVAX Precautions:** It is not known if varicella vaccine virus is excreted in human milk. A boost in antibody levels has been observed in vaccinees following exposure to wild-type varicella, which could account for the apparent long-term persistence of antibody levels in studies. The duration of protection from varicella infection after vaccination is unknown.
- **ProQuad/VARIVAX and Herpes Zoster:** The long-term effect of **VARIVAX** on the incidence of herpes zoster, particularly in those vaccinees exposed to wild-type varicella, is unknown at present.
- **Efficacy:** Vaccination with **ProQuad**, **VARIVAX**, or **M-M-R® II** may not result in protection in 100% of vaccinees.

## Dosage and Administration

### ProQuad:

- Each dose of **ProQuad** is approximately 0.5 mL and is administered intramuscularly or subcutaneously.
- At least 1 month should elapse between a dose of a measles-containing vaccine such as **M-M-R® II** and a dose of **ProQuad**. At least 3 months should elapse between a dose of varicella-containing vaccine and **ProQuad**.

### VARIVAX:

- Each dose is approximately 0.5 mL and is administered intramuscularly or subcutaneously.
  - The first dose is administered at 12 to 15 months of age.
  - The second dose is administered at 4 to 6 years of age.
  - There should be a minimum interval of 3 months between doses.
  - 12 months to 12 years of age: If a second dose is administered, there should be a minimum interval of 3 months between doses.
  - Adolescents (≥13 years of age) and Adults: 2 doses, to be administered with a minimum interval of 4 weeks between doses.

### M-M-R® II:

- The dose for any age is approximately 0.5 mL administered intramuscularly or subcutaneously.
  - The recommended age for primary vaccination is 12 to 15 months and the second dose should be given at 4 to 6 years of age.

**Before administering VARIVAX® (Varicella Virus Vaccine Live), M-M-R® II (Measles, Mumps, and Rubella Virus Vaccine Live), or ProQuad® (Measles, Mumps, Rubella and Varicella Virus Vaccine Live), please read the accompanying Prescribing Information. The Patient Information also is available for VARIVAX, M-M-R® II, and ProQuad.**

For additional copies of the Prescribing Information, please call 800-672-6372, visit [merckvaccines.com](http://merckvaccines.com)®, or contact your Merck representative.



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about Merck's MMRV Family