A Quick Look at Using Measles, Mumps, Rubella, Varicella Vaccine (MMRV; ProQuad®)

**Indications for Use and Schedule**
- For children aged 12 months through 12 years without evidence of immunity to measles, mumps, rubella, and varicella
- 2-dose series given at ages 12-15 months and 4-6 years
- Minimum age for 1st dose is 12 months; not indicated for use in ages 13 years and older
- Minimum interval between doses is 12 weeks
- Due to increased risk of fever and febrile seizures after 1st dose of MMRV in children aged 12 months through 4 years, the Advisory Committee on Immunization Practices (ACIP) has made further recommendations (see “ACIP Recommendations” below)
- Can be given at the same visit as other live/inactivated vaccines; if not given simultaneously follow these intervals:
  - Any time before/after inactivated vaccines
  - At least 4 weeks before/after MMR, LAIV, or other injectable live non-varicella containing vaccines
  - At least 3 months before/after single-antigen Varicella

**Vaccine Administration**
- Administer subcutaneous (SC) in the upper outer triceps area or the fatty tissue over the anterolateral thigh at a 45° angle
- 5/8-inch needle; 23-25 gauge
- Can be given with other vaccines at the same visit
  - Use separate sites, space at least 1-inch apart

**Storage and Handling**
- **Only** store vaccine in the freezer unit at -58°F to +5°F (-50°C to -15°C)
- Store diluent at room temperature (68°F to 77°F, 20°C to 25°C) or in the refrigerator (36°F to 46°F, 2°C to 8°C); **do not freeze diluent**
- Pharmaceutical-grade (purpose-built) units are preferred for vaccine storage
- Keep in the original box and protect from light
- Reconstitute using only the Merck diluent
- Administer within 30 minutes of reconstituting
- If transport is necessary, use portable freezer unit

**ACIP RECOMMENDATIONS**
- For the 1st dose of measles, mumps, rubella (MMR) and varicella (Var) vaccines recommended at ages 12 through 47 months:
  - Either MMR & Var (2 separate injections) or MMRV (1 injection) may be given
  - When considering MMRV for the 1st dose at ages 12 through 47 months:
    - Providers should discuss risks and benefits of both vaccine options with the parent/guardian
    - Unless parent/guardian expresses preference for MMRV, give separate MMR & Var vaccines for the 1st dose
- MMRV is generally preferred over separate MMR & Var vaccines only in these situations:
  - For the 1st dose of MMR & Var if the child is aged 4 through 12 years
  - For the 2nd dose of MMR & Var if the child is aged 15 months through 12 years
- Refer to these handouts for more information, including a summary on risks:
  - For providers: “MMR & Varicella Vaccines or MMRV Vaccine? Discussing the Options with Parents” [www.cdc.gov/vaccines/vpd/mmr/hcp/vacopt-factsheet-hcp.pdf](http://www.cdc.gov/vaccines/vpd/mmr/hcp/vacopt-factsheet-hcp.pdf)
Publicly purchased MMRV vaccine can be administered to eligible children 12 months through 12 years of age through the Vaccines for Children (VFC) Program. Eligible children include those who are uninsured, underinsured, Medicaid eligible, Native American, or Alaskan Natives. Contact your local health department for more information.

For additional information, refer to the MMWR: “Use of Combination Measles, Mumps, Rubella, and Varicella Vaccine: Recommendations of the ACIP” (May 7, 2010) at www.cdc.gov/vaccines.