Measles, Mumps, Rubella, Varicella Vaccine

Information for health professionals
About the combination measles, mumps, rubella and varicella vaccine

A combination vaccine, Priorix-Tetra, for measles, mumps, rubella and varicella (MMRV) for children aged 18 months will be added to the National Immunisation Program (NIP) Schedule from 1 July 2013.

Who is eligible to receive free MMRV vaccine?

To be eligible to receive the free MMRV vaccine from 1 July 2013 a child must:

- Be 18 months of age; and
- Have received their 12 month MMR vaccine at least four weeks prior to presentation; and
- Have not received their 18 month monovalent varicella vaccination, as per the previous NIP schedule.

Children who have received their 12 month MMR vaccine, but missed their 18 month varicella vaccine under the previous NIP schedule, should receive the MMRV vaccine.

Vaccine side effects and MMRV vaccine safety

Like most vaccinations, the MMRV vaccine can cause some mild side effects. Possible side effects include:

- Redness, soreness or swelling where the needle was given;
- A rash that looks like chickenpox or measles accompanied by a fever can occur, usually between 7-10 days after vaccination and lasting 2-3 days; or
- Fever, in some children.

Severe reactions are very rare. There is an extremely small chance that the vaccine like any medication could cause serious problems such as an allergic/anaphylactic reaction.

Fever after vaccination can lead to febrile convulsions in a young child. It is important to note that febrile convulsions are a relatively common response to fever of any cause in young children, particularly those aged under three years.

MMRV vaccines are only recommended for use as a second dose of MMR-containing vaccine. This is because MMRV vaccine administered as a first dose is associated with an increase in the rate of febrile convulsions approximately 7-12 days post vaccination, when the peak of vaccine virus replication occurs, affecting 6-7 in every 10,000 children. There is a reduced risk of febrile convulsions in children when MMRV is administered as the second dose of MMR-containing vaccine.

Parents will receive additional information materials to make them aware of potential side effects of the MMRV vaccine, including febrile convulsions. Immunisation providers are also encouraged

What’s changing?

The second dose of MMR vaccine, previously given at four years, is to be brought forward to 18 months of age and delivered with varicella vaccine (currently scheduled at 18 months) as a combination MMRV vaccine. This move provides earlier two-dose protection for children against measles, mumps and rubella, and is likely to result in an increased uptake of the second dose of the MMR and varicella vaccine.

Children who have already received their 18 month varicella vaccination should still be immunised for measles, mumps, rubella (MMR) at four years of age. This four year old MMR schedule point will remain until all children aged between 18 months and four years of age as at 1 July 2013 reach the age of four years - that is, 31 December 2015.

Monovalent varicella vaccine will no longer be available under the NIP schedule for children 18 months of age and only be routinely available to the school immunisation program where a catch-up program is delivered to children aged 10-13 years (age varies by state and territory). Children who have previously been infected with chickenpox should still receive the varicella vaccination, as applicable to their circumstances on presentation.
to discuss the associated risks and benefits of immunisation with parents.

MMRV is not recommended for use in children 14 years of age or older due to a lack of data on safety and immunogenicity/efficacy in this age group.

**Adverse events and reporting mechanism following MMRV vaccination**

As with all registered medical products, prior to the decision to approve the registration and marketing of Priorix-Tetra in Australia, a thorough review of its quality, safety and efficacy was undertaken by the Therapeutic Goods Administration (TGA) and considered by the Australian Committee for Prescription Medicines.

Detailed efficacy and safety information can be found in the TGA-approved Product Information on the following website [www.ebs.tga.gov.au](http://www.ebs.tga.gov.au)

Adverse events following immunisation at any age should be reported through the usual reporting mechanisms in your state or territory or to the TGA through the 'report a problem' link via its website at [www.tga.gov.au](http://www.tga.gov.au)

**How should the MMRV vaccine be administered to children requiring ‘catch-up’ dosage?**

If a child is aged between 18 months and 14 years, and no previous dose of MMR vaccine has been administered (or the vaccination status of the child is unknown), MMR should be administered as the first dose and then the MMRV vaccine can be administered four weeks later as the second dose of MMR-containing vaccine. If MMR has previously been given, MMRV can be administered as the second dose.

Other catch-up for MMRV should be done according to the NIP Schedule and with reference to the *Australian Immunisation Handbook* 10th edition.

**What if a child has been previously infected with varicella?**

Prior varicella infection is not a contraindication to vaccination; as such, children should still receive the MMRV vaccination. There is no known increase in adverse events from vaccinating those with pre-existing immunity to one or more of the vaccine components.

**How will this change affect children who have already received their 18 month varicella vaccine?**

Children who have already received their 18 month varicella vaccination should still be immunised for measles, mumps and rubella (MMR) at four years of age. This four year MMR schedule point will remain until all children aged between 18 months and four years of age as at 1 July 2013 reach the age of four years - that is, 31 December 2015.

**Rationale for recommended ages**

Since the introduction of the varicella vaccine to the NIP in 2005, coverage of over 80% has been achieved in children aged 2 years, resulting in the reduction of varicella hospitalisations by almost 70%. Combining MMR and varicella vaccines has the potential to further increase the uptake of the varicella vaccine and therefore have a greater impact on controlling varicella disease.

It is best clinical practice to move the second dose of MMR, previously given at four years of age under the NIP, to 18 months of age. This move provides earlier two dose protection for children against measles, mumps and rubella, and is likely to result in an increased uptake of two doses.

**Transport, storage and handling**

All vaccine service providers should be familiar with and adhere to the *National Vaccine Storage Guidelines “Strive for Five”* (2nd edition). This publication can be accessed free of charge from the Immunise Australia website [www.immunise.health.gov.au](http://www.immunise.health.gov.au)

**Vaccine efficacy**

Combination MMRV vaccines, including Priorix-Tetra, have been shown in clinical trials to produce similar rates of seroconversion to all four vaccine components compared with MMR and monovalent varicella vaccines administered concomitantly at separate injection sites.

**Differences between the product information and the Australian Immunisation Handbook 10th edition**

Advice provided in the *Australian Immunisation Handbook* 10th edition should be followed in preference over the product information, as there are some differences.
For example, although the product information for MMRV states that a person with a history of anaphylaxis or anaphylactoid reactions to eggs should not be vaccinated, the Australian Immunisation Handbook 10th edition recommends that the vaccine can be given in this situation. This is because the measles and mumps components of the MMR vaccine do not contain sufficient amounts of egg ovalbumin to contraindicate MMR vaccination of people with egg allergy (even anaphylaxis).

Contraindications
Refer to the Australian Immunisation Handbook 10th edition for further information and a full list of contraindications and special precautions associated with the MMRV vaccine.

Children should not receive the vaccine if they have:
- allergies to the vaccine or any component of the vaccine, such as gelatin or neomycin (except for an allergy to eggs see note above);
- previously experienced an allergic reaction to any vaccine against measles, mumps, rubella and/or varicella diseases; or
- HIV, due to a lack of data on its use.

Special precautions required for children who have:
- a weakened immune system or those on medications which suppress their immune system; or
- been given or will receive immunoglobulin-containing products.

Notification to the Australian Childhood Immunisation Register (ACIR)
All vaccines administered to children less than seven years of age should be notified to the ACIR, in order to maintain a complete immunisation history for the child on the register.

Definition of fully immunised for purposes of parenting payments
The Government has introduced reforms to Australia’s childhood immunisation arrangements. Parents now need to have had their children fully immunised during the financial years that each child turns one, two and five years of age to obtain the Family Tax Benefit Part A supplement for that period.

To meet the immunisation requirements, children will need to be “fully immunised”, be on a recognised immunisation catch-up schedule, or have an approved exemption.

From 1 July 2013, the meningococcal C, pneumococcal and varicella (chickenpox) vaccines will be included in the list of immunisations that are needed for a child to be fully immunised.

Further information
You should contact your state or territory health department for more information on the program specific to your area:
Australian Capital Territory: (02) 6205 2300
New South Wales: 1300 066 055
Northern Territory: (08) 8922 8044
Queensland: 13 43 25 84
South Australia: 1300 232 272
Tasmania: 1800 671 738 (Tasmania only)
Victoria: 1300 882 008
Western Australia: (08) 9321 1312

More information is also available from the Immunise Australia Program website at immunise.health.gov.au

Note: All information in this publication is correct as at 1 May 2013.