The Immunisation Advisory Centre

Quick answers to frequent MMR questions

MMR vaccine is a live attenuated vaccine. Please familiarise yourself with the information in the *Measles, Mumps,* and *Rubella* chapters in the current *Immunisation Handbook,* including the contraindications and precautions for this vaccine.

Do we give MMR vaccine via the intramuscular (IM) or subcutaneous (SC) route?
The Ministry of Health recommends that MMR vaccine is administered via the IM route. However, administration of MMR vaccine by either the IM or SC injection route delivers a valid dose of vaccine.

In the original clinical trials, MMR vaccine was given by SC injection and this became the recommended route of injection. Since then, data have shown that administration of MMR vaccine by IM injection generates an immune response equal to the response when the vaccine is given via the SC route, and the vaccine is also well-tolerated.

Can we give the 12-months MMR1 and PCV vaccines earlier than 12 months of age?
On parental request, the MMR1 and pneumococcal (PCV) vaccine doses due at 12 months of age can be given a maximum of 4 days before the child is aged 12 months.

Can we give the 15-months varicella, Hib and MMR2 vaccines earlier than 15 months of age?
On parental request, the varicella and Hib vaccine doses due at 15 months of age can be given a maximum of 4 days before the child is aged 12 months.

The MMR2 vaccine dose due at 15 months of age is not recommended to be given early, unless there is a high risk of exposure to these diseases, such as during an outbreak.

When there is a high risk of exposure to measles, mumps or rubella, 15-months MMR2 dose can be administered as early as 4 weeks after the MMR1 dose.

Can children already aged 15 months or older have their MMR2 vaccine before they are aged 4 years?
Yes. It is recommended that practices actively recall children aged 16 month to4 years to receive their MMR2 vaccine dose.

Practices can opportunistically vaccinate children aged under 4 years for their MMR2 vaccine dose as well as actively recalling them. From 15 months of age, the second MMR vaccine dose can routinely be given as soon as four weeks after the first dose.

How do we enter the MMR2 vaccine dose into the PMS?
After your practice PMS has been updated for the Schedule changes in 2020, MMR vaccine doses will show as MMR-12M and MMR-15M events for all children aged under 5 years.

Children who have completed their MMR-15M dose and previously had a MMR-4Y dose showing as due when they were 4 years of age will now have an MMR-12M dose showing as overdue. Their second MMR dose will be entered against this event.

Can we give the 4-years DTaP-IPV vaccine if we are giving the MMR2 vaccine early?
In New Zealand, the DTaP-IPV due at 4 years can be given a maximum of 4 weeks before the child is aged 4 years.

If a child from overseas received a fourth DTaP dose before they were aged 3 years and 11 months, please contact your Immunisation Coordinator, Practice Nurse Advisor, or 0800 IMMUNE to discuss their catch-up immunisation.

Should older children who have missed one or both doses of the MMR vaccine still have the vaccine?
Yes. A total of two documented doses of MMR vaccine are recommended for all children and adults born after 1968. When two catch-up doses of MMR are required, they can be given a minimum of four weeks apart.

Do children who received a measles only or measles/rubella vaccine overseas need MMR vaccination?
Yes. Two doses of the MMR vaccine given from 12 months of age are recommended irrespective of previous measles or measles/rubella only vaccination.

Do children who have had measles still need to receive the MMR vaccine?
Yes. Two doses of MMR vaccine are recommended to protect the child from mumps and rubella.

Can a close contact of a woman who is pregnant or of a person who is immunocompromised receive the MMR vaccine?
Yes. MMR vaccine viruses are considered to be non-transmissible. It is also important to reduce the risk of the mother and those who are immunocompromised being exposed to measles disease.

How long should a woman wait to get pregnant after receiving the MMR vaccine?
As a precautionary measure, women should be advised to avoid becoming pregnant for 28 days after receiving MMR vaccine. However, if she becomes pregnant within 28 days of MMR vaccination, there are international data that can reassure the woman the vaccination is not expected to cause harm to the fetus.

What happens if a woman receives MMR vaccine and then finds out she was pregnant at the time or within 4 weeks of the vaccination?
No additional pregnancy monitoring or management is required. There are international data that can reassure the woman the vaccination is not expected to cause harm to the fetus. The advice not to give MMR vaccine to a woman who knows she is pregnant is based on a theoretical risk that the vaccine viruses could cause maternal or fetal disease.

Can a pregnant woman receive the MMR vaccine?
Live vaccines are not given to pregnant women. However, if an MMR vaccine is given in error there are international data that can reassure the woman the vaccination is not expected to cause harm to the fetus.

How soon after having a baby can a woman receive the MMR vaccine?
As soon as baby has been delivered.

Can a breastfeeding woman receive the MMR vaccine?
Yes. There is no risk to the mother or child from giving MMR to breastfeeding women.

What do we do when a woman's antenatal rubella serology result reports she is not immune to rubella?
A woman is considered to be immune to rubella if she has two documented doses of MMR vaccine, given from 12 months of age and at least four weeks apart, regardless of serology.

If she does not have two documented doses of MMR vaccine, administer catch-up doses of MMR vaccine after the baby has been delivered. When two doses of MMR are required, they can be given a minimum of four weeks apart.

Can a person with an egg allergy receive the MMR vaccine?
Yes. Neither egg allergy nor anaphylaxis are contraindications for receipt of the MMR vaccine.

Should we order serology to check for measles immunity?
No. Evidence of immunity for adults born prior to 1969 is simply being born before 1969. Evidence of immunity for adults born in 1969 or later is two documented doses of MMR vaccine.

What if there is no available documentation available for a person presenting for a 'catch up' dose of MMR?
There is no need to delay, the vaccinator should feel confident to offer a dose of MMR vaccine to the patient. There are no safety concerns if a person is given an extra dose of MMR vaccine.

Do adults aged 18 years or over need MMR revaccination if they have had chemotherapy or radiotherapy for cancer?
If the person was considered immune before chemotherapy, they are still considered immune to measles, mumps and rubella after completion of treatment and immune system recovery.
Chemotherapy and radiotherapy for cancer does not remove immune system memory cells.

Can a person who is immunocompromised receive the MMR vaccine?
No. If your patient has a medical condition or is on a treatment that affects their immune system, refer to chapter 4 in the current *Immunisation Handbook* for more information on treatments and timing of vaccination.

Is there a single antigen measles vaccine available in NZ?
No. The measles vaccine is only available as one of the components of the MMR vaccine in NZ. There is no immunological or medical reason for offering a single measles vaccine and it is important to offer protection for rubella and mumps.

Can adults have the MMR vaccine?

Adults born before 1969 in New Zealand or overseas

Adults in this age group are not recommended to receive MMR vaccination. Generally, they are considered to be immune to measles. No measles vaccine was available in New Zealand until 1969 and measles is so infectious that people born before this were highly likely to be exposed. For those born overseas, it is similar as most countries introduced a measles vaccine in the late 1960s, 1970s or later.

Adults born in 1969 or later
Yes. Two documented doses of MMR vaccine given at least four weeks apart are recommended for individuals born in 1969 or later.

Adults born before 1969
Are considered immune to measles. Vaccinating these adults post-chemotherapy is not indicated.

Adults born 1969 or later

- Who have two documented doses of MMR are considered immune. No more MMR vaccinations are required.
- Who have one documented dose of MMR prior to chemotherapy should receive a second dose of MMR vaccine, OR
- Who do not have any documented doses of MMR vaccine should receive two doses of MMR vaccine six months post- chemotherapy and when their lymphocyte count is greater than 1.0×10^9/L.

Only pre-HSCT (stem cell or bone marrow transplant) conditioning completely removes a person's immune system including memory cells. Re-vaccination with MMR vaccine usually occurs 2 years post-HSCT.

CALL 0800 IMMUNE (466 863) for clinical advice