Quick answers to frequent MMR questions
during the 2019 measles outbreaks

(20 September 2019)

The Immunisation Advisory Centre

Priority groups
All of New Zealand including Auckland DHBs
» Ensure all children receive their Schedule vaccines on time at 15 months (12 months in Auckland) and 4 years of age.
» Actively recall children aged under 5 years who need catch-up vaccination.
» Vaccinate susceptible close contacts of a confirmed case within 72 hours of first exposure to measles when possible.

Auckland DHBs only
» Ensure all children receive their MMR vaccinations on time at 12 months and 4 years of age.
» Targeted community outreach managed by the three Auckland DHBs, namely groups who are most affected by the outbreak including 15–29 year olds and particularly Pacific peoples within those groups.

Clinicians are still able to vaccinate outside of these priority groups. This decision would depend on whether the practice has sufficient vaccine without impacting on the stock needed for their priority 15-months (12-months in Auckland) and 4-years vaccinations.

These priority groups will be revised once the delivery of additional MMR vaccine stock is confirmed.

Why have we been asked to limit MMR vaccination to priority groups?
Currently, there are significant limitations in MMR supply. The Ministry of Health has asked general practices and PHOs are to reserve vaccine for the priority groups to ensure that all children are able to be vaccinated on time, the Auckland outbreak is controlled, and outbreaks elsewhere are prevented through active management of isolated cases.

On 18 September PHARMAC and the Ministry of Health announced that an additional 100,000 MMR vaccine doses had been secured. We are awaiting news of how soon this supply will be available to providers as this will then enable the priorities to be broadened.

What do we do about MMR vaccination for non-priority groups?
For patients booked in for MMR vaccination or who are eligible, but do not meet the above priorities:
» Please add a recall in the PMS to contact those who request MMR vaccination but are not able to receive it at this time.
» When stocks are secure, practices should offer MMR vaccine to all those who need it, to bring them up to two documented doses as per the Schedule.

Vaccination information
Maintenance of the Childhood Immunisation Schedule is the priority.

Can we give the MMR vaccine to infants aged under 12 months?
Infants aged 6–11 months can receive MMR vaccination:
» If they are travelling overseas to a country with a measles outbreak or Auckland, at least 2 weeks before travel.
» If they are a contact of a confirmed case within 72 hours of first exposure to measles.
» On parental request if there are concerns about a high-risk of exposure to measles and their GP advises administration of MMR.
» This dose needs to be prescribed in the infant’s medical notes by the doctor or nurse prescriber.
» The administration of Priorix® to infants aged 6–11 months is off-label. There are no safety concerns.
» Standing orders cannot be used for administration of Priorix under this criterion.
» MMR administered at 6–11 months of age is considered dose zero (MMR0).
» The infant will still require the 15-months and 4-years MMR vaccinations as per the Schedule.

How do we enter MMR0 into the PMS and claim?
» Enter the dose on the NIR using your PMS ‘MMR at-risk’, ‘MMR misc’ or ‘MMR primary’ vaccine option.
» Leave the Schedule 15-months and 4-years MMR vaccinations as to be given in the future.
» Ensure ‘Autobill’ is selected as an Immunisation Subsidy can be claimed.
» If the MMR ‘at-risk’, ‘misc’ or ‘primary’ vaccine option has not been activated in your PMS, contact the PMS provider for advice.

Infants aged under 6 months are usually too young to receive an MMR vaccination.
The vaccination is less likely to be effective for younger infants due to interference from maternal antibody that is received in utero.

Can we give the MMR vaccination due at 15 months early?
Children aged 12–14 months who live in the Auckland region
Children in this age group, who are living in the Auckland region are advised to receive all four vaccines due at 15 months from 12 months of age. Practices are asked to actively recall infants to receive these vaccines from 12 months of age.

Children aged 12–14 months who live outside the Auckland region
Children in this age group, who are travelling overseas to a country with a measles outbreak or Auckland are advised to receive all four vaccines due at 15 months from 12 months of age and at least 2 weeks before travel.

For all other children aged 12–14 months
Immunisation at 15 months of age as per the Immunisation Schedule is recommended. However, all four vaccines due at 15 months can be given from 12 months of age on parental request.

If we give the 15-months MMR vaccine early, can we give the other 15-months vaccines early as well?
Yes. The 15-months Schedule varicella, pneumococcal and Hib vaccines are considered valid doses when given from 12 months of age.

Can we give the 4-years MMR vaccine early?
The second MMR vaccine dose is recommended to be given on-time at 4 years of age. After one MMR vaccination 90–95% of people are fully protected from measles, hence the first dose for all is the current priority.

If the 4-years MMR vaccine dose is given early, does the child need another MMR again at age 4 years?
No. Only two doses of MMR vaccine are required if they are both given from 12 months of age and at least a month apart. The second MMR vaccine is a revaccination for the 5–10% of individuals who fail to become protected against measles after the first dose. Nearly all individuals will be protected after the second dose.

If we give the 4 years MMR vaccine dose early, can we give DTaP-IPV early as well?
No. It is important to wait until the child is 4 years of age to give the DTaP-IPV to ensure the child has some protection against pertussis through their primary school years.

Catch-up MMR vaccination – current priority groups
Children aged from 16 months (13 months in Auckland) to under 5 years
Continue to recall children in these age groups who are overdue for their Schedule immunisations.

Continued on page 2 ..
Quick answers to frequent MMR questions during the 2019 measles outbreaks (20 September 2019)

Catch-up MMR vaccination – current priority groups continued

Young people aged 15–29 years in Auckland
Recall young people in this age group who do not have one documented dose of MMR vaccine with a focus on Pacific peoples within those groups. It is appropriate to vaccinate if the person cannot easily locate immunisation records.

While the priority is the administration of the first MMR vaccine dose, please add a recall in the PMS to contact young people who require a second catch-up MMR vaccination.

Can young people aged 18–29 years who are living in Auckland and not eligible to receive publicly funded healthcare buy MMR vaccine?
No. There is no MMR vaccine stock available for purchase. Administer the MMR vaccine to these adults. It should be prescribed in their medical notes by their doctor.

How do we enter catch-up doses of MMR into the PMS and claim?
In the PMS immunisation section, go to ‘Schedule selection tab 3’ and select ‘MMR schedule – Adult eligible’, then go to ‘Immunisation tab 1’ and select MMR1 to enter the first catch-up dose of MMR vaccine. Ensure ‘Autobill’ is selected as an Immunisation Subsidy can be claimed.

Catch-up MMR vaccination – current non-priority groups
Children aged 5–14 years, young people aged 15–29 years outside Auckland, adults aged 30–50 years, and unvaccinated travellers
MMR vaccination is not currently prioritised for these age groups.
» Please add a recall in the PMS to contact those who request MMR vaccination but are not able to receive it at this time.

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 fairly similar as most countries introduced a measles vaccine in the late 1960s, 1970s or later.

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.

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.

Adults born prior to 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 >1.0 x 10⁹/L.

⊥MMR vaccination is not currently prioritised for this age group.
» Please add a recall in the PMS to contact those who request MMR vaccination but are not able to receive it at this time.

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

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.

Note for children aged 5–14 years and young people aged 15–29 years outside Auckland:
MMR vaccination is not currently prioritised for these age groups.
» Please add a recall in the PMS to contact those who request MMR vaccination but are not able to receive it at this time.

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.

How long after having measles can a child receive vaccines?
A child can receive their Schedule vaccines, including MMR and varicella vaccines, as soon as they are due if the child is not acutely unwell.

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.

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.

Can a pregnant woman receive the MMR vaccine?
No. 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.

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 sections 4.3.2, 4.3.3 and 22.6.2, and table 22.2 in the Immunisation Handbook 2017 2nd Edition for more information on treatments and timing of vaccination.

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

Are M-M-R II® and Priorix® interchangeable?
Yes. M-M-R II and Priorix are fully interchangeable. The doses must be given a minimum of four weeks apart.

Fact sheet