46th Annual Enrolled Nurses Section NZNO Conference Hamilton, Waikato.



Improving Opportunities for Immunisation Together – every opportunity counts for a better tomorrow"

Cilla Wyllie-Schmidt Clinical Nurse Specialist Hospital Opportunistic Immunisation Service Health NZ / Te Whatu Ora Waikato

Plan for our time together this morning ©

- Why are immunisations important
- Immunisation coverage, policy & covid-19 impact
- Future plans to improve coverage
- Immunisation schedules and special programmes
- Decision making for Whānau equity & eliminating barriers
- Having körero/conversations risk perception & engagement

Beginning an immunisation journey....



Why I love vaccination...

- Personal protection
- Family/whānau & community benefits
- Global eradication of disease!!
- Reduces inequalities
- Prevention better than cure

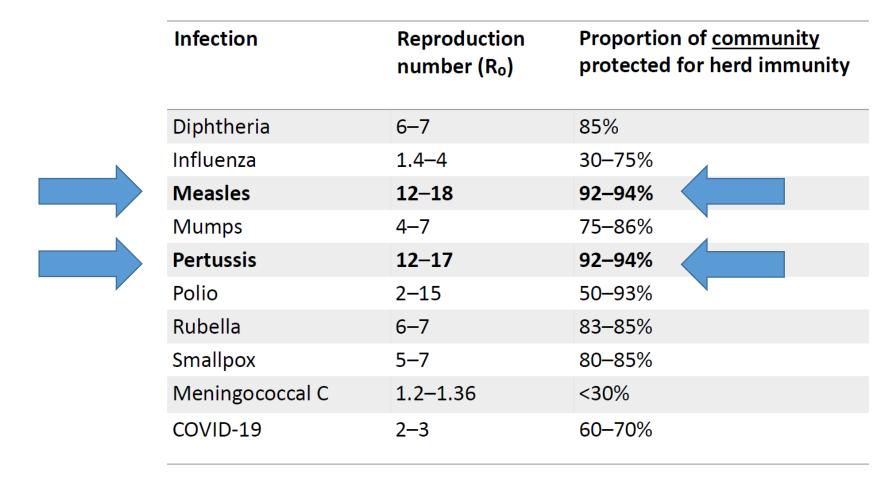


Why do we vaccinate???

- 1. No treatment
 - Mumps, Measles, Pertussis, Rubella
- 2. Treatment can't guarantee a good outcome
 - Pneumococcal, Hib, Meningococcal
- 3. To prevent cancer
 - > HPV, Hep B
- 4. To prevent disease complications
 - Chicken pox, Rotavirus, Influenza

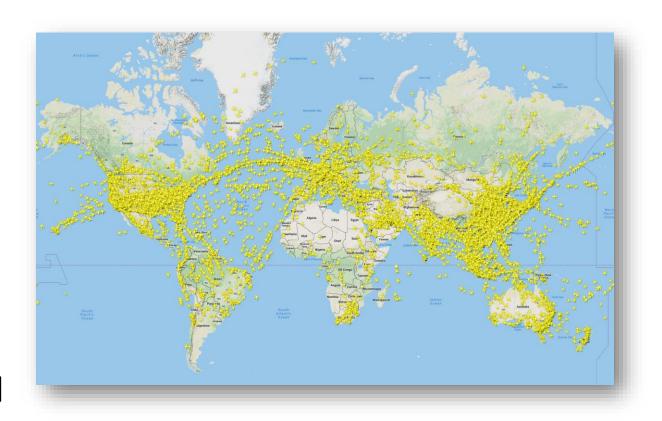


Reproduction number (R₀) and vaccination rate required for community immunity



Why it matters that we vaccinate against VPD's

- Global travel closed borders have limited exposure to circulating diseases. With the reopening of borders and increase in global travel there has been a significant increase in vaccine preventable disease spread
- Lower immunisation rates
- Rapid spread in nonimmune/susceptible groups
- High morbidity (complications) and mortality



Immunisation coverage and policy & Future plans to improve coverage in Aotearoa

"Only clean water and antibiotics have had an impact on childhood death and disease that is equal to that of vaccines"





Vision



A world where everyone, everywhere, at every age...

... fully benefits from vaccines...

... for good health and well-being

Impact goals



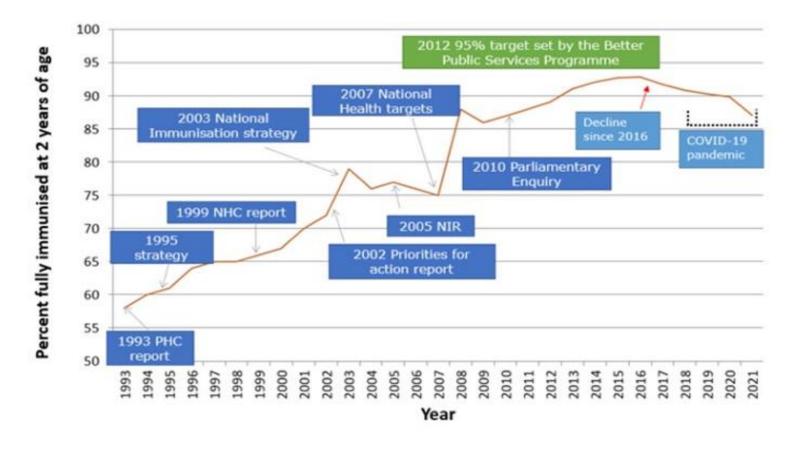
Reduce mortality and morbidity from vaccine-preventable diseases for everyone throughout the life course.

Leave non one behind, by increasing equitable access and use of new and existing vaccines.

Ensure good health and well-being for everyone by strengthening immunisation within primary health care and contributing to universal health coverage and sustainable development.

Aotearoa Immunisation coverage history at 2 years of age from 1993-2021 in relation to policy

changes



PHC= Public Health Commission, NHC= National Health Committee, NIR= National Immunisation Registry. Coverage estimates are from combined data from national surveys and the NIR (Turner N, unpublished; IMAC, 2023).

Making childhood immunisation a priority in Aotearoa New Zealand

Priority Childhood Immunisation Policy Statement

Aotearoa New Zealand National Immunisation Programme

Version 1.0 December 2022

Te Whatu Ora

- Childhood immunisation rates are now as low as they have ever been recorded.
- Policy statement is grounded in addressing equity and access challenges.
- Prioritisation matrix adopted nationally to address the long term inequities.

Childhood Immunisation Prioritisation Matrix

In the Matrix, **Priority Group 1** indicates the highest priority vaccination activity to receive the immunisation sector's priority efforts, and wherever possible additional vaccination resource.

And Priority Groups 2 to 6 are graduated prioritised vaccination activity, presented as a guide for national, regional, district and local immunisation decision making when aligning other immunisation priorities.

Vaccine Schedule	Māori	Pacific	Quintile 5 Non-Māori & non-Pacific	Quintile 1-4 Non-Māori & non-Pacific
6-week	1	2	2	4
Antenatal Pertussis and flu	1	2	2	4
MMR-1	1	1	1/2*	3
3-Month	2	3	3	4
5-Month	2	3	3	4
MMR-2	3	4	4	5
4 -Year	3	5	5	6

^{*} May be adjusted depending on the presence of disease in the community

Aotearoa New Zealand priorities for Childhood immunisations...

 Development of a digital immunisation platform for storage of vaccine information, data transparency, and reporting Aotearoa Immunisation Register (AIR)



 Taskforce report released in December 2022 - Initial Priorities for the National Immunisation Programme in Aotearoa - 54 individual recommendations within 10 key priority areas



Current immunisation target for Aotearoa

Improved immunisation



95% of children fully immunised at 24 months of age.

Countries such as Australia, the UK and Canada have a 95% target. It provides effective immunity for the New Zealand population.

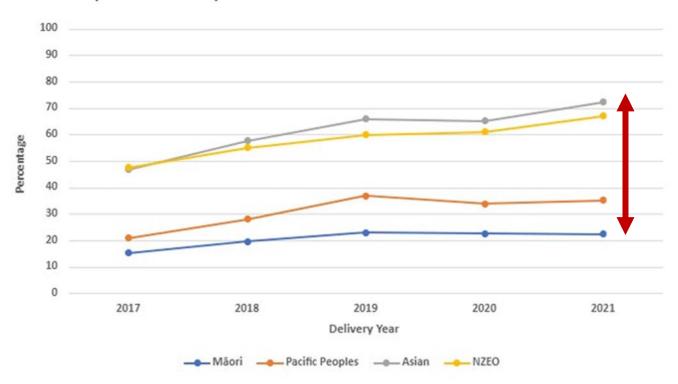
The target: 95%

Latest data: 83%*

*Latest data from the national collections, September 2023.

Aotearoa maternal **pertussis** vaccine coverage by ethnicity 2017 - 2021

Figure 10: Antenatal pertussis vaccine coverage by ethnicity in Aotearoa (2017 to 2021)

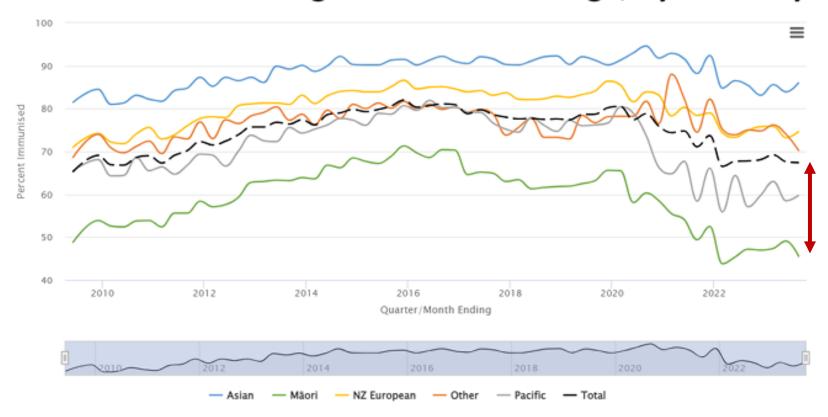


Note: NZEO = NZ European / Other.

Source: Ministry of Health data

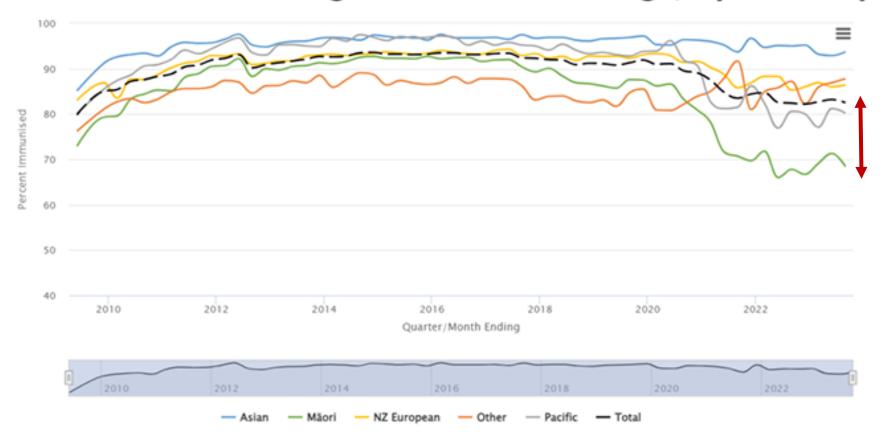
Aotearoa immunisation coverage by ethnicity for **pēpi aged 6 months** old 2010 - 2022

Immunisation Coverage at 6 months of age, by ethnicity



Aotearoa immunisation coverage by ethnicity for tamariki aged 2 years 2010 - 2022

Immunisation Coverage at 24 months of age, by ethnicity



Globally did covid have an impact on childhood immunisation rates...sadly yes...

RESEARCH ARTICLE

Impact of COVID-19 on routine childhood immunisations in low- and middle-income countries: A scoping review

Milena Dalton₀¹*, Benjamin Sanderson¹, Leanne J. Robinson^{1,2,3,4}, Caroline S. E. Homer¹, William Pomat⁵, Margie Danchin^{6,7,8}, Stefanie Vaccher₀⁹

1 Burnet Institute, Melbourne, Victoria, Australia, 2 Population Health & Immunity Division, Walter and Eliza Hall Institute of Medical Research, Parkville, Victoria, Australia, 3 Department of Medical Biology, University of Melbourne, Melbourne, Australia, 4 Papua New Guinea Institute of Medical Research, Madang, Papua New Guinea, 5 Papua New Guinea Institute of Medical Research, Goroka, Papua New Guinea, 6 Department of General Medicine, The Royal Children's Hospital, Parkville, Victoria, Australia, 7 Vaccine Uptake Group, Murdoch Children's Research Institute, Parkville, Victoria, Australia, 8 Department of Paediatrics, University of Melbourne, Melbourne, Victoria, Australia, 9 Burnet Institute, Port Moresby, Papua New Guinea

- 3,471 publications; 58 studies were included (2020-2022)
- 1/4 of studies showed routine childhood immunisation coverage declined and the range was from 10% to 38%, between 2019 to 2021
- Declines in the number of vaccine doses administered (25% to 51%)
- Timeliness of administration impacted (6.2% to 34%)
- Decreased availability of fixed and outreach services was also reported.

Did covid-19 have an impact on immunisation rates in Aotearoa New Zealand...







The impact of Covid-19 vaccination in Aotearoa New Zealand: A modelling study



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- ^b School of Mathematics and Statistics, University of Canterbury, Christchurch, New Zealand
 ^c Manaaki Whenua, Lincoln, New Zealand
- d Department of Engineering Science, University of Auckland, Auckland, New Zealand
- ^o Precision Driven Health, Auckland, New Zealand
- Department of Statistics, University of Auckland, Auckland, New Zealand
- 8 iNZight Analytics Ltd., Auckland, New Zealand



In short...yes sadly © covid-19 did have an impact on our immunisation rates...

Aotearoa Immunisation schedules and special programmes

Journey for pēpi starts in pregnancy

The National Immunisation Schedule

From - 1 MARCH 2023

Stages	Disease to protect against	Vaccine				
Drodnancy	Tetanus + diphtheria + whooping cough (pertussis)	Boostrix*				
Pregnancy	Influenza	Brand varies				
	Rotavirus (first dose must be given before 15 weeks)	Rotarix* (oral)				
6 weeks	Diphtheria + tetanus + whooping cough (pertussis) + polio + hepatitis B + Haemophilus influenzae type b (Hib)	Infanrix® hexa				
	Pneumococcal disease	Prevenar 13®				
	Rotavirus (second dose must be given before 25 weeks)	Rotarix* (oral)				
3 months	Diphtheria + tetanus + whooping cough + polio + hepatitis B + Haemophilus influenzae type b (Hib)	Infanrix* hexa				
	Meningococcal B (can be given at 8 weeks)	Bexsero®				
5	Diphtheria + tetanus + whooping cough + polio + hepatitis B + Haemophilus influenzae type b (Hib)	Infanrix* hexa				
months	Pneumococcal disease	Prevenar 13*				
months	Meningococcal B (can be given at 4 months)	Bexsero®				
12	Measles + mumps + rubella	Priorix*				
	Pneumococcal disease	Prevenar 13*				
months	Meningococcal B	Bexsero®				
46	Haemophilus influenzae type b (Hib)	Hiberix*				
15	Measles + mumps + rubella	Priorix*				
months	Chickenpox (varicella)	Varivax*				
4 years	Diphtheria + tetanus + whooping cough + polio	Infanrix* IPV				
9-13 years	Tetanus + diphtheria + whooping cough	Boostrix*				
	Human papillomavirus (HPV)	Gardasil*9 (2 doses, 6 months apart)				
45 years	Tetanus + diphtheria + whooping cough	Boostrix*				
65 years	Tetanus + diphtheria + whooping cough	Boostrix*				
	Influenza	Brand varies				
	Shingles	Shingrix*				
NPBB00 immunisation Schedule Card 120324						

End of primary series ©

Immunisations for Olly

To make a vaccination appointment contact your doctor, nurse, or healthcare provider.

If Olly has an ongoing medical condition that you see a paediatrician or a doctor about, ask them what extra immunisations are needed.



6-week immunisations

From 17 May 2022

- · Rotavirus (dose 1 of 2)
- Diphtheria, tetanus, whooping cough, polio, hep B, and Hib (dose 1 of 3)
- Pneumocaccal (dose 1 of 3)

5-month immunisations

From 5 September 2022

- Diphtheria, tetanus, whooping cough, polio, hep B, and Hib (dose 3 of 3)
- Pneumococcal (dose 2 of 3)
- · Meningococcal B (dose 2 of 3)

15-month immunisations

From 5 July 2023

- · Hib (booster)
- Measles, mumps, and rubella (dose 2 of 2)
- · Chicken pox (single dose)





From age 9

· HPV (2 doses, 6 months apart)

3-month immunisations

From 5 July 2022

- Rotavirus (dose 2 of 2)
 Diphtheria, tetanus, whooping cough, polio, hep 8, and Hib (dose 2 of 3)
- Meningococcal B (dose 1 of 3)

12-month immunisations

From 5 April 2023

- Measles, mumps, and rubella (dose 1 of 2)
- Pneumococcal (dose 3 of 3)
- · Meningococcal B (dose 3 of 3)



4-year immunisations

From 5 April 2026

Diphtheria, tetanus, whooping cough, and polio (booster)

From age 11

· Tetanus, diphtheria, whooping

















Immunisations for Very Cute Pēpi

To make a vaccination appointment contact your doctor, nurse, or healthcare provider.

If Very Cute Pēpi has an ongoing medical condition that you see a paediatrician or a doctor about, ask them what extra immunisations are needed.



6-week immunisations

From 5 July 2024

- Rotavirus (dose 1 of 2)
 Diphtheria, tetanus, whooping cough, polia, hep B, and Hib (dose 1 of 3)
- · Pneumococcal (dose 1 of 3)

3-month immunisations

From 24 August 2024

- Rotavirus (dose 2 of 2)
- Diphtheria, tetanus, whooping cough, polio, hep B, and Hib (dose 2 of 3)
 Meningococcal B (dose 1 of 3)

5-month immunisations

From 24 October 2024

- Diphtheria, tetanus, whooping cough, polio, hep B, and Hib (dose 3 of 3)
 Pneumococcal (dose 2 of 3)
- Meningococcal B (dose 2 of 3)

12-month immunisations

From 24 May 2025

- Measles, mumps, and rubella (dose 1 of 2)
- Pneumococcai (dose 3 of 3)
- · Meningococcal B (dose 3 of 3)

15-month immunisations

From 24 August 2025

- · Hib (booster)
- . Measles, mumps, and rubella (dose 2 of 2)
- · Chicken pox (single dose)

4-year immunisations

From 24 May 2028

Diphtheria, tetanus, whooping cough, and polio (booster)



From age 9

· HPV (2 doses, 6 months apart)



From age 11

Tetanus, diphtheria, whooping cough (booster)







Te Whatu Ora Health New Zealand

New Zealand National Immunisation Schedule

Updated June 2023

	RV	DTaP-IPV- HepB/Hib	PCV	MenB	MMR	ніь	vv	DTaP-IPV	Tdap	HPV	Influenza	COVID-19	zv
Every pregnancy									Boostrix® from 2nd trimester		Any trimester - see below	Comirnaty® any trimester	
Birth vaccines	High risk babies, eligible for birth hepatitis B and/or BCG (tuberculosis) vaccines. See over page for more details.												
6 weeks	Rotarix*	Infanrix*-hexa	Prevenar 13®										
2 months				Bexsero*†									
3 months	Rotarix*	Infanrix*-hexa	Prevenar 13**	Bexsero®									
4 months				Bexsero*†									
5 months		Infanrix*-hexa	Prevenar 13®	Bexsero®									
6 months											Seasonal		
12 months			Prevenar 13®	Bexsero*	Priorix*						influenza vaccines	COVID-19 vaccines available for eligible persons from 6mths	
15 months					Priorix*	Hiberix®	Varivax®				are available		
4 years								Infanrix*- IPV			for eligible persons from 6mths		
School year 7 (11 years)									Boostrix®		of age: visit	of age:	
School year 8 (12 years)										Gardasil® 9 two doses	org.nz for eligibility	Immunisation Handbook	
45 years									Boostrix®		criteria and vaccine brands		
65 years									Boostrix®				Shingrix® two doses

*An additional dose of Prevenar 13 is given at 3months to children with an eligible medical condition.

Children with high pneumococcal-risk conditions may be eligible for 23PPV. Check the 'special groups' eligibility in the online Immunisation Handbook.

[†]Alternative approved schedule for MenB: 2 months; 4 months; Booster at 12 months.

VACCINE KEY

RV: rotavirus (Rotarix)
DTaP-IPV-HepB/Hib: diphtheria, tetanus, acellular pertussis, polio, hepatitis B, Haemophilus influenzae type b (Infanrix-hexa)
PCV: pneumococcal conjugate vaccine (Prevenar 13)
MenB: meningococcal B vaccine (Bexsero)
Hib: Haemophilus influenzae type b (Hiberix)

VV: varicella (chickenpox) vaccine (Varivax)
MMR: measles, mumps, rubella (Priorix)
DTaP-IPV: diphtheria, tetanus, acellular pertussis, polio (Infanrix-IPV)
Tdap: tetanus, diphtheria, acellular pertussis (Boostrix)
HPV: human papillomavirus (Gardasil 9)
ZV: zoster (shingles) vaccine (Shingrix)



Funded vaccines for special groups from 1 March 2023

To determine whether your patient meets the eligibility criteria, please check the specific eligibility details described on the Pharmaceutical Schedule (www.pharmac.govt.nz) for every vaccine listed below. Please refer to the current Immunisation Handbook for vaccine administration schedules.

Adolescents and young people 13-25 years inclusively entering specified close-living situations

Meningococcal vaccines

Asplenia - Functional or Pre- or Post-Splenectomy Immunisation Programme

· Hib, influenza, meningococcal, pneumococcal, and Tdap vaccines

Chemotherapy - following

Hib, HPV, influenza, pneumococcal, Tdap, and varicella vaccines

Also consider immunosuppression for longer than 28 days

· Hepatitis B and meningococcal vaccines

Cochlear implant

· Hib, influenza, and pneumococcal vaccines

Error of metabolism at risk of major metabolic decompensation

· Influenza and varicella vaccines

Haematopoietic stem cell transplantation (HSCT) - following

Hib, HPV, influenza, meningococcal, pneumococcal, Tdap, and varicella vaccines
 Also consider immunosuppression for longer than 28 days

· Hepatitis B vaccine

Hepatitis A case - contact with

· Hepatitis A vaccine

Hepatitis B case - contact with

Infants born to mothers who are hepatitis B surface antigen (HBsAg) positive

· Hepatitis B vaccine and hepatitis B immunoglobulin (HBIG) at birth

Household and sexual contacts of known acute hepatitis B cases or carriers

Hepatitis B vaccine

Hepatitis C positive

· Hepatitis B vaccine

HIV positive

· Hepatitis B, HPV, influenza, meningococcal, pneumococcal, and varicella vaccines

Immunosuppression

Household contacts of children or adults who will be/are immunosuppressed

· Varicella vaccine

Prior to elective immunosuppression for longer than 28 days

· Varicella vaccine

Following immunosuppression for longer than 28 days

· Hepatitis B, Hib, influenza, meningococcal, and Tdap vaccines

VACCINE KEY

BCG: tuberculosis

Hib: Haemophilus influenzae type b

HPV: human papillomavirus IPV: inactivated polio vaccine

Tdap: tetanus, diphtheria, acellular pertussis

Immunodeficiency - primary or secondary

· Hib, influenza, meningococcal, and pneumococcal vaccines

Influenza Immunisation Programme

· Influenza vaccine

Visit influenza.org.nz to see the current eligibilty criteria and funded influenza vaccine brands.

Kidney disease

Hepatitis B, Hib, influenza, pneumococcal, Tdap, and varicella vaccines

Liver disease

Hepatitis A and varicella vaccines

Meningococcal disease case - contact with

· Meningococcal vaccine

Needle stick injury - following

· Hepatitis B vaccine

Non-consensual sexual intercourse - following

· Hepatitis B vaccine

Neonatal Intensive Care Unit or Specialist Care Baby Unit admission more than 3 days

· Tdap for parents/primary caregivers if maternal Tdap not given at least 14 days before birth

Pneumococcal disease - increased risk

Additional pneumococcal vaccines

Pregnancy

Influenza and Tdap vaccines in every pregnancy

Solid organ transplantation

Prior to solid organ transplantation

- · Hepatitis A, hepatitis B, Hib, meningococcal, pneumococcal, Tdap, and varicella vaccines Following solid organ transplantation
- Hepatitis A, hepatitis B, Hib, HPV, influenza, meningococcal, pneumococcal, and Tdap vaccines

Tuberculosis - infants and children aged under 5 years at risk of tuberculosis (TB) exposure

BCG vaccine

For more details, visit immune.org.nz



Resources for special groups from IMAC immune.org.nz

Immunisation for adults post-chemotherapy who are not taking immunosuppressive disease modifying drugs August 2022	View >
Immunisation for adults post-haematopoietic stem cell transplantation (HSCT) August 2022	View >
Immunisation for adults pre-/post-solid organ transplantation (excluding kidney transplantation) August 2022	View >
Immunisation for adults pre-/post-splenectomy or with functional asplenia August 2022	View >
Immunisation for adults pre-dialysis, on dialysis or pre-/post-kidney transplantation February 2024	View >
Immunisation for adults requiring immunosuppressive disease modifying therapy August 2022	View >
Immunisation for adults with HIV infection August 2022	View >
Immunocompromise and the three dose primary course of COVID-19 vaccine March 2024	View >

Immunisation Handbook - Chapter 4

On this page

- ↓ 4.1. Pregnancy and lactation
- ↓ 4.2. Infants with special immunisation considerations from birth
- ↓ 4.3. Immunocompromised individuals
- ↓ 4.4. Chronic kidney disease
- ↓ 4.5. Chronic liver disease
- ↓ 4.6. Other special groups
- ↓ 4.7. Immigrants and refugees
- ↓ 4.8. Occupation-related vaccination
- ↓ 4.9. Travel
- ↓ References

Immunisation of special groups

A brief word on immunisation considerations for other important groups...

- Management of baby born to HBsAg positive person
- BCG vaccine management for tuberculosis
- Management of Tetanus prone wounds flowchart via IMAC
- Catch up immunisations resource via IMAC

Remember to promote non-funded vaccines available for purchase

 See IHB tables in disease chapters for group where vaccines are recommended but not funded

 For detail on occupations at greater risk of exposure to some VPDs, refer to IHB Chapter 4 Table 4.9
 Occupation-related vaccination.





Decision making for Whānau, equity & eliminating barriers

Factors that influence vaccine uptake...

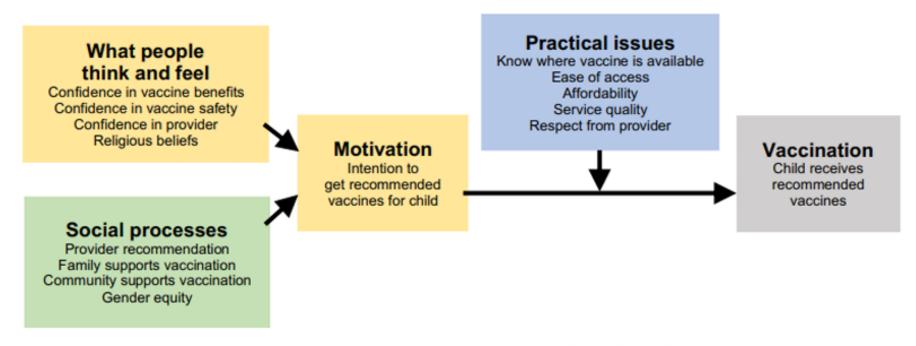
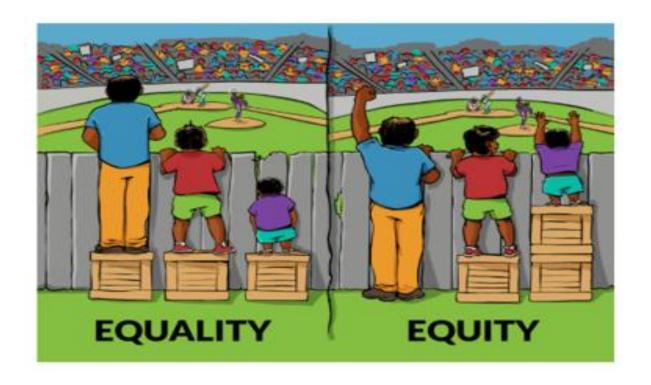


Figure 5. Adaptation of the increasing vaccination model by WHO working group.



Equality is treating everyone the same – it only works if everyone starts from the same place and need the same help

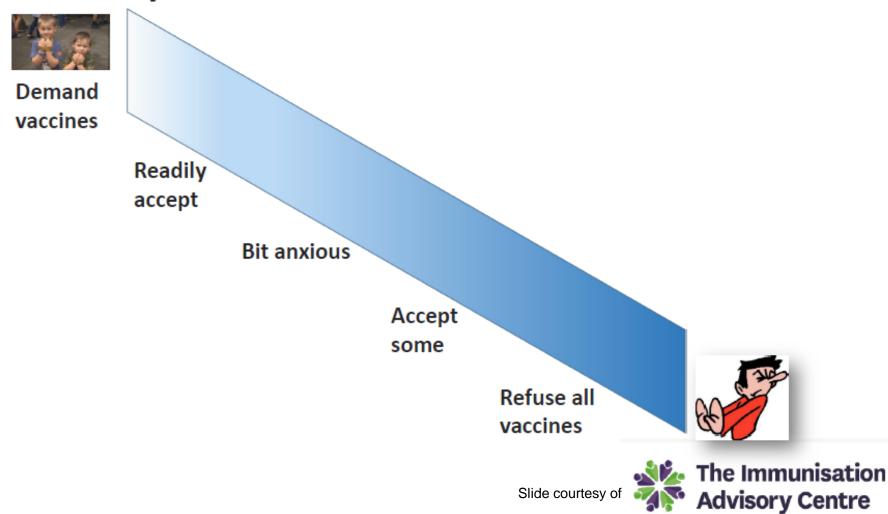
"Equity is the absence of avoidable or remediable differences amongst groups of people" World Health Organization

How can we break down barriers to immunisation?



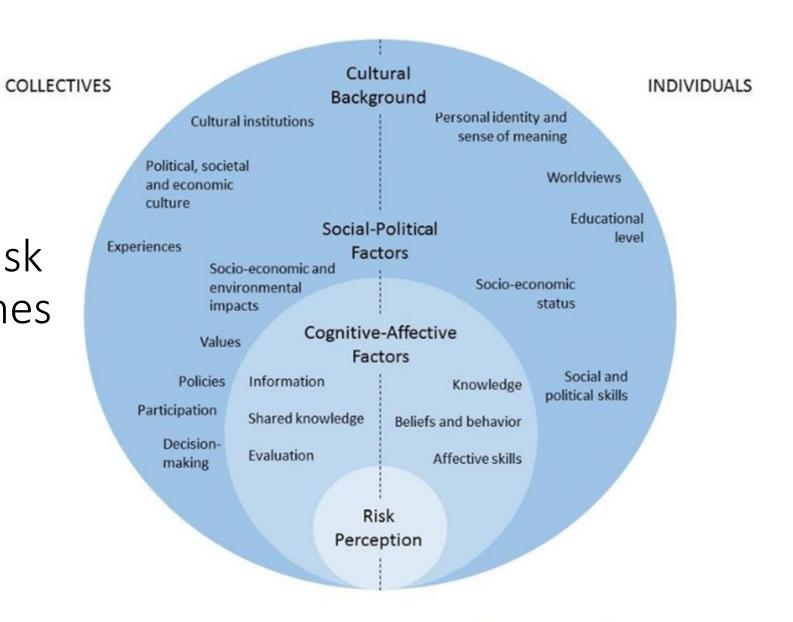
Having körero/conversations - risk perception & engagement

Vaccine hesitancy - we exist on a continuum



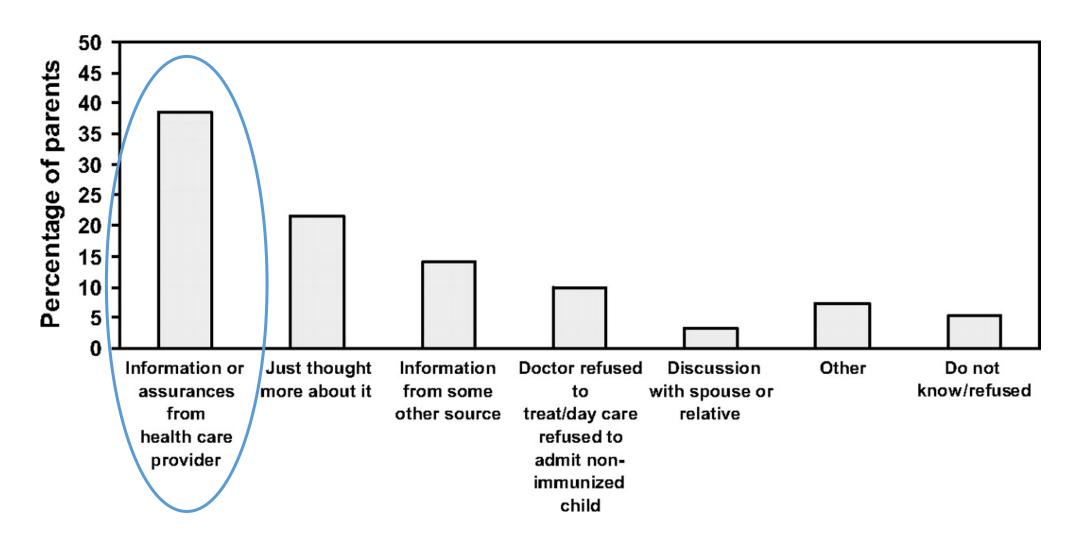
Perceiving risk...





Factor determining risk perception...sometimes it's complicated

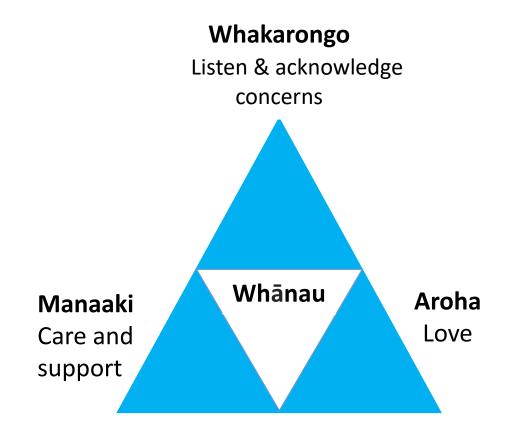
Health professionals are influential!



Talking about immunisation

Consider there are many world views around wellbeing, and how you might approach whānau and other cultures on this topic.

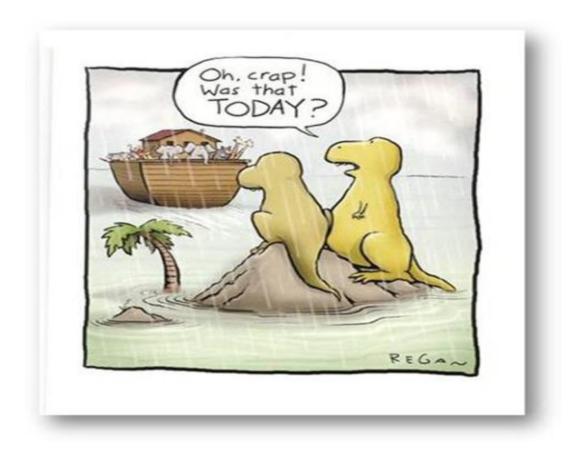
- Whakarongo: acknowledge fears and concerns – connect as a parent/your own experiences
- Manaaki: respect and empathy rather than challenge their beliefs
- Aroha: consider discussing immunisation as a way to protect our whānau



Courtesy of Denise Tahuri: Niho Taniwha model



There is little point in having the best science in the world if we can't communicate it effectively...



The benefits of immunisation

Immunisation protects your tamariki, whānau, and community

After access to clean water, immunisation is the most effective health intervention in the world for saving lives.

Immunisation:

- stops adults and tamariki from getting really sick and having to go to hospital
- stops people dying from diseases that could be prevented
- reduces the risk of having long-term health issues and disabilities caused by disease
- stops people from passing diseases to their whānau, particularly to those who may not have strong immune systems
- keeps your community safe by stopping the spread of disease sometimes called 'herd immunity'
- may mean having to take less time off school or work due to your whānau getting sick
- during pregnancy helps keep both you and your baby safe.



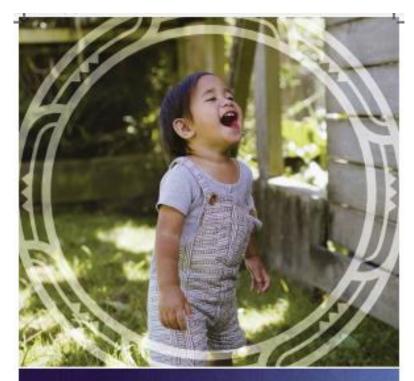
Protect your tamariki for life

Immunisation is one of the most effective ways to prevent infectious diseases

www.immunise.health.nz

Te Aka Whai Ora

Te Whatu Ora



Keep your mokopuna safe

Immunise against preventable childhood diseases. Have a kõrero with your GP, pharmacy or hauora provider today.

www.immunise.health.nz

Te Aka Whai Ora Hoori Health Authority Te Whatu Ora

Opportunistic immunisations for everyone... Working *together towards tomorrow* ©

- ✓ Seize the opportunity to check immunisation history, have korero and offer relevant vaccines to your patient/client...everyday
- ✓ Health NZ Te Whatu Ora Waikato is vaccinating in secondary care in many clinical areas – what is happening in your sites and services?

Why opportunistic?

Every child/person immunised helps increase our coverage and helps to protect our population ©

PROTECT AGAINST MEASLES

Are your tamariki under 5 vaccinated against measles? It's a serious disease that's highly contagious.



Many children missed their FREE measles vaccinations due to the COVID-19 pandemic. Your tamariki need two doses of the measles vaccine to be fully protected.

Talk to your doctor, Well Child Tamariki Ora Nurse, or visit your local pharmacy.

Te Kāwanatanga o Aotearoa New Zealand Government Visit health.govt.nz/children-measles or call Healthline on 0800 611 116



PROTECT AGAINST MEASLES

If you were born between 1989 and 2004, you might not be protected against measles. It's a serious disease that's highly contagious.

Get your FREE measles vaccine here



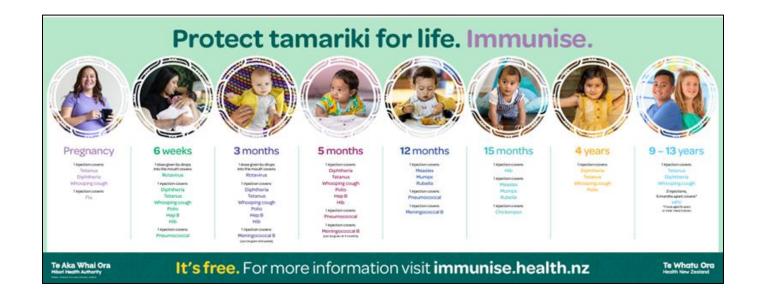
Te Käwanatanga o Aotearoa New Zealand Government To find out more visit health, govt.nz/MeaslesVaccine or call Healthline on 0800 611116



Olly at the end of his vaccination journey...for now



Thank you for this opportunity today © Any pātai?





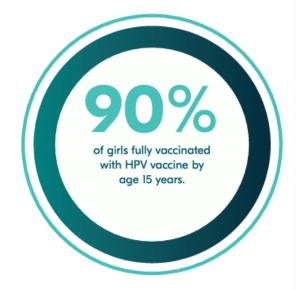
Resources & where to get more information

- Parent/whānau friendly ② -https://info.health.nz/immunisations/
- Resources via drop box see immunisation pānui for links <u>https://www.tewhatuora.govt.nz/health-services-and-</u> programmes/vaccine-information/immunisation-update-panui/
- IHB link https://www.tewhatuora.govt.nz/for-health-professionals/clinical-guidance/immunisation-handbook/
- Te Whatu Ora website https://www.tewhatuora.govt.nz/health-services-and-programmes/vaccine-information/
- Immunisation Advisory Centre https://www.immune.org.nz/

Remember when I said I love vaccination... Imagine a world where cervical cancer is eliminated as a public health problem!

"Through cost-effective, evidence-based interventions, including human papillomavirus vaccination of girls, screening and treatment of precancerous lesions, and improving access to diagnosis and treatment of invasive cancers, we can eliminate cervical cancer as a public health problem and make it a disease of the past."

Dr Tedros Adhanom Ghebreyesus, Director-General, World Health Organization



Together, we can make history – it is within our reach!

Elimination is within the reach of all countries.

We can all leave behind a great legacy if we seize the opportunities that are within our reach now, so that girls who are born today will live to see a world free of this disease.