

Measles Update 11th Oct 2023

What we know about the current exposure event.

Measles reminder

Using the clinical dashboard to help improve immunisation uptake.

Any questions ?

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What we know..

Index case visited Wellington from Northland during infectious period of PCR confirmed measles

29th Sept – 3rd October

Approx 500 close contacts contacted by PHUs nationally

Most are vaccinated or immune due to age (born before 1969)

At time of writing no proven cases.

(R0 – 9)

During Incubation period

- Ranges from 7–14 days (average 10–11 days).
- The patient usually has no symptoms.
- Some may experience symptoms of primary viral spread (fever, spotty rash, and respiratory symptoms due to virus in the bloodstream) within 2–3 days of exposure.

Prodrome

- Generally begins 10–12 days after exposure (i.e. about now)
- Presents as fever, malaise, and loss of appetite, followed by conjunctivitis (red eyes), cough, and coryza (blocked or runny nose).
- 2–3 days into the prodromal phase, Koplik spots appear. These are blue-white spots on the inside of the mouth opposite the molars, and occur 24–48 hours before the [exanthem](#) (rash) stage.
- Prodromal symptoms usually last for 2–5 days but in some cases may persist for as long as 7–10 days.

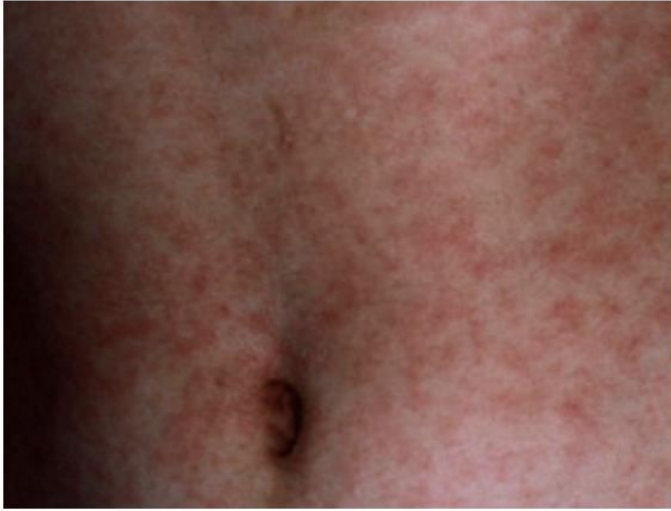
Exanthem (rash)



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- Flat red spots ranging from 0.1–1.0cm in diameter appear on the 4th or 5th day following the start of symptoms (i.e. end of this week beginning of next)
- This non-itchy rash begins on the face and behind the ears. Within 24–36 hours it spreads over the entire trunk and extremities (palms and soles rarely involved).
- The spots may join together, especially in areas of the face.
- The onset of the rash usually coincides with a high fever of at least 40C.
- The rash begins to fade 3–4 days after it first appears. It fades first to a purplish hue and then to brown/coppery coloured lesions with fine scales.

Measles



Koplik spots



Recovery

- A cough may persist for 1–3 weeks.
- Measles-associated complications may be the cause of persisting fever beyond the 3rd day of the rash.

Complications – 30% of cases

- Gastrointestinal: diarrhoea that may be fatal if dehydration occurs, [mouth ulceration](#), appendicitis, hepatitis, mesenteric adenitis, and pancreatitis.
- Ears: otitis media (almost exclusively in children) may lead to deafness.
- Respiratory tract: laryngobronchitis, measles croup, and pneumonia (either primary viral or secondary bacterial) — the most common cause of death from measles.
- Heart: myocarditis and pericarditis.
- Haematological system: thrombocytopenia, causing bleeding and [disseminated intravascular coagulation \(DIC\)](#).
- Eyes: conjunctivitis and/or corneal ulceration leading to blindness (especially if vitamin A deficient), and squint.
- Kidneys: acute glomerulonephritis (inflammation of kidneys) and renal failure.
- Nervous system: febrile seizures and encephalitis.
- [Malnutrition](#) (especially if from a poor community).
- Measles infection during pregnancy increases the risk of premature labour and delivery, fetal loss and maternal death.

Rarely, subacute sclerosing panencephalitis—a fatal condition—develops decades after a measles infection due to persistence of the measles virus in the central nervous system.



What should we be doing now ?

- It is recommended that ALL patients are TRIAGED for symptoms by phone (or if they arrive at the surgery by the reception staff.)
- For walk in clinics -Suggest posters alerting whanau to the possibility of measles with clinic's phone number so they can call/mask etc before entering
- If immunised or born before 1969 they can be treated as normal (remembering the potential for covid!)
- If no evidence of immunisation or partial immunisation only and potential symptoms (any of fever, sore eyes, rash, cough, cold) then arrange a "red zone" assessment.

What should we be doing now ?

Red zone staff should all be known to be immune to measles

- wear N95 and eye protection

(note an isolation room needs to be closed for 2 hrs after a potential measles case so maybe the first in person triage should be outdoors)

- Consider measles in your differential & if symptoms / signs are consistent then
- ISOLATE,
- NOTIFY and
- SWAB.

i.e. Do not wait for the result to isolate / notify the PHU)

NB SWABS will only be processed if the MOoH has agreed.

- Serology may be organised by MOoH directly with contacts and patients will present to pathlab (pre-arranged)

Immunise

Many NZ'ers born between 1989-2004 (aged 19-35) were not vaccinated for measles

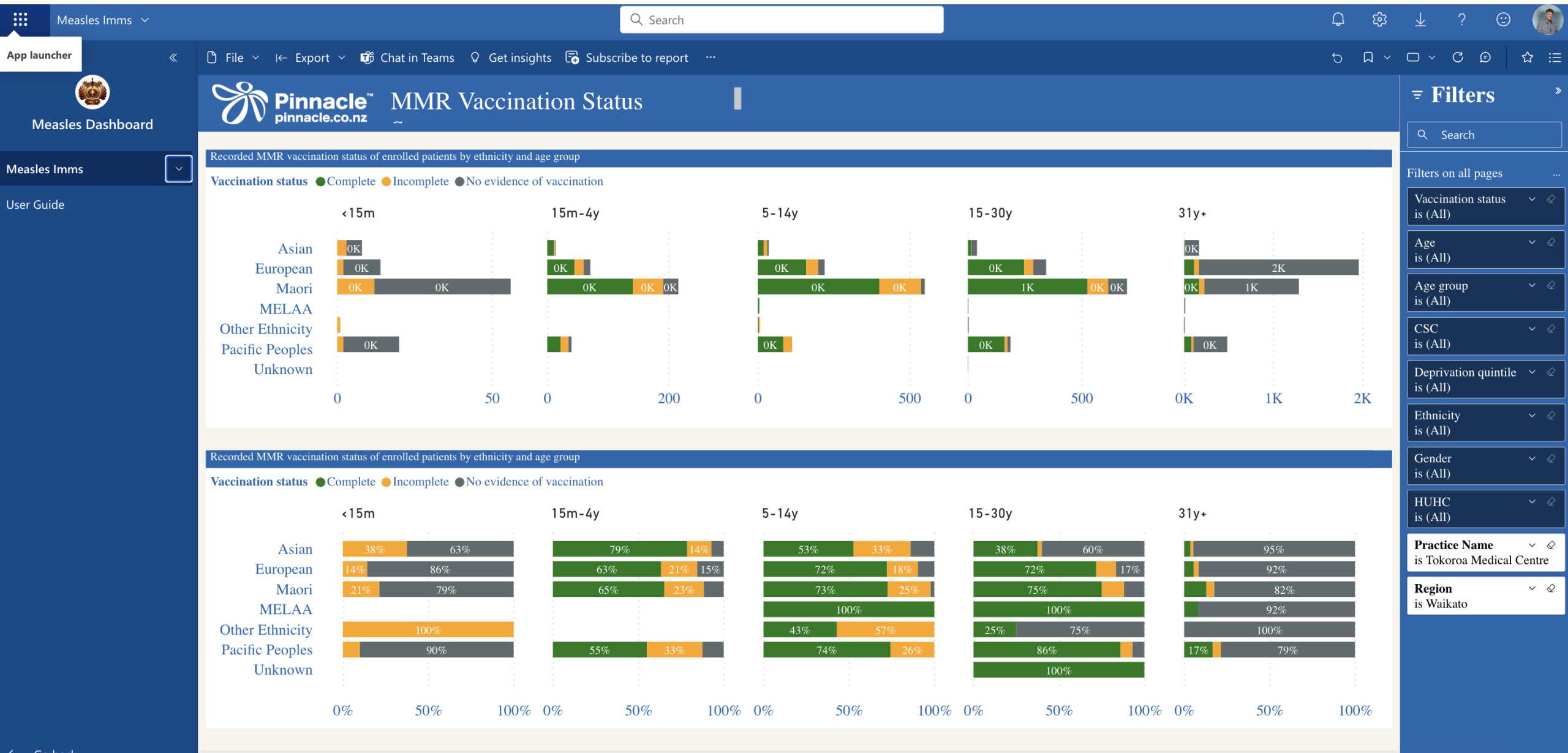
Anyone < 54 who does not have proof of two Measles vaccines in the past

Uncertain status – do not order serology – immunize (nb Book my vaccine)

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

PowerBI measles clinical dashboard



Measles Dashboard

Measles Imms

Summary

Patient List Builder

Map View

User Guide

Measles Imms

Summary

Patient List Builder

Map View

User Guide

File

Export

Chat in Teams

Get insights

Subscribe to report

Filters

Search

Filters on all pages

Vaccination status

is No evidence of vaccinat...

Filter type

Basic filtering

Search

Select all

Complete1791

Incomplete446

No evidence o...231

No evidence of vaccination

Age

is less than 30 and is great...

Filter type

Advanced filtering

Show items when the value

is less than

30

And

Or

is greater than or equ...

1

Apply filter

Age group

is 15m-4y, 5-14y, or 15-30y

Enrolled patients selected

231

Selected patients by age group

Age group	Patients	% Patients
15-30y	151	65.37%
15m-4y	42	18.18%
5-14y	38	16.45%
Total	231	100.00%

Selected patients by ethnicity

Ethnicity	Patients	% Patients
Maori	104	45.02%
European	82	35.50%
Asian	26	11.26%
Pacific Peoples	17	7.36%
Other Ethnicity	2	0.87%
Total	231	100.00%

Selected patients by gender

Gender	Patients	% Patients
F	125	54.11%
M	106	45.89%
Total	231	100.00%

Selected patients by deprivation quintile

Deprivation quintile	Patients	% Patients
5	155	67.10%
4	49	21.21%
3	13	5.63%
	6	2.60%
2	6	2.60%
1	2	0.87%
Total	231	100.00%

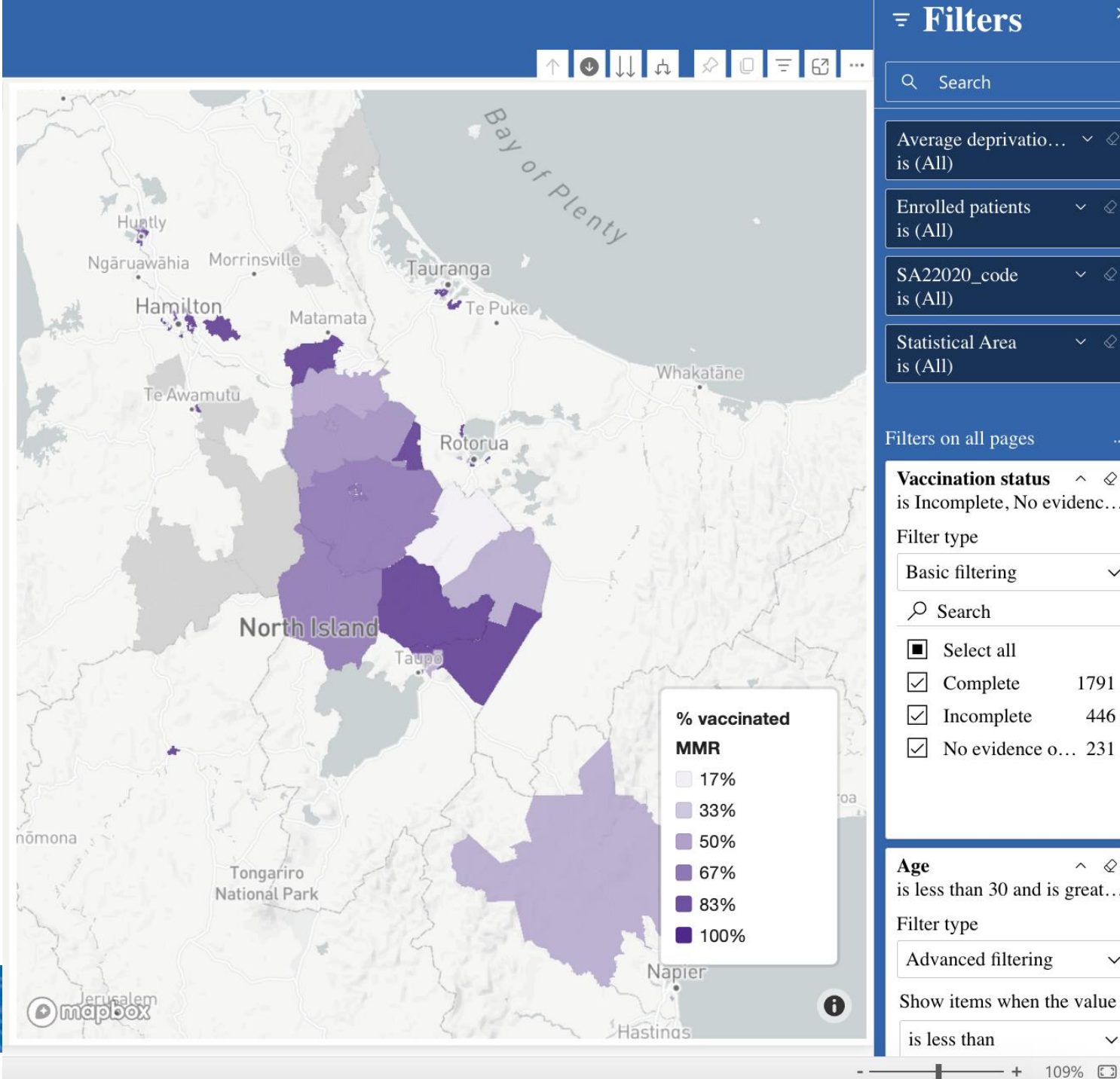
Selected patients by vaccination status

Vaccination status	Patients	% Patients
No evidence of vaccination	231	100.00%
Total	231	100.00%

Practice Name	NHI	Given name	Family name	Date of birth	Gender	Age	Age group	Ethnicity	Deprivation quintile	Doses	Last given	Last declined	Vaccination status	Primary data source
Tokoroa Medical Centre					F	29	15-30y	Maori	5	0			No evidence of vaccination	
Tokoroa Medical Centre					M	28	15-30y	Maori	5	0			No evidence of vaccination	
Tokoroa Medical Centre					F	28	15-30y	European	5	0			No evidence of vaccination	
Tokoroa Medical Centre					F	28	15-30y	Maori	5	0			No evidence of vaccination	
Tokoroa Medical Centre					M	28	15-30y	European	4	0			No evidence of vaccination	
Tokoroa Medical Centre					M	28	15-30y	Maori	5	0			No evidence of vaccination	
Tokoroa Medical Centre					M	27	15-30y	European	5	0			No evidence of vaccination	
Tokoroa Medical Centre					M	27	15-30y	European	5	0			No evidence of vaccination	
Tokoroa Medical Centre					M	27	15-30y	European	5	0			No evidence of vaccination	
Tokoroa Medical Centre					F	27	15-30y	Maori	4	0			No evidence of vaccination	
Tokoroa Medical Centre					F	27	15-30y	Maori	5	0			No evidence of vaccination	
Tokoroa Medical Centre					F	27	15-30y	European	5	0			No evidence of vaccination	
Tokoroa Medical Centre					M	24	15-30y	Maori	5	0			No evidence of vaccination	
Tokoroa Medical Centre					M	26	15-30y	Pacific Peoples	5	0			No evidence of vaccination	
Tokoroa Medical Centre					M	26	15-30y	European	5	0			No evidence of vaccination	
Tokoroa Medical Centre					F	25	15-30y	Maori	4	0			No evidence of vaccination	
Tokoroa Medical Centre					M	29	15-30y	European	5	0			No evidence of vaccination	
Tokoroa Medical Centre					M	29	15-30y	Maori	5	0			No evidence of vaccination	
Tokoroa Medical Centre					M	29	15-30y	European	4	0			No evidence of vaccination	
Tokoroa Medical Centre					M	29	15-30y	European	5	0			No evidence of vaccination	
Tokoroa Medical Centre					F	29	15-30y	European	5	0			No evidence of vaccination	
Tokoroa Medical Centre					F	29	15-30y	Maori	5	0			No evidence of vaccination	
Tokoroa Medical Centre					F	29	15-30y	European	4	0			No evidence of vaccination	
Tokoroa Medical Centre					F	29	15-30y	European	5	0			No evidence of vaccination	
Tokoroa Medical Centre					F	29	15-30y	Pacific Peoples	5	0			No evidence of vaccination	

Go back

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Map function –

Here the lighter colours indicate areas where lower proportions of the enrolled population living in that area have been immunized.

May be a useful guide to where to hold community meetings / connection with hauora partners in your areas to discuss MMR promotion in the community.

Measles Dashboard

Measles Imms

Summary

Patient List Builder

Map View

User Guide

Pinnacle™

pinnacle.co.nz

MMR Patient List Builder

Enrolled patients selected

12

Selected patients by age group

Age group	Patients	% Patients
15m-4y	9	75.00%
<15m	3	25.00%
Total	12	100.00%

Selected patients by ethnicity

Ethnicity	Patients	% Patients
Maori	10	83.33%
Pacific Peoples	2	16.67%
Total	12	100.00%

Selected patients by gender

Gender	Patients	% Patients
F	7	58.33%
M	5	41.67%
Total	12	100.00%

Selected patients by deprivation quintile

Deprivation quintile	Patients	% Patients
5	8	66.67%
4	3	25.00%
3	1	8.33%
Total	12	100.00%

Selected patients by vaccination status

Vaccination status	Patients	% Patients
No evidence of vaccination	12	100.00%
Total	12	100.00%

Practice Name	NHI	Given name	Family name	Date of birth	Gender	Age	Age group	Ethnicity	Deprivation quintile	Doses	Last given	Last declined	Vaccination status	Primary data source
Tokoroa Medical Centre					F	1	15m-4y	Maori	3	0			No evidence of vaccination	
Tokoroa Medical Centre					M	1	15m-4y	Maori	4	0		8/3/2023	No evidence of vaccination	NIR
Tokoroa Medical Centre					F	1	15m-4y	Maori	5	0		4/14/2023	No evidence of vaccination	NIR
Tokoroa Medical Centre					F	1	15m-4y	Maori	5	0			No evidence of vaccination	
Tokoroa Medical Centre					M	1	15m-4y	Pacific Peoples	5	0		6/16/2023	No evidence of vaccination	NIR
Tokoroa Medical Centre					F	1	15m-4y	Pacific Peoples	5	0		6/29/2023	No evidence of vaccination	NIR
Tokoroa Medical Centre					M	1	15m-4y	Maori	5	0			No evidence of vaccination	
Tokoroa Medical Centre					F	1	15m-4y	Maori	5	0		8/23/2023	No evidence of vaccination	NIR
Tokoroa Medical Centre					F	1	15m-4y	Maori	4	0			No evidence of vaccination	
Tokoroa Medical Centre					M	1	<15m	Maori	5	0			No evidence of vaccination	
Tokoroa Medical Centre					F	1	<15m	Maori	4	0			No evidence of vaccination	
Tokoroa Medical Centre					M	1	<15m	Maori	5	0			No evidence of vaccination	

Filters

Search

Practice Name

is (All)

Primary data source

is (All)

Vaccination status

is (All)

Filters on all pages

Vaccination status

is No evidence of vaccination

Age

is less than 2 and is greater than 0

Age group

is (All)

CSC

is (All)

Deprivation quintile

is (All)

Ethnicity

is Maori or Pacific Peoples

Gender

is (All)

HUHC

is (All)

Practice Name

is Tokoroa Medical Centre

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Midlands Health Network

Enrolled patients selected

(Blank)

Selected patients by age group

Age groupPatients% Patients

Selected patients by ethnicity

EthnicityPatients% Patients

Selected patients by gender

GenderPatients% Patients

Selected patients by deprivation quintile

Deprivation quintilePatients% Patients

Selected patients by vaccination status

Vaccination statusPatients% Patients

Practice Name	NHI	Given name	Family name	Date of birth	Gender	Age	Age group	Ethnicity	Deprivation quintile	Doses	Last given	Last declined	Vaccination status	Primary data source
Tokoroa Medical Centre					F	52	31y+	European	4	0			No evidence of vaccination	
Tokoroa Medical Centre					F	57	31y+	European	4	0			No evidence of vaccination	
Tokoroa Medical Centre					F	76	31y+	European	4	0			No evidence of vaccination	
Tokoroa Medical Centre					M	35	31y+	European	5	0			No evidence of vaccination	
Tokoroa Medical Centre					F	52	31y+	Maori	5	0			No evidence of vaccination	
Tokoroa Medical Centre					F	49	31y+	Maori		0			No evidence of vaccination	
Tokoroa Medical Centre					F	51	31y+	European	4	0			No evidence of vaccination	
Tokoroa Medical Centre					F	58	31y+	European	4	0			No evidence of vaccination	
Tokoroa Medical Centre					M	65	31y+	European	5	0			No evidence of vaccination	
Tokoroa Medical Centre					M	72	31y+	European	3	0			No evidence of vaccination	
Tokoroa Medical Centre					F	30	15-30y	Maori	4	0			No evidence of vaccination	
Tokoroa Medical Centre					M	75	31y+	European	3	0			No evidence of vaccination	
Tokoroa Medical Centre					F	50	31y+	Maori	5	0			No evidence of vaccination	
Tokoroa Medical Centre					F	69	31y+	European	5	0			No evidence of vaccination	
Tokoroa Medical Centre					F	45	31y+	European	5	0			No evidence of vaccination	
Tokoroa Medical Centre					M	84	31y+	European	5	0			No evidence of vaccination	
Tokoroa Medical Centre					M	79	31y+	Asian	5	0			No evidence of vaccination	
Tokoroa Medical Centre					M	12	5-14y	Maori	2	2	1/23/2015		Complete	NIR
Tokoroa Medical Centre					F	6	5-14y	Maori	5	1	12/18/2020		Incomplete	NIR
Tokoroa Medical Centre					F	38	31y+	European	5	0			No evidence of vaccination	

Filters

Search

is (All)

Doses is (All)

Ethnicity is (All)

Family name is (All)

Gender is (All)

Given name is (All)

Last declined is (All)

Last given is (All)

NHI

Practice Name is (All)

Primary data source is (All)

Vaccination status is (All)

Filters on all pages

