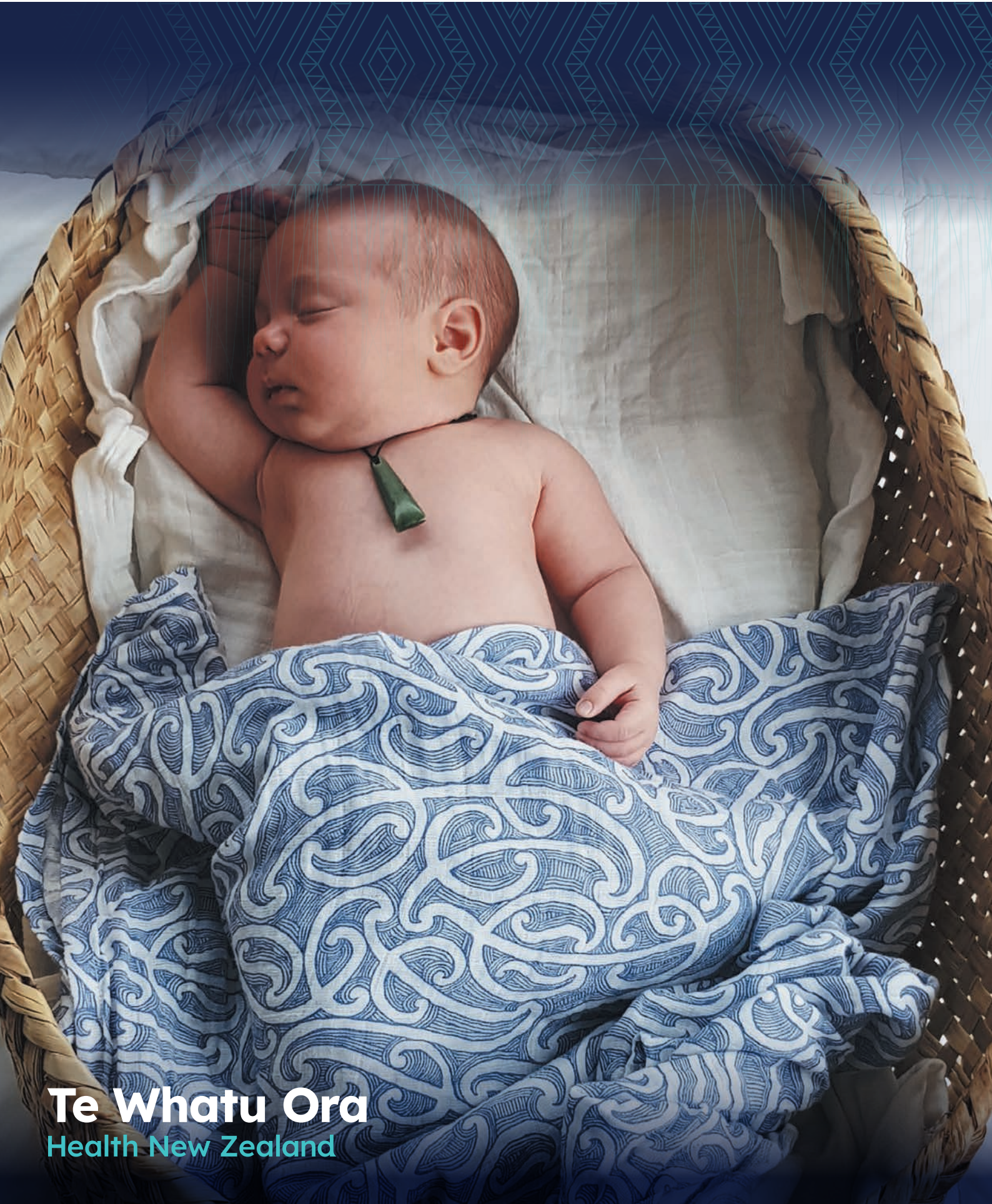


Maternity Annual Report

Te Tai Tokerau 2021/2022





Forward by Sue Bree and Jeanette Wedding

It is a pleasure to present another MQSP Annual Report. Despite the impact of the Covid pandemic we are proud that the maternity service continued to function in a responsive way

throughout our District and that several key quality initiatives were also implemented during this time. We want to acknowledge the overt commitment of all maternity staff in Te Tai Tokerau in achieving this whilst working in an environment of profound uncertainty. New ways of working were necessary and some staff were drawn away from their usual jobs to provide critical clinical care and front door screening.

Our significantly diminished midwifery workforce is a serious problem for us. Again, it is only the generosity of committed midwives which has enabled us to maintain a service on occasions. We genuinely foster a one team approach in Te Tai Tokerau and the maternity service is renowned for the close professional relationships within the wider team.

It is of concern to us that there is an increasing number of pregnant people in the wider Whangārei and Kaipara areas who are not receiving continuity of care throughout their maternity experience. We know this makes a difference. To address the deficit created by a discontinuation of some LMC midwife services it has been necessary to ramp up the Te Whatu Ora Te Tai Tokerau service of last resort which, at best, will ensure antenatal and postnatal continuity of care. In addition, we have responded to the rapidly growing population of the Mangawhai area and have established a Te Whatu Ora maternity service there delivering coordinated care as described above.

Our accountability towards our high perinatal mortality rate here in Te Tai Tokerau is evident in another review of deaths covering the past five years. The outcome of this review reveals the necessity to further support whānau in their stop smoking efforts; to ensure adherence by all clinicians to detect small for gestational age babies and to continue to explore ways to reduce barriers for women accessing maternity services – especially those whānau in rural areas, who form a significant part of our population.

We are pleased to be currently developing a role for a position of kaiawhina in Te Kotuku. We see this as a deliberate action to enhance communication and foster relationships between whānau and maternity staff which will assist in improving the experience of whānau, many of whom are out of their own area of residence due to the need to access the secondary maternity service.

Despite the many challenges facing all areas of the health workforce currently, we remain grateful to the dedication of our staff; to the support we get from Tracey Schebli, our Interim District Director, and to the whānau of Te Tai Tokerau with whom we have the honour of sharing their most significant life events.

Sue Bree – Director of Midwifery

Jeanette Wedding – Director Rural, Family and Community Health

Acknowledgements

- Jeanette Wedding** General Manager Rural Family Community
- Sue Bree** Director of Midwifery and Maternity Service Manager
- Yvonne Morgan** Clinical Midwife Manager
- Rebecca Harrison** Clinical Coach, Midwife Specialist:Quality/Education
- Katharina Bretschneider** Midwifery Educator, GAP champion
- Csarndra Ogle**Smoking Cessation Kaitiaki
- Samantha Harris** Associate Clinical Midwife Manager,
Community Maternity Services
- Rosie Sharman**Midwife Manager, Bay of Islands
- Sharmaine Poata**Midwife Manager, Kaitaia hospital
- Holly Coombes** Team Leader, Maternal and Infant Mental Health
- Amanda Brown**Clinical Nurse Manager, Diabetes Service
- Gavin De Klerk**Service Manager, Public and Population Health
- Natalie Allen**Maternity Clinical Governance Committee,
consumer member
- Tash Wharerau**Maternity Clinical Governance Committee,
consumer member
- Paula Wetere** Kai Hāpai Nga Wānanga o Hine Kōpū
- Louise Rowden**Maternity Quality and Safety Programme Leader
- Shane Stanners**Business Analyst: Rural, Family, Community
- Adelle Turuwhenua**Kai Hāpai Safe Sleep Coordinator

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Glossary

| | |
|-----------------------------------|---|
| APC | Annual Practising Certificate |
| Caesarean Section | An operative birth through an abdominal incision |
| Episiotomy | An incision of the perineal tissue surrounding the vagina to facilitate or expedite birth |
| Gravida | A pregnant person |
| Maternity Facilities | A maternity facility is a place that women / people attend, or are resident in, for the primary purpose of receiving maternity care, usually during labour and birth. It may be classed as primary, secondary or tertiary depending on the availability of specialist services (Ministry of Health 2012) |
| Multiparous | A woman / person who has given birth one or more times |
| Parity | Number of previous births a woman / person as had |
| Perinatal death | Death of a fetus (from 20-weeks gestation or weighing over 400grams) and early neonatal deaths to seven days |
| Primiparous | A woman / person who is pregnant for the first time |
| Primary Facility | Refers to a maternity unit where women / people are expected to experience normal birth with care provided by midwives. It is usually community-based and specifically for women / people assessed as being at low risk of complications for labour and birth. Access to specialist secondary maternity services and care will require transfer to a secondary/tertiary facility. Primary facilities do not provide epidural analgesia or operative birth services. Primary maternity facilities provide inpatient services for labour and birth and the immediate postnatal period |
| Postpartum Haemorrhage | Excessive bleeding after birth that causes a woman / person to become unwell |
| Primary Birthing | Birthing in a primary setting, either at home or in a primary birthing unit . |
| Primary Maternity Services | Primary maternity services are provided to women / people and their babies for an uncomplicated pregnancy, labour and birth, and postnatal period. They are based on continuity of care. The majority of these maternity services are provided by Lead Maternity Carers (LMCs) |
| Secondary Facility | Refers to a hospital that can provide care for normal births, complicated pregnancies and births including operative births and caesarean sections as well as other specialist services such as anaesthetics, paediatrics, radiology, laboratory and neonatal services |
| Standard Primiparae | A group of mothers considered to be clinically comparable and expected to require low levels of obstetric intervention |
| Stillbirth | The birth of an infant after 20-weeks gestation, who has died in the womb and weighed more than 400 grams |
| Weeks' Gestation | The term used to describe how far along the pregnancy is. It is measured from the first day of the woman / person's last menstrual cycle to the current date. |

Abbreviations

| | |
|----------------|---|
| ACMM | Associate Clinical Midwife Manager |
| APC | Annual Practising Certificate |
| CCDM | Care Capacity Demand Management |
| CTG | Cardiotocograph |
| DHB | District Health Board |
| ED | Emergency Department |
| FGR | Fetal Growth Restriction |
| FTE | Fulltime Equivalent |
| FNDC | Far North District Council |
| GAP | Growth Assessment Programme |
| GDM | Gestational Diabetes Mellitus |
| GP | General Practitioner |
| HCA | Health Care Assistant |
| IDM | Index of Multiple Deprivation |
| IMAC | Immunisation Advisory Centre |
| IUGR | Intrauterine Growth Restriction |
| KDC | Kaipara District Council |
| LARC | Long-Acting, Reversible Contraception |
| LMC | Lead Maternity Carer |
| LUSCS | Lower Uterine Segment Caesarean Section |
| MCGC | Maternity Clinical Governance Committee |
| MERAS | Midwifery Employee Representation & Advisory Service |
| MESR | Midwifery Emergency Skills Refresher |
| MEWS | Maternity Early Warning System |
| MDT | Multi-Disciplinary Team |
| M&M | Mortality & Morbidity |
| MQSP | Maternity Quality Safety Programme |
| NEWS | Newborn Early Warning System |
| NICU | Neonatal Intensive Care Unit |
| NZCYES | New Zealand Child and Youth Epidemiology Service |
| NZDep | New Zealand Deprivation |
| NZRC | New Zealand Resuscitation Council |
| PACU | Post Anesthesia Care Unit |
| PMCP | Primary Maternity Care Provider |
| PPH | Postpartum Haemorrhage |
| PPS | Pregnancy and Parenting Service |
| PROMPT | Practical Obstetrical Multidisciplinary Training |
| RANZCOG | Royal Australian and New Zealand College of Obstetricians and Gynecologists |
| REC | Reportable Events Committee |
| SAC | Severity Assessment Code |
| SGA | Small for Gestational Age |
| SANDS | Stillbirth and Neonatal Death Support |
| SCBU | Special Care Baby Unit |
| SMO | Senior Medical Officer |
| SUDI | Sudden Unexpected Death in Infants |
| TPO | Te Puawai Ora |
| WCTO | Well Child/Tamariki Ora |
| WDC | Whangārei District Council |

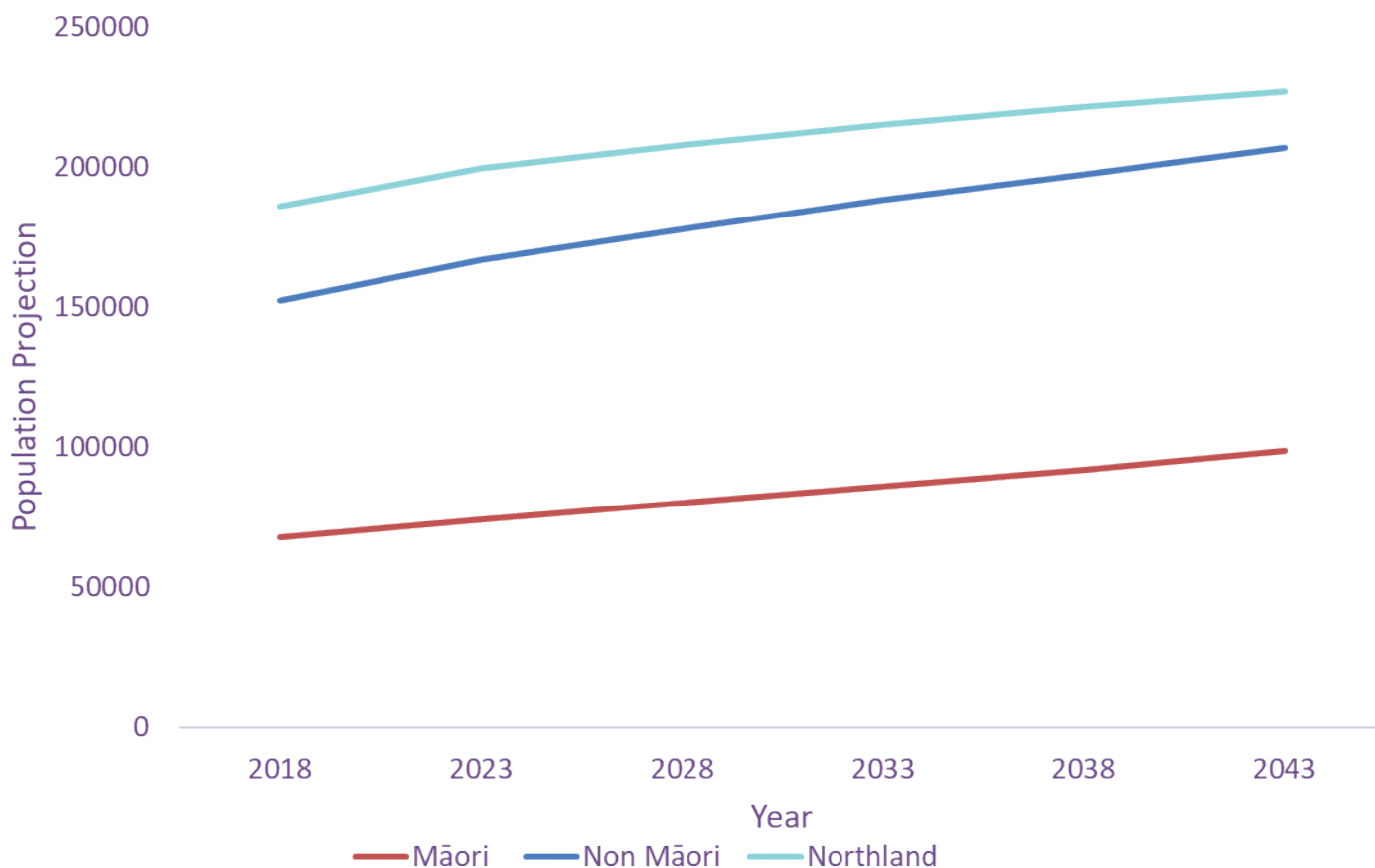


Te Tai Tokerau population 191,929



Northland Territorial Authorities and their respective boundaries.

Te Tai Tokerau Population Projection



Te Tai Tokerau is one of the fastest growing regions across the country. The population increased by 18% from 2013 to 2018.

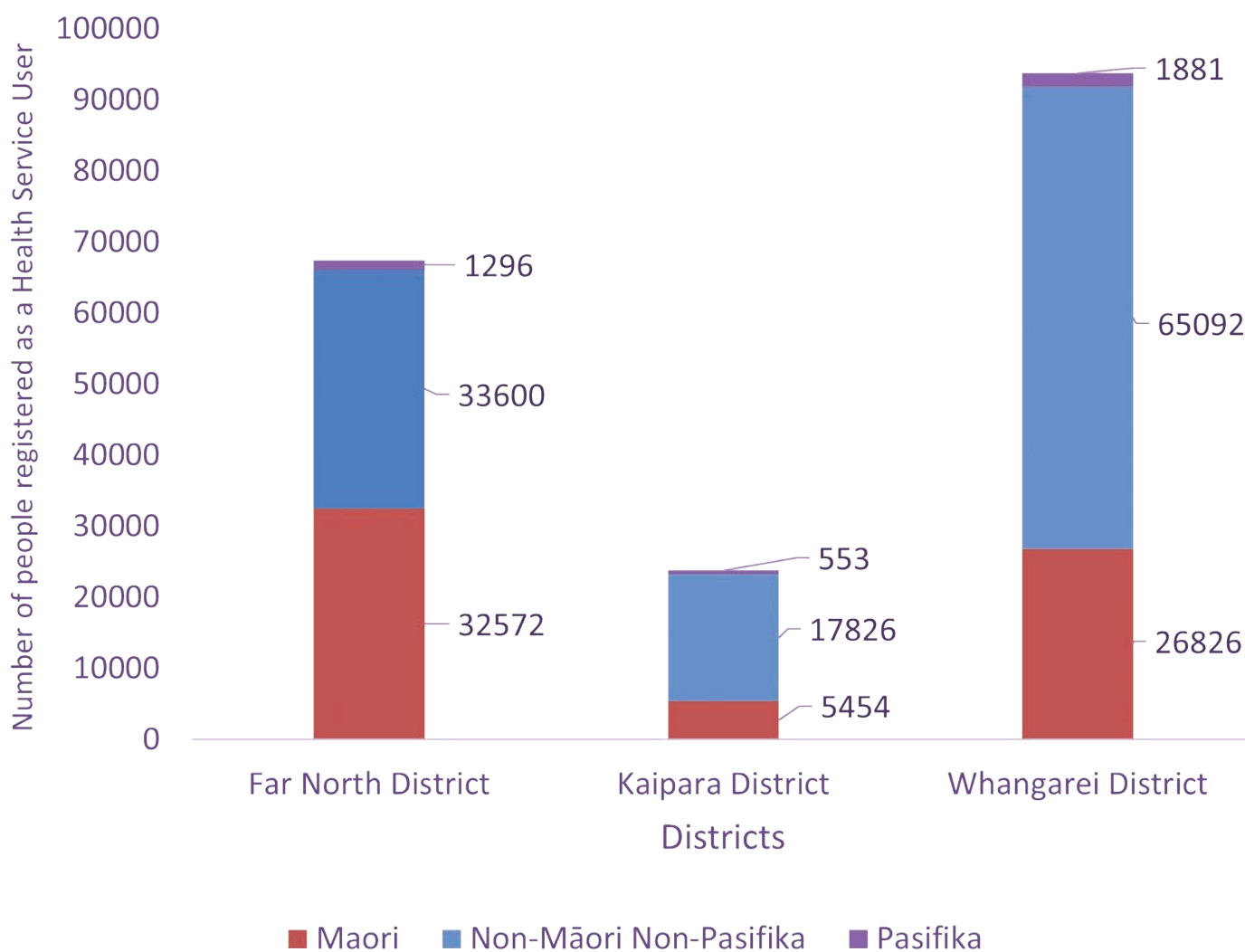
The estimated population for Te Tai Tokerau is now is ~194,000

Note: It is important to note that these ethnic populations are not mutually exclusive because people can and do identify with more than one ethnicity
Data Source: Stats NZ, Population Projections 2023

Te Tai Tokerau Population by Ethnicity and Territorial Authority

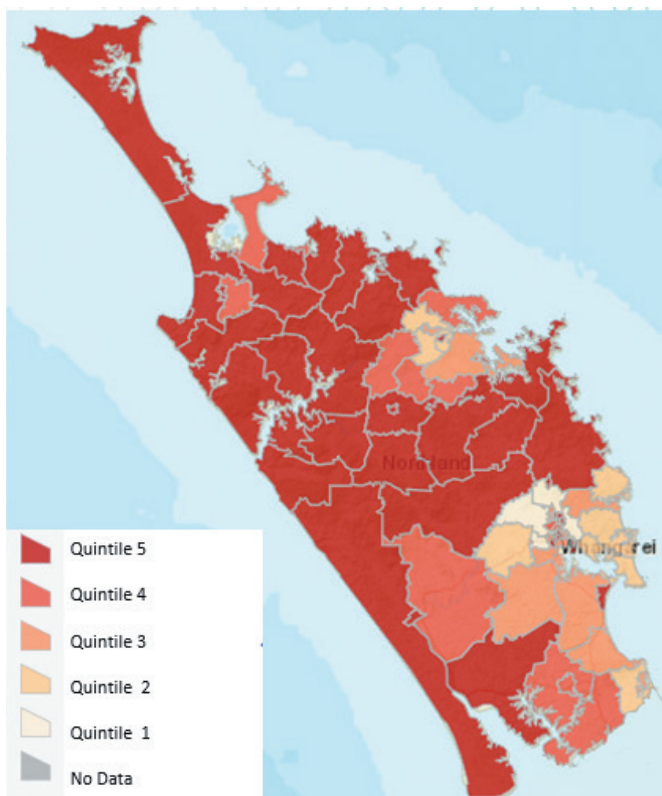
// The Far North has the highest Māori population of any territorial authority (just under 50 percent) //

| | FNDC (%) | WDC (%) | KDC (%) | Total (%) |
|--------------------------------|----------|---------|---------|-----------|
| Māori | 48.3% | 22.9% | 28.6% | 35.0% |
| Pasifika | 1.9% | 2.3% | 2.0% | 2.0% |
| Non-Māori Non- Pasifika | 49.8% | 74.8% | 69.4% | 62.9% |



Data Source : Health Service User data from Ministry of Health 2023

Te Tai Tokerau Population Distribution by Deprivation



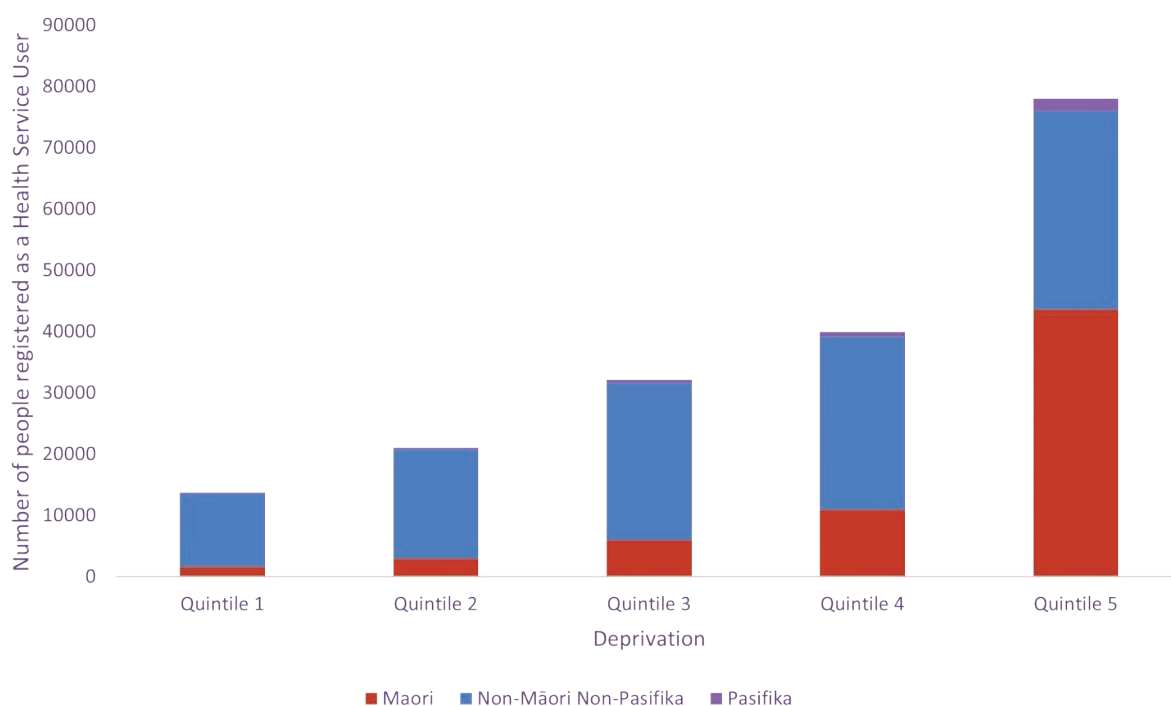
Deprivation is measured in quintiles. Quintile 1 represents the least deprived section of the population and quintile 5 represents the most deprived section.

Nationally, each quintile represents twenty percent of the population. The quintiles will vary for each region. If a region has more than 20 percent within a quintile it means that there are more people in that deprivation group than in the National average.

In Te Tai Tokerau, 28.9% of data zones were among the 20% most deprived in NZ, and 5.8% were among the least deprived 20%.

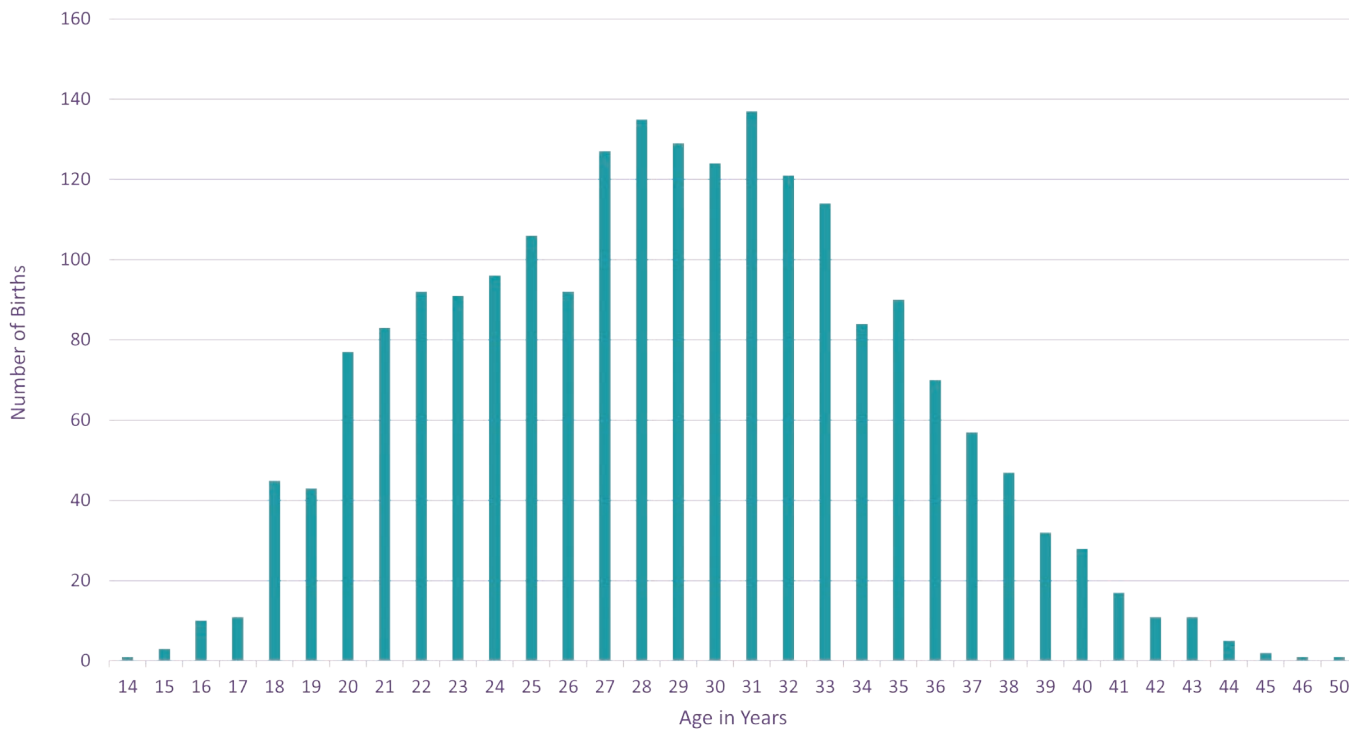
In the Far North, these relatively high (Q5) levels of deprivation occurred in Ahipara, Kaitaia and the Karikari Peninsula, and further south in areas around Kaikohe. In the Whangārei area, there were 43 data zones with Q5 deprivation.

Northland Population Distribution by Deprivation (NZDep2018)



Data Source : Health Service User data from Ministry of Health 2023

Northland Births by age during the 2022 calendar year



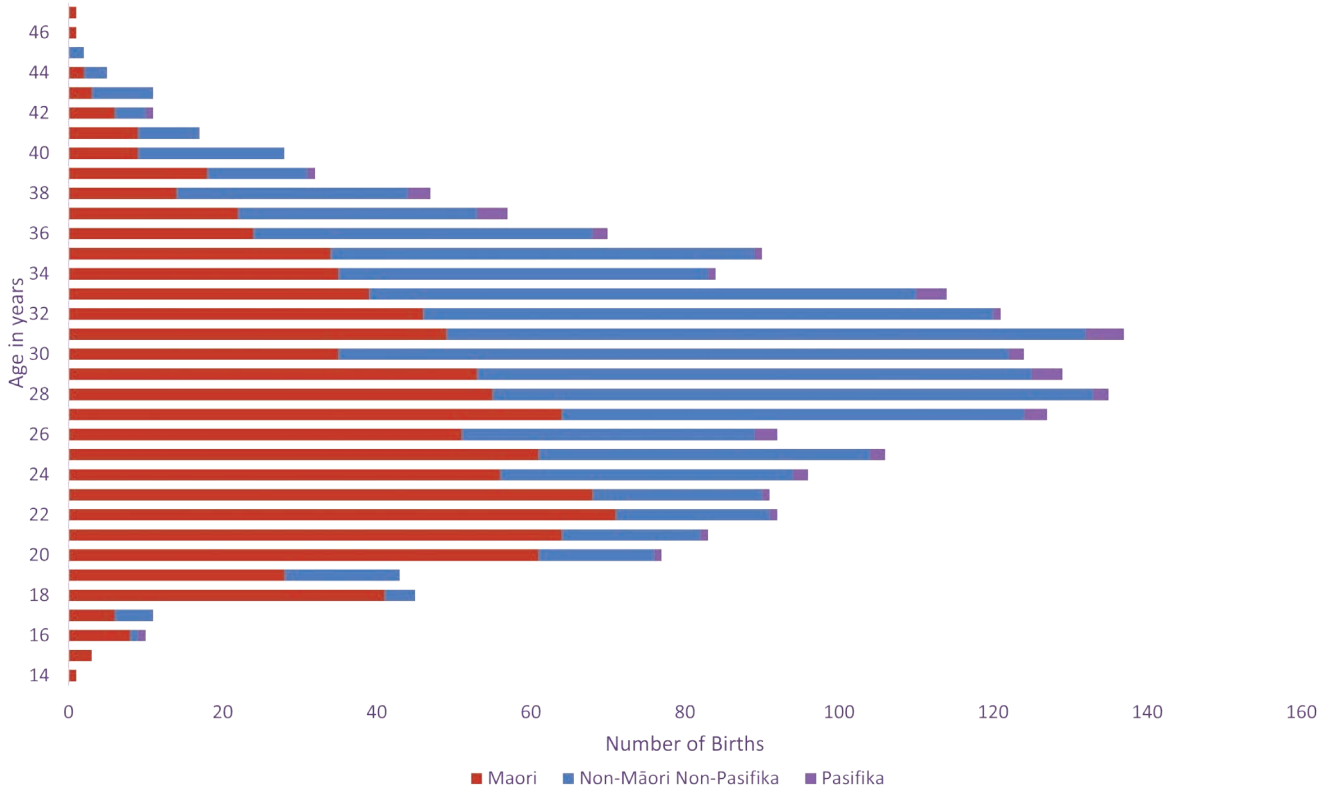
| | Māori | Pasifika | Non-Māori Non-Pasifika | All Births |
|--|-------|----------|---------------------------|------------|
| Mean age* | 27 | 30 | 30 | 29 |
| Median Age | 27 | 31 | 30 | 29 |
| Range (minimum age – maximum age) | 14-50 | 16-42 | 16-45 | 14-50 |

// Māori tend to give birth at a younger age than non-Māori.

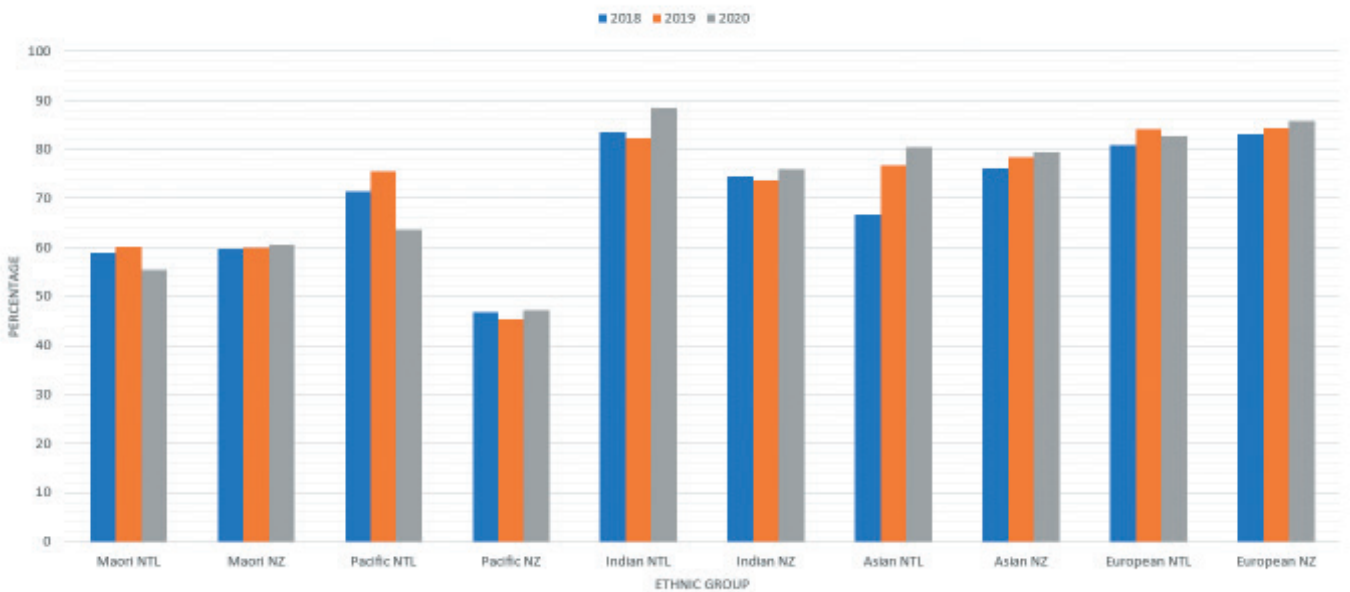
For all young mothers under 20 years of age the proportion of young Māori women giving birth has increased from 83 percent in 2019 to 87 percent in 2021 and 77 percent in 2022.

Data Source: Maternity Services, Te Whatu Ora
*Age in years

Northland Births by age and ethnicity during the 2022 calendar year*



Registration with LMC in First Trimester



Data Source: Maternity Services, Te Whatu Ora
 *Data includes only hospital births

Births by Ethnicity and Territorial Authority 2022*

| | Far North District Council (%) | Whangārei | Non-Māori Non-Pasifika | All Births |
|-------------------------------|--------------------------------|-----------|------------------------|------------|
| District Council (%) | Kaipara District Council (%) | Total (%) | 30 | 29 |
| Māori | 65.8% | 39.9% | 38.4% | 49.6% |
| Pasifika | 1.5% | 2.5% | 2.1% | 2.1% |
| Non-Māori Non-Pasifika | 32.6% | 57.4% | 59.4% | 48.1% |

Data Source: Maternity Services, Te Whatu Ora
*Data includes only hospital births

Births by Ethnicity and Deprivation 2022*

| | Quintile 1 (%) | Quintile 2 (%) | Quintile 3 (%) | Quintile 4 (%) | Quintile 5 (%) | Total (%) |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|-----------|
| Māori | 12.5% | 21.4% | 28.5% | 38.6% | 65.3% | 49.6% |
| Pasifika | 0.0% | 2.1% | 2.3% | 2.5% | 2.1% | 2.2% |
| Non-Māori Non-Pasifika | 87.5% | 76.6% | 69.2% | 58.9% | 32.6% | 48.2% |

Data Source: Maternity Services, Te Whatu Ora
*Data includes only hospital births.

2022 birthing statistics Te Tai Tokerau

| Gestational age | | |
|-----------------|------|-----|
| <14<< | 1446 | 69% |
| 14-27 | 419 | 20% |
| 28-35 | 117 | 6% |
| 36+ | 65 | 3% |
| unknown | 46 | 2% |

| Gestational age at Delivery | | |
|-----------------------------|------|-----|
| <27 | 18 | 1% |
| 27-35 | 96 | 5% |
| 36-40 | 1627 | 78% |
| 40+ | 352 | 17% |

| Body Mass Index | | |
|-----------------|------|-----|
| <30 | 1335 | 64% |
| 30-34.9 | 372 | 18% |
| 35-39.9 | 201 | 10% |
| 40+ | 140 | 7% |
| unknown | 45 | 2% |

| Birth Outcome | |
|-------------------------------------|------|
| Liveborn - Primary Care | 1819 |
| Liveborn - Congenital abnormality | 1 |
| Neonatal Death | 3 |
| Referred to Neonatal/Secondary Care | 239 |
| Stillborn/IUD AntePartum | 25 |

| Smoking Pattern of Mother | | |
|----------------------------------|------|-----|
| Current smoker | 360 | 17% |
| Ex-smoker (<12 months abstinent) | 214 | 10% |
| Ex-smoker (>12 months abstinent) | 91 | 4% |
| Never smoked tobacco | 1386 | 66% |
| Unknown | 42 | 2% |

Birth Data A Comparison of birth data

Ten years: 2011 and 2021 Te Tai Tokerau and all of New Zealand

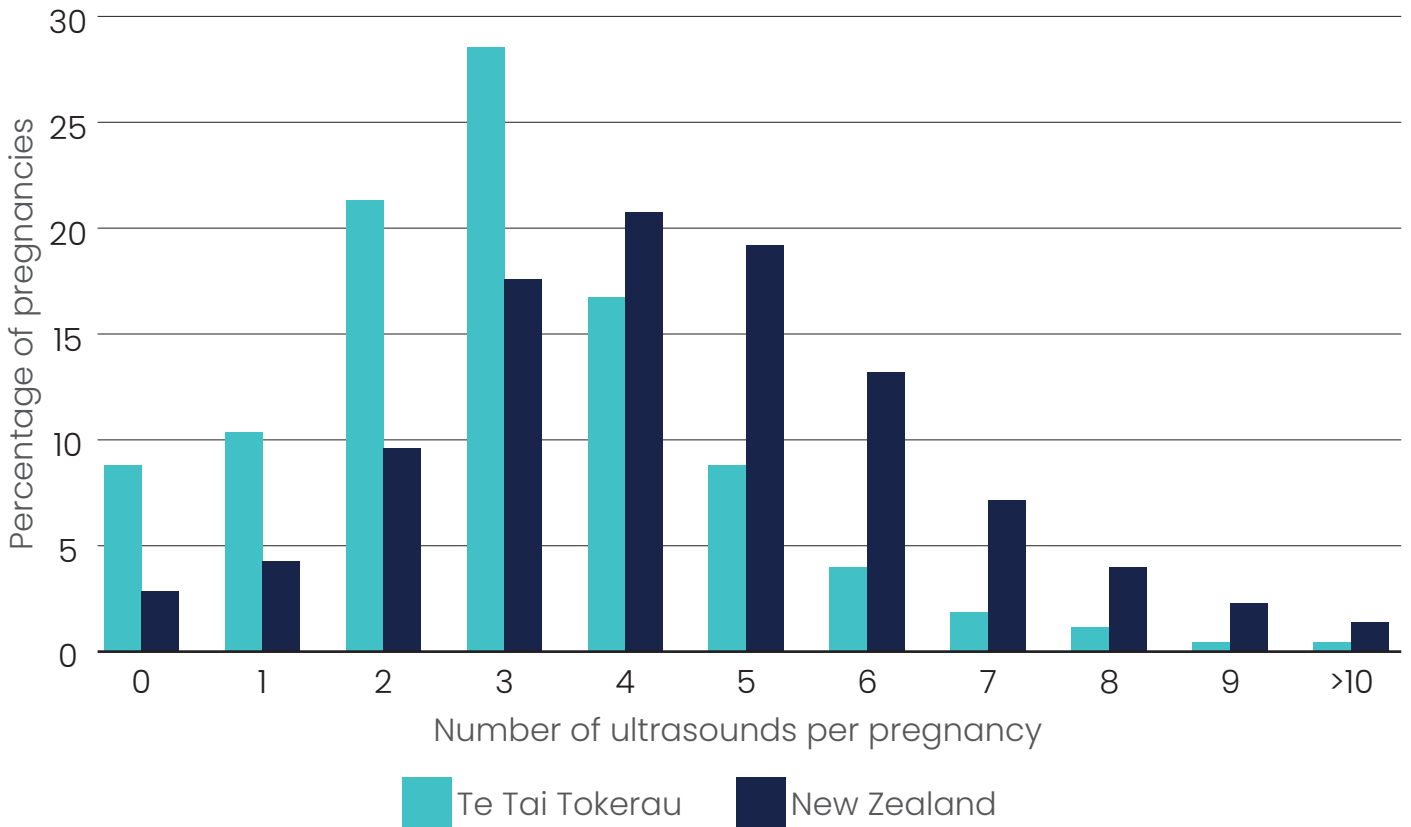
| Year | 2011 | | 2021 | |
|---------------------------------|----------------|-------------|----------------|-------------|
| | Te Tai Tokerau | New Zealand | Te Tai Tokerau | New Zealand |
| # births | 2302 | 62333 | 2063 | 54547 |
| Normal Births % | 48.7% | 34.8 | 46.3% | 27.9% |
| Caesarean section* % | 15.6% | 23.8 | 19.3% | 29.9% |
| Elective Caesarean section% | 5.1% | 10.9 | 5.3% | 11.6% |
| Emergency Caesarean section | 10.6% | 12.9 | 14.0% | 18.3% |
| Home birth | 6.4 % | 3.3% | 8.7% | 4.4% |
| Pre-term birth | 6.4% | 6.9% | 7.1% | 7.2% |
| Smoking | 26.4% | 10.5% | 17.9% | 4.9% |
| BMI-(obese) | 25.4 | 20.1 | 32.3 | 28.1% |
| Diabetes in pregnancy | 2.3 | 4.5 | 5.1 | 8.5% |
| Induction of labour | 15.1 | 19.1 | 16.7 | 24.8% |
| Early registration with PMCP | 58.6 | 48.2 | 72.3 | 77.9 |
| Ethnic group | | | | |
| Māori | 57.6 | 26.1 | 53.1 | 25.3 |
| Pacific | 1.4 | 11.5 | 2.2 | 9.5 |
| Asian | 3.2 | 11.5 | 6.5 | 18.8 |
| Other | 37.9 | 50.7 | 38.1 | 46.3 |
| Quintile | | | | |
| 1 | 0.6% | 13.7% | 0.4% | 15.7% |
| 2 | 8.9% | 15.2% | 8.9% | 16.4% |
| 3 | 11.2% | 17.9% | 12.3% | 18.0% |
| 4 | 23.1% | 22.1% | 26.8% | 21.2% |
| 5 | 55.3% | 30.1% | 51.6% | 27.7% |
| Referral to Well Child provider | 84.1% | 84.6% | 65.8% | 67.5% |

As is evident from the table above, our rates of caesarean sections and induction of labour have increased though they are still well below the rates of the rest of the country. Most women giving birth come from an area of high deprivation. More than 50% are Māori and we have an increasing Asian population. We have a higher than average home birth rate and this is increasing. Work needs to be done to improve registration rates with a Well Child provider, although this seems to be a national issue.

*Caesarean section data is number of women giving birth
Data from Te Whatu Ora QLIK National Maternity Collection Dec 2022

Birth Data A Comparison of birth data

Ultrasonds per pregnancy 2021



Data from Te Whatu Ora (QLIK) National Maternity Collection Dec 2022

Equitable access to ultrasound scanning during pregnancy continues to be an issue especially for whānau from rural areas.

As you can see from the table above, pregnancies in Te Tai Tokerau have far fewer scans per pregnancy when compared with the rate per pregnancy of scanning over the whole of New Zealand.



Place of Birth

| Home births in Te Tai Tokerau | | |
|-------------------------------|------------|----|
| 2020 | 221 Births | 9% |
| 2021 | 166 Births | 7% |



| Births in Primary Birthing Units | | |
|----------------------------------|------------|-----|
| 2020 | 379 Births | 16% |
| 2021 | 302 Births | 13% |



| Births in Te Kotuku (Whangārei / secondary facility) | | |
|---|-------------|-----|
| 2020 | 1757 Births | 74% |
| 2021 | 1777 Births | 79% |



Data from QLIK - Data includes home births

Maternity Clinical Governance Committee

The MCGC provides oversight of the MQSP programme. The committee is currently made up of representatives from the maternity workforce, Te Poutokomanawa (Māori Health Directorate) and consumers.

The number of consumer representatives on the board, all of whom are Māori, has been increased to four.

In October 2022 a hui was held for the consumer representatives from the MCGC to further strengthen the group.

The Future: In 2023 two consumer representatives will attend the HSQC national consumer hui. Networking is taking place within the Northern region MCGC consumer committee members.

From the Consumer representatives of Te Tai Tokerau Clinical Governance Committee

Describe the Māori representation and joint decision making on Maternity / MQSP committees and working groups.

Four Māori consumer/Whānau from various areas of Tai Tokerau have been invited to attend monthly Maternity Governance Hui to be able to participate in joint decision making on Maternity and the Perinatal Morbidity Review. They have expressed appreciation for being able to speak freely and to have good understanding of topics pertaining to Whānau experiences as well as clarification of medical terms outside of their everyday language.

Are maternity/ MQSP consumer representatives involved with the development and writing of the annual report?

There are four consumer Whānau representatives who attend regular hui, they hail from Kaitaia, Kaikohe, Moerewa and Whangārei. Representatives are invited to participate in report writing as well as development hui leading up to the writing of reports.

Is there consumer representation from Māori, Pasifika or other groups relevant to the DHB?

All four consumer Whānau representatives identify as tangata whenua, some also have Pacific affiliations and have experience in working with Nga Wananga o Hine Koopu and breastfeeding, infant nutrition from Ngāti Hine Health Trust and Te Rarawa Anga Mua.

Has the DHB involved women /people/ whānau from the Rainbow community

A Consumer/Whānau representative identifies as part of the Rainbow community and is adequately able to speak on behalf of themselves and others. We have engagement with Women's Health Action as well who have included guidance from their Gender Diverse Lead.

Consumer Members on the Maternity Clinical Governance Committee

Tash Wharerau



*Ko Whakatere te Maunga Ko Waima
Tuhirangi te Awa Ko Matetera te
Marae Ko Te Mahurehure te Iwi*

*Tokotoru aku tamariki, o ratou ingoa
ko ViJau ratou ko Julian Jairus ko
Jacinta-Leigh Ana- hera-Grace Ko
Eddie Wharerau raua ko Trudi Hunt
oku matua Ko Tony Makiha toku hoa
rangatira*

Ko Tasha Wharerau Ahau

Kia ora, my name is Tash. I live in the beautiful Bay of Islands with my tamariki and carver partner. Whānau are everything to me therefore it is extremely important to represent Whānau voice with tika, pono and aroha for the health of ourselves and our pepi mokopuna. I am honoured to be a consumer/Whānau representative in many various boards and groups for Whānau life. We know

Whānau have their own solutions to everything so it is my passion to listen and pass on those solutions to the right places, wherever that may be. Many of the groups I participate are in the area of wahine health: breastfeeding, maternity and national cervical screening.

No reira, He Oranga Ngakau, He Pikinga Waiora – When our hearts are well our spirits are lifted.

Ngā mihi mahana

Consumer Members on the Maternity

Natalie Allen

Current employment: Youth Health Educator for Te Rarawa Anga Mua (two years)

Position details: health education, with a focus on nutrition. I teach life skills that centre around nutrition such as prepping food, cooking, healthy snacks/meals, food groups and recipe making, making fishing rigs, fishing, gardening, planting and growing seedlings, Matariki gift giving, Rongoā Māori and many more things that are fun and broaden the idea of nutrition (food for health). As a team we teach taonga tākaro, exercise and sports, arts and crafts, leadership and event management as well as tikanga practises centred in te ao Māori.

Passion: My passion area is infant and maternal nutrition. I love everything to do with nutrition in this area and have experience helping some of my friends through their first pregnancies and beyond as well as my own experiences through my own tamariki. I am working towards becoming a lactation consultant for the Far North and am so excited

to get qualified so I can continue giving back to my community. I am a mother of two boys and had very different breastfeeding journeys with both my tamariki. I am so passionate about helping families with some of the struggles parenting has, especially in the Far North where services like these are limited.

Maternity Clinical Governance: I have been a consumer representative on the Maternity Clinical Governance Committee Board for a year now and have learnt so much in this short amount of time. I have built connections, relationships and foundations that have given me access to even more platforms to increase my knowledge and also give me other avenues to assist where I can with my nutrition knowledge. I hope to continue providing feedback from my unique perspective and can already tell we are headed in the right direction in regards to creating a tailored health system. It is scary to know we are shifting so much but I hope it works out for us all in the long run. Especially our vulnerable Whānau here in Aotearoa. Nga mihi mahana,

Natalie Allen

NZ Māori

BSc Human Nutrition, Otago University



Te Kotuku (Whangārei Maternity Unit)



Te Kotuku, the secondary level maternity unit in Whangārei, is the only facility for primary care for women/people residing in Whangārei and Dargaville to give birth. This is one factor, along with population density and the increasing prevalence of co-morbidities, that contributes to the disproportionate number of births taking place in Te Kotuku.



Te Kotuku (Whangārei Maternity Unit)

Te Kotuku Secondary Maternity Unit

2021: 1777 births

2022: 1754 births

Facilities:

- 18** bed combined antenatal/postnatal ward
- 5** birthing rooms
- 2** outpatient assessment
- 1** special baby care unit
- 1** ultrasound room

Workforce:

- 1** Service Manager
- 1** Clinical Midwife Manager
- 49** Employed midwives
- 36** LMC midwives (with an access agreement to Te Kotuku)
- 3.6** Health Care Assistants
- 4.7** FTE Administration
- 8** Obstetricians
- 1** MQSP midwife
- 0.5** Quality midwife / Clinical Coach
- 1.5** Midwifery educators
- 1** Lactation consultant
- 1** Social worker



Services:

- Antenatal clinics
- Obstetric clinics
- Medicine in pregnancy clinic
- Lactation consultant service
- Anaesthetics clinic
- High risk pregnancy clinic
- Diabetes midwife clinic



The last two years have been challenging. The COVID pandemic has caused workforce shortages, ongoing procurement challenges, clinical issues for staff who have had to cope with lockdowns and areas of the workplace shut off for isolation rooms. These issues, along with mask wearing, staff loss due to vaccine mandates, partners perhaps working from home, home schooling and staff generally managing their Whānau to keep everyone safe has impacted on the mental health of everyone.

On the positive side I have witnessed amazing teamwork, preparation, and organisation to allow services to be adapted e.g., zoom for consultations, planning and developing a RED zone and negative pressure rooms, front of house RAT testing.

Sue Bree, as Director of Midwifery, was always ensuring the community LMC midwives were also looked after and regarded as part of our workforce.

The impact on women/people and Whānau of having a baby during the last two years cannot be underestimated. Although we did 'allow' one support person to stay during the woman/person's stay, the feedback survey, undertaken by the MQSP midwife, showed that women/people encountered added stressors during their stay that impacted negatively on them and on their mental health especially.

Staffing update; We have rostered senior clinical midwifery leadership offering clinical advice and expertise twenty-four hours a day over the week. These roles also have a small clinical workload component.

A clinical coach role was also funded and added to the role of the Midwifery Quality & Education specialist.

The Safe Staffing Project showed that we need to employ an additional four FTE midwives to enable this to happen; extra staff on morning shift and at night. At this stage due to staff turnover we are not anywhere close to achieving this level of FTE.

At times the demand on the Maternity ward for beds is exceeding supply. Since 1 July 2022 we are exceeding an average of 82% occupancy. This puts pressure on everyone to keep up with discharges and transfers to our primary units on a continual basis.

In the long term, four beds are marked for a 'transitional care programme' with babies that still require paediatric care but do not need SCBU level input. This project has stalled due to staffing levels and the regular staff are having to cope with an increased number of babies needing blood sugar monitoring and IV antibiotics as well as caring for everyone.

“We will always be facing new challenges.

Good leadership, an adaptive service, and a well-supported and dedicated workforce, which includes clerical, allied health and HCA services is vital to enabling a positive response to those challenges.”

Bay of Islands Primary Maternity Unit

Bay of Islands Primary Maternity Unit

2021: 196 births 50 transfers

2022: 156 births 66 transfers

Facilities:

- 2 birthing rooms
- 5 postnatal beds
- 1 birthing pool
- 1 clinic room

Services:

- Weekly ultrasound clinic
- Weekly obstetric clinic
- Weekly lactation consultant clinic
- Hearing screening 24/7 midwifery cover

Workforce:

- 1 Midwife Manager
- 7 employed midwives
- 10 LMC midwives



In 2022 we established a midwifery-led diabetes service for those with gestational diabetes, ensuring their care encompasses midwifery and whanau-centred values.

We installed a new birth pool in 2022. More than 50% of Whānau birthing at the unit in 2022 chose to use the birth pool during their labour.

All women/people domiciled in the Mid-North area are registered with a community midwife providing continuity of care.

Kaitaia Hospital Primary Maternity Unit

Kaitaia Hospital Primary Maternity Unit

2021: 120 births 44 Transfers

2022: 125 births 30 Transfers

Workforce:

- 1 Midwife Manager
- 10 Employed midwives
- 6 LMC midwives
- 1 FTE Administration



Facilities:

- 2 birthing rooms
- 3 postnatal rooms



Services:

- Ultrasound clinic
- Weekly obstetric clinic
- Newborn hearing
- 24/7 midwifery cover



A review of the model of care provided by Kaitaia maternity unit was completed in 2021 and a new Midwife Manager was appointed. The unit is staffed by midwives 24/7. 83% of the midwives identify as Māori (10 out of 12 employed staff). We hope to establish a diabetes midwifery service in 2023.

Dargaville Maternity Unit

Dargaville

2021: 120 bookings
79 births in Whangarei

2022: 107 births
75 births in Whangarei

Workforce:

- 1 Two midwives providing antenatal and postnatal care

Services:

Antenatal and postnatal midwifery care under the coordinated care model

Weekly ultrasound clinic

Weekly lactation consultant clinic

Obstetric clinic every second week



Whilst some people are attended by LMC midwives from Whangārei, maternity services for Whānau residing in the Kaipara area are otherwise provided under a coordinated care model encompassing antenatal and postnatal services. This is provided by two employed midwives sharing 1.0 FTE. People from this area are required to travel to Whangārei Hospital to give birth if not choosing a homebirth under LMC care.

The option of a postnatal stay in Dargaville Hospital has been reinstated following the disruption to an appropriate inpatient facility due to COVID and the necessity to convert what were the designated postnatal rooms into a red zone.

The maternity service has been augmented with the establishment of more regular antenatal obstetric and ultrasound clinics however it is acknowledged that travel to Whangārei is still required by some whānau for these aspects of care.

Workforce

Te Tai Tokerau currently has a midwifery workforce shortage of a severity not previously experienced, especially within the secondary service in Whangārei Hospital. Rosters are repeatedly depleted of staff and safety is maintained only by the generosity of employed midwives and nurses working additional shifts above their FTE; by quality and education midwives working clinically; by the clinical manager working as a shift leader; and with support from LMC community midwives as they are able. Morale related to workforce shortages is low amongst midwives and it is their sense of obligation to service for Whānau in Te Tai Tokerau that is sustaining the maternity service. This is not sustainable. In addition, after many years of stability, there has been a significant decrease in the number of LMC midwives working in the Whangārei community. By default, this has placed pressure on the District 'service of last resort' beyond the capacity of the assigned FTE. Women/people in this service are attended by employed midwives for their labour/birth and inpatient postnatal care.

Apart from permanent advertisements for midwives, the Te Tai Tokerau workforce is reliant on midwives graduating from the Te Tai Tokerau cohort of the AUT midwifery programme. We are grateful for the likelihood of an increase in the number of graduates at the end of 2024. Local students in the AUT programme are offered employment at Te Kotuku as Health Care Assistants and Maternity Care Assistants, however their availability can, understandably, be somewhat thwarted by the demands of their study. Another recruitment initiative was to reach out to midwives residing in Te Tai Tokerau without a current APC. A letter was distributed via the Midwifery Council of NZ and one midwife has been employed following this. Others who responded to this were unable to work due to the COVID vaccine mandate.

Retention strategies in Te Kotuku include:

- the input of childbirth educators to provide the necessary pre-discharge education to Whānau enhanced breastfeeding support by lactation consultants
- acknowledgement of the additional demands during COVID by the provision of vouchers, snack boxes
- enabling staff to transition to the PTNFH roster
- rostering based on shift requests
- use of on-call arrangements as provided in the midwifery collective agreement
- a shift leadership review resulting in alignment of positions at ACMM level.

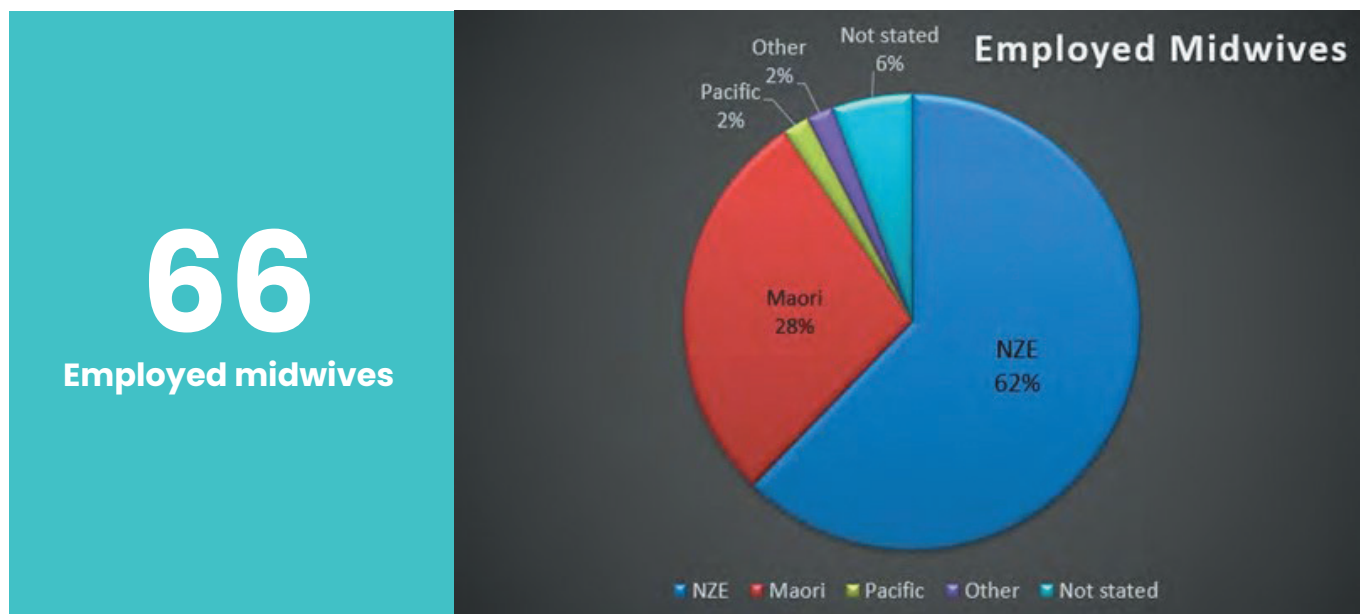


Engagement with LMC workforce

A "one team" approach is evident throughout Te Tai Tokerau. We take pride in this and we are grateful for it.

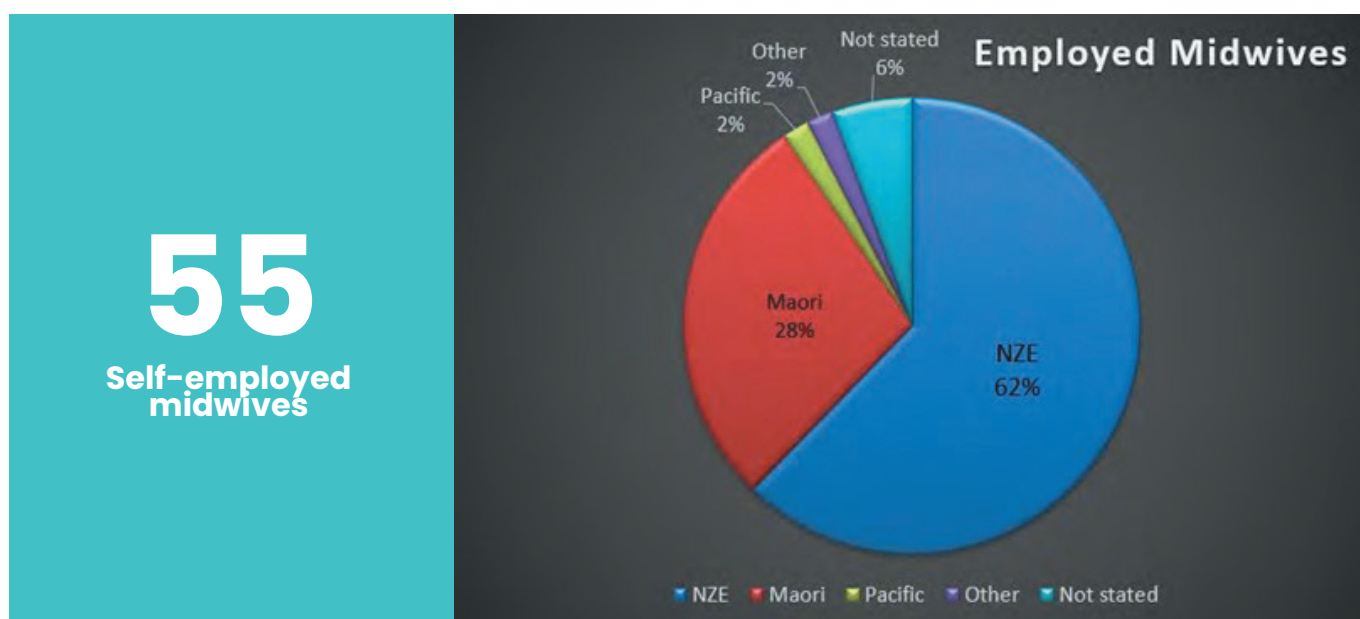
There is reciprocal support between employed midwives, self-employed midwives and medical staff. Self-employed midwives are represented on all maternity committees and regular combined meetings occur within all localities. All education is free of charge for all maternity staff, irrespective of employment status.

Te Tai Tokerau Midwife Workforce



Te Tai Tokerau in the past has had a reasonably stable midwifery population with many midwives moving between being employed and self-employed . This appears to be changing now with shortages within both the employed and self-employed midwifery population. This is especially apparent in Whangārei and Kaipara.

Many self-employed midwives also hold casual employment contracts with Te Whatu Ora and will frequently respond to critical roster gaps.



Te Puawai Ora



Te Puawai Ora is a community-based maternity facility based in Whangārei. Te Puawai Ora provides a welcoming atmosphere where families can stop in to feed or change their baby and access the many maternity-related services that are offered.



2021 and 2022

**22 Childbirth
Education
Classes with
264 attendees**

60 percent of the women who attended clinic to receive a LARC identified as Māori.

Percentage of women exclusively breastfeeding on discharge from hospital.

**Whangārei at 94.5%
Kaitaia at 95.9 %**

Services provided

Newborn Hearing Screening

A quiet room is always kept available at Te Puawai Ora for the newborn hearing screeners to run community clinics for those babies that were not born in hospital or were unable to be screened on the maternity unit.

Free LARC (Jadelle) insertion

There are currently three registered midwives based at Te Puawai Ora who are qualified to insert LARC. This can be by appointment or drop in. Quite often the local LMC's refer people to Te Puawai Ora to benefit from this free service.

15 Jadelles were inserted at Te Puawai Ora in 2022. 60% of the people who attended clinic in 2022 to receive the LARC identified as Māori.



Anti D

Anti D is now available at Te Puawai Ora to those who meet the criteria in pregnancy. It is given in two individual doses at 28 and 34 weeks' gestation.

Immunisation

Te Puawai Ora continues its cold chain accreditation in order to be able to provide free, on-the-spot immunisations to pregnant women/people attending antenatal classes, coffee groups, antenatal appointments etc. As there is always a midwife onsite, Te Puawai Ora also provides a drop-in service Monday to Friday for immunisations. During the level 4 lockdown in 2020, two midwives ran a drive-through service for immunisations at Te Puawai Ora. People stayed in their vehicles whilst their immunisation was given and for 20 minutes afterwards. This was advertised and pre-booked once a week with a large number of people utilising this service.

During 2022, 20.6% of hapū māmā who sought Flu or Boostrix immunisations at Te Puawai Ora, identified as Māori. Immunising hapū māmā in their homes is being discussed with the Te Whatu Ora outreach service. This would enhance equitable access and would also provide an opportunity to offer immunisation to the wider whānau.

Harmony Teen Childbirth Education Classes



Teen Childbirth education has been run in conjunction with Te Ora Hou for the past 13 years. The need to develop these classes was recognised due to the fact that there were a rising number of pregnancies amongst women/people under the age of 20 and there was no education that catered for the pregnant rangatahi of Te Tai Tokerau.

Transport is arranged to pick up each person and their Whānau, partner, or support team to bring them along to class and also transport them back home again. The classes are co-facilitated by Te Ora Hou and a Te Whatu Ora Midwife and Childbirth Educator. A wrap-around service is provided to class participants to awhi them and encourage engagement.

On the first week, a representative from the Nga Tatai Ihorangi team is invited to meet the class and facilitate a short welcome to Te Wananga O Hine Koopu programme.

“Taking the Child Birth Education Classes gave me confidence in being a young māmā and provided me with assurance when I had doubts of ability. An immeasurable amount of manaakitanga was given to us hapū māmā”.
Teen class attendee.

Multiple Birth Club

A Multiple birth group takes place at Te Puawai Ora once a month and is facilitated by a lactation consultant. The group averages 6–12 sets of twins/triplets and is also attended by Whānau during pregnancy.

Community Maternity Social Worker

Te Puawai Ora has a 0.6FTE in-house Social Worker. The social worker receives referrals from LMCs, Emergency Department, community midwives, and the violence intervention programme.

Childbirth Education Classes



The childbirth educators currently hold evening sessions which run for two hours each class over a six-week period. Weekend sessions are also offered. These are held once a month for six hours on the Saturday and on the Sunday.

In order to provide an equitable service, classes are also held in Dargaville, thereby eliminating the need to travel.

22 Childbirth Education Classes were held at Te Puawai Ora in 2021 and 2022. At least 264 Whānau members attended.

Each Monday during the school term, an open coffee group is facilitated at Te Puawai Ora by the childbirth education team. Any pregnant person or people in the early postnatal period are welcome to attend.

A range of topics with guest speakers are planned and then advertised on the popular Childbirth Education Facebook page. These include workshops such as The 4th Trimester, The Brain Wave Trust (“growing great brains”), Sleeping and Settling, Infant First Aid, Baby Massage, Budgeting and so on.

Groups average 20 parents per session with the occasional 30–36. Lots of fathers and grandparents attend these sessions too.

Lactation Consultant Service

Te Whatu Ora, Te Tai Tokerau, has always been proud to consistently lead the country with exclusive breastfeeding rates on discharge. 2022 saw Whangārei at 94.5% with a total of 1474 births, Kaitaia at 95.9 with a total of 122 births and Bay of Islands at 90.42% with a total of 167 births.

We offer regular and free drop-in lactation clinics throughout Te Tai Tokerau.

We work to increase the focus on antenatal expressing for those who have risk factors such as GDM, IUGR, SGA, LGA, Elective Caesarean, Multiples, IOL, and a history of breastfeeding issues.

We work alongside the Diabetes clinic to ensure up-to-date information is being shared along with hand expressing kits.

Free, pre-made hand expressing kits are available at LMC rooms, Te Kotuku, Te Puawai Ora and Childbirth education classes.

Information is given on hand expressing twice daily from 36 weeks with advice from their LMC.

People are then encouraged to bring their EBM with them to the hospital to store in the dedicated milk room in Te Kotuku.

Te Kotuku

Seven-day week LC service for postnatal ward.

Te Puawai Ora

Drop-in Lactation Service Monday, Tuesday, Thursday

Bay Of Islands

Weekly Lactation clinic Friday

Dargaville

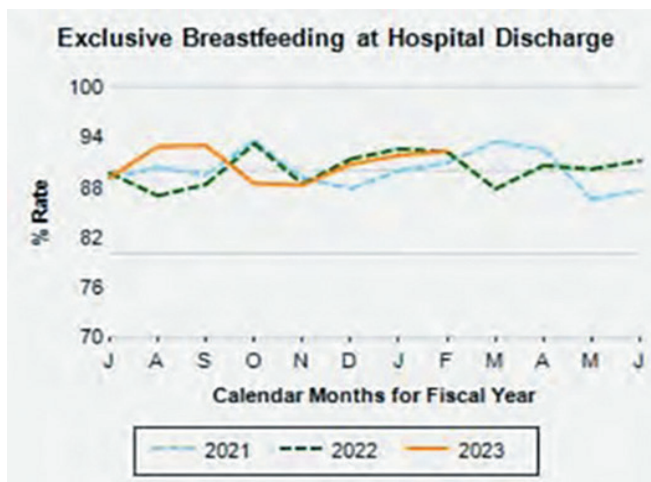
Weekly Lactation clinic Wednesday

Tongue Tie Release

Whangārei

Breastfeeding Education

Education of midwives in Te Tai Tokerau



Lactation Consultant Service

Te Puawai Ora

Lactation drop-in clinics are run from Te Puawai Ora in Whangārei on Mondays, Tuesdays and Thursdays from 10am till 2pm by one of our 4x Lactation Consultants. The clinic is offsite and enables women/people and babies easy access and free designated parking. Clinics have continued to be well attended, with 844 contacts from 1 January – 31 December, 2022. Women/people were seen with a range of problems such as latching problems, damaged nipples, low milk supply, mastitis and unsettled babies. Babies were seen as young as 1 day to 30 months, and some older, with caregivers asking for weaning advice. During the level 4 COVID lockdown, the Lactation Consultants were on call several days a week for feeding issues on the maternity unit and also provided Zoom consults with women/people in the community. This service was very well utilised and should another level 4 lockdown occur, we would use the same process. 10x loan pumps are available for women/people who have low milk supply or damaged nipples. Women/people with pumps are contacted weekly for follow up and are expected to attend clinic fortnightly for plan revision and feeding observation.

Te Kotuku

A Lactation consultant will catch up with all woman/people who are on the postnatal ward, Monday to Friday. This provides an opportunity for the LCs to see women/people on the postnatal ward who are experiencing feeding issues that require specialist advice, and provides the rapport needed for women/people to feel safe and at ease to use Te Puawai Ora's lactation free drop in service if required. There is a Lactation Consultant on call in the weekends from 9am – 3pm. This covers the hospital in general, Maternity, Pediatrics and the Surgical Ward.

Dargaville

In February 2020, the Dargaville Lactation clinic was initiated due to a need in the community for antenatal and postnatal mothers with breastfeeding issues needing to be seen by a consultant and the travel time constraints they faced. A Lactation Consultant from Whangārei travels across every Wednesday to run this free, drop-in clinic.

From 1 January – 31 December, 2022, there were 76 clients that attended (1.8 per clinic). This clinic also has 2x electric loan breast pumps available, which have been loaned out regularly.

Kaitia

Apart from the LMCs, Kaitia no longer has breastfeeding support from wraparound services. We are looking at how this can be rectified. Options include supporting the training of local staff LC certification and tongue tie release training.

Bay of Islands

The Lactation clinic in Bay of Islands' maternity ward is run every Friday between 10am–2pm. It is a free, drop-in service, the same as Whangārei. Thanks to the Countdown Kids Hospital Appeal, we have purchased 2x portable electric double pumps and equipment which can be loaned out to mothers in the community with weekly follow-up. These pumps are regularly loaned out and have assisted women/people to continue to breastfeed and/or express to support milk supply. From 1 January – 31 December, 2022, 130 face-to-face contacts were made. The most common issues were milk supply, latching problems and nipple trauma.

Maternal Mental Health

Manaaki Kākano – Our Team

- One Clinician covering Whangārei North, Dargaville, Kaipara.
- One Clinician covering Whangārei South and Bream Bay/ Mangawhai
- 0.5FTE Clinician in Mid-North
- One Clinician in Far North *plus*
- Share 0.4FTE Psychiatrist – covering entire Te Tai Tokerau region
- Share one Psychologist – covering entire Te Tai Tokerau region

What we can provide

- Consult-Liaison re: whānau under CMHT who become pregnant
- Medication advice Dr to Dr
- Clinical and planned intervention targeting mother-baby bond
- Maternal Mental Health Birth Plan – liaison with Maternity Ward and Special Care Baby Unit
- Liaison with Midwives, Plunket, Lactation support

Maternal Mental Health

Case Manage / Sole Provider

- Newly emerging, moderate to severe
- Brought about by pregnancy and early parenting
- Impacting significantly on day to day function / high level of distress / high risk
- RISK OF impact on mother-baby bonding process

Consult-Liason

- Some distress re: pregnancy, birth, bonding, adjustment to parenting
- Advise re: primary level support
- Resources for primary level stakeholders (eg. HIPs, Whānau Awhina/Plunket, GPs, LMCs, etc)

Collaborative Care

- Longstanding / severe and enduring mental health diagnosis
- Support birth planning and preparation, liaison with LMC / OBGYN
- Brief, targeted specific intervention if parenting / bonding concerns arise
- Access to Maternal CSWs, in-home respite, and Mother-Baby Unit as needed
- CMHT provide clinical oversight and case management

Consult-Liason

- Longstanding / severe and enduring mental health diagnosis
- Planning pregnancy / pregnant / postnatal up to 12 months
- Consult-liason to support treating team

Maternal Mental Health

Manaaki Kākano | Maternal and Infant Mental Health Service

Manaaki Kākano provides a Te Tai Tokerau-wide mental health service for pregnant and postpartum whānau with a focus on bonding and attachment processes. Manaaki Kākano shares its psychology resource (1 FTE) and psychiatry resource (0.4 FTE, currently vacant) with He Tupua Waiora. The Manaaki Kākano team currently is two social workers and 2.5 FTE community mental health nurses. Three clinicians are based in Whangārei, half an FTE is based in the mid-North, and one clinician is in Kaitiāia. Changes over the past two years include co-locating the mid-North Manaaki Kākano clinician in Kaikohe with the local CAMHS team. This allows for better networking and closer relationships with primary level and hospital level maternity services in the mid-North.

Criteria for referral into the service are:

Manaaki Kākano includes experienced mental health clinicians with specific and ongoing training in perinatal and infant mental health. Whānau can access psychological therapies targeting specific trauma such as birth trauma (e.g. EMDR therapy), and intensive therapy targeting parents' own early attachment and relational experiences, and how these impact on their current emotional and relational wellbeing, and their bonding and connection with their infant/s (e.g. Cognitive Analytic Therapy, Schema Therapy, ACT, CBT).

Due to the provision of additional targeted funding, there is now a greater range of support options for māmā and pēpi in Te Tai Tokerau who may present with acute mental health concerns. In-home respite is now available to provide specialist maternal support in the whānau home at times of acute distress. This means whānau can stay connected to their community and their natural supports while a high level of clinical safety and oversight is maintained. This service is available across the Te Tai Tokerau rohe. In-home respite aims to reduce the number of whānau who need to be admitted to the specialist maternal mental health inpatient facility, Starship's Mother and Baby Unit, thus reducing the need for whānau in distress to be transferred to Auckland for care. Work is also underway for there to be a formal policy that if any hapū or postnatal māmā are admitted to Tumanako (the acute mental health inpatient unit in Whangārei), that Manaaki Kākano are contacted at the earliest opportunity to provide consult-liaison and care planning with access to maternal-specific services.

Manaaki Kākano works closely with maternity services, supporting and advising midwives and whānau by linking them with a range of appropriate community services if secondary service is not indicated. In the last two years, a newly-funded service has provided maternal mental health support to women/people in the mild-to-moderate range who would benefit from focused support, but do not need specialist secondary-level care. Arataki (Whangārei and Kaipara), Emerge (Whangārei) and Te Mana Oranga (Mid and Far North) have dedicated community support workers for maternal mental health. These NGOs deliver a community-based, mobile, early-intervention perinatal mental health service.

Maternal Mental Health

He Tupua Waiora | Pregnancy and Parental Service

He Tupua Waiora was established as a pilot in 2017 with the aim of reducing harm and improving the wellbeing of children by addressing the needs of parents and working to strengthen the whānau environment. This service is specifically focused on parents who have alcohol or substance abuse issues, and are currently hapū or have a child less than three years old in their care. These clients are often experiencing multiple complexities such as stigma, mental and physical health issues, poverty, custody issues, violence and abuse, criminal charges, housing issues, and Oranga Tamariki involvement.

In 2021, the service was expanded to provide support into the mid-North area. Although this is an area identified as having a high birth rate and a large Māori population, there had previously been no access to He Tupua Waiora. He Tupua Waiora and the mid-North Alcohol and other Drugs Service worked together to develop a clinical role based in Kaikohe, covering the wider mid-North rohe. The He Tupua Waiora clinician is co-located with the Kaikohe AoD and CMHT teams, providing seamless connection between the services to ensure ease of access for parents in need.

He Tupua Waiora has two clinicians based in Kaitiāia covering the Far North, 0.5FTE in the mid-North, and three clinicians based in Whangārei covering Kaipara, Bream Bay, and Whangārei. He Tupua Waiora works differently from other community teams in that it has capped caseloads of 15 whānau per clinician. This enables clinicians to carry out assertive outreach follow-up with each client including transport, support, and advocacy for whānau interacting with various agencies. Coordination and establishing relationships is a key function of this team.

Māori comprise 73 percent of the whānau working with He Tupua Waiora. Equity of access is a targeted focus of this service. He Tupua Waiora provides interventions focusing on harm reduction in substance use, and psychoeducation about the needs of babies and children during these foundational years. For example, in the last two years, a Clinical Psychologist has been providing Parent-Child Interaction Therapy – Toddler (PCIT – T). PCIT-T is an intensive, highly-structured parent coaching intervention which has been shown to increase secure attachment and emotional regulation in toddlers, as well as reducing parenting stress and mental health symptoms in parents of toddlers.

Clinical Indicators



Our Outcomes – Maternity Clinical Indicators

The New Zealand Maternity Clinical Indicators provide information on interventions and outcomes associated with maternity care for mothers and babies. There are twenty indicators – eight for standard primiparae*; seven for all women/people giving birth; one relating to the time of registration with a LMC; and four are applicable to babies.

Maternity Clinical Indicator data is available from 2009 which provides an opportunity for us to track our outcomes and to compare them with other regions. Analysis of the data enables us to identify trends and areas of concern, then implement changes within our local maternity service where able.

As well as overall rates for each region, each indicator is also presented by ethnicity. Given that our Pacific, Indian and Asian populations are small in Te Tai Tokerau, we are required to exercise caution when interpreting one-off results for these mothers and babies.

The data presented in this report is based on 2020 outcomes which is the most recent data available from the Ministry of Health. It is pleasing to see some steady improvement in several areas as depicted in the review of each Clinical Indicator below.

Standard primiparae are defined as women/people between 20–34 years of age having their first single baby at term (from 37 weeks). The baby is in a head down position and there have been no complications during the pregnancy. It is assumed that these women/people, without risk factors, will all have relatively similar outcomes irrespective of the region in which they reside.

The following Maternity Clinical Indicator statistics are from the latest Ministry of Health clinical indicators released in 2022 giving data up to 2020.

Clinical Indicators

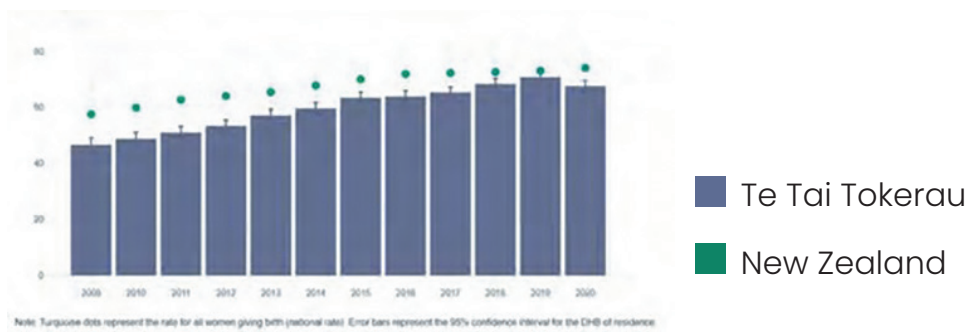
Te Tai Tokerau’s registrations with an LMC in the first trimester increased steadily until 2019 but has been consistently below the national average.

In 2020 the rate dropped to 67.6% of women/people of all ethnicities registering with an LMC in the first trimester but reducing to 55.3% for Māori women/people.

This is possibly related to COVID. Some women/people in our annual survey reported that it was more difficult contacting an LMC early in their pregnancy due to COVID restrictions.

There is an ongoing focus within the area to encourage women/people to book early with an LMC.

Indicator One: Registration with a Lead Maternity Carer (LMC) in the first Trimester of Pregnancy

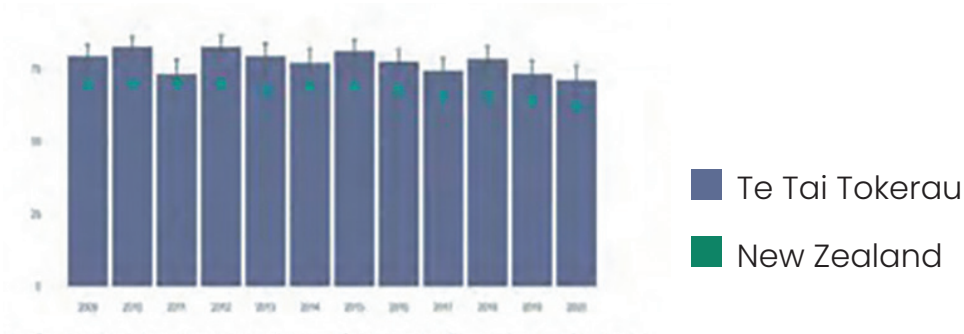


| Rates for 2020 | | | | | | |
|-----------------------|-----------------|-------|---------|--------|----------------------|-----------|
| | All ethnicities | Māori | Pacific | Indian | Asian (excl. Indian) | NZE/other |
| Te Tai Tokerau | 67.6 | 55.3 | 63.6 | 88.4 | 80.6 | 82.7 |
| New Zealand | 74.1 | 60.6 | 47.1 | 75.8 | 79.4 | 85.8 |

Clinical Indicators

Indicator 2: Standard Primipara who have a spontaneous vaginal birth at a maternity facility.

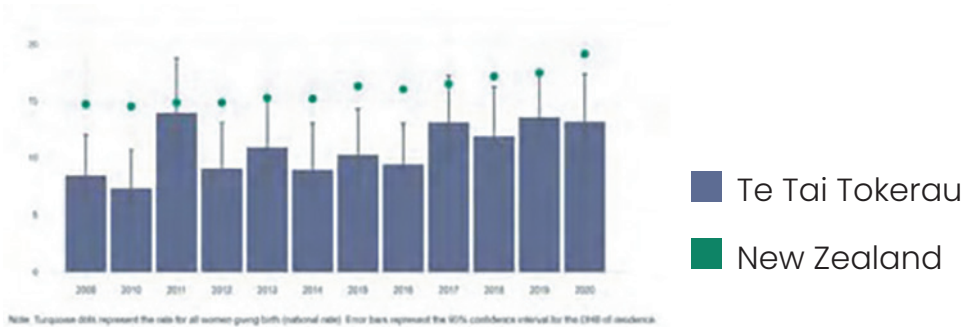
Te Tai Tokerau continues to have a higher spontaneous vaginal birth rate for standard primiparas than the national average across all ethnicities.



| Rates for 2020 | | | | | | |
|-----------------------|-----------------|-------|---------|--------|----------------------|-----------|
| | All ethnicities | Māori | Pacific | Indian | Asian (excl. Indian) | NZE/other |
| Te Tai Tokerau | 71.1 | 78.2 | 100 | 51.9 | 60 | 67.4 |
| New Zealand | 62.1 | 74.1 | 70.8 | 44.6 | 54.6 | 61.1 |

Indicator 3: Standard Primipara who undergo an instrumental vaginal birth

Te Tai Tokerau remains consistently below the national average for this indicator

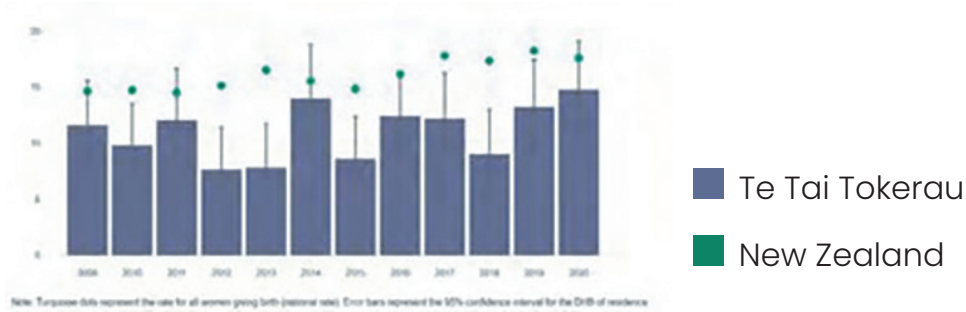


| Rates for 2020 | | | | | | |
|-----------------------|-----------------|-------|---------|--------|----------------------|-----------|
| | All ethnicities | Māori | Pacific | Indian | Asian (excl. Indian) | NZE/other |
| Te Tai Tokerau | 13.2 | 6 | 0 | 18.5 | 30.0 | 14.9 |
| New Zealand | 19.2 | 9.9 | 13.2 | 28.3 | 24.2 | 20 |

Clinical Indicators

Indicator 4: Standard Primipara who undergo Caesarean section

Te Tai Tokerau continues to have a consistently lower than average caesarean section rate with the exception of women/people of Indian descent. This is possibly attributable to higher rates of gestational diabetes in this population. There has been a steady increase since in the rate of caesarean sections since 2018.

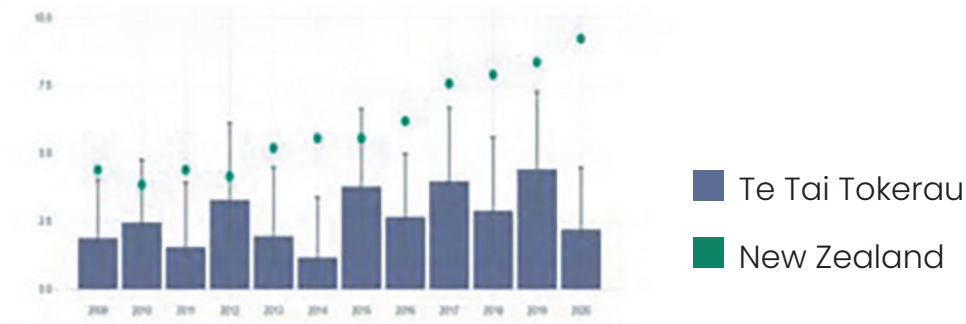


Note: Turquoise dots represent the rate for all women going birth (national rate). Error bars represent the 95% confidence interval for the DHB of residence.

| Rates for 2020 | | | | | | |
|-----------------------|-----------------|-------|---------|--------|----------------------|-----------|
| | All ethnicities | Māori | Pacific | Indian | Asian (excl. Indian) | NZE/other |
| Te Tai Tokerau | 14.8 | 12 | 0 | 29.6 | 10 | 15.6 |
| New Zealand | 17.5 | 13 | 15.5 | 25.7 | 19.5 | 17.7 |

Indicator 5: Standard Primipara who undergo induction of labour

Our induction of labour rates are significantly below the national average across all ethnicities for 2020. The numbers of inductions over the last two years since 2020 have increased due to the introduction of GAP and a high rate of diabetes in our population but this is not reflected in the 2020 data.

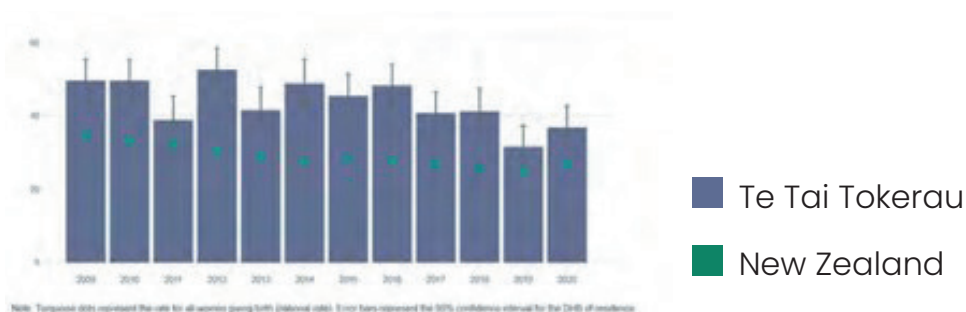


| Rates for 2020 | | | | | | |
|-----------------------|-----------------|-------|---------|--------|----------------------|-----------|
| | All ethnicities | Māori | Pacific | Indian | Asian (excl. Indian) | NZE/other |
| Te Tai Tokerau | 2.2 | 0.8 | 14.3 | 3.7 | 0 | 2.8 |
| New Zealand | 9.2 | 6.3 | 9.8 | 15.8 | 6.8 | 9.5 |

Clinical Indicators

Indicator 6: Standard primipara who undergo an induction of labour

Te Tai Tokerau continues to have a high rate of intact perineums for primiparous women/people when compared to the rest of New Zealand. Our low instrumental delivery rate contributes to this.

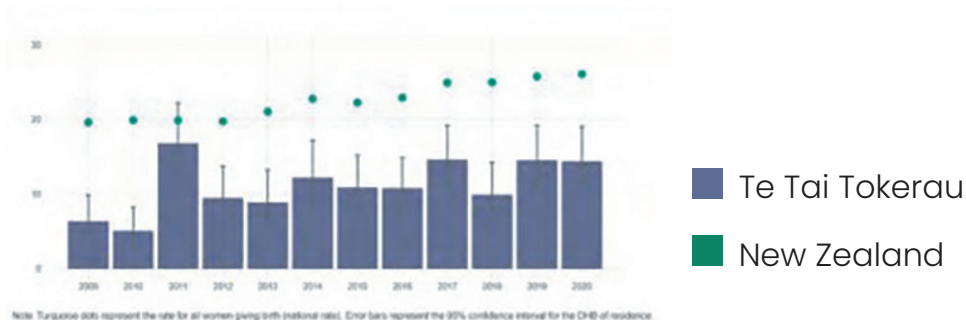


Note: Turquoise dots represent the rate for all women going birth (national rate). Error bars represent the 95% confidence interval for the CHD of residence.

| Rates for 2020 | | | | | | |
|-----------------------|-----------------|-------|---------|--------|----------------------|-----------|
| | All ethnicities | Māori | Pacific | Indian | Asian (excl. Indian) | NZE/other |
| Te Tai Tokerau | 36.9 | 45.3 | 28.6 | 10.5 | 0 | 36.1 |
| New Zealand | 26.7 | 40.9 | 22.6 | 10.0 | 13.4 | 27.4 |

Indicator 7: Standard primipara who undergoing episiotomy and no 3rd or 4th-degree perineal tear

With the exception of our Asian population, Te Tai Tokerau continues to have a rate lower than the national average for this indicator.



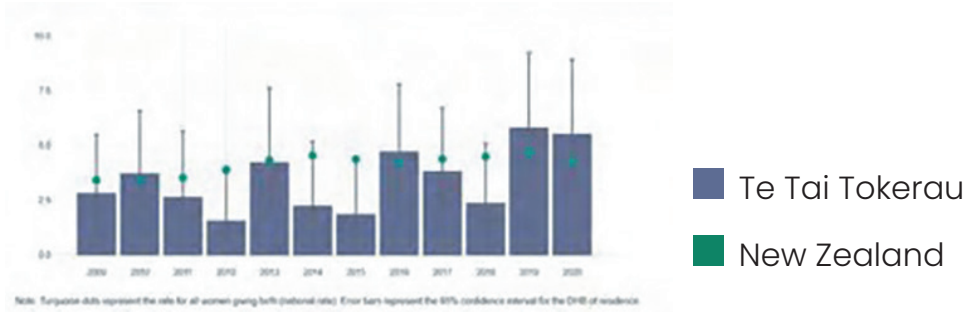
Note: Turquoise dots represent the rate for all women going birth (national rate). Error bars represent the 95% confidence interval for the CHD of residence.

| Rates for 2020 | | | | | | |
|-----------------------|-----------------|-------|---------|--------|----------------------|-----------|
| | All ethnicities | Māori | Pacific | Indian | Asian (excl. Indian) | NZE/other |
| Te Tai Tokerau | 14.4 | 9.4 | 0 | 15.8 | 55.6 | 16.8 |
| New Zealand | 26.1 | 13.5 | 21.7 | 42.6 | 39.6 | 26.1 |

Clinical Indicators

Indicator 8: Standard primipara sustaining a 3rd or 4th-degree perineal tear and no episiotomy.

Te Tai Tokerau has experienced an increase in the rate of severe perineal trauma in 2019 and 2020. Our rates are now higher than the national average especially within our Indian community. We plan to review this outlier in the coming year.



| Rates for 2020 | | | | | | |
|-----------------------|-----------------|-------|---------|--------|----------------------|-----------|
| | All ethnicities | Māori | Pacific | Indian | Asian (excl. Indian) | NZE/other |
| Te Tai Tokerau | 5.5 | 3.4 | 0 | 31.6 | 0 | 4.2 |
| New Zealand | 4.3 | 3.1 | 5.1 | 7.7 | 4.9 | 3.9 |

Indicator 9: Standard primipara undergoing episiotomy and sustaining a 3rd or 4th-degree perineal tear

Te Tai Tokerau overall rate for this indicator is below the national average. The numbers are small and no definite conclusions can be drawn as this outcome does not appear to equate with instrumental-assisted births.

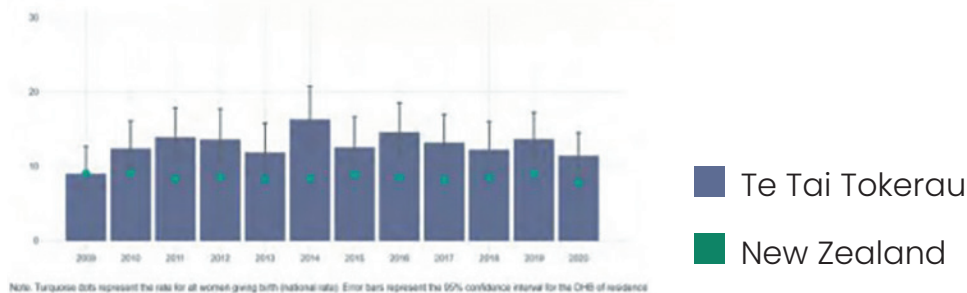


| Rates for 2020 | | | | | | |
|-----------------------|-----------------|-------|---------|--------|----------------------|-----------|
| | All ethnicities | Māori | Pacific | Indian | Asian (excl. Indian) | NZE/other |
| Te Tai Tokerau | 0.7 | 0 | 0 | 9 | 11 | 0.8 |
| New Zealand | 2.1 | 0.7 | 2.2 | 4.7 | 3.3 | 1.9 |

Clinical Indicators

Indicator 10: Women having a general anaesthetic for caesarean section

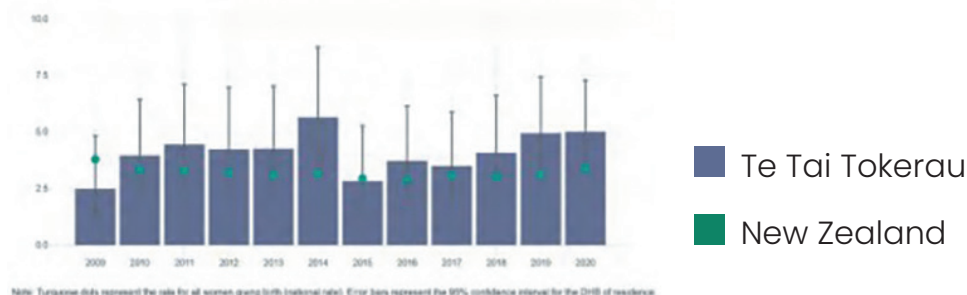
Te Tai Tokerau has consistently had higher than national rates for this indicator however Te Tai Tokerau caesarean section rate and epidural use is low. The numbers are also small.



| Rates for 2020 | | | | | | |
|-----------------------|-----------------|-------|---------|--------|----------------------|-----------|
| | All ethnicities | Māori | Pacific | Indian | Asian (excl. Indian) | NZE/other |
| Te Tai Tokerau | 11.4 | 13.6 | 28.6 | 4.5 | 16.7 | 8.2 |
| New Zealand | 7.8 | 10.5 | 9.8 | 7.9 | 5.5 | 6.9 |

Indicator 11: Women requiring a blood transfusion with caesarean section

Te Tai Tokerau has a higher than average rate of women/people requiring blood transfusions with a caesarean section. However we have a low repeat caesarean section rate compared to the rest of NZ, so a higher proportion of women/people are having emergency rather than planned caesarean. Emergency caesarean's have higher rates of general anaesthetic and blood transfusion. When these factors are adjusted for the difference disappears and we actually had an overall lower rate of blood transfusion associated with delivery compared to the national average and no difference in general anaesthetic.



| Rates for 2020 | | | | | | |
|-----------------------|-----------------|-------|---------|--------|----------------------|-----------|
| | All ethnicities | Māori | Pacific | Indian | Asian (excl. Indian) | NZE/other |
| Te Tai Tokerau | 5 | 6.2 | 21.4 | 4.5 | 6.7 | 1.8 |
| New Zealand | 3.4 | 4.3 | 5.1 | 3.6 | 3.7 | 2.5 |

Clinical Indicators

Indicator 12: Women requiring a blood transfusion with vaginal birth

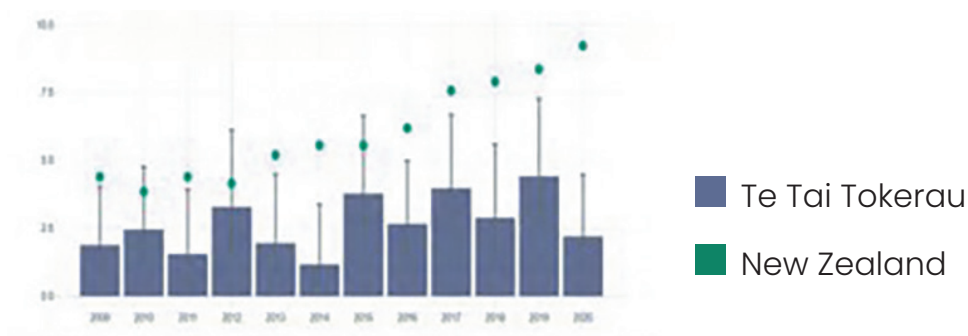
Te Tai Tokerau has consistently remained below national rates for this indicator and the rate remains stable, with the exception of Indian women/people.



| Rates for 2020 | | | | | | |
|-----------------------|-----------------|-------|---------|--------|----------------------|-----------|
| | All ethnicities | Māori | Pacific | Indian | Asian (excl. Indian) | NZE/other |
| Te Tai Tokerau | 1.8 | 1.9 | 2.8 | 10.2 | 2.1 | 0.8 |
| New Zealand | 2.4 | 2.0 | 4.0 | 3.7 | 3.5 | 1.7 |

Indicator 13: Diagnosis of eclampsia on birth admission

Te Tai Tokerau saw 1 person in 2020 who developed eclampsia.

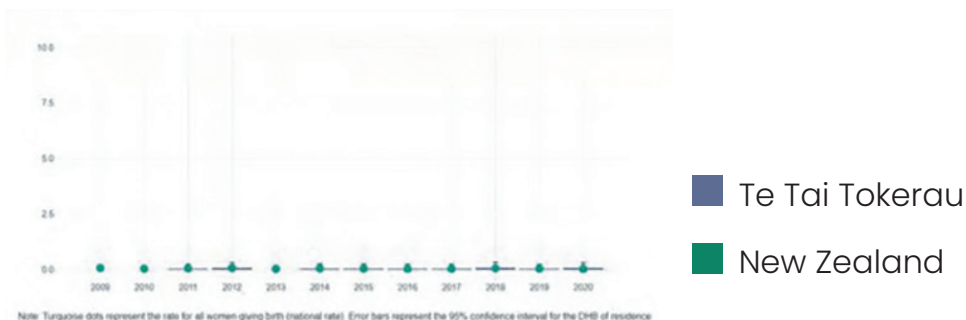


| Rates for 2020 | | | | | | |
|-----------------------|-----------------|-------|---------|--------|----------------------|-----------|
| | All ethnicities | Māori | Pacific | Indian | Asian (excl. Indian) | NZE/other |
| Te Tai Tokerau | 2.2 | 0.8 | 14.3 | 3.7 | 0 | 2.8 |
| New Zealand | 9.2 | 6.3 | 9.8 | 15.8 | 6.8 | 9.5 |

Clinical Indicators

Indicator 14: Women having a perimortem hysterectomy

Two people in 2020 had a peripartum hysterectomy. These were discussed at M&M meetings and reported as SAC events.

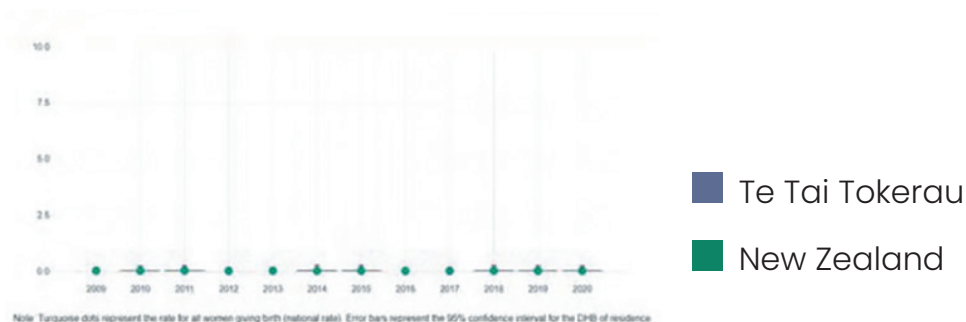


Rate (%)

| dhb | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Northland | 0.00 | 0.00 | 0.04 | 0.09 | 0.00 | 0.05 | 0.05 | 0.04 | 0.04 | 0.09 | 0.04 | 0.08 |
| All births | 0.08 | 0.04 | 0.06 | 0.08 | 0.04 | 0.06 | 0.05 | 0.04 | 0.05 | 0.06 | 0.05 | 0.04 |

Indicator 15: Women admitted to ICU and requiring ventilation during the pregnancy or postnatal period

In 2020 only 1 woman/person was admitted to ICU requiring ventilation.

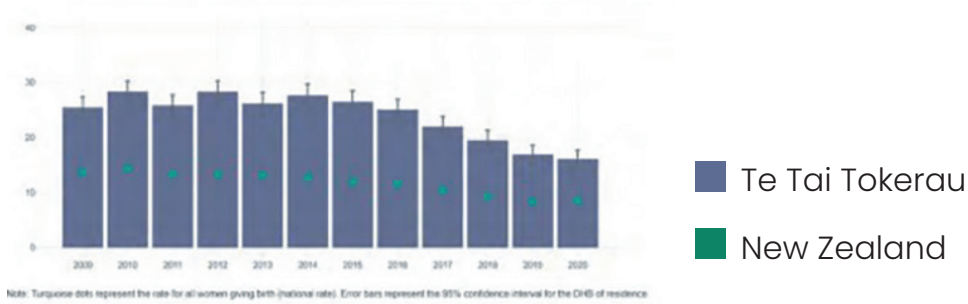


| dhb | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Northland | 0.00 | 0.04 | 0.04 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.00 | 0.05 | 0.04 | 0.04 |
| All births | 0.03 | 0.03 | 0.03 | 0.02 | 0.03 | 0.02 | 0.03 | 0.02 | 0.02 | 0.03 | 0.02 | 0.03 |

Clinical Indicators

Indicator 16: Maternal tobacco use during postnatal period

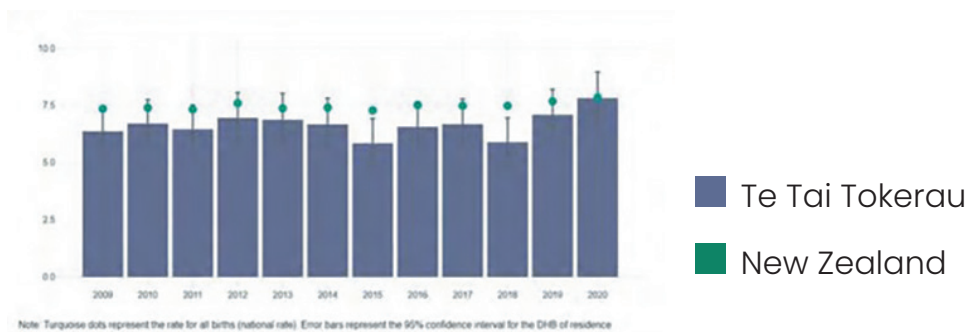
There has been a marked improvement in smoking rates, although it is still higher than the national average.



| Rates for 2020 | | | | | | |
|-----------------------|-----------------|-------|---------|--------|----------------------|-----------|
| | All ethnicities | Māori | Pacific | Indian | Asian (excl. Indian) | NZE/other |
| Te Tai Tokerau | 16.1 | 25.6 | 11.4 | 0 | 1.5 | 5.1 |
| New Zealand | 8.6 | 22.9 | 6.0 | 0.3 | 0.4 | 4.7 |

Indicator 17: Pre-term Birth

Despite our high levels of deprivation and smoking, our pre-term birth rate has consistently been below the national average but the last three years have seen an increase.



| Rates for 2020 | | | | | | |
|-----------------------|-----------------|-------|---------|--------|----------------------|-----------|
| | All ethnicities | Māori | Pacific | Indian | Asian (excl. Indian) | NZE/other |
| Te Tai Tokerau | 7.8 | 8.7 | 5.1 | 6.3 | 7.9 | 6.5 |
| New Zealand | 7.9 | 8.9 | 8.1 | 8.8 | 7.3 | 7.1 |

Clinical Indicators

Indicator 18: Small babies at term (37–42 weeks' gestation)

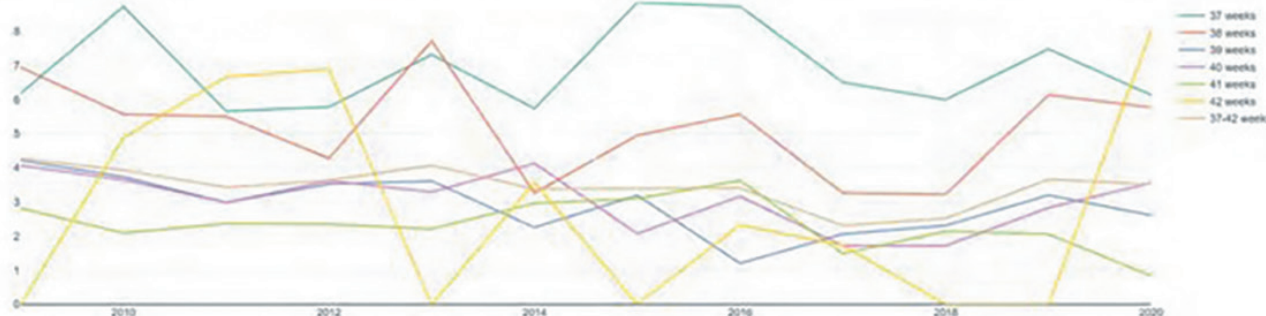
Small for gestational age is defined as being below the 10th percentile for birthweight on the INTERGROWTH-21 growth charts for gestational ages 37 to 42 weeks.

This does not take into account the ethnicity, height and weight of the mother.

Due to this and the make-up of our population, the data does not necessarily represent whether our babies are in fact SGA.

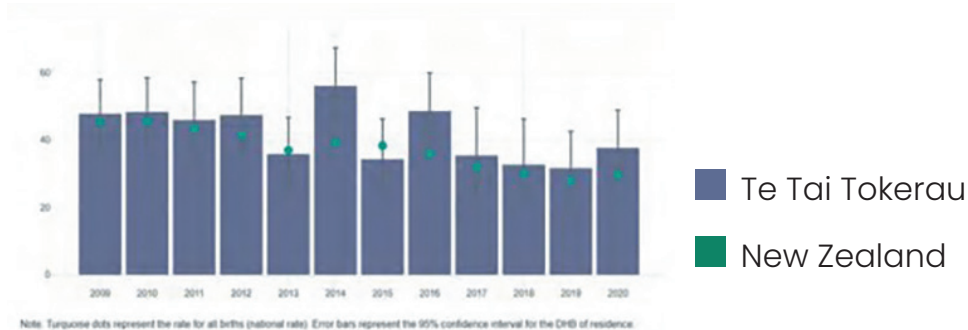
We are currently using customised growth charts for all births in Te Tai Tokerau.

| Rates for 2020 | | | | | | |
|-----------------------|-----------------|-------|---------|--------|----------------------|-----------|
| | All ethnicities | Māori | Pacific | Indian | Asian (excl. Indian) | NZE/other |
| Te Tai Tokerau | 3.5 | 4.4 | 2.8 | 6.8 | 1.4 | 1.7 |
| New Zealand | 3.0 | 3.3 | 2.4 | 7.3 | 3.9 | 1.9 |



Clinical Indicators

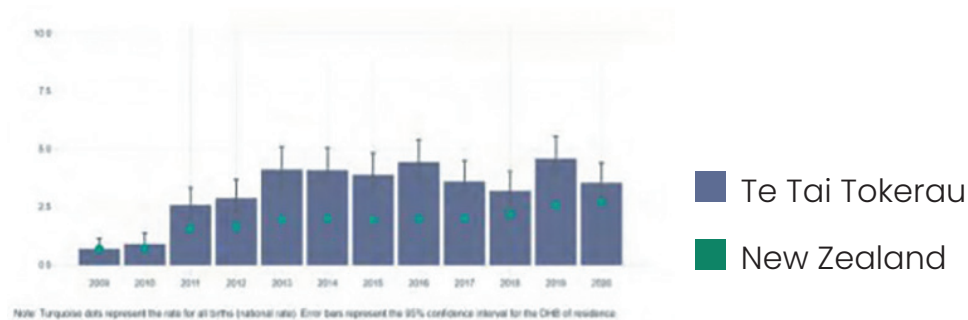
Indicator 19: Small babies at term born 40–42 weeks gestation



| Rates for 2020 | | | | | | |
|-----------------------|-----------------|-------|---------|--------|----------------------|-----------|
| | All ethnicities | Māori | Pacific | Indian | Asian (excl. Indian) | NZE/other |
| Te Tai Tokerau | 3.5 | 4.4 | 2.8 | 6.8 | 1.4 | 1.7 |
| New Zealand | 3.0 | 3.3 | 2.4 | 7.3 | 3.9 | 1.9 |

Indicator 20: Babies born at 37+ gestation requiring respiratory support.

Te Tai Tokerau has a higher rate than the national average of babies needing ventilation but we have previously identified that this is due to local policies around when CPAP is discontinued.



| Rates for 2020 | | | | | | |
|-----------------------|-----------------|-------|---------|--------|----------------------|-----------|
| | All ethnicities | Māori | Pacific | Indian | Asian (excl. Indian) | NZE/other |
| Te Tai Tokerau | 3.5 | 3.6 | 0 | 4.5 | 5.7 | 3.3 |
| New Zealand | 2.7 | 2.9 | 3.4 | 2.9 | 1.6 | 2.6 |

Education

Midwifery educators support all midwives across the region to meet their Midwifery Council education and professional development requirements, as well as our service requirements. Education takes place at all maternity units in Te Tai Tokerau and is offered free of charge to all LMC midwives.

We provide all staff and Lead Maternity Carers with opportunities to actively engage in meaningful, up-to-date, evidence-based education on a continuous basis.

Furthermore, our training has an interdisciplinary component which builds teamwork, enhances systems and processes, and develops a shared understanding.

Advanced Neonatal Life Support and PROMPT are examples of these interdisciplinary training days. Both days are offered to the wider clinical team including midwives, anaesthetic registrars, obstetric consultants, paediatric registrars and their respective house officers, registered nurses working in SCBU and ED nurses and doctors.

The midwifery educators, work closely with the MQSP coordinator to link identified topics into midwifery education.

Sepsis has been an education topic throughout 2022 to align with our new sepsis protocols and this work will continue in 2023.

In 2023 we will also offer

- RANZCOG fetal surveillance education for all practitioners
- Compassionate and quality maternity care to the LGBTTQIA + community (lesbian, gay, bisexual, transgender, takatāpui, queer, intersex, asexual and others)
- The Hypoglycaemic baby



Education

The following education sessions were held during 2021/2022. Many were scheduled several times throughout the year. The education programme was delayed somewhat by COVID-19 when all education ceased for six weeks in March and April 2022.

| Name of Course | |
|---|--|
| NLS Neonatal life support - advanced (MDT) (8hrs) | S.T.A.B.L.E (8hrs) |
| Midwifery emergency skills refresher (8hrs) | Breastfeeding workshop (8hrs) |
| PROMPT (8hrs) | Breastfeeding workshop (4hrs) |
| Nurses working in maternity (8hrs) | OFSEP education & CTG workshop (8hrs) |
| Suturing workshop (8 hrs) | Breech without borders (8hrs) face-to-face + online education for 1 year |
| Complex māmā (8hrs) | Neonatal Perinatal Pathology (8hrs) |
| IMAC immunisation workshop (8 hrs) | Early pregnancy bleeding (4hrs) |
| Complex pēpi (8hrs) | Protecting normal birth (8hrs) |
| Fetal surveillance education | CTG workshop (4hrs) RANZCOG online |



Breech Without Borders

Breech Without Borders workshop

The workshop included simulation training with the instructor and activity stations that included breech birth video analysis and clinical scenario flashcards.

Part of the ongoing breech education from Breech Without Borders is twice-monthly live sessions for one year to provide ongoing mentorship.

"This is an excellent course and workshop for training for vaginal breech deliveries. I particularly appreciated the evidence reviewed, the videos, the simulations, the hands-on practice"

"It's been amazing to learn so many new skills to potentially save a baby's life by learning new manoeuvres for my tool kit, but even more so, learning when to keep my hands off and trust the process."

"Amazing workshop, totally demystified vaginal breech birth and has given me confidence to discuss this with women/people and be a birth attendant at breech births"



Vaginal breech birth at Te Kotuku - Shared with permission

PROMPT *Practical Obstetric Multi Professional Training*

Plans for multi-disciplinary emergency training were commenced in 2021. Whilst starting this training was marked as a top priority for Te Tai Tokerau, however due to COVID breakouts and lockdowns, it took another 18 months for our staff to be able to attend the train the trainer study day in Auckland and begin offering the course.

The train the trainer session was eventually attended in June 2022. This included attendance by four obstetricians and five midwives from throughout Te Tai Tokerau. We are fortunate to have two anaesthetists and one midwife who have been trained prior, who also joined the faculty to deliver this education.

The first PROMPT session was held in November 2022 attended by 18 participants (Obstetric House Officers, Anaesthetics, Midwives and Associate Charge Midwife Managers). PROMPT colleagues from Middlemore Hospital came to this first session to support. It was incredibly helpful to have their experience and knowledge on the day.

Topics covered were: Maternal Collapse, Shoulder Dystocia, Pre Eclampsia/Hypertension, Postpartum Haemorrhage, Newborn life support, estimating blood loss, sepsis, situational awareness.

Following a successful PROMPT training in Te Kotuku, a session was held in Bay of Islands Hospital. Feedback included that it was great to get to know your colleagues prior to an emergency, and also to gain a better understanding of what people can do in an emergency so everyone is utilised to their full potential – especially in situations in rural units when help is more limited.

In 2023 PROMPT is being offered in Bay of Islands Hospital, Kaitaia Hospital and Te Kotuku maternity unit, with most spaces already filled.

“Multidisciplinary training is awesome - we need more of it!”

“I have learned and consolidated my midwifery skills”

“Very valuable learning & refreshers, thank you”

“Love the multi-disciplinary dynamic”



Clinical Coach

The Clinical Coach role commenced in early 2022. During 2022 two internationally qualified midwives began working within Te Kotuku and were supported to complete all requirements for NZ registration. New midwives received guidance from the clinical coach as a preceptor to support their smooth transition to working within the unit. Due to the changes to the midwifery undergraduate degree, there were no new graduate midwives in Te Tai Tokerau in 2022.

The clinical coach was also utilised to provide training to midwives in new initiatives such as the sepsis box, Magnesium Sulphate grab box, IV antibiotics for babies and other areas of practice in which midwives requested support.

In 2023 the Clinical Coach will be assisting a return-to-practise midwife, new graduate midwives, and new staff to integrate into the Te Tai Tokerau midwifery workforce.

Right time Right Place Right people
Kia ora,

I have been wanting to return to practice as a midwife for a number of years. I attempted to pursue this in Wellington and Hawkes Bay.

I always dreamed of living in the winterless North. I love it up here; the climate, lush vegetation, gorgeous beaches and generous people.

After moving to Whangārei, I worked for a year as a Bureau Nurse, including several shifts on the postnatal ward. Te Kotuku is a lovely new maternity unit. The midwives are very experienced. I am fortunate to have been so well supported to return to midwifery practice. I feel I have been embraced and encouraged to get on with it. Women's/people's health is my passion. This is an emotional, scary and exciting time for me. I feel at home in the right place with the right people.

Arohanui Chris



Chris Hobbs - midwife

Midwifery First Year of Practice



I began my midwifery journey in 2019. I started placement at Te Kotuku maternity unit mid-year and then went on to do many placements there. I have always felt supported by the midwives (both core and LMC) and other health professionals midwives work alongside.

It has been great doing placements here as I have built really good relationships which is really important to me as I have just completed my four-year degree and will be starting the new graduate programme at Te Kotuku.

Dallas Halliday

There were no midwifery first year of practice midwives working in Te Kotuku in 2022.

We are investigating the possibility of supporting first year of practice midwives working in a variety of maternity settings – rural, community and secondary services – within Te Whatu Ora Te Tai Tokerau.

Quality Projects

Induction of Labour using Misoprostol

Following the publication of Induction of labour: a clinical practise guideline in 2021, the current induction of labour process was reviewed. World Health Organisation as well as RANZCOG recommendations and a review of research on the topic, directed the change from vaginal Prostaglandin gel induction of labours, to oral Misoprostol.

After consultation with other maternity units who had already made the change, a large education and awareness campaign was commenced. Lanyards were given out to all staff, support was given in the startup period to support staff in the new process, and a commencement date was established. A new booking process and online booking system was also rolled out, to ensure a safe number of inductions of labour were booked according to staffing levels, and planned inductions were prioritised in order of importance.

The process was reviewed at one year which revealed a reduction in time spent on the ward awaiting labour, time in established labour, the need for syntocinon augmentation, and caesarean section.

In 2023, an induction of labour project will look at our induction of labour process from booking onwards. An audit will be undertaken to examine adherence so that all inductions are booked within best practise guidelines. The aim of the project is to see and test where improvements can be made.



| MISOPROSTOL INDUCTION | |
|--|---|
| DATE: | |
| <input type="checkbox"/> CTG prior to commencing IOL | <input type="checkbox"/> CTG after initial dose |
| 1 st Dose administered | Time: |
| CTG prior to next assessment | DUE: |
| 2 nd Dose Administered | Time: |
| CTG prior to next assessment | DUE: |
| 3 rd Dose administered | Time: |
| CTG prior to next assessment | DUE: |
| 4 th Dose administered | Time: |
| CTG prior to next assessment | DUE: |

>> Birth year and month

births



Induction of Labour rate Te Tai Tokerau DHB (Data from QLIK)

Quality Projects

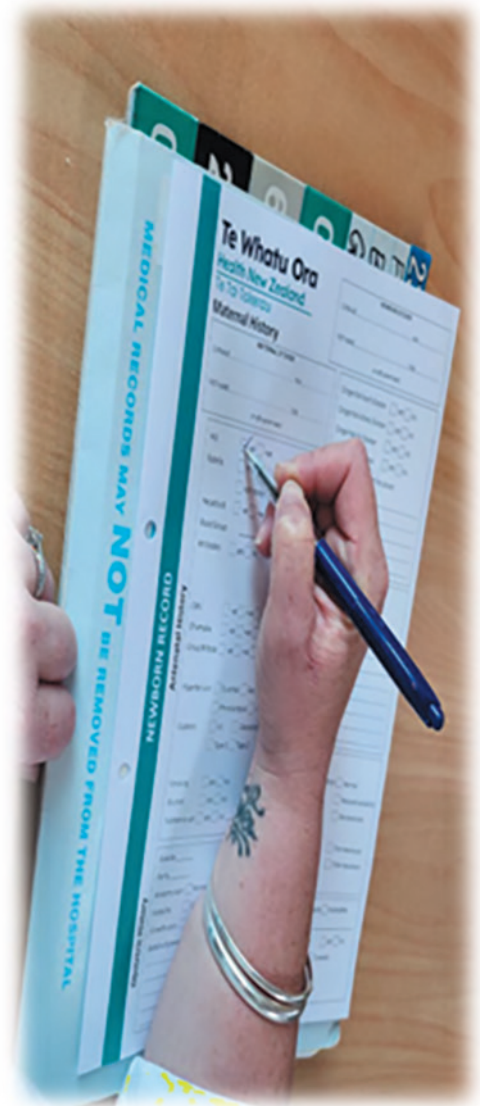
Newborn Observation Chart and Newborn Early Warning ScoreNOC/NEWS

In line with ACC directive NOC/NEWS was implemented in August 2021. Staff in Te Tai Tokerau had been familiar with using MEWs chart for a long period of time, so rolling out NOC/NEWS was relatively straightforward. A change in practice for some risk assessment categories (such as meconium observations being necessary only for thick meconium) meant some further education was introduced in study days and in-service sessions, but overall the NEWS chart has been a welcome addition in the care for newborn babies and is now business as usual.

Newborn Record

After NOC/NEWS was implemented, feedback from staff using the form recognised the significant number of duplications in newborn documentation. An audit was undertaken by a paediatric house officer, who found that less than 10% of the newborn charts were completed to a satisfactory level. A project team, consisting of Quality Midwife, Paediatric Quality Nurse, Paediatric house officer and Paediatrician, was established and a new newborn record developed. This form removed duplication of information and incorporated the NOC/ NEWS chart within the form, as well as removing ambiguity and improving the documentation of the newborn check.

The new form was trialed for two months, with a large amount of feedback from both paediatrics and maternity. Several relevant changes were made and the final copy has started circulation recently. Another audit will be done to establish if the new form is completed properly, or if more education needs to be undertaken.

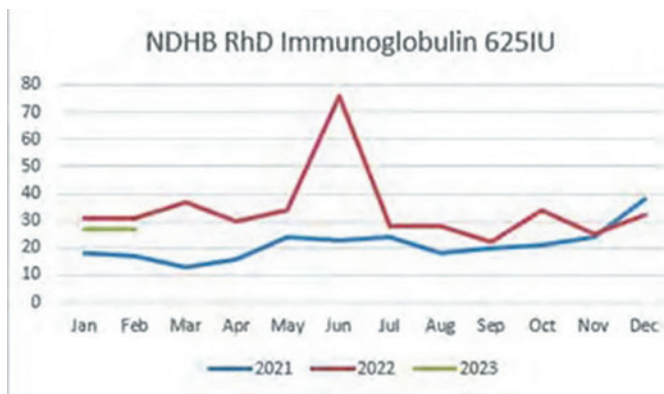


Prophylactic Anti D

This process was set up and has been implemented since 2021. Anti-D was made available in the community with the help of local birth units, pharmacy and community clinics.

The referral form has been utilised by LMCs with approximately one to four women /people a week referred to antenatal clinic in Whangārei and the rural units for prophylactic Anti-D injection.

The exact number using the community locations is as yet unknown, although it appears to be not particularly well used given the number of referrals to antenatal clinics. This will be audited in the coming year to ensure it is meeting needs and ensuring equity of access.



Sites for storage of Anti D throughout the community to enable women and their LMCs to easily be able to access Anti D have been accredited by NZ Blood service. Midwifery education for community midwives has been completed. The Anti D guideline has been updated to reflect the new best practice guidelines.

M&M meetings: Maternity and Morbidity

Monthly meetings are held both in person and on Zoom. During Covid, Zoom was introduced to facilitate the continuation of these important meetings, and this has seen a significant increase in the number of attendees at the meeting. For this reason, offering Zoom for these meetings has continued.

All events that require transfer to NICU/ICU, unexpected adverse events, or serious events (that will require a serious events analysis) are reviewed in the Morbidity and Mortality meeting. The history of the māmā/person, and timeline of events is presented, usually by the LMC midwife, in a safe and supportive environment. Any cases that have paediatric element is presented by the Paediatrician in charge of the case. Every effort is made to review these cases in the month following the event.

The following changes have resulted from the M&M meetings

| Learning Point: | Implementation: | Status: |
|--|--|--|
| Ambulance transport delayed or unavailable for transfer from rural units to Te Kotuku Maternity Unit | Meeting with St Johns and plan made for increased availability to ambulances | Completed – ambulance now rostered 24 hours a day in Kaitaia |
| Care plans when presenting with reduced fetal movements | New guideline outlining best practise when caring for those with reduced fetal movements. Suggests referral to obstetricians for review and care plan that may including induction of labour. Emphasis on referral and individualised care plan that takes all risk factors into consideration | Completed |
| Emergency calls and communication around emergency situations | Training and new process for emergency calls to ensure correct call is heard and communicated PROMPT multi-disciplinary training for all staff | Completed |
| Magnesium Sulphate infusion (loading and maintenance doses) | New premix bags that are separated into loading and maintenance dose Pre-Eclampsia grab box for efficient treatment of pre-eclampsia Education on the new bags and box | Completed |
| Adequate diabetes service in Far North | Employment of a diabetes midwife to engage with māmā/people in Far North diagnosed with diabetes and pregnant. Stronger connection between maternity care and diabetes care services in rural areas | Completed |

M&M meetings: Maternity and Morbidity

| | | |
|--|---|-------------------|
| Fetal Scalp sampling and its use in Te Kotuku to help with decisionmaking around progress | Required further discussion amongst Obstetricians | Ongoing |
| Employment of a Kaiawhina in Te Kotuku to enhance the connection between Whānau and the maternity service | This role has been approved | Ongoing |
| Best practise for pre-term, pre-labour rupture of membranes | Guideline reviewed to ensure evidence based best practise New patient information form for parents to take home upon discharge if being conservatively managed | Completed |
| Ability to contact obstetricians, in particular second on call when required in an emergency | All units supplied with direct dial phone numbers for Obstetric team | Completed |
| Early engagement | Project with local primary care providers to encourage early engagement Billboards in community encouraging early engagement | To be reassessed |
| Use of partogram in rural units | Education on the use of partogram and the importance when transferring to another unit | Completed |
| Placenta to histology for assessment following a poor outcome (including but not restricted to stillbirth) | Conversation with Auckland Pathologist to ensure best practise followed. Education to midwives on when and how this should be done | Ongoing |
| Clinics to continue in rural units during festive period | Commitment from obstetric team to ensure this happens | Completed/ongoing |
| Better communication between rural units and specialised services such as paediatrics during emergencies | Video link and improved internet set up in all units with access to telemed | Completed |
| Delay in blood results leading to delay in necessary care when diagnosing Cholestatis | Process for ordering bloods and when to mark them urgent | Completed |
| Recognition and treatment of sepsis | Implementation of Sepsis 6+2 bundle Sepsis grab box in all maternity units Education for all midwives | Completed |
| Induction of labour process, decisionmaking, referral process | New guideline in consultation with new national guideline on Induction of labour | Completed |

Maternal Sepsis

The Maternal Sepsis project was started in response to a 2017 Maternal Morbidity Working Group annual report that found that the severity of morbidity was potentially avoidable in half of all the maternal sepsis cases reviewed.

Causes of increased morbidity

- Delays in recognition Delays in treatment
- Delays in escalation of care
- Screening tools
- Sepsis six plus two bundle

Te Tai Tokerau response

Te Tai Tokerau Maternal Sepsis Project

- New guideline
- Maternal Sepsis screening tool
- Six plus two treatment bundle
- Maternal Sepsis grab box in each facility

Ongoing work

Ongoing work:

- Roll out of Maternal Sepsis bundle of care to rest of the hospital.
- This is expected to be completed with a finale on World Sepsis Day 13 September 2023
- Maternal sepsis resources and education to be available in community settings.

Te Whatu Ora MATERNAL SEPSIS SCREENING TOOL

To be applied to all women who are pregnant or up to six weeks after the pregnancy ends who have a suspected infection or have clinical observations outside of normal limits

Staff member completing this form

Date: _____ Name: _____
Designation: _____ Signature: _____

1. Has MEWS been triggered? (1 or more)

- Does the woman look sick?
- Is the baby tachycardic? (≥ 160 bpm)
- 2 or more temps $\geq 37.5^{\circ}\text{C}$ one hour apart?
- Or 1 temp $\geq 38^{\circ}\text{C}$

NO → Low risk of sepsis. Use standard protocols, consider obstetric needs.

YES → **2. Could this be an infection?**

- Yes but the source is unclear at present
- Chorioamnionitis, endometritis
- Urinary tract infection
- Infected caesarean or perineal wound
- Influenza, severe sore throat, pneumonia
- Abdominal pain or distension
- Breast abscess, mastitis
- Other (specify) _____

NO → **4. Any Amber Flag Criteria?**

- Relatives worried about mental status
- Māori and/or Pacific ethnicity
- Acute deterioration in functional ability
- Respiratory rate 21-24 OR breathing hard
- Heart Rate 100-130 OR new arrhythmia
- Systolic B.P. 91-100 mmHg
- Has not passed urine in the last 12-18 hours
- Temperature $< 36^{\circ}\text{C}$
- Immunosuppressed/ diabetes/ gestational diabetes
- Has had invasive procedure in last 6 weeks (e.g. C.S. forceps delivery, ERCP, caesare, CVS, miscarriage, termination)
- Prolonged rupture of membranes
- Close contact with Group A strep
- Bleeding, wound infection, vaginal discharge
- Non reassuring CTG/ fetal tachycardia > 160 bpm

NO → Low risk of sepsis. Use standard protocols, consider obstetric needs.

YES → **3. Is ONE maternal RED Flag present?**

- Responds only to voice or pain/unresponsive?
- Systolic B.P. ≤ 90 mmHg (major drop > 40 from normal)
- Heart rate > 130 per minute
- Respiratory rate ≥ 25 per minute
- Needs oxygen to keep SpO₂ $\geq 95\%$
- Non blanching rash, mottled, ashen, cyanotic
- Has not passed urine in the last 18 hours.
- Urine output less than 0.5ml/kg/hour
- Lactate ≥ 2 mmol/L. note: lactate may be raised in & immediately after normal labour and delivery

NO → **4. Any Amber Flag Criteria?** (see above)

YES → **Discuss with a senior clinician and decide either:**

Start Sepsis Six pathway (see page 2) time completed: review

or

Take bloods and review within 1 hour (FBC, U&E, CRP, LFT, ~~one~~ lactate)

or

Hold off bloods and review within 1 hour

YES → **Clinical deterioration or Lactate > 2**

YES NO

YES → Clinician to make antimicrobial prescribing decision within 3 h time completed: review

NO → **RED FLAG SEPSIS!!! Start Sepsis Six Pathway NOW (see overleaf)**

Consider MET call, Contact SMC and consultant

Maternal Sepsis Six Plus Two bundle

all to be completed within 1 hour

1. Antimicrobials: Administer (Empiric only if SpO₂ $< 95\%$ and not on a target of SpO₂ $\geq 95\%$)

2. Diagnostic Tests: **Blood**, **U&E**, **antibiotics**
Blood cultures
Send + consider urine, sputum, vaginal swabs, ascites, sputum swabs
Blood tests: FBC, electrolytes & renal function, CRP/LFTs
Venous blood gas. (Ongoing serial lactate tests)

Plus 2: Assess vital signs (CTG) and consider delivery or escalation of maternal products of conception
Consider thromboprophylaxis

3. Give IV antibiotics: Consider urgent give to antimicrobials. See Maternal Sepsis Guidelines

4. Give IV fluids: If hypotensive (SBP < 90 mmHg) before nil mouth, give 500 ml of **Crystalloid** primed fluid. Repeat if clinically indicated but do not exceed 2l/mg.

5. Measure urine output: May require urinary catheter. Ensure accurate hourly fluid balance chart maintained

6. Check Serial Lactates: U&E every 6h + 4. (Lactate must be confirmed with ABG before test)
For ABG lactate > 4 mmol/L, recheck after 12 hourly fluid challenge

7. Consider Sepsis Six Plus Two bundle: (see overleaf)

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GAP: Growth Assessment Protocol

The Growth Assessment Protocol (GAP) is designed to improve

antenatal detection of babies who are small for their gestational age (SGA) or who have fetal growth restriction (FGR).

It has been implemented in our region since 1 July 2020 with the aim of improving:

- antenatal detection of SGA babies (who are at increased risk of stillbirth)
- neonatal outcomes for SGA babies

It does this through evidence-based monitoring of fetal growth and timing of the birth.

Education of all maternity staff

Training and accreditation of all staff involved in clinical care via;

- Evidence-based SGA risk assessment from booking throughout the pregnancy.
- Use of customised growth charts and calculating birthweight centiles.

Te Whatu Ora – Te Tai Tokerau has been running face-to-face GAP education workshops since September 2019, prior to the official NDHB GAP start date. The training involved LMCs, core midwives, paediatricians and lactation consultants. Workshops were held in each region, including Dargaville, Bay of Islands and Kaitaia and local LMCs and core midwives were trained.

Since April 2020 monthly zoom GAP workshops are being facilitated by the New Zealand GAP Lead Educators Joyce Cowan and Clare Barrett. Staff who have not yet had the training will be able to join in with the monthly zoom sessions. Our local GAP champion is also providing guidance for health care staff in the use of the GAP programme.

Rolling audit and benchmarking of performance

A baseline audit was carried out in September 2020, which collected data on 500 births for the six-month period from January to June 2017. A minimum of 500 births were necessary to give sufficient data for predictability of SGA rates.

The baseline audit identified the rate of both suspected and detected SGA prior to the implementation of the GAP programme. This enabled a pre and post-comparative analysis by Te Whatu Ora – Te Tai Tokerau, to evaluate the effectiveness of implementing the GAP programme. The SGA detection rate pre-GAP of 24.6 % compared to the last quarter of this year's detection rate of 46.1 % since implementation of the GAP programme, suggests a significant increase in detection from the baseline audit.

We are currently conducting a missed case audit to identify the factors that may limit the detection of SGA in Te Tai Tokerau with the aim of improving our service to better meet the needs of our birthing population. One area that has already been identified as a challenge for our service is availability of ultrasound scanning, especially in the regions. We have evidence that the implementation of GAP has improved the detection rate of SGA. It is vital that we continue to improve outcomes for mothers, babies and their whānau by ongoing, consistent application of the GAP protocol.

The new National SGA guidelines will be released in April 2023. We will adapt our management of SGA/FGR (fetal growth restriction) according to the best practise guidelines. This will necessitate a close examination of resources available, especially to rural communities, in view of equitable access to scanning.

Data

Our Maternity dashboard is updated monthly and displays outcomes for ethnicities. Reporting has been changed to separate a wider range of ethnicities, for example people of Indian and Asian ethnicity.

We are still very much a paper based system which has its limitations when collecting data.

Our IT system has not been updated in the last 7 years as we are awaiting the implementation of Badgernet (Maternity Clinical Information System) Limited auditing of the data has occurred.

The introduction of the Maternity Clinical Information System will enable us to collect accurate and current data.



Supporting the Primary Birthing Units

Over the past two years:

- Review of Kaitaia model of care
- completed
- Regular visits by the Director of Midwifery Regular leadership meetings
- Inclusion of rural midwife representative in all governing and investigative and policy groups.
- Inclusion in district-wide M&M reviews Review of Ambulance transfer service SBAR for handover
- Postnatal documentation for transfer from secondary services to rural units improved
- Support provided to LMCs to do home births (supplies, Entonox, PPE) during COVID

Education is offered onsite

- Multi-disciplinary PROMPT workshops held at the Primary birthing Units in Bay of Islands and Kaitaia
- Newborn Life Support training in Kaitaia and Bay of Islands
- S.T.A.B.L.E– course on the stabilisation of sick infants before transportation. (Sugar/ Temperature/Airway/Blood pressure/Lab work/Emotional support)
- Midwifery emergency skills day (also offered in Rāwene)
- CTG training

Future Plans

Continue to offer education in rural facilities

Diabetes midwife position in Kaitaia

Lactation consultant in Kaitaia Tongue tie release training AMNISURE introduction



Improving the resources and support available for Indian women/whānau in Te Tai Tokerau

Te Tai Tokerau has seen an increase in the birthing population of women/people of Indian descent.

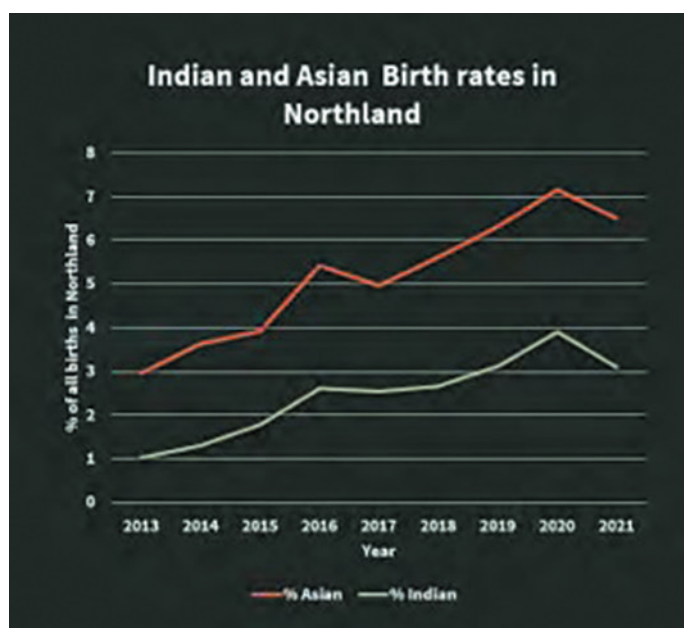
Indian women/people have a higher rate of diabetes, caesarean sections, and induction of labour than the general population.

Our co-design project's aim is to provide equitable access and appropriate resources to support Indian women/people and their families.

To do this we have linked in with Janm Aur Parvarish (based in Auckland) and are offering antenatal and breastfeeding classes via Zoom.

We have resources in a variety of Indian languages.

We are surveying Indian Whānau on how we can improve our services.



Link Tree

Link tree was developed to help Whānau in Te Tai Tokerau to access good online information about pregnancy, labour and the postnatal period.

It is designed to be a one-stop shop for information for whānau with all maternity related topics covered.

A group was formed comprising of antenatal educators, community midwives, LMC midwife representative, and a quality midwife.

Cards were made with a QR code and distributed to midwives and Whānau .

We have had great feedback from the cards. They are used regularly in the postnatal wards and make it easy for websites, educational videos to be found.

This is an ongoing project and the website is being regularly updated with more information sites being added. We have been asked (and will) make the card into a sticker so that it may be stuck onto antenatal and postnatal books for easier access.

Antenatal / Your Pregnancy

Need to know resources about your pregnancy

- Alcohol and Pregnancy
- Are you OK?
- Find Your Midwife
- Food Safety in Pregnancy
- Healthy Eating
- Listeria
- Parental Leave
- Pregnancy Screening Tests and Checks
- Sleep On Side
- Smoke Free: Toki Rau

Nice to know resources about your pregnancy

- Anti-D prophylaxis
- Pregnancy
- Pregnancy in NZ (Ministry of Health)
- Pregnancy Information in Multiple Languages
- Smart Start

Te Tai Tokerau Maternity Services and Resources

Everything you need to know for your pregnancy journey



www.northlanddhb.org.nz

Te Whatu Ora
Health New Zealand



Improving care for teenagers

Young mothers/people were surveyed to see how we could better improve our services. We surveyed young māmā/people to see how well supported they were during their pregnancy .

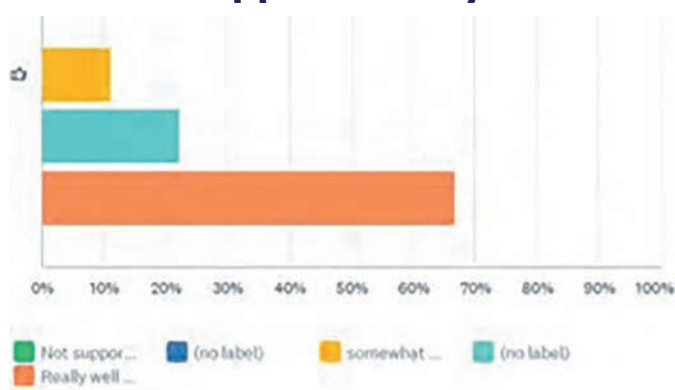
Here are the results of that survey:

The people who answered the survey ranged from 16 to 19 years.

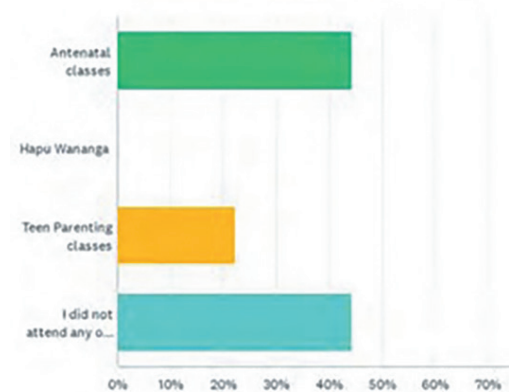
- A midwife was the first health professional that 56% of people contacted when they first became pregnant
- followed by GP/nurse 11%
- 56% found a LMC before 36 weeks' gestation
- 75% who attended teen parenting class would recommend them to their friends



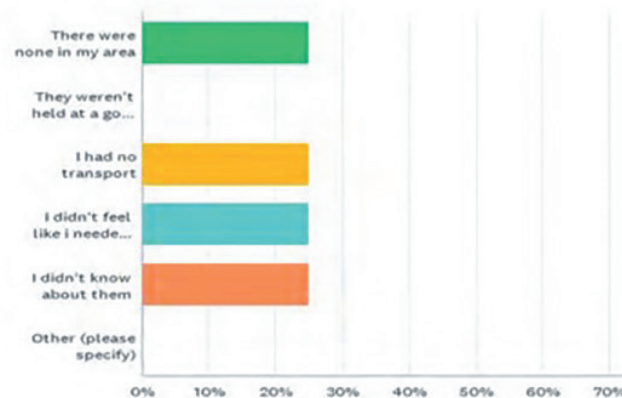
How well supported did you feel on your first visit?



Did you attend antenatal education classes?



If not– why not?



The "Improving maternity care for young people project" was interrupted due to COVID and will be readdressed in 2023 with further work and investigation on what further resources are needed in this space across Te Tai Tokerau.

Long-Acting Contraceptives (LARC)

LARCs are widely available across Te Tai Tokerau.

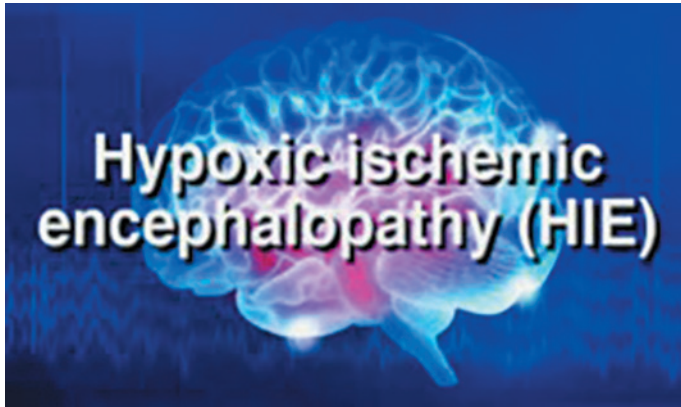
A project has been underway in conjunction with the nurse co-coordinator for LARC from Community Clinical Services to increase the number of midwives who are trained for LARC insertion.

A number of core and LMC midwives across Te Tai Tokerau have taken up this opportunity aimed at improving access for women who might otherwise experience difficulty obtaining a LARC.

We will continue to train and support midwives to insert LARC's and work closely with the community clinical services to improve our processes.

| Number of LARCs placed in Te Tai Tokerau 2022 | |
|---|-----------|
| NZM | 33 |
| NZE | 5 |
| Indian | 2 |
| Other Asian | 4 |
| Other | 2 |
| Unknown | 32 |
| TOTAL | 77 |

Neonatal Encephalopathy



In 2022 we initiated a rapid review process for all babies that were transferred to the NICU (Neonatal Intensive Care Unit) with HIE: hypoxic ischemic encephalopathy.

Te Tai Tokerau's rate of HIE is slightly higher at 1.36 per 1000 births than the average national rate of 1.21 per 1000 births for the 2016–2020 period, (PMMRC 15th report) however the rates are not statistically significantly higher.

Babies that are born in deprivation quintiles 4 and 5 within New Zealand have been shown to be more likely to suffer from HIE than those babies born in lower quintiles. Our higher rate of HIE may correspond to the fact that 78 percent of Te Tai Tokerau births from that period were from families from quintile 4 and 5.

After each event of HIE a multi-disciplinary team is formed to review the case and highlight any system changes that could improve practice.

The initial review team comprises the staff involved, the midwife manager, an obstetrician, a paediatrician, quality midwife and/or quality nurse from child health.

We have had three reviews since the instigation of the rapid review process. Each case is also reviewed at M&M meetings and referred to the Reportable Events Committee. The review process is currently being evaluated to see how we proceed with this in the 2023.

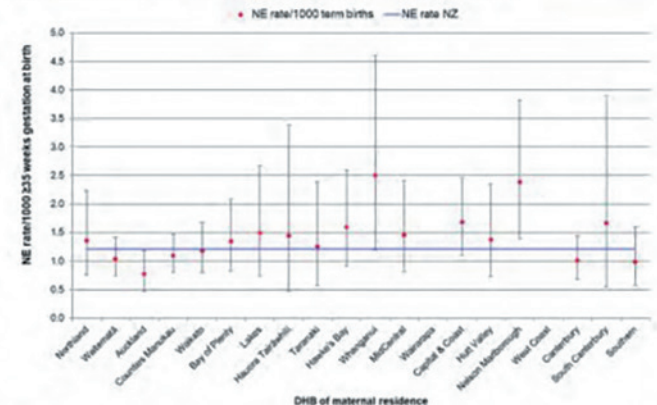
Some recommendations from the review process

The helicopter was unable to fly due to the weather and there was no ambulance available, causing a delay in transfer. A meeting was held with Hato Hone St John and there is now 24/7 ambulance cover from rural areas for maternity clients.

Nitric oxide treatment was available but the case highlighted the importance of having staff trained in its use. Guideline to be developed.

All house officers to get training on NLS (Newborn Life Support) and PPHN (Persistent Pulmonary Hypertension of the Newborn.)

Figure 4.4: Neonatal encephalopathy rates[†] (per 1000 births at ≥35 weeks gestation, with 95% CIs) by DHB of maternal residence (compared with Aotearoa New Zealand NE rate), 2016–2020



[†] Rates for Wairarapa and West Coast have been suppressed due to small numbers. Sources: Numerator: PMMRC's NE data extract ≥35 weeks 2016–2020, Denominator: MAT births ≥35 weeks 2016–2020.

Covid Response

As with the rest of the country, Te Tai Tokerau continued to provide maternity care during the COVID pandemic. A 'Red Zone' was established within maternity to facilitate safe care.

Plans were made for medically unwell pregnant people within the dedicated COVID ward, meaning maternity care could also be provided there if necessary.

Education on PPE and the care of those with COVID continued and was adjusted to match best practise as restrictions within the country were loosened.

No fetal deaths were attributed to COVID and our experience was that women recovered well.

There was an increase in home births during this time and LMC midwives were provided with supplies to assist them in providing a full range of services in the community.



The uptake of vaccinations amongst pregnant woman was very low within Te Tai Tokerau, and so a large focus was placed in the area of education and accessibility to the vaccine.

The vaccine was offered for both pregnant people and their Whānau and in the community. Information pamphlets were made to emphasise the safety of the vaccine for pregnant people, and lists of other locations where vaccines were available, was given at all access points.

A RAT testing station was set up at the entrance to all Maternity units, ensuring all people presenting to maternity were tested prior to entering. This station allowed for redeployment of community staff that were unable to complete their usual face-to-face work during the outbreak, and allowed for more conversation around the vaccine and COVID during the 15 minute wait times.

Fortunately, the people presenting with COVID were relatively well and were able to be cared for mostly within the Maternity 'Red Zone'.

Growing and nurturing new midwives

In Te Tai Tokerau we have been “growing Our midwives”

The importance of promoting midwifery as a vocation to school students cannot be overstated. Every year registered midwives participate in information days aimed at secondary school students in order to encourage and support students to choose midwifery as a career.

We also do question and answer sessions with gateway students interested in healthcare promoting midwifery.



Jordan (in her first year of Practice) at the student road show at the midwifery stall at a school for the student road show.

In the future we plan to work much more closely with midwives from AUT and Te Ara o Hine in promoting midwifery as a career.

Auckland University of Technology has a satellite undergraduate programme in Te Tai Tokerau for midwifery students so they can complete midwifery education close to home.

Midwifery students are supported into placements with community midwives, and at all Te Tai Tokerau maternity facilities.

Many midwifery graduates who study here end up living and working in Te Tai Tokerau.

“One of my students decided to do midwifery after talking to the midwives at the student roadshow last year. She is now studying to become a midwife”

Feedback from a teacher



Midwives from AUT (Auckland University of Technology, Te Whatu Ora, and Te Ara o Hine) at teachers' information day in Bay Of Islands College promoting midwifery as a career.

Future MQSP Projects

In addition to continuing the projects and quality work already mentioned in this report we are also looking at starting the following improvement projects.

Community Milk Banking Project.

A project to establish a community milk banking facility and distribution network in Te Tai Tokerau. The project will be co-designed involving community groups and consumers throughout the region. A pānui will be sent out to all interested groups in May 2023 for the first project planning meeting.



VBAC – vaginal birth after a caesarean section.

We are planning an in-depth look at the processes and the systems we have around VBAC. In 2021 elective VBAC rate This will include an audit on VBAC rates, a look at the booking system, the information whānau are receiving before making a decision about what type of delivery is best for them.

LGBTTQIA+

Improving support and resources available to the LGBTTQIA+ community (lesbian, gay, bisexual, transgender, takatāpui, queer, intersex, asexual and others).

This will include education for midwives on providing compassionate and quality maternity care for the LGBTTQIA+ community.

Perinatal Mortality Review 2016–2020

A review of all perinatal deaths in Te Tai Tokerau from 2016 to 2020 has been completed. The review looked at all perinatal deaths from 24 weeks of gestation (and over 400 grams). Babies with congenital abnormalities not compatible with life and terminations of pregnancies were excluded from the review.

A prior review of perinatal deaths in Te Tai Tokerau took place reviewing perinatal mortality from 2012–2015. The purpose of the review was to identify and highlight systems and processes which may have contributed to the perinatal deaths in Te Tai Tokerau.

Fifty-four cases were reviewed by a multi-disciplinary panel made up of DOM, MQSP facilitator, quality midwife, clinical midwife manager, two self-employed midwives, a midwife representative from Te Kaahu Wahine, an obstetric consultant, and a consumer representative from the Maternity Clinical Governance committee.

Ethnicity did not seem to be a statistical factor in the perinatal death rate in Te Tai Tokerau. There was an increase in the rate of perinatal death for women who lived rurally and those who lived in an area with a higher deprivation index.

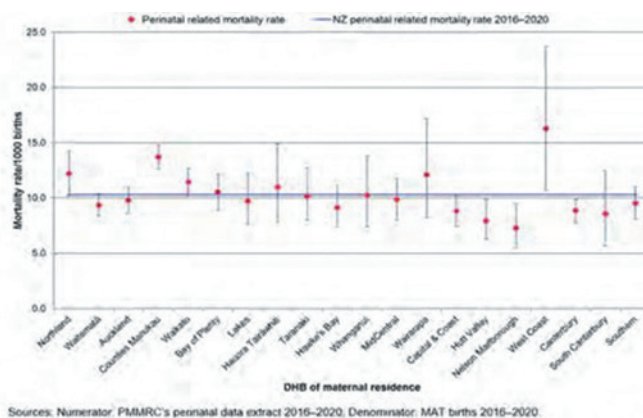
Women who were unbooked or booked with an LMC midwife after 36 weeks were also over represented, as were those with a high BMI when compare to the general Te Tai Tokerau birthing population.

Tobacco use in pregnancy was a significant factor. Of all the women who lost their babies, 41 percent were smokers. Te Tai Tokerau has a high rate of maternal tobacco use in pregnancy with 23 percent of women using tobacco in their pregnancy in 2020.

Fifty percent of perinatal deaths were of babies who were below the 10th percentile in weight. (small for their gestational age) The GAP programme was introduced in July 2020.

Fifteen percent of mothers who lost their babies reported reduced fetal movements in their pregnancy and nine percent had premature rupture of membranes.

The biggest barrier to care was being unbooked or booking with a LMC midwife late in the pregnancy. This was followed by a lack of recognition of the woman and her Whānau as to the seriousness of the condition. Communication is the key.



Perinatal Mortality Review 2016–2020

What has already been done

Funding for scans and transport to antenatal appointments for women who experience significant barriers.

Scanning is available in Bay of Islands and Kaitaia and Dargaville.

Antenatal and diabetic clinics are held in Kaitaia, Bay of Islands, and Dargaville.

Work is being done to improve reliable rural transfers with the ambulance service.

Link tree online maternity resources

Easy access via social media/ internet to make it easy for women/people to find where to find a LMC/midwifery care.

If an unbooked pregnant woman/person presents at the emergency department in Te Tai Tokerau there are systems in place to notify the local community or birthing unit midwives. They will follow up and the person will be offered midwifery care.

An alert system on the whiteboard has been implemented in Whangāreito make staff aware when a woman/person is needing a higher level of care.

SBAR (Situation, Background, Assessment, Recommendation) pad available for verbal handovers.

Handover of care sticker to be placed in the notes has been developed.

The Amnisure ROM (Rupture of Membranes) test is being introduced in 2023 to help with diagnoses of PROM which will be especially useful in rural areas.

New policy and a patient pamphlet have been developed to give to mothers/people with PPRM/ PROM Reduced fetal movement guideline and patient pamphlet has been developed

CTG available in Dargaville for use in assessment following report of reduced baby movements

GAP – ongoing audits and education

Future Plans

Project to ensure all women/people having their first babies have access to antenatal education and resources that meets their needs.

Project to ensure all unbooked women/people (especially rural women/people) who present in pregnancy are followed up with midwifery care.

Information needs to be sent to all GP practices so that they can refer women/people to midwifery /LMC services

Electronic notes: sharing of information between all New Zealand providers.

Support and promote the smoke-free campaign, further education for midwives/ LMCs on smoking cessation.

Investigate the possibility of accommodating women/people with high- risk pregnancies close to the secondary service

Kaiāwhina role within maternity service Audit on GAP (growth assessment protocol)

Values of Ngā Wānanga o Hine kōpū

1. **He kākāno au i ruia mai i Rangiatea** Celebrating YOU. We are all descendants from the divine universe; I celebrate the uniqueness that is me.
2. **Manaakitia te māhuri he tupuna kei roto** Nothing is more important than giving new life. Nurture and take care of the future that grows within for one day they will stand as the ancestors of tomorrow.
3. **Kia puta ora ai ngā hua** Every pregnancy is a new pregnancy. Take care of yourself and be present in the moment. This is the most important role you will have in your lifetime. This is your chance to help in the creation of a miracle.
4. **Me whakapapa te ora** Whānau begins with whakapapa. Our greatest taonga tuku iho is whakapapa which is derived from Atua. Aspirations for oranga are about ultimate wellness and thriving.
5. **He ōhanga wairua he puna tangata** Your tūpuna chose you. Acknowledge the unique and special status of ngā hine kōpū as the keepers of te ira tangata.
6. **Tahia te ara kia kitea ai te huarahi, ahu atu tō matā ki te ao mārama kei reira ngā uri whakatupu kāhore ano i whānau mai e tatari atu ana i a koe** Clear away the obstacles to have a healthy, happy pregnancy.
7. **Nau te rourou nāku te rourou ka ora te iwi** Share your wisdom in a hapū wānanga. Each whānau come with their own stories they have received from tūpuna. These stories are shared in a wānanga space that gives them life and allows for matauranga to be validated in a Māori way.
8. **I haere mai koe e te ahuru mōwai ki te ao mārama tau ana** From one safe space to another. Acknowledging the sanctity and safety of te whare tangata as te ahuru mowai and transferring that safety to a waikawa safe sleep space.
9. **Ko te whenua te wai-ū mō ngā uri whakatupu** Ukaipo is used to describe our divine mother Papatuanuku. She gives us sustenance and nurtures all who dwell upon her. Breastfeeding connects us to our whenua, te whāngāi ū nurtures not only our body but also our spirit.
10. **Tihewa Mauri Ora** Infused with the essence of life.



Ngā Tātai **Ihorangi**

Me whakapapa te ora

Whānau begins with whakapapa



Ngā Tātai **Ihurangi**

Nga Wānanga o Hine Kōpū

Future aspirations for Nga Wānanga o Hine Kōpū: That we walk alongside whānau from conception to school.

We are in the process of constructing wānanga across the continuum of 'Te Kahu Taurima' to address the gaps in service provision of Māori Health that we have identified in previous wānanga here in Te Tai Tokerau.

It is evident that tikanga practice works for Māori.

We deliver our wānanga for Hapū Māmā/People and whānau from Kaitaia to Kaipara.



The following numbers, represent whānau who attended Nga Wānanga o Hine Kōpū 2021.

- Kawakawa; February 19 & 20 (9 waikawa)
- Kawakawa; March 15th (10 waikawa)
- Hokianga; March 25th (21 waikawa)
- Kaitaia: May 4 & 5 (5 waikawa)
- Dargaville: April 8 & 9 (3 waikawa)
- Whangārei: May 22 & 23 (10 waikawa)
- Hokianga: June 2 & 3 (10 waikawa)
- Kawakawa; June 14 & 15 (5 waikawa)
- Kaitaia: July 6 & 7 (4 waikawa)
- Kaiwaka: July 15 & 16 (4 waikawa)
- Whangārei: August 5 & 6 (11 waikawa)
- Kawakawa: August 13 & 14 (15 waikawa)
- Whangārei: September 23 & 24 (3 waikawa)
- Whangārei: November 20 & 21 (15 waikawa)

Due to the effects of COVID restrictions, some wānanga were cancelled/postponed.

- Whangārei: 86 whanau
- Kawakawa: 61 whanau
- Hokianga: 18 whanau
- Kaitaia: 35 whanau





Ngā Tātai **Ihorangi**

Nga Wānanga o Hine Kōpū

Hapū Wānanga are held across Te Tai Tokerau, in Whangārei, Kaitaia, Kaipara and Hokianga. Each area aims to hold 3-4 wānanga a year.

Attendees of Wānanga 2022

Kawakawa 61

Whangārei 86

Kaitaia 35

Hokianga 18

Alongside Nga Wānanga o Hine Kōpū a further Wānanga was created Te Ara Ora.

Nga Wānanga o Te Ara Ora was the follow on Wānanga from Nga Wānanga O Hine Kōpū. Another space for whānau to come and share in a nurturing space and explored the absolute aspirations for their pēpi as they continue to grow.

Similar to Ngā Wānanga o Hine Kōpū, Te Ara Ora is provided in collaboration with Māori Health Providers, social service providers and our WCTO teams across Te Tai Tokerau. Te Ara Ora was a pilot programme run throughout 2022 with an evaluation being completed.



Sudden Infant Death Prevention SUDI

In 2021 and 2022

918 Safe Sleep Devices were given out

SUDI prevention Te Tai Tokerau

Safe sleep training continued with two community safe sleep training workshops. We also provided team training for the Takawaenga and Te whare teams, Oranga Tamariki ki Whangārei.

All SUDI prevention programmes continued through the COVID periods of changing traffic lights and lockdowns. We used online platforms to continue to share SUDI prevention messages and education. Nga Wānanga o Hine Kōpū continued to thrive in the online space. This Wānanga remained very popular and suddenly Whānau who lived out of Te Tai Tokerau were able to connect into our Wānanga.

Distribution of safe sleep devices has continued – Mānuka beds and Waika- wa and We also added Mocka Cot packages as a part of Ngā Wānanga o Te Ara Ora pilot programme.

Kai Hāpai and SUDI

Three Kai Hāpai are supporting hapū whānau in their connections with our hapū Wānanga. They have a special focus in the areas of mental wellbeing (Te Taha Hinengaro) and connecting with our youth populations. Kai Hāpai have been very busy since starting their roles in August 2022. They are building their connections across communities throughout Te Tai Tokerau, redesigning our whaia te ora Wānanga and also raising the profile of Nga Wānanga o Hine kōpū.

89 Cots

34 Eco Baby Beds 155 Mānuka Beds

185 Pēpi Pods

441 Pre-made Wahakura

14 Wahakura (woven through wānanga)



Ngā Tātai **Ihorangi**

Smokefree Kaitiaki



As at June 2020, the latest data available, only 29.3% of Māori babies are living in smokefree homes in Te Tai Tokerau compared to 58.6% for non-Māori, non-Pacific – an equity gap of just under 30%. 87% of all birthing women/people who smoke are Māori, with roughly 5% becoming smokefree in their hapū tanga.

We have some of the highest rates of maternal smoking in the country and are fighting to make meaningful change. We propose invigoration of the space with the exciting new 2025 action plan, the possibility of a hapū Whānau coach, and the launch of the vape2 quit programme for hapū Whānau as fresh new approaches for the new year. We will also be focusing more on education delivery to our maternity and child health colleagues. We are ever hopeful that we might receive funding to help grow the space and be able to offer Whānau more tools for their smoke free kete.

The smokefree Kaitiaki role continues to attend all the hapū wānanga, and the harmony young parent classes. Smokefree messages have been shared with more than 240 Whānau in these spaces. This number would have been considerably bigger had COVID not interrupted the wānanga space as much as it did (10 were cancelled).

We were only able to host two whāia te ora wānanga this year, the other two scheduled wānanga fell within lockdown periods. Manaaki packs were created for those Whānau who missed out along with the invitation to the next available session/s

Early in 2022 the Hapū mama stop smoking programme was transferred back to Te Poutokomanawa (Māori Health Directorate) and new roles have been developed. Auahi Kore Hapū Whānau – navigators will soon start – April 2023.



Ngā Tātai **Ihorangi**

Smokefree Kaitiaki

MATERNITY

- Visit LMC clinics and sites to continue to raise the awareness of stop smoking services in Te Tai Tokerau.
- Offer NRT sample packs, however interest in this has decreased of late.
- Led by Crystal Paikea (hospital co-ordinator) there will be a review of community LMC Te Whatu Ora service delivery in ABCs. Auditing is in progress to determine why the target is not being met, and to identify training needs to ensure target will be met in future.
- The education requirements of Te Kotuku will be revisited in the new year . Hand over refreshers may not be the best way forward. We are working on a “resource kit” midwives in the unit can access with smokefree resources in it. This will be completed in the new year.

TOKI RAU

- Increase in “quality” referrals with 22 māmā/people becoming smokefree
- High referral to sign-up rate, and increase in percentage of successful quits at 22/55
- Incentives continue at 4/52 and 12/52 (\$150 in total)
- LMC feedback continues to be mixed regarding referral receipt and follow through from coaches. We are still asked to follow up on their behalf from time to time, however this has lessened.
- Seven (7) smokefree referrals were directly received by our Kaitiaki in wānanga.
- Continue to advocate for LMC referrals to Toki Rau.
- Available as hapū māmā/people specialist for any coaches who require extra support.

VAPE2QUIT

- The vape2quit pilot has received funding and is on track to be launched in May of 2022. We are hopeful that we will have a dedicated hapū whānau smokefree coach, who will be able to further enhance the pilot. This programme will be offered to all hapū māmā/people and their whānau (who live with them) who smoke. In the absence of a coach, this will be facilitated by the smokefree Kaitiaki.



Smokefree Kaitiaki

GENERAL

World Smokefree Day May 2022

- Ran promotion via wānanga spaces, and Facebook
- Developed 'give away' packs for the midwives to give out to hapū mama who smoke
- Launched vape2quit for hapū whānau pilot
- Continued developing the wānanga space
- Ngā Wānanga o Hine Kōpū programme evaluation completed and was launched in Te Tai Tokerau in March of 2022
- If resources allow, run a Matariki campaign to encourage "new beginnings" as a smoke-free whānau.

SUMMARY

COVID was very disruptive to our wānanga space this year. We are looking at new techniques to ensure wānanga can continue in the event of a lockdown in ways that encapsulate the essence of the wānanga experience. Plans are with decisionmakers at the moment, as to whether or not we will be able to implement these tools.

Our current and future mahi and plans, align with the overall vision of where the Ministry of Health wants Smokefree 2025 to go. Co-designed by whānau, meeting diverse needs, smoke-free considered in the context of other life goals, encouraging vaping as an additional less harmful tool, as well as adaptive and flexible approaches to each interaction.

Every wānanga we do is an opportunity to learn and get feedback from our whānau about what they would like to see in services, and how we can optimise how we support them. Our primary focus is protection of whakapapa. This approach seems to resonate with whānau, with many of them having "aha" moments. Wānanga creates an ideal opportunity to elaborate on the themes explored by Hine Kōpū, gaining a greater depth of knowledge, and further tools to achieve whāia te ora. Utilising the Ngā Wānanga o Hine Kōpū framework creates a space for Whānau to speak freely, share their truths, and openly explore issues they feel unsafe about unpacking in other spaces.

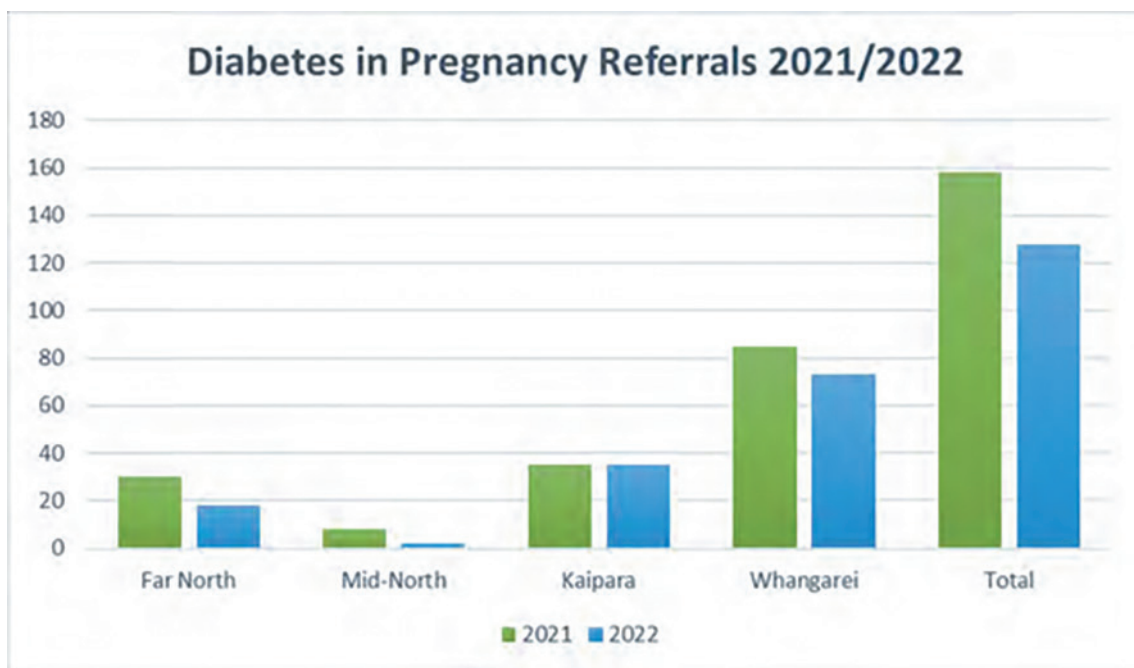


Diabetes

The diabetes in pregnancy team continues to grow with the addition of a diabetes midwife in the Mid-North and Kaitaia and another specialist diabetes dietitian. The full team consists of diabetes midwives, clinical nurse specialist prescribers, dietitians, a kaiāwhina and two medical in pregnancy physicians. We have a full regional service with women/people usually seen in their local hospital if at all possible. There is currently recruitment for a diabetes midwife in the Far North.

An increased trend over the past two years is women/people presenting late for oral glucose tolerance tests (OGTT). This is because many women/people are reluctant to have the two-hour test. It is currently the only reliable form of diagnosis of gestational diabetes.

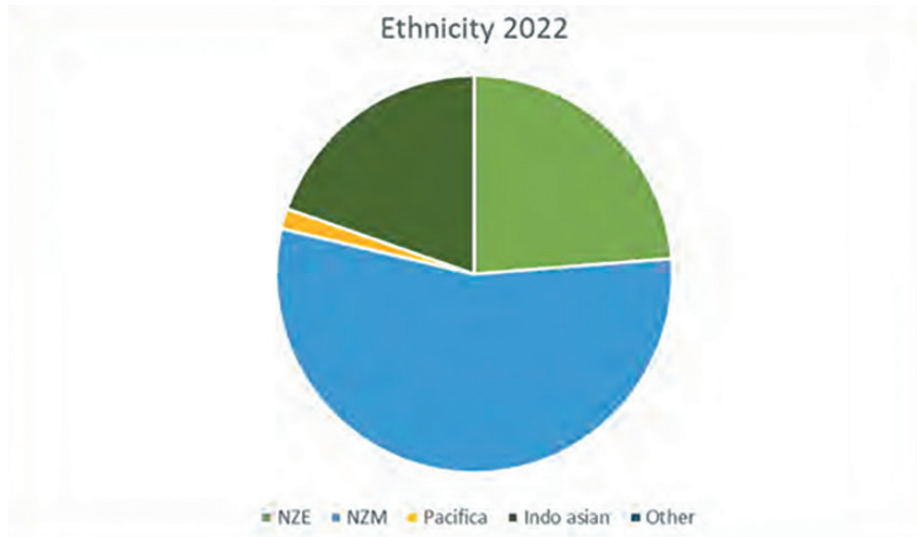
Furthermore, as a service we are seeing the impact of increased social complexity. The cost of living and access to suitable foods like fresh vegetables has become a luxury item for some whānau. This problem is only going to continue to get worse. Access to social work support especially for hapū mothers in more rural areas is extremely limited and difficult to access.



Diabetes

2022 saw a decrease in pregnancy-related diabetes referrals. There were 30 fewer referrals when compared with 2021.

Māori are represented 2:1 in the statistics when compared with other ethnicities.



Te Tai Tokerau Maternity Consumer Survey

A Maternity Services survey was sent out via email and text. 512 messages were sent out (with reminders)

- 331 emails and 181 phone texts inviting women to participate to our survey.
- 42% of those surveyed replied.
- 58% were NZ European, 29% were Māori, 4% Indian, 0.6% Tongan and 7% identified as other.

Overall most people had a positive experience throughout their maternity journey with the majority of women being satisfied or somewhat satisfied with the care they received.

A minority of responses were neutral or negative.

- A LMC midwife was the first health provider approached by 55 percent of women when they found they were pregnant.
- Of those that booked later than 12 weeks the most common reason for booking later was not being able to find a midwife who was available. Some women reported that COVID made finding a midwife more difficult.
- 68 percent were aware of antenatal classes in their area. Many women chose not to go as it wasn't their first baby or they were working and others reported that they felt they could get the same information from friends and family.
- 40 percent of respondents were referred to a specialist service, 88 percent of woman referred were able to see a specialist in their local hospital and 82 percent reported being satisfied with the way they and their Whānau were involved in decisionmaking.

Care received during labour and birth

- 80 percent reported being satisfied with the care they received
- 92 percent felt their decisions and choices were respected.
- 81 percent were satisfied with the communication between people involved with their care.
- 92 percent reported being satisfied that there was respect for their cultural requirements.

Happy with the care/ excellent care/ midwife was amazing/ relaxed and supportive environment/ amazing care/ very helpful/ good experience/ satisfied midwives nurses and doctors were competent and caring/ amazing/ excellent care/ all hospital staff were great/ LMC midwife was amazing.

*Thank you so much to the excellent care I received for the birth of my baby.
Every staff member was excellent/ The midwives were amazing.*

Te Tai Tokerau Maternity Consumer Survey

Of the care received after baby is born on the postnatal ward

- 89 percent were happy with the caring manner of hospital ward staff, 11 percent were undecided or unhappy.
- 93 percent of people felt they had enough care from staff during their stay.
- 91 percent had positive feedback that their dignity and privacy was respected.
- 73 percent got enough rest.
- 57 percent felt the food was satisfactory, 26 percent were unsatisfied with the food and 17 percent were undecided.
- 79 percent were satisfied about the advice they received on caring for their baby.
- 64 percent felt they had enough advice about baby's sleeping patterns.

The review results were circulated and discussed in a variety of forums. COVID had an impact on the ability women/people to find a LMC midwife.

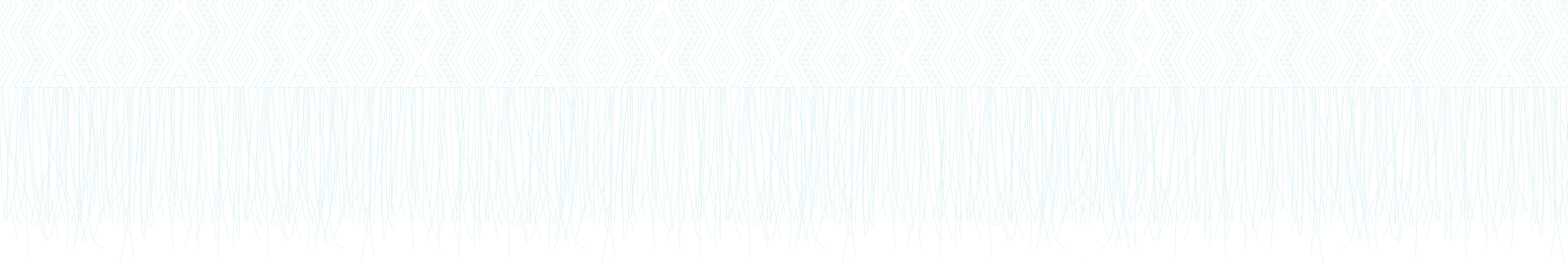
Some comments and negative feedback were a result of staff acuity on the ward.

Work has been done in Te Kotuku to address the complaints about the quantity of food.

Facilities were lovely/Clean and comfortable/Te Kotuku unit is amazing/New maternity unit is great/Great being able to have your husband stay with you/ Thought that the Whānau House should have been made available for partner/ Not enough resources for whānau- food and a place to sleep/ Better place for partner to sleep/ Did not like lazyboy chairs/Better chairs for partners to sleep in/ Better care for husbands.

I think most importantly is I feel the care after baby was born could have been improved/ Hard to find a midwife to help at night/ There is room for improvement in care after baby is born/ Not enough

postnatal support and information available/The staff were so so lovely, and so helpful, but you could tell at times were very stretched /Would have liked formula to be available/Wanted formula available. Didn't get told to feed my baby/Didn't like staff touching breasts





Te Whatu Ora
Health New Zealand