

Atlas of Healthcare Variation | Methodology

Well Child / Tamariki Ora Quality Indicators

General points:

- Data are not presented where the number of children was less than 10, with the exception of indicators 3, 13 and 14 where counts less than 20 are not presented. This is to preserve confidentiality.
- Children were assigned to their district health board (DHB) of domicile unless otherwise noted. Where more than one domicile was recorded, the most recent value was selected.
- Ethnicity data presented is prioritised ethnic group (Māori, Pacific peoples, Asian and European/Other). For people reporting multiple ethnic groups, the most recent value was selected.

Exclusions:

- Children with overseas and undefined DHBs were excluded.
- Indicators 22, 25 and 26 are not presented in the atlas as there is no variation between DHBs (all values are 100% where data available).

Further information:

<http://www.health.govt.nz/publication/indicators-well-child-tamariki-ora-quality-improvement-framework-september-2014>

Standard deviation

Data are presented as standard deviation from the mean.

Standard deviation is a statistical measure of variation from a mean. Assuming that recorded instances are normally distributed (ie, they are in the usual 'bell-shaped curve'), 68 percent of all recorded instances would be expected to be within one standard deviation either side of the mean and 95 percent within two standard deviations. The two 'middle' shades will be within one standard deviation of the mean.

Confidence intervals

Data for each DHB is presented as rate per 100 population. Upper and lower confidence intervals were calculated to 95 percent level of confidence.

Indicator #1:	The percent of babies enrolled with a PHO by three months of age
Numerator	The number of babies under three months of age enrolled with a PHO
Denominator	The number of births reported to the National Immunisation Register
Data source	PHO Enrolment Collection, Ministry of Health (numerator) National Immunisation Register, Ministry of Health (denominator)
Comment	This indicator was designed to measure enrolment with a general practice by two weeks of age. These data were not available at the time of writing, and so enrolment with a PHO by three months of age has been used as an interim measure.

Indicator #2:	The percent of families referred from their lead maternity carer (LMC) to a Well Child / Tamariki Ora provider.
Numerator	The number of babies recorded as referred from their lead maternity carer (LMC) to a Well Child / Tamariki Ora provider.
Denominator	All babies with a recorded field (yes or no) of referral from their lead maternity carer (LMC) to a Well Child / Tamariki Ora provider.
Data source	National Maternity Collection, Ministry of Health

Indicator #3:	The percent of babies who receive all Well Child / Tamariki Ora core contacts in their first year
Numerator	The number of babies where contact was able to be made by six weeks of age and who received all five contacts
Denominator	The number of babies where contact was able to be made by six weeks who reached 14 months of age
Data source	Plunket

Indicator #4:	The percent of four-year-olds who received a B4 School Check, by DHB of service
Numerator	The number of four-year-olds who received a B4 School Check
Denominator	The number of four-year-olds eligible for a B4 School Check
Data source	B4 School Check Information System, Ministry of Health (numerator) PHO Enrolment Collection, Ministry of Health (denominator)

Indicator #5:	The percent of preschool children enrolled with oral health services
Numerator	The number of children aged less than five years enrolled with oral health services
Denominator	The number of children aged under five years
Data source	Community Oral Health Services, Ministry of Health (numerator) PHO enrolments, Ministry of Health (denominator)

Indicator #6:	The percent of eight-month-old babies who are fully immunised
Numerator	The number of eight-month-old babies whose immunisations are up to date for their age
Denominator	The number of babies aged eight-months
Data source	National Immunisation Register, Ministry of Health

Indicator #7:	The percent of children starting school who have participated in early childhood education
Numerator	The number of children starting school who have participated in early childhood education
Denominator	The number of children starting school
Data source	ENROL, Ministry of Education

Indicator #8:	The percent of children under six with access to free primary care
Numerator	The number of children under six who were enrolled with a PHO delivering free primary care for under-sixes
Denominator	The number of children under six who were enrolled with a PHO
Data source	PHO Enrolment Collection, Ministry of Health

Indicator #9:	The percent of children under six with access to free after-hours primary care
Numerator	The number of children under six who were enrolled with a PHO delivering free after-hours primary care for under sixes
Denominator	The number of children under six who were enrolled with a PHO
Data source	PHO Enrolment Collection, Ministry of Health

Indicator #10:	The percent of referred children who are seen within five months of referral to specialist services, by DHB of service
Numerator	The number of children waiting less than or equal to five months for first paediatric medicine specialist appointment
Denominator	The total number of children on the paediatric medicine wait list at the end of the month
Data source	National Booking Reporting System, Ministry of Health
Comment	Paediatric services generally provide services to children up to 18 years of age.

Indicator #11:	The percent of babies exclusively or fully breastfed at two weeks
Numerator	The number of babies exclusively or fully breastfed at two weeks
Denominator	The number of babies with recorded breastfeeding status at two weeks
Data source	National Maternity Collection, Ministry of Health

Indicator #12:	The percent of babies exclusively or fully breastfed on discharge from lead maternity carer (LMC) care
Numerator	The number of babies exclusively or fully breastfed on discharge from LMC
Denominator	The number of babies with recorded breastfeeding status on discharge from LMC
Data source	National Maternity Collection, Ministry of Health

Indicator #13:	The percent of babies exclusively or fully breastfed at three months
Numerator	The number of babies exclusively or fully breastfed at three months
Denominator	The number of babies with recorded breastfeeding status at three months
Data source	Plunket

Indicator #14:	The percent of babies receiving breastmilk at six months
Numerator	The number of babies receiving breast milk at six months, whether exclusively, fully or partial.
Denominator	The number of babies with recorded breastfeeding at status six months
Data source	Plunket

Indicator #15:	The percent of children with a healthy weight at four years, by DHB of service
Numerator	The number of children whose BMI is between the 5 th and 84 th percentile at the B4 School Check
Denominator	Children with a BMI recorded at B4 School Check
Data source	B4 School Check Information System, Ministry of Health

Indicator #16:	The percent of children who are caries free at five years
Numerator	The number of five year old children enrolled with an oral health service who are caries free
Denominator	The number of five year old children who were enrolled with an oral health service
Data source	Community Oral Health Services, Ministry of Health

Indicator #17:	The average burden of decay in children aged five years
Numerator	The number of decayed, missing and filled teeth in five year old children enrolled with an oral health service
Denominator	The number of five year old children with a caries who were enrolled with an oral health service
Data source	Community Oral Health Services, Ministry of Health

Indicator #18:	The percent of children with a normal strengths and difficulties questionnaire score at four years of age, by DHB of service
Numerator	The number of children aged four years who have a normal strengths and difficulties questionnaire score. This was defined as a normal score from the parent or caregiver completed strengths and difficulties questionnaire (SDQ-P).
Denominator	The number of children aged four years who had a SDQ-P recorded at the B4 School Check
Data source	B4 School Check Information System, Ministry of Health

Indicator #19:	The percent of mothers who were smoke-free two weeks postnatal
Numerator	The number of mothers recorded as smoke-free at two weeks postnatal
Denominator	The number of mothers with tobacco use recorded at two weeks postnatal
Data source	National Maternity Collection, Ministry of Health

Indicator #20:	The percent of four year old children who live in a smoke-free home, by DHB of service
Numerator	The number of children with a smoke-free home, recorded during their B4 School Check.
Denominator	The number of children with the smoking status of their home recorded during their B4 School Check
Data source	B4 School Check Information System, Ministry of Health
Comment	Smoke-free was defined as parents not smoking indoors at home.

Indicator #21:	The percent of children starting the B4 School Check by 4 ½ years, by DHB of service
Numerator	The number of children who started their B4 School Check aged less than 4 ½ years
Denominator	The number of children who received a B4 School Check
Data source	B4 School Check Information System, Ministry of Health

Indicator #22:	The percent of children with a strengths and difficulties questionnaire score requiring specialist assessment at the B4 School Check who were referred, by DHB of service
Numerator	The number of children with a parent or caregiver completed strengths and difficulties questionnaire (SDQ-P) score requiring specialist assessment at the B4 School Check, who were referred to specialist services. This includes those who were given advice.
Denominator	The number of children with a parent or caregiver completed strengths and difficulties questionnaire score requiring specialist assessment. This excluded those who were already under care.
Data source	B4 School Check Information System, Ministry of Health

Indicator #23:	The percent of children assessed as PEDS Pathway A who were referred to specialist services, by DHB of service
Numerator	The number of children with a Parental Evaluation of Developmental Status (PEDS) questionnaire score assessed as Pathway A at the B4 School Check, who were referred to specialist services. This includes those who were given advice. Pathway A indicates that two or more significant concerns were identified.
Denominator	The number of children with a Parental Evaluation of Developmental Status (PEDS) questionnaire score assessed as Pathway A at the B4 School Check. This excluded those who were already under care.
Data source	B4 School Check Information System, Ministry of Health

Indicator #24:	The percent of children with a 'Lift The Lip' (LTL) score of 2–6, who were referred to oral health services, by DHB of service.
Numerator	The number of children with a LTL score of 2–6 at the B4 School Check who were referred to oral health services, by DHB of service. This excludes those who were given advice.
Denominator	The number of children with a LTL score of 2–6 at the B4 School Check. This excludes those who were already under care.
Data source	B4 School Check Information System, Ministry of Health

Indicator #25:	The percent of children with a vision problem who were referred to specialist services, DHB of service.
Numerator	The number of children with a vision problem identified at the B4 School Check who were referred to specialist services, by DHB of service. This excludes advice given.
Denominator	The number of children with a vision problem identified at the B4 School Check. This excludes those who were already under care.
Data source	B4 School Check Information System, Ministry of Health

Indicator #26:	The percent of children with a hearing problem who were referred to specialist services, DHB of service
Numerator	The number of children with a hearing problem identified at the B4 School Check who were referred to specialist services, by DHB of service. This excludes advice given.
Denominator	The number of children with a hearing problem identified at the B4 School Check. This excludes those who were already under care.
Data source	B4 School Check Information System, Ministry of Health

Indicator #27:	The percent of children with a BMI > 98th percentile who were referred to a GP or specialist services, DHB of service
Numerator	The number of children with a BMI greater than the 98 th percentile who were referred to GP or specialist services
Denominator	The number of children with a BMI greater than the 98 th percentile
Data source	B4 school check