

Regional trends in teenage parenthood

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Introduction

Summary of project

The purpose of this report is to analyse regional variation in teenage birth and parenthood rates in New Zealand. In order to provide context for this analysis the report begins with an overview of trends in fertility and family formation in New Zealand over the past 50 years. It then presents an analysis of national and regional trends in teenage births including the impact of demographics (including age and ethnicity) and socio-economic circumstances on teenage parenthood rates. It then provides a detailed analysis of nine selected regions with the highest rates and numbers of teenage births.

Background

The Families Commission is undertaking research to explore the following questions:

- What are the reasons behind high rates of parenthood amongst young teenagers in specific regions of New Zealand?
- What support would be needed for the teenage parents to prevent subsequent repeat pregnancies?

In March 2010, the Families Commission commissioned this report to focus on the first question through a statistical analysis of regional trends in teenage parenthood and childbirth statistics in New Zealand. It also takes into consideration the impact of demographic and socio-economic variables on teenage parenthood at the regional level.

Key research questions

The key research questions the Families Commission is seeking to address are:

Regions with highest rates of teenage births and parenthood	<ul style="list-style-type: none">• Which regions have the highest per population rates of teenage births and parenthood in New Zealand?• Statistically, how reliable are these differences and are these differences major or minor?
Prevalence of 'young' teenage parenting across regions	<ul style="list-style-type: none">• For high-rate regions – what are the rates for 'younger teenagers' (13–17) and 'older teenagers' (18–19)?• Are the differences between these two age groups similar or different for regions with high rates of teenage births and parenthood overall?• Are there any regions with unusually high rates of young teenagers' (13–17) births and parenthood? Statistically, how reliable are these differences and are these differences major or minor?
Prevalence of 'multiple pregnancies'	<ul style="list-style-type: none">• Is there regional variation for the rate of teenage parents with two or more children or are these rates in line with the overall regional rate?

Impact of demographic composition	<ul style="list-style-type: none"> • To what extent, statistically, does region ethnicity profile explain these differences? That is, in New Zealand there are ethnic differences in rates of teenage parenthood and differences in the overall demographic profile. Are regional differences an outcome of these ethnic demographic differences? • Do high-rate regions have an overall different birth rate profile by age and ethnicity than other regions? For instance, in these high-rate regions, is there an overall region trend for a) higher parenthood rates across all age groups, and/or b) higher rates of parenthood for younger people?
Impact of socio-economic outcomes	<ul style="list-style-type: none"> • To what extent statistically, does region socio-economic profile explain these differences? That is, internationally teenage pregnancy rates are associated with socio-economic factors.
Regions as a unit of analysis	<ul style="list-style-type: none"> • Are regions an effective unit of analysis for differences by geographical area? For instance, are there strong <i>within region</i> differences in high- and non-high-rate regions?

Structure of the report

The report is presented in four main sections. The first section provides an overview of trends in fertility and family formation in New Zealand, including fertility rates, age of mothers, total fertility rates, Māori births and a comparison of rates of teenage pregnancy in New Zealand with international rates.

The second section examines national trends in teenage births and parenthood in New Zealand. It begins with an overview of the total number of births to teenage women. It then examines: the impact of demographic variables on fertility including: trends in Māori parenthood; the impact of location (urban/rural); the alignment between teenage fertility and total fertility within regions; the prevalence of 'young' teenage parenting; the extent to which teenagers have more than one child; and the impact of deprivation.

The third section provides a more detailed analysis of nine selected regions including regions with the highest rates and numbers of teenage parenthood. The concluding section responds to the key research questions, based on the key findings to emerge from the analysis.

Fertility and family formation in New Zealand

Introduction

Teenage pregnancy and childbearing are not new phenomena. Throughout history, in many cultures, teenage pregnancy and childbirth have been an integrated part of a society's reproductive pattern. However, in modern days, births at younger ages or the teenage years have been increasingly associated with social disadvantage and, therefore, increasingly considered as a negative social problem.

Teenage parenthood is an issue that can arouse many deep-seated emotions and convictions. Much of the debate assumes a broad consensus that the personal and public costs resulting from teenagers having children are far too high to ignore. Critics note discontinued education, reduced employment opportunities, unstable marriages, low incomes, increased dependence on government benefits and increased health and developmental risks to the children of teenage mothers as negative consequences of teenage parenthood.

Fertility trends show that throughout Western developed countries, including New Zealand, teenage parenthood was far more common prior to the 1970s than it is today. Overall, teenagers of today are far more conservative in their rates of fertility than teenagers of the 1960s and early 1970s. This is most likely due to improvements in contraceptive technology and its availability to younger women, increased accessibility to abortion and a relaxation of strict parental expectations regarding moral attitudes towards use of contraception, intercourse, the timing of family formation and the education pathways of their teenage children.¹

Although teenage parenthood is less common today than 40 years ago, the nature of teenage parenthood has changed. Since the 1970s there has been a significant increase in ex-nuptial or out of marriage childbirth in New Zealand,² and it is this aspect of teenage parenthood that continues to cause heightened concern from governments, policy-makers and some social commentators.

Despite ongoing social research into teenage parenthood in New Zealand, there are important issues and questions surrounding teenage parenthood that remain unanswered. The following analysis uses Vital Statistics Births and Census data to investigate the regional patterns of teenage parenthood and seeks to explore a range of factors that may help to explain regional variations in rates of teenage parenthood in New Zealand.

Key trends

According to Statistics New Zealand's latest Births and Deaths release there were 63,180 live births registered in New Zealand in the March 2011 year, down 770 (1 percent) from the March 2010 year. The highest number of births ever recorded in any March year was 65,800, in 1962. At that time, New Zealand's population was just 2.5 million, compared with 4.4 million in 2011.

¹ Bourgeois-Pichat, J. (1986). 'The unprecedented shortage of births in Europe'. In 'Below-replacement fertility in industrial societies: Causes, consequences, policies'. *Population and Development Review*, 12: 3–25.

² United Nations. (1988). *First marriage: Patterns and determinants*. United Nations, New York.

Fertility rates

Age-specific fertility rates measure the number of live births 1,000 women in a particular age group have in a given period (usually a year). In the March 2011 year, women aged 30–34 years had the highest fertility rate (125 births per 1,000 women aged 30–34 years), followed by those aged 25–29 years (108 per 1,000) and 20–24 years (76 per 1,000)³.

Compared with the high fertility seen in the early 1960s, women in all age groups now have fewer babies. In 1962, women aged 20–24 years had the highest fertility rate (265 per 1,000), followed by those aged 25–29 years (259 per 1,000), and 30–34 years (152 per 1,000)⁴.

Median age of mothers

The median age of New Zealand women giving birth is now 30 years, compared with 26 years in the early 1960s. The median age dropped to just under 25 years in the early 1970s. Although there has been a significant increase in the median age since the 1970s, it has been relatively stable at around 30 years in the past decade.

While there has been a small decrease since the March 2006 year (down from 30.4 to 29.9 years), this is not necessarily indicative of a reversal in the trend towards older childbearing, but reflects changes in age structure within the childbearing age group: the median age of all women aged 15–39 years is now about one year younger than in 2001⁵.

The median age of women giving birth to their first child was 28 years in the year ended March 2011, and has been relatively stable over the past decade.

Total fertility rate⁶

The total fertility rate for the March 2011 year was 2.12 births per woman – down slightly from 2.16 in 2010. New Zealand's total fertility rate has been relatively stable over the last three decades, averaging 2.02 births per woman. In contrast, fertility rates increased dramatically from the mid-1940s, peaking at 4.31 births per woman in 1961. New Zealand then experienced decreasing fertility, with the total fertility rate dropping to 4.05 in 1963, 3.00 in 1972 and 2.12 in 1979⁷.

Māori births

In the March 2011 year, there were 14,190 live births registered to Māori women. In the year ended March 2011, Māori women aged 20–24 years and 25–29 years had the highest fertility rates (around 150 per 1,000 women). The median age of Māori women giving birth was 26 years in the March 2011 year, compared with 30 years for the total population⁸.

³ Statistics New Zealand (2011) *Births and deaths: year ended March 2011*. Statistics New Zealand, Wellington.

⁴ Ibid.

⁵ Ibid.

⁶ The total fertility rate summarises the age-specific fertility rates into a single number indicator of fertility. It indicates, on average, the number of babies a woman would have in her lifetime if the age-specific fertility rates in a given period stayed the same throughout her life.

⁷ Ibid.

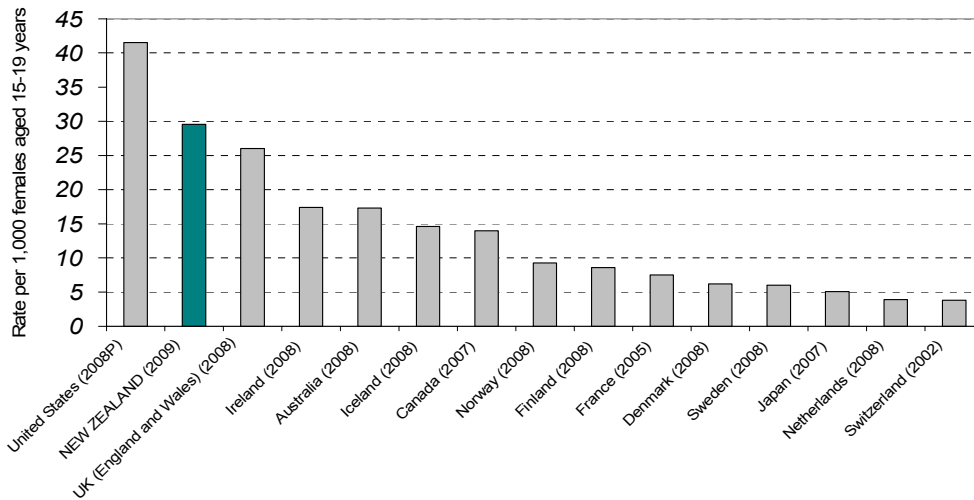
⁸ Ibid.

The total fertility rate for Māori women in the March 2011 year was 2.80 births per woman, above the rate for the total population (2.12 births per woman).

International trends

According to international statistics from other OECD countries, New Zealand has a relatively high teenage birth rate. Figure 1 shows that, in 2009 New Zealand had the second highest teenage birth rate among developed countries (29.6 per 1,000 women aged 15–19 years in 2009). The latest provisional figure for New Zealand is 28 in 2011.

Figure 1: Teenage birth rate, selected OECD countries, 2008 or latest



Source: Statistics New Zealand and other national statistics agencies

Teenage births in New Zealand

Introduction

This section looks at some of the significant trends in parenthood at a national level and across all the regions in New Zealand. It details the overall number of live births to teenage women and the proportion of teenagers with at least one child. It then investigates the differences in teenage parenthood across ethnic groups and between younger and older teenagers.

Technical notes

The following analysis of regional trends uses two main sources. Vital Statistics Births include the number of live births to teenage women aged 13–19 years that occurred between January 2005 and December 2009. The regional analysis draws on data from the 2006 Census. It represents the number of women aged 15–19 years who have given birth to at least one baby born alive.⁹ Thus, it is important for readers to note that the data from the two data sources (Vital Statistics Births and Census) are **not** directly comparable because:

- Vital Statistics is based on five years of data (2005–2009) and is for the teenagers aged 13–19 years
- Census is based on a single year's data (2006) and is for teenagers aged 15–19 years.

Regional analysis has been undertaken using ethnicity and deprivation index. A similar breakdown has not been undertaken at the territorial authority level¹⁰ as the data would not be reliable. More than half of the territorial authorities have less than 50 teenage women with children in the 2006 Census and to divide these small numbers by ethnicity or deprivation index would create many statistically insignificant numbers. Any regional analysis that is considered statistically insignificant will be stated in this report.

With regard to ethnicity data, the data presented in this report include all of the people who stated each ethnic group, whether as their only ethnic group or as one of several ethnic groups. Where a person reported more than one ethnic group, they have been counted in each applicable group.

Readers should note that the incidence of teenage childbirth in New Zealand involves relatively small numbers. In addition, the age group concerned is not homogeneous – the probability of having a teenage birth increases the longer one is a teenager, for both biomedical and statistical reasons. Therefore, identifying sub-national differentials, particularly for issues such as 'repeat' births, has a number of statistical limitations that readers should be cognisant of when interpreting the findings of the report.

⁹ Because of the sensitivity of this question, respondents are given the option of 'objecting to answer the question' (refer Appendix A for the Census question format).

¹⁰ Regional councils are made up of a number of territorial authorities. There is a total of 73 territorial authorities (15 cities and 58 districts). When defining the boundaries of territorial authorities in 1989, the Local Government Commission placed considerable weight on the 'community of interest'. While the size of the community was a factor, the relevance of the components of the community to each other, and the capacity of the unit to service the community in an efficient manner, were the factors on which the Commission placed most emphasis.

Overall trends

Table 1 presents Vital Statistics Births data for the period January 2005–December 2009. It shows that the Auckland region had the highest number of live births to teenage women with 7,031 live births or 30.4 percent of the total live births to teenage women in New Zealand. The next highest regions were Waikato with 2,747 (11.8 percent) and the Bay of Plenty with 2,114 (9.1 percent). The region with the lowest number of live births to teenage women was the Tasman region with only 138 (0.6 percent) followed by West Coast with 161 (0.7 percent) and Marlborough with 193 (0.8 percent).

Table 1: Number of live births to teenage women, January 2005–December 2009

Regional Council	Births to teenage women	Percent of births to teenage women
Northland	1,257	5.4
Auckland	7,031	30.4
Waikato	2,747	11.8
Bay of Plenty	2,114	9.1
Gisborne	521	2.2
Hawke's Bay	1,170	5.0
Taranaki	709	3.1
Manawatu-Whanganui	1,707	7.4
Wellington	2,063	8.9
West Coast	161	0.7
Canterbury	2,065	8.9
Otago	545	2.3
Southland	573	2.5
Tasman	138	0.6
Nelson	199	0.9
Marlborough	193	0.8
Total	23,193	100

Source: Vital Statistics Births January 2005–December 2009

Note: Births to teenage women include all births to women aged 13–19 years.

According to the 2006 Census, approximately 4,842¹¹ teenage women had at least one child; this equates to 3.7 percent of all teenage women in New Zealand aged 15–19 years (Table 2).

¹¹ It is important to note that Census data and the nature by which they are collected may under-estimate the number of teenage parents in New Zealand. IRD family tax credit data in March 2009 showed an estimated 6,000 women aged 16–19 with primary caregiving responsibility.

Table 2: Percent of births to teenagers aged 15–19, Census 2006

Women aged 15–19 with at least one child	4,842
Total women aged 15–19	132,027
Percent aged 15–19 with at least one child	3.7

Source: 2006 Census of Population and Dwellings

Impact of ethnicity

The overall New Zealand ethnicity trends show that, compared to all other ethnic groups, Māori (9.3 percent) had significantly higher percentages of teenage women with at least one child. The next highest ethnicity was Pacific Peoples with 5.4 percent, while the ethnicity with the lowest percentage of teenage women with at least one child was Asian with only 1 percent.

Māori (68.5 percent) also had relatively high percentages of total women who were mothers with at least one child; however, the 'Other Ethnicity' group (72.2 percent) and European (69.6 percent) both had higher percentages of total women with at least one child (Table 3).

Table 3: Teenage women with at least one child by ethnicity, Census 2006

Ethnic group	Total teenage women	Teenage women who were parents ¹²	Percent of teenage women who were parents	Percent of all women who were parents
European	178,647	5,709	3.2	69.6
Māori	53,556	4,953	9.3	68.5
Pacific Peoples	24,333	1,314	5.4	63.7
Asian	28,938	288	1.0	56.8
Middle Eastern/Latin American/African	2,832	48	1.7	57.3
Other Ethnicity	16,938	237	1.4	72.2

Source: 2006 Census of Population and Dwellings

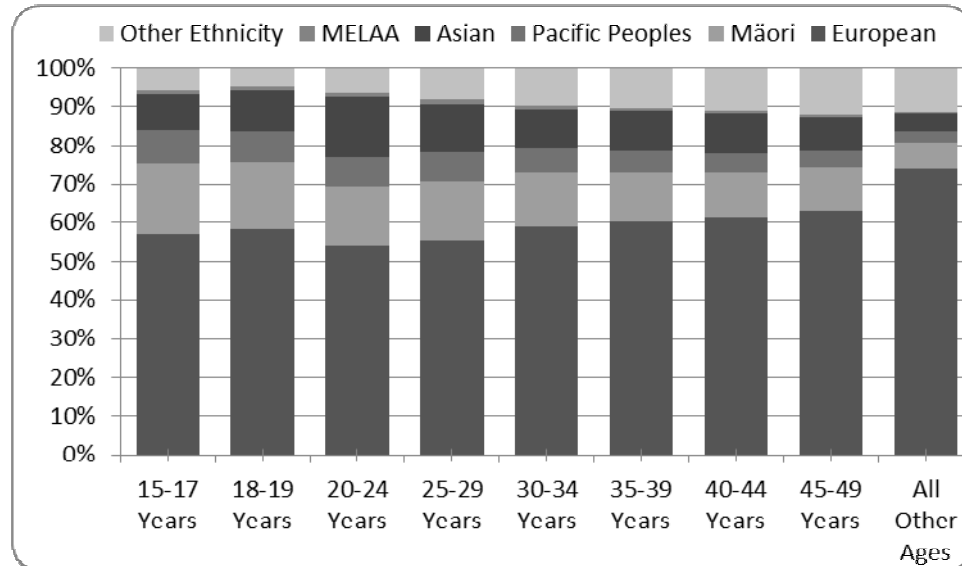
Note: Teenage births include all teenage women 15–19 years with at least one child.

Any research that investigates ethnic differences in social trends needs to be cognisant of the inherent differences in the structure of the different ethnic groups' populations. For instance, the Māori population is characteristically younger than the non-Māori population; differences in parenthood, family structure, education and labour force participation often result from the younger age profile of the Māori population. Ethnic differences in teenage parenthood cannot be investigated in isolation. Any differences need to be considered within the wider context of family formation over an entire life span with patterns of family formation differing across ethnic groups.

¹² As indicated in the technical notes, these data are based on the number of women aged 15–19 years who have given birth to at least one baby born alive. For readability purposes, the Families Commission has employed the term 'parent' to refer to live births recorded in Census data. However, it is recognised that some women who reported giving birth and are included in the data may not have parented that child. Conversely, women who are parenting children but did not give birth to them will not be captured in the data.

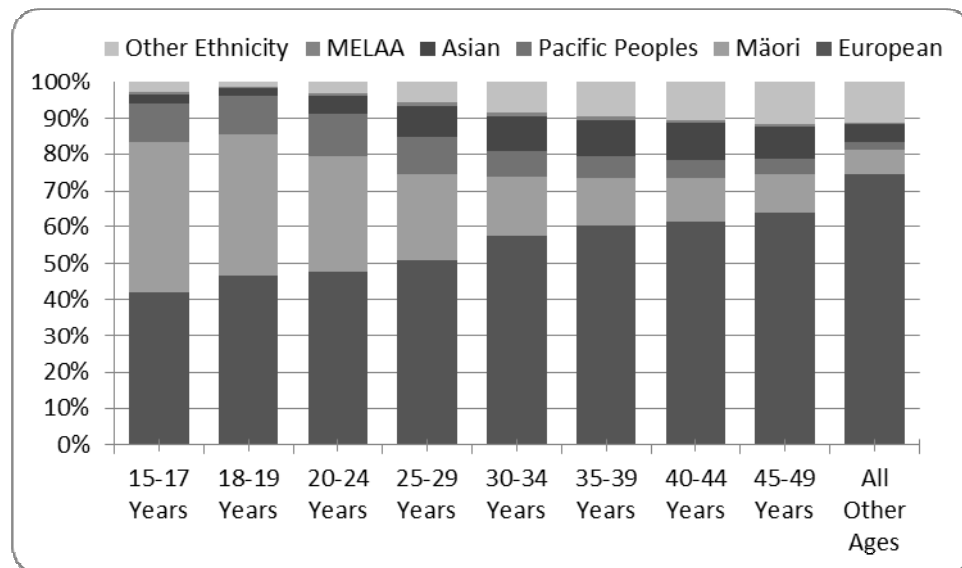
Figure 2 shows the different age structures of the ethnic groups that make up the female population in New Zealand. Māori and, to a lesser extent, Pacific Peoples have young populations, while in contrast, the European and Asian populations are comparatively older.

Figure 2: Ethnic breakdown of female population by age group, Census 2006



Source: 2006 Census of Population and Dwellings
 Note: All Other Ages refers to females over 50 years and 14 years or under.

Figure 3: Ethnic breakdown of female population with at least one child by age group, Census 2006

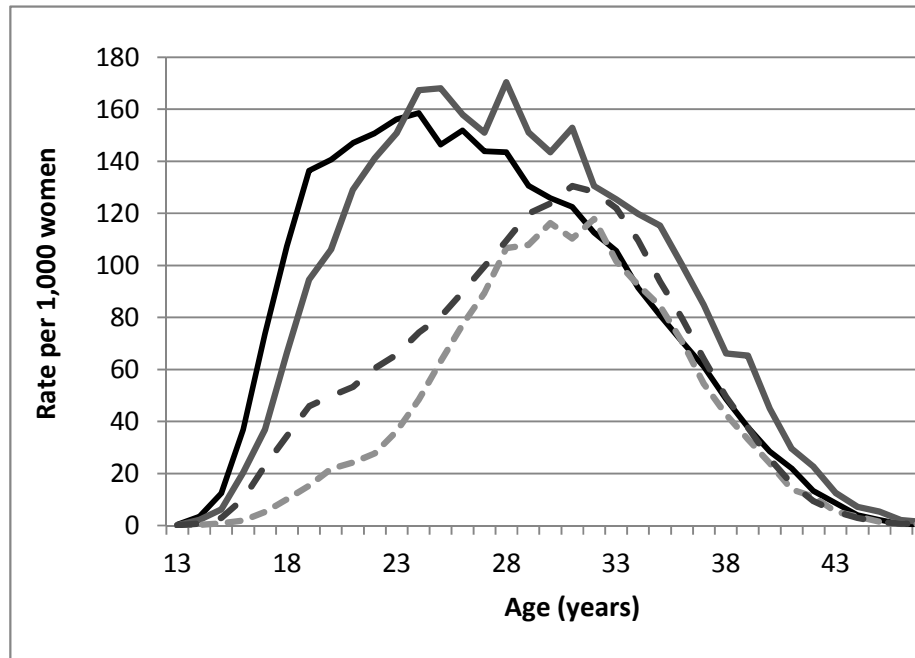


Source: 2006 Census of Population and Dwellings
 Note: All Other Ages refers to females over 50 years and 14 years or under.

Figure 3 shows the percentage breakdown of all females with children by ethnicity at each age group. A comparison of Figures 2 and 3 shows that Māori females between the ages of 15 and 24 account for a much higher proportion of the female population with at least one child, than they do of the general female population.

This point is further illustrated in Figure 4 which shows that Māori have the highest fertility rates at younger ages, peaking at age 25 years. For Pacific Peoples, rates peak at age 28 years and for European and Asian, 31 years and 32 years respectively.

Figure 4: Age-specific fertility rates by ethnicity, 2006



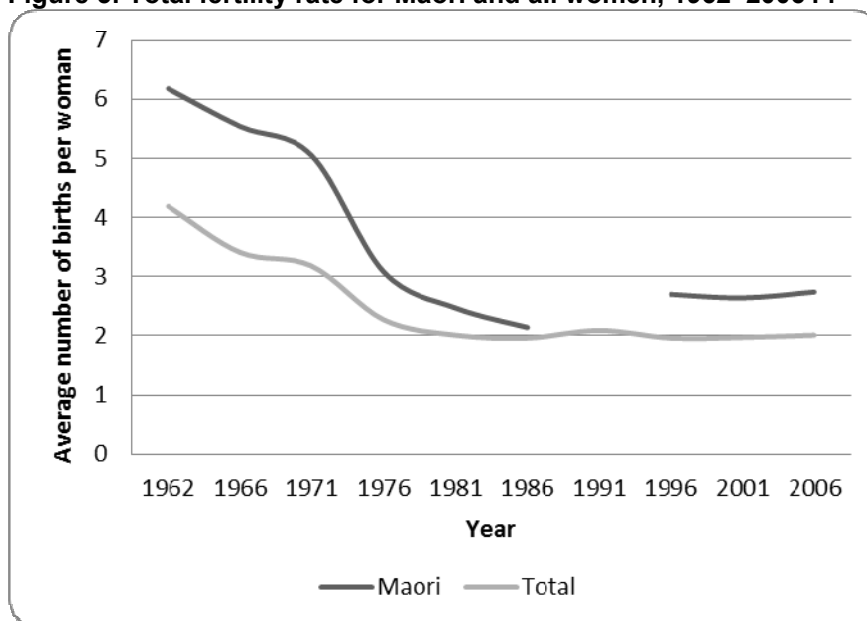
Source: Statistics New Zealand, Demographic Trends Report 1962–2006

Trends in Māori parenthood

By 1976, the Māori fertility rate had been falling for more than 10 years. However, the sharpest drop occurred between 1970 and 1980 when the total fertility rate (the average number of children a Māori woman could expect to bear in her lifetime at the fertility levels current at the time) fell from 5.2 to 2.4 births per woman. This means that the completed size of Māori families as implied by the total fertility rate fell by nearly three children in the space of just 10 years.¹³

¹³ Davies, L., & Wereta, W. (2011). 'A demographic and statistical profile of whānau from 1975 to the present'. *Whānau Yesterday, Today, Tomorrow*. Families Commission, Wellington, pp. 39-67.

Figure 5: Total fertility rate for Māori and all women, 1962–2006¹⁴



Source: Statistics New Zealand, Demographic Trends Report 1962–2006.

Despite its downward trajectory, the Māori fertility rate has remained consistently higher than that for the total New Zealand population.

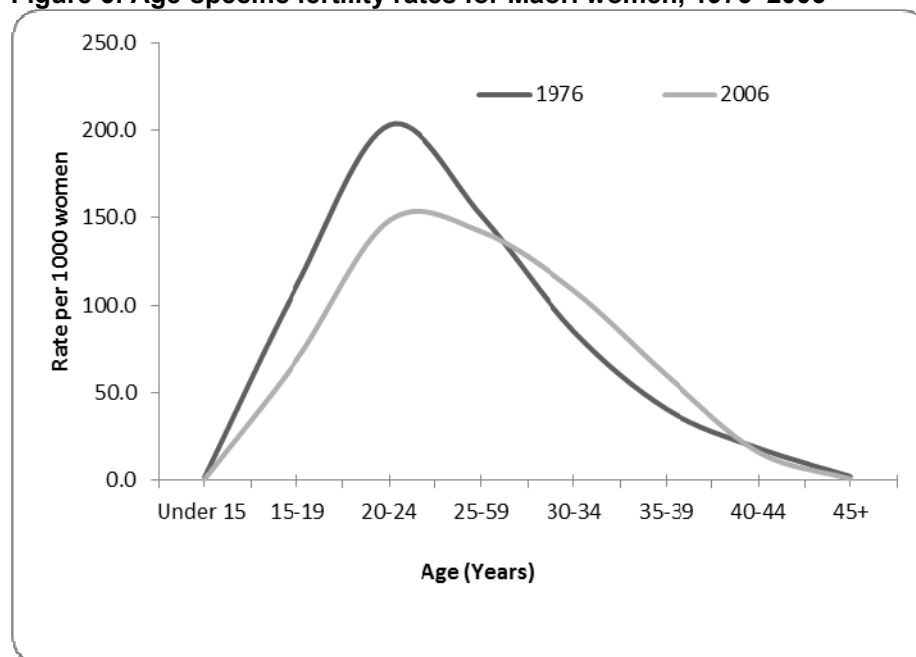
Figure 6 shows that, in 1976, fertility levels were clearly at their highest among Māori women aged 20–24. However, by 2006, fertility rates for women under 30 years of age dropped significantly. The largest decrease occurred among women aged 20–24 years (down from 203 to 147 births per 1,000) followed by women aged 15–19 years (down from 113 to 69 births per 1,000). In contrast, rates for women aged 30–39 years increased (up from 85 to 109 births per 1,000 for women aged 30–34 and up from 41 to 60 births per 1,000 for women aged 35–39).

On average, Māori women now have children a little over three years later than their counterparts in the mid-1970s. The median age of Māori women giving birth in 2006 was 25.9 years compared with 22.7 years in 1976¹⁵.

¹⁴ In 1990, the publication of Total Fertility data ceased pending the introduction of a new birth registration form. After the introduction of the new form in 1995 and the resumption of the series, the rate was found to be higher than expected (2.7 births per woman) causing Statistics New Zealand to observe in its briefing for the 2005 Hui Taumata that there may have been an understatement of Māori fertility, “at least from the late 1970s”.

¹⁵ *ibid*

Figure 6: Age-specific fertility rates for Māori women, 1976–2006



Source: Statistics New Zealand, Demographic Trends, 1976–2006.

Evidence suggests that Māori parenthood trends and patterns tend to mirror changes that are taking place among New Zealand women as a whole.¹⁶

Coinciding with these changes in childbearing have been changes in Māori women's participation in tertiary study and increasing participation in the labour force. In 1997, 18.6 percent of 18–19-year-old and 13.9 percent of 20–24-year-old women were enrolled in tertiary institutions. By 2006, the proportions had risen to 39.2 and 34.8 percent respectively. In respect of the labour force, in 1991, 39.6 and 55.5 percent of 15–19 and 20–24-year-olds respectively were in the labour force. By 2006, the proportions had risen to 55.0 and 65.0 percent respectively. As Māori women's fertility rates have declined and the median age of childbearing has risen, their participation rates in tertiary education and the labour force have increased¹⁷.

Impact of location

The urban/rural location¹⁸ of woman having teenage births shows that, although the majority of teenage births were to mothers located in main urban areas, the highest percentage (almost 12 percent of all births) of teenage births were to mothers located in both secondary urban areas and minor urban areas.

¹⁶ Davies, L., & Wereta, W. (2011). 'A demographic and statistical profile of whānau from 1975 to the present'. *Whānau Yesterday, Today, Tomorrow*. Families Commission, Wellington, pp. 39-67.

¹⁷ *ibid*

¹⁸ Main urban areas are very large urban areas centred on a city or major urban centre. Main urban areas have a minimum population of 30,000. Secondary urban areas have a population between 10,000 and 29,999 and are centred on the larger regional centres. Minor urban areas are urbanised settlements (outside main and secondary urban areas), centred around smaller towns with a population between 1,000 and 9,999. This complies with international definitions of 'urban' population, which include towns with over 1,000 people. The rural areas of New Zealand are those that are not specifically designated as 'urban'. They include rural centres and district territories where these are not included in main, secondary or minor urban areas, and inlets, islands, inland waters and oceanic waters that are outside urban areas.

Table 4: Teenage births as a percent of all births in urban/rural areas, January 2005–December 2009

	Main urban area	Secondary urban area	Minor urban area	Rural area
Teenage births	16,328	1,799	2,619	2,447
Teenage births as a % of all births in area	7.2	10.7	10.9	6.4

Source: Vital Statistics Births January 2005–December 2009

Table 5 looks at the percentage and numbers of all births to teenage mothers by urban/rural location and ethnicity. It is common across all the ethnicities for the highest number of teenage births to be located in main urban areas. However, all ethnicities (with the exception of Pacific Peoples) have the highest percentage of births to teenage mothers located in secondary urban areas. Pacific Peoples have a slightly higher percentage of births to teenage mothers located in minor urban areas. Māori in secondary urban areas have 19.8 percent of births to teenage mothers.

Table 5: Teenage births as a percent of all births by urban/rural location and ethnicity, January 2005–December 2009

Ethnic group [#]	Main urban area		Secondary urban area		Minor urban area		Rural area	
	Teenage births	%	Teenage births	%	Teenage births	%	Teenage births	%
European	8,660	6.1	1,172	9.2	1,474	8.7	1,630	5.0
Māori	8,182	17.3	958	19.8	1,721	18.6	1,304	14.6
Pacific Peoples	3,507	10.5	131	13.5	120	15.8	83	12.6
Asian	565	1.9	19	3.3	23	2.9	12	1.6
MELAA [^]	130	3.4	5	5.5	2	1.4	5	2.9
Other	41	3.3	6	5.0	4	2.2	8	2.3

Source: Vital Statistics Births January 2005–December 2009

[#] Includes all of the people who stated each ethnic group, whether as their only ethnic group or as one of several ethnic groups. Where a person reported more than one ethnic group, they have been counted in each applicable group.

[^] Includes Middle Eastern, Latin American and African ethnicities.

Table 6 looks at the percentage and numbers of all births to teenage mothers by urban/rural location and region. Similar to Table 5, it is common across all the regions for the highest number of mothers having teenage births to be located in main urban areas. When comparing the percentage of births to teenage mothers, there was no clear location trend across the regions. For the majority of regions, secondary urban areas and minor urban areas recorded the highest percentage of births to teenage mothers.

Table 6: Teenage births as a percent of all births by urban/rural location and region, January 2005–December 2009

Region	Main urban area		Secondary urban area		Minor urban area		Rural area	
	Teenage births	%	Teenage births	%	Teenage births	%	Teenage births	%
Northland	483	12.3	0	0.0	322	14.4	452	9.2
Auckland	6,608	6.4	159	9.5	129	7.2	135	4.1
Waikato	1,257	8.2	384	12.0	618	12.8	488	7.5
Bay of Plenty	1,333	10.5	157	12.1	330	14.9	294	8.7
Gisborne	404	14.0	0	0.0	0	0.0	117	12.3
Taranaki	272	8.2	118	14.8	213	13.5	106	5.5
Manawatu-Whanganui	830	9.9	299	13.2	364	14.2	214	7.6
Hawke's Bay	943	10.5	0	0.0	149	17.0	78	5.7
Wellington	1,766	5.9	146	11.3	106	10.1	45	4.4
Tasman	45	5.7	0	0.0	60	7.1	33	3.2
Nelson	198	7.0	0	0.0	0	0.0	1	2.0
Marlborough	0	0.0	137	7.7	29	12.7	27	4.7
West Coast	0	0.0	56	9.4	50	10.0	55	6.1
Canterbury	1,489	6.0	223	8.6	150	5.9	203	3.9
Otago	347	5.9	50	8.0	59	2.7	89	3.5
Southland	353	10.5	70	11.5	40	8.9	110	5.4

Source: Vital Statistics Births January 2005–December 2009

Regional alignment between teenage births, Māori births and all births

Table 7 shows that the region with the highest percentage of teenage women with at least one child is Gisborne with approximately 6.8 percent of teenage women having at least one child according to the 2006 Census. The next highest regions were Northland with 6.5 percent and Bay of Plenty with 5.6 percent. These are regions with a high proportion of teenage Māori women (54.6 percent, 41.8 percent and 35.4 percent respectively).

The region with the lowest percentage of teenage women with at least one child was Otago with only 1.6 percent followed by Wellington with 2.8 percent, Canterbury 2.9 percent and Auckland with 3.1 percent. Table 7 shows that the proportion of teenage Māori women in these regions was relatively low (8.7 percent, 16.6 percent, 10.4 percent and 14.3 percent respectively).

Table 7: Teenage women with at least one child by region, Census 2006[^]

Region	Total teenage women	Teenage women who were parents	Percent of teenage women who were parents [#]	Percent of teenage women who were Māori	Percent of all women who were parents
Gisborne	1,422	96	6.8	54.6	76.5
Northland	4,350	282	6.5	41.8	76.7
Bay of Plenty	7,884	438	5.6	35.4	76.0
Hawke's Bay	4,710	261	5.5	30.7	75.1
Manawatu-Wanganui	7,944	426	5.4	24.2	72.3
Taranaki	3,264	159	4.9	19.3	75.4
Marlborough	1,110	51	4.6	15.9	75.3
Southland	2,775	120	4.3	16.7	74.7
Waikato	12,174	522	4.3	26.8	72.2
West Coast	837	30	3.6	12.9	74.7
Nelson	1,398	48	3.4	12.7	70.5
Tasman	1,236	39	3.2	11.9	76.2
Auckland	43,560	1,329	3.1	14.3	65.0
Canterbury	17,121	501	2.9	10.4	69.1
Wellington	14,946	423	2.8	16.6	63.8
Otago	7,296	117	1.6	8.7	62.5
Total regional councils	132,027	4,842	3.7	20.1	68.8

Source: 2006 Census of Population and Dwellings

Includes all teenage women 15–19 years with at least one child.

[^] The totals within this table are a sum of the individual territorial local authorities within each region. Due to confidentiality rounding at the territorial local authority level, the total teenage births recorded here will differ from the total in Table 9.

There is also some correlation between regions with high percentages of teenage women and high percentages of total women with at least one child. Northland, Gisborne and Bay of Plenty all had high percentages of total women with at least one child (above 76 percent).

Conversely, regions with low percentages of teenage women with at least one child also had low percentages of total women with at least one child. Otago, Wellington, Canterbury and Auckland all had the lowest percentages of total women with at least one child (below 70 percent). An obvious exception to this is the Tasman region, which had a low percentage of teenage women with at least one child while also having a high percentage of total women with at least one child.

Prevalence of births to 'young' teenagers

Table 8 provides Vital Statistics Birth data collected over a period of five years from January 2005 to December 2009. It shows that, when looking at the number of live births to teenagers, there are fewer live births to younger teenage women aged 13–17 years, with only 7,535 compared to 15,658 live births to older teenage women aged 18–19 years. Thus, nationally, around one in three (32.5 percent) of births to teenage women were to mothers aged between 13–17 years, and the majority of these are to mothers aged 16–17 years.

While this finding is fairly consistent across regions, Table 8 shows that Waikato and Manawatu-Whanganui are slightly higher than the national average (almost 35 percent) whereas Otago stands out as falling below the national average (28.6 percent).

Table 8: Births to teenage women by age group and region, January 2005–December 2009

Region	13–17 years	18–19 years	Total	Percent 13–17 years
Northland	398	859	1,257	31.7
Auckland	2,213	4,818	7,031	31.5
Waikato	954	1,793	2,747	34.7
Bay of Plenty	714	1,400	2,114	33.8
Gisborne	159	362	521	30.5
Hawke's Bay	381	789	1,170	32.6
Taranaki	231	478	709	32.6
Manawatu-Whanganui	593	1,114	1,707	34.7
Wellington	668	1,395	2,063	32.4
West Coast	54	107	161	33.5
Canterbury	669	1,396	2,065	32.4
Otago	156	389	545	28.6
Southland	175	398	573	30.5
Tasman	43	95	138	31.2
Nelson	66	133	199	33.2
Marlborough	61	132	193	31.6
Total	7,535	15,658	23,193	32.5

Source: Vital Statistics Births January 2005–December 2009

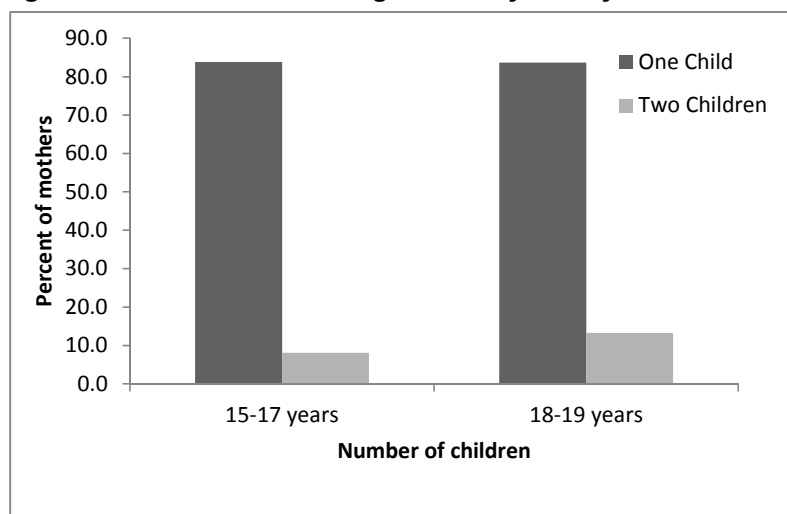
Teenagers with more than one child

The majority of teenage parents in New Zealand (84 percent in 2006) had one child. A further 12 percent had two children. Thus, less than 4 percent of teenage women nationally had more than two children.

Figure 7 compares the proportion of children to parents aged 15–17 years with those aged 18–19 years. Of teenage parents aged 15–17 years, 8 percent have two children. The comparable figure for 18–19-year-olds is 13 percent. It is not appropriate to compare the likelihood of teenagers having more than two children as the numbers involved are so small that the process of rounding that has been applied to the data¹⁹ would mean that the comparisons would not be statistically significant.

¹⁹ Statistics New Zealand has a policy of randomly rounding cells to base 3 in order to protect the confidentiality of respondents.

Figure 7: Percent of women aged 15–19 years by number of children, Census 2006



Source: 2006 Census of Population and Dwellings

Table 9 shows that, in 2006, 4,155 teenage women indicated they had given birth to one child, and 738 indicated they had given birth to two or more children. Not surprisingly, Auckland had the highest numbers with 1,107 teenage women indicating they had one child, and 222 indicating they had two or more children. For the same reasons as outlined above, it would not be appropriate to compare the number of children to teenagers at a territorial authority level.

Table 9: Number of children to teenage parents, Census 2006

Region	One child	Two or more children	Total
Northland	210	63	273
Auckland	1,107	222	1,329
Waikato	474	78	552
Bay of Plenty	381	63	444
Gisborne	81	21	102
Hawke's Bay	204	51	255
Taranaki	135	18	153
Manawatu-Whanganui	369	51	420
Wellington	381	57	438
West Coast	36	6	42
Canterbury	447	63	510
Otago	111	21	132
Southland	96	15	111
Tasman	33	3	36
Nelson	42	3	45
Marlborough	48	3	51
Total	4,155	738	4,893

Source: 2006 Census of Population and Dwellings

Impact of deprivation²⁰

Table 10 shows the number of births to teenage women aged 13–19 years during 2005–2009 by level of deprivation. It shows that Māori have high numbers of teenage births at the highest levels of deprivation. At deprivation level 10 there were 3,924 births to Māori teenagers while at the same level of deprivation there were only 1,928 births to European teenagers. The high numbers of births to Māori teenagers at this level of deprivation could be a result of high numbers of Māori living in areas with high levels of deprivation in comparison to European and other ethnic groups.

Table 10: Births to mothers aged 13–19 years by NZ Deprivation Index and ethnicity, January 2005–December 2009

Ethnicity	NZ Deprivation Index									
	1	2	3	4	5	6	7	8	9	10
European	409	645	695	870	1,164	1,224	1,697	2,048	2,153	1,928
Māori	124	264	312	475	649	863	1,183	1,754	2,514	3,924
Pacific Peoples	34	62	50	102	130	206	297	482	772	1,656
Asian	14	29	22	31	39	53	48	106	129	140
MELAA [^]	4	8	8	10	14	17	16	19	28	17
Other	3	0	2	8	3	7	10	11	8	7

Source: Vital Statistics Births January 2005–December 2009

[^] Includes Middle Eastern, Latin American and African ethnicities.

Table 11 shows the births to teenage women as a percentage of all births within the various deprivation areas. It shows that all ethnicities experienced increases in the percentage of teenage births as levels of deprivation increased. Interestingly, the European result increases by a greater percentage, than Māori and especially Pacific Peoples. However, Māori have higher percentages of teenage births compared to other ethnic groups across all of the deprivation index levels. Davie

This is consistent with recent research by Dannette, Fergusson and Boden (2011)²¹ which suggested that the higher rates of early pregnancy and parenthood among Māori are a consequence of a combination of socio-economic, family and cultural factors that combine to place young Māori at a significantly increased likelihood of early pregnancy and parenthood.

²⁰ The NZ Deprivation Index is constructed from information collected during each Census. It provides a summary deprivation score from 1 to 10 for geographical areas. A score of 1 is allocated to the least deprived 10 percent of areas, and 10 is allocated to the most deprived 10 percent of areas. The deprivation index is constructed using the following nine variables: People aged 18–64 receiving a means tested benefit; People living in households with income below an income threshold; People not living in own home; People aged <65 living in a single-parent family; People aged 18–64 unemployed; People aged 18–64 without any qualifications; People living in households below a bedroom occupancy threshold; People with no access to a telephone; People with no access to a car. (Source: NZDep 2006 Index of Deprivation. Salmond, Crampton, Atkinson. Otago University, Wellington August 2007.)

²¹ Dannette, M., Fergusson, D., & Boden, J. (2011). 'Cultural identity and pregnancy/parenthood by age 20: Evidence from a New Zealand birth cohort'. *Social Policy Journal of New Zealand*, 37.

Table 11: Percentage of births by NZ Deprivation Index to mothers aged 13–19 years, by ethnicity of mother, January 2005–December 2009²²

Ethnicity	NZ Deprivation Index									
	1	2	3	4	5	6	7	8	9	10
European	2.2	3.1	3.5	4.3	5.0	6.1	7.6	8.8	10.8	14.2
Māori	8.5	11.5	12.0	14.1	14.2	15.7	17.0	17.4	19.1	20.1
Pacific Peoples	8.9	8.9	6.6	9.9	9.2	10.6	10.3	10.5	11.0	11.5
Asian	0.9	1.0	0.9	1.2	1.2	1.6	1.4	2.4	3.0	4.7
MELAA	2.0	2.4	2.6	3.7	3.3	4.6	3.4	2.7	4.4	3.9
Other	1.9	0.0	1.0	4.0	1.3	3.9	5.0	4.6	4.3	6.1

Source: Vital Statistics Births January 2005–December 2009

^ Includes Middle Eastern, Latin American and African ethnicities.

Analysis of regions with high levels of teenage births

This section provides a more detailed analysis of nine regions. It begins with an analysis of regions that have the highest rates of teenage parenthood (Gisborne, Northland, Bay of Plenty, Hawke's Bay and Manawatu-Whanganui). These regions have been selected as they all have a teenage birth rate of at least 5 percent.

As a point of comparison, the second part of this section focuses on those regions with the highest numerical numbers of teenage women (Auckland, Waikato, Canterbury, Bay of Plenty, Manawatu-Whanganui and Wellington regions). Collectively, these six regions account for 75.2 percent of all teenage women with at least one child in 2006.

Table 12: Regions with highest rates and highest numbers of births to teenage women, Census 2006

Region	Percent of women aged 15–19 with at least one child
Gisborne	6.8
Northland	6.5
Bay of Plenty	5.6
Hawke's Bay	5.5
Manawatu-Whanganui	5.4
Number of women aged 15–19 with at least one child	
Auckland	1,329
Waikato	522
Canterbury	501
Bay of Plenty	438
Manawatu-Whanganui	426
Wellington	423

Source: 2006 Census of Population and Dwellings

²² These tables use data from the Vital Statistics Births; therefore they include births over the five-year period January 2005 to December 2009.

Gisborne

In terms of within region differences, Gisborne has only has one territorial authority, Gisborne District, so further analysis by territorial authority is not possible.

Table 13: Teenage women with at least one child, Gisborne Territorial Authorities, Census 2006

Territorial authority	Total teenage women	Teenage women who were parents	Percent of teenage women who were parents	Percent of all women who were parents
Gisborne District	1,422	96	6.8	76.6
Regional total	1,422	96	6.8	76.6

Source: 2006 Census of Population and Dwellings

Note: Teenage births include all teenage women 15–19 years with at least one child.

The ethnicity trends in Gisborne show that in the 2006 Census only two ethnicities were identified as having females aged 15–19 years with at least one child. Māori (9.3 percent) had a higher percentage of teenage women with at least one child than European (4.0 percent). Māori (74.6 percent) also had a relatively high percentage of total women with at least one child; however, the 'Other Ethnicity' group (77.9 percent) and European (76.4 percent) both had slightly higher percentages of total women with least one child.

Table 14: Teenage women with at least one child by ethnicity, Gisborne region, Census 2006

Ethnicity	Total teenage women	Teenage women who were parents	Percent of teenage women who were parents	Percent of all women who were parents
European	744	30	4.0	76.4
Māori	843	78	9.3	74.6
Pacific Peoples	54	0	0.0	67.9
Asian	15	0	0.0	72.8
Middle Eastern/Latin American/African	0	0	0.0	66.7
Other Ethnicity	72	0	0.0	77.9

Source: 2006 Census of Population and Dwellings

Note: Teenage births include all teenage women 15–19 years with at least one child.

Gisborne has a strong relationship between the number of births to teenage women and level of deprivation. Approximately 298 births occurred to teenage women who were also resident in a location with the highest level of deprivation; this was 18.1 percent of all births occurring to women resident in this level of deprivation. In comparison, births to teenage women accounted for only 3.8 percent of births in the least deprived areas (Levels 1–3).

Table 15: Births to teenage women by NZ Deprivation Index, Gisborne region, January 2005–December 2009

Residence of mother (NZ Deprivation Index)	Total region births	Number (%) of births to women aged 13–19 years
1	0	0 (0.0)
2	130	5 (3.8)
3	0	0 (0.0)
4	312	18 (5.8)
5	391	37 (9.5)
6	127	5 (3.9)
7	45	5 (11.1)
8	182	14 (7.7)
9	1,005	139 (13.8)
10	1,647	298 (18.1)

Source: Vital Statistics Births January 2005–December 2009

Northland

In Northland, Whangarei had the highest number of teenage women with at least one child, with 141; however, Whangarei (6.0 percent) had the lowest percentage of teenage women with at least one child. The territorial authority with the highest percentage of teenage women with at least one child was Kaipara with 7.8 percent.

There was correlation between Northland Territorial Authorities with high percentages of teenage women and territorial authorities with high percentages of total women with at least one child; both Kaipara and Far North have high percentages of total women with at least one child.

Table 16: Teenage women with at least one child, Northland Territorial Authorities, Census 2006

Territorial authority	Total teenage women	Teenage women who were parents	Percent of teenage women who were parents	Percent of all women who were parents
Far North District	1,518	102	6.7	77.1
Whangarei District	2,331	141	6.0	75.8
Kaipara District	501	39	7.8	79.5
Regional total	4,350	282	6.5	76.7

Source: 2006 Census of Population and Dwellings

Note: Teenage births include all teenage women 15–19 years with at least one child.

The Northland ethnicity trends show that Māori (9.7 percent) had significantly higher percentages of teenage women with at least one child. The next highest ethnicity was Pacific Peoples with 8.8 percent. Māori (73.6 percent) also had a relatively high percentage of total women with at least one child; however, the 'Other Ethnicity' group (80.5 percent) had the highest percentages of total women with at least one child.

Table 17: Teenage women with at least one child by ethnicity, Northland region, Census 2006

Ethnicity	Total teenage women	Teenage women who were parents	Percent of teenage women who were parents	Percent of all women were parents
European	2,910	135	4.6	76.6
Māori	1,953	189	9.7	73.6
Pacific Peoples	171	15	8.8 ²³	67.1
Asian	96	0	0.0	65.0
Middle Eastern/Latin American/African	12	0	0.0	65.8
Other Ethnicity	258	3	1.2	80.5

Source: 2006 Census of Population and Dwellings

Note: Teenage births include all teenage women 15–19 years with at least one child.

In Northland, births to teenage women accounted for only 3.8 percent of all births in the least deprived areas (Levels 1–3). Approximately 425 births occurred to teenage women who were resident in a location with the highest level of deprivation – 16.3 percent of all births occurring to women resident in this level of deprivation.

Table 18: Births to teenage women by NZ Deprivation Index, Northland region, January 2005–December 2009

Residence of mother (NZ Deprivation Index)	Total births	Number (%) of births to women aged 13–19 years
1	0	0 (0.0)
2	335	12 (3.6)
3	197	8 (4.1)
4	970	76 (7.8)
5	767	48 (6.3)
6	1,017	66 (6.5)
7	663	59 (8.9)
8	2,333	262 (11.2)
9	2,095	294 (14.0)
10	2,605	425 (16.3)

Source: Vital Statistics Births January 2005–December 2009

Hawke's Bay

Within Hawke's Bay, Hastings had the highest number of teenage women with at least one child, with 126; however, the territorial authority with the highest percentage of teenage women with at least one child was Wairoa with 8.4 percent.

²³ Numbers are too small for this percentage to be a reliable comparison.

Central Hawke's Bay (27) had the lowest number of teenage women with at least one child, while Napier City had the lowest percentage of teenage women with at least one child with only 4.9 percent.

There was some correlation between Hawke's Bay Territorial Authorities with high percentages of teenage mothers and total women with at least one child; both Wairoa and Central Hawke's Bay also had a high percentage of total women with at least one child.

Table 19: Teenage women with at least one child, Hawke's Bay Territorial Authorities, Census 2006

Territorial authority	Total teenage women	Teenage women who were parents	Percent of teenage women who were parents	Percent of all women who were parents
Wairoa District	249	21	8.4	78.3
Hastings District	2,292	126	5.5	75.1
Napier City	1,782	87	4.9	74.0
Central Hawke's Bay District	387	27	7.0	78.2
Regional total	4,710	261	5.5	75.1

Source: 2006 Census of Population and Dwellings

Note: Teenage births include all teenage women 15–19 years with at least one child.

The ethnicity trends for Hawke's Bay are unreliable for the Middle Eastern/Latin American/African ethnic group and Pacific Peoples due to the low numbers. Māori (10.6 percent) and European (4.2 percent) had slightly higher percentages of teenagers who are mothers than those ethnicities report at a national level.

Table 20: Teenage women with at least one child by ethnicity, Hawke's Bay region, Census 2006

Ethnicity	Total teenage women	Teenage women who were parents	Percent of teenage women who were parents	Percent of all women who were parents
European	3,297	138	4.2	75.1
Māori	1,563	165	10.6	72.6
Pacific Peoples	213	21	9.9 ²⁴	67.1
Asian	120	0	0.0	63.8
Middle Eastern/Latin American/African	18	3	16.7 ²⁵	58.8
Other Ethnicity	285	6	2.1	78.3

Source: 2006 Census of Population and Dwellings

Note: Teenage births include all teenage women 15–19 years with at least one child.

²⁴ Numbers are too small for this percentage to be a reliable comparison.

²⁵ Ibid.

There is a strong relationship between the number of births to teenage women in the Hawke's Bay region and level of deprivation. Approximately 442 births occurred to teenage women who were also resident in a location with the highest level of deprivation; this was 16.1 percent of all births occurring to women resident in this level of deprivation. In comparison, only nine births occurred to teenage women who were resident in the lowest level of deprivation (only 4.5 percent of all births occurring in this level of deprivation).

Table 21: Births to teenage women by NZ Deprivation Index, Hawke's Bay region, January 2005–December 2009

Residence of mother (NZ Deprivation Index)	Total births	Number (%) of births to women aged 13–19 years
1	198	9 (4.5)
2	533	18 (3.4)
3	673	25 (3.7)
4	1,189	74 (6.2)
5	748	38 (5.1)
6	535	59 (11.0)
7	579	52 (9.0)
8	2,292	232 (10.1)
9	1,677	221 (13.2)
10	2,752	442 (16.1)

Source: Vital Statistics Births January 2005–December 2009

Manawatu-Whanganui

Within Manawatu-Whanganui, Territorial Authorities had a significant variation in the percentage of teenage women with at least one child. Palmerston North had the highest number of teenage women with at least one child, with 132; however, Ruapehu (9.6 percent) had the highest percentage of teenage women with at least one child in the Manawatu-Whanganui region and in New Zealand. Manawatu (33) had the lowest number and a percentage matching the national average (3.5 percent) of teenage women with at least one child. There was some correlation between Manawatu-Whanganui Territorial Authorities with high percentages of teenage women and total women with at least one child; Ruapehu, Horowhenua and Tararua had high percentages of total women with at least one child.

Table 22: Teenage women with at least one child, Manawatu-Whanganui Territorial Authorities, Census 2006

Territorial authority	Total teenage women	Teenage women who were parents	Percent of teenage women who were parents	Percent of all women who were parents
Ruapehu District	408	39	9.6	76.3
Whanganui District	1,389	90	6.5	76.3
Rangitikei District	477	27	5.7	76.4
Manawatu District	948	33	3.5	75.6
Palmerston North City	3,318	132	4.0	63.9
Tararua District	525	39	7.4	79.3
Horowhenua District	879	66	7.5	78.3
Regional total	7,944	426	5.4	72.3

Source: 2006 Census of Population and Dwellings

Note: Teenage births include all teenage women 15–19 years with at least one child.

The Manawatu-Whanganui ethnicity trends show that Māori (10.9 percent) had significantly higher percentages of teenage women with at least one child. The next highest ethnicity was Pacific Peoples with 7.8 percent. Māori (70.5 percent) also had a relatively high percentage of total women with at least one child; however, the 'Other Ethnicity' group (75.6 percent) and European (72.6 percent) both had higher percentages of total women with at least one child.

Table 23: Teenage women with at least one child by ethnicity, Manawatu-Whanganui region, Census 2006

Ethnicity	Total teenage women	Teenage women who were parents	Percent of teenage women who were parents	Percent of all women who were parents
European	6,039	279	4.6	72.6
Māori	2,055	225	10.9	70.5
Pacific Peoples	306	24	7.8	60.9
Asian	363	3	0.8	55.1
Middle Eastern/Latin American/African	45	0	0.0	55.5
Other Ethnicity	546	9	1.6	75.6

Source: 2006 Census of Population and Dwellings

Note: Teenage births include all teenage women 15–19 years with at least one child.

Similar to most other regions in the Manawatu-Whanganui region, there is a strong relationship between the number of births to teenage women and level of deprivation. Approximately 447 births occurred to teenage women who were also resident in a location with the highest level of deprivation; this was 17.6 percent of all births occurring to women resident in this level of deprivation. In comparison, only 21 births occurred to teenage women who were resident in the lowest level of deprivation (only 4.4 percent of all births occurring in this level of deprivation).

Table 24: Births to teenage women by NZ Deprivation Index, Manawatu-Whanganui region, January 2005–December 2009

Residence of mother (NZ Deprivation Index)	Total births	Number (%) of births to women aged 13–19 years
1	475	21 (4.4)
2	726	37 (5.1)
3	550	28 (5.1)
4	1,847	119 (6.4)
5	1,762	95 (5.4)
6	1,384	138 (10.0)
7	1,486	147 (9.9)
8	2,907	356 (12.2)
9	2,338	319 (13.6)
10	2,537	447 (17.6)

Source: Vital Statistics Births January 2005–December 2009

Auckland

Within Auckland, various territorial authorities had different numbers and percentages of teenage women with at least one child. Papakura was the territorial authority with the highest percentage of teenage women with at least one child (7.2 percent). Manukau had the highest number of teenage women with at least one child (495) of any territorial authority in New Zealand. Manukau (4.2 percent) also had the second highest percentage of teenage women with at least one child in the Auckland region.

Franklin (66) and Rodney (66) had the lowest numbers of teenage women with at least one child, while the North Shore had the lowest percentage of teenage women with at least one child, with only 1.4 percent.

There was some correlation between Auckland Territorial authorities with high percentages of teenage women with at least one child and high percentages of total women with at least one child; both Manukau and Papakura also had high percentages of total women with at least one child.

Table 25: Teenage women with at least one child, Auckland Territorial Authorities, Census 2006

Territorial authority	Total teenage women	Teenage women who were parents	Percent of teenage women who were parents	Percent of all women who were parents
Rodney District	2,604	66	2.5	74.9
North Shore City	7,125	99	1.4	65.3
Waitakere City	6,057	222	3.7	68.5
Auckland City	12,519	264	2.1	56.0
Manukau City	11,844	495	4.2	69.3
Papakura District	1,635	117	7.2	71.6
Franklin District	1,776	66	3.7	74.8
Regional total	43,560	1,329	3.1	65.0

Source: 2006 Census of Population and Dwellings

Note: Teenage births include all teenage women 15–19 years with at least one child.

Table 26 below outlines the ethnicity trends for Auckland. Māori (9.4 percent) had a significantly higher percentage of teenage women with at least one child, a percentage very similar to the Māori percentage for all of New Zealand. The next highest ethnicity was Pacific Peoples with 5.3 percent, again, similar to the Pacific Peoples percentage for all New Zealand. Māori (65.4 percent) also had a relatively high percentage of total women with at least one child; however the 'Other Ethnicity' group (66.9 percent) and European (65.8 percent) both had higher percentages of total women with at least one child.

Table 26: Teenage women with at least one child by ethnicity, Auckland region, Census 2006

Ethnicity	Total teenage women	Teenage women who were parents	Percent of teenage women who were parents	Percent of all women who were parents
European	22,986	612	2.7	65.8
Māori	6,693	630	9.4	65.4
Pacific Peoples	8,094	429	5.3	64.4
Asian	9,420	90	1.0	58.5
Middle Eastern/Latin American/African	780	9	1.2	58.5
Other Ethnicity	1,914	21	1.1	66.9

Source: 2006 Census of Population and Dwellings

Note: Teenage births include all teenage women 15–19 years with at least one child.

Within the Auckland region there is a strong relationship between the number of births to teenage women and level of deprivation. Approximately 2,308 births occurred to teenage women who were also resident in a location with the highest level of deprivation; this was 11.7 percent of all births occurring to women resident in this level of deprivation. In comparison, only 114 births occurred to teenage women who were also resident in a location with the lowest level of deprivation (only 1.9 percent of all births occurred in this level of deprivation).

Table 27: Births to teenage women by NZ Deprivation Index, Auckland region, January 2005–December 2009

Residence of mother (NZ Deprivation Index)	Total births	Number (%) of births to women aged 13–19 years
1	6,169	114 (1.9)
2	11,113	304 (2.7)
3	8,838	212 (2.4)
4	7,756	288 (3.7)
5	9,125	353(3.9)
6	9,844	510 (5.2)
7	10,095	631 (6.3)
8	12,336	846 (6.9)
9	13,816	1,340 (9.7)
10	19,700	2,308 (11.7) ²⁶

Source: Vital Statistics Births January 2005–December 2009

Waikato

Within the Waikato, there were also differences amongst the territorial authorities. Hamilton City is the largest urban centre of the region and had the highest number of teenage women with at least one child, with 201; however, Hamilton City (3.9 percent) in comparison to other territorial authorities had a relatively low percentage of teenage women with at least one child. The territorial authority with the highest percentage of teenage women with at least one child was South Waikato with 6.4 percent.

Otorohanga had the lowest number of teenage women with at least one child with only nine. Thames-Coromandel had the lowest percentage of teenage women with at least one child with only 3.3 percent.

Interestingly, South Waikato, which had the highest percentage of teenage women with at least one child, also had a relatively high percentage of total women with at least one child.

²⁶ Although the percentage of teenage parents is highest at this level of deprivation in Auckland, in relative terms, compared to other regions this percentage is moderate for this level of deprivation.

Table 28: Teenage women with at least one child, Waikato Territorial Authorities, Census 2006

Territorial authority	Total teenage women	Teenage women who were parents	Percent of teenage women who were parents	Percent of all women who were parents
Thames-Coromandel District	552	18	3.3	79.9
Hauraki District	495	24	4.9	79.6
Waikato District	1,452	78	5.4	74.9
Matamata-Piako District	969	36	3.7	77.5
Hamilton City	5,160	201	3.9	64.2
Waipa District	1,338	45	3.4	75.4
Otorohanga District	270	9	3.3	78.2
South Waikato District	750	48	6.4	78.9
Waitomo District	279	12	4.3	77.3
Taupo District	909	51	5.6	75.4
Regional total	12,174	522	4.3	72.2

Source: 2006 Census of Population and Dwellings

Note: Teenage births include all teenage women 15–19 years with at least one child.

The ethnicity trends for Waikato show that Māori had both the highest number and the highest percentage of teenage women with at least one child, with 339 (9.3 percent) a percentage similar to the Māori percentage for all New Zealand. The next highest ethnicity was Pacific Peoples with 7.6 percent.

Māori (69.8 percent) also had a relatively high percentage of total women with at least one child; however, 'Other Ethnicity' (76.1 percent) and European (73.1 percent) both had higher percentages of total women with at least one child.

Table 29: Teenage women with at least one child by ethnicity, Waikato region, Census 2006

Ethnicity	Total teenage women	Teenage women who were parents	Percent of teenage women who were parents	Percent of all women who were parents
European	9,159	315	3.4	73.1
Māori	3,666	339	9.3	69.8
Pacific Peoples	552	42	7.6	63.5
Asian	705	12	1.7	55.2
Middle Eastern/Latin American/African	93	3	3.2 ²⁷	61.7
Other Ethnicity	840	12	1.4	76.1

Source: 2006 Census of Population and Dwellings

Note: Teenage births include all teenage women 15–19 years with at least one child.

²⁷ Numbers are too small for this percentage to be a reliable comparison.

Similar to Auckland, in the Waikato region there is a strong relationship between the number of births to teenage women and level of deprivation. Approximately 552 births occurred to teenage women who were also resident in a location with the highest level of deprivation; this was 16 percent of all births occurring to women resident in this level of deprivation. In comparison, only 45 births occurred to teenage women who were resident in the lowest level of deprivation (only 3 percent of all births occurring in this level of deprivation).

Table 30: Births to teenage women by NZ Deprivation Index, Waikato region, January 2005–December 2009

Residence of mother (NZ Deprivation Index)	Total births	Number (%) of births to women aged 13–19 years
1	1,500	45 (3.0)
2	2,089	104 (5.0)
3	1,756	121 (6.9)
4	1,969	136 (6.9)
5	4,609	311 (6.7)
6	2,153	164 (7.6)
7	3,863	325 (8.4)
8	4,002	414 (10.3)
9	4,186	541 (12.9)
10	3,451	552 (16.0)

Source: Vital Statistics Births January 2005–December 2009

Canterbury

All territorial authorities within the Canterbury region were below the national average (3.5 percent) of females aged 15–19 with at least one child. However, Christchurch City had the second highest number of teenage women with at least one child (396) for any territorial authority in New Zealand.

Kaikōura, Hurunui, Mackenzie and Waimate all had no teenage women with at least one child.

There is little correlation between Canterbury Territorial Authorities with high percentages of teenage women and high percentages of total women with at least one child. The territorial authorities with high numbers and percentages of teenage women with at least one child did not have high percentages of total women with at least one child.

Table 31: Teenage women with at least one child, Canterbury Territorial Authorities, Census 2006

Territorial authority	Total teenage women	Teenage women who were parents	Percent of teenage women who were parents	Percent of all women who were parents
Kaikōura District	93	0	0.0	73.5
Hurunui District	249	0	0.0	78.4
Waimakariri District	1,185	21	1.8	76.5
Christchurch City	11,709	396	3.4	65.3
Selwyn District	1,110	15	1.4	71.4
Ashburton District	711	21	3.0	77.0
Timaru District	1,314	39	3.0	76.9
Mackenzie District	99	0	0.0	73.1
Waimate District	171	0	0.0	81.3
Waitaki District	480	9	1.9	79.2
Regional total	17,121	501	2.9	69.1

Source: 2006 Census of Population and Dwellings

Note: Teenage births include all teenage women 15–19 years with at least one child.

The ethnicity trends for Canterbury show that Māori (8.3 percent) had significantly higher percentages of teenage women with at least one child. The next highest ethnicity was Pacific Peoples with 4.9 percent. Māori (63.6 percent) also had a relatively high percentage of total women with at least one child; however, the 'Other Ethnicity' group (71.9 percent) and European (69.6 percent) both had higher percentages of total women with at least one child.

Table 32: Teenage women with at least one child by ethnicity, Canterbury region, Census 2006

Ethnicity	Total teenage women	Teenage women who were parents	Percent of teenage women who were parents	Percent of all women who were parents
European	13,302	384	2.9	69.6
Māori	1,833	153	8.3	63.6
Pacific Peoples	552	27	4.9	60.9
Asian	1,299	12	0.9	49.5
Middle Eastern/Latin American/African	114	0	0.0	57.9
Other Ethnicity	1,344	30	2.2	71.9

Source: 2006 Census of Population and Dwellings

Note: Teenage births include all teenage women 15–19 years with at least one child.

Like other regions, the Canterbury region has a strong relationship between the percentage of births to teenage women and level of deprivation. Approximately 13.3 percent of births at the highest level of deprivation were to teenage women. While only 2.3 percent of births in the lowest level of deprivation were to teenage women,

the percentage of all births to teenage women steadily increased through the deprivation index scale.

Table 33: Births to teenage women by NZ Deprivation Index, Canterbury region, January 2005–December 2009

Residence of mother (NZ Deprivation Index)	Total births	Number (%) of births to women aged 13–19 years
1	3,990	92 (2.3)
2	3,627	107 (3.0)
3	3,254	131 (4.0)
4	4,504	178 (4.0)
5	4,245	218 (5.1)
6	1,936	129 (6.7)
7	4,438	344 (7.8)
8	3,601	294 (8.2)
9	3,846	388 (10.1)
10	1,222	162 (13.3)

Source: Vital Statistics Births January 2005–December 2009

Bay of Plenty

The Bay of Plenty region is the only region to be in the top five regions for both the total number of teenage women with at least one child (444) and the percentage of teenage women with at least one child (5.3 percent). In the Bay of Plenty, Rotorua had the highest number of teenage women with at least one child, with 165; Rotorua (7.8 percent) also had the highest percentage of teenage women with at least one child. Opotiki had the second highest percentage (7.1 percent) of teenage women with at least one child.

Kawerau²⁸ had the lowest number (nine) and the lowest percentage (3.9 percent) of teenage women with at least one child.

There is little correlation between Bay of Plenty Territorial Authorities with high percentages of teenage women with at least one child and high percentages of total women with at least one child. Some of the territorial authorities with high numbers and percentages of teenage women with at least one birth did not have high percentages of total women with at least one child.

²⁸ Kawerau is often associated with high numbers of teenage parents. The apparent low number and rate of teenage parenthood in the 2006 Census data may be attributed to self-reporting or incorrect completion of Census forms. The Vital Statistics Births records for January 2005–December 2009 show that, over a five-year period, 120 births were recorded to teenage women living in Kawerau. This also indicates that the 2006 Census may be reporting low for Kawerau.

Table 34: Teenage women with at least one child, Bay of Plenty Territorial Authorities, Census 2006

Territorial authority	Total teenage women	Teenage women who were parents	Percent of teenage women who were parents	Percent of all women who were parents
Western Bay of Plenty District	1,218	54	4.4	79.1
Tauranga City	3,069	129	4.2	74.8
Rotorua District	2,115	165	7.8	74.7
Whakatane District	1,002	63	6.3	77.2
Kawerau District	228	9	3.9	80.1
Opotiki District	252	18	7.1	80.3
Regional total	7,884	438	5.6	76.1

Source: 2006 Census of Population and Dwellings

Note: Teenage births include all teenage women 15–19 years with at least one child.

The Bay of Plenty ethnicity trends show that Māori (10.4 percent) had a significantly higher percentage of teenage women with at least one child. The next highest ethnicity was Pacific Peoples with 7.4 percent. Although Māori (73.0 percent) had a relatively high percentage of total women with at least one child, the 'Other Ethnicity' group (79.1 percent) and European (76.2 percent) both had higher percentages of total women with at least one child.

Table 35: Teenage women with at least one child by ethnicity, Bay of Plenty region, Census 2006

Ethnicity	Total teenage women	Teenage women who were parents	Percent of teenage women who were parents	Percent of all women who were parents
European	5,196	213	4.1	76.2
Māori	2,979	309	10.4	73.0
Pacific Peoples	285	21	7.4	66.7
Asian	285	9	3.2	65.1
Middle Eastern/Latin American/African	30	0	0.0	54.8
Other Ethnicity	543	18	3.3	79.1

Source: 2006 Census of Population and Dwellings

Note: Teenage births include all teenage women 15–19 years with at least one child.

In the Bay of Plenty there is a strong relationship between the percentage of births to teenage women and level of deprivation. Approximately 742 births occurred to teenage women who were also resident in a location with the highest level of deprivation; this was 17 percent of all births occurring to women resident in this level of deprivation. In comparison, only 22 births occurred to teenage women who were resident in the lowest level of deprivation (only 5.1 percent of all births occurring in this level of deprivation).

Table 36: Births to teenage women by NZ Deprivation Index, Bay of Plenty region, January 2005–December 2009

Residence of mother (NZ Deprivation Index)	Total births	Number (%) of births to women aged 13–19 years
1	432	22 (5.1)
2	645	44 (6.8)
3	1,733	100 (5.8)
4	1,031	64 (6.2)
5	654	54 (8.3)
6	2,893	244 (8.4)
7	2,135	194 (9.1)
8	2,351	229 (9.7)
9	2,882	390 (13.5)
10	4,370	742 (17.0)

Source: Vital Statistics Births January 2005–December 2009

Wellington

Within Wellington, Lower Hutt City had the highest number of teenage women with at least one child, with 135, and the third highest percentage of teenage women with at least one child (4.1 percent). The territorial authority with the highest percentage of teenage women with at least one child was Porirua with 5.8 percent. Carterton and South Wairarapa both had no teenage women aged 15–19 with at least one child.

In Masterton, the relatively high percentage of teenage women who are mothers (4.8 percent), aligned with the relatively high proportion of all women who were mothers (77.5 percent).

Table 37: Teenage women with at least one child, Wellington Territorial Authorities, Census 2006

Territorial authority	Total teenage women	Teenage women who were parents	Percent of teenage women who were parents	Percent of all women who were parents
Kapiti Coast District	1,248	42	3.4	77.0
Porirua City	1,716	99	5.8	70.1
Upper Hutt City	1,242	39	3.1	72.9
Lower Hutt City	3,285	135	4.1	69.2
Wellington City	6,327	72	1.1	51.5
Masterton District	753	36	4.8	77.5
Carterton District	192	0	0.0	77.7
South Wairarapa District	183	0	0.0	76.5
Regional total	14,946	423	2.8	63.8

Source: 2006 Census of Population and Dwellings

Note: Teenage births include all teenage women 15–19 years with at least one child.

The ethnicity trends for Wellington region show that Māori (7.6 percent) had higher percentages of teenage women with at least one child. The next highest ethnicity was Pacific Peoples with 3.8 percent. Although Māori (63.3 percent) also had a relatively high percentage of total women with at least one child, the 'Other Ethnicity' group (65.5 percent) had the highest percentage of total women with at least one child.

Table 38: Teenage women with at least one child by ethnicity, Wellington region, Census 2006

Ethnicity	Total teenage women	Teenage women who were parents	Percent of teenage women who were parents	Percent of all women who were parents
European	10,725	288	2.7	63.9
Māori	2,646	201	7.6	63.3
Pacific Peoples	1,506	57	3.8	61.4
Asian	1,323	15	1.1	55.6
Middle Eastern/Latin American/African ²⁹	225	6	2.7	56.4
Other Ethnicity ³⁰	1,008	6	0.6	65.5

Source: 2006 Census of Population and Dwellings

Note: Teenage births include all teenage women 15–19 years with at least one child.

There is a strong relationship between the number of births to teenage women in the Wellington region and level of deprivation. Approximately 518 births occurred to teenage women who were also resident in a location with the highest level of deprivation; this was 13.3 percent of all births occurring to women resident in this level of deprivation. In comparison, only 96 births occurred to teenage women who were resident in the lowest level of deprivation (only 1.8 percent of all births occurring in this level of deprivation).

Table 39: Births to teenage women by NZ Deprivation Index, Wellington region, January 2005–December 2009

Residence of mother (NZ Deprivation Index)	Total births	Number (%) of births to women aged 13–19 years
1	5,397	96 (1.8)
2	2,932	78 (2.7)
3	2,437	74 (3.0)
4	2,274	93 (4.1)
5	3,407	186 (5.5)
6	3,267	228 (7.0)
7	3,401	289 (8.5)
8	2,482	202 (8.1)
9	3,554	296 (8.3)
10	3,900	518 (13.3)

Source: Vital Statistics Births January 2005–December 2009

²⁹ Numbers are too small for this percentage to be a reliable comparison.

³⁰ Ibid.

Discussion

One of the key research questions at the outset of this project was “Are regions an effective unit of analysis for differences by geographical area?” The analysis presented here has shown that regional analysis can provide some useful insights into the phenomenon of teenage parenting in New Zealand. The high-quality Census and Vital Statistics Births data have enabled some robust analysis to be presented. However, the small numbers involved at a regional level for some variables of interest, such as the data relating specifically to teenagers with more than one child, has limited the level of analysis possible. Similarly, detailed analysis within territorial authorities does not retain this same robustness due to the very small numbers in some territorial authorities.

When interpreting regional trends, it is also important to recognise that we are not “comparing apples with apples”. Regions across New Zealand and communities within those regions all have their own distinctive make-up in terms of demographic composition and social and economic circumstances. Previous research has clearly demonstrated that each of these are significant factors that are associated with patterns of fertility and family formation generally, and within that, trends in teenage parenting. In addition the urban/rural location analysis also highlights the size of an urban settlement may also have an influence on the percentage of teenage births.

Thus, regional analysis has the potential to provide useful insights to inform policy analysis, initiatives and interventions to reduce or support teenage parenting. However, any regional analysis needs to explore and take into account the demographic and socio-economic composition of the region.

Regions with highest rates of teenage birth and parenthood

Gisborne, Northland, Bay of Plenty, Hawke’s Bay and Manawatu-Whanganui were identified as having the *highest rates* of teenage parenthood. These regions are recognised as having high levels of socio-economic disadvantage and deprivation, factors which are associated with high levels of teenage parenting. The regions with the *highest number* of teenage births were Auckland, Waikato, Canterbury, Bay of Plenty, Manawatu-Whanganui and Wellington regions.

Although some regions had significantly high percentages of teenage births, given the small populations in these locations the actual number of teenage women with at least one child was numerically much smaller than in territorial authorities with significantly lower percentages but larger populations.

Ruapehu District provides a good example of this point. Although Ruapehu District had the highest percentage of teenage mothers of all the territorial authorities in New Zealand with 9.6 percent, this only equated to 39 teenage women with at least one child. In comparison, Manukau, with only 4.2 percent of teenage women with at least one child, equates to 495 teenage women.

Thus, if the policy objective were to impact on the total numbers of teenage births, then investing into communities such as Manukau is likely to achieve the best result. Alternatively, if the policy objective were to improve outcomes for young women who experience the highest rates of teenage births, then it is communities such as Ruapehu that most warrant investment.

Differences within regions

Another key question for this research was whether there are strong *within region* differences in high- and non-high-rate regions. The data presented here indicated that there are significant variations within regions. For example, within the Manawatu-Whanganui region, the Ruapehu District has a high percentage of teenage parenthood with 9.6, yet in the same region, Palmerston North City has a close to average percentage of 4.0. Across New Zealand there is a strong relationship between smaller populated North Island territorial authorities with high rates of teenage parenthood. This correlates with the deprivation experienced in some smaller populated areas and with the high percentage of Māori in the North Island. The unique composition of regions needs to be considered when addressing teenage births.

The pattern of territorial authorities with a high percentage and low number and other territorial authorities with a low percentage and high number often correlates with the more rural or urban nature of the location of the territorial authority. The smaller populated territorial authorities like Ruapehu, Wairoa, Kaipara, South Taranaki, Horowhenua, Tararua and Opotiki all had significantly high percentages of teenage mothers; however, none of these territorial authorities had numbers greater than 70. In comparison, the majority of territorial authorities with numbers of teenage mothers greater than 150 are highly populated areas like Manukau City, Christchurch City, Auckland City, Waitakere City, Hamilton City and Rotorua District.

Prevalence of 'young' teenage parents

A key variable of interest for this research was the age of the teenage mother. The data showed that, at a national level, around one in three (32.5 percent) of births to teenage women were to mothers aged between 13–17 years. This finding was fairly consistent across regions. Using the data available for this research (13–17 years), no regions stood out as having unusually high rates of young teenage parenthood.

Prevalence of more than one child

A key line of enquiry for this research was whether some regions have higher rates of women having more than one birth in their teens. The data showed that, at a national level, the majority of teenage women (15–19 years) in New Zealand (84 percent in 2006) have one child. A further 12 percent have two children. Thus, less than 4 percent of teenage women nationally have more than two children.

It was not possible to compare this variable regionally because the small numbers of teenage women with more than one child would make statistical comparison unreliable.

Impact of demographic composition on trends

Ethnicity

The data highlighted some strong trends across all the regions in ethnicity. Māori in particular, but also Pacific Peoples, showed significantly high percentages of teenage women with at least one child. These ethnicities also had moderately higher percentages of all women with at least one child. Regions with high Māori populations also recorded high rates of teenage parenting.

In interpreting these findings it is important to recognise the differences in values, beliefs and historical trends in family formation across cultures in New Zealand that have been well documented.³¹

For Māori in particular, the higher levels of teenage fertility need to be considered within the broader patterns of family formation over a life span. The material presented earlier clearly showed that, historically, Māori women have had, and continue to have, children at younger ages than their European peers. However, over a life span, increasingly, Māori women are having a similar total number of children to European women. In the short to medium term, this highlights the importance of ensuring that social and economic policies (particularly relating to education and employment) are sufficiently flexible and accessible at all life stages so that Māori women, who generally have children at younger ages, are not disadvantaged.

Location

The urban/rural location data showed that, although the majority of teenage births were to mothers located in main urban areas, the highest percentage of teenage births were to mothers located in both secondary urban areas and minor urban areas. When looking at ethnic differences it was common across all the ethnicities for the highest number of mothers having teenage births to be located in main urban areas. However, all ethnicities (with the exception of Pacific Peoples) had the highest percentage of births to teenage mothers located in a secondary urban area. These findings suggest that the nature and size of location where a teenager lives may have an influence on teenage births. This could be a factor of the level of services and educational options in such locations.

Research suggests that differences between urban and rural percentages in early childbirth can be partly attributed to access to services.³² Rural and non-urban areas are not always able to supply teenagers with direct access to family planning services or abortion. In addition, in some non-urban areas teenagers may face challenges in pursuing education or employment pathways.

Impact of socio-economic circumstances

Data presented throughout the regional analysis clearly show the correlation between the higher level of deprivation across and within a region, and the higher levels of teenage parenthood.

³¹ Morgan, S. P., Pool, I., Sceats, J., & Dharmalingham, A. (1998). *The link of early childbearing to marriage and subsequent fertility in New Zealand*. Paper presented at the PAA conference, Chicago.

³² Francome, C. (1986). *Abortion practice in Britain and the United States*. Allen and Unwin, London.

Analysis using Vital Statistics Births data showed that, for every region, an increased level of deprivation also meant an increased percentage of teenage births relative to total births. This trend indicates that deprivation is one of the strongest influences on teenage births. Similarly, international research³³ suggests that socio-economic status is a significant variable; it is a complex variable but still remains an essential factor in the determinants of teenage births.

Overall patterns of births

The overall parenthood rate of a region was also a strong influencing factor. Within territorial authorities there is a strong relationship between the percentage of teenage parenthood and the percentage of all women in the territorial authority who have at least one child. When analysed by region, most territorial authorities with high percentages of teenage parenthood are also the highest in the region for total percentage of women with at least one child. The exceptions are Christchurch City, Rotorua City and Porirua City which, within their regions, have high percentages of teenage parenthood but relatively low percentages of all women with at least one child. Further analysis would need to be undertaken to identify the reason for this anomaly.

Other considerations

Regional analysis of teenage births using both Census and Vital Statistics Births data provides an insight into the complexities involved in this social issue: there are no simple and straightforward relationships between the variables analysed. However, there are some interesting complexities that may be further researched with more complex statistical techniques or with more qualitative investigation.

In addition to deprivation and ethnicity there are other factors that may merit further investigation but were beyond the scope of this report. For example, education is a significant variable that can influence the occurrence of early births. International research suggests that young women who have highly educated parents are more likely to use contraception and avoid an early birth and young women who lack strong goals in educational achievement are more likely to experience early childbirth.³⁴

This report has looked at regional trends in teenage births and parenthood, the patterns between territorial authorities, ethnicity and deprivation. International literature and research suggest that these are some of the critical factors that can influence teenage births. Analysis of the data available shows that there are many complexities that interrelate and influence teenage births – we can see that region, ethnicity and deprivation all have a significant relationship with teenage births.

³³ Hogan, D., & Kitagawa, E. (1985). 'The impact of social status, family structure and neighbourhood on the fertility of black adolescents'. *American Journal of Sociology*, 90 (4): pp. 825-855.

³⁴ Zelnik, M., Kantner, J., & Ford, K. (1981). *Sex and pregnancy in adolescence*. Sage Publications, Beverly Hills, CA.

Appendix A

Census 2006 Question 25: Children born alive

25 If you are male → *go to 26*
If you are female, answer this question.
How many babies have you given birth to?

number born alive

none

object to answering this question

→ *go to 26*

Appendix B

Table 40: New Zealand territorial authorities ranked by number and percent of teenage women with at least one child

Territorial authority ranked by total females aged 15–19 with at least one child		
Rank	Territorial authority	Teenage births
1	Manukau City	495
2	Christchurch City	396
3	Auckland City	264
4	Waitakere City	222
5	Hamilton City	201
6	Rotorua District	165
7	Whangarei District	141
8	Lower Hutt City	135
9	Palmerston North City	132
10	Tauranga City	129
11	Hastings District	126
12	Papakura District	117
13	Far North District	102
14 =	North Shore City	99
14 =	Porirua City	99
16	Gisborne District	96
17 =	Whanganui District	90
17 =	Dunedin City	90
19	Napier City	87
20	New Plymouth District	81
21 =	Waikato District	78
21 =	Invercargill City	78
23	Wellington City	72
24 =	Rodney District	66
24 =	Franklin District	66
24 =	Horowhenua District	66
27	Whakatane District	63
28	South Taranaki District	60
29	Western Bay of Plenty	54
30	Taupo District	51
31	Marlborough District	51
32 =	South Waikato District	48
32 =	Nelson City	48
34	Waipa District	45
35	Kapiti Coast District	42
36 =	Kaipara District	39
36 =	Ruapehu District	39
36 =	Tararua District	39
36 =	Upper Hutt City	39
36 =	Tasman District	39
36 =	Timaru District	39
42 =	Matamata-Piako District	36
42 =	Masterton District	36
44	Manawatu District	33
45 =	Central Hawke's Bay	27
45 =	Rangitikei District	27
45 =	Southland District	27

Territorial authority ranked by percent females aged 15–19 with at least one child		
Rank	Territorial authority	Percent of teenage women who are mothers
1	Ruapehu District	9.6
2	Wairoa District	8.4
3 =	Rotorua District	7.8
3 =	Kaipara District	7.8
3 =	South Taranaki District	7.8
6	Horowhenua District	7.5
7	Tararua District	7.4
8	Papakura District	7.2
9	Opotiki District	7.1
10	Central Hawke's Bay	7.0
11	Gisborne District	6.8
12	Far North District	6.7
13	Whanganui District	6.5
14	South Waikato District	6.4
15	Whakatane District	6.3
16	Whangarei District	6.0
17	Porirua City	5.8
18 =	Stratford District	5.7
18 =	Rangitikei District	5.7
20	Taupo District	5.6
21	Hastings District	5.5
22	Waikato District	5.4
23 =	Napier City	4.9
23 =	Buller District	4.9
25 =	Hauraki District	4.8
25 =	Masterton District	4.8
25 =	Invercargill City	4.8
28	Marlborough District	4.6
29	Western Bay of Plenty	4.4
30	Waitomo District	4.3
31 =	Tauranga City	4.2
31 =	Manukau City	4.2
33 =	Lower Hutt City	4.1
33 =	Gore District	4.1
35	Palmerston North City	4.0
36 =	Kawerau District	3.9
36 =	Hamilton City	3.9
38 =	New Plymouth District	3.7
38 =	Franklin District	3.7
38 =	Matamata-Piako District	3.7
38 =	Waitakere City	3.7
42 =	Southland District	3.5
42 =	Manawatu District	3.5
44 =	Nelson City	3.4
44 =	Christchurch City	3.4
44 =	Kapiti Coast District	3.4
44 =	Waipa District	3.4

Territorial authority ranked by total females aged 15–19 with at least one child		
Rank	Territorial authority	Teenage births
48	Hauraki District	24
49 =	Wairoa District	21
49 =	Waimakariri District	21
49 =	Ashburton District	21
52 =	Thames-Coromandel	18
52 =	Opotiki District	18
52 =	Stratford District	18
55 =	Selwyn District	15
55 =	Gore District	15
57 =	Waitomo District	12
57 =	Buller District	12
57 =	Grey District	12
57 =	Central Otago District	12
57 =	Clutha District	12
62 =	Otorohanga District	9
62 =	Kawerau District	9
62 =	Waitaki District	9
65	Westland District	6
66	Queenstown-Lakes	3
67 =	Carterton District	0
67 =	South Wairarapa	0
67 =	Kaikoura District	0
67 =	Hurunui District	0
67 =	Mackenzie District	0
67 =	Waimate District	0
67 =	Chatham Islands	0

Territorial authority ranked by percent females aged 15–19 with at least one child		
Rank	Territorial authority	Percent of teenage women who are mothers
48 =	Otorohanga District	3.3
48 =	Thames-Coromandel	3.3
50	Tasman District	3.2
51 =	Grey District	3.1
51 =	Upper Hutt City	3.1
53 =	Timaru District	3.0
53 =	Ashburton District	3.0
55 =	Clutha District	2.9
55 =	Westland District	2.9
55 =	Central Otago District	2.9
58	Rodney District	2.5
59	Auckland City	2.1
60	Waitaki District	1.9
61	Waimakariri District	1.8
62	Dunedin City	1.5
63 =	North Shore City	1.4
63 =	Selwyn District	1.4
65	Wellington City	1.1
66	Queenstown-Lakes	0.7
67 =	Carterton District	0.0
67 =	South Wairarapa	0.0
67 =	Kaikoura District	0.0
67 =	Hurunui District	0.0
67 =	Mackenzie District	0.0
67 =	Waimate District	0.0
67 =	Chatham Islands	0.0