Strengthening Families

Report on

Cross-Sectoral Outcome Measures and Targets

1999

INCORPORATING A FIVE YEARLY REPORT ON SELECTED SOCIAL CONTEXT INDICATORS

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INTRODUCTION

The purpose of this report is to provide an update on outcome measures and targets set in 1997, to enable Ministers and other key stakeholders to assess progress towards achievement of the Strengthening Families Strategy. This is the third such report to be compiled annually by the co-ordinating agencies.

Strengthening Families is a multi-sector approach, providing co-ordinated services to improve the well-being of New Zealand's most at-risk children, young people and their families. The goal of the Strengthening Families Strategy is to improve life outcomes for children in families whose circumstances put good health, education and welfare outcomes at risk. Families at risk are defined as "families who are experiencing multiple and persistent disadvantages which compromise family functioning and increase the chances that their children may have poor long-term outcomes".

The Outcome Measures

The measures are listed on pages 16-17. They are a mixture of outcome measures, risk behaviour indicators and output measures. The 1997 measures comprise a range of mortality, illness and injury, abuse and neglect, care and protection, participation in early education and health prevention activities, and development/behaviour measures. Each of the 1997 measures has been updated by Health, Education and Welfare with the latest figures available at the time of collation, and a commentary on progress. In 1998, the list was expanded to include two justice-related measures which have also been updated.

Generally speaking, the report provides for each outcome measure:

- a short statement about why the measure is important as a indicator of life outcomes for children and young people,
- a graph showing important facts about trends or subgroups for each measure, and
- highlights of what has been happening with each measure, with important differences by population subgroups noted.

The links between initiatives in the Strengthening Families Strategy and some of the measures may not be immediately apparent. Outcomes are the result of complex inter-relationships between the individual, the family and a range of social, cultural and economic factors, and Strengthening Families focuses foremost on family functioning as the primary axis of care, control and support that ultimately shapes outcomes for children. However, at this early stage in the life of the strategy it is not possible to draw conclusions about its impact from the measures presented.

Newly Established Measures

Two new outcome measures have been established for Drug and Alcohol Risk Behaviour. These relate to alcohol and cannabis use among young people aged 15-17 years, and 18-19 years. Inclusion of an indicator for drug and alcohol risk behaviour was agreed in 1997, but the specific measures have been defined and are presented for the first time in this report. Targets have yet to be set for these new measures.

Target Setting

Targets were set in 1997 for most of the measures. Each sector takes the lead for targets where the strategies for achieving them are predominantly within their responsibility. Criteria for setting targets were:

- achievement of the target would have a significant impact on future outcomes for children and for young people from families/whanau at risk
- there are known interventions in respect of the particular issue
- the intervention would contribute to improving equality of opportunity for children, and in particular, reduce disparities between Maori and non-Maori
- the intervention would enhance the capacity and self reliance of families and whanau in their role of raising healthy and capable children.

The two justice-related measures do not have targets. Nor have targets been set for the Child Abuse and Neglect Notifications and Re-notifications measure. These are measures for which target setting is not appropriate. For measures such as crime and child abuse the figures represent reported incidence only, and actual incidence is not known. Figures are therefore confounded by levels of reporting. It is not appropriate to set targets to reduce figures for reported incidence when there is under-reporting and a higher level of reporting is desired.

Changes to the Outcome Measures and Targets

The reporting approach has attempted to avoid *ad hoc* changes to the measures and targets agreed in 1997, to ensure consistency and enable comparison across the years. However, as a result of clarifications of concepts behind some of the measures and improved understanding of issues and approaches relating to data capture, definitions to some of the measures have been modified and interpretation of the data and trends qualified. Where unavoidable changes have been made, they are noted throughout the report.

In addition to these changes noted in the report, the baseline established for the 3-Year-Olds in Early Childhood Education (percentage) measure (see page 16) has been revised due to the revision of the population estimates used to calculate this rate. Targets for the Teenage Fertility Rate measure have been rebased to live births per 1000 females (previously per 100 000) and the baseline year has been changed from 1996 to 1995 due to the revision of population estimates used in the calculation of fertility rates, that changed the previously established levels (see page 17).

Several potential changes that may affect next year's report can also be foreshadowed here.

With regard to the welfare-related measures, following considerable organisational change and a review of departmental output structures the Department of Child, Youth and Family Services is progressing a client outcome measures project to establish an integrated framework and methodology for measuring client outcomes. In light of these developments there is a need to review the welfare-related measures at the earliest opportunity, to realign them with current concepts and data standards. These measures include:

- Child Abuse and Neglect Notifications and Re-notifications
- Out of Family Care and Protection Services
- Incidence of Repeat and Serious Re-offending Cases Referred to CYPFA

The age range for the Youth Suicide measure (15-24 years) is also in need of review. Suicide rates for 15-24 year olds are not considered indicative of recent trends in the under 20 age group, at which monitoring is generally targeted. The age range could be changed to 15-19 years in future.

Finally, it appears that the targets set for reductions in the Teenage Fertility Rate may be too modest, and should be reconsidered.

Outcome Measures and Targets for Maori

The distinction is drawn between including monitoring figures for Maori and setting targets for Maori. In terms of monitoring, the figures for Maori are included on charts in the 1999 update wherever possible.

Little progress has been made toward the inclusion of targets for Maori since the preparation of the 1998 report. The issues surrounding targets for Maori are complex. There is a tension between setting targets that are achievable (and therefore lower) and setting targets that work towards the overall goal of reducing the disparity between Maori and non-Maori. Where the disparity was narrower, a separate target would not be appropriate in any case.

There are also questions about the value of setting separate targets for Maori. It is still possible to track whether disparities have been reduced between Maori and non-Maori without setting targets for Maori.

Technically, Health would have some difficulty projecting trends and therefore setting targets for some measures. Since 1995 there have been a number of changes to the way health statistics and population statistics are collected. As a result of these changes, data from 1995 is not directly comparable with data from previous years. There exist therefore only three years of data on which to base predictions. In one or two years there will be better information on which to base Maori-specific targets.

Education has a similar problem with the first of its two measures, participation of 3-Year-Olds in Early Childhood Education. Education reports that currently it is not possible to develop Maori targets because between census years two different population measures are used. Ethnic populations are based on projections whereas estimated actuals are used for the population as a whole.

With regard to the second measure, School Leavers With A Formal Qualification, the Ministry of Education has stated the view that the setting of targets should be undertaken in the context of the Maori Education Strategy and then picked up as appropriate in Strengthening Families.

The issues surrounding targets for Maori have not yet been fully debated in the respective agencies concerned or in the wider public sector. While the respective agencies are still addressing these issues, targets are not yet available which can be included in this year's report.

Social Context Indicators - Five Yearly Report

In addition to outcome measures and targets, this year's report incorporates for the first time a report on selected social context indicators. These indicators are intended to provide a picture of changing trends in some of the key risk factors for children, which are considered to be disadvantages associated with poor family functioning and increased chances that children may have poor long term outcomes.

There are no targets for the social context indicators. Monitoring changes in these social environmental factors over a long time frame serves to contextualise the outcomes of the Strengthening Families Strategy by highlighting the changing conditions under which it operates. In order to see the longer view, it is intended to report on the social context indicators every five years. This coincides with the availability of the census data that have been used for most of the indicators.

The social context indicators are summarised on page 5, with trends for Maori and Pacific Islands people shown on the following page. They include indicators of the extent to which children are affected (through their parents, families or households) by disadvantages in relation to family circumstances, benefit dependency, paid work status, low income, housing circumstances, household food security and educational level. Where possible, results are included for 1986, 1991 and 1996. These will be updated following the 2001 Census.

Each social context indicator presented in the report provides a brief explanation of the rationale for its inclusion. However, the current indicator regime does not claim to be comprehensive. Other indicators, such as the occupational class of parents and area deprivation have been suggested as strong risk factors, but it was not possible to assess or include all of these. Further theoretical work to clarify the framework underlying the choice of indicators would reinforce confidence that the indicators were providing an accurate overall monitor of the key risk factors for disadvantage among families with children.

There is no simple measure of social well being. The social indicators presented in this report give only a limited picture of complex social processes, and do not purport to be a comprehensive social analysis. They are important, however, in allowing scrutiny of some of the changes in the social environment most likely to have a broad impact on the well being of children.

SUMMARY LISTS OF SELECTED SOCIAL CONTEXT INDICATORS AND TRENDS

Summary list of selected social context indicators and trends

	Indicators	1986	1991	1996
Family Circumstances	Percentage of dependent children under 18 years living with one parent	16%	21%	24%
Benefit Receipt	Percentage of children under 18 years with a parent on benefit	13%	25%	26%
Long Term Benefit Receipt	Percentage of children who were under 10 years of age and included in benefits granted in 1993, that spent at least three of the following five years as the child of a benefit recipient (1993-98 sample cohort)	-	-	52%
Paid Work Status	Percentage of children under 15 years without a parent in paid work	21%	25%	23%
Low Income	(a) Percentage of children with equivalent family income in the lowest two quintiles by family type - one parent /two parent……..…. One parent	-	88%	85%
	……Two parent	-	27%	27%
	(b) Percentage of children with equivalent family income in the lowest two quintiles by ethnic group - Maori/Pacific Islands/European …… Maori	-	66%	59%
	Pacific Islands	-	71%	60%
	……European	-	35%	30%
Housing Circumstances	(a) Percentage of children living in households containing more than their immediate family (Shared housing)	-	13%	17%
	(b) Percentage of children under 18 years living in crowded households, as defined by the Canadian National Occupancy Standard (There is no official measure of household crowding in New Zealand)	-	-	5%
Household Food Security	(a) Percentage of 25-44 year olds whose households can afford to eat properly only sometimes by gender - male/female (1997)……...Male	-	-	17%
	...Female	-	-	19%
	(b) Percentage of 25-44 year olds whose households sometimes or often run out of food due to lack of money by gender - male/female (1997)…….Male	-	-	14%
	Female	-	-	21%
	(c) Percentage of 25-44 year olds whose households sometimes or often eat less because of lack of money for food by gender - male/female (1997)…..……Male	-	-	13%
	Female	-	-	18%
	(d) Percentage of 25-44 year olds whose households make use of special food grants or food banks when they do not have enough money for food by gender - male/female (1997)……..……..Male	-	-	2%
	Female	-	-	8%
Educational Level	Percentage of dependent children under 18 and not in full time employment who have a resident parent with no formal qualifications	58%	48%	43%

Summary of trends for Maori

	Indicators	1986	1991	1996
Family Circumstances	Percentage of dependent children under 18 years living with one parent	28%	39%	41%
Benefit Receipt	Percentage of children under 18 years with a parent on benefit (1999)*	-	-	39%
Paid Work Status	Percentage of children under 15 years without a parent in paid work	40%	48%	41%
Housing Circumstances	(a) Percentage of children living in households containing more than their immediate family (Shared housing)	-	-	26%
Household Food Security	(a) Percentage of 25-44 year olds whose households can afford to eat properly only sometimes by Male	-	-	30%
	gender - male/female (1997)……..Female	-	-	37%
	(b) Percentage of 25-44 year olds whose households sometimes or often run out of food due to lack of Male	-	-	31%
	money by gender - male/female (1997)…….Female	-	-	41%
	(c) Percentage of 25-44 year olds whose households sometimes or often eat less because of lack of Male	-	-	29%
	money for food by gender - male/female (1997)……..…Female	-	-	33%
	(d) Percentage of 25-44 year olds whose households make use of special food grants or food banks when they do not have enough money for food Male	-	-	9%
	by gender - male/female (1997)…….……..……...Female	-	-	18%
Educational Level	Percentage of dependent children under 18 and not in full time employment who have a resident parent with no formal qualifications	79%	68%	62%

'-' indicates that data are not available (Benefit Receipt, Household Food Security) or could not be derived within the time frame available (Housing Circumstances).

Summary of trends for Pacific Islands people

	Indicators	1986	1991	1996
Family Circumstances	Percentage of dependent children under 18 years living with one parent	19%	28%	29%
Benefit Receipt	Percentage of children under 18 years with a parent on benefit (1999)*	-	-	13%
Paid Work Status	Percentage of children under 15 years without a parent in paid work	26%	45%	38%
Housing Circumstances	(a) Percentage of children living in households containing more than their immediate family (Shared housing)	-	-	38%
Household Food Security	(a) Percentage of 25-44 year olds whose households can afford to eat properly only sometimes by Male	-	-	43%
	gender - male/female (1997)……..Female	-	-	35%
	(b) Percentage of 25-44 year olds whose households sometimes or often run out of food due to lack of Male	-	-	48%
	money by gender - male/female (1997)…….Female	-	-	54%
	(c) Percentage of 25-44 year olds whose households sometimes or often eat less because of lack of Male	-	-	47%
	money for food by gender - male/female (1997)……..…Female	-	-	38%
	(d) Percentage of 25-44 year olds whose households make use of special food grants or food banks when they do not have enough money for food Male	-	-	13%
	by gender - male/female (1997)……...……..Female	-	-	18%
Educational Level	Percentage of dependent children under 18 and not in full time employment who have a resident parent with no formal qualifications	77%	66%	64%

'-' indicates that data are not available (Benefit Receipt, Household Food Security) or could not be derived within the time frame available (Housing Circumstances).

* For the Benefit Receipt indicator, the ethnic group of children is inferred from the ethnic group of parents, which was assigned using a priority method: Maori, Pacific Islands (excl. Maori), Other. This means that parents of combined Maori and Pacific Islands ethnicity will be classified as Maori, and their children will not be included in the figure for the percentage of Pacific Islands children with a parent on benefit.

REPORT ON SELECTED SOCIAL CONTEXT INDICATORS

Counting both adults and children, approximately half of New Zealand's population (about 1.8 million people) live in a family with dependent children. Between 1986 and 1996, census results indicate a 6 percent increase in the number of families with dependent children aged under 18 years and not in full time employment, to 473 thousand. The number of dependent children increased by 4.5 percent to 926 thousand. Yet, as a proportion of the total resident population, the percentage of dependent children has been in decline, falling from 27.1 in 1986, to 26.5 in 1991, and 25.6 in 1996.

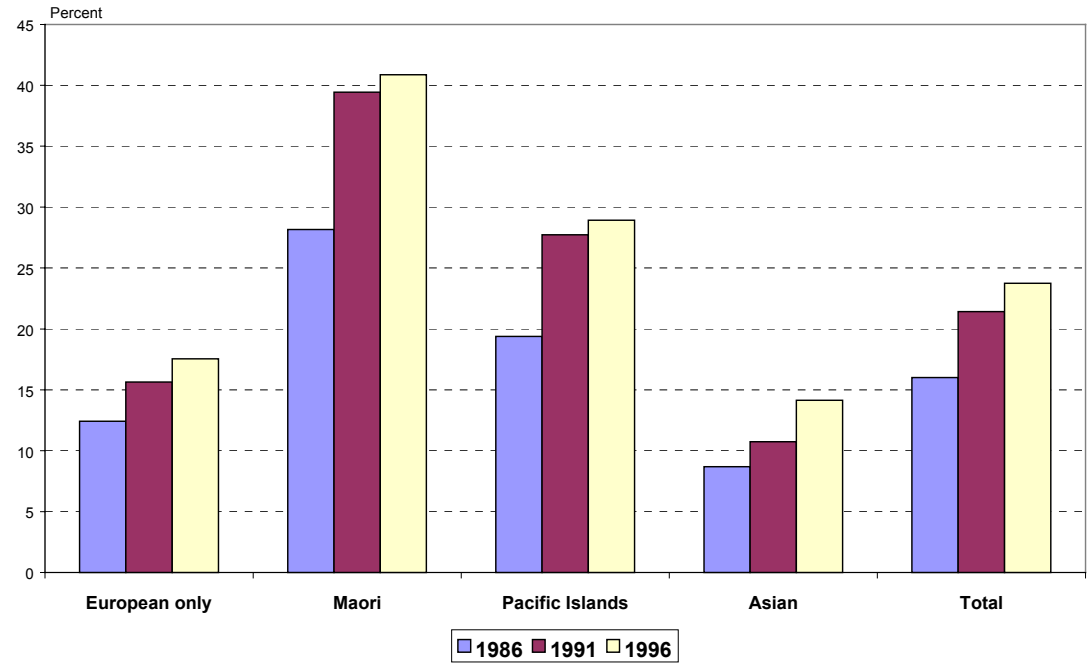
The ethnic composition of dependent children in the population continues to change. Between 1986 and 1996 European children, while still in the majority, declined as a proportion of all dependent children from 72.2 to 62.7 percent. The proportion of Maori children grew from 18.4 to 22.7 percent, while the proportion of Asian children, although still relatively small, more than trebled from 1.6 to 5.4 percent. The proportion of Pacific Islands children increased from 5.3 percent in 1986 to 7.4 percent in 1991, but did not increase further between 1991 and 1996.

Family circumstances of children

Family resources and the amount of parental attention available to children are likely to be greater where there are two parents. While most dependent children under 18 years of age live with two parents, the proportion has declined over time, from 84 percent in 1986, to 76 percent in 1996. Over the same period, the proportion of dependent children living in mother-only families rose from 14 to 21 percent, while the proportion living in father-only families increased from 2 to 3 percent.[1]

Changes in family structure in the 1980s were most pronounced for Maori and Pacific Islands children. Between 1986 and 1991, the proportion of children living with one parent rose from 16 to 21 percent overall, but from 28 to 39 percent for Maori children and from 19 to 28 percent for Pacific Islands children. In the five years to 1996, this upward trend slowed, bringing the proportion of children living with one parent to 41 percent for Maori children, 29 percent for Pacific Islands children, 18 percent for European children, 14 percent for Asian children, and 24 percent for all dependent children (Figure 1).

Figure 1: Dependent children living with one parent, by ethnic group, 1986, 1991, 1996



Source: Statistics New Zealand, unpublished data from the Census of Population and Dwellings

[1] This excludes a small proportion (5 percent) of children who do not live with either parent, most of whom live with other relatives or siblings.

While the vast majority (86 percent) of dependent children living in one-parent families live with their mothers, this varies by age. In 1996, 21 percent of sole parents' children aged 14-17 were living with their father, compared with just 8 percent of sole parents' children aged under 5. Boys are more likely than girls to live with their father.

Census statistics can only provide a snapshot at a point in time; they underestimate the extent to which children and parents experience life in a one-parent family. A longitudinal study of 1,265 children born in Christchurch in 1977 found that 36 percent had spent a period of time in a one-parent family by the age of 16.[2]

Compared to two-parent families, one-parent families are generally disadvantaged in terms of employment, income, education and housing.[3] This is thought to be one of the reasons why children from one-parent families tend to have more health problems than children living in two-parent families.[4]

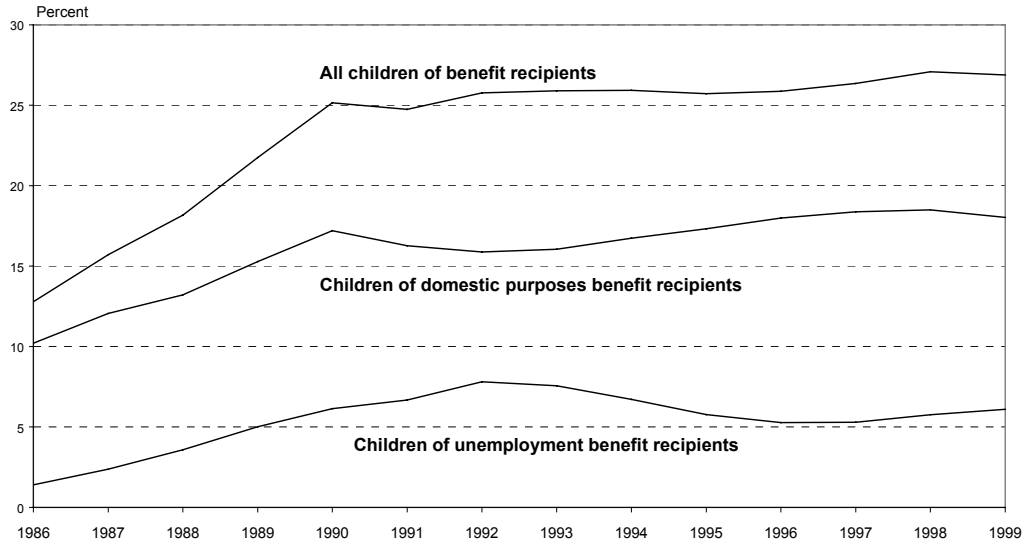
Children with a parent on benefit

Growth in parental unemployment since the 1980s is reflected in the number of children with a parent on benefit. Between 1986 and 1992, the proportion of children under 18 years of age with a parent on benefit doubled, from 13 percent to 26 percent. In 1997-98, this figure rose slightly, to 27 percent, where it remained in 1999 (Figure 2). In the year to June 1999, the proportion of children with parents on domestic purposes benefits declined while those with parents on unemployment benefits increased.

At the end of June 1999, there were 278,200 children whose parents or caregivers were receiving an income-tested benefit, compared to 280,300 the previous June, a decline of 0.7 percent. This is the first time a decline has been recorded in the number of children with a parent on benefit. The decline occurred among children under 10 years of age, which is consistent with the aging of the child population.

Most children with a parent on benefit are the children of sole parents (75 percent); two-thirds are the children of sole parents on domestic purposes benefit (67 percent). However, the number of children with parents on other benefits, particularly unemployment benefit, has increased substantially since the mid-1980s.

Figure 2: Children of benefit recipients as a percentage of children under 18 years, 1986 to 1999



Source: DSW Annual Reports, Statistical Information Reports; SWIFTT; Statistics New Zealand, age estimates as at 31 March, 30 June (resident population estimates from 1991).

[2] Fergusson DM (1998) "The Christchurch Health and Development Study: An Overview and Some Key Findings" *Social Policy Journal of New Zealand,* Issue 10, June, p158.

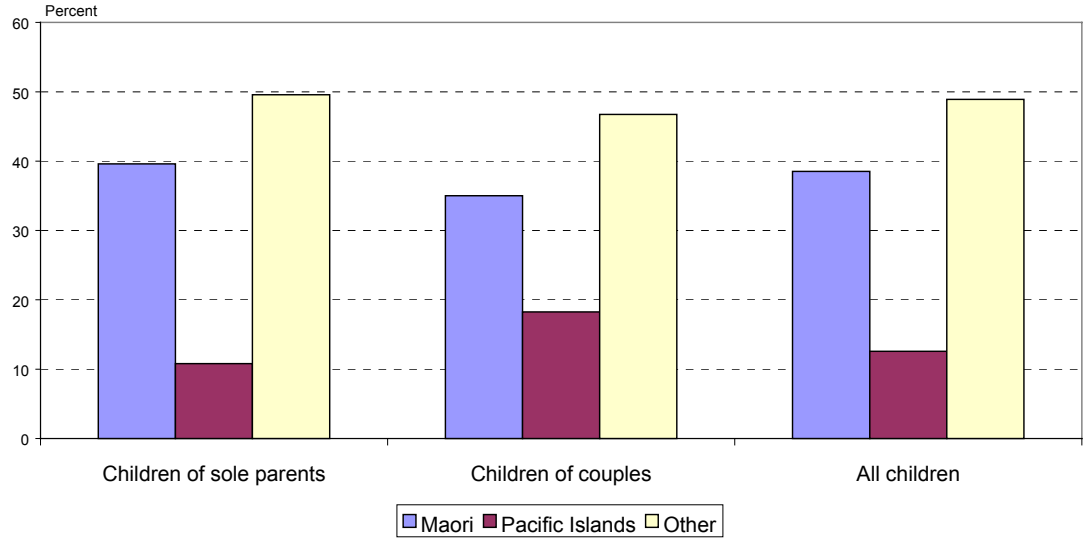
[3] Statistics New Zealand (1998) New Zealand Now – Children, p37.

[4] Barwick J (1992) *The Impact of Economic and Social Factors on Health*, Wellington: Public Health Association of New Zealand. Roberts H (1997) "Children, Inequalities and Health" *British Medical Journal*, 314:1122-5.

Information on the ethnic group of children of benefit recipients is not available but can be inferred from the ethnic group of the parents. In June 1999, 39 percent of children of benefit recipients had a Maori parent, 13 percent had a Pacific Islands parent and the remaining 49 percent were children whose parents belonged to other ethnic groups, mainly Europeans.[5] These proportions differ according to the number of parents present (Figure 3). The proportion of children with a Maori parent is higher for children with a sole parent on benefit (40 percent), than for children of couples (35 percent). Conversely, the proportion of children with Pacific Islands parents is higher for those with two parents (18 percent) than for those with sole parents (11 percent).

Maori are over-represented among benefit recipients caring for dependent children. For example, while 1996 Census figures showed that 21 percent of families with dependent children had at least one Maori parent, the proportion of children of benefit recipients who had at least one Maori parent in 1999 was much higher (39 percent).

Figure 3: Children of benefit recipients, by family type and ethnic group of parent, 1999



Source: DSW, SWIFTT, as at 2 July 1999. Includes only on those cases where there was at least one parent whose ethnicity was specified.

Children of long-term benefit recipients

Long-term benefit receipt prolongs the period in which children are vulnerable to social and economic disadvantage.

Duration of benefit receipt is difficult to measure for a number of reasons. Measures based on "snapshots" of current or cancelled benefits are likely to underestimate long-term receipt. The best information comes from a longitudinal study of patterns of benefit receipt over time, which follows all people who have received a working-age benefit from the beginning of 1993 onwards.[6]

- Of all children who were under 10 years of age in 1993[7] and were included in benefits granted in that year, just over half (52 percent) had spent at least 3 out of the following 5 years as the child of a benefit recipient.

The proportion of children who spend at least 3 out 5 years on a benefit will be reported annually for children included in benefits granted in 1994 and subsequent years.

[5] Ethnicity of parents was assigned using a priority method: Maori, Pacific Islands (excl. Maori), Other.

[6] Based on the DSW benefit dynamics data set. Ethnicity data for long-term benefit recipients is not reliable.

[7] Older children are excluded because they could "age out" of eligibility within five years.

Children without a parent in paid work

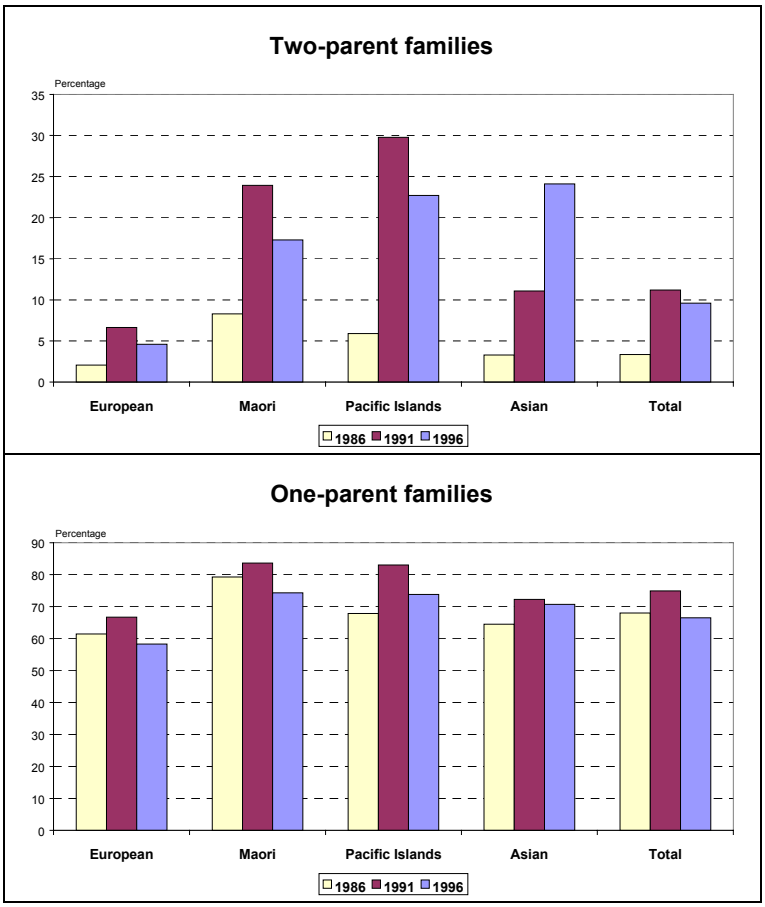
Paid work is the main source of regular income for most parents and lack of access to it has important implications for children's standard of living. Two factors that have greatly influenced parents' employment trends in recent years have been the increase in sole parenthood (described above) and changes in the economic climate. During the 1980s, employment rates[8] of fathers and sole mothers in particular declined, and so overall the proportion of children who had no resident parent employed increased from 21.1 percent in 1986, to 25.0 percent in 1991. The economic recovery that began in 1992 brought an increase in employment among parents, and the proportion of children without a parent in paid work declined slightly, to reach 23.4 percent in 1996.

The relatively high levels of unemployment and sole parenthood among Maori mean that Maori children are more likely than other children to have no parent in paid work. In 1996, 41.2 percent of Maori children had no parent in paid work, compared with 37.9 percent of Pacific Islands children, 30.1 percent of Asian children, and 13.8 percent of children whose ethnic group was European only.

Children in sole parent families are much more likely than those in two-parent families to have no parent in employment (66.5 percent and 9.6 percent, respectively, in 1996). However, compared with the situation in 1986, there has been an improvement for children in one-parent families, while those in two-parent families remain more likely than they were in 1986 to have no parent employed (Figure 4).

Among children living with one parent in 1996, Maori and Pacific Islands children had the highest proportion of parents out of work (74.3 percent and 73.8 percent, respectively), followed by Asian children (70.7 percent) and European children (58.3 percent).

Figure 4: Percentage of children without a parent in paid work, by family type and ethnic group, 1986, 1991, 1996



Source: Statistics NZ, *New Zealand Now – Children* (1995 and 1998 editions); unpublished data from the 1986 Census.

Notes:

1. Children without a parent in paid work are defined here as children under 15 years whose resident parent(s) are either unemployed or not in the labour force.

2. The scales in the two graphs are different.

[8] Employment rates are defined here as the proportion of mothers and fathers who were employed, either full-time or part-time.

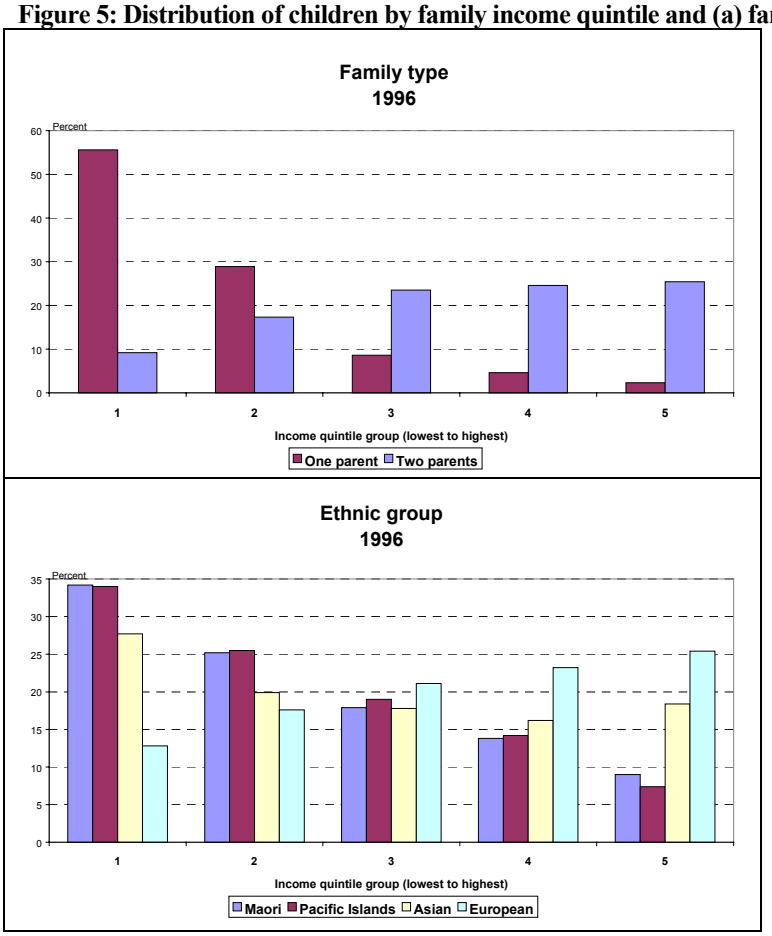
Children in low income families

Children in low-income families are likely to be worse off than children in more affluent families for many of the indicators presented in this report. This can be inferred from an established body of international research, which shows a persistent correlation between low income and poor health.[9] Longitudinal studies in New Zealand have also identified low income as a key factor associated with lower levels of developmental competence in young children,[10] and one of a group of disadvantageous factors disproportionately experienced by multiple problem adolescents.[11]

Children in one-parent families are highly over-represented at the lower end of the family income[12] distribution (Figure 5). In 1996, 84.5 percent of children in one-parent families were in the two lowest income quintiles, compared with just 26.5 percent of children in two-parent families. There has been a slight improvement since 1991, when these proportions were 87.9 percent and 26.7 percent, respectively.

Maori and Pacific Islands children are also relatively disadvantaged in terms of family income, being twice as likely as European children to be in the two lowest income quintiles (59.4, 59.5 and 30.4 percent, respectively). Again, these proportions are lower than in 1991, when 66 percent of Maori children, 71 percent of Pacific Islands children and 35 percent of European children were in the lowest two income groups.

Figure 5: Distribution of children by family income quintile and (a) family type, (b) ethnic group, 1996



Source: Statistics NZ, *New Zealand Now – Children* (1995 and 1998 editions).

Notes:

1. In this analysis, family incomes are first adjusted to take account of the number of adults and children in each family. The equivalised family incomes of all children are then ranked in ascending order and divided into equal-sized groups (so that 20 percent of all children fall into each group, or quintile). The indicator measures the extent to which different groups of children diverge from the distribution of all children, i.e., their relative position.

2. The scales in the two graphs are different.

[9] National Health Committee (1998) *The Social, Cultural and Economic Determinants of Health in New Zealand: Action to Improve Health*, p23.

[10] Wylie C, Thompson J, Hendricks AK (1996) *Competent Children at 5: Families and Early Education*, Wellington: New Zealand Council for Educational Research, pxi.

[11] Fergusson DM, Horwood LJ, Lynskey M (1994) The childhoods of multiple problem adolescents: A 15 year longitudinal study, *Journal of Child Psychology and Psychiatry*, p1132.

[12] Family income in this section refers to income from all sources, before tax, as reported in the Census.

Housing circumstances of children

(a) Shared housing

Economic hardship may compel families to adopt living arrangements which enable costs to be shared with others. Cultural preferences also influence whether families live on their own or with others. It is not possible to tell from available statistics whether those who share are doing so from choice, cultural preference or a lack of alternatives. Similarly, it is not possible to say what effect living in shared housing has on the well-being of children. On one hand, they may benefit from greater access to social and economic support (particularly if they live with a young sole parent); on the other, they may be at increased risk from family stress and, where crowded, associated adverse health conditions.

In 1996, 16.8 percent of children lived in households containing more than their immediate family, an increase from 13 percent in 1991.[13] Sole parent families and Maori and Pacific Islands people are more likely than others to be economically disadvantaged and this may be a factor in their higher propensity to live in shared households. In 1996, 33.3 percent of children with a sole parent shared their home with others, compared with 10.8 percent of children with two parents. Pacific Islands children were the most likely to live in shared households (38.4 percent), followed by Maori children (25.9 percent), Asian children (25.0 percent), with European children the least likely to do so (8.5 percent).

An increase in the propensity to live in shared households was evident for both family types and all ethnic groups over the decade to 1996, but was most pronounced for Asian children (from 18.3 percent to 25.0 percent).[14]

(b) Crowded housing

Crowding is generally associated with poverty and may also be connected to other issues such as poor health status, communication of infectious disease and low educational attainment.[15] There is no official measure of household crowding in New Zealand. However, in an exploratory exercise using a Canadian model, Statistics New Zealand identified 16,700 households, or 1.4 percent of all households, which required two or more additional bedrooms to meet the standard in 1996, and deemed those to be crowded.[16] Almost all of those homes deemed to be crowded (90 percent) contained children and nearly 60 percent included young children under 5 years. In all, there were just over 50,000 children under 18 living in crowded households in 1996, representing 5.3 percent of all children in New Zealand.[17]

Maori and Pacific Islands people are highly over-represented among those defined in this way as living in crowded conditions, accounting for 74.6 percent of people living in crowded homes, compared to just 20.1 percent of the total resident population.

Household food security

Household food security issues are of important concern to all human beings in terms of their ability to access the food they require. However, certain groups of people may experience problems with access to the food they need due to personal socio-economic circumstances. Food security questions were asked in the 1997 National Nutrition Survey basically to find out about people's perception of their ability to access the food that they need for themselves or their households. The key issue here is about *people's perception* of whether they are able to access the food they require, not any external measure of that access.

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[13] Shared households include those in which two or more families reside, or where a family is living with other individuals who are not part of the immediate family. The majority of children in shared housing fall into the latter group, but Pacific Islands children in shared housing are more likely to live with other families (20.5 percent) than with other individuals (17.9 percent).

[14] Statistics New Zealand (1998), *New Zealand Now – Children*, p45.

[15] Statistics New Zealand (1998), *New Zealand Now – Housing*, p53.

[16] These figures should be regarded as indicative only as they are highly sensitive to the measure used. The Canadian National Occupancy Standard sets the bedroom requirements of a household according to the following criteria: there should be no more than two people per bedroom; parents or couples share a bedroom; children under five years of either sex, and children under 18 of the same sex, may share a bedroom (however, a child aged 5-17 should not share a bedroom with a child under 5 of the opposite sex); single adults 18 and over and any unpaired children require a separate bedroom.

[17] Statistics New Zealand (1998), *New Zealand Now – Housing*, pp54-61.

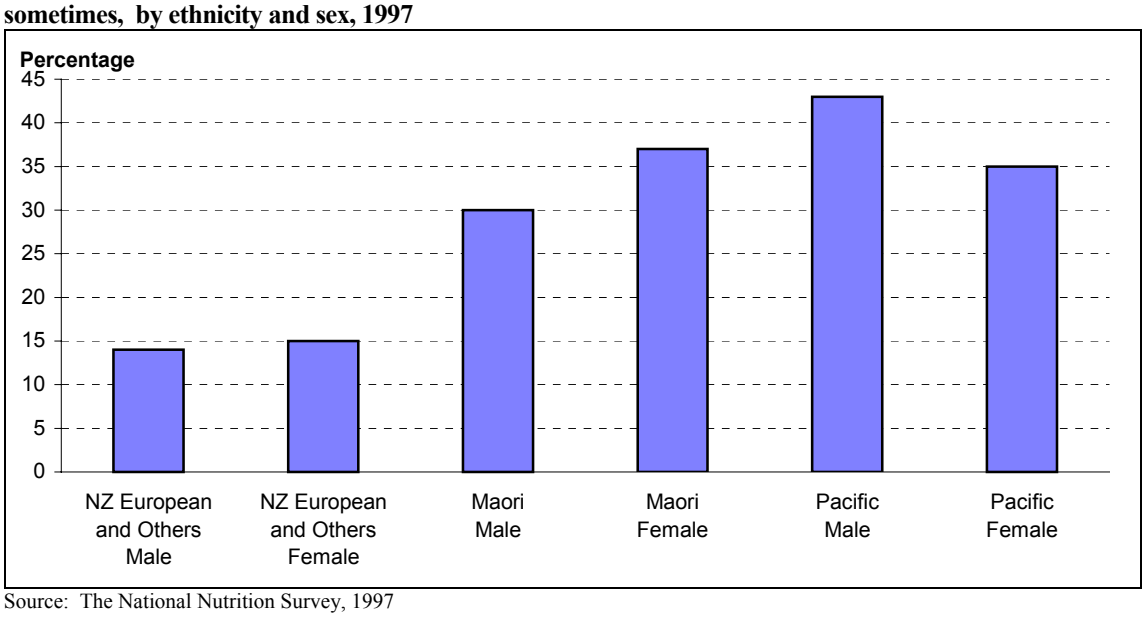
In the survey, eight different statements about food related to the issue of affordability were asked in the light of whether or not the respondent felt they had enough money for food. For instance, questions were asked " ... *we are interested in whether you feel you always have sufficient resources to have the food you need for yourself and the people you live with. We are not concerned with your budget, or how you spend your money, but we are more interested in finding out about how people get the food that they need for their household to eat and share* .."

Discussion is provided here on only selected indicators of food security which appeared to be more applicable to those who were in the 25-44 year age group. This group was chosen because they are the most likely to have dependent children.

(a) 'I/we[18] can afford to eat properly'

Of all those respondents aged 25-44 years old, 17 percent of males and 19 percent of females reported that they or their household can afford to eat properly only sometimes. More than one third of Pacific (43 percent of males and 35 percent of females) reported that they could afford to eat properly only sometimes, while the corresponding figures for Maori are 30 percent among males and 37 percent among females (Figure 6).

Figure 6: Proportion of 25-44 year olds who reported that their household 'can afford to eat properly' only sometimes, by ethnicity and sex, 1997



Source: The National Nutrition Survey, 1997

(b) 'Food runs out in my/our household due to lack of money'

'Food runs out' refers to lack of basic food, such as bread, potatoes, etc., (but not including treats or special food) because of not having enough money. Of all the 25-44 year age group, 14 percent of males and 21 percent of females reported 'food runs out' in their households. About half of Pacific people (48 percent of males and 54 percent of females) and one third of Maori (31 percent of males and 41 percent of females) responded that food runs out in their household sometimes or often because of lack of money, compared with about 12 percent (9 percent of males and 15 percent of females) of New Zealand European and Others (Figure 7).

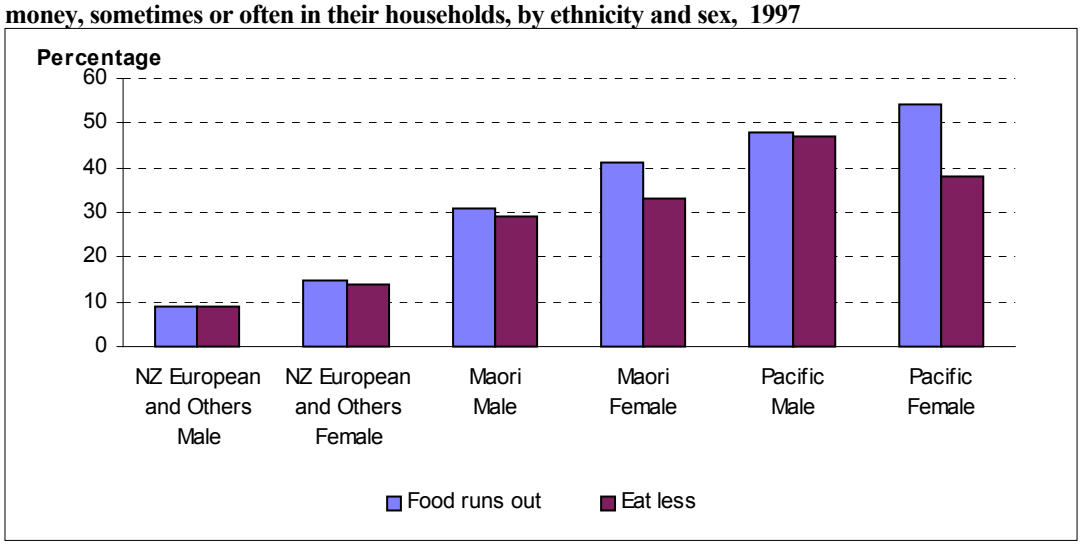
(c) ' I/we eat less because of lack of money for food'

'Eat less' here refers to eating less, i.e., whether respondents had smaller meals than they would like or not enough for seconds or sometimes even missing meals, because of lack of money but not eating less on purpose for health consciousness. About 13 percent of all males and 18 percent of females aged 25-44 years reported that they had eaten less because of lack of money 'sometimes or often' during the last year. About half of Pacific males (47 percent) and twenty nine percent of Maori males experienced eating less because of lack of

[18] Households include one-person households. Therefore, several statements were presented to the respondents as an I or We, depending on whether the household was a one-person or multi-person household.

money 'sometimes or often'. About one third of each of Maori (33 percent) and Pacific females (38 percent) reported so (Figure 7).

Figure 7: Proportion of 25-44 year olds who reported that 'food runs out' or they 'eat less' due to lack of money, sometimes or often in their households, by ethnicity and sex, 1997



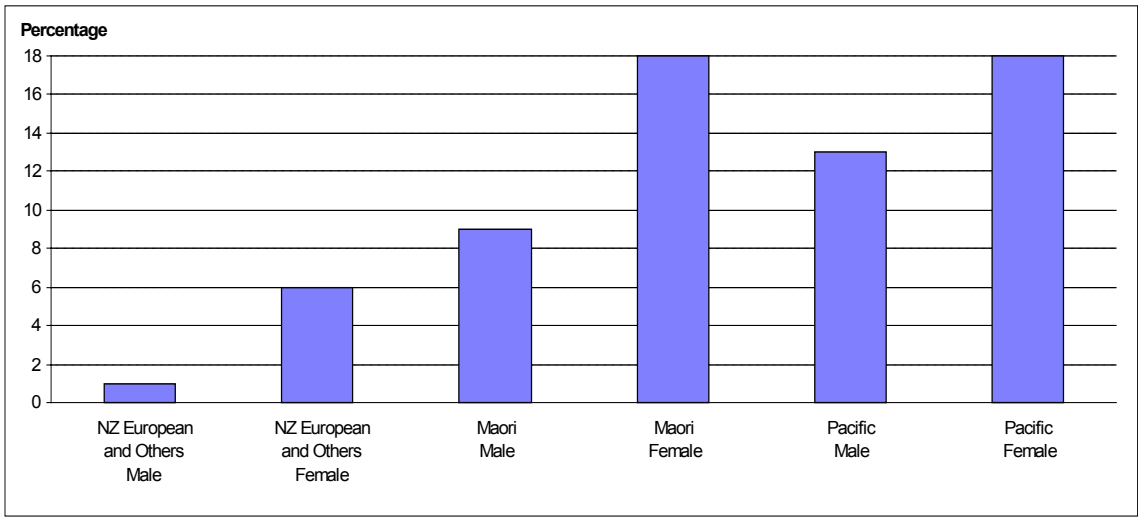
Source: The National Nutrition Survey, 1997

(d) 'Make use of special food grants or food banks when do not have enough money for food'

The results of this indicator need to be interpreted cautiously because food banks or grants are not easily available in all parts of the country, and also not all people are willing to use food grants even when they are in dire need of it. However, it indicates whether people rely on other sources for help such as food grants or food banks.

Among New Zealanders aged 25-44, two percent of males and eight percent of females reported use of food banks or grants. It appears that Maori and Pacific females are the group making most use of foodbanks. Eighteen percent of each of Maori and Pacific females reported using 'food bank or grants' when they experienced lack of money for food during last year. This is followed by New Zealand European females (6 percent). The corresponding figures for males are 9 percent, 13 percent and 1 percent among Maori, Pacific and European people (Figure 8).

Figure 8: Proportion of 25-44 year olds who reported that 'make use of special food grants or food banks when do not have enough money for food' sometimes or often by ethnicity and sex, 1997



Source: The National Nutrition Survey, 1997

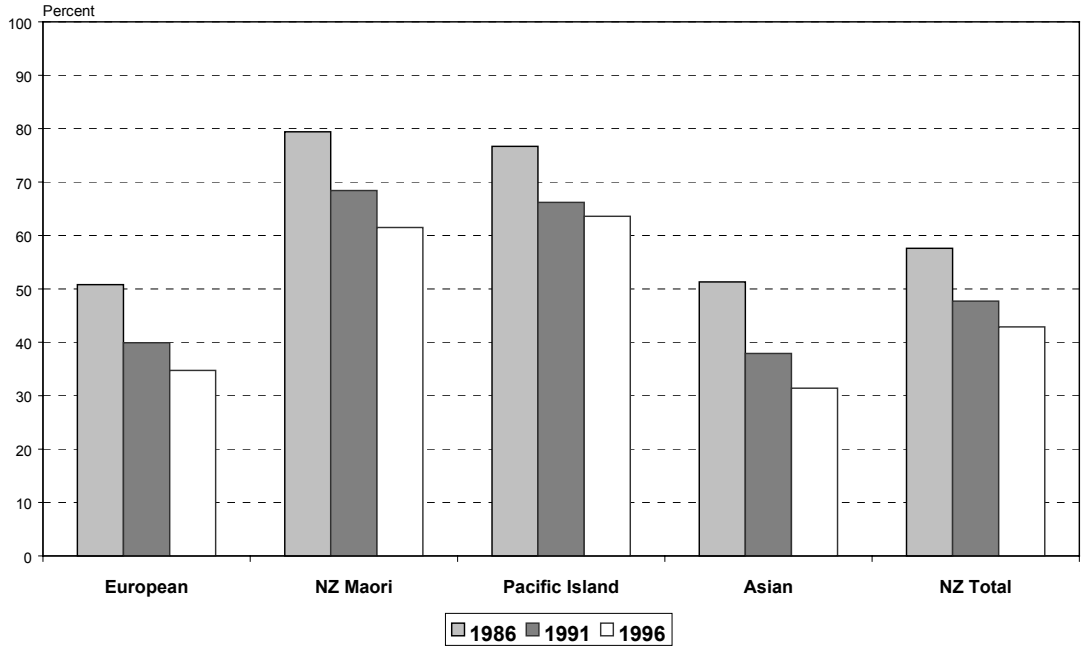
Children of parents without educational qualifications

The social consequences of poor educational attainment have not been fully documented. Yet, we can begin to see from the results of the 1996 Census that individuals with no formal qualifications from school or post-school education are more likely than those with qualifications to be unemployed, to have low income, and (for those in employment) to work in elementary occupations or as plant and machine operators and assemblers. While these observations are based on the entire population aged 15 years and over, and not only those belonging to families with dependent children, it is likely that similar associations would be found for parents without qualifications.

Poor educational attainment of parents may contribute not only to the current disadvantageous circumstances of families, but in combination with these circumstances hinder educational achievement in the next generation. Results of the Christchurch Health and Development Study suggest that educational under achievement in eight to 13 year olds is associated with "disadvantageous family factors" including less well-educated mothers.[19] Other major studies (though often using different measures of parental education and student achievement) have found broadly consistent results for five to eight year olds[20] and for secondary school students[21].

The period from 1986 to 1996 saw improvements in the educational level of parents for a significant proportion of dependent children aged under 18 years and not in full time employment. The trend is highlighted by the reduction in the proportion who had at least one parent with no formal qualifications from school or post-school education. In 1986 a clear majority were in this category (58 percent) but the proportion fell to 48 percent in 1991, and 43 percent in 1996 (Figure 9).

Figure 9: Percentage of dependent children who have a parent with no formal educational qualifications, by ethnic group, 1986, 1991, 1996



Source: Census of Population and Dwellings. In one parent families the qualifications of the absent parent are discounted.

The trend is generally similar for one parent families. The proportion of dependent children with sole parents who had no qualifications fell from 57 to 45 percent between 1986 and 1996. The trend is also similar when looking more particularly at mothers' qualifications, a factor examined in much of the research on children's achievement levels. The proportion of dependent children with mothers who had no qualifications fell from 44 to 31 percent over the same period.

While the situation has improved for all of the ethnic groups shown in Figure 9, Maori and Pacific Island children are still more likely than other ethnic groups to have a parent with no formal qualification. The proportions exceeded 60 percent in 1996.

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[19] Fergusson DM (1998) op. cit.

[20] Wylie C, et al. (1996) op. cit. Wylie C, Thompson J (1998) *Competent Children at 6: Families, Early Education, and Schools*. Wylie C, Thompson J, Lythe C (1999) *Competent Children at 8: Families, Early education, and Schools*, Wellington: New Zealand Council for Educational Research.

[21] Nash R, Harker RK (1997) *Progress at School: Final Report to the Ministry of Education*, Wellington: Ministry of Education.

SUMMARY LISTS OF OUTCOME MEASURES AND TARGETS

Outcome/output measures and targets for children aged 0–6 years

	Output/outcome Measure	Agency	Baseline	2000 Target	2010 Target
Deaths	Infant mortality rate (per 1000 live births)	Health	(1995) 6.7	5	4
	*** Under-five mortality rate (per 1000 live births)	Health	(1995) 8.3	7	5
Illness and injury	Hospital injury discharge rate, 0–4 years (per 100,000 population)	Health	(1994) 2,401	2,040	1,680
Abuse	Death rate (0–14 years) from injuries inflicted by other persons (per 100,000 population)	Health	(1988–92) 1.23	1.0	0.8
Abuse and neglect	*** Abuse and neglect notification/renotification rate, 0–6 years (per 1000 population)	DCYFS	(1997) 9.08	80% of current rate	50% of current rate
Care and protection	Out of family care and protection services, 0–16 years (volume of bednights, including within 28 days)	DCYFS	(1995/96) 375,000 bednights	95% of baseline	75% of baseline
Reproductive health	Smoking during pregnancy (percentage of pregnant women smoking)	Health	(1991) 33%	20%	18%
	Birth weight less than 2500 grams (per 1000 live births)	Health	(1993) 59	57	55
Development measures	Hearing loss at school entry (percentage of children at school entry with hearing loss)	Health	(1994/95) 8.3%	5%	4%
Participation	Immunisation completed by 2 years of age (percentage of children aged 2 years with completed immunisations)	Health	(1992) 56%	95%	95%
	*** 3-year-olds in early childhood education (percentage)	Education	(1995) 77.3%	84%	90%

Priority targets indicated by ***

Outcome/output measures and targets for young people aged 5–19 years

	Output/outcome Measure	Agency	Baseline	2000 Target	2010 Target
Deaths	Road traffic death rate, 15–19 years (per 100,000 population)	Health, based on Land Transport Safety Authority (LTSA)	(1994–96) 31	25	To be set, based on LTSA
	Youth suicide death rate, 15–24 years (per 100,000 population)	Health	(1990–92) 38.9 (males) 6.3 (females)	33 (males) 5.4 (females)	29 (males) 4.7 (females)
Illness and injuries	Hospital injury discharge rate, 15–19 years (per 100,000 population)	Health	(1994) 2,517	2,100	1,770
Abuse and neglect	*** Abuse and neglect notification/renotification rate, 7–16 years (per 1000 population)	DCYFS	(1997) 11.68	75% of current rate	50% of current rate
Reproductive health	*** Teenage fertility rate, 13–17 years, (livebirths per 1000 females)	Health	(1995) 11.8	10.9	9.8
Development/ behaviour measures	Tobacco smoking, 18–24 years (percentage)	Health	(1993) 34.2%	22%	19%
	Drug and alcohol risk behaviour, 15–19 years	Health	(1998)		
	Heavier drinking (enough to feel drunk at least once per week) among 15-17 year olds		20% (male) 15% (female)	To be set	To be set
	…and 18-19 year olds		41% (male) 24% (female)	To be set	To be set
	Current users of cannabis (in the form of marijuana) among 15-17 year olds		18% (male) 10% (female)	To be set	To be set
	…and 18-19 year olds		34% (male) 19% (female)	To be set	To be set
	Incidence of repeat and serious reoffending cases referred to CYPFA, 10–16 years (per 1000 population)	DCYFS	(1997) 13.76	80% of baseline	65% of the baseline
	*** School leavers with a formal qualification (percentage)	Education	(1995) 81.9%	84%	90%
	Offenders aged 16 or under dealt with by the Police	Justice	(1997) 44,654 police contacts	Not set	Not set
	Cases involving the prosecution of offenders aged 16 or under	Justice	(1997) 4,798 cases	Not set	Not set

Priority Targets indicated by *
Note: the age range has been expanded to 24 years for selected targets

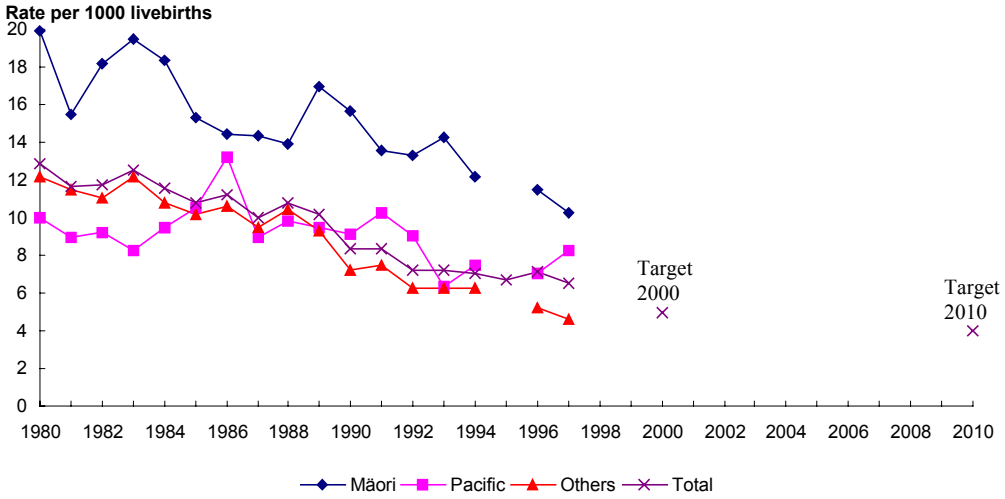
REPORT ON EACH OUTCOME MEASURE AND TARGET

Infant mortality

To reduce infant mortality from 6.7 per 1000 livebirths in 1995 to 5 per 1000 livebirths in the year 2000, and to 4 per 1000 livebirths in the year 2010.

An infant death is defined as a liveborn infant dying before the first year of life is completed (WHO 1975). The infant mortality rate is an important measure of well-being, associated with maternal health, quality and access to health services, socio-economic conditions, and public health practice (Public Health Commission 1994). Almost half of infant deaths occur during the postneonatal period, and a third are sudden infant death syndrome (SIDS), reflecting social and environmental factors (Mitchell and Tipene-Leach 1996). However, this appears to have been changing in recent years. For instance, in 1997, one third of infant deaths (33.8 percent) occurred due to conditions originating in the perinatal period, followed by congenital anomalies (25 percent) and SIDS (20.7 percent).

Figure 10: Infant mortality, by ethnicity, 1980–97



Sources: Statistics New Zealand and provisional data for 1997 are from New Zealand Health Information Service.
Technical note: ethnic-specific rates before and after 1995 are *not* comparable and are shown with a break in the time series. Classification of ethnicity in vital and health statistics changed in 1995.

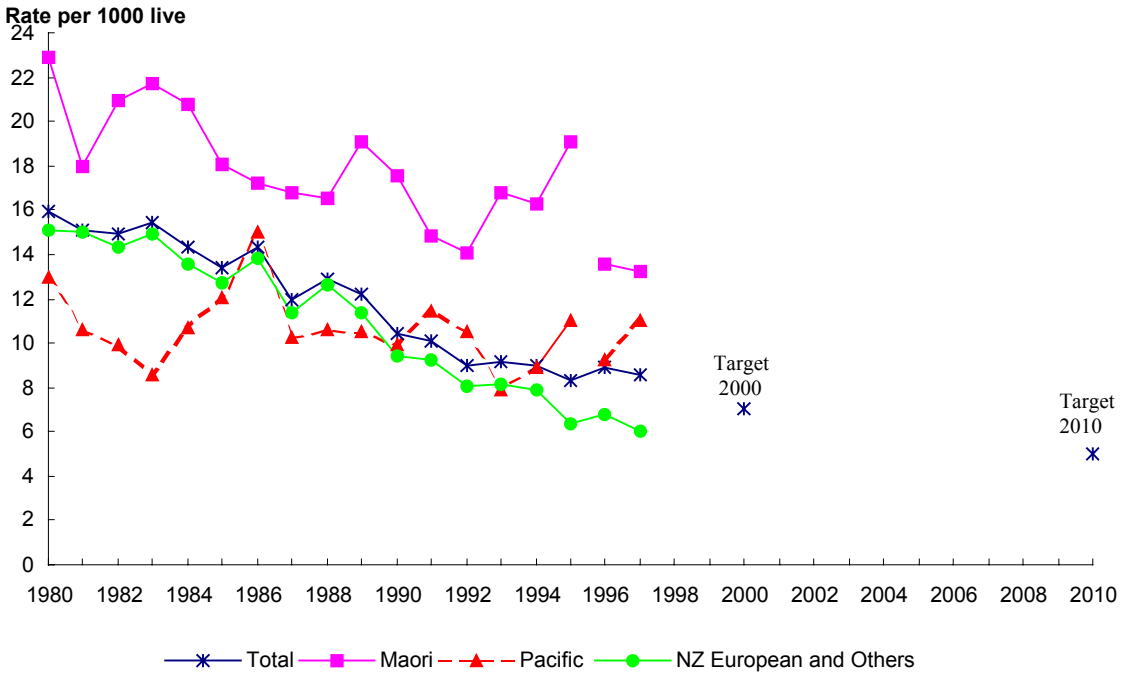
- In 1997, there were 389 infant deaths, a rate of 6.7 per 1000 livebirths which has decreased from 10.1 per 1000 live births in 1987.
- The total infant mortality rate has been decreasing slowly since 1980. During the period 1987-97, infant mortality rate has decreased by 4.2 percent annually.
- The infant mortality target rate of 5 per 1000 livebirths, set for the year 2000, will be met provided that infant mortality rate decreases by 8.9 percent annually for next three years (1998-2000). To achieve the target set for the year 2010, it would require an additional decrease of 3.8 percent each year during 1998-2010.
- Infant mortality rates vary substantially among ethnic groups. In 1997, there were 174 and 50 infant deaths among Maori and Pacific people respectively. Both in 1996 and 1997, infant mortality rates among Maori and Pacific people were above the national average.
- The greatest disparity exists for Maori, whose infant mortality rate (10.7 per 1,000 live births) in 1997 was 22 percent and 133 percent higher than the Pacific rate (8.8 per 1000 live births) and the New Zealand European and other rate (4.6 per 1000 livebirths) respectively.
- Leading causes of deaths in infants, in 1997, included conditions originating in the perinatal period (34 percent) followed by congenital anomalies (25 percent) and SIDS (20.7 percent).
- Maori infants have a higher risk of SIDS. The SIDS death rate among Maori was six times as high as for Other infants.

Under-five mortality (priority target)

To reduce the under-five mortality rate from 8.3 per 1000 livebirths in 1995 to 7 per 1000 livebirths in the year 2000, and to 5 per 1000 livebirths in the year 2010.

Under-five mortality rate is used by UNICEF as the principal indicator of child well-being (UNICEF 1996). The under-five mortality rate was chosen by UNICEF for several reasons. Firstly, the under-five mortality rate measures an outcome of the developmental process rather than inputs to the process, such as school enrolment, caloric availability or number of general practitioners per child. Secondly, the under-five mortality rate is dependent upon a wide variety of inputs: the nutritional health and the health knowledge of mothers; the level of immunisation; the availability of maternal and child health services (including prenatal care); safe sanitation; income and food availability in the family; and the overall safety of the child's environment. Thirdly, the under-five mortality rate is less susceptible to the *fallacy of the average* where indicators may be skewed by a wealthy minority, such as average household income. Other information is presented here for mortality for ages 1–4 years, for which no target has been set (see also the target for infant mortality).

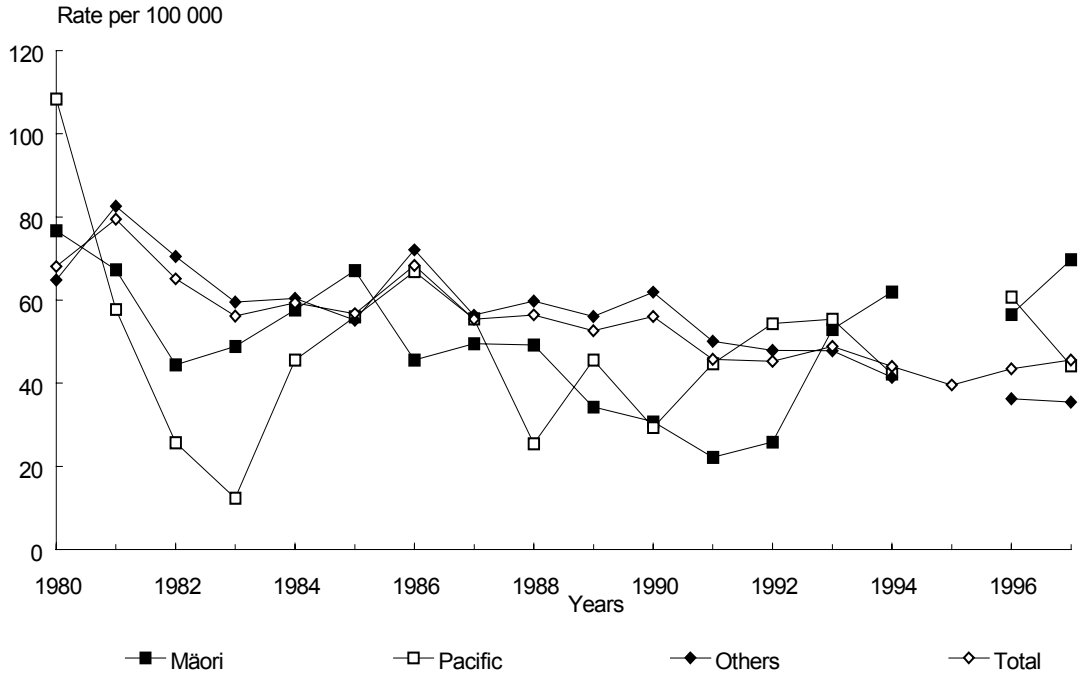
Figure 11: Under-five mortality, by ethnicity, 1980–97



Sources: Statistics New Zealand and provisional data for 1997 are from New Zealand Health Information Service.
Technical note: ethnic-specific +rates before and after 1995 are *not* comparable and are shown with a break in the time series. Classification of ethnicity in vital and health statistics changed in 1995.

- The under-five mortality rate for 1997 was 8.6 per 1000 livebirths (n=493), a decrease of 46 percent from 15.9 per 1000 livebirths in 1980. There have not been significant changes in the under-five mortality rate in the half decade ending 1997.
- Major causes of under-five mortality include perinatal conditions (27 percent), congenital anomalies (22 percent), SIDS (17 percent), and poisoning and injuries (16 percent).
- Infant mortality accounted for 79 percent of under-five mortality for 1997 (see the section on infant mortality). Mortality rates for 1-4 years old are shown separately.
- The under-five mortality rate for Maori (13.2 per 1000 live births) was 2.2 times the rate for New Zealand European and other children in 1997 (6 per 1000 live births).
- Under-five mortality rates for Pacific children fluctuate because of small numbers, but in 1997 there were 63 deaths showing a rate of 11.1 per 1000 live births.
- During 1987-97, the under-five mortality rate decreased by 3.3 percent annually. It would require an annual decrease of 6.4 percent to reach the target set for the year 2000.

Figure 12: Mortality for ages 1–4 years, by ethnicity, 1980–97



Sources: Statistics New Zealand (1997 data are unpublished) and provisional data for 1997 from New Zealand Health Information Service.
Note: no target has been set for 1–4 years mortality.
Technical note: ethnic-specific rates before and after 1995 are *not* comparable and are shown with a break in the time series. Classification of ethnicity in vital and health statistics changed in 1995.

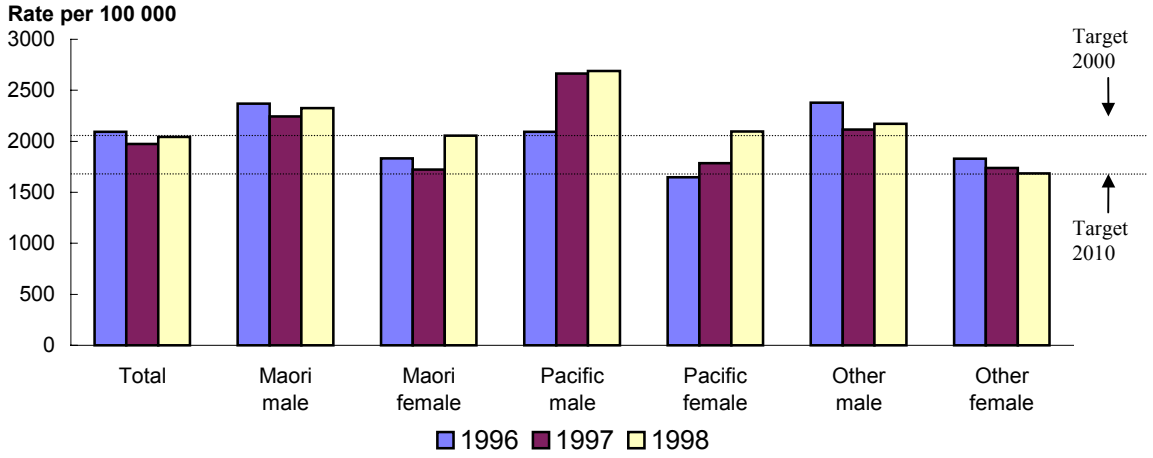
- The mortality rate for ages 1–4 years for 1997 was 46 per 100 000 population (n=102), a decrease of 33 percent from 1980.
- The ethnic differentials for 1–4 years mortality are generally narrower than for infant mortality. In 1997, the rates for Maori and Pacific children were 2.0 and 1.2 times higher, respectively, than the rate for 'Other' (mainly European) children.
- In 1997, the major causes of death of children aged 1–4 years were injury and poisoning (18 percent), which also accounted for nearly half (45 percent) of all deaths in 1992–96. Cancers and congenital anomalies are the other most common causes of death in this age group in 1997. Cancer accounted for 15 percent of death followed by congenital anomalies (10 percent).

Injury hospitalisation rate, 0–4 years

To reduce the hospitalisation rate of children aged 0–4 years due to injury from 2401 per 100 000 in 1994 to 2040 per 100 000 in the year 2000, and to 1680 per 100 000 in the year 2010.

Injury is a leading cause of both morbidity and mortality in New Zealand (Public Health Commission 1994). Hospitalisation data, as a measure of morbidity, are a count of public hospital events, not of individual children. Hospitalisations include both inpatient and daypatient events, while outpatients are generally not admitted and are not counted. Changes in hospital admission policy, accepted treatment practices, recording systems or case-mix presentation may affect consistency of reporting over time. However, the current analysis is based on filtered data that have been adjusted for hospital transfers, patients whose normal residence is outside New Zealand, inconsistent stays and so forth. For details about the data filtration process, refer to Ministry of Health, 1999a.

Figure 13: Injury hospitalisation rates, ages 0–4 years, by sex and ethnicity, 1996–98



Source: New Zealand Health Information Service
Technical note: Injuries are classified according to ICD-9 External Cause Codes E800–999, omitting codes that refer to medical misadventure, complications of care etc, E870–879 and E930–949. Classification of ethnicity in vital and health statistics changed in 1995.

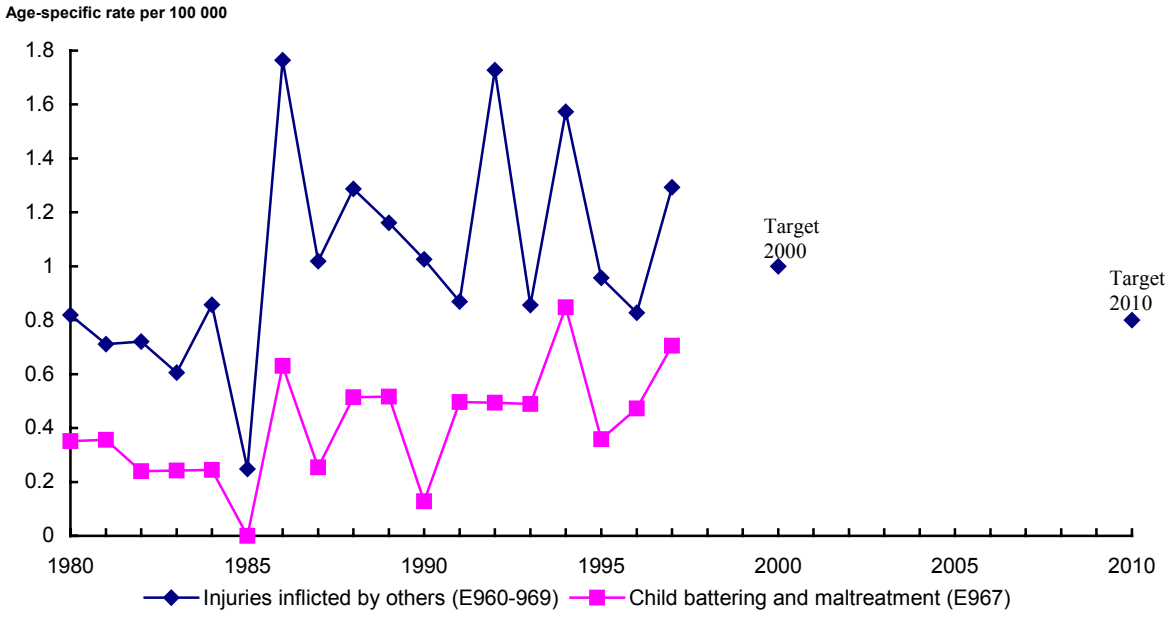
- Hospitalisation events for injuries totalled 5819 in 1998 for ages 0–4 years of which 14 percent were infants. The 1998 hospitalisation rates for injuries were 2044 per 100 000 population, reaching the target set for the year 2000.
- There were 3304 males aged 0–4 years hospitalised for injuries in 1998, reflecting a rate of 2258 per 100 000. The corresponding figures for females were 2515 in the same age group, a rate of 1818 per 100 000.
- Rates of hospitalisation for Maori and Pacific exceed the rates for European and Other ethnic group. Females of European and Other ethnic group have the lowest hospitalisation rates (1687 per 100 000) for injuries. In contrast, Pacific males have the highest rates (2689 per 100 000) of hospitalisation for injuries in 1998.
- Falls and poisoning were the main causes of hospitalisation among 0-4 years old which accounted for 30 and 14.6 percent respectively.
- The proportion of hospitalisation for falls was higher among infants of less than one year of age (41 percent) than for children in the age group 1-4 (29 percent) whereas the proportion of hospitalisation for poisonings was greater among children of 1-4 years old (16 percent) compared to infants (6 percent).
- Among children of 0-4 years, while there is not much difference in falls hospitalisation by sex, a slightly higher proportion of hospitalisation for poisoning was found among males.
- During 1996-98, the total hospitalisation rate for injuries has decreased by 1 percent annually. It would require approximately 1.6 percent annual decrease to attain the target rate of 1680 per 100 000, set for the year 2010.

Child abuse, 0–14 years

To reduce the mortality rate among children aged 0–14 years from injuries inflicted by other persons from 1.23 per 100 000 for the period 1988–92 to 1.00 per 100 000 in the year 2000, and to 0.80 per 100 000 in the year 2010.

In its broadest sense, child abuse involves one or more of the following:- deprivation, such as being inadequately fed, clothed and housed; emotional harm; sexual harm, impacting on mental health; and physical harm, most of which will not receive medical attention and not be recorded (Coggan et al 1995; Kotch et al 1993). Mortality data represent the extreme end of the child abuse spectrum. Even so, mortality data are used internationally as indicators of child abuse trends. The mortality rates for 'injuries inflicted by others' represent both homicide and child abuse. Separate examination of the E967 code 'child-battering and other maltreatment' would be desirable to focus attention on the 'child abuse' component but this code is significantly under-utilised in relation to the other codes in the E960–969 range. Kotch et al (1993) found only 31 percent of deaths due to physical and/or sexual abuse were so coded.

Figure 14: Mortality from injuries inflicted by other people, child battering or maltreatment, ages 0–14 years, 1980–97



Source: New Zealand Health Information Service

- For the five year period 1992–97, there was an average of 9 deaths per annum among children aged 0–14 years from injury inflicted by other persons (a rate of 1.1 per 100 000, close to the target set for the year 2000).
- These deaths accounted for 1.4 percent of all the deaths of children in this age group. Over this five year period, the mortality rates for males and females were similar.
- In 1998, of all the children hospitalised for injuries (206) were hospitalised due to injury caused by other persons, of which 41 percent were directly coded as being due to child battering or maltreatment, and 32 percent were aged less than five years.
- Maori hospitalisation rates were 1.4 times higher than the rates for others.
- Falls were also a main cause of hospitalisation (40 percent) for the 5-14 years age group. In 1998, about six percent of all hospitalisations were due to road traffic accident injuries in this age group.
- The three year average mortality rate for 1995-1997 was 1.03 per 100 000. This would require a further decrease of 1.9 percent annually during the period 1998-2010 to attain the target set for the year 2010.

Abuse and neglect notifications, re-notifications 0-16 years (priority target)

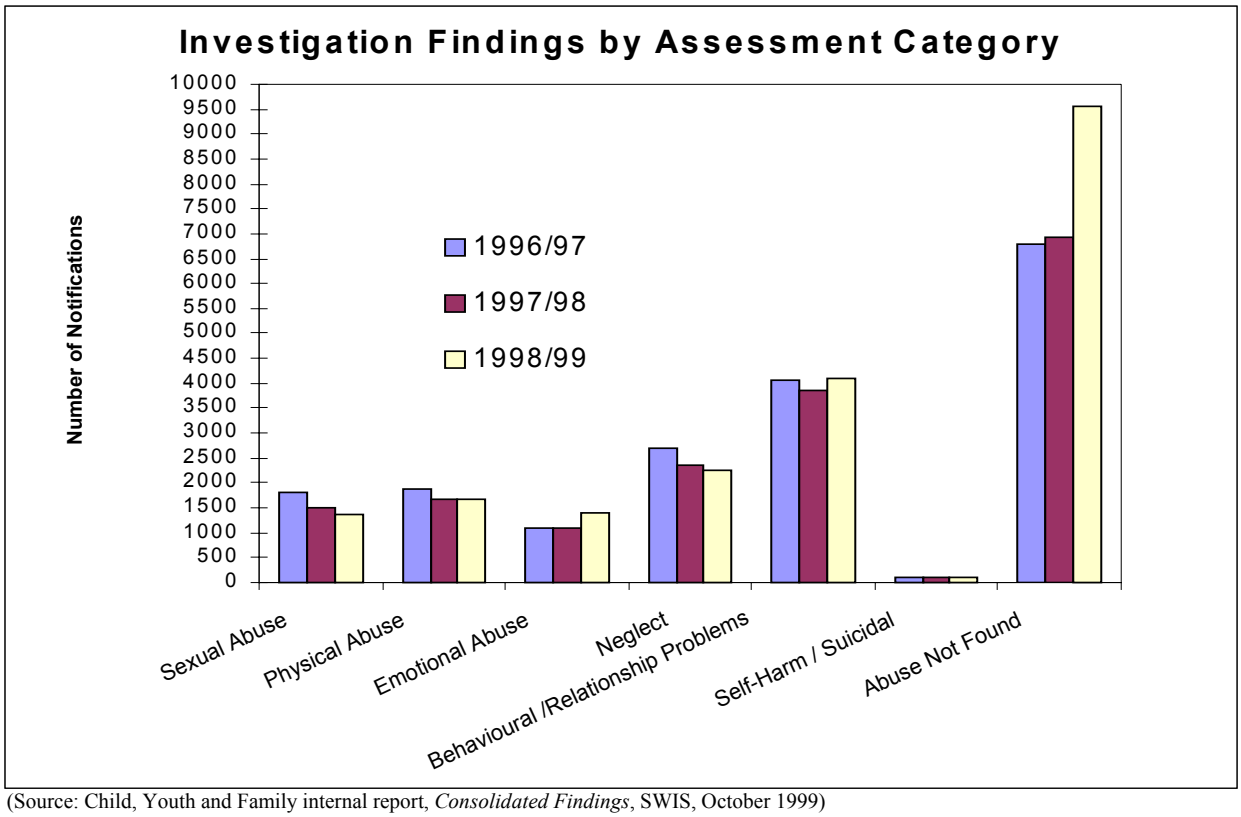
To reduce abuse and neglect notification/re-notification for children and young people.

Notifications

In the 1998/99 year CYPFA received 27216 notifications of which 21,935 notifications required further investigation[22] involving children and young people under the age of 17 years. Of these, some form or multiple forms of abuse and neglect were substantiated for 2,808 children aged 0-6 years and 3,392 young people aged 7–16 years[23].

Table 1: Abuse and neglect notifications-investigation findings 0-16 years

Fiscal Year	Sexual Abuse	Physical Abuse	Emotional Abuse	Neglect	Behavioural /Relationship Problems	Self-Harm / Suicidal	Abuse Not Found	Total
1996/97	1804	1868	1077	2693	4058	111	6782	18393
1997/98	1502	1671	1080	2356	3856	119	6937	17521
1998/99	1375	1660	1414	2260	4088	115	9543	20455



(Source: Child, Youth and Family internal report, *Consolidated Findings*, SWIS, October 1999)

Approximately 46% of children and young people with substantiated findings of abuse and neglect are Maori, 34% European, and 11% Pacific Islands.

CYPFA cannot derive a rate per 1000 population for substantiated abuse and neglect by the specific age groupings 0-6 years and 7-16 years. The rate per 1000 for the population <17 years is 6.9[24]. The proportion of substantiated abuse and neglect for 0-6 years is 43.3% and 7-16 years is 52.4%.

The number of children aged between 10-13 years is expected to increase by 20,000 between 1998 and 2002. This 'bulge' will flow into the 14-16 year age group over the three subsequent years to 2005. Between 2002 and 2005 Child, Youth and Family may be subject to increased demand for youth services.

An increasing proportion of children and young people under the age of 15 will be of non-European ethnic groups. By 2016, 28% of all children and young people are projected to be Maori, 13% Pacific Islands, and 11% Asian. The growth in the non-European ethnic group populations will be most evident in areas of ethnic group concentration: for

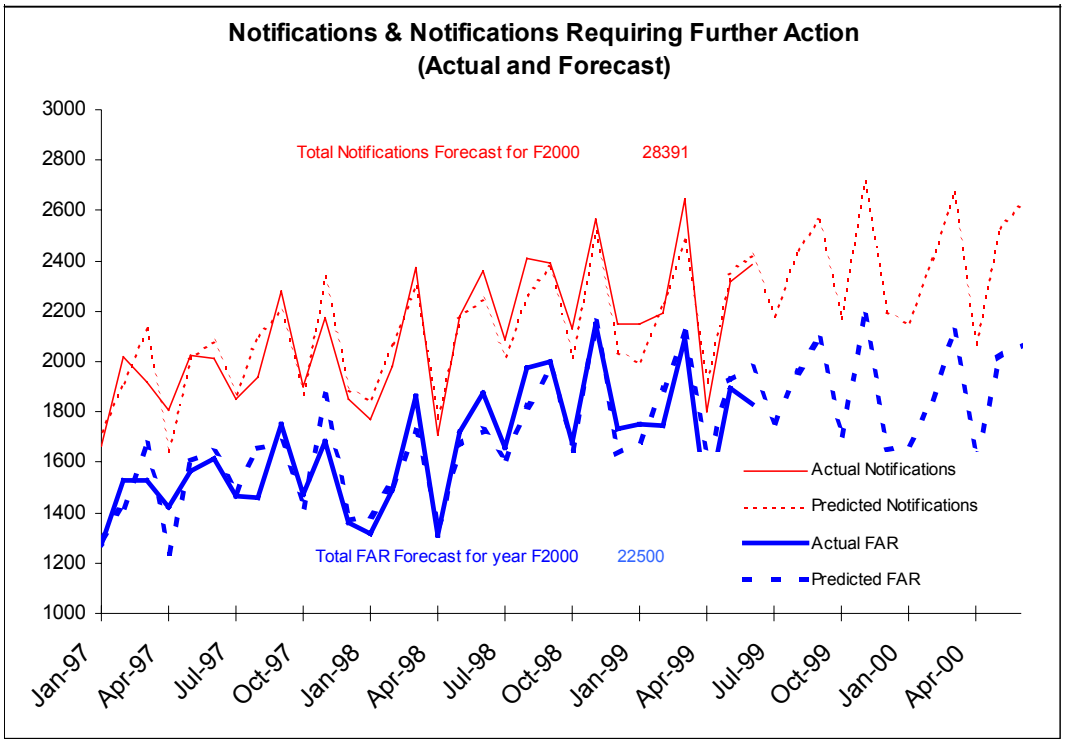
[22] The number of notifications requiring further investigation exceeds the total number of investigation findings given in Table 1 primarily because it includes notifications still under investigation and investigations still before the court.

[23] Abuse types combined (physical, sexual, and emotional). The number of children and young people reported refers to distinct clients. There are sometimes more than one finding of abuse and neglect relating to each child.

[24] Child, Youth and Family estimate for NZ population <17 years of age is 938,000.

Maori, Auckland, Waikato, Bay of Plenty and Northland; for Pacific Islands in Auckland and Wellington, and; Asian in Auckland, Wellington, and Christchurch. (Social Policy Agency, *Social Environment Scan*, June 1999).

Figure 15: Number of notifications and notifications requiring further action (actual and forecast)



(Child, Youth and Family internal report, *Critical Indicator Time-series Report*, November 1999)

The number of notifications and the number of notifications requiring further action (FAR) have increased over the past three years. The proportion of notifications currently requiring further action is approximately 81%. This trend is forecast to continue. Although the number of "Abuse not found" has increased over 1998/99, the rate of substantiation remains at about 50% of total notifications.

Re-notifications

In December 1998, an Officials Group from CYPFS, Treasury and the Social Policy Agency completed a review of performance measures relating to client outcomes as a result of receiving services from CYPFS. The review focused on the issue of re-notification measures and their feasibility, efficiency and usefulness as an outcome measure for service interventions. A comprehensive literature review (SPA, 1998) concluded that direct links cannot be made between a re-notification and client outcome. Recurrence by problem type may give a better indication of service impact on the problem initially presented. Until more effective client outcome measures are established, it was agreed that the re-notification measure should be refined, and considered in conjunction with recurrence data. With such modifications, these two measures may have a useful role as trend indicators of the impact of interventions made and services provided in the interim. It is not considered possible or appropriate to set targets for re-notification or recurrence, as national and international benchmarks are not available. Approval was obtained from the Joint Ministers for this revised set of performance specification measures and CYPFA and Child Youth and Family will report on the recurrence rate and re-notification rate from 1 July 1999.

The definitions for this measure have been revised in consultation with Treasury. During 1998/99 the number of care or protection clients subject to a subsequent notification has ranged between 8-9% of CYPFA clients.

Current Agreed Definitions: Re-notifications

The number and proportion of notifications for children and young persons who have had a prior notification within the previous 12 calendar month period.

The number and proportion of substantiated abuse or neglect or problem behaviour notifications that are for children and young persons who have had a prior substantiated abuse, neglect of problem behaviour finding within the previous 12 month period.

Out of family care and protection services, 0–16 years

To reduce the volume of out of family care and protection bednights for children and young people aged 0-16 years from 375,000 bednights (including within 28 days) in the year 1995/96 to 356,250 in the year 2000, and 281,250 in the year 2010.

CYPFA provides or purchases care services for children and young people who are in the Director-General's care or custody by Court order or agreement, and also for children in the care of a Director of a Child and Family Service (CFSS) or Iwi Social Service (Iwi SS) after a Family Group Conference.

There are two main placement options used in New Zealand for children and young persons requiring out-of-family care. These are either based in a *home* (i.e. foster, family, special purpose family, specialist or group) or an *institution* (i.e. short- or extended-term, local or national residences). This measure is focused on the children and young persons who require one of the home-based care options.

Table 2: Level of out-of-family care and in-family care for distinct children aged 0–16 years

Note: * As at month end	1997/98	Bednights	CYPs in Care	Average Duration	1998/99	Bednights	CYPs in Care	Average Duration
Type of Care	CYPs in Care	Used	as at June 1998*	of Stay	CYPs in Care	Used	as at June 1999*	of Stay
Agency	1,445	246,938	436	171	1,614	260,041[25]	561	161
CYPFA Care Givers	2,298	447,481	1,270	195	2,503	499,496	1,385	200
CYPFA Family Home	1,022	87,887	261	86	905	87,417	200	97
In Family/ Whanau Care	1,550	322,348	944	208	1,772	387,516	1,087	219
Total	6,315	1,104,654	2,911	175	6,794	1,234,470	3,233	182

(Source: Child Youth and Family internal report, *CYP in Care Summary Report,* SWIS)

In 1998/99, 6794 distinct children and young persons were placed in home-based care compared with 6315 in 1997/98. (Child, Youth and Family internal report, *CYP in Care Summary Report*, SWIS)

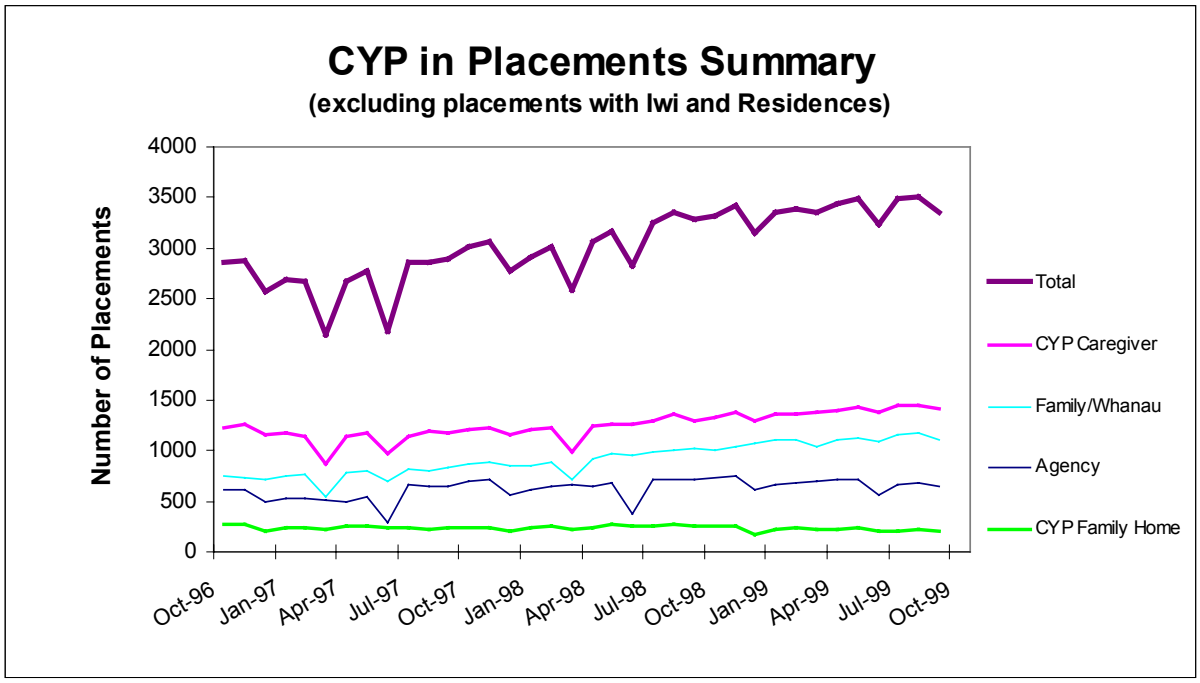
However, a far larger volume of cases of children and young people move in and out of CYPFA's care during the course of the year. The incidence of multiple placements in the past year generated a total of more than 15,000 placements. (Child, Youth and Family internal report, Care Services Project: Summary Report and Recommendations, November 1999)

Growth in the number of bednights used for children and young people in the care, custody or guardianship of the Director General of Social Welfare or contracted agencies is around 12 percent per annum. This growth rate translates to approximately 500 more children and young people in care each year. (Child, Youth and Family internal report, *Care Services Project: Summary Report and Recommendations*, November1999). For 1998/99 the total number of children and young people in care has increased and so has the duration of care.[26]

[25] Consolidated figure of 256,879 contracted bednights and 3162 non-standard bednight placements.
[26] It cannot be determined from bednight counts whether increase or decreases relate to longer stays or more children and young people.

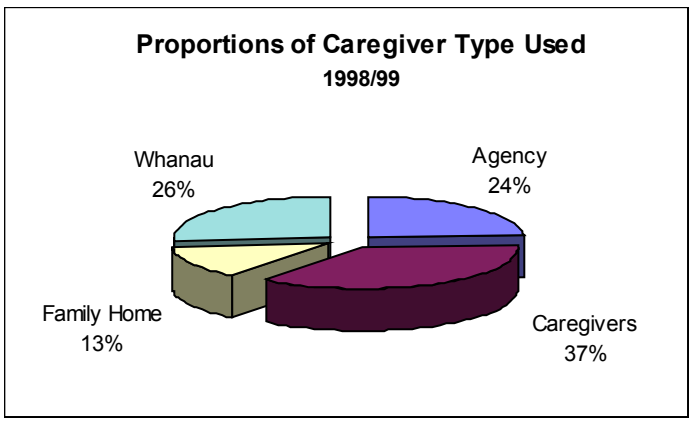
In 1998/99 there were approximately 3350 children and young persons in care at any given time. This figure excludes children and young people in CYPFA residences (approx. 100) or in the care of Iwi Social Services (approx. 150). (Child, Youth and Family internal report, Care Services Project: Summary Report and Recommendations, November 1999)

Figure 16: Children and young persons in placements summary (excluding placements with iwi and residences)



International research indicates that family-based placements are more effective than other forms of placement in that children and young people are more likely to return to their usual caregivers and are less likely to be re-abused if they access family-based care rather than non-kin-based care. (Child, Youth and Family internal report, Care Services Project: Summary Report and Recommendations, November1999*)*

The CYP&F Act 1989 shifted the emphasis away from the longer term extended care placements towards restoring usual caregiving arrangements. Where alternative placements are necessary, emphasis is put on making a placement, wherever possible within the child's extended family or community.



Of the total number of children and young people aged 0-16 years in care and protection placements, approximately 76 percent are placed with family/whanau caregivers or CYPFA recruited caregivers, including family homes. The remaining 24 percent represent those children and young people placed under the bednights system with s396 approved organisations, all of which are out of family placements. (Child, Youth and Family internal report, *CYP in Care Summary Report*, SWIS)

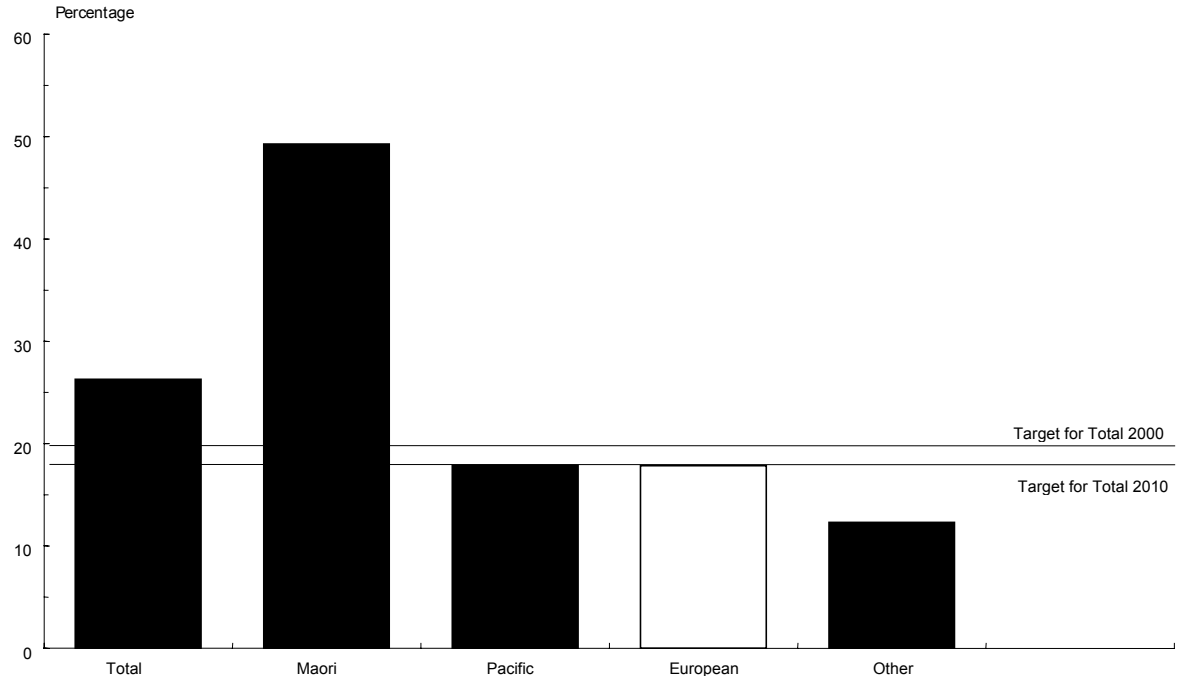
A Care Services project is being undertaken by Child, Youth and Family to further analyse the interfaces between service demand trends, care planning, and service provider and contracting approaches with the aim of improving care purchase and the service outcome for CYP at risk, and managing down the financial risks.

Smoking during pregnancy

To reduce the percentage of pregnant women smoking any type of cigarette from 33 percent in 1991 to 20 percent in the year 2000, and to 18 percent in the year 2010.

Smoking is known to adversely affect the well-being of both the foetus and the pregnant woman. The 1990 report of the US Surgeon General suggested that "Smoking is probably the most important modifiable cause of poor pregnancy outcome in the United States" (US Department of Health and Human Services 1990). Smoking in pregnancy is associated with spontaneous abortions, lower birthweight infants, preterm delivery, foetal and infant deaths. Other outcomes affected by smoking in pregnancy include impairment of behavioural, intellectual and physical development, and the development of respiratory disease (Winstanley et al 1995).

Figure 17: Percentage of pregnant women who smoke, by ethnicity, 1995–96



Source: Tuohy et al 1997

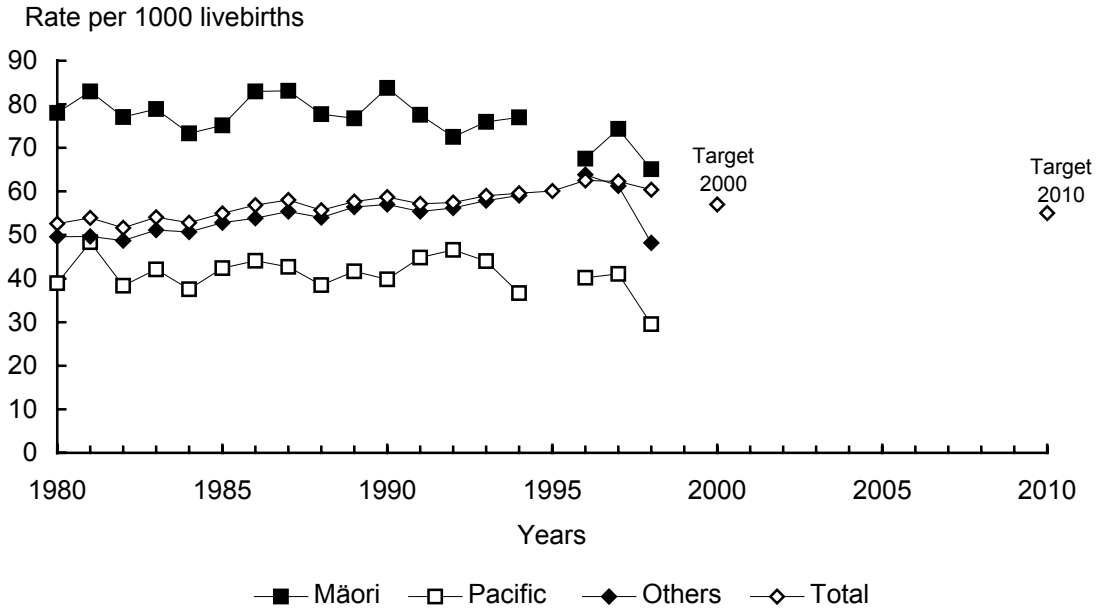
- Data for 1995–96 suggest that the prevalence of maternal smoking during pregnancy of infants visited by Plunket at three months was 26 percent for all infants and 49 percent for Maori infants (Tuohy et al 1997).
- In 1991, about one woman in three smoked during pregnancy, while Maori women were twice as likely to smoke in pregnancy (Alison et al 1993). Comparisons with the 1995–96 data are difficult because of different sampling frames. The relative prevalence of smoking in pregnancy between Maori and non-Maori, assuming similar proportions of births, was 2.8 in 1995–96, compared with 3.1 in 1991. This suggests that the differential in smoking behaviour may be narrowing (Ministry of Health 1997a).
- There is a strong association between SIDS and maternal smoking during pregnancy and postnatally. In recent years, over half of SIDS deaths have been attributed to maternal smoking (Mitchell 1994).
- For low birthweight due to intrauterine growth problems, 35 percent are attributed to maternal cigarette smoking (Morrell 1990).
- Mothers who smoke have been reported as less likely to have exclusively breastfed their babies at discharge from the obstetric hospital and less likely to be breastfeeding at all when the infant is six months of age (Clements et al 1995).

Low birthweight

To reduce the rate of infants born weighing less than 2500g from 59 per 1000 livebirths in 1993 to 57 per 1000 livebirths in the year 2000, and to 55 per 1000 livebirths in the year 2010.

Low birthweight infants (infants born weighing less than 2500 grams) have been shown to be more susceptible to serious illness during infancy, early childhood and also later in life than are infants of normal birthweight. Infants have low birthweight because of being premature, being small for their gestational age, or a combination of the two factors. Important epidemiological associations include: maternal smoking; young mothers; low maternal educational status; low maternal socio-economic status; and single mothers and mothers in de facto relationships (Silva and Stanton 1996; Bouchier 1991; De Boer et al 1990).

Figure 18: Low birth weight (less than 2500 g), by ethnicity, 1980–98



Source: Statistics New Zealand (1998 data are unpublished)
Technical note: ethnic-specific rates before and after 1995 are *not* comparable and are shown with a break in the time series. Classification of ethnicity in vital and health statistics changed in 1995. The 1998 low birth weight rate is calculated using the live births as of 30 March 1998. Ethnicity of child is used. In cases where children have different ethnicity, each ethnic grouping is counted, hence the rates need to be interpreted cautiously.

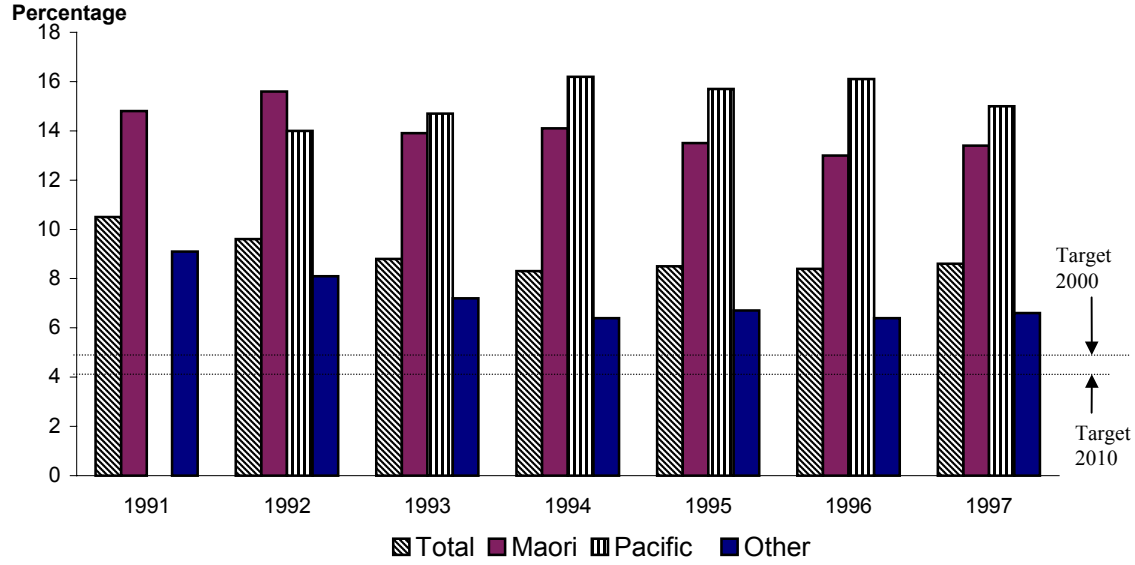
- In 1998, there were 3,449 live infants born weighing less than 2500 grams (60.4 per 1000 live births) slightly down from 3,671 infants (62.3 per 1000 livebirths) born with low birth weight in 1997.
- Maori infants born with low birth weight accounted for 30 percent of all low birth weight infants in 1998. This represents a rate of 65 per 1000 live births. The rates of low birthweight among Maori have been consistently higher than the average for all ethnic groups.
- In 1998, 221 Pacific infants were born with less than 2500 gms of weight. This shows a rate of 29.5 per 1000 live births. The low rate of low birth weight among Pacific infants may be explained partly in terms of Pacific infants tend to be heavier on average at the time of birth than infants of other ethnic groups and partly because the denominator may involve double counting of infants due to multiple coding of ethnicity.
- In 1996, low birthweight infants were 11 and four times more likely to die than other infants during the perinatal and post-neonatal period respectively (Ministry of Health 1999b).
- Low birthweight infants are more likely to die from all the major causes of infant deaths than other infants (Ministry of Health 1996).
- To achieve the target set for the year 2010, it would require approximately less than 1 percent annual decrease during the period 1999-2010.

Hearing loss at school entry

To reduce hearing loss in children at school entry from 8.3 percent for 1994–95 to 5 percent in the year 2000, and to 4 percent in the year 2010.

Hearing loss in early childhood has a significant effect on emotional, social and educational development. Its early detection is essential to ensure optimal development of speech and language and to minimise the longer-term effects on educational performance (Public Health Commission 1995).

Figure 19: Percentage of new school entrants failing hearing tests, by ethnicity, 1991–97



Source: National Audiology Centre, 1999.

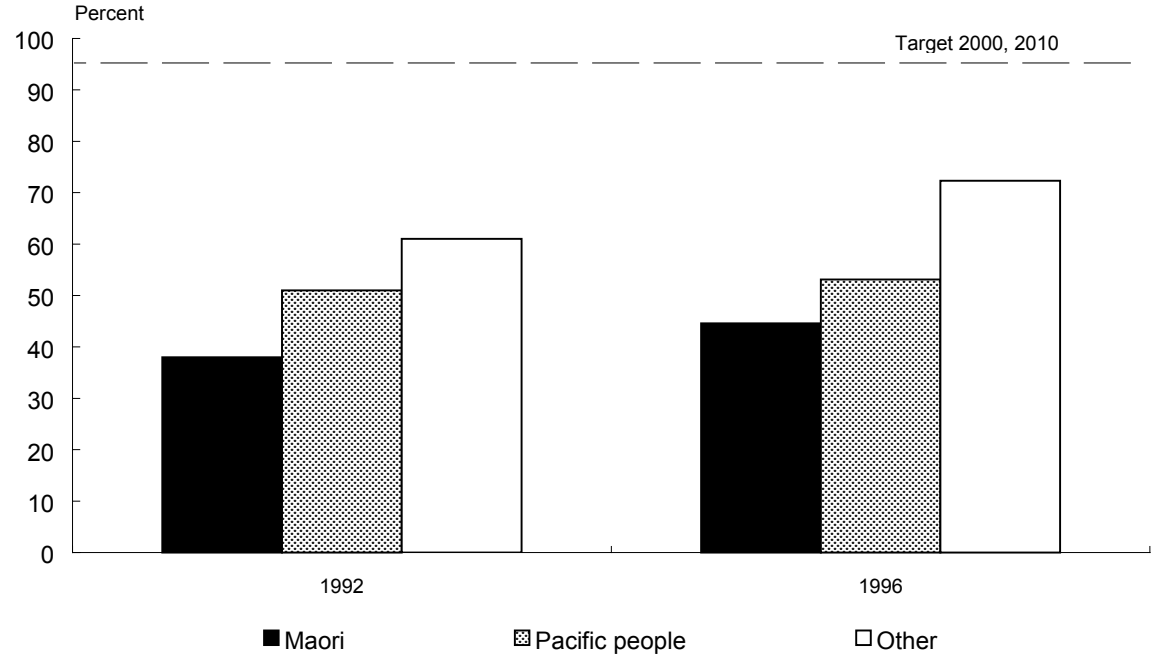
- In 1997, the national prevalence of hearing loss was 8.6 percent among new school entrants, down from 10.5 percent in 1991.
- Maori (13.4 percent) and Pacific children (15 percent) are more than twice as likely to fail hearing tests as are other children (6.6 percent). In fact, there has not been much improvement in hearing test failure rates among Maori and Pacific children.
- The vast majority of failures result from conductive hearing loss due to chronic otitis media with effusion (glue ear). However, sensorineural hearing loss is also a significant public health problem because it often affects children who have not learnt to speak, and is therefore more difficult to detect and more profound in its effect on cognitive and behavioural development (Ministry of Health 1997a).
- The cause of glue ear is complex. It is often associated with episodes of upper respiratory tract infection, as well as attendance at child care centres, exposure to environmental tobacco smoke, and low rates of breastfeeding (Public Health Commission 1995).
- The target set for the year 2000 appears to be ambitious since the current data clearly confirm the need to target the Maori and Pacific children as being at higher risks of hearing loss.
- Targeted ear health education and improved access to appropriate health services for Maori and Pacific children are needed in order to lower the risk of child hearing loss.
- An annual reduction of 24 percent is required for the period 1998-2000 to achieve the year 2000 target of 5 percent.

Immunisation completed at two years of age

To increase the proportion of New Zealand children with completed early childhood immunisation by the time they are two years old from 56 percent in 1992 to 95 percent in the year 2000, and also at 95 percent in the year 2010.

Immunisation has contributed significantly to the control of a number of important infectious diseases in New Zealand, including polio, diphtheria, tetanus, *Haemophilus influenzae* type b (Hib) disease, congenital rubella, and hepatitis B (Ministry of Health 1997a). Unfortunately, some vaccine-preventable diseases continue to be significant public health problems in New Zealand, especially pertussis and measles. Immunisation coverage is also a useful indicator of access to health services.

Figure 20: Immunisation completed at two years of age, 1992 and 1996



Source of data: Department of Health (1992 data), North Health 1997.

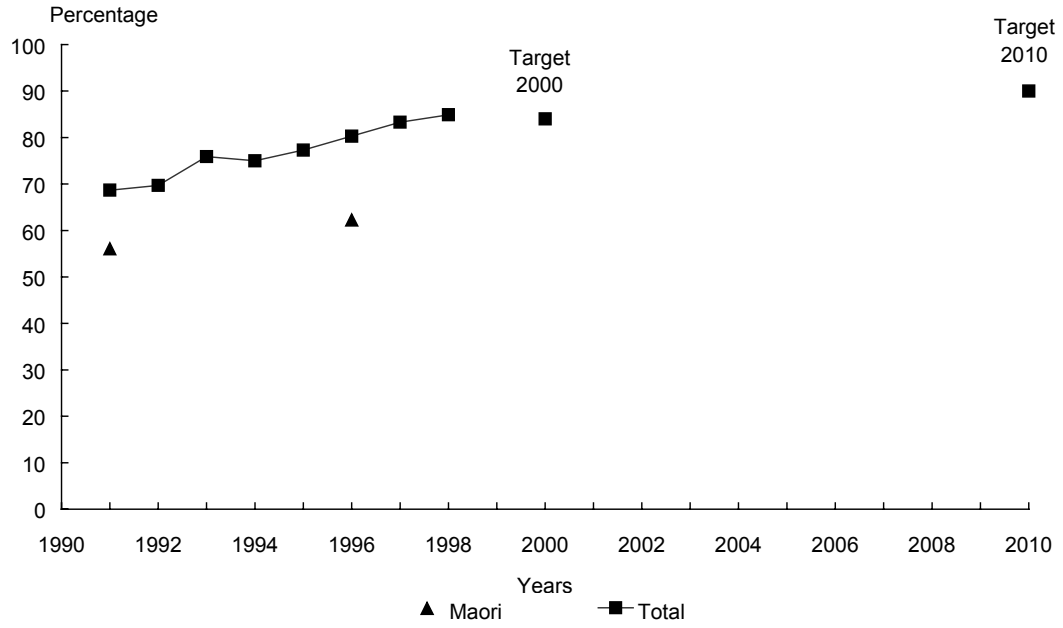
- Immunisation coverage levels in 1996 show only a small improvement over 1992, although this is based on Northern regional data only.
- An immunisation coverage survey in the northern region in 1996 showed that Maori and Pacific children had low rates of completed immunisation. Only 45 percent of Maori and 53 percent of Pacific children were fully immunised at two years of age, compared with 72 percent of European and Other children (North Health 1997). These rates reflect coverage for 1994–95.
- To achieve the immunisation targets, a national immunisation strategy was launched in February 1996 (Ministry of Health 1997a).

Participation of 3 year olds in early childhood education (priority target)

To increase the apparent participation rates of 3 year olds in early childhood education from 77.3 percent in 1995 to 84 percent in the year 2000, and to 90 percent in the year 2010.

The importance of early childhood education in forming the foundation for success in future education is widely acknowledged. Participation in an early childhood programme enhances the total development of the child, prepares the child for school and eases transition, and provides support for parents (Wylie et al 1996).

Figure 21: Apparent participation rates of 3 year olds in early childhood education, 1991–98



Source: Ministry of Education

Technical notes:

1. It is likely that a number of children are enrolled concurrently in more than one type of service, so rates of participation can only be considered 'apparent' and may be inflated.
2. The population figures from Statistics New Zealand are usually resident population.
3. Maori resident population figures are from the Census of Population 1991 and 1996. Apparent participation rates are given for census years only as estimated actual population figures for Maori children between censuses were not available at the time of writing.

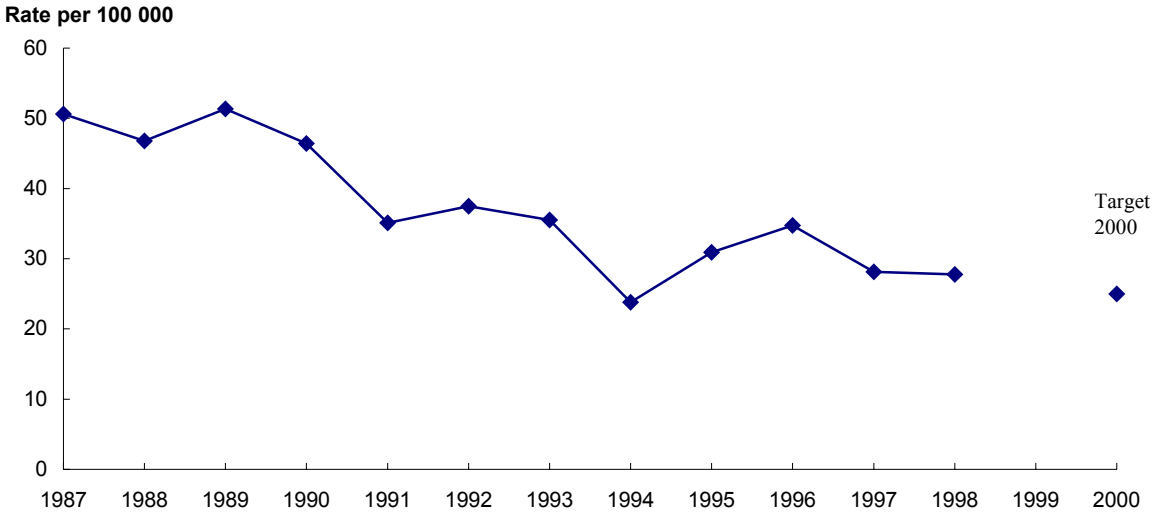
- The participation rate for 3 year olds in early childhood education has increased from 69 percent in 1991 to 85 percent in 1998, an increase of 16 percentage points.
- Between 1991 and 1996, the participation rate for Maori 3 year olds increased from 56 to 62 percent, compared to the increase for the total 3 year old population in the same period of 69 to 80 percent, indicating that Maori participation rates remained substantially lower than the overall participation rate.
- The main providers of early childhood education are kindergartens, playcentres, education and care centres, homebased networks, the Correspondence School, licence-exempt Early Childhood Development (ECD) funded playgroups, ECD Pacific Islands early childhood groups, and Te Kohanga Reo.
- In 1998 Maori children were concentrated in Te Kohanga Reo (40 percent), education and care centres (26 percent) and kindergartens (23 percent).
- Most enrolments of Pacific Islands children in 1998 were in Pacific Islands early childhood groups (34 percent), kindergartens (32 percent) and education and care centres (29 percent).
- These figures compare with the overall majority of children who attended education and care centres (41 percent) and kindergartens (29 percent) in 1998.

Road traffic death rate, 15–19 years

To reduce the mortality rate due to motor vehicle crashes for young people aged 15–19 years from 31 per 100 000 in 1994–96 to 25 per 100 000 in the year 2000 (target level for year 2010 is awaiting advice from Land Transport Safety Authority on their target for all ages).

In 1996, a total of 514 people died in road traffic accidents, a preventable cause of death (Ministry of Health 1997a). Compared with younger children, adolescents aged 15–19 years have considerably higher rates of death for road traffic accidents. This difference illustrates the importance of looking separately at mortality rates by cause of death among 15–19 year-olds. For 15–19 year-olds, deaths due to road traffic accidents accounted for 36 percent (n=75) of all deaths in 1997, more than any other cause. Lower social class groups have higher mortality rates for motor vehicle crashes compared with groups of higher social class (Pearce et al 1993; Beaglehole 1991). This target is an indicator of adverse outcomes relating to adolescent risk behaviour.

Figure 22: Mortality due to road traffic accidents, ages 15–19 years, 1987–98



Source: Land Transport Safety Authority
Note: Ethnic-specific information is not collected by Land Transport Safety Authority.

- In 1998, the death rate for ages 15–19 years due to road traffic injuries was 27.7 per 100 000 population. This is a 45 percent decline from the rate in 1987.
- Males aged 15–19 years are 2.9 times more likely than females to be killed in a road traffic accident based on NZHIS data for 1997 (ICD-9 codes E810–819).
- In 1997 the death rates of Maori were more than twice that of non-Maori rates. The sex differential is seen for both ethnic groups.
- In 1997, there were 1500 hospitalisations for 15–19 year-olds due to road traffic accidents (E810–819, E826–829). Males were 1.6 times more likely than females to be hospitalised. Maori were 14 percent less likely than non-Maori to be hospitalised, though the rate for Maori may be underestimated due to inaccurate recording of ethnicity in hospital statistics.
- During the period 1996-98, the road traffic death rate has decreased by 10.6 percent each year. The year 2000 target may be achieved with an annual reduction of 5 percent during 1999 and 2000.

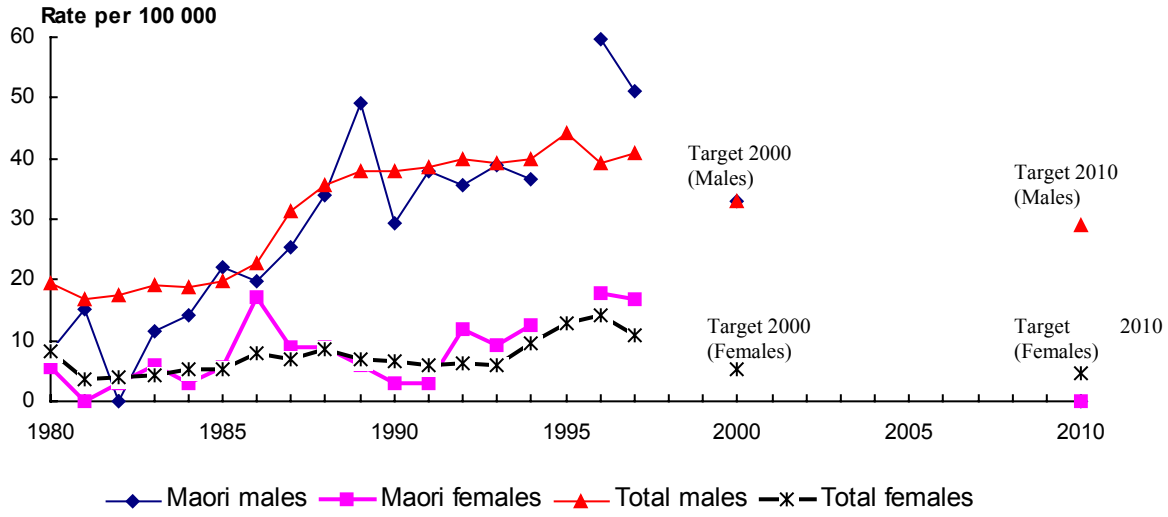
Youth suicide, 15–24 years[27]

For young people aged 15–24 years:

- *to reduce the suicide rate among males from 38.9 per 100 000 for the period 1990–92 to 33 per 100 000 in the year 2000, and to 29 per 100 000 in the year 2010.*
- *to reduce the suicide rate among females from 6.3 per 100 000 for the period 1990–92 to 5.4 per 100 000 in the year 2000, and to 4.7 per 100 000 in the year 2010.*

Suicide in the 15–24 year age group is an important public health and social issue, particularly for males, among whom it accounts for approximately 112 deaths per year (1987-1997). The ratio is 4 male suicides to every female suicide. A wide range of risk factors for youth suicide has been identified in New Zealand literature, including psychiatric disorder, family instability, being in custody and having a history of suicide attempts (Barwick 1992; Coggan et al 1995). Psychiatric disorder appears to be particularly important, with 90 percent or more of young people who commit suicide having a diagnosable mental disorder (Ministry of Health 1997b). At the family level, family instability and dysfunction are risk factors, along with stressful life events. Sexual abuse in childhood also appears to be a significant risk factor for attempted suicide along with childhood adversity and social disadvantage (Beautrais et al 1996).

Figure 23: Suicide rate, ages 15–24 years, by sex and ethnicity, 1980–97



Source: New Zealand Health Information Service

Technical note: ethnic-specific rates before and after 1995 are *not* comparable and are shown with a break in the time series. Classification of ethnicity in vital and health statistics changed in 1995.

- In 1997, 540 people died by suicide of which 142 people were aged 15-24 years. Youth suicides represented 26 percent of total suicides resulting in a youth suicide rate of 26.1 per 100 000. This compares with the 1988 rate of 22.4 per 100 000.
- During 1993–97, an average of 141 young people died from suicide each year. Suicide was the second most common cause of death in the 15–24 year age group, after road traffic crashes.
- The female suicide rate has been rising since 1993, though not as steeply as the male rate in the late 1980s. At 40.9 per 100 000, the rate for males remains much higher than the rate of 10.8 per 100 000 for females in 1997.
- To achieve the year 2000 target, suicide death rates need to be decreased by 10 percent annually among males and 29 percent among females during the next three year period (1998-2000).
- In 1997, 36 Maori youth aged 15-24 years died by suicide resulting in a Maori youth suicide rate of 33.9 per 100 000 which is considerably higher than non-Maori rates of 24.2 per 100 000. Similar rates were observed in 1996.
- In 1996-97, 405 males (rate of 150.9 per 100 000) and 684 (rate of 256.8 per 100 000) females aged 15-24 years were hospitalised as a result of intentional self-inflicted injury. These data highlight the fact that completed suicide is more common among males, but non-fatal self-inflicted injury is more common in females. Not included in these totals are cases of self-inflicted injury that are treated in emergency departments and then discharged home.

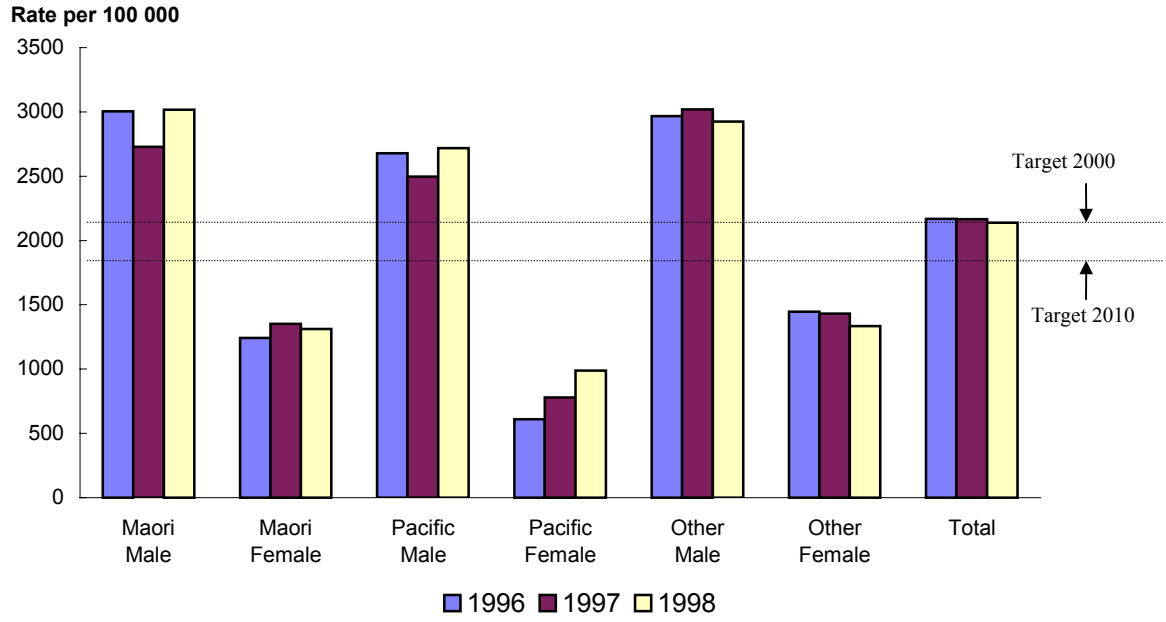
[27] Suicide rates for 15-24 year olds are not considered indicative of recent trends in the under 20 age group, at which the monitoring of the Strengthening Families Strategy is generally targeted. In order to bring this indicator in line with the overall monitoring regime, the age range monitored (and therefore the targets) could be adjusted to 15-19 years in future.

Injury hospitalisation rate, 15–19 years

To reduce the public injury hospitalisation rate from public hospitals of those aged 15–19 years due to injury from 2517 per 100 000 for 1994 to 2100 per 100 000 in the year 2000, and to 1770 per 100 000 in the year 2010.

Injury is a leading cause of both morbidity and mortality in New Zealand (Public Health Commission 1994). In 1994, injury (intentional and unintentional) accounted for six percent of deaths for all ages and 77 percent (n=156) of deaths for ages 15–19 years. Hospitalisation data, as a measure of morbidity, are a count of public hospital events, not of individual children. Hospitalisations include both inpatient and daypatient events, while outpatients are generally not admitted and are not counted. Changes in hospital admission policy, accepted treatment practices, recording systems and case-mix presentation may affect consistency of reporting over time. For details about the data filtration process, refer to Ministry of Health 1999a.

Figure 24: Injury hospitalisation rates, ages 15–19 years, by sex and ethnicity, 1996–98



Source: New Zealand Health Information Service.
Technical note: Injuries are classified according to ICD-9 External Cause Codes E800–999, omitting codes that refer to medical misadventure, complications of care etc, E870–879 and E930–949. Classification of ethnicity in vital and health statistics changed in 1995.

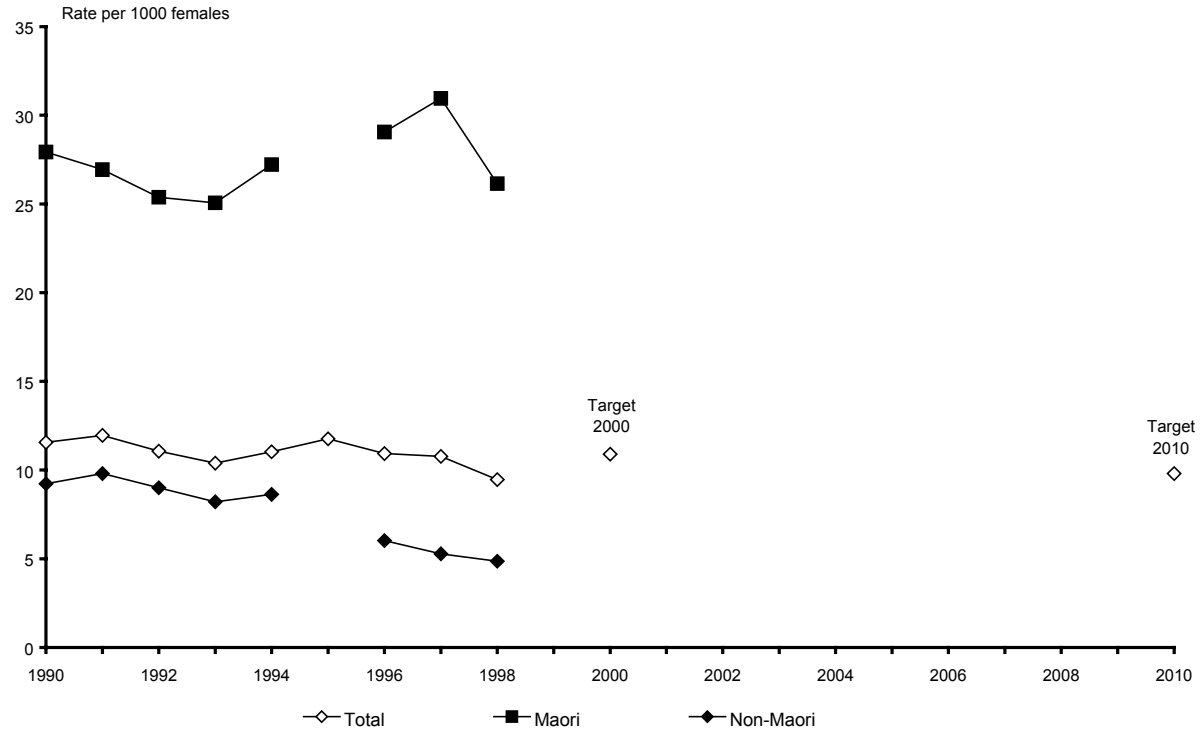
- Hospitalisation events for injuries totalled 5779 in 1998 for ages 15–19 years (2138 per 100 000 population), close to the target level for the year 2000.
- For that group, events of hospitalisation due to intentional injuries slightly exceeded the road traffic accidents injuries in 1998. Intentional injuries accounted for 20 percent of hospitalisation followed by road traffic accident (19 percent), and falls (14 percent).
- In 1998, males aged 15–19 years were more than twice as likely as females to be hospitalised for injuries.
- The rate for Maori was similar to the rate for non-Maori. Hospitalisation rates for Maori males were highest at 3016 per 100 000 in 1998, followed by other and Pacific males at 2926 and 2718 per 100 000 respectively.
- Rates for females of European and other ethnic background are decreasing but still exceed the rates of all other groups. The hospitalisation rates among them were 1333 per 100 000. These are very close to Maori female rate (1311 per 100 000) .
- Pacific females had the lowest rates of all at 988 per 100 000 but appear to be increasing in the past three years period.
- To achieve the target set for the year 2010, an average of less than 2 percent decrease in injury hospitalisation rate is required each year during the period 1999-2010.

Teenage fertility rate (priority target)

To reduce the fertility rate for females aged 13–17 years from 11.8 live births per 1000 females in 1995 to 10.9 live births per 1000 in the year 2000, and to 9.8 live births in the year 2010.[28]

International research suggests that childbearing during adolescence is associated with long-term difficulties for the mother, the child, and society. These outcomes have been attributed to the poverty and other adverse socio-economic circumstances that frequently accompany early childbearing. Compared with babies born to older mothers, babies born to adolescent mothers are at a higher risk of low birthweight and infant mortality, and are more likely to grow up in homes that offer lower levels of emotional support and cognitive stimulation. For the mothers, giving birth during adolescence is associated with limited educational attainment, which in turn can reduce employment prospects and earnings potential. The indicator of adolescent childbearing used is the fertility rate for young women aged 13 to 17 years.

Figure 25: Fertility rate for females aged 13–17 years, 1990–98



Source: Statistics New Zealand.

Technical notes: ethnic-specific rates before and after 1995 are *not* comparable and are shown with a break in the time series. Classification of ethnicity in vital and health statistics changed in 1995. A change in the processing of birth registration forms from 1 Jan 1998 resulted in lower than expected births for that year , so the figures for 1998 should be regarded with caution.

- In 1998, there were 1,245 live births to mothers aged less than 18 years (a rate of 9.5 per 1000 females aged 13–17 years). This rate surpasses the target for 2000 and is lower than the target set for 2010 (9.8 per 1000). Births to females under 18 made up 2.2 percent of all live births in 1998.
- In 1998, the fertility rate for Maori females aged 13–17 years was 26.2 per 1000, more than five times that of non-Maori (4.9 per 1000).
- Age-specific fertility rates for Pacific Islands women are produced by Statistics New Zealand for census years only. In 1996, the fertility rate for Pacific Islands females aged 13-17 years was 17.0 per 1000, nearly twice the average rate.
- In 1998, there were 1,232 abortions to females aged less than 18 years, representing 8.2 percent of all abortions (an abortion rate of 9.4 per 1000 females aged 13–17 years).
- For 1995–96 and using information for females aged 15–19 years, Maori and European females had comparable abortion rates (21.2 and 20.7 per 1,000, respectively), while the rate for Pacific females was approximately 30 percent higher, at 27.2 per 1,000 (Abortion Supervisory Committee 1997).

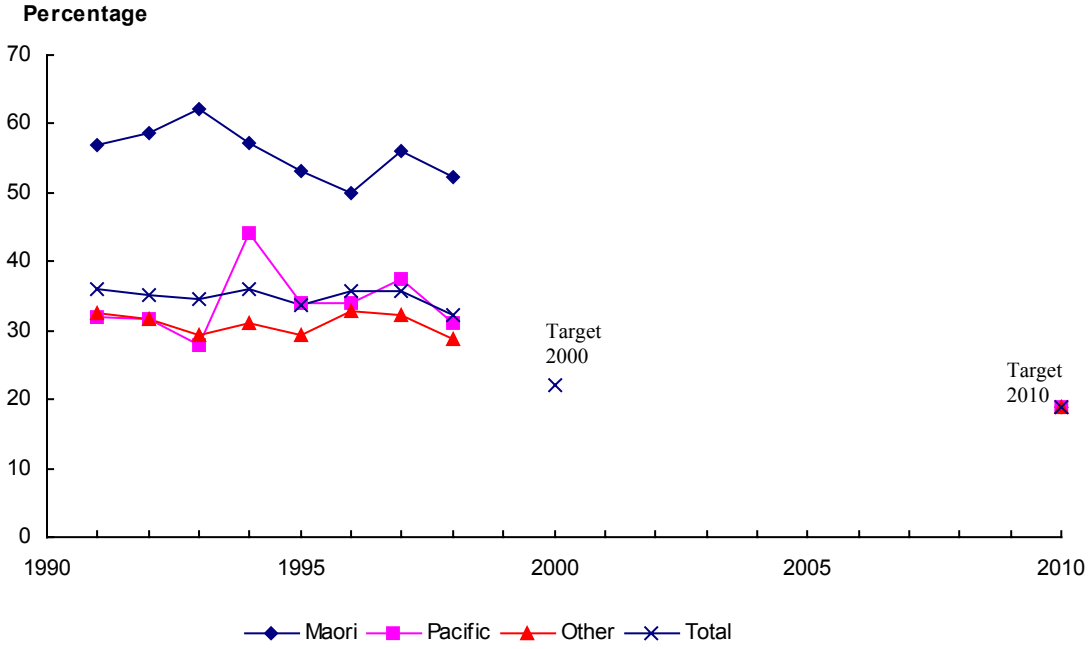
[28] Targets have been rebased to live births per 1000 females (previously per 100 000). The baseline year has been changed from 1996 to 1995 due to the revision of population estimates used in the calculation of fertility rates, that changed the previously established historical levels.

Tobacco smoking, 18–24 years

To reduce the percentage of young people aged 18–24 years smoking any type of cigarette from 34.2 percent in 1993 to 22 percent in the year 2000, and to 19 percent in the year 2010.

Smoking has serious long-term consequences, including the risk of smoking-related diseases, increased health care costs associated with treating these illnesses, and the risk of premature death (Winstanley et al 1995). Many adults who today are addicted to tobacco began smoking as adolescents. These consequences underscore the importance of studying patterns of smoking among adolescents. Data are collected for ages 18 years and over, where 18 years of age is the lowest age group to whom shop owners can legally sell tobacco products. Any impact of interventions targeted to young people aged less than 18 years would be seen in the years following the intervention when the targeted cohort move into the 18–24 year age group.

Figure 26: Percentage of youth smokers, ages 18–24 years, by ethnicity, 1991–98



Source: ACNielsen.Spectrum

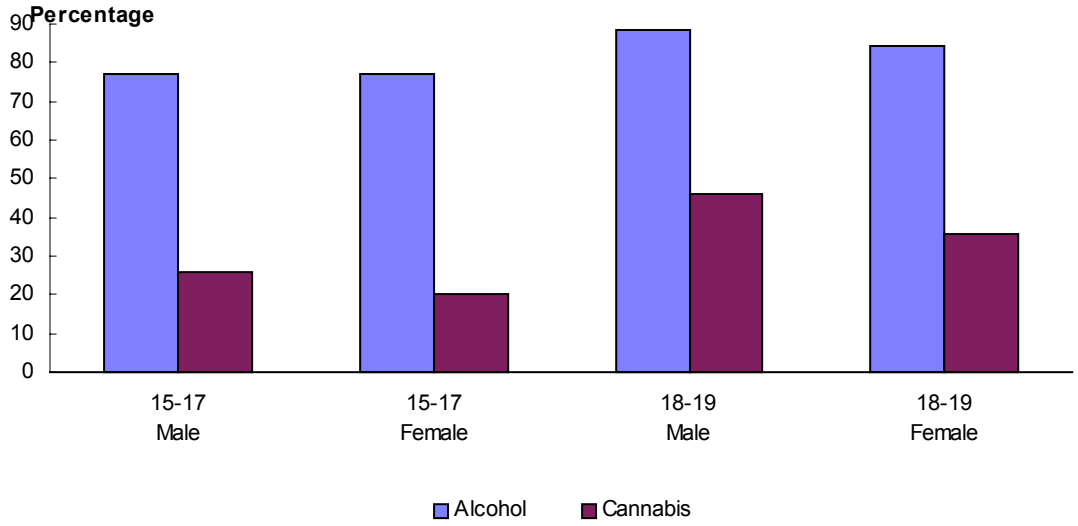
- For 1998, an estimated 32.3 percent of those aged 18–24 years were cigarette smokers, decreased from 36 percent in 1991. Given the current rate, it would require a reduction of 17 percent annually to reach the target set for the year 2000.
- Estimates of cigarette smoking for males and females were almost identical in 1998. The figures were 31.2 percent and 33.5 percent for males and females respectively.
- Among males, the prevalence rate of smoking virtually remained unchanged from the 1997 level, while for females, it decreased significantly from 40.6 percent in 1997 to 33.5 percent in 1998.
- Compared with the prevalence rates of 1991, there has been only a small change among males (34 percent versus 31.2 percent) but among females it has decreased from 37.9 percent to 33.5 percent.
- Compared with European and Other youths aged 18–24 years, Maori rate of smoking was 79 percent higher than the rate for European and Other (52 versus 29 percent), while Pacific youth have a smoking rate of 31 percent in 1998.
- According to results of the Drugs in New Zealand National Survey of 1998, 31 percent of youth aged 18-19 and 36 percent of those aged 20-24 smoked one or more cigarettes per day in the last 30 days (Field and Casswell, 1999).
- In 1997 Pacific and 'Other' (mainly European) females tend to smoke more than males by about one percentage point, while Maori females smoke more by nine percent (35 percent and 26 percent for Maori females and males respectively).
- To achieve the target set for the year 2010, an annual reduction of 4 percent is required during the period 1999-2010.

Drug and alcohol risk behaviour, 15–19 years[29]

To select an appropriate indicator of adolescent drug and alcohol risk behaviour, to estimate a baseline for the indicator, and to develop appropriate target levels for the year 2000 and the year 2010.

Research indicates that drug and alcohol abuse by adolescents can have immediate as well as long-term health and social consequences. Alcohol abuse by adolescents is associated with motor vehicle accidents, injuries and deaths, problems in school and in the workplace, fighting, and crime (Fergusson et al 1994; American Academy of Paediatrics 1995). Chronic marijuana abuse poses both health risks, particularly for damage to respiratory functions, and cognitive risks, where this age group have a special vulnerability to the effects of cannabis on educational performance (Hall 1995). Acute effects and risks of marijuana use amongst adolescents include slowed reaction times, and impaired short term memory and attention (Drugs Advisory Committee report 'Cannabis and Health in New Zealand', March 1995). Possession and/or use of illegal drugs can lead to a variety of penalties and a permanent criminal record.

Figure 27: Percentage of males and females aged 15-19 who reported using alcohol and cannabis in the last 12 months, 1998



Source: Drugs in New Zealand National Survey 1998

- Eight out of 10 males and females aged 15-19 years reported using alcohol in the last 12 months according to the Drugs in New Zealand National Survey, 1998 (Field and Casswell, 1999).
- Heavy drinking, as defined by six drinks or more per occasion for males and four drinks or more per occasion for females, was most common among 18-19 years old. It was 49 percent for males and 36 percent for females (Field and Casswell, 1999).
- Forty one percent of males aged 18-19 reported consumption of alcohol enough to feel drunk at least once per week. The corresponding figure for females was 24 percent (Field and Casswell, 1999).
- For males and females aged 15-17, the figures were approximately 20 and 15 percent respectively (Field and Casswell, 1999).
- Cannabis, in the form of marijuana, was used by 32 percent of males and 27 percent of females aged 15-19 in the last 12 months (Field and Casswell, 1999).
- A 'current user' is a respondent who had used cannabis in the last 12 months and said he/she had not stopped using it. The percentage of current use also was highest among 18-19 years old. In this age group, 34 percent of males and 19 percent of females were current users. The approximate figures for 15-17 were 18 and 10 percent for males and females respectively (Field and Casswell, 1999).
- Use of cannabis on more than ten occasions in the last month was also most common among males aged 18-19 year olds (11 percent). The corresponding figure for females was much lower at 2 percent (Field and Casswell, 1999).

[29] Targets have yet to be set for this indicator.

Incidence of repeat and serious re-offending cases referred to CYPFA, 10-16 years

To reduce the incidence of repeat and serious re-offending cases involving youth offenders aged 10-16 years referred to CYPFA from 13.76 per 1000 in 1997 to 11.01 per 1000 in the year 2000, and 8.94 per 1000 in the year 2010. (These targets were based on the DSW Social Services Strategic Plan.)

While offending may be the presenting reason for the referral, the causes of offending and risk behaviour amongst youth are often complex and may include safety as well as behaviour problems. Youth Services was introduced as a distinct output from 1 July 1998 to provide a focus on overall services to youth.

In 1998, Government approved funding for the Youth Services Strategy following a review of youth services and the youth justice provisions of the CYP&F Act. The strategy increases focus on the rehabilitative outcomes to be achieved with the Agency's Youth Services, addressing youth offending and re-offending as well as dealing with behaviour problems. The target client groups include young people with conduct disorders, sexually abusive or difficult-to-manage behaviours and those who have offended and are at risk of re-offending.

The Youth Services Strategy complements other strategies such as the Residential Services Strategy and seeks to extend the continuum of care options for this client group. The strategy will strengthen the risk assessment tools, introduce a decision-making framework, and increase the range of specialist services and rehabilitative programmes available to youth. The feasibility of developing a "risk of re-offending" assessment tool will be investigated as part of the strategy implementation plan.

For the purpose of this report, Child Youth and Family has defined a repeat offender as a "child or young person between 10 –16 years whose offending, after one or more previous interventions, is persistent and/or escalating". Two measures have been selected as indicators of either an increase or a decrease in repeat and serious re-offending. These are:

- Youth Court Orders
- The ratio of Orders to Youth Justice Family Group Conferences (held).

Table 3: New Youth Justice FGC Plans and Youth Court Final Orders for distinct clients

	1996/97	*1997/98*	*1998/99*
YJ FGC Plans	3428	3245	3505
Total Youth Court Final Orders	633	792	783
Total Plans and Orders	4061	4037	4288

(Child Youth and Family internal report, *Distinct Client New YJ FGC Plans and Orders*, SWIS)

In 1998/99 CYPFA received Youth Court Final Orders for 783 distinct clients and held a total of 6408 Youth Justice Family Group Conferences. (Child, Youth and Family internal report, *Critical Indicator Time-series Report*, November 1999).

Table 4: Ratio of Youth Court Final Orders to Youth Justice FGCs Held

	1996/97	*1997/98*	*1998/99*
Total Youth Court Final Orders	633	792	783
YJ FGCs Held	4272	6267	6408
Ratio of Orders to YJ FGC	1 : 6.7	1 : 7.9	1 : 8.2

(Child Youth and Family internal report, *Critical Indicator Time-series Report*, November 1999)

While Youth Court Final Orders may be first-time orders for young people, the hierarchy of interventions indicates that they would have to be repeat and serious offenders to receive these high tariffs. These orders include supervision with residence (SUR), supervision with activity (SUA), supervision order (SUO) and

community work order (COM). These orders are not mutually exclusive. However, the count has been adjusted for this and represents as closely as possible discrete client numbers.[30]

Youth Justice Referrals[31]

Over the past two years the number of both "court directed" and "intention to charge" (Police Consultation) Youth Justice referrals have stabilised at around 6200 per year.

Table 5: Youth Justice Family Group Conference Referrals

	1996/97	*1997/98*	*1998/99*
Police "Intention to Charge"	2954	3121	3043
Court-directed YJ FGCs	3666	3091	3188
Total YJ FGC Referrals	6620	6212	6231

(Child Youth and Family internal report, *FGC Intention to Charge and Court-Directed FGCs*, SWIS)

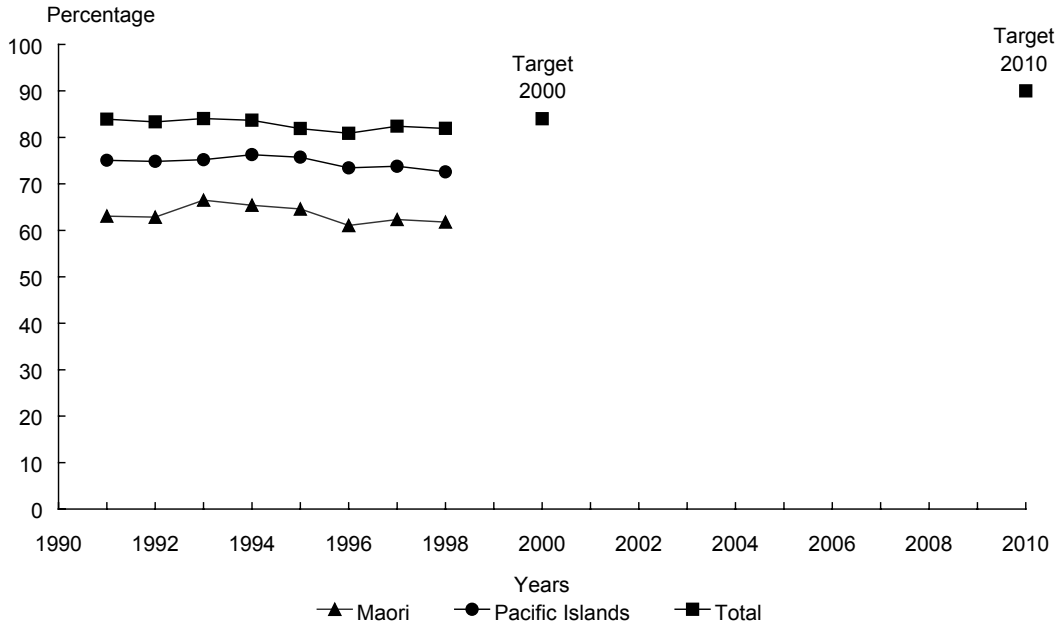
[30] All SUR orders have SUO as well. Therefore SUR has not been included in the count. An estimate that half the SUA orders also have SUO has been included. COM orders are most often independent of the other orders, so are fully included in the count.

[31] A distinction must be noted between YJ Referrals, FGCs held, FGC Plans and Final Orders. YJ FGC referrals count the number of new referrals received by CYPFA during the period. FGCs held refers to the number of FGCs actually held during the period between CYPFA, the client, the client's family/whanau and other relevant parties. FGC plans are the plans developed during the conference for managing the incident. Youth Court Orders are orders made by the Youth Court and may include the supervision of the young person.

School leavers with a formal qualification (priority target)

A formal school qualification is a measure of the extent to which young adults have completed a basic prerequisite for higher education and many entry level jobs. Educational qualifications are linked to labour force status and income. They improve life chances for the individual and enhance general social well being.

Figure 28: Percentage of school leavers with formal qualifications, by ethnicity, 1991-98



Source: Ministry of Education
Note: A formal qualification is defined as one School Certificate subject irrespective of grade awarded (or national qualifications framework equivalent), or better.

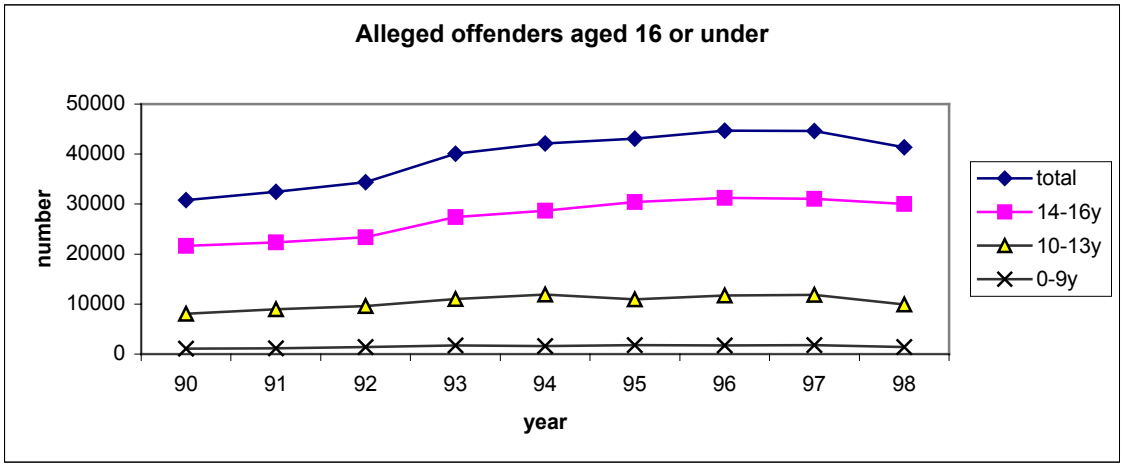
- The proportion of all students leaving school with a formal qualification remained at around 84 percent in each year from 1991 until 1994. It decreased to 82 percent in 1995 and remained at that level for students who left school in 1998.
- The decrease in the proportion of students leaving school with formal qualifications may be related to improvements in the labour market for unskilled school leavers.
- Students who leave school without a formal qualification may have the opportunity to return to education and training through the Training Opportunities Programme.
- The proportion of Maori and Pacific Islands school leavers with a formal qualification also fell between 1991 and 1998, despite initial improvements in the mid-1990s.
- Maori and Pacific Islands people have consistently had a lower proportion of students leaving school with a formal qualification. In 1998, 62 percent of Maori and 73 percent of Pacific Islands school leavers had gained one School Certificate subject or better before leaving school, compared to 82 percent of all school leavers.
- Regions with the lowest proportion of students leaving school in 1998 with formal qualifications were Northland (75 percent), Gisborne (76 percent) and Bay of Plenty (78 percent).

Number of offenders aged 16 or under apprehended by the Police

To reduce the number of alleged offenders aged 16 or under apprehended by the Police.

The focus of this indicator is the numbers of young persons apprehended by the Police. Context is important when interpreting the data. For example possible changes in policing practices, reporting and/or recording practices would need to be considered when examining variations in apprehension rates[32].

Figure 29: Alleged offenders aged 16 or under



Source: New Zealand Police. Data for years ending 31 December.
Technical note: Apprehensions for traffic offences are not included.

- There was a total of 41,339 apprehensions of offenders aged 16 or under in 1998, up 34% on the number for 1990. [This is not equivalent to 41,339 individual offenders as many offenders are apprehended for multiple offences.] The apprehensions were for any of seven major offence categories: violence, sexual, drugs and anti-social, dishonesty, property damage, property abuses, and administrative (predominantly offences against justice).
- The dishonesty offence category (which includes burglary, vehicle taking, theft, receiving stolen property and fraud) accounted for over half (55%) of apprehensions involving offenders aged 16 or under in 1998.
- In 1998, nearly four out of five apprehensions involving offenders aged 16 or under were of males.
- The number of offenders recorded as being Maori and the number from other ethnic groups (i.e. all other ethnic groups combined) have increased at a similar rate over the past few years.
- Apprehensions for three major offence categories – administrative, property damage and violence – involving offenders aged 16 or under more than doubled between 1990 and 1998.

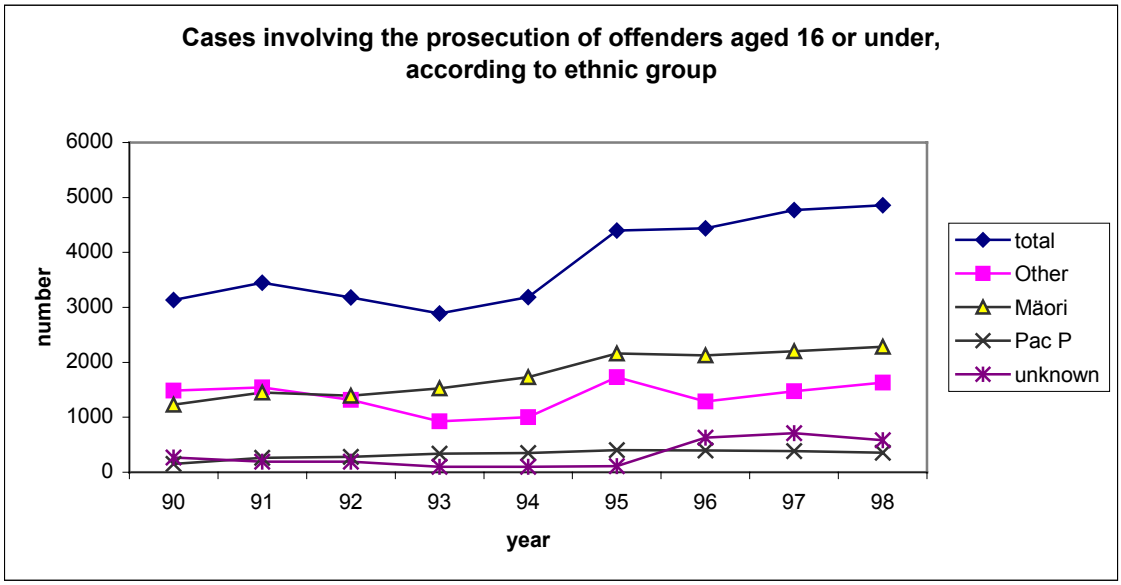
[32] An understanding of the limitations in respect to the Police data on offenders is also important. Two key limitations are 1) the data does not contain unique numbers. Since the data is collected in relation to reported offences, and many offences involve multiple charges or multiple offenders, it is impossible to give an accurate count of **individual** offenders, 2) the statistics only relate to those offenders apprehended by Police in relation to **reported** offences.

Cases involving the prosecution of offenders aged 16 or under[33]

To reduce the number of cases involving the prosecution of offenders aged 16 or under.

There are a number of potential outcomes for young persons who have been apprehended by the Police. These are: discretionary cautions[34]; warnings[35]; Family Group Conferences[36]; Police Youth Aid section referral for further action; Youth Court prosecution[37]; or District or High Court prosecution[38].

Figure 30: Cases involving the prosecution of offenders aged 16 or under, according to ethnic group



Source: Ministry of Justice.

Technical note: The transition from police data to courts data requires a change of unit of measure from offences to cases. The number of prosecuted offences is considerably higher than the number of prosecuted cases as more than one offence can be prosecuted by one court case. The data presented above includes cases prosecuted for any offence category, including traffic offences.

- In 1998, 4856 cases involved the prosecution of offenders aged 16 or under, up 55% since 1990.
- In 1990 about one in four cases resulted in a conviction in the District or High Courts; by 1998, the ratio had reduced to about one in seven. The trend was slightly reversed for cases resulting in an outcome of "Youth Court proved". Twenty eight percent of cases resulted in this outcome in 1990 compared with 30% in 1998.
- Forty three percent of cases involving the prosecution of young offenders in 1998 had a property offence as the major offence, 25% had a traffic offence as the major offence, and 20% had a violence offence as the major offence.
- In over four in five cases, the offenders aged 16 or under who were prosecuted in 1998 were male.
- Young Maori are over-represented among cases in which offenders aged 16 or under are prosecuted. In 1998, 2282 (47%) of cases involved the prosecution of Maori offenders, 358 (7%) involved the prosecution of Pacific Peoples offenders, and 1632 (34%) of cases involved the prosecution of offenders of all other ethnic groups combined. (Ethnicity data was not available for 584 (12%) of cases).
- In 1998, the prosecution rates for 10 to 16 year olds were 2.8 per 100 for Maori, 1.2 per 100 for Pacific Peoples, and 0.6 per 100 for all other ethnic groups combined.

[33] '16 or under' predominantly refers to young persons aged 14 – 16 years of age. Children aged 10 to 13 years of age can only be prosecuted for murder or manslaughter. A child under the age of 10 cannot be prosecuted for any offence.

[34] The reporting officer issues a caution to the apprehended offender having determined that the nature of the offence only warrants a caution and no further action is required.

[35] A warning is given to a child or young person for the commission of an offence by an investigating officer or his/her supervisor, without the matter being referred further.

[36] The offender is not prosecuted; instead the offence is cleared by means of a Family Group Conference held under the Youth Justice provisions of the Children, Young Persons and Their Families Act 1989.

[37] The young person is prosecuted in the Youth Court, either as a result of an arrest or by summons following a Family Group Conference, under the Youth Justice provisions of the Children Young Persons and Their Families Act 1989. If the case is proved, it is referred to as Youth Court Proved. No criminal conviction is entered.

[38] The alleged offender is prosecuted in either a High Court or District Court, either as a result of an arrest or by summons. If the case is proved, a criminal conviction is entered.

Cases involving the prosecution of offenders aged 16 or under by gender and ethnicity

Figure 31: Cases involving the prosecution of male offenders aged 16 or under, according to ethnic group

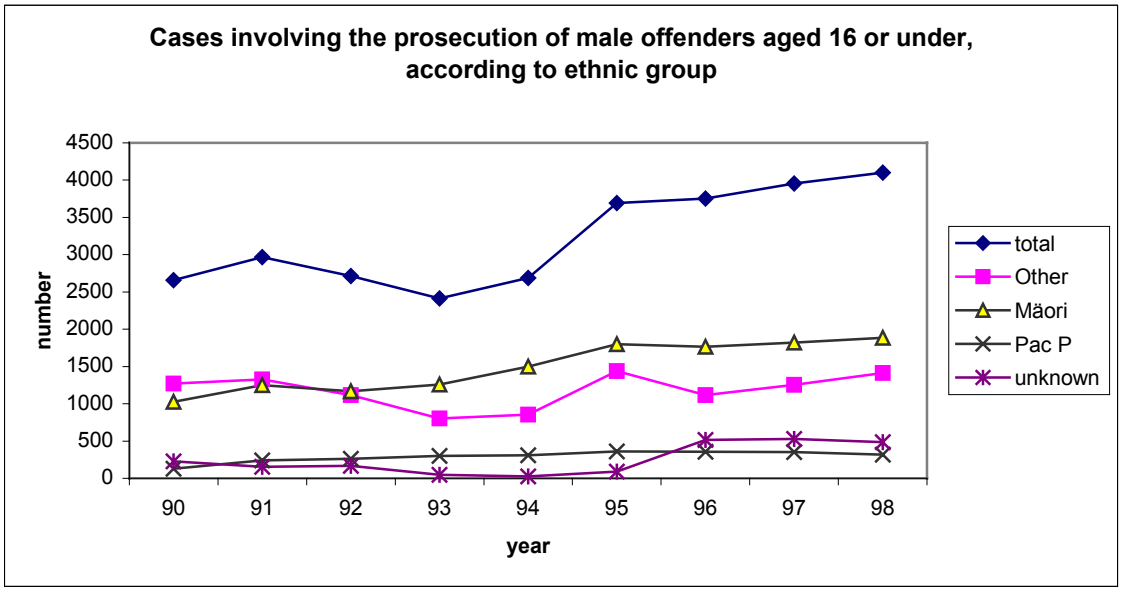
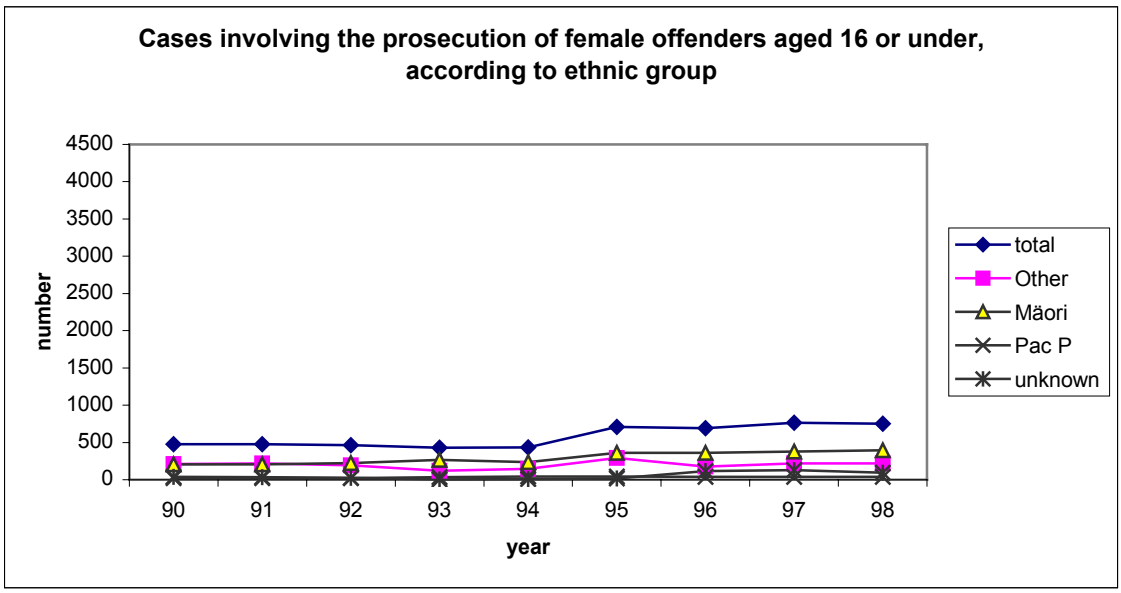


Figure 32: Cases involving the prosecution of female offenders aged 16 or under, according to ethnic group



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