

PACIFIC YOUTH HEALTH

A paper for the
PACIFIC HEALTH AND DISABILITY ACTION PLAN REVIEW



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MANATŪ HAUORA

Foreword

Talofa lava, Malo e lelei, Kia Orana, Taloha Ni, Fakalofa Lahi Atu, Ni Sa Bula Vinaka, Kia Ora, Greetings

This is one of a series of papers prepared for the review of the *Pacific Health and Disability Action Plan* and represents another step towards the development of a Pacific health evidence base. The *Pacific Health Chart Book* in 2004 brought together much of the available data and identified indicators that could be used for monitoring Pacific health. Its development also highlighted the comparative inaccessibility of quality information about Pacific health. These papers bring together much of the published information relevant to Pacific health and a more complex picture is emerging about the significant influence of determinants and risk factors on Pacific health; and the role of the health system in addressing Pacific health need. The evidence from the papers confirms the importance of action in two directions to achieve Pacific health gain and reduce inequalities: one, intersectoral action to improve the determinants of health status and two, improved health system responsiveness to Pacific peoples to reduce inequalities.

The available research and evidence about Pacific youth is showing a diverse group united by their Pacific heritage and engaging in varying ways with education, social and economic life in New Zealand. In youth, health is more directly affected by decision-making associated with risky behaviours, and for Pacific youth smoking and alcohol consumption are the two highest risk behaviours. Smoking has long-term consequences as evidence about chronic disease among Pacific peoples shows, and alcohol leads to other risky behaviour such as unprotected sex. The determinants of health for Pacific youth are generally those of their childhood so they are continuing to move into adulthood more vulnerable to poor health than other New Zealanders. It is important that Pacific youth be engaged in healthy eating – healthy action initiatives because of their role model and putative leadership roles and own potential for health gain. Pacific youth are increasingly articulating a need for health services that acknowledge and respond to their needs.



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Executive Summary

This paper draws on the few New Zealand studies of youth and the even fewer studies of Pacific youth, as well as a number of subject-specific studies that include youth and ethnicity data and analysis, to develop an information and evidence based profile of Pacific youth health. The paper considers determinants, protective factors, risk factors, health outcomes and interventions.

The majority of Pacific youth are growing up in New Zealand's most deprived neighbourhoods, which are generally characterised by lower standards of living, more overcrowded housing, low-decile schools and fewer social, sports and leisure facilities for youth.

Cultural, family, community and church networks provide considerable support to Pacific youth, but the challenges of bridging two cultures can result in the isolation of youth from support structures at vital times. The majority of Pacific youth are in education or employment but low education attainment is limiting their potential to achieve better lifestyles, wellbeing and health.

Pacific youth have similar patterns of risky behaviour to other New Zealand youth. Of concern are the levels of alcohol consumption and smoking (although smoking initiation and prevalence appears to be declining) which alongside overweight and obesity are contributing to early onset and high chronic disease rates among Pacific peoples. Alcohol is also linked to the high rate of unsafe sexual behaviour among Pacific youth.

Tackling the risk factors of poor diet and physical inactivity is already a health sector priority. The health consequences of obesity are now considered to be apparent in youth, and some researchers suggest that Pacific youth, as one of the most vulnerable groups, should be routinely screened for diabetes and cardiovascular disease. The evidence accessed for this paper highlights the need for more Pacific-focused research to inform responses and strategies to the obesity epidemic. Pacific youth have indicated concern about the problems presented by obesity, but need more support if they are to act as change agents individually and as part of families and communities. Available information suggests interventions to address obesity such as Healthy Eating – Healthy Action and Mission On, which recognise Pacific needs are being well received by Pacific youth.

Pacific youth are reluctant to use general health services and Pacific provider health services, so further investigation of the potential for dedicated youth health services in high-need areas may be timely. However, Pacific youth appear to prefer to be considered part of New Zealand youth. This indicates the importance of national youth health initiatives that explicitly recognise diversity and engage Pacific youth as part of the development and implementation process is likely to have gains beyond health improvement. Evaluations of youth health interventions are increasingly stressing the importance of ensuring messages are appropriate to Pacific youth.

Pacific youth face more challenges to achieving and maintaining good health and wellbeing than most other young New Zealanders. The majority demonstrate considerable resiliency and where possible the health system should be looking to support and strengthen protective factors for all young Pacific people. Continuing to address risk factors and develop effective interventions for Pacific youth at risk of poor health outcomes needs to be considered a worthwhile investment in the future of the nation.

1. Introduction

The health of Pacific youth (aged 15–24 years) is a priority in the Pacific Health and Disability Action Plan (PHDAP). This is in recognition of the personal, national and community benefits to be gained from promoting and investing in the health and wellbeing of youth (Ministry of Health 2002b). This paper stands alone, but is also part of a series of papers prepared for the review of the PHDAP. Other papers cover:

- *Pacific Child Health* (Ministry of Health 2008a)
- *Pacific Peoples and Health Care Services* (Ministry of Health 2008b)
- *Pacific Peoples' Experience of Disability* (Ministry of Health 2008c)
- *Pacific Peoples and Mental Health* (Ministry of Health 2008d)
- *Promoting Healthy Lifestyles and Preventing Chronic Diseases Among Pacific Peoples* (Ministry of Health 2008e)
- *Improving Quality of Care for Pacific Peoples* (Ministry of Health 2008f).

A related paper, *Pacific Cultural Competencies: A literature review* (Tiatia 2008) complements the review papers and provides additional information about the significance of cultural competence for Pacific peoples' health.

A few facts about Pacific youth

At the 2006 population census:

- 48,411 individuals aged 15–24 years identified themselves as being of Pacific ethnicity
- 18.2 percent of all Pacific peoples in New Zealand were aged 15–24 years
- 24,474 (50.6 percent) of Pacific peoples aged 15–24 years were female
- 23,934 (49.4 percent) of Pacific peoples aged 15–24 years were male
- 8.9 percent of New Zealanders aged 15–24 years were Pacific
- the median age for Pacific peoples was 21 years, compared to 36 years for the national population
- over 90 percent of Pacific youth resided in the North Island within the major urban areas (Statistics New Zealand 2007a).

Background

Young people are generally considered to be one of the healthiest groups within national populations.

In the past, important health issues for the youth age group were infectious diseases and paediatric conditions. Today, the most significant and problematic youth health issues are behavioural. These concerning behaviours evolve from a complex interplay of biopsychosocial and cultural factors within a particular developmental context (Watson 2007).

The PHDAP objective to improve and protect the health of Pacific youth included the development of a Pacific health youth strategy. This was subsumed by the *Youth Development Strategy Aotearoa* (Ministry of Youth Affairs 2002) and the Ministry of Health's (2002) *Youth Health: A guide to action*.

As part of their responsibility for the PHDAP, District Health Boards (DHBs) with high Pacific populations have held Pacific youth forums and have developed plans and initiated actions in response to identified youth health needs and preferences. This activity has also stimulated local research and information-gathering projects about Pacific youth health, which have complemented the small but growing body of national research and studies of Pacific youth health.

Like the other papers in this series, the current analysis began with *Tupu Ola Moui: Pacific Health Chart Book 2004* (Ministry of Health and Ministry of Pacific Island Affairs 2004), which provided a stocktake of the health needs of the Pacific population in New Zealand. The chart book indicators relevant to youth are provided in the Appendix to this paper.

Additional research, information and evidence were accessed with the assistance of Pacific health experts, youth health practitioners and experts, and Ministry colleagues.

Sources

There is a marked paucity of information on the health and wellbeing of Pacific (and Māori) youth (Adolescent Health Research Group 2003b). Accordingly, this paper has gathered information and evidence pertinent to the health of Pacific youth from a range of sources in an attempt to develop a better understanding of the health status of Pacific youth and to identify the influences on the health of Pacific youth in New Zealand.

The Youth2000 survey¹, the only nationally representative and ethnically diverse sample of New Zealand secondary school students, has been quoted extensively in this paper, so it is important to note this caution from its authors, the Adolescent Health Research Group:

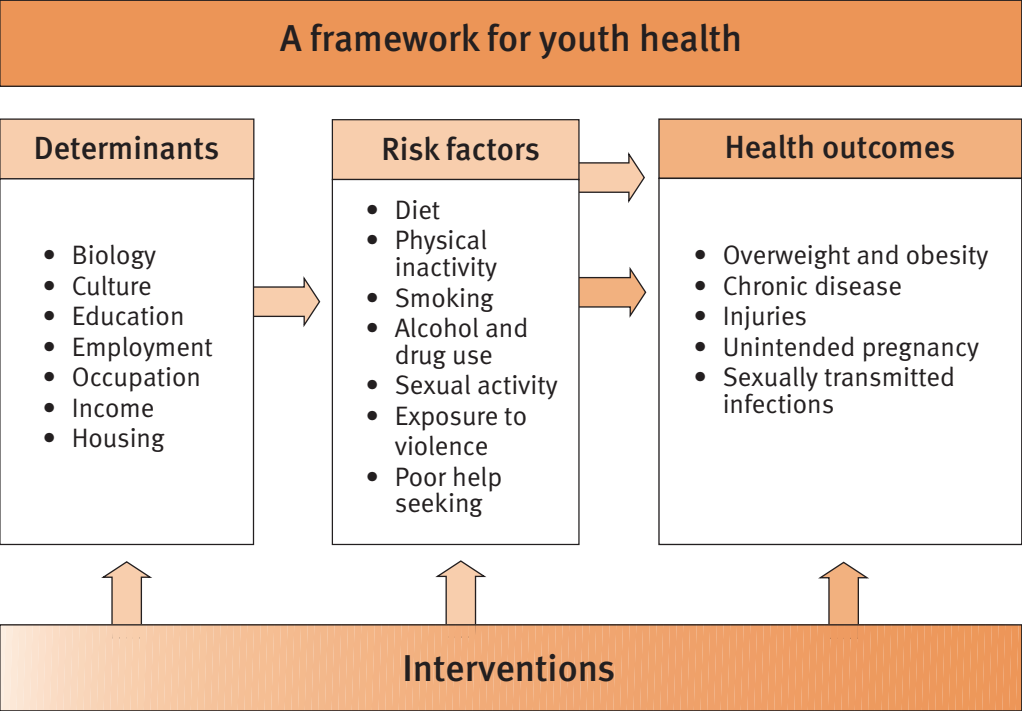
The survey's sampling frame, sample size and response rates provide a basis for the accurate prediction of population prevalences of a wide range of health risk behaviours, protective factors, health status and service utilisation indicators. However it should be noted that the findings of this survey cannot be generalised to the entire youth population ... Past research has found youth who do not attend school, and students absent on the day of a school health survey, have higher rates of health risk behaviours. Therefore it is likely that the findings of this survey may overestimate the health and wellbeing of New Zealand's school-age youth population. (Adolescent Health Research Group 2003b)

Methodology

To understand how the various influences on youth health interact and contribute to poorer health outcomes for Pacific youth, a similar framework to that used in the papers on Pacific child health and promoting healthy lifestyles and preventing chronic disease (Ministry of Health 2008a and 2008e) has been applied.

¹ A report of Youth2000 findings for Pacific youth will be published in 2008.

Figure 1: A framework for understanding poor Pacific youth health outcomes.



The four components of the model are discussed in turn, and the available evidence relating to determinants and risk factors and their consequential links to youth health outcomes are presented. Interventions likely to benefit Pacific youth health through addressing risk factors and poor health outcomes are then described. The concluding section has a list of possible future actions for consideration and discussion.

2. Determinants

The health of individuals and communities is influenced by the social, cultural, economic and environmental contexts in which people live their lives, generally referred to as the determinants of health. These determinants are influenced by a number of factors including government policy and international events. The determinants discussed in this paper are those that the available evidence indicates to be most relevant to Pacific youth.

Youth are in transition from dependence on parents to greater independence and autonomy. As youth take responsibility for their own education, employment and housing choices, they will also be making choices about lifestyle, family, community and church engagement. For many Pacific youth, these choices are already constrained by the interplay of social, cultural and economic determinants: the determinants of child health have a strong influence as predictors of youth circumstances and health. Education is arguably the most influential determinant for youth and their future social and health status.

Biology

Youth development research has led to fresh understanding of the biological development of the adolescent brain – a period of rapid growth that is only outstripped by the first year of life. This new knowledge will have a profound influence on understanding of young people’s cognitive processes and how their healthy development might be best supported and how treatment disorders might be best addressed. Youth development research has also taken a strong ecological standpoint and has examined the environments that reduce harm in the face of adversity (resiliency or protective factors) and promote healthy development at both a population and individual level. This period is a critical time of development in which there is the potential to establish enduring healthy patterns of living that will have an impact on an individual many years ahead (Watson 2007).

Culture

Most Pacific youth have a strong cultural and religious value base that provides a good foundation for life and citizenship. However, many Pacific youth struggle with reconciling traditional Pacific values and expectations with New Zealand values and expectations in order to establish a secure identity for themselves.

At the Ministry of Pacific Island Affairs Ala Fou consultation fono in 2003, the overall feeling from youth was one of pride in their cultural identity, but they also expressed negative views on certain aspects of their culture:

Hard work – having to work twice as hard, sometimes living two lives, satisfying the cultural requirement of family and Pacific community life as well as living in a Palagi world.

Pacific youth appreciate that non-Pacific people enjoy various aspects of Pacific culture. They noted that it was becoming more common to see ‘Palagi’ wearing Pacific-inspired fashion and listening to Pacific music. They also noted the greater visibility of Pacific motifs and designs in advertising and interior design and décor. It was clear that greater visibility and adoption of Pacific concepts and culture in mainstream New Zealand gave Pacific youth a strong affirmation of their place in New Zealand society (Ministry of Pacific Island Affairs 2003).

Identity and language

Pacific youth can also face challenges in gaining acceptance by their own communities, including:

- language – ‘I can’t speak Island, but I know I’m an Islander’
- colour – pale-coloured individuals aren’t recognised as Islanders, even though they know they are: ‘If young people recognise themselves as an Islander but aren’t accepted as one, that will affect who they think they are.’

At the Ala Fou consultation fono there was a general interest among most of the participants, regardless of ethnic background, to learn or improve their knowledge of their Pacific languages, as well as an acceptance that their Pacific languages are an important part of their identity. Many of the participants who expressed knowledge of two languages (English and their Pacific language) said this was an advantage. In some groups where most could not speak their Pacific language, all wanted to learn.

Some noted that a greater knowledge of their language contributed to strengthening their sense of identity, not just as Pacific peoples but more specifically their separate identity as a Samoan, Niuean, Tongan, etc. It gave them a stronger sense of pride and a feeling of being special, particularly when they could speak it with each other at school as another way of expressing and representing their culture. They also saw language ability as important in helping them to maintain links with their families back in the islands (Ministry of Pacific Island Affairs 2003).

Participants in the Youth2000 survey who identified with the three largest Pacific populations in New Zealand overwhelmingly expressed pride in their ethnic identity, and over 85 percent of each ethnic group indicated it was important for them to be recognised as a Samoan, Cook Islander or Tongan (see Table 1 below). Participants in all three groups expressed lower levels of satisfaction with their knowledge of their culture and understanding and ability to speak their language. That approximately two-thirds of Samoan and Tongan youth indicate knowledge of culture and language suggests there is an interest and commitment to intergenerational culture and language transfer in many families.

Approximately two-thirds of Samoans and Tongans are able to speak some of their language, compared with only 38 percent of Cook Islanders. Many Cook Island families have been in New Zealand for much longer than Samoan and Tongan families, which has increased the likelihood of language loss (Adolescent Health Research Group 2003b).

Table 1: Pacific youth identity and culture

Statement	Samoan %	Cook Island %	Tongan %
Very proud of ethnic identity	86.1	82.4	75.5
Recognition of ethnic identity important	90.1	85.5	87.0
Satisfaction with knowledge of culture	69.8	77.2	68.7
Understanding of language	75.5	49.1	67.4
Able to speak an average amount	64.0	38.0	67.8

Source: Adolescent Health Research Group 2003b

Values and aspirations

New Zealand-educated youth have greater exposure to other value systems and are more likely to question traditional values that are not common or widely accepted in New Zealand society. This can provoke tensions within families and communities. The most negative aspect of Pacific culture voiced by Pacific youth at the Ala Fou consultation fono in 2003 was the extensive giving of money to the church and at other Pacific events such as funerals and weddings. Further discussion revealed:

- a lack of communication between youth and their parents
- a lack of knowledge and understanding by Pacific youth of the significance of particular cultural practices
- the difference in experience and understanding between Pacific youth and their parents on collective/community values and responsibilities.

During the Ala Fou fono, and also when responding to the Youth2000 survey, many Pacific youth reported being stressed by the tensions between family and community expectations on the one hand and tertiary education and other academic commitments on the other. They felt that their aspirations often differed from what their parents wanted of them, and the key challenge lay in effectively communicating the message of success and prosperity that would result from them pursuing their own path.

Religion

Pacific youth continue to hold religious beliefs, and 77 percent of Pacific peoples aged under 25 indicated in the 2001² census that they attend some religious activity. Almost 66 percent of all Pacific youth who are religious belong to the Catholic, Presbyterian, Congregational, Reformed or Methodist denominations.

Relationships with parents

Pacific youth generally see family as a strength and a key source of support and motivation for them to do well, despite the identified obstacles relating to family and culture. The Adolescent Research Group found no significant differences between how Pacific students and New Zealand European students reported positive relationships with parents: 92 percent of Pacific students and 94 percent of European students thought their parents cared about them a lot, 73 percent of Pacific students and 74 percent of European students felt close to their mother and/or father most of the time, but only 60 percent of Pacific students and 65 percent of European students felt they spent enough time with one and or both parents (Adolescent Research Group 2003a).

Education

Education can affect many determinants of health indirectly by influencing occupation and income, but it also affects health directly by improving understanding of health and providing the confidence to seek assistance from health professionals. Tertiary education is closely correlated with upward social mobility, more effective use of health information and better adult health outcomes. Educational attainment (or qualifications) is a key dimension of social stratification and has a major impact on the socioeconomic position achieved in adult life.

² Census 2006 data on religious affiliation by age and ethnicity was not accessible.

Secondary education

Eight percent of students aged 13 years and over in New Zealand schools are Pacific. Table 2 shows the distribution of Pacific and European secondary school students by school decile. Almost half of all Pacific secondary school students are attending schools classified as decile 1, 2 or 3,³ and comprise almost a quarter of all students in decile 1 to 3 schools. This contrasts with only 8.5 percent of all European students attending decile 1 to 3 secondary schools, where they comprise 30 percent of the total student population. Only 11.4 percent of all Pacific students attend decile 8, 9 and 10 schools and comprise only 2.7 percent of all students in these schools. In contrast, 41.7 percent of European students attend decile 8 to 10 secondary schools and comprise 70.1 percent of all students in these schools (Ministry of Education 2007a).

Table 2: Students attending secondary schools, by socioeconomic status of school community (decile) and ethnicity, at 1 July 2005

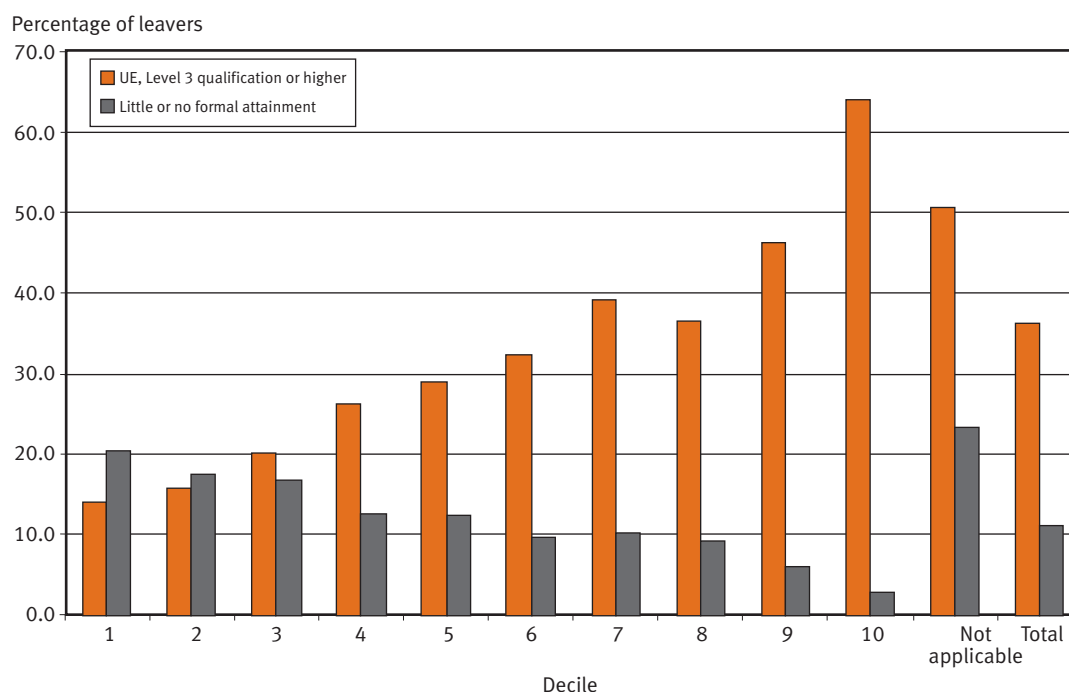
Decile	Pacific		European		Total	
	Number	%	Number	%	Number	%
1–3	10,817	49.6	13,308	8.5	44,164	16.8
4–7	8509	39.0	78,196	49.8	126,363	48.1
8–10	2475	11.4	65,392	41.7	92,196	35.1
	21,801	100.0	156,896	100.0	262,723	100.0

Source: Ministry of Education 2006a

Students who leave school from a high-decile school are much more likely to leave with university entrance or a Level 3 qualification or higher, while low-decile schools are more likely to have students leave with little or no formal qualifications (Ministry of Education 2007a) as Figure 3 illustrates.

³ A school's decile indicates the extent to which the school draws its students from low socioeconomic communities. Decile 1 schools are the 10 percent of schools with the highest proportion of students from low socioeconomic communities, whereas decile 10 schools are the 10 percent of schools with the lowest proportion of these students. A school's decile does not indicate the overall socioeconomic mix of the school.

Figure 3: Highest attainment of school leavers, by socioeconomic status of school community (decile), 2006



Source: Ministry of Education 2007a

Although Pacific students have the highest secondary school retention rates,⁴ they continue to be under-represented among school leavers with university entrance or a Level 3 qualification or higher, and over-represented among school leavers with no qualification (Ministry of Education 2007a) as Table 3 shows.

Table 3: Attainments of Pacific and European school leavers, 2006

	Pacific %	European %	Total %
UE, Level 3 qualification or higher	17	41	36
Level 2 qualification, progress towards Level 3	33	24	24
Level 1 qualification, progress towards Level 2	18	14	16
Little or no attainment	32	20	24

Source: Ministry of Education 2007a.

The attainment levels of Pacific school leavers have been improving since 2002, and the proportion leaving school with little or no attainment has been declining over the same period (Ministry of Education 2007a).

Tertiary education

The number of Pacific peoples under 25 years enrolled with a tertiary education provider grew from 7870 in 1999 to 12,351 in 2006. Pacific peoples comprised 16 percent of all domestic tertiary students aged under 25 years in 2006. Pacific tertiary students were more likely than others to be enrolled in certificate- and diploma-level courses, and less likely to be studying for university degrees or to be engaged in postgraduate study.

⁴ The proportion of students still enrolled to ages 16 and 17, beyond the minimum school leaving age of 16.

Modern Apprenticeships is a work-based training initiative designed to encourage young people (particularly those aged between 16 and 21 years) to undertake industry training. Only about 3 percent of 8395 Modern Apprentices at 31 December 2005 were Pacific peoples (Ministry of Education 2006c).

Pacific people comprise about 6 percent of all industry training learners aged 15 years and over, and in 2005 an estimated 11 percent of all working Pacific peoples participated in industry training (Ministry of Education 2006c). The age distribution of industry training learners suggests that less than half of Pacific peoples in industry training are likely to be aged under 30 years.

In 2005, 6 percent of learners studying Level 4 to 7 certificate and diploma qualifications identified as Pacific. Pacific learners are most likely to progress to higher study in the year following completion of their Level 4 certificate (Ministry of Education 2006c).

Pacific students have the lowest completion rates five years after starting study across all qualification levels. Table 4 sets out the participation, attrition, retention and completion rates for bachelor’s degree students. Pacific learners are the least likely of all learners to remain enrolled and/or to have completed their qualifications within five years.

Table 4: Participation, attrition, retention and completion rates for domestic bachelor’s degree students, by ethnicity

	Pacific %	Māori %	European %	Asian %	Total %
Participation (age structure adjusted) aged 15 years and over in 2005	3.1	3.2	3.9	5.4	–
First year attrition, students starting in 2004	28	32	22	14	22
Five-year retention, students starting in 2001	41	41	52	55	50
Five-year completion, students starting in 2001	28	30	43	45	41

Source: Ministry of Education 2006c

Pacific females comprised 63 percent of all domestic bachelor’s-level Pacific students (compared to females comprising 60 percent of all domestic bachelor’s-level students) in 2005 (Ministry of Education 2006c).

Pacific students remain under-represented across all qualifications in postgraduate study, but growth in the number of Pacific (and Māori) students has been stronger than that of European students between 2000 and 2005. There were 95 domestic Pacific students enrolled at doctorate level in 2005, a doubling of numbers since 2000 (Ministry of Education 2006c).

Employment

Participation in employment not only provides income but also confers psychosocial benefits, with major impacts on health. Labourforce participation⁵ by Pacific youth aged 15–24 years (51 percent) is lower than that of European (73 percent) and Māori youth (56 percent) (Department of Labour 2007b), as it is for Pacific people at all ages. The difference is smallest between the ages of 20 and 24 years.

⁵ Labourforce participation rates include people who are unemployed and actively seeking work.

Labour market outcomes for Pacific youth (15–24 years) have improved greatly over the past five years. Between 2001 and 2006 Pacific youth have experienced above-average employment growth (26 percent, compared to 19 percent for non-Pacific youth) and a large fall in the number unemployed (a 19 percent fall compared to 4 percent for non-Pacific youth) (Department of Labour 2007a).

In June 2007 39 percent of youth aged 15–24 who were employed were working fewer than 30 hours per week (i.e. working part time) compared to 22 percent of all workers. The prevalence of part-time work was even more pronounced for workers aged 15–19, with 57 percent employed part time (Department of Labour 2007b). Youth are more likely to have school and other study commitments than older workers.

Casual and part-time employment, while providing useful income, can also put youth at risk. A survey by Caritas Aotearoa found students from low-decile schools were more likely to be working to supplement family income. Lack of supervision, work accidents, use of heavy machinery and a high number of under-16-year-olds working after 10 pm were all identified as concerns, with implications for health (Public Health Advisory Committee 2004).

Occupation

Occupation helps form the basis for the conventional stratification of society. While the meaning of occupational class may differ across cultures, it remains an important indicator of socioeconomic position or rank, and constitutes a powerful determinant of adult and intergenerational health status.

The Pacific workforce is predominantly located in lower-skilled and lower-status occupations, although less so now than in the 1980s and 90s. More recently there has been some social mobility among the Pacific population as younger Pacific peoples have acquired more qualifications and skills. Increasing numbers have moved into white-collar jobs in service industries or have started their own businesses. Despite this, there are continuing disparities between the occupational distribution of the Pacific and total populations. As Table 5 shows this disparity is most marked by the lower proportion of Pacific youth working in the more skilled occupations.

Table 5: Occupation of Pacific peoples and total workforce aged 15–24 years, 2006

	Pacific %	Total %
Labourers	20	18
sales workers	17	20
clerical and administrative workers	11	10
technician and trade workers	11	14
community and personal service workers	10	12
machinery operator and drivers	9.3	4
managers	4.8	7
professionals	4.7	9
Not elsewhere included	12.4	6

Source: Statistics New Zealand 2007b

Census results for 2006 showed that for Pacific youth aged 15–24 years, the most common areas of employment were the retail trade (14 percent), manufacturing (14 percent), and accommodation and food services (11 percent), which collectively accounted for 39 percent of all employed Pacific youth in this age group (Statistics New Zealand 2007b).

Income

Earning their own wage or salary from employment is an important step towards financial independence for young adults. In June 2003 there was no significant gender gap in the median hourly earnings of young people aged 15–24 years. There were also no significant differences between the median hourly earnings of different ethnic groups (Ministry of Social Development 2004).

The average hourly wages for youth workers have been increasing, but they are still substantially below those of older age groups. In June 2006 the average hourly wage for all 15–19-year-olds was \$10.83, and for 20–24 year olds it was \$15.53 (Department of Labour 2007a, 2007b).

Benefits

A range of benefits are available for young people unable to support themselves financially for reasons such as being temporarily out of work, caring for young children, or being unable to participate in the workforce because of sickness and disability. During 2000–06 the number of youth relying on benefits declined by one-third as employment opportunities increased. The benefit uptake of Pacific youth dropped most rapidly in this period (Craig and Jackson 2006).

Uptake of the unemployment benefit and domestic purposes benefit by Pacific youth is still higher than that of European youth but less than that of Māori youth. The uptake rate of sickness and invalid benefits by Pacific youth remains considerably lower than that of European and Māori youth (Craig and Jackson 2006).

Standard of living

Having a low living standard also limits the ability of youth to participate in wider society, curtails quality of life and can have negative long-term consequences across a wide range of social and economic indicators. The 2000 Standard of Living Survey found that at age 18–24 years, 23 percent of young New Zealand women compared to 10 percent of young men had low living standards⁶ (Krishnan et al 2002); and 18.7 percent of Pacific youth compared to 13.4 percent of European youth and 33.3 percent of Māori youth had a low standard of living (Ministry of Social Development 2004).

Housing

National and international studies indicate an association between quality of housing, and the prevalence of certain infectious diseases, psychological stress and poor educational attainment. Youth in poor housing are likely to have more days off school and work with health issues.

Having ‘a place of one’s own’, even within a large household of extended family can contribute to feelings of personal security and wellbeing. The ability to spend time alone can support the development of personal interests and the growth of healthy independence during the transition

⁶ As measured by the Economic Living Standards Index, an indicator of how people are living in terms of their possessions and activities, and of how they get by financially.

to adulthood. These in turn contribute to the development of a healthy lifestyle balance between social and other obligations, personal pursuits and leisure (Ministry of Social Development 2004).

More than one in ten of all New Zealand secondary school students (males 11.8 percent, females 15.3 percent) report that there is not enough space in their home for them to do their homework (Adolescent Health Research Group 2003a). In 2001, youth aged 18–24 years were slightly more likely (17 percent) than children and young people under 18 years (16 percent) to live in crowded households⁷. The rate of youth (and children) living in crowded housing rises progressively as the rate of NZDep deprivation increases. In 2001, 48 percent of Pacific youth (aged 18–24 years) lived in crowded households compared to nine percent of European youth and 28 percent of Māori youth (Ministry of Social Development 2004).

Area of residence

Deprivation of area of residence is increasingly recognised as a salient predictor of life chances. Research findings show that area-based composite indices correlate with measures of health status (Crampton et al 2004). At the 2001 census over 58 percent of Pacific people lived in areas with the most deprived NZDep scores (decile 9 and 10).⁸ Twenty-seven percent of Pacific people met the criteria for living in severe hardship, compared to 8 percent of the total New Zealand population, and 57 percent of Pacific people lived in some form of hardship.

It is therefore reasonable to assume that most Pacific youth are familiar with social and economic hardship, either through direct experience or through extended family and community ties. Some will already have compromised health as a consequence of childhood disease (Ministry of Health 2008a). Others will have a combination of less favourable health indicators associated with poverty and deprivation, such as a lack of or limited access to housing, education, employment, and recreational and health resources. The papers on child health (Ministry of Health 2008a) promoting healthy lifestyles and preventing chronic diseases (Ministry of Health 2008e) describe the links between deprivation, poverty, diet and lifestyle.

Of particular relevance to the health status of Pacific youth is research evidence that poorer neighbourhoods tend to have fewer recreational amenities, be less safe, and have a higher concentration of fast food outlets than more affluent areas (Swinburn et al 2003). Findings from the Youth2000 survey also provide some insight into youth perceptions about their neighbourhoods. About 15 percent of New Zealand secondary students (males 14.2 percent, females 16.7 percent) reported that there is nothing to do in their neighbourhood.

Safety

As youth take increasing responsibility for their own safety, they need, and are entitled to security and protection from harm. In 2001, 27 percent of 15–24 year olds said they felt (or would feel) unsafe walking alone in their neighbourhood after dark (Ministry of Social Development 2004). Some students (males 13.3 percent, females 17.1 percent) felt safe in their neighbourhoods only sometimes, mostly not or not at all (Adolescent Health Research Group 2003a). Pacific peoples are more likely than other ethnic groups to report feeling unsafe about walking alone in their neighbourhood after dark. Pacific men are more than twice as likely as European and Māori men to report feeling unsafe. Although a similar proportion of Pacific and European women reported that they felt unsafe, Pacific women were considerably more likely to report feeling *very* unsafe compared to other groups (Ministry of Justice 2006).

⁷ A crowded household is defined as a household that requires one or more additional bedrooms.

⁸ The NZDep2001 scale of deprivation from 1 to 10 divides New Zealand into tenths. A value of 10 indicates that the small area is in the most deprived 10 percent of small areas in New Zealand, as measured by NZDep.

3. Risk Factors

There is a considerable amount of evidence on the presence and impact of risk factors on the health of youth internationally and nationally, but rather less information about Pacific youth in particular. However, recent research is providing more insight into the risk behaviours of Pacific youth and where these differ from other New Zealand youth.

The Youth2000 survey identified six health risk behaviours for New Zealand youth:

- having ever drunk alcohol
- ever smoked a cigarette
- ever used marijuana
- ever had sex
- been in a fight in the last year
- thought of killing oneself in the last year (Adolescent Health Research Group 2003b).

This paper also considers diet and physical activity behaviours, as well as experience of violence by Pacific children and youth. The paper on Pacific mental health includes a section on Pacific youth mental health, and discusses self-harm and suicide (Ministry of Health 2008d).

Many students (39.5 percent) reported engaging in none or only one of the six health risk behaviours. A small number (11.8 percent) reported engaging in either five or all six of the risk behaviours. A statistical analysis found no difference in the average number of these six health risk behaviours engaged in by male students compared with female students (Adolescent Health Research Group 2003b). No information was available comparing Pacific students with all students.

The Pacific Youth Health Project (Leger 2005) compiled comments from Pacific youth on the various risk factors, and a selection of these comments is given in boxes throughout this chapter.

Diet

‘We do have choices but at home we have to eat what is put in front of us.’

Changes in eating patterns are occurring worldwide. There has been a shift from home sourced and prepared food towards consuming more food prepared at restaurants and fast food places. Consumption of energy-dense foods including pizza, cheeseburgers, and salty snacks has increased as has the proportion of energy consumed from sugar-added beverages. These changes have occurred concurrently with the increasing rates of youth obesity (Hohepa et al 2004).

Food security refers to having reliable and sustainable access to affordable foods of high nutritional value, and is a key determinant of whether or not such foods will be consumed. The 2002 Children’s Nutrition Survey found that Pacific households experienced higher rates of food insecurity than other New Zealand households: less than half of households with dependent Pacific children could afford to eat properly all the time, compared to the national average of 78 percent. Also, 18 percent of households with dependent Pacific children sometimes used food banks, compared to a national average of less than 9 percent (Ministry of Health 2003b). Younger women (11 percent of those aged 19–24 years) reported using food banks most frequently of all groups (Russell 1999). In a study of New Zealand households on government

benefits, 70 percent of mothers said they restricted their own meal size to feed their children and the study indicated these women were getting insufficient energy, iron and calcium (Parnell 1997).

Research indicates Pacific women, adolescent and young adult women and women from a low socioeconomic background are more likely than other New Zealand women to experience inadequate nutrition (Ministry of Health 2003b, 2003c, Russell et al 1999). Pacific women are likely to be included in all three of the groups experiencing inadequate nutritional intake (Ministry of Health 2006c). Adolescent Pacific women who are pregnant may be at particular risk because their limited life experience, own continued growth, interrupted education or socioeconomic status may place them at what is already a nutritional, educational, emotional or social disadvantage (Woodward et al 2001, Ministry of Health 2004a, 2006c). Pacific women have both the highest pre-pregnancy body mass index (BMI) and the highest gestational weight gain in pregnancy which means they are potentially more vulnerable to weight retention problems post-partum (Ministry of Health 2006c).

Good diet and nutrition are important because Pacific women have high adolescent pregnancy and birth rates, and are more likely to have more children (Ministry of Health and Ministry of Pacific Island Affairs 2004). Pacific women are also more likely to attend later at antenatal classes (Ministry of Health 2006c).

‘We have fatty food at home and eat junk food at school.’

A Pacific youth health study for Waitemata DHB found that generally there is an acceptance by Pacific youth that many will be overweight. Study participants saw this to be because food is an important element of Pacific culture, and the types of food that are eaten are not likely to change and are the primary cause of being overweight (Leger 2005).

The 2002 Children’s Nutrition Survey found older Pacific children source a greater proportion of their food from outside the home (shops, dairies, takeaways, tuckshops and canteens) than younger Pacific children (Ministry of Health 2003b). Findings from a pilot study of outdoor food advertisements and food availability from outlets in the vicinity of secondary schools in the Wellington and Wairarapa regions suggested that food advertising and food outlets are prevalent in the vicinity of secondary schools, and that the advertising is generally not compatible with nutritional guidelines for adolescents (Maher et al 2005).

Another recent study found a strong association between neighbourhood deprivation and geographic access to fast food outlets in New Zealand. Fast food outlets were at least twice as far away in the least socially deprived neighbourhoods compared to the most deprived neighbourhoods. This may help explain one of the environmental causes of obesity. However, outlets potentially selling healthy food (eg, supermarkets) are patterned by deprivation in a similar way (Pearce et al 2007).

Physical activity

There is increasing evidence that regular physical activity among young people is associated with improvements in various health outcomes, including blood lipid profile, blood pressure, body composition, glucose metabolism, bone strength, and the maintenance of normal growth and development (Hohepa et al 2004).

The majority of Youth2000 survey respondents (males 70.4 percent, females 57.3 percent) reported participating in regular physical activity, defined as moderate or strenuous activity on three or more of the last seven days (Adolescent Health Research Group 2003b).

The only trend data on youth physical activity comes from Sport and Recreation New Zealand (SPARC) surveys at three time points: 1997/98, 1998/99 and 2000/01. Analysis indicated that inactivity increases progressively from late childhood to adolescence and but sedentary behaviour declines markedly after 17 years (see Table 6). Youth activity was influenced by parents' activity levels, with only 25 percent of youth being inactive if their parents were highly active, as opposed to 43 percent being inactive if their parents were sedentary (SPARC 2003).

When compared to their Māori and European counterparts, Pacific youth are the least active (see sedentary plus relatively inactive rates in Table 5). SPARC found that 52 percent of Pacific youth are active, compared to their Māori (71 percent) and European (70 percent) contemporaries. Youth from Pacific communities are active for 5.6 hours per week compared to 6.5 hours per week for European youth (SPARC 2003).

Table 6: Proportion of young people aged 13–24 years who are either sedentary or relatively inactive, by age group and ethnicity, 1997–2001

	Pacific		Māori		European	
	Sedentary %	Relatively inactive %	Sedentary %	Relatively inactive %	Sedentary %	Relatively inactive %
13–15 years	28	16	13	14	6	22
16–17 years	31	17	21	18	23	24
18–24 years	5	20	7	19	7	23

Source: SPARC 2003

Furthermore, when comparing figures between 1997 and 2001, the proportion of inactive Pacific youth increased overall from 40 percent to 53 percent. This pattern was particularly marked for girls – 30 percent of Pacific girls were inactive in 1997, compared with 60 percent in 1999 and 2001 (SPARC 2003).

Tobacco consumption

‘Lots of us do smoke, I know heaps of people who do. We smoke to be cool, to be popular. Peer pressure makes us smoke.’

Tobacco smoking rates are one of the major causes of health inequalities in New Zealand. General prevalence figures disguise the disproportionate health burden of tobacco use that is borne by Pacific peoples, Māori, disadvantaged youth and low-income New Zealanders. Smoking uptake usually occurs in adolescence while the vast majority of smoking-related deaths occur in middle-aged and older people. Young people who smoke may become addicted before reaching adulthood, making them less able to quit smoking and more likely to have a tobacco-related health problem (Health Sponsorship Council 2005). Overseas research suggests that 33 to 50 percent of young people who try smoking become regular smokers, with the transition taking on average two to three years. Once smoking regularly the well-documented signs of nicotine dependence and withdrawal become as evident in adolescents as they do in the adult population (Elders et al 1994).

Exposure to more than one of the following factors – parental smoking, best friend smoking, pocket money over \$5 a week, and smoking in the house – explain up to 67 percent of smoking by 14- and 15-year-olds in New Zealand (Scragg and Laugesen 2007).

The prevalence of current tobacco use is an important measure of the tobacco burden in a given population. The Year 10 Smoking Survey indicated a decreasing trend in the prevalence of daily smoking across all ethnic groups from 1999 to 2005. As Table 7 shows the decline over this period has occurred among Pacific, Māori, European and Asian year 10 students, although large relative inequalities persist.

Table 7: Prevalence of daily smoking (%), year 10 students, by sex and ethnicity, 1999–2006

Female	1999	2000	2001	2002	2003	2004	2005	2006
Pacific	23.0	19.4	19.5	17.6	18.1	13.2	14.5	13.0
Māori	36.2	37.1	34.3	34.3	34.2	29.1	26.5	25.2
Asian	5.9	5.1	3.2	3.9	4.5	2.9	2.9	2.0
European/Other	13.1	12.2	11.4	10.8	9.8	7.2	7.3	6.1
Male	1999	2000	2001	2002	2003	2004	2005	2006
Pacific	16.6	16.8	14.3	10.8	12.5	11.8	10.2	8.5
Māori	23.6	24.2	19.1	16.8	19.4	16.2	14.0	13.5
Asian	7.9	9.4	7.2	7.5	6.4	3.8	5.3	3.4
European/Other	12.6	12.1	10.0	8.6	7.6	5.9	5.4	4.1

Source: Scragg 2007

Trends for Pacific year 10 girls' daily smoking prevalence have remained similar between 2004 and 2006, although the prevalence of monthly or more often smoking declined from 25.5 percent in 2005 to 21.4 percent in 2006, and the prevalence of never smoking increased from 37.4 percent in 2005 to 41.8 percent in 2006. Cumulatively, from 1999 to 2006 there has been a:

- 44 percent relative decline in daily smoking
- 36 percent relative decline in monthly or more often smoking
- 33 percent relative increase in never smoking.

The lack of change in daily smoking prevalence since 2004 requires monitoring in future surveys to determine whether this trend has levelled out (Scragg 2007).

Pacific year 10 boys continue to show declines in daily smoking (from 10.2 percent in 2005 to 8.5 percent in 2006) and monthly or more often smoking (from 16.3 percent in 2005 to 13.9 percent in 2006), and a rise in the number of never smokers (from 45.1 percent in 2005 to 48.5 percent in 2006). Since 1999 Pacific boys have had a:

- 46 percent relative decline in daily smoking
- 33 percent relative increase in never smoking.

Overall their smoking pattern continues to improve (Scragg 2007).

Among year 10 girls (see Table 8), daily smoking prevalence is highest among Cook Island girls, intermediate in Tongan, followed by Niuean and Samoan, and lowest in Other Pacific girls. Table 8 also show that the pattern of daily smoking prevalence is slightly different among boys, being highest among Niuean, followed by Cook Island, Tongan, Samoan and Other Pacific. Never smoking is most prevalent among year 10 Other Pacific and Samoan students, followed by Tongan, Cook Island and Niuean students (Scragg 2007).

Table 8: Proportion of Pacific year 10 students smoking cigarettes daily, monthly or more often, or who have never smoked (%), by sex and Pacific ethnic group, 2004–2006

Smoking category	Samoan	Cook Island	Tongan	Niuean	Other Pacific
Female daily	10.6	23.8	13.8	10.9	8.5
Female monthly plus	19.8	25.3	19.5	25.0	17.4
Female never smoked	44.4	36.9	38.5	34.6	42.6
Male daily	8.3	13.8	11.4	15.8	6.2
Male monthly plus	13.5	19.5	18.1	30.0	8.4
Male never smoked	49.9	38.5	41.8	37.4	54.5

Source: Scragg 2007

Pacific males and females aged 14–15 years have similar rates of at least weekly smoking to their counterparts in the total New Zealand population. However, the rate for females is 1.5 times the rate for males in both the Pacific and the total populations.

An ethnic-specific analysis reveals important trends, including a smoking rate of 51 percent among Cook Island female adolescents, whose smoking is twice that of other Pacific adolescents and marginally worse than the Māori female smoking rate of 50 percent. The findings of this study also indicate that a higher proportion of Pacific female adolescents (31 percent) are current smokers than the Pacific adolescent total (26 percent) (Schaaf 2005).

The overall prevalence of smoking among Pacific youth is shown in Table 9 to be higher than that of European youth and lower than that of Māori youth. Pacific males, especially those aged 15–19 years, have a higher prevalence than Pacific females. This contrasts with the higher prevalence among Māori females than males, and the more equal prevalence between European males and females (Ministry of Health 2007b).

Table 9: Prevalence of current smokers (%) 15–24 years, by age group, sex and ethnicity, 2006

	Pacific	Māori	Asian	European/Other	Total
Female 15–19 years	27.8	60.4	–	21.7	28.5
Female 20–24 years	38.5	60.9	–	26.1	29.3
Male 15–19 years	45.8	32.1	25.1	24.5	25.1
Male 20–24 years	39.0	53.0	31.3	24.0	31.3

Source: Ministry of Health 2007b

Among all current smokers the prevalence of smoking increases with increasing levels of deprivation. Smoking prevalence is also higher among people with no educational qualifications (Ministry of Health 2006b).

Secondhand cigarette smoke

Parental smoking is thought to increase the likelihood that children will take up smoking during adolescence. Over the period 2001–06 the proportion of New Zealand year 10 students (14–15 years of age) whose parent smoked remained relatively static at around 40 percent. The proportion of students who lived in homes where smoking was permitted inside declined from 30.5 percent in 2001 to 25 percent in 2006. For all ethnic groups the proportion of students living in a household with a smoker increased with increasing NZDep deprivation (Scragg 2007).

The proportion of Pacific year 10 students whose parents smoked was 50 percent in 2001 and 49.2 percent in 2006. There was, however, a decline in the proportion of Pacific students exposed to smoke inside homes, from 34.6 percent in 2001 to 27.4 percent in 2006.

Quitting

All youth have perceptions and attitudes towards smoking and smoking-related behaviours. These attitudes change over time and depend on a variety of social influences, including parental, peer and environmental behaviours, ideas, social constructs and identity (Ministry of Health 2007b). Many young smokers wish they had never started and actively try to quit.⁹

The 2006 Tobacco Use Survey asked youth (15–19 years): ‘If you had your life over again, would you smoke?’ The responses showed that:

- 72 percent would not smoke
- 28 percent would smoke
- 76 percent of females would not smoke
- 68 percent of males would not smoke (Ministry of Health 2007b).

Around 85 percent of youth reported they would not be smokers in their 20s, compared to 15 percent who reported they would (Ministry of Health 2007b).

Alcohol and drug use

Alcohol

‘Alcohol is not the problem it is only when you drink too much, then there can be problems/do stupid things like having sex, getting pregnant, accidents, getting bashed.’

According to the World Health Organization’s global burden of disease study (World Health Organization 2002), alcohol ranks third of 20 risk factors in its overall impact on disease, disability and death in developed countries such as New Zealand. Adverse health consequences associated with alcohol include motor vehicle and other injuries, suicide, domestic and street violence, foetal alcohol syndrome, certain cancers (including colon and upper digestive tract), cirrhosis of the liver, haemorrhagic stroke and high blood pressure (Single 2002).

No information about the attitudes and beliefs Pacific youth held about alcohol was located. Two 1997 studies provide some insight into Pacific views. Interviews looking at the place of alcohol in the lives of people from Tokelau, Fiji, Niue, Tonga, the Cook Islands and Samoa living in New Zealand found that within and across communities there is no single unified view of alcohol, and not all Pacific peoples recognise the term ‘social drinker’. There was, however, information to suggest some common views, including:

- being a drinker equates to drinking enough to get drunk
- binge drinking is not associated with health effects
- as long as people behave appropriately they can drink as much as they like
- the Pākehā style of drinking and never getting drunk is something to emulate, but only having a few drinks is also being mean (ALAC 1997).

⁹ Ashley Bloomfield, personal communication, September 2007.

The other study proposed that Pacific peoples' alcohol drinking practices may be influenced by kava drinking practices: consumption is typically social rather than solitary; people drink quickly; men drink more than women; and drinkers empty entire bottles at once, just as they drink to the bottom of the kava bowl (Lebot et al 1997).

Pacific youth are more likely to be non-drinkers compared with other ethnicities according to the results of a 2003 survey by the Alcohol Advisory Council (ALAC). The survey shows that about two-thirds of Pacific youth (compared with just under 50 percent of youth overall) are non-drinkers. However, young people surveyed who do drink consumed more than the general population on their last drinking occasion: for Pacific youth the average consumed was 6.9 standard drinks compared with 4.7 overall. Pacific youth stated that on their last drinking occasion their parents were aware they were consuming alcohol. However, they are more likely to report that they drink 'out and about', such as on the street, in parks, malls, etc, and are more likely to report that they never drink alcohol at home (de Bonnaire et al 2004).

Ethnic-specific analysis as part of the Waitemata DHB study found that Cook Island youth, followed by Niuean youth, have the least favourable drinking pattern. Samoan youth of both sexes and Tongan females have the most favourable drinking pattern. This study identified risk factors for binge drinking (more than five alcohol drinks on a single occasion) as: being male, regular alcohol intake, early age of starting alcohol drinking, and cigarette smoking (Leger 2005).

ALAC's 2003 nationwide survey of the drinking patterns of New Zealanders found that regular and risky drinking is common among 12–17-year-olds. Forty-two percent of young people reported that they had a drink at least once every two weeks, with 25 percent reporting it at least once a week. Fifty-eight percent of 12–17-year-olds had consumed five or more drinks on at least one occasion. Key findings from the survey showed that Pacific youth were polarised as either non- or occasional drinkers, or heavy drinkers (de Bonnaire et al 2004). The 2003 Pacific drugs and alcohol consumption survey found that among the Pacific population, those aged 18–20, 21–29 and 30–34 consumed the most alcohol (Huakau et al 2005).

Much of the harm from alcohol results from heavier drinking occasions. For Pacific drinkers, the higher frequency of episodes of drinking to intoxication increases the risk of acute health effects – in particular unintentional injury, violence and self-harm. Furthermore, the large average volumes of alcohol consumed by some Pacific drinkers is likely to lead to a higher risk of alcohol-related chronic diseases later in life, such as cirrhosis (Huakau et al 2005).

Some participants in the Pacific Youth Health Project identified alcohol use, driving under the influence of alcohol and gambling as being a problem for some Pacific parents/elders, and as affecting the whole family because of the financial burden engaging in these activities places on the family (Leger 2005). More than one-quarter of all Youth2000 survey students (males 27.2 percent and females 27.6 percent) reported riding in a car with a potentially intoxicated driver in the last four weeks (Adolescent Health Research Group 2003b).

Marijuana and other drugs

Numbers in national surveys have generally not been sufficient to allow separate analysis of Pacific peoples' drug use so it has been difficult to obtain information about illicit drug use by Pacific youth. It is known that Pacific peoples are under-represented in drug convictions (Ministry of Pacific Island Affairs and Statistics New Zealand 2002).

The Youth2000 survey found that at age 13, about 20 percent of New Zealand secondary school students (males 21.2 percent, females 19 percent) have tried marijuana. This increases to about 50 percent among students aged 16, with similar rates for male and female students. Regular use of marijuana (those who use it weekly or more often) is less prevalent, and peaks in the 15-year-old age group (males 10.2 percent, females 8.3 percent) (Adolescent Health Research Group 2003b).

The 2003 Pacific Drugs and Alcohol Consumption Survey found that a third of the sample had used marijuana at least once, and that the mean age at which marijuana was first used was 17 years (Wilson 2007). A small minority of participants in the Pacific Youth Health Project stated that they used marijuana on an occasional basis, and that use was associated with social life, peer pressure and a way of coping with problems (Leger 2005).

Sexual activity

Young people are becoming sexually active at an earlier age. Findings from the Youth2000 survey show that across the 12–18 years age range, 32.4 percent of males and 30.4 percent of females have had sexual intercourse. At age 17, nearly half have had sexual intercourse (49 percent of males and 49.5 percent of females) (Adolescent Health Research Group 2003a).

A background of socioeconomic disadvantage, sexual abuse in childhood and alcohol misuse in early adolescence has been associated with early sexual intercourse among young women in particular. About one-quarter (26 percent) of female students and one in every seven (14 percent) male students in the Youth2000 survey reported having experienced unwanted sexual contact. Pacific students were more likely to report unwanted sexual contact than European students (Fleming et al 2007). In 2003 rates of substantiated child abuse among 14–16-year-old females was 8.0 per 1,000, over twice the rate for males (3.9 per 1,000) (Ministry of Social Development 2003).

Sex education at school is where secondary school students most often get information about sexual health and related issues. Friends and family are also common sources of information. Of those students having sex, over half (males 63.3 percent, females 59.7 percent) reported always using contraception to prevent pregnancy. In addition, most sexually active students (males 76.5 percent, females 68.8 percent) reported having used a condom as protection against a sexually transmitted infection the last time they had sex (Adolescent Health Research Group 2003b).

Participants in the Pacific Youth Health Project reported that sexual health was a primary concern for sexually active Pacific youth, but that their knowledge is limited because it is a subject they are not allowed to talk about. Members of this group considered it culturally inappropriate to talk to their parents about sexual health. Religion was seen as having a strong influence on the messages Pacific youth are allowed to receive about sex. Pacific youth also reported that talking to a Pacific health worker was unsafe, and going to the family doctor or to a Pacific health service or worker was not an option, because they might be seen by somebody connected to their family or church. Overall, they were averse to any option that risked their parents finding out they were sexually active (Leger 2005). The evaluation of the Pacific Island sexual health project, Family Life Education Pasifika (FLEP), also found that Pacific young people report difficulty in talking to their parents about sexuality (University of Auckland 1999).

In Pacific families there are often protocols and etiquettes to be observed for discussion on issues such as sex, sexuality and reproduction. It may be inappropriate to include in the same group, for example, older and younger siblings, mothers and daughters, or church leaders and non-church leaders. Discussion of sexuality and reproduction in the presence of both brother and sister may also be considered inappropriate (Leger 2005).

Exposure to violence

Being safe and feeling safe are fundamental to wellbeing. Bullying at school can deplete students' self-esteem and lead to avoidance of school and poor educational performance. Criminal victimisation of young people provides a broad measure of personal safety and wellbeing (Ministry of Social Development 2004).

The Christchurch Longitudinal Health and Development Study data indicated that 23 percent of males and 14 percent of females reported an assault between the ages of 16 and 18 years. The risk factors for assault were similar for both genders and included childhood measures of behavioural disturbance and parental dysfunction, as well as adolescent participation in violent offending and the misuse of alcohol.

Intimidation at school

A report on New Zealand secondary school students' experiences of violence using data from the Youth2000 survey found that violence is a common experience for many young New Zealanders and is associated with many health issues (Fleming et al 2007). Male students most often reported being hurt by friends and at school. Female students most commonly reported being hurt by family members and at home. Being hurt frequently by others is associated with increased rates of mental health issues (Adolescent Health Research Group 2003a; Fleming et al 2007).

About 30 percent of students reported being bullied at school in the last year. Pacific students were less likely to report being bullied, but those that were were twice as likely as European students to report it as being bad, really bad or terrible (Fleming et al 2007). Seventy-two percent of Pacific students reported that they felt safe at school most of the time or all of the time, compared with 76 percent of Māori, 81 percent of European and 73 percent of Asian students. After adjusting for age, sex and socioeconomic differences Pacific and Māori students are just as likely to feel safe and European students (Ministry of Social Development 2004).

Family violence

'Tired of getting hidings all the time, need to do something about it but have no one to turn to, being here in New Zealand it's not accepted but I can't do anything about it. I don't want to get anyone into trouble but need a health worker who can understand and work with the family.'

'You need to speak to our elders; they need to know how we feel about what they do, just because they had it done to them doesn't mean they need to carry it on, it affected me getting the bash all the time, just for doing little things, it made me feel like they didn't want me, I am a nobody, it affects you as you grow up and then you do bad things and then they blame you – you need to talk to them 'cause we can't tell them.'

There is anecdotal information about family violence but few studies have focused on Pacific youth. The Waitemata DHB youth study report noted that the effects of receiving physical punishment were often spoken of as a health issue and in relation to risky behaviours. 'The fear of receiving physical punishment is a major contributor to the silence and isolation that was expressed by participants when needing to talk about behaviours that may affect their health' (Leger 2005).

Many students in the Youth2000 survey reported witnessing violence in their home, and 16 percent had witnessed adults in their home physically hurting children in the last year. Six percent of students reported witnessing adults in their home physically hurting other adults in the last year. Students felt that violence between parents or adults at home was particularly disturbing. Pacific students are more likely than European students to witness adults hurting another child or adult (Fleming et al 2007).

Students who witnessed violence between adults at home (compared to students who had not had this experience) had significantly increased rates of depression, anxiety and suicidality, as well as increased rates of problem behaviour, substance abuse and relationship difficulties (Fleming et al 2007).

Family violence remains a serious problem in New Zealand, not only because of its impact on victims but because of the cycle of intergenerational violence and criminality it can feed. There is a large body of research showing that children who are either victims or witnesses of family violence are more likely to become perpetrators (males) and victims (females) of family violence in their adult lives. Addressing the needs of this group as children, youth and adults is important.

The use of physical punishment and more severe forms of physical assault/abuse are relatively common amongst contemporary young New Zealand parents and are associated with having more children, greater perceived family stresses and functioning difficulties, and having been raised in families characterised by lower socioeconomic status and overly restrictive and controlling parenting practices (Woodward et al 2007).

Findings from the Pacific Islands Families Study are that smacking is a widespread form of discipline administered to Pacific children and hitting with objects is common (Schluter et al 2007).

Criminal victimisation

Young adults are more likely than older adults to be victims of crime, and those aged 15–24 years are at much higher risk than others. Almost a quarter of youth reported being the victim of violent offending, 18 percent were subject to a property offence. Twenty-six percent of females aged 17–24 years reported that they had experienced sexual interference or sexual assault (Ministry of Social Development 2004). Sole parents have the highest risk of victimisation of all New Zealanders. Pacific peoples have risks one-fifth higher than average, with the exception of confrontational crimes committed by partners (Ministry of Justice 2007).

Criminal offending

For all ethnic groups, the rate of prosecution for criminal offending peaks for the 17 to 19 years age group and then falls steadily to its lowest for those aged 40 or more. The proportion of Pacific 14–16-year-olds apprehended by the police for non-traffic offences between 1996 and 2005 was between six and nine percent of all youth apprehensions. Convictions in 2004 of 14–16-year-olds comprised 9 percent Pacific youth, 45 percent European youth, 43 percent Māori youth and 3 percent other youth (Ministry of Justice 2006).

Pacific 17–19-year-olds are 1.6 times more likely to be prosecuted than other New Zealanders of the same age (Ministry of Justice 2006) and have a conviction rate about 20 percent higher than the total youth population (Ministry of Pacific Island Affairs and Statistics New Zealand 2002). Pacific peoples are also more likely than offenders from other groups to receive community programme, supervision, deferment, or conviction and discharge (Ministry of Justice 2006).

In 2004 Pacific peoples' convictions were highest for violent offences (13 percent), followed by: other against persons (10 percent), against justice (9 percent), good order (9 percent), traffic (9 percent), property (8 percent), miscellaneous (5 percent) and drug (4 percent) (Ministry of Justice 2006). Unlike offending by other groups, where repeated offending tends to increase in seriousness, Pacific peoples seem more likely to commit a violent offence as their first offence and may not repeatedly offend (Ministry of Justice and Ministry of Social Development 2002).

Forty-three percent of the males identified as Pacific sent to prison in 2004 were aged under 25 (compared to 36 percent of Māori and 31 percent of Europeans) (Ministry of Justice 2006). Only 11 percent of all cases resulting in a custodial sentence in 2004 involved a female offender of any age, and of these only 5 percent were Pacific peoples (Department of Corrections 2005).

Poor help-seeking behaviours

Help-seeking behaviours are often not well developed among young people, and Pacific youth are more likely to live in areas where access to services can be problematic. There has been some suggestion that youth perceive their needs to be a low priority for health providers, and there is also some information to suggest that Pacific peoples may approach seeking help from health services differently to other New Zealanders. The reasons for this are discussed in the paper on improving quality of care for Pacific peoples (Ministry of Health 2008f). It is also worth noting that until recently, New Zealand youth have been overlooked in terms of national policy, age specific health services, and nationally representative population-based databases (Adolescent Health Research Group 2003a).

Pacific youth with a disability have been identified as often not engaging with support and community services and at risk of isolation in the years after they leave school (Ministry of Health 2008c). The paper on mental health highlights the low level of engagement by Pacific peoples and youth in particular with mental health services (Ministry of Health 2008d).

Many students in the Youth2000 survey, especially males, did not tell adults about their experiences of violence. About half of bullied students told an adult about being bullied, with 26 percent of bullied students telling a parent and 11 percent telling a teacher. Fewer students (24 percent of males and 40 percent of females) who had been physically abused by others told an adult. Only 15 percent of students (10 percent of males and 18 percent of females) who had experienced unwanted sexual contact told any adults about these experiences (Fleming et al 2007).

The Youth2000 survey concluded that existing health care services do not meet the needs of today's youth, and that few health services provide the comprehensive care required by youth who have multiple health concerns. More than three-quarters of secondary school students (males 81.9 percent, females 84.7 percent) usually go to their family general practitioner for health care. About half of all students (males 45.9 percent, females 50.3 percent) identified barriers to obtaining health care. The most commonly identified barriers were:

- not wanting to make a fuss (28 percent)
- could not be bothered (24 percent)
- cost (15 percent)
- not comfortable with the health provider (15 percent)
- too scared (15 percent)
- worried the consultation would not be kept private (13 percent) (Adolescent Health Research Group 2003b).

Privacy, comfort and trust concerns were also noted earlier in this paper as a barrier to Pacific youth seeking advice about sexual and reproductive health.

Social stigma associated with mental illness and with being either overweight or anorexic can throw up additional barriers to dealing with problems. A third of respondents gave the government, tertiary education providers and secondary schools below average scores for efforts to improve youth health. This suggests that youth health could benefit from more attention being directed towards the 'structural' or institutional organisational aspects of youth health services (Griffiths 2006).

4. Health Outcomes

The major finding of the Youth2000 survey was that New Zealand secondary school students are generally healthy. Most students felt healthy and had positive connections to their families, schools and peers, and few students engaged in multiple health risk behaviours (Adolescent Health Research Group 2003a).

Much of New Zealand's current preventable morbidity and mortality can be attributed to behaviours that are initiated during adolescence, such as substance use, sexual behaviours, eating and physical activity patterns (Minister of Health 2000). This section is concerned with the consequences of the social, economic and cultural determinants of Pacific youth health and risk behaviours initiated in adolescence.

Overweight and obesity

There have been two national surveys examining youth obesity levels. The 1989 Life in New Zealand survey (Duncan et al 2004) and the 1997 National Nutrition Survey (Russell et al 1999) examined the prevalence of obesity in youth aged 15–18 years, although there has been no single survey examining the prevalence of overweight and obesity among all adolescents (Ministry of Health 2003b). These studies and the 2002 Children's Nutrition Survey, which investigated the nutritional status and body mass index (BMI) of children aged between 5 and 14, found that in New Zealand 33 percent of 11–14-year-olds are considered to be overweight or obese (Ministry of Health 2003b). The 2002/03 New Zealand Health Survey found 27 percent of 15–18-year-olds are considered to be overweight or obese (Ministry of Health 2004b).

Both the National Nutrition Survey and the Children's Nutrition Survey found that a disproportionate number of Pacific and Māori children were considered overweight and obese compared to New Zealand European and Other children (Ministry of Health 2003b; Russell et al 1999). An Auckland study of Pacific peoples aged 15–24 years showed that the prevalence of overweight and obesity was approximately 55 percent in males and 69 percent in females (Bell et al 2001).

Some research has cautioned about reliance on BMI because no currently agreed thresholds exist for classifying children or adolescents as obese or overweight. More importantly for Pacific peoples, BMI does not correspond to the same percent body fat (%BF) across different population groups. New Zealand research has been inconclusive, indicating the need for further research clarifying the BMI to %BF relationship according to ethnicity among New Zealand youth (Hohepa et al 2004). Classification now occurs with qualifications acknowledging different population groups.

Adolescent obesity is a stronger predictor of adulthood obesity than childhood obesity, and severe adolescent obesity is more likely to persist into adulthood (Hohepa et al 2004).

Globally, obesity and physical inactivity are two key health issues affecting young people. Both obesity and physical inactivity are risk factors for a number of lifestyle-related conditions, including type 2 diabetes, coronary heart disease, hypertension, and some types of cancers (Hohepa et al 2004). The New Zealand Health Strategy (Minister of Health 2000) and Healthy Eating – Healthy Action (Ministry of Health 2003a) both identify obesity and physical inactivity as two of the top four health priorities for New Zealand. New Zealand youth have themselves identified obesity and overweight as the biggest health-related problem they face (Griffiths 2006).

Overweight and obesity as a predictor of poor adult health

No research has been published that specifically addresses overweight and obesity in youth as a predictor of poor adult health for Pacific peoples but there is international evidence that indicates a predictive link for overweight and obesity in youth and poor adult health. Severely obese (BMI over 45 kg/m²) youth have reduced their life expectancy by 5–20 years. It has been suggested that because of the health impact of obesity, this generation may be the first to live a shorter average lifespan than the preceding generation (Velasquez-Mieyer et al 2005).

Obese youth (15–17 years of age) have 17.5 times greater odds of becoming obese adults compared to their normal-weight peers, whereas obese one- to two-year-olds have 1.3 times greater odds of becoming obese adults compared to normal-weight toddlers. Not all overweight youth have the same risk of developing hypertension, diabetes and CVD. It has been suggested that appropriate risk stratification could guide recognition of overweight youth at risk of developing type 2 diabetes or CVD, and could assist prompt intervention. Health care providers need to pursue efficient screening procedures earlier in the progression of overweight in order to prevent adolescents from developing these diseases (Velasquez-Mieyer et al 2005). Overweight and obesity in children and youth should no longer be regarded as variations of normality but as diseases with an extremely high risk for the development of atherosclerosis¹⁰ and cardiovascular complications in adulthood (Schiel et al 2006).

Chronic disease

Overweight in adolescence may be associated with premature morbidity and mortality, not only from cardiovascular disease and diabetes but also from colorectal cancer, gout and arthritis.

Cardiovascular disease (CVD)

Cardiovascular risk factors frequently occur in obese youth, and these risk factors tend to cluster. Obesity and insulin resistance are hypothesised to be the underlying mechanism for this clustering of risk factors, known as metabolic syndrome¹¹ (Velasquez-Mieyer et al 2005). The patterning of CVD risk clustering seen among adults is also present in healthy adolescents. Among youth, obesity is the predominant correlate of cumulative risk (Goodman et al 2005).

Diabetes

Diabetes is an important cause of morbidity and mortality among Pacific young people. American studies have shown that risk factors for CVD and diabetes acquired in childhood commonly persist in later life and are strong predictors of sub-clinical atherosclerosis in youth (Hughes et al 2006). Population-based data suggests that the epidemic of childhood obesity is being followed by an increase in type 2 diabetes, particularly in the youth of minority groups (Velasquez-Mieyer et al 2005).

Within the New Zealand population the prevalence of diabetes in Māori and Pacific populations is around three times that of other New Zealanders (Simmons 1996). Studies have also indicated an earlier onset of type 2 diabetes in Māori (8–10 years earlier) and Pacific people (5–9 years earlier) compared to Europeans (Simmons et al 1994). The age of onset of type 2 diabetes has been

10 Atherosclerosis occurs when fat, cholesterol, and other substances build up in the walls of arteries and form plaque. Plaque deposits can narrow the artery or can break apart and move through the bloodstream. Blood clots, chest pain, stroke, heart attack or pulmonary embolism may result.

11 Central adiposity, atherogenic dyslipidaemia, hypertension, insulin resistance, glucose intolerance, and a prothrombotic, proinflammatory state characterise the metabolic syndrome.

falling, with increasing numbers of children and adolescents with type 2 diabetes, and women with type 2 diabetes in pregnancy (Joshy and Simmons 2006). The Auckland Diabetes Centre has reported an increasing prevalence of type 2 diabetes in adolescents: in 1996 the prevalence among the adolescent clinic attendees was 1.8 percent, but in 2002 this had increased to 11 percent (Hotu et al 2004).

An audit of 12 paediatric and adult hospital-based diabetes services looked at the outcomes of the care of children and young adults with diabetes across New Zealand. Nine of these centres submitted data for the study. A total of 1282 people under the age of 26 were diagnosed with diabetes, 105 of whom were classified as having type 2 diabetes. Sixty-three percent of the subjects with type 2 diabetes were non-European. All were overweight, with an average BMI of 35. Seventy-two percent had microalbuminuria,¹² 4 percent had background retinopathy¹³ and another 4 percent had sight-threatening retinopathy (Scott et al 2006).

Over the age of 12 years microalbuminuria is more common among Pacific peoples and Māori (43.8 percent) than Europeans (17 percent) or others (17.8 percent). This ethnic predisposition to nephropathy¹⁴ was apparent in both type 1 and type 2 diabetes (Scott et al 2006).

Poor physical, mental and emotional health

Significant non-cardiovascular morbidities are related to obesity, particularly central obesity, as are orthopaedic abnormalities, premature onset of puberty, hypoventilation, endocrinopathies¹⁵ and skin problems (Gidding et al 1996). Social stigmatisation and poor self-image have both been associated with significant obesity. Popular culture has clearly associated positive social rewards with leanness and negative social rewards with obesity (Gidding et al 1996).

Injuries

Injuries are the leading cause of death and hospitalisation for all New Zealand people aged 15–24 years, with motor vehicle accidents being the single most frequent cause. Non-accidental injuries also make a significant contribution, especially self-inflicted injuries and those arising from assault (Kypri et al 2002). Pacific youth have lower rates of death and hospitalisation resulting from road traffic injuries than the national average for young people.

Males of all ethnicities are more than twice as likely as females to be killed in motor vehicle crashes. Pacific peoples are less likely to drive than Europeans, but when they do a 1998 survey found the risk of a Pacific driver being hospitalised as a result of a crash was slightly less than three times that of European drivers (Ministry of Social Development 2007).

Hospital admissions due to assault in New Zealand changed little from 1988 to 2004. Young men were much more likely to be hospitalised due to assault, in particular Māori youth and Pacific youth, as well as those living in the most deprived NZDep areas.

Abuse

Outcome research has indicated unequivocally that extreme or abusive punishment has harmful negative consequences (Ferguson et al 1997; Malinosky-Rummell et al 1993; Feehan et al 1991; Millichamp et al 2006). The Dunedin Multidisciplinary Health and Development Study found that

12 A relatively low rate of urinary excretion of albumin (a water-soluble protein).

13 Non-inflammatory disorders of the retina including some that cause blindness.

14 An abnormal state of the kidney.

15 Disease marked by disfunction of an endocrine gland.

children and teenagers who had received severe physical punishment were emotionally distressed at interview 10 to 15 years later (Millichamp et al 2006). Some research undertaken as part of the Pacific Islands Families: First Two Years of Life (PIF) study independently associated paternal physical abuse with severe physical perpetration and victimisation in the mother’s current intimate partner violence (IPV) (Paterson et al 2007).

Pregnancy

Teenage pregnancy

The rate of teenage childbearing in New Zealand is high by OECD standards. This is generally considered a poor life choice. It is widely acknowledged that the responsibilities of early parenthood have long-lasting effects on the socioeconomic wellbeing of the women and children involved. This results from interrupted education; failure to attain educational potential; reduced earning potential; reduced career prospects; and more generally simply being emotionally and socially unprepared for childrearing (Boddington et al 2003; Woodward et al 2001). Young maternal age has also been associated with a number of adverse birth outcomes, including low birthweight, perinatal mortality, and eventual behavioural problems and educational under-achievement (Woodward et al 2001).

Pacific teenage fertility rates (48 per 1000 in 2000-02) tend to be intermediate between those of Māori (70 per 1000) and European New Zealanders (22 per 1000). The rate of abortions for Pacific teenagers was 26 per 1000 in 2000–02, higher than the corresponding rate for European teenagers (21 per 1000) (Boddington et al 2003) but relative to their respective pregnancy rates the Pacific abortion rate is lower (Ministry of Health and Ministry of Pacific Island Affairs 2004). This suggests that fertility indices understate pregnancy levels among Pacific teenagers (Boddington et al 2003).

Not all teenage pregnancies are necessarily unplanned although the evidence that more New Zealand teenage pregnancies ended in abortion in 2001 than they did in 1981 suggests fewer teenage women are choosing to become teenage mothers or to complete an unplanned pregnancy (Boddington et al 2003).

Family planning

A significant feature of family formation norms in New Zealand is the ethnic diversity in reproductive behaviour. Both Pacific and Māori women have larger families than their European counterparts, and they also follow early childbearing norms as Table 10 shows.

Table 10: Live births of young mothers as a proportion of total births by ethnicity, 2005

	Pacific %	Māori %	Asian %	European/Other %	Total %
15–19 years	10	17	2	6	7
20–24 years	25	28	15	14	17

Source: Statistics New Zealand 2006

A study of pregnancy planning by mothers of Pacific infants delivered at Middlemore hospital in 2000 found that of the 60 percent of mothers who had not planned their pregnancies 71 percent (75 percent of mothers aged under 20 years and 73 percent of mothers aged 20–29 years) were not using contraception when they conceived (Paterson et al 2004). The finding of unplanned pregnancies due to not using contraceptives is in line with other studies (Ministry of Health 1997;

Bathgate et al 1994) and is indicative of the number of Pacific women not accessing various contraceptive services available to them (Paterson et al 2004).

Sexually transmitted infections (STIs)

STIs are a cause of acute illness, long-term disability, infertility, cervical cancer and death worldwide. In New Zealand, as reported in other industrialised countries, surveillance data¹⁶ indicates the highest burden of STIs are in youth and non-European ethnic groups (Johnston et al 2005). Youth have more sexual partners, change partners more frequently, and are at greater risk of re-infection (Azariah and Perkins 2007; Johnston et al 2005). Furthermore a significant proportion of young people do not always practice safe sex, putting them at risk of acquiring an STI (Johnston et al 2005).

Chlamydia is the most commonly diagnosed STI followed by gonorrhoea, genital warts and herpes. In 2003, the highest rates of chlamydia and gonorrhoea were found in the 15–19 years age group (Johnston et al 2005). Pacific youth (15–24 years) had proportionally higher diagnosis of chlamydia and gonorrhoea (Ministry of Health 2007c; Sparrow et al 2007). The incidence of gonorrhoea in the Auckland population is steadily rising, with the main risk factors being aged under 25 and of Māori or Pacific ethnicity (Azariah and Perkins 2007).

Many STIs are easy to diagnose and treat effectively with antibiotics (Johnston et al 2005). Pacific youth have been reported elsewhere in this paper as not having access to, or voluntarily using, health services. This suggests the need for more innovative approaches to the development of effective sexual health campaigns.

Infectious disease

Increased immunisation rates in recent years among all New Zealand children – and Pacific children in particular – have reduced but not eliminated the threat posed by epidemics of vaccine-preventable diseases. Available information does not suggest that Pacific youth are more vulnerable to infectious disease than other young people.

Meningococcal B immunisation programme

Pacific peoples' coverage rates in the meningococcal B immunisation programme have been high. Table 11 shows that among 18–19-year-olds, proportionally more Pacific youth have received each of the three doses and have completed their course of vaccinations.

Table 11: MeNZB™ coverage level for those aged 18–19 years, by ethnicity, as at July 2006

Ethnicity	Population (18-19 years)	Dose 1 %	Dose 2 %	Dose 3 %
Pacific peoples	8350	74.4	68.0	59.6
Māori	22,590	52.9	45.4	37.8
Other	90,740	64.4	61.0	56.8
All	121,680	62.9	58.6	53.5

Source: Ministry of Health 2006, unpublished tables

¹⁶ STIs are non-notifiable diseases (with the exception of AIDS). The surveillance system is based primarily on reporting from clinics (sexual health, family planning, student and youth) and several laboratories in the Waikato, Bay of Plenty and Auckland regions.

5. Interventions

There are benefits to youth health from both direct and indirect interventions aimed at addressing the wider determinants of health, such as improving crowded housing and educational attainment, reducing or mitigating risky behaviours (eg, dietary habits and alcohol consumption), and improving the quality of care provided by health and disability services (eg, by introducing dedicated youth services).

This section describes some interventions that are expected to benefit Pacific youth health through addressing risk behaviours or health outcomes. It is also important to recognise that other interventions, including those that originate in other sectors, are important to addressing the determinants of poor health. Examples include the *Pasifika Education Plan* (Ministry of Education 2006b) and the Ministry of Pacific Island Affairs' strategic direction for Pacific peoples' economic and social prosperity.

Healthy Eating – Healthy Action (HEHA)

HEHA is a strategic approach to promoting and protecting health, maintaining a healthy weight throughout life and preventing obesity. Pacific peoples are identified as a priority group. Mission-On is a package of 10 initiatives to give young New Zealanders aged 0–24 years and their families the tools to improve their nutrition and increase physical activity. The child health paper (Ministry of Health 2008a) and the paper on promoting healthy lifestyles and preventing chronic disease among Pacific peoples (Ministry of Health 2008e) have more details about the range of public health measures for the development, promotion and maintenance of healthy diet and physical activity patterns.

Recent research findings highlighting the complexities associated with weight loss are relevant to interventions. Utter et al (2007) used data from the Pacific OPIC (Obesity Prevention in Communities) study and found that many overweight students (57 percent identified as Pacific) were taking appropriate steps to reduce their weight; and that relying on cross-section findings between nutrition behaviours and BMI would misinform intervention strategies. The researchers concluded that intervention efforts should move beyond education-based strategies to environmental changes that support students in adopting healthier nutrition practices. Preliminary results from another OPIC study suggest that parental influence is stronger for Pacific students, compared to other ethnic groups, in shaping attitudes, perceptions and beliefs that promote or prevent obesity (Telvale and Thomas unpublished).

Diabetes care and management

The Ministry of Health has initiated a number of projects in response to the growing diabetes epidemic, including the release of a diabetes strategic plan (Ministry of Health 1997), a diabetes implementation plan (Ministry of Health 2000), and a diabetes toolkit for DHBs (Ministry of Health 2001). The diabetes toolkit required DHBs to set up local diabetes teams and implement the free Get Checked programme for diabetes patients. A set of guidelines for the management of type 2 diabetes was released in 2003 (New Zealand Guidelines Group 2003).

The National Pacific Diabetes Initiative aims to improve the understanding and effectiveness of approaches and interventions to improve diabetes care and management for Pacific peoples diagnosed with type 2 diabetes. Activities completed as part of the initiative include the production of a Diabetes Services Directory (2005); a literature review (2005), which brings together Pacific-focused diabetes information from New Zealand, the Pacific region and internationally; and three lifestyle guides on nutrition, physical activity and smoking cessation.

The lifestyle guides are available to diabetes health workers to support them in delivering consistent lifestyle messages to Pacific peoples with type 2 diabetes and their families (Counties Manukau DHB and Ministry of Health 2006).

Smoking prevention and cessation

Interventions to date appear to have been focused on youth as a whole, and include tobacco tax increases, mass media campaigns, smoke-free schools, and school-based educational interventions. Any evaluations of these interventions have not specifically identified impacts on Pacific (or Māori) youth (Wilson 2007).

Pacific youth will have benefited from initiatives such as smoke-free workplaces. An estimated 100 lives a year are expected to be saved by removing the risks of exposure to second-hand smoke in all workplaces (Ministry of Health 2006a).

A study of changes in the demographic and smoking characteristics of new callers to the New Zealand Quitline, a national free-phone smoking cessation service, between 2001 and 2005 showed increased use of the service across a range of population groups, including a 54 percent increase by Pacific people and a 67 percent increase by callers aged under 25 years (Li and Grigg 2007). No information was reported on quitting outcomes achieved by Pacific peoples.

Encouraging youth not to take up smoking is a public health challenge. The Ministry is developing a youth focused social marketing programme with the Health Sponsorship Council to reduce the initiation of smoking by young people (the Framework for Reducing Smoking Initiation in Aotearoa–New Zealand). This programme will specifically target groups with high rates of tobacco smoking, such as those from lower socioeconomic backgrounds, young Māori, Pacific peoples and females.

A Pacific Smoking Cessation Service Model was developed by the Counties Manukau, Auckland and Waitemata DHBs to provide a personal health service to Pacific populations who are ready to quit smoking in the Auckland region. The service is expected to begin delivery by mid-2008. Similar services, applying a model of service delivery shown to enable Pacific peoples to cease smoking, are already available in Wellington, Christchurch and Hamilton. A feature of these services is developing a workforce able to deliver smoking cessation services to Pacific peoples.

As part of a smoke-free initiative for Pacific churches in its region, the Counties Manukau DHB developed smoke-free toolkits, which include signage declaring the church and its grounds smoke-free; sample nicotine gum, nicotine patches and mints; a template for developing a smoke-free church policy; translated information about smoking cessation and quit-smoking programmes; guidelines on quit-smoking programmes; and information on smoking cessation training (Minister of Health 2005).

The Health Sponsorship Council has focused on sponsoring smoke-free sports and cultural events (with an underlying goal of preventing smoking initiation). For example, the Smokefree Pacifica Beats 2005 attracted a record 74 bands from 61 schools across the country (Health Sponsorship Council 2005). Smokefree sponsorship activities are likely to have other benefits, such as increasing physical activity, greater interest in school and strengthening cultural identity (Wilson 2007).

Reducing alcohol harm

ALAC launched a media campaign in March 2005 entitled 'It's Not the Drinking, it's How We're Drinking', aimed at encouraging New Zealanders to reduce the amount of alcohol they drink on any one occasion. A series of advertisements designed to get New Zealanders to see the connection between getting drunk and the harms that result has been launched.

ALAC has initiatives in place supporting Pacific health workers and communities to work with Pacific families to reduce harm from misuse of alcohol. Promotion strategies for ‘moderate drinking’ and ‘host responsibility’ have been modified to reflect research findings about effective ways of communicating with Pacific communities. Initiatives include developing the capacity and capability of the health workforce to identify and address alcohol harm through ALAC-sponsored workshops, and the provision of resourcing for Pacific health workers to deliver programmes within communities, and monitoring and identifying effective interventions for young people (ALAC 2006).

Promoting safer sexual health

A range of strategies is required for STI prevention and control programmes, including primary prevention strategies and strategies that reduce individual morbidity and transmission within the population. Health promotion and social marketing programmes that promote safer sexual health practice are aimed at reducing the likelihood of transmission through the use of condoms or non-penetrative sexual practices. Such programmes could also aim to reduce the average rate of partner change by decreasing the number of partners, encouraging monogamy, and delaying the onset of first coitus (Sherwood and Coughlan 2007).

The Ministry of Health’s No Rubba, No Hubba Hubba sexual health campaign in 2004/05 aimed at encouraging sexually active young people to use condoms when having sex. The campaign was targeted at 15–19-year-olds with an emphasis on Māori and Pacific youth. The goal of the campaign was to raise awareness, and consequently reduce the high rates of STIs (Ministry of Health 2005). Studies show that regular or ongoing sexual health media campaigns are needed to achieve effective behavioural change and a longer term campaign is being planned.

Family Life Education Pasefika Services (FLEP) is funded by the Ministry of Health to increase knowledge and awareness of sexual health and wellbeing, including contraceptive use among Pacific people and the development of a positive sexual culture among Pacific peoples in Auckland. FLEP has established good working relationships with schools in Auckland with high numbers of Pacific students. Drama and music are used as health promotion media by FLEP because of their proven effectiveness with Pacific youth.¹⁷

An independent Pacific-led initiative for young women that aims to promote connectedness within families and safe relationships has received a positive response from parents and young women within the wider New Zealand community. It involves a more values-based approach to sex education and health and lifestyle promotion. The service outcomes have not yet been evaluated.

Health care services for youth

Quality youth health services that provide opportunities to support the health and development of youth:

- have an explicit youth development framework
- avoid a focus on single health issues
- are comprehensive, multidisciplinary and culturally competent
- recognise and treat disease and disability in adolescence
- promote and support positive trajectories into adulthood
- focus on opportunities for improving the health and wellbeing of groups of youth

¹⁷ Ministry of Health 2007, unpublished data.

- are effective at intersectoral work
- advocate and support system development that enhances youth wellbeing (Watson 2007).

The Counties Manukau DHB undertook a scoping project to examine the feasibility of a youth targeted health and social services facility for Pacific youth and their families. The results indicated that a critical factor for success for youth services is the ability to work across different sectors to ensure that youth can access a range of services to meet their health and social needs. The following mix of services were identified: primary care; physiotherapy; oral health; youth transitions (IRD and WINZ); counselling services; church-based and outreach services; leadership and mentoring support services; legal services; mental health, alcohol and drug specialist services; career planning; linkages to training programmes and tertiary study; and recreational activities (Counties Manukau DHB 2007).

There are a range of health services available to youth, including school-based, community-based, and general practice services. There is, however, increasing evidence that youth-specific health services promote health service utilisation and better health outcomes (Mathias 2002).

Healthy Community Schools Initiative in AIMHI Schools

The Healthy Community Schools initiative delivered in the AIMHI schools (Achievement in Multicultural High Schools) offers comprehensive health assessments to year 9 students, follow-up health care and referral to other health and social services as required. The AIMHI schools identified the lack of management of health and social services as one of the greatest barriers to student achievement and positive educational outcomes. An evaluation of the initiative by Auckland Uniservices found AIMHI school health services:

- provided a supportive environment for health service delivery and suitable facilities
- led to increased consultations by year 9 and 10 students
- identified and managed student health and welfare issues that would otherwise impact negatively on students' behaviour in class and their ability to learn
- contributed to improved staff and student support for ethnic diversity.

Pacific students' NCEA Level 1 achievements at AIMHI schools improved by 12 percent between 2002 and 2003 and were similar to the national rate for Pacific students across all decile schools. The evaluation linked the effectiveness of the AIMHI school health services to the appointment of mature and experienced staff, collaboration and information sharing among the AIMHI schools, and an 'embracing' attitude that resourced school-based health services well and involved health staff in decision-making (Auckland Uniservices Ltd 2004).

6. Conclusion

The available evidence confirms that the wider social, economic and cultural determinants of health remain important influences on the health of Pacific youth. Pacific youth are generally healthy, and the majority are well connected to family, community, school and peers. Many Pacific youth live in the most deprived NZDep areas, in overcrowded housing, have a less than ideal diet and limited access to sporting and recreational facilities, and attend low-decile schools with poorer attainment outcomes and as a result are mainly employed in lower-paid jobs with limited prospects. Individually and collectively, these factors represent considerable challenges to maintaining health status and improving social and economic status. Improved social and economic circumstances are critical to increasing long-term health status and to intergenerational health gains for Pacific peoples.

Pacific youth acknowledge the pressures of bridging two cultures, and while this enriches the life experience of many, some struggle to cope. Reconciling family, community and church obligations with study is a particular issue for Pacific youth. For all youth, education is the gatekeeper to adult life and status. Pacific youth are achieving in education and moving into better jobs with better pay, but not at a rate that sufficiently represents their future importance to New Zealand society and economy and to Pacific families and communities.

Living in the most deprived NZDep areas increases the likelihood of risk behaviours such as bad diet, physical inactivity, substance abuse and unsafe sexual activity. The available information indicates that these risk behaviours are becoming increasingly prevalent among Pacific youth. As awareness of this has grown among Pacific youth, Pacific communities and government agencies, interventions to reduce and mitigate risk behaviours have been initiated. Indications from available information are that while Pacific youth do respond to and like to be included in national youth initiatives, greater understanding and care are needed to ensure that messages and strategies are framed in a way that recognises Pacific values and the specific tensions and issues faced by Pacific youth.

Almost a third of Pacific youth are by some estimates possibly overweight or obese and over a third are smokers. This has serious implications for individual adult health and wellbeing, chronic disease and life expectancy as well as for the future health and wellbeing of Pacific families and communities. Interventions are increasingly recognising Pacific needs at the design stage and engaging early with Pacific communities. The hope is that smoking cessation, HEHA and Mission On initiatives will further advance collaboration and engagement with Pacific youth.

Pacific youth have indicated reservations about using conventional health services, which suggests that developing dedicated youth health services that are Pacific-specific or acceptable to Pacific youth may be a means of addressing risky behaviours and improving uptake of health care by Pacific youth.

The complex dynamics of Pacific youth need to be better recognised in both policy development and service delivery. Ethnicity in New Zealand is based on self-identification, and ethnic intermarriage is resulting in increasing proportions of children and youth with mixed ethnic backgrounds. Many Pacific youth become young parents and available evidence suggests that many require support additional to that provided by families and communities.

This paper has not discussed youth mental health or youth experience of disability as these were canvassed in as much detail as available evidence allowed in the papers on Pacific peoples' experience of disability and mental health (Ministry of Health 2008c, 2008d). The evidence that Pacific youth with mental health disorders are less likely to access mental health services than other youth is a concern and consistent with the findings of this paper about Pacific youth service use. Disabled Pacific youth also require better support and encouragement to access services.

Looking forward

The following goals are proposed as a basis for further consideration and discussion in determining future action.

- a. Reduce and prevent overweight and obesity.
- b. Prevent smoking initiation and promote smoking cessation programmes for youth.
- c. Promote informed and moderate alcohol consumption and reduce risky drinking behaviours.
- d. Improve sexual health knowledge and reduce STIs.
- e. Investigate options for youth-specific health services that promote engagement with primary health care.
- f. Include a Pacific youth dimension in national youth health initiatives and ensure health promotion messages and strategies are appropriate for Pacific youth and their families.
- g. Support initiatives to improve access to support services by disabled Pacific youth and Pacific youth with mental health issues.
- h. Seek opportunities to mobilise Pacific youth as part of overall strategies for reducing overweight and obesity and promoting Pacific health gain.
- i. Recruit more Pacific youth into the health and disability workforce.

Appendix 1: Health indicators for Pacific youth and total New Zealand youth in *Tupu Ola Moui Pacific Health Chart Book 2004* showing inequalities

The Chart Book indicators are presented as rates and 95 percent confidence intervals, calculated by conventional parametric techniques are shown where possible. For many indicators confidence intervals for the Pacific population estimate are in fact very wide, reflecting small numbers. The total New Zealand rate was provided in the Chart Book alongside the Pacific rate to provide a context for interpreting the Pacific rate. If their respective 95 percent confidence intervals do not overlap, the difference is likely to be statistically significant. Inequalities between the respective populations are flagged in column 4.

Indicator	Pacific population	Total New Zealand population	Inequality
Pregnancies 2002, rate per 1000 females (10–19 years)	65 (62–69)	37 (37–38)	Inequality
Births 2002, rate per 1000 females (10–19 years)	41 (20–44)	19 (18–19)	Inequality
Abortions 2002, rate per 1000 females (10–19 years)	15 (13–16)	13 (13–14)	
Sexually transmitted infections, all types, 1999–2002, rate per 100 young people attending sexual health clinics	23.7	14.8	Inequality
Suicide mortality, 1996–2000, rate per 100,000 young people	21 (15–29)	24 (22–26)	
Road traffic injury mortality, 1996–2000, rate per 100,000 young people	17 (11–24)	28 (26–30)	
Road traffic injury hospitalisation, 1998–2002, rate per 100,000 young people	260 (236–285)	207 (399–415)	
Tobacco smoking, 14/15-year-olds smoking at least weekly, 2002, rate per 100	13.8 (M)	13.5 (M)	
	22.6 (F)	20.7 (F)	Inequality
Participation in tertiary education, 18–24 years, 2001, percent	15	32	Inequality

Source: Ministry of Health and Ministry of Pacific Island Affairs 2004

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