THE HEALTH OF PACIFIC CHILDREN AND YOUNG PEOPLE IN NEW ZEALAND
The Health of Pacific Children and Young People in New Zealand

Introduction, Viewpoints And Executive Summary

This Report was produced as a result of a contract with the NZ Child and Youth Epidemiology Service, a joint venture between the Paediatric Society of New Zealand and Auckland UniServices. While every endeavour has been made to use accurate data in this Report, there are currently some variations in the way data is collected from District Health Boards and other agencies that may result in errors, omissions and inaccuracies in the information contained in this Report. The NZ Child and Youth Epidemiology Service does not accept liability for any inaccuracies arising from the use of this data in the production of these reports, or for any losses arising as a consequence thereof.
Cover Artwork: Elements Taken from a Self Portrait by Michael Lea
“Creating a Spiritual and Cultural Identity in a Colonial Background”
Report Graphics by Imelda Morgan
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Introduction
Introduction

Nothing matters more to Pacific people than the health, well-being and future success of our children. Our community’s future is inextricably linked to their health and success (Teuila Percival p 24)

Children share a central and pivotal position in traditional and contemporary Pacific society. It is thus encouraging to note that recently there have been many improvements in their wellbeing. These include large reductions in the number of Pacific young people leaving school without formal qualifications; decreased numbers of Pacific young people reporting that they smoke regularly; and meningococcal disease rates which have declined markedly in recent years [1]. These improvements are significant for developing a healthy and successful future generation.

Of concern however, hospital admissions for many respiratory and infectious diseases (e.g. serious skin infections, bronchiolitis) have either remained static or increased, with rates in many cases remaining 2-5x higher for Pacific and Maori children and young people, and those living in the most deprived areas [1]. While more recently, many of these hospital admissions have come to be perceived as avoidable, on the basis that early access to effective interventions in primary care may have prevented their occurrence, it is increasingly being recognised that such disparities also reflect real differences in health status, as well as access to the underlying cultural and socioeconomic determinants of health1. Hence much broader and more integrated approaches to the design, delivery, maintenance and future planning of policies and services may be required, if we are to promote and maintain improvements in the health of all Pacific children and young people in future years.

When considering what form such integrated approaches might take however, it is important not only to review the chains of causality which have led to Pacific children and young people experiencing a disproportionate burden of morbidity and mortality, but also to integrate into this analysis the viewpoints of Pacific leaders, community workers and health professionals, as such a synthesis potentially offers some real, utilitarian and effective solutions.

In achieving these aims, this report firstly uses the recently developed Zealand Child and Youth Indicator Framework [1], to review the health of Pacific Children and Young People in New Zealand and the underlying cultural and socioeconomic determinants which contribute to their wellbeing. Secondly, strategically placed throughout the report are a number of Viewpoints, written by key Pacific academics / health professionals, which each provide a different perspective on how the health and other sectors might best respond to the health needs of Pacific children and young people.

The following sections briefly review each of these aspects in turn.

Overall Structure of the Report

This report provides information on a broad set of indicators, which those working in the health sector felt were of importance to child and youth health [1]. Due to its large size it has been presented as a reference manual, which is divided into three main sections as follows:

1. Demography and the Measurement of Ethnicity: This section explains the origins of the various ethnicity classification systems used in this report, before considering the distribution (by geographic location and NZ Deprivation Index decile) of Pacific children and young people in New Zealand since 1996.

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1 For a more detailed discussion of this issue see Teuila Percival’s Viewpoint on Page 24
2. **Pacific Child and Youth Health Statistics**: This section provides information on a range of health issues affecting Pacific children and young people in New Zealand. Within this section, individual indicators are loosely arranged according to the hierarchical domains of the NZ Child and Youth Health Indicator Framework [1], which considers the underlying socioeconomic and cultural determinants of health, a range of risk and protective factors, and a large number of individual health outcomes of relevance to Pacific children and young people.

While the information accompanying each of these indicators varies depending on the data sources used, in general each indicator follows a standard format:

a. **Introduction**: The health issue is defined, and a brief summary is provided of its public health significance in the NZ context.

b. **Data Sources and Methods**: Brief notes on the data sources and statistical methods used are then presented. These are linked to a series of Appendices at the back of this report, which provide a more detailed discussion on the strengths and limitations of the various datasets.

c. **New Zealand Distribution and Trends**: Summary graphs then present an analysis of New Zealand trends over time, as well as the distribution of the indicator by age and (where relevant) gender.

d. **Distribution by Prioritised Ethnicity and NZ Deprivation Index Decile**: Where possible, the distribution of the indicator by prioritised ethnicity and NZ Deprivation Index decile is then presented using data from the last 5 years. The aim of the prioritised ethnicity analysis (which allocates children and young people to one of 5 hierarchically arranged groups: Māori > Pacific > Asian / Indian > Other > European) is to allow the reader to compare health outcomes for Pacific children and young people in New Zealand with those of other ethnic groups. When making comparisons (i.e. rate ratios), the European group has been used as the reference group, due to its large numerical size and because the use of a non-Maori non-Pacific reference group in this context would preclude comparisons between Pacific, European and Asian / Indian children.

e. **Distribution by Pacific Group Within New Zealand**: Where possible, the distribution of each indicator by Pacific group is then presented using the Sole (i.e. identifying solely with one Pacific group) / Any (i.e. identifying with a Pacific group in any of the first three responses) Classification System. The aim of this analysis is to allow comparisons to be made between different Pacific groups using a common reference category (i.e. the non-Māori non-Pacific group, selected because of its large numerical size and because of the relative absence of health disparity, although the table format also allows for comparisons between Pacific groups as required).

3. **Appendices**: When considering the information contained in the sections above, there are some real data quality issues which must be taken into account, as they influence the way in which the information in this report can be interpreted. While these issues are described in more detail in Appendices 1-10 at the back of this report, the most important of these are described in the text box below:
Appendix 10 outlines the rationale for the use of statistical children and young people’s wellbeing, with Seini Taufa (Page 17) noting that “...healthy confident children, strong resilient determinants of health and notes that “...”. Two authors then consider the role socioec onomic and family factors play in shaping Pacific world views and cultural identity occur. These changes must take into account the significant roles family, ancestral communities to fully realise these ideals, some fundamental changes may need to society. In transforming New Zealand’s health system into one which assists Pacific families and engaged communities are the building blocks of a vibrant and hopeful people. In the first of these Viewpoints (Page 11), Pefi Kingi considers the cultural determinants of health and notes that “...healthy confident children, strong resilient families and engaged communities are the building blocks of a vibrant and hopeful society. In transforming New Zealand’s health system into one which assists Pacific communities to fully realise these ideals, some fundamental changes may need to occur. These changes must take into account the significant roles family, ancestral lands, spirituality and religion play in shaping Pacific world views and cultural identity”.

Two authors then consider the role socioeconomic and family factors play in shaping children and young people’s wellbeing, with Seini Taufa (Page 17) noting that “All
societies desire their children to grow up to become competent and productive citizens. Yet not all children start off from the same mark. In many societies, a significant minority of children face hazards or disadvantages linked to their socioeconomic circumstances, which they need to overcome if they are to reach their full potential”. Teuila Percival (Page 24) takes this theme further, noting that “…a sentinel article by Mosley and Chen [2] provides a framework for combining the social science research of socioeconomic and cultural determinants with medical research focusing on specific diseases…..providing us with multiple levels of intervention with which to improve the health of Pacific children, from legislation and government policy influencing proximal determinants such as Pacific family’s household income, to health service funding focused on improving efficacy of primary care for Pacific children.”

The role of health services is also considered by two authors, with Lana Perese (Page 21) focusing on “the important, and often unrecognised role of the support services provided by the non-regulated health workforce (e.g. health promoters, mental and community health workers, caregivers, youth workers), as a broader distal and socio-cultural factor associated with influencing behavioural change and positive health outcomes”. Similarly, Minnie Strickland (Page 27) considers the role of antenatal and Well Child services and notes the need for “the establishment and implementation of a national register of Well Child contacts”, “a focused strategy to inform Pacific mothers, especially Cook Island Māori mothers, about the early and adequate attendance at antenatal visits” and “further research into oral health in Pacific children, due to the paucity of information that is currently available”.

Finally, Karlo Mila-Schaaf (Page 31) reviews health issues for Pacific young people and notes that “Despite the good news of strong, consistent and positive improvements in outcomes, what is also clear... is that ethnic disparities have not disappeared....” She goes on to make recommendations in the areas of sexual and reproductive health, mental health and education, noting that “…any services developed for young people... need to be cognisant of Pacific cultures, as well as of youth culture, recognising young Pacific people straddle (often the contradictions of) both worlds”.

Note: Accompanying each of these Viewpoints is a painting by one of two Pacific Artists; Michael Lea and Sione Tukuafu, whose artworks each provide a personal perspective on the role culture plays in forming the identities of Pacific young people growing up in New Zealand.

In Conclusion

This report provides a comprehensive overview of the health of Pacific children and young people in New Zealand, and presents the viewpoints of key Pacific authors, who each reflect on the potential responses the health sector might consider in addressing the large health disparities currently experienced by Pacific children and young people. However, it is clear that this task is beyond the capacity of the health sector alone, and it will require the coordinated, integrated and inter-agency efforts of a range of other sectors including Education, Housing and Social Development, if any real and long term changes are to be achieved.

Effective and sustained changes for Pacific children and young people will also only be realised if their families, extended families, caregivers and respective communities are an integral part of the mix. Collective ownership will ensure optimum care and responsibility for the wellbeing of this important group. The ongoing advocacy and support of Pacific leaders, health professionals, and those working with Pacific children and young people at the community, District Health Board and Government Ministry level is also critical, if we are to achieve the shared vision of every Pacific child and young person in New Zealand growing up to reach their full potential.

Teuila Percival and Elizabeth Craig December 2008
Viewpoints
Self Portrait by Michael Lea
“Creating a Spiritual and Cultural Identity in a Colonial Background”
Introduction

Pacific peoples collectively maintain a core set of cultural values which have sustained, nurtured and developed them through the centuries. These values include family, community, spirituality, and a holistic worldview of life and health. A number of Pacific cultures have also retained proverbs which describe the centrality of children in contemporary society, including the one above, which sees children as being the “centre of one’s eye”. This analogy is appropriate, as without the eye there can be no light.

This opinion piece perceives healthy confident children, strong resilient families and engaged communities as the building blocks of a vibrant and hopeful society. In transforming New Zealand’s health system into one which assists Pacific communities to fully realise these ideals however, some fundamental changes and paradigm shifts may need to occur. Such changes must take into account the significant roles family, ancestral lands, spirituality and religion play in shaping Pacific world views and cultural identity. The following opinion piece reviews some of these key determinants of cultural identity for Pacific children and young people in New Zealand, before considering how the health sector might respond to their needs in an effective and culturally competent manner.

Understanding the Cultural Determents of Health for Pacific Children and Young People

Pacific Worldviews: Historically, analyses of Pacific health have often had inherent problems with how health differences are conceptualised and constructed. These narratives have often been instituted within Papa’alagi health systems and institutions and contested through constructs such as race, power and hegemony. Pacific history is replete with cases, patients and services managed by those with deep-seated beliefs drawn from dominant frameworks, and this persists today. However, through the ongoing efforts of Pacific health leaders, community workers and professionals, this debate has expanded and now gives credence to Pacific worldviews. As a result, Pacific paradigms and frameworks can be utilised for the maximum development of Pacific communities. For example, effective strategies can be designed, and targeted resources invested in a way which allows Pacific communities to participate in an inclusive, collaborative and empowering manner.

Pacific Cultural Democracy: The Pacific is multicultural, multiethnic and comprises a multitude of small populations in ecological microcosms [3]. In this context, health may be viewed “... not merely as a state of individual well-being; it is also constructed as an equilibrium in relationships between the individual, ancestral spirits, other people and the environment” [4]. Such a definition implies that the freedom to practice one’s culture without fear, coined by Finau as “cultural democracy” [5] should be central to health and health service provision, particularly in a diverse society such as Aotearoa New Zealand, where children and young people, as our future leaders, all hail from population groups that are unique in culture, language, physique and lifestyle. It is also vital that Pacific Peoples themselves, fully acknowledge culture and its tenets, and
know their individual and collective place and power in the equation. As Kavaliku points out, “We must always remember that not only do we live in a culture but we are the culture, nor do we live in a vacuum” [6]. Finally, it has been posed that Pacific peoples have moved past the imbalances of health wrought by globalization, imperialism and colonialism. While debatable, such an analysis does offer a much more optimistic outlook for the health of the next generation.

**Pacific Values**: Pacific peoples maintain core cultural values that have sustained nurtured and developed them through the centuries. These values have gained increased visibility, vitality and validity in contemporary society. They include family, community, spirituality and a holistic worldview of life and health. These intertwining components of Pacific life are extremely dynamic and constantly changing. Some Pacific Peoples believe that illness and other health misfortunes can be attributed to the loss of, or damage to, mana (special power or life force), fonua (land) or fakafetuiaga (Vagahau Niue for human relationships, although other vernaculars have equivalents) [5]. Restoring health may thus include an analysis of the cause of the problem, a family fono [6], a meeting or gathering, the expression of an abject apology (ole fakamolemole), or a ceremony of forgiveness (ifoga). In addition, some values are of greater significance, or have greater currency amongst Pacific Peoples. For example: interdependence is a treasured principle; it is the practice of reciprocity and the notion of equal and equitable giving, taking and receiving. Group harmony is achieved when all members of the family work and live cooperatively and reciprocally. Respect is also highly valued and manifests itself via a range of verbal and non-verbal cues and behaviours i.e. *doing the right things and doing things right*. Thus, recognising and understanding the significance of these core cultural values is an effective and profitable investment for those working to enhance Pacific Peoples' health.

**Pacific Families**: Pacific cultures place great value on the family. In this context, “family” may include family members related through blood, adoption (legal or customary), and marriage. In addition, some Pacific families recognize a deceased relative's spirit as an active family member. This may be relevant when treating mental health issues; it may pose a risk that requires sensitive management, but it may also provide spiritual strength.

For many Pacific groups, the family is the cornerstone of personal life from birth to death [7], and identity can centre on one's roles, duties and responsibilities within the family. At times however, it may seem that collective well-being is awarded a higher priority than that of the individual, which may be problematic if group decisions minimise the importance of the sick individual, particularly if that individual is a child. It is positive however, when family supports are working at an optimum level. Further, at times the sheer volume of family members may appear problematic, especially if discussions favour a complex consensus model of decision-making. At other times however, the volume of family members may be favourable for family strength and consolidation. Religious ethics add to a problematic situation, and it is fair to state that at times, religious dogma does not always dwell well with cultural dynamics. This is an anticipated constant that Pacific communities deal with; it may seem confusing to external forces, but to Pacific peoples it is normal and resolvable.

In contemporary contexts, Pacific families are redefining themselves, although these changes may not always be accepted, or be seen as appropriate. While families are usually stratified by generation, and relationships are often determined by genealogical seniority, the current contextual changes and adaptations of today may be eroding some of these structures. For example, family structures may be challenged when power roles are switched for utilitarian purposes. However, this can be managed well so that the family “tivaevae” becomes a firm coping mechanism. Pacific families can also be strengthened, so that they are well-equipped to withstand all the challenges of
a modern environment. Thus for the Pacific child, any constructs of health and well-being must focus on family and familial values, even though their duality as both risk and protective factors may at times seem complicated.

**Pacific Spirituality and Religion**: Spirituality is also an intrinsic part of many Pacific cultures, with many Pacific worldviews being holistic and therefore, spiritual. Spiritual health in turn contributes to physical and psychological wellness, with spiritual well-being being seen as “the affirmation of life in a relationship with a god, self, community, and environment that nurtures and celebrates wholeness” [8]. This underscores the inter-relationships and inter-connectedness between all elements in life, with a number of great leaders noting that one of the foundations of spiritual wellbeing is self-determined wisdom; another is the ability to balance all aspects of life.

Pacific Peoples have embraced different forms of religious belief and faith with fervour; and these have served as a guide and safeguard for many. For Pacific Peoples, religion includes a range of new and adopted forms of worship, characterised by diverse dogmas, infrastructures, churches and church buildings. However, as with all other influences, religious belief has the potential to be both a protective and a risk factor for Pacific children and young people.

**Belonging in the Pacific**: In addition, lands exert a centripetal force for many Pacific Peoples, be they clan, tribe or family. Ancestral lands provide a sense of belonging, a place of connectedness and a basis for strength, with many Pacific Peoples having close and sacred ties to their homelands. “You know who you are when you know where you are...being without a place means being severed “from the most vital physical, psychological, social, and spiritual values of one’s existence” [9]. However, clashes over land titles have led to disconnection among some Pacific families and extended families.

Other challenges associated with belonging have meant that some Pacific Peoples experience complex problems associated with oppression or racism, alienation from the mainstream culture, identity conflict, generational conflicts, and a sense of powerlessness. These in turn may result in continued negative behaviours or consequences, including illegal or criminal behaviours. In contrast, knowledge of Pacific cultures can be instructive in understanding Pacific concepts of health, which in turn is useful for developing healthcare solutions. With healthcare systems being in a state of ongoing change, developing a culturally competent system should be a priority in modern western health services, so that they are best able to ensure the future for Pacific peoples.

**A Health Sector Which Better Meets the Needs of Pacific Children and Young People**

**Prioritising Pacific Children and Young People in Health Policy**: This report identifies Pacific children and young people as belonging to a diverse and cohesive society. However, it is necessary to ensure that this vulnerable cultural group is awarded a high priority in New Zealand health policy, given that the majority are / will be born in Aotearoa, and that they will comprise an increasing proportion of the New Zealand population in future years. Current health strategies are increasing public confidence amongst Pacific communities and there is a perception that New Zealand is becoming a more diverse, tolerant, creative and supportive place, where Pacific children and young people can receive the best healthcare. However, if health policies and strategies are to result in positive impacts for Pacific children and young people, they must include concepts of “belonging, participation, inclusion, recognition and legitimacy” [10]. It is also critical that Pacific cultural identities and worldviews are fully incorporated into policy development and that the political agenda of the day does not interfere with the long-term political commitment to resourcing and operationalising clear strategic priorities for Pacific children and young people.
Services Which Acknowledge Pacific Cultural Identity: Health services must also foster cultural identity as the basis for the values, beliefs, attitudes, motivation, knowledge, and skills needed to bring about change and improved health outcomes for Pacific children. Providers should view cultural identity and cultural pride as positive factors in the provision of health care and the prevention of illness. Pacific languages are critical as part of the foundation of a strong identity and can be a potentially strong protective factor. Services should promote and preserve cultural identity, values, and traditions in order to enhance the resiliency of Pacific Peoples who experience multiple health ailments. Other challenges relate to the demise of identifying with being Island-Born or Island-Raised, as opposed to New Zealand-Born or New Zealand-Raised. It is also pertinent that nowhere else in the world do young people identify as being “Pacific” except in Aotearoa New Zealand. Strong protective factors can be generated through positive cultural affiliations, resulting in positive self-identity and enhanced self-esteem. Recognising, acknowledging and supporting cultural values and norms are inherent cultural strengths that should contribute to Pacific Peoples’ participation in, and ownership of, their own wellness.

Access and Utilisation of Primary Health Care: Access and utilisation of primary health care services is one of the most common denominators reflecting health disparities in New Zealand [11]. The basis for these disparities may be ethnicity, socio-economic status, social class and/or geographical distribution [12]. Pacific Peoples are noted as “hard to reach New Zealanders”, so there is a need to further improve their access and rates of utilisation. Those who need care the most, often have the least access to the healthcare services they need, want or demand. Barriers to access for Pacific Peoples cannot just be explained by a lack of available facilities, appropriate personnel, or socioeconomic factors. Barriers may exist for a range of other valid reasons including acceptability, and affordability [13]. For example, Pacific Peoples who have access to services may still under-utilise these services if the system is not responsive to their cultural norms. Often, healthcare systems have neglected to incorporate cultural worldviews and values into service delivery and this discourages use by Pacific groups who subscribe to particular values. A healthcare system that does not include the client, their families and communities at large may exacerbate distress during a period of poor health [14]. In this context, negative outcomes are costly, expensive, ineffective, inefficient, and reflect poorly on New Zealand as a developed nation.

Cultural Competence of Health Care Providers: Health providers can benefit from strategies which increase their understanding of the health beliefs held, and treatments utilised, by Pacific clients. It is important to ask Pacific caregivers and parents what they think may have caused their child’s illness, and what they are already doing to treat their child. It is equally important to ask whether prescribed medical interventions conflict with their beliefs and traditional practices, especially if these beliefs and practices apply to children of a particular age group. Cultural competence thus requires not only a knowledge of a child’s family’s worldview, but also a sensitivity to cultural boundaries and norms, and an appreciation of the role these cultural differences play in the Pacific child’s wellbeing and illness. Health care providers who are medically competent but not culturally competent are at risk of treating a Pacific child inappropriately. In contrast, health services that emphasize the importance of holism, a family’s scope for access, and who can accommodate Pacific cultural perspectives, increase opportunities for acceptability. Cultural competence can be the best risk management plan conceived and it is advantageous and effective, if implemented constantly and consistently.

In Conclusion

Pacific peoples maintain a set of core cultural values including family, community, spirituality and a holistic world view, which have sustained nurtured and developed
them through the centuries. While service providers can have a powerful influence on the wellbeing of Pacific children, to do so they require a knowledge of Pacific worldviews, a sensitivity to cultural boundaries and norms, and an appreciation of the role these cultural differences play in the Pacific child’s wellbeing and illness.

Culturally competent health services do have the potential to be acceptable to Pacific groups; and Pacific communities do have the potential and capacity to meet the challenges faced by their children and young people. By utilising the values and principles which characterize Pacific peoples as a firm basis for transformation, community-based participation to enhance the accessibility and acceptability of services, and a commitment by Government departments to a health system that is progressively financed, inclusive and equitable [15], the wellbeing of Pacific children and young people can be transformed. Pacific communities thus anticipate and look forward to a future that is uncompromisingly responsive to the health needs, wants and demands of their children and young people.
Self Portrait and Friends by Michael Lea
“The patterns and colour symbolise my cultural identity”
Viewpoint: Socioeconomic and Family Factors
by Seini Taufa

Introduction
All societies desire their children to grow up to become competent and productive citizens. Yet not all children start off from the same mark. In many societies, a significant minority of children face hazards or disadvantages linked to their socioeconomic circumstances, which they need to overcome if they are to reach their full potential [16]. Socioeconomic status thus remains a topic of great interest for those who study child and youth health, with the literature suggesting that high socioeconomic status families have opportunities to afford their children an array of services, goods, parental actions, and social connections which contribute to their development. In contrast, children from less affluent families may lack access to these same resources, putting them at risk of poorer health [17] [16].

As the following sections of this report will suggest, these issues are particularly important for Pacific families in New Zealand, with Pacific babies being much more likely to be born into socioeconomically deprived (NZDep Decile 8-10) areas, or to be brought up in families whose living standards result in severe hardship. Given the crucial links between family socioeconomic circumstances and child and youth health, this viewpoint considers three key elements of socio-economic status (income, employment and education) and how these might be improved, in order to achieve better outcomes for Pacific families and children.

Income
Income is one of the single most important determinants of health [18]. While the 2006 Census noted that Pacific people in New Zealand had lower incomes than non-Pacific people (median annual income Pacific People $20,500 vs. New Zealand $24,400 [19]), the potentially greater financial commitments many Pacific families experience must also be taken into account. While the 2006 Census found that Niueans and Samoans had the highest median incomes [20], a recent study exploring health related socioeconomic characteristics amongst Pacific populations in Auckland found that Samoans experienced greater financial pressures. These pressures were in part as a result of remittances to family in Samoa, donations of money to the Church, and an adherence to the cultural concept of Fa’a Samoa (in response to requests from family elders, leaders, or Matai (village chief) for financial contributions to be used to finance projects, functions, or for gifting to prominent people, guests, and visitors [21]).

Similarly, the high priority Pacific families place on being connected or geographically close to kin means that many Pacific families choose to locate themselves in major urban centres (e.g. Auckland and Wellington), even though the cost of living these centres is much higher than in regional or rural areas (e.g. in 2006, 67% of Samoan, 60% of Cook Island Māori, 80% of Tongan and 79% of Niue people in New Zealand were based in Auckland [20] even though median weekly rentals in Auckland ($275) were much higher than the New Zealand average ($201) [22]. During 2006 a much higher proportion of Pacific people (34%) were also living in an extended family situation than the total New Zealand population (10%) [20]. Thus even for a given level of income, it is likely that Pacific families have greater financial commitments as a result of the high priority they place on being connected to kin and other community obligations, and these factors need to be taken into account when considering the role income plays in ensuring wellbeing for Pacific families and children.

Employment
One of the main factors determining income is employment. Employment has been shown to increase general health and wellbeing as it provides opportunities for social interaction, community participation, the development of social status, and can
increase levels of physical activity [23]. In New Zealand a higher proportion of Pacific men (71%) are employed than Pacific women (59%), with the most common occupations for Pacific men being labourers (23%), machinery operators / drivers (21%) and technicians / trades workers (20%). Pacific women are more likely to be clerical / administrative workers (19%), labourers (19%), professionals (15%) or community / personal service workers (15%) [19]). With many Pacific people working in low-skilled jobs paying the minimum wage, it is likely that the high cost of living in urban areas will impact on the number of hours they have to work, as well as the priority they award to health issues (e.g. for those working long hours or doing shift work, finding adequate child care may be an issue, and personal health may not be taken seriously, as time taken off work means less income).

Conversely, unemployment has been found to be detrimental to both physical and mental health [24]. In New Zealand during 2006, 10.7% of the adult Pacific population was unemployed, as compared to 5.0% for New Zealand as a whole [20]. In contrast, 28% of Pacific adults received income support (e.g. Government benefits or other payments) as compared to 17% of the total New Zealand population [20]. When interpreting these figures however, the larger size of Pacific families and the impact this may have on care giving duties, as well as different levels of awareness for welfare entitlements, and how to access them must be taken into account [18]. In addition, the 2006 Census suggest that workforce statistics may underestimate the amount of time put into the traditional labour market (e.g. volunteer work within Pacific communities).

**Education**
Another key determinant of socio-economic status is education, which effects health indirectly via its impact on occupation and income [25]. Education also impacts on health directly by improving an individual’s knowledge about health related topics and giving people confidence to seek the aid of professionals. In a recent study entitled “Who Doesn’t Get Into Preschool” Fergusson et al [26] found that mothers who were better educated were more likely to receive health services for their children (e.g. postnatal care, immunisation, community nurses, early dental care, early childhood education) than those that were not. These findings highlight the importance of ensuring that Pacific people are aware of the health issues prevalent within the community and the services available to address them.

Secondary school education is also critical for developing potential employment opportunities for students. It paves the way for further tertiary education, or moving into a trade or apprenticeship. While retention rates for Pacific students in senior secondary school remain higher than for most other ethnic groups, the proportion of Pacific students leaving school with a University Entrance Standard remains much lower than for Asian or European students. Thus in 2006 only 16.8% of Pacific students left school with a University Entrance Standard, as compared to 41.3% of European and 63.0% of Asian young people. While all ethnic groups saw increases in the proportion of students gaining a University Entrance Standard since 2002, the differences between ethnic groups have remained.

Considering these figures in the context of the earlier figures on employment, it is likely that many Pacific students go straight from high school into a low-paid job. This editorial recognizes the importance of maximizing education by encouraging further tertiary education and/or youth learning a trade or apprenticeship. This will better the chances of gaining employment and increasing income.

**Conclusions and Recommendations**
This editorial has considered three components of socioeconomic status which impact on the wellbeing of Pacific families and their children. It has also highlighted a number of areas where it may be possible to break down the barriers Pacific children experience as a result of their socio-economic position.
Firstly, secondary school education is critical for enhancing potential employment opportunities for Pacific young people. It paves the way for further tertiary education, a trade or an apprenticeship. Given that at present, many Pacific students are likely to go straight from high school into a low-paid job, maximizing education by encouraging further tertiary education and / or the learning of a trade / an apprenticeship is vitally important for future employment and income earning potential. This can be achieved by working with Pacific communities, so that both Pacific youth and Pacific families are aware of the options available for further study.

Secondly, a significant proportion of the Pacific population are involved in unskilled occupations, which at times require either long hours or shift work. In such cases it is likely that traditional child care facilities will be unable to meet the needs of working families. It is thus recommended that culturally appropriate childcare facilities which can cater to the needs of shift workers be explored, so that parents can ensure that their children are adequately cared for while earning income for their families.

Finally, it is recommended that greater emphasis be placed on ensuring that Pacific families are aware of the resources available to them in the community. This can be done by being mobile, working with cultural centres, community groups or local churches to spread key health messages. By interacting with the local community, health professionals can thus ensure that Pacific families will be more confident to use services and ask questions.
Elements from a Self Portrait by Sione Tukuafu
“Celebrating myself and my culture… with some natural elements … the birds and the fish”
This report explores the health status of Pacific children and young people in New Zealand over time and provides some insights into the underlying determinants (proximal factors) and the pathways (distal factors) which lead to particular health prospects (See Part 2 - Socioeconomic and Cultural Determinants). This opinion piece focuses on the important, and often unrecognised role of the support services provided by the non-regulated health workforce\(^2\) (e.g. health promoters, mental and community health workers, caregivers, youth workers), as a broader distal and socio-cultural factor associated with influencing behavioural change and positive health outcomes [27, 28]. This piece is premised on the notion that effective policy initiatives and interventions must give due consideration to the underlying and often complex and multi-dimensional factors (e.g. support services, the non-regulated health workforce) that play a role in influencing attitudes toward, and the utilisation of, Primary and Mental Health Care Services for Pacific peoples.

Primary Health Care in New Zealand consists of a broad range of services that cover: community development and empowerment to improve the health of people within communities; preventative services such as health education and counselling, disease prevention and screening; general practice, mobile nursing, community health and pharmacy services; and first-level services for conditions such as maternity, family planning and sexual health, dentistry, physiotherapy, chiropractics and osteopathy, traditional healers and alternative healers. Primary Care also includes Primary Health Organisations (PHOs), which place an emphasis on population health within communities. PHOs consist of general practitioners, primary care nurses, and other health professionals, such as Māori and Pacific health providers and health promotion workers [29]. Research indicates the 96% of the Pacific population are enrolled in PHOs [30].

Despite this finding, the health disparities identified in this report, in conjunction with contextual evidence which suggests that Primary and Mental Health Services remain underutilised by Pacific peoples, young and old [30-37], identify a need to address barriers to help seeking, and provide evidence that Support Services have an increasingly important role to play in improving the health status of Pacific people in New Zealand.

Pacific adult populations have identified a plethora of barriers to Primary and Mental Health Care which include financial hardship, cost and transport, lack of culturally appropriate service, lack of local services, difficulties accessing services, stigma associated with mental illness, lack of childcare and family support, gender insensitivity and a lack of information [32, 33, 38, 39]. Barriers to health care specific to young people include cost (visits / prescriptions), concerns of confidentiality, embarrassment

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2 The non-regulated Pacific health workforce can be defined as:
- Those who are not subjected to regulatory requirements under health legislation (Health Practitioners Competence Assurance Act, 2003))
- Those who have direct personal care interaction with clients, patients or consumers within the health and disability sector and/or who spend at least some of their visiting people in the community or following up on released and discharged patients
- Those who are employed in funded services, and for whom the chief original source of their remuneration is public money
- People who identify as Pacific, and who are of a Pacific culture that is represented in New Zealand
- People employed by a health care provider or an organisation that works with a health care provider, and caters to the needs of the Pacific community.
and not wanting to make a fuss, travel, lack of cultural appropriateness, lack of appropriate and accessible services and information, lack of knowledge about services, and perceptions that communication between adults and young people is sometimes authoritarian, judgemental and patronising [34, 40, 41]. Understanding these barriers to service utilisation is important, if policy initiatives and interventions are to reach and to be effective for their target audience.

In regard to young people in New Zealand, over the last 10-15 years youth-targeted clinical on-site care (e.g. school-based health care) has gradually developed and been proven effective in terms of increasing the utilisation of Primary and Mental Health Services, substance abuse care, health promotion, education and counselling services for this target group [34, 42, 43]. However, despite commendable advancements, it is important to note that there is insufficient evidence to demonstrate changes in physical or mental health status [43]. Also, the most high risk students, who often have the biggest health needs, either leave school early or are in alternative education [40, 43]. This finding, in conjunction with the significant rates of school stand-downs, suspensions, and expulsions for Pacific young people identified in this report, implies that this group remains ill-exposed to targeted health care interventions and that alternative approaches and policy initiatives are required.

The role of Support Services and the non-regulated health workforce as an alternative, effective intervention to complement clinical practice has been contended within Pacific adult population health service utilisation research [39] and exemplified within the mental health sector by significant increases in the use of services delivered by community mental health teams [33]. This seems unsurprising given that the roles undertaken by non-regulated health workers are extensive and encompass cultural mediation, culturally appropriate health education, advocacy for community and individual needs, empowering communities, clients and their families, increasing access to health care and reducing health care costs [27, 44, 45].

In addition, this workforce is identified as being more cost effective and mobile, thus in a position to access ‘hard-to-reach’ communities and groups, such as Pacific young people who are no longer within the school system. In view of the barriers to service utilisation for young people that are identified within this piece, the non-regulated health workforce is apt to address each of these and to provide the cultural connectedness and appropriateness that Pacific young people consider a necessary enabler to health service utilisation and provision [34, 42]. As well as influencing behavioural change, positive health outcomes, and access to health services, the non-regulated health workforce also plays an effective role in the dissemination of information and increasing client knowledge on health maintenance and disease prevention [45]. Youth workers in the non-regulated health sector are also in a position to provide referral Support Services to non-health organisations such as the Department of Child Youth and Family (CYF), Work and Income New Zealand (WINZ) and the New Zealand Police.

Despite the important role that Support Services can and do play in improving health outcomes for Pacific young people, this workforce remains characterised by lowly paid, casual and voluntary workers with high turnover rates. Also, with the exception of Mental Health Services, there lacks an overarching strategy within the health and disability sector. On the premise that the non-regulated workforce is a key workforce for the future of New Zealand’s health and disability services, this opinion piece contends the need to recognise and acknowledge the values that Support Services add to health service provision for Pacific young people in New Zealand. Additionally, this piece provides an insight into and information on a relatively unknown workforce and contends that this will enable better targeting of interventions, policy and services aimed at improving outcomes at the broader distal level for Pacific young people in New Zealand.
“Celebrating myself and my culture… I have used symbols to visualise people uniting in place and time, with some natural elements… the birds and fish”.

Self Portrait by Sione Tukuafu
Viewpoint: Illness and Hospitalization in New Zealand Pacific Children

by Teuila Percival

Nothing matters more to Pacific people than the health, well-being and future success of our children. Our community’s future is inextricably linked to their health and success. Child health in New Zealand over the last few decades has shown much improvement. We have seen a reduction in total infant mortality rate and a marked reduction in SIDS, the commonest post-neonatal cause of death in New Zealand infants [1]. Overall admission rates for asthma have declined. Both quality of life and survival for very premature and low birth weight infants have improved.

However New Zealand’s rates of acute and chronic respiratory diseases and serious infections have either remained static or are increasing. Supposedly preventable diseases such as cellulitis are showing a persisting and alarming increase over the past decade. Common to all these conditions is an ethnic and socio-economic disparity in hospitalization rates. Indeed as we can see from the sections on infectious and respiratory disease in this Report, the burden for Pacific children is much higher than that of all other New Zealand children.

Traditionally we focus on common and serious conditions resulting in child hospitalisation. We see that Pacific children have the highest rates of admission for infectious diseases such as cellulitis, rheumatic fever and gastroenteritis. Similarly prior to the success of the Meningococcal B vaccine campaign, Pacific children had the highest rates of meningococcal disease. The acute infectious respiratory diseases, bronchiolitis and pneumonia are some of the most frequent causes of hospital admission for Pacific children outside the neonatal period. The rate of bronchiolitis admissions is nearly four and a half times that of NZ European and one and a half times that of Māori children. Similarly with pneumonia, admission rates are highest in Pacific children followed by Māori. The sequelae of severe and repeated lower respiratory disease may be the development of bronchiectasis, a chronic suppurative lung condition, resulting in ongoing morbidity and disability. This disease, as with acute respiratory diseases, shows marked ethnic and socio-economic disparity, with the rates being highest in Pacific children: almost three times that of Māori and over ten times that of European children.

Diseases such as pneumonia and bronchiolitis have traditionally been termed ambulatory sensitive hospitalisations (ASH), the assumption being that timely and effective primary healthcare will result in a reduction in admission rates. For Pacific children we have for years now seen very high rates of such conditions. The ethnic and socioeconomic disparities seen have resulted in single disease orientated health programmes in primary or secondary care to reduce such high rates. The premise being that the disparities reflect ethnic and socioeconomic inequalities in access to healthcare, with the solution seemingly in health service delivery. Increasingly this limited approach has been challenged. The disparate ethnic and socioeconomic gradients seen may reflect gradients in health status and underlying determinants and not necessarily in health care [46], [47].

Certainly access to effective healthcare remains a significant factor for Pacific children. Our children, along with Māori, present to hospital with more severe disease than other New Zealand children [48] implying delay in presentation or difficulty with access. In Primary Care, as with adults, we find reduced access and quality of care for Pacific and Māori children despite more severe disease. As important as healthcare is however, it does not influence child health status as strongly as socioeconomic status and ethnicity. The socio-economic status of Pacific
children is well documented in other publication [30]. Our children, more than any other group live in the most deprived neighbourhoods, with lower household income, high rates of unemployment and benefit dependence. Over half of Pacific children live in the most deprived (NZDep decile 9 and 10) areas [30]. Housing is also an important determinant of Pacific children’s health. The relationship between substandard and overcrowded housing and children’s health is well documented for respiratory and other infectious diseases. Pacific children, more than any other group are likely to live in overcrowded homes.

An often cited and sentinel article by Mosley and Chen [2] provides a framework combining the social science research of socioeconomic and cultural determinants with medical research focusing on specific diseases, with the shared outcome being morbidity. This Report also draws on this important framework. Social, economic and cultural variables operate through a set of proximate determinants directly influencing the risk of disease and its associated morbidities. This framework provides us with multiple levels of intervention with which to improve the health of Pacific children. From legislation and government policy influencing proximal determinants such as Pacific family’s household income, to health service funding focused on improving efficacy of primary care for Pacific children. Given the considerable and widespread burden of disease for Pacific children, interventions at all levels will be needed. Most importantly however, we do need to acknowledge that the solutions likely to have most influence may lie outside our health sector and that these will require some considerable sustained advocacy by clinicians and the Pacific community.
Self Portrait by Michael Lea

“The patterns and colour symbolise my cultural identity”
Viewpoint: Maternal and Well Child Issues
by Minnie Strickland

This report on the *Health of Pacific Children and Young People in New Zealand* is informative and timely. It highlights, yet again, the ethnic disparities that continue to exist in this country; which poses a challenge about future health care for Pacific children. A discussion about child health must include maternal health, since women need care prior to conception to enhance the potential outcomes for themselves and their offspring.

Approximately half of pregnancies in New Zealand are unplanned [49]. One cohort showed that 60% of mothers of Pacific infants had not planned their pregnancies [50]. The foetus is particularly vulnerable during the early days of pregnancy, often before most women know they are pregnant. The key concerns for unplanned pregnancies are alcohol intake, lack of folic acid supplementation and the use of cigarettes, drugs and medications [49].

New Zealand has one of the highest teenage pregnancy rates in the world [51]. In New Zealand, teenage pregnancy increases the risk of both preterm birth and small for gestational age (SGA) [52]. This report highlights during the period 2002-2006 teenage birth rates in Pacific women were significantly higher than the NZ European average. Of note, teenage births amongst New Zealand's Pacific Groups were highest in Cook Islands Māori women followed by Niue women.

It is widely accepted that good antenatal care is an important means of decreasing the risk of maternal and peri-natal mortality [53], [51], [52]. Research suggests that women who initiate their antenatal care later than the first trimester have poorer outcomes, such as low birth weight and pre-term birth [54]. Some studies suggest that approximately 40-70% of Pacific women tend to initiate antenatal care late and attend fewer visits than other women. A study in 2000 showed that 26.6% of mothers of Pacific infants initiated antenatal care late, and this finding was an improvement in comparison to previous research. That same study showed the maternal factors significantly associated with late initiation of antenatal care were high parity, first pregnancy, not being employed prior to pregnancy and Cook Islands Māori ethnicity [55].

Low Birth Weight is a frequently used peri-natal indicator as it predicts neonatal morbidity and mortality [56]. SGA and Preterm birth rates have been highlighted in this report and overall have decreased in recent years for Pacific babies. This trend is not seen in Cook Islands Māori babies as they have significantly higher SGA rates and Preterm birth rates than NZ European babies. It is clear that a focused strategy to inform Cook Islands Māori women about the benefits of early and adequate attendance of antenatal care is needed.

The benefits of breastfeeding (for both infant and mother) are numerous and well documented [57],[58]. The data presented in this report shows that the breastfeeding rates for Pacific babies in June 2005-2006 at <6 weeks, 3 months and 6 months were lower than the European/Other babies and similar to Māori babies. Furthermore, during this period there was a marked tapering off in exclusive/full breastfeeding rates as the infant aged. This suggests that the WHO recommendations of exclusive breastfeeding for 6 months, with the introduction of complementary food and continued breastfeeding thereafter were not met. One study of mothers of Pacific infants identified factors significantly associated with not exclusively breastfeeding. These included, amongst others, smoking, not seeing a midwife during pregnancy and having a home visit for the infant from a traditional healer. As suggested by the authors, the use of traditional healers will require further investigation within the New Zealand context [59].
Well Child

It is well documented that access to quality primary healthcare is associated with better health outcomes. This report identifies that enrolments of Pacific children and young people in Primary Health Organisations were higher than all other ethnic groups during October and December of 2006. Although this is encouraging news, there is also a paucity of Pacific ethnic-specific data in this report about accessing general practice services for this age group. Survey data from 1996 – 2004 highlighted that there seems to be an unmet need for general practitioner services in 13% of children and 20% of young people. The cost and lack of transport or inability to get an appointment soon enough or at a suitable time were cited as reasons for not seeing a GP.

In 2002 the Tamariki Ora Well Child Framework was developed to meet the increasing needs of children and their families. In 2006 over 90% of infants born in New Zealand were enrolled with Plunket, the leading Well Child Provider in this country. In the same period the proportion of Pacific Plunket enrolled children, who attended the 5 core visits offered in the first year of life, was intermediate between European/Other and Maori ethnic groups. Despite these trends over 75% of Pacific and Māori infants enrolled with Plunket attended Core 2- Core 5 visits. Unfortunately participation in future core visits decreased with increasing age. To date there is no national register of Well Child contacts and therefore the proportion of children who receive each scheduled contact is unknown.

Immunisation continues to be a priority population objective of the New Zealand Health Strategy. The report data shows improvements in the number of Pacific children fully immunized at 2 years from 53.1% to 80.7% in 1996 to 2005. In spite of these gains the Ministry of Health target of 95% has not been reached. Of concern is data from the National Immunisation Register during April-July 2007 which showed 59.3% of 6 month old children were fully immunised with lower rates seen in Māori and Pacific infants. The importance of timely immunisation has been documented and during the 1995 – 1997 pertussis epidemic delay in receipt of any of the three infant doses of pertussis vaccine was associated with a four-fold increased risk of hospitalisation with pertussis. Furthermore, delay in receiving the first vaccine dose is one of the strongest and most consistent predictors of subsequent incomplete immunisation [35].

Hearing Screening and Oral health are part of the Well Child checks. Hearing loss in infants is not often suspected by parents or health professionals until speech and language difficulties become apparent [60]. Hearing loss in Māori and Pacific children is diagnosed later than non-Māori, non-Pacific children. Pacific infants are over-represented in hearing loss statistics with 13.5% of notifications compared with 10.9% of the population in 2005 [61], [62] This report highlights that during 1993-2006, there was a gradual decline in audiometry failure rates at school entry across New Zealand. However, audiometry failure rates were highest for Pacific children and consistently lower for European/Other and Asian children.

The Ministry of Health’s vision for oral health is “Good oral health for all, for life”. The Strategic Vision for Oral health in New Zealand Report cites the inequalities in oral health and in access to oral health services have become increasingly evident in Māori, Pacific, rural and low socioeconomic populations [63]. It is highlighted in this report that Pacific children are worse off than European/Other children when it comes to oral health with lower proportions of Pacific and Māori children being caries free at 5 years. In 2005 only 50.7% of children aged 5 years had access to fluoridated drinking water based on the fluoridation status of the school rather than home. The Government has indicated that it will be investing in a strengthened community-based oral health service for young people and this is one step forward in improving the oral health of our Pacific children [63].
Recommendations:
1. To consider the establishment and implementation of a national register of Well Child contacts.
2. That a focused strategy to inform Pacific mothers, especially Cook Island Māori mothers, about the early and adequate attendance at antenatal visits be prioritised.
3. To consider further research into oral health in Pacific children due to the paucity of information that is currently available.
Self Portrait by Sione Tukuafu

“Identifying myself as an individual supported by friends and culture”
Introduction
There is a paucity of information about Pacific young people. Evidentially, we are used to working from a few isolated cross-sectional snapshots in time. These are often few and far between and tend to be limited in their focus, design, scope, usefulness and science. The wealth of information provided here is a huge gift to Pacific young people and people working towards their advancement and wellbeing. To have data that can track movement over a five year period is particularly exciting.

This “opinion piece” highlights and briefly summarises the key findings relevant to Pacific youth in this report. This begins with a focus on some of the main health issues identified. It then examines in more detail, the patterns of ethnic disparity found in the report. It then considers the broad trend of improvement in outcomes demonstrated over a five year period in a number of youth health areas. These improvements in outcome are generally experienced by all ethnic groups, including Pacific young people. Notably, despite these improvements, ethnic disparities for Pacific young people remain. A few metaphorical “red flags” are then identified, whereby specific results highlight areas of concern - or questions - that warrant further study.

The opinion piece concludes with a discussion of the implications of the findings and recommendations in three key health areas: sexual health, mental health and the relationship between education and health outcomes for Pacific young people. It is generally concluded that The Health of Pacific Children and Young People in New Zealand is a substantial piece of research that can be used as a solid platform for advancing equitable and optimal health and wellbeing for Pacific young people.

Major Health and Wellbeing Issues for Pacific Young People
This report provides some clear answers to some very fundamental and basic questions. First, what are our Pacific young people, aged 15-24, dying of? The report tells us that the leading cause of mortality (63.2%) between the ages of 15-24 is injury (including suicide). And from all types of injury mortality, suicide (19.1 per 100,000 per year) is the leading cause of death, followed closely by being the vehicle occupant of a transport accident (18.2 per 100,000 per year).

Another fundamental question: What are our Pacific young people most likely to be going to hospital for? We learn from this report that our Pacific young people (aged 15-24) are mostly going to the hospital for pregnancy related issues (45.5%) and for the most part, to give birth (39.6%). This is followed by approximately ten percent of admissions being due to injury. We also learn that amongst young people during 2002-2006, hospital admissions for injuries sustained as a result of an assault were higher than the non-Maori non-Pacific average for all of New Zealand’s largest Pacific groups, with the exception of Tokelauan young people.

Mental health, violence, sexual health and access (e.g. to health care, societal institutions) are critical areas that have been identified as crucial to the health and wellbeing of Pacific young people [64]. This report reaffirms all of these areas as important health issues for Pacific young people.

Ethnic Disparities
This report also reinforces the fact that there are significant differences in health outcomes between Pacific young people and young people of other ethnic groups. Such inequalities between Pacific peoples and the New Zealand European population have been replicated in numerous data-sets and appear to be revalidated with every new study [65], [30]. Poorer outcomes for young Pacific people are evident in the
relatively high rates of teen pregnancies, schizophrenia admissions and injuries arising from assault.

The ethnic disparities are also evident in various determinants of health such as education, employment and living standards. This report shows Pacific young people have proportionally higher rates of leaving school with little or no formal attainment (12.2% in 2006), relatively low rates of leaving school with university entrance qualifications (16.8% in 2006), and markedly high rates of school stand-downs and suspensions (with the highest rate of expulsions). Similarly, the report shows Pacific young people have proportionally higher numbers of people on unemployment benefits, who report lower than average living standards, and who live in significantly more crowded households than other New Zealanders.

There is also a recurring pattern within ethnic differences which is reaffirmed in this report. This pattern dictates that either Pacific or Māori have the poorest health outcomes of all ethnic groups in New Zealand. In this report, the youth findings show that Pacific young people tend to have an ‘intermediary’ profile and that young tangata whenua have, fairly consistently, the poorest youth health profile. NZ European young people, for the most part, enjoy the best health profile and, in some cases, young New Zealanders of Asian and other ethnicities appear to fare better than NZ Europeans; although this is not always the case. The pattern whereby Pacific young people have an ‘intermediary’ profile (between Māori and NZ European) is evident in, for example: daily smoking rates, suspensions and stand-downs, educational attainment at school leaving, injury mortality, teenage pregnancies and benefit recipients.

**Improvements in Outcomes**

In this report, balanced against a fairly negative statistical picture, there are some clear positive gains. The ability to track data over a five year period shows some consistently positive movement. There are upward trajectories for all ethnic groups over the past five years in a variety of areas. This strong gradient of improvement is evident in the following areas:

- Reduction of numbers of young people reliant on benefits
- Higher levels of educational attainment (noticeably since the introduction of NCEA)
- Improved or sustained school retention rates
- A significant decline in daily smoking
- A decline in injury mortality
- A decline in suicide rates

One could also posit that the approach of the “Primary Health Care Strategy” [29] has worked well. Pacific peoples have a high rate (96%) of registration with Primary Health Organisations [30]. Research has shown that there is a predominance of Pacific patients at community governed clinics and that they receive a higher level of service there [39].

Increasingly health promotion, injury prevention, smoking cessation and other important well-being promoting social marketing campaigns and interventions have also been targeted directly at Pacific youth. Understanding the extent to which this makes a difference is a reasonable area for inquiry, particularly given that the pretext was marginalisation, lack of visibility and the same (i.e. mono-cultural) solutions and interventions for all young people.

**A Few Red Flags**

Aside from the major trends and big questions, there were many smaller but significant areas that waved metaphorical red flags within the Report. One of particular concern was the disproportionate proportion of mental health admissions for schizophrenia (48.2%) among Pacific young people. This was followed by schizotypal and delusional disorders (15.1%), which amounted to well over half of all admissions. It is recognised
that there are limitations in focusing on hospital admission data, as opposed to outpatient data, as most mental health care occurs in outpatient settings. Fairly obviously, admission data is information about admission, as opposed to actual burden of illness which provides further limits. There have been concerns about the low rates of visits to mental health services by Pacific peoples, with research showing only one quarter of Pacific peoples with a serious mental disorder accessing mental health care [66]. With all of this taken into account, however, the disproportionate rate of young Pacific peoples presenting with schizophrenia or schizotypal disorders is still an area meriting further focus and better understanding.

Another hotspot is in the area of expulsions from school. When Pacific young people have lower rates of stand-downs, suspensions, why are they over-represented in expulsions?

The most difficult questions are about what lies beneath the admission rates and statistics in the areas of violence, sexual health, mental health and access? This is the challenge that presents itself. Notably, to some extent these areas are all likely to be associated with cultural determinants of health and wellbeing. It is not surprising that a report of this kind leads directly to more questions. And somewhat oxymoronically, when more becomes ‘known’, one becomes more aware of how ‘little’ is known.

Another red flag - although not derived from the data - is the fact that the information collected in this Report does not reflect the burden of chronic diseases likely to face the next generation of Pacific peoples. Lifestyle diseases such as diabetes and coronary heart disease, which affect Pacific peoples disproportionately, for the most part do not appear on the radar in the information collected here [30]. However, lifestyle choices and patterns established in adolescence clearly have implications for chronic diseases in later life [67]. Although this is not captured in young people’s hospital admission data, the extreme burden of chronic diseases among Pacific adults requires that we engage with lifestyle risk factors in the youth population.

Implications of the Findings

Despite the good news of strong, consistent and positive improvements in outcomes, what is also clear from the data is that ethnic disparities have not disappeared. Ethnic differences appear to be deeply embedded within New Zealand society. To use outdated terminology – despite overall improvements in outcomes - the “gaps” between ethnic groups have not closed. Ethnic differences remain entrenched even in the improvements.

What does this mean for us? What kinds of initiatives would lead to equitable gains, what would address/ challenge/ change such well-established patterns of inequalities?

Will there be support for concerted, directed, targeted efforts to propel and accelerate Pacific and Māori young peoples’ outcomes to tip the balance of this inequity?

There has been a political agenda to minimise ethnic differences and swing our focus, instead, to socio-economic determinants. While the data in this report has not been adjusted for NZDep, the relationship between ethnicity and socio-economic status has been carefully examined. In many other analyses, Pacific data has been re-examined and after modelling, controlling, checking for effects and confounding, it is clear that ethnic inequalities for young people exist independently of socio-economic status (e.g. the recently released Youth2000 Pacific Youth Health Report [68]).

What do we do with this kind of information - which is both empowering and disempowering at the same time? In light of the evidence provided here (and elsewhere), political attacks on ‘race-based’ funding appear inconsistent with the best information we have at hand.

What is clear is that we can have renewed confidence in the advice and instruction that diligent attention and due care of the health of young people in New Zealand requires
engaging with ethnicity. In light of the political climate we have been operating within, this evidence-based certainty is a gift. The task at hand is to ensure this gift reaches the hands of Pacific young people.

**Recommendations**

This opinion piece concludes with three recommendations in key health-related areas.

1. The findings show that Pacific young people were most likely to be going to hospital for reproductive and pregnancy related issues. The report also shows higher rates of teen pregnancy among Pacific young people, when compared to NZ-European young people (intermediary compared with Māori). This clearly identifies sexual and reproductive health among Pacific young people as a priority area. It makes sense that efforts are made (and investment is targeted) to promote sexual health and safe sex upstream of pregnancy. Any services developed for young people in this area need to be cognisant of Pacific cultures, as well as of youth culture, recognising young Pacific people straddle (often the contradictions of) both worlds. In addition, the paucity of research about any aspect of sexual health and Pacific young people needs to be immediately addressed.

2. The leading cause of mortality among Pacific young people was injury, with a large proportion of injury mortality being attributable to suicide. The high incidence of suicide, in combination with the finding that almost half of mental health admissions were attributed to schizophrenia, (followed by schizotypal or delusional disorders) strongly indicates that mental health is a priority Pacific youth health area. Once again, a case can be made for earlier interventions and mental health promoting activities to reduce the prevalence of serious disorders and suicide. As stated above, any service or initiative targeting Pacific young people must be cognisant of Pacific cultures, as well as of youth culture, if it is to be responsive to the complexity of young Pacific peoples’ realities.

3. Finally, it is recognised that between 2000 and 2005, educational retention rates and educational attainment rates improved in combination with a reduction in the number of Pacific young people on benefits. This increased participation in education and employment (and corresponding socio-economic benefit) are trends that occurred in conjunction with a decline in suicide rates, injury mortality and smoking. The Youth Development Strategy Aotearoa [69] identifies the importance of meaningful participation, the sense of contributing something to society and young peoples’ belief that they have choices about their future as fundamental to youth development and wellbeing. In broad terms, the findings from this report reinforce that for Pacific young people, positive participation in education and employment is connected to health and wellbeing. The findings suggest that strengthening educational and employment outcomes for Pacific young people may be valid pathways (or viable medium to long-term strategies) towards improving health outcomes. This potentially lends support to unconventionally holistic and radically intersectoral approaches to improving health outcomes for Pacific young people. Exploration of intersectoral relationships (and solutions) is particularly compelling in a context whereby Pacific health disparities parallel considerable socio-economic, educational and employment inequities.

To conclude, this report shows that Pacific young people have specific health needs, and a profile of risk and protective factors, different from other ethnic groups. For a long time we’ve recognised that the determinants of health of Pacific young people involves a complex interaction of risk and protective factors. The report provides new insights and more advanced understandings of the dynamics for Pacific young people. It imperative that the next steps are taken: first, that this knowledge is translated meaningfully into responsive targeted action; second, that the knowledge in this report is advanced and extended via further research.
Executive Summary
Tables
Executive Summary Tables

The following summary tables provide a brief overview of each of the indicators contained in *The Health of Pacific Children and Young People in New Zealand*. For more detail in each of these areas the reader is directed to the full report.

Table 1. Overview of the Health of Pacific Children and Young People in NZ

<table>
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<tr>
<th>Stream</th>
<th>Current Indicators</th>
<th>Distribution and Trends for New Zealand’s Pacific Children and Young People</th>
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<tr>
<td>Demography and the Measurement of Ethnicity</td>
<td>In New Zealand during 2002-06, 43,760 babies were born who were identified as belonging to a Pacific group. Of these, 44.4% belonged solely to one Pacific group and 8.2% belonged to 2+ Pacific groups. An additional 12.2% were also identified as being Māori, 11.8% as European and 1.8% as Asian / Indian / Other, with the remaining 21.6% belonging to 3+ ethnic groups, of which at least one was Pacific. While these figures reflect the ethnic diversity of NZ’s population today, they also pose a number of challenges for anyone attempting to review the health of NZ’s Pacific children and young people. In particular, they highlight the potential for ethnic disparities to change depending on the ethnicity definitions used. In order to address this diversity, a number of ethnicity classifications have been used in this report. While all are based on self-identified concepts of ethnicity, each differs in the way in which it deals with those with multiple ethnic affiliations:</td>
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<td>1. Prioritised Level 1 Ethnicity: Where comparisons with other ethnic groups are required, this report utilises Statistics NZ’s Level 1 Prioritised Ethnicity, which recognises 5 ethnic groups: European, Māori, Pacific Island, Asian (including Indian) and Other. For those reporting multiple ethnic affiliations, ethnicity is prioritised in the following order: Māori &gt; Pacific &gt; Asian &gt; Other &gt; European, so that each child or young person is only assigned to a single ethnic group [70]. While convenient for the purposes of analysis, this process results in the loss of a small but significant proportion of Pacific children and young people to the Māori ethnic group (in both the numerator and the denominator).</td>
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<td>2. Any Pacific: Where a Pacific focused analysis is required which seeks to incorporate the ethnic heterogeneity of NZ’s Pacific population, this report utilises an Any Pacific classification, which includes those identifying as Pacific in ANY of their first 3 ethnic groups. This system includes anyone identifying as Pacific in the broader sense and provides a larger and more stable numerator and denominator for statistical analysis. Because the Any Pacific group includes those with multiple ethnic affiliations, health disparities are often less than for the Sole Pacific Category. In addition, as a single individual may appear in more than one Any Pacific group when a Level 2 (e.g. Samoan, Tongan) analysis is undertaken, outcomes for Level 2 Any Pacific groups cannot be directly added to produce an overall total. (Note: This classification is often called Total Response in Ministry of Health Publications).</td>
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<td>3. Sole Pacific: Where a Pacific focused analysis is required which seeks to discount the ethnic heterogeneity of NZ’s Pacific population, this report utilises a Sole Pacific classification, which includes only those identifying solely with one Pacific Island group. This system results in greater homogeneity, as there is no admixture with other ethnic groups, and health disparities tend to be greater than if the Any classification is used. The Sole Pacific classification results in a much smaller and statistically less stable numerator and denominator however and in addition, potentially fails to take into account the ethnic diversity of NZ’s Pacific child and youth population.</td>
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</table>

In addition, a number of analyses have also been provided by agencies from outside of the health sector (e.g. Education, MSD, Police), each of which has its own way of classifying ethnicity information.
## Demography and the Measurement of Ethnicity

### Demographic Profile

The Pacific population in New Zealand is becoming increasingly ethnically diverse, with large numbers of Pacific children and young people simultaneously identifying with other ethnic groups. Despite these differences, the majority of Pacific children and young people in New Zealand share a very similar demographic profile, with higher proportions living in the Wider Auckland Region, and in areas characterised by relative socioeconomic deprivation. The relative youth of the New Zealand Pacific population also suggests that the issues facing Pacific children and young people may potentially have a much greater impact on the Pacific population as a whole, than occurs for other ethnic groups.

## Socioeconomic and Cultural Determinants

### Religious Affiliation

Religion plays an important role in Pacific societies, and is incorporated into the mottos of a number of Pacific nations. In New Zealand during 2006, the vast majority of Pacific young people identified with a Christian religion, although the denomination varied from Pacific group to Pacific group. In addition, there was considerable variation between Pacific groups in terms of the number of young people who identified with no religion, with the proportion being lowest for Tongan young people (Sole 1.9%; Any 7.3%) and highest for Cook Island Māori young people (Sole 18.0%; Any 25.7%). Even for (Any) Cook Island young people however, rates were lower than for non-Pacific groups, where 47.1% stated they had no religion.

### Pacific Language Retention

Language is an important part of an ethnic group’s cultural identity. It is embedded within the values, beliefs and norms of the groups who use it. For many migrants, maintaining one’s first language and passing it on to the next generation is perceived as important to both cultural and personal well-being, in that it ensures that traditions, customs and protocols are preserved. In New Zealand during 2006, the proportion of Pacific young people able to hold an everyday conversation in their own Pacific language varied, with the highest rates being seen in Samoan and Tongan young people, and lower rates being seen in Niue and Cook Island Māori young people. For NZ, preserving linguistic diversity is increasingly being considered an issue of social responsibility, with a range of initiatives such as Pacific language nests and subsidized community broadcasting being put in place to increase Pacific language retention.

### Children in Families with Restricted Socioeconomic Resources

During 1988-2004, New Zealand saw large increases in the number of Pacific families living below the poverty line, and while improvements have occurred during the past decade, the proportion of Pacific families living below the poverty line has not yet recovered to 1987-1988 levels. In addition, the relative socioeconomic position into which Pacific babies are born (measured by NZDep) has not changed appreciably during the past decade (although no conclusions can be drawn about the absolute socioeconomic position of Pacific babies from these figures). Finally, the New Zealand Living Standards survey suggested that 30% of Pacific families with dependent children in 2004 lived in severe hardship, with many families having to postpone doctors and dentists visits due to cost and a number being unable to afford wet weather gear, or a separate bed for their children.
<table>
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<tr>
<td>Economic Standard of Living</td>
<td>Children Reliant on Benefit Recipients</td>
<td>While no ethnic specific data was available, during 2000-2007 the % of New Zealand children &lt;18 years dependent on a benefit recipient fell from 27.0% to 19.3%. A large % of this decrease was due to a fall in the number relying on unemployment benefit recipients. While the % of children reliant on DPB recipients also fell, more rapid declines in those reliant on unemployment benefits meant that in relative terms, the % of benefit dependent children relying on DPB recipients actually increased during this period. During 2007, it was younger children who were disproportionately reliant on benefit recipients, with rates being highest for those &lt;6 years and then tapering off gradually through childhood and more rapidly after 11 years of age. While the number of children reliant on benefit recipients may not correlate precisely with the number living below the poverty line, they do reflect a particularly vulnerable group with higher health and support needs and tracking changes in their distribution over time may be of value in predicting future health service demand.</td>
</tr>
<tr>
<td></td>
<td>Young People Reliant on Benefits</td>
<td>In New Zealand during 2000-2007, there was a steep decline in the % of Pacific young people receiving unemployment benefits, while the % receiving domestic purposes benefits declined more slowly and the % receiving invalid’s benefits increased. While reductions in the number of Pacific young people reliant on unemployment benefits are encouraging and potentially reflect greater employment and training opportunities, those remaining on income tested benefits nevertheless represent a high needs group, who may warrant further consideration in future planning and strategy development.</td>
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<tr>
<td></td>
<td>Household Crowding</td>
<td>In New Zealand during 2006, 49.9% of Pacific children lived in crowded households, as compared to 16.4% of children nationally. Household crowding was higher for Pacific &gt; Māori &gt; Asian / Indian &gt; European children during this period. There were also marked socioeconomic differences, with household crowding rising progressively as the degree of NZDep deprivation increased. Even once household crowding was broken down by NZDep decile, a higher % of Pacific children and young people lived in crowded households than did Māori and Asian / Indian &gt; European children and young people, with 61.8% of Pacific children in the most deprived areas living in households requiring one or more additional bedrooms during 2006.</td>
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<tr>
<td></td>
<td>Prior Participation in Early Childhood Education</td>
<td>In NZ, Early Childhood Education (ECE) is provided in a variety of settings ranging from Kindergartens and Te Kohanga Reo, to services that cater for the needs of working parents. In New Zealand during 1990-2006, the number of children enrolled in ECE increased by 55.8%, with the largest increases being in Education and Care Services, Home Based Services and License Exempt Playgroups. In contrast, enrolments in Pacific Island Early Childhood Groups declined by 56.8%. Despite this, during 2000-2006, the % of Pacific new entrants (Year 1) reporting prior participation in ECE increased from 76.1% to 84.2% and while rates remained higher for European &gt; Asian / Indian &gt; Māori &gt; Pacific children and those attending the most affluent schools, in absolute terms rates increased most rapidly for Pacific children during this period.</td>
</tr>
<tr>
<td></td>
<td>Educational Attainment at School Leaving</td>
<td>In New Zealand since the introduction of the NCEA in 2002, the % of Pacific students leaving school with a UE standard has increased, while the % leaving with little or no formal attainment has declined. Care must be taken when interpreting these trends however, as the old and new qualification structures may not be strictly comparable. Despite these improvements, the % of Pacific young people leaving school with little or no formal attainment has remained intermediate between that of Māori and European students, while the % attaining a UE standard has remained lower than for Asian / Indian and European students. Such differences are of concern, as they are likely to significantly influence the socioeconomic environments in which the current generation of Pacific young people bring up their own families in future years.</td>
</tr>
</tbody>
</table>
During the past decade, senior secondary retention rates for Pacific students remained higher than for Māori students and for the majority of this period, were also higher than for New Zealand as a whole. Care must be taken when interpreting these differences however, as rates are very sensitive to migratory inflows. Trends in retention need also to be viewed in the context of the alternative educational opportunities available, with the participation of Pacific students in Certificate Level 1-3 courses increasing from 47.0 per 1,000 in 2001 to 70.3 per 1,000 in 2005. There were also steady longer term increases in the proportion of Pacific students participating in bachelor level study during 2001-2005. While much of this increase was in the 25+ age group, such figures suggest that for many, participation in education does not cease at school leaving, although the income premiums achieved for completing various types of study need to be taken into consideration when assessing the longer term impacts educational participation has on future socioeconomic security.

Participation in secondary school is vital for academic achievement and factors which disrupt participation potentially impact on educational outcomes. In New Zealand schools, stand-downs, suspensions, exclusions and expulsions are ways the system deals with student behaviour that disrupts the wellbeing of other students or staff. During 2006, the main reasons for the suspension of Pacific students were for physical assaults on other students or staff, continual disobedience and drug use. During 2000-2006, stand-downs, suspensions, exclusions and expulsions for Pacific students all increased, and while stand-down, suspension and exclusion rates remained intermediate between those of Māori and European students, expulsion rates for Pacific students were higher than for other ethnic groups for the majority of this period.

A strong primary health care system is central to improving the health of New Zealanders and tackling inequalities in health. In New Zealand Primary Health Organisations (PHOs) have become the primary vehicle via which first-level health services are accessed. In the last quarter of 2006, 98% of children and 93% of young people were enrolled with a PHO. The lowest enrolment rates were seen in children <1 year (75%), and in Asian/Indian young people 15-24 years (54%). In addition, the Ministry of Health recommends participation in Tamariki Ora Well Child Visits. Plunket is the leading Well Child Provider in New Zealand and enrolls over 90% of infants born in New Zealand [71]. Of children enrolled with Plunket who turned 1 year in 2006, 98% had attended at least 2 of their scheduled 5 Core Visits, and 77% had attended 4 or 5. Māori and Pacific children and those in the more deprived areas are less likely to attend core Well Child visits, with participation also decreasing with increasing age. Those living in the most deprived areas however, attend more additional visits, and on average receive a greater total number of Well Child visits than those living in more affluent areas.

Breastfeeding meets a term infant's nutritional needs for the first 4-6 months of life, as well as providing protection against a wide range of infections and non-infectious diseases [72]. During June 2005-2006, breastfeeding rates for Pacific babies at <6 weeks, 3 months and 6 months were lower than for European / Other babies, but were similar to those of Māori babies. Despite these differences, there was a marked tapering off in exclusive / full breastfeeding rates for all ethnic groups as infants age increased. There were also socioeconomic differences in the proportion of babies exclusively or fully breastfed during this period, with rates at all three ages being higher for babies in the most affluent areas.
### Overweight and Obesity

A review of New Zealand data suggests that:

**Prevalence:** While estimates vary from study to study, New Zealand data collected since 2000 suggests that approximately 20% of New Zealand children are overweight and 10% are obese. In addition, survey data suggest that approximately 60% of Pacific children aged 5-14 years are either overweight or obese and that in comparative terms rates of overweight and obesity amongst Pacific children are higher than for Māori > European children. These findings however must be viewed within the context of an earlier average age of puberty for Pacific and Māori girls, as well as ethnic differences in the ability of BMI to approximate total body fat composition.

**Trends over Time:** Of the 2 studies which have tracked the pace of the obesity epidemic amongst Intermediate School aged children in NZ, both suggest that it is progressing relatively rapidly, with the proportion of children who are overweight or obese increasing 2-3 fold over the past decade.

**Socioeconomic Disparities:** The New Zealand Children’s Nutrition Survey also suggested that overweight and obesity exhibit a modest socioeconomic gradient, with rates being higher amongst those living in the most deprived areas.

### Nutrition

The Children’s Nutrition Survey provided a number of insights into the nutritional intake of New Zealand children which may be of value in addressing the obesity epidemic in Pacific children and young people. These include:

1. Ethnic differences in total energy intake did not appear to explain ethnic differences in obesity, with Māori children having higher total energy intakes than European or Pacific children, yet Pacific children having the highest obesity rates. In addition, while socioeconomic gradients in obesity were prominent, socioeconomic gradients in total caloric intake were less marked. In contrast, the % of the daily intake derived from fat did correspond more closely with ethnic differences in obesity, being higher for Pacific and Māori children.

2. While the majority of children brought the food they consumed at school from home this declined as children grew older. In addition, a higher % of Pacific and Māori children and those living in the most deprived areas relied on school canteens or local food outlets. Such differences are concerning in the context of data suggesting that many items currently offered in school canteens and takeaway outlets do not support healthy food choices.

3. Even in the context of the current obesity epidemic, food security remained an issue for Pacific and Māori families, as well as larger families and those living in the most deprived areas, with many saying that they could not always afford to eat properly, and that they often or sometimes ran out of food. That those with the greatest food security issues (Pacific > Māori > European / Other, Least Affluent > Most Affluent) also experienced the highest rates of childhood overweight and obesity, suggests further research is needed to assess the impact that affordability of healthy food has on the current obesity epidemic.
Nutrition, Growth and Physical Activity

**Physical Activity**

The New Zealand Children’s Nutrition Survey (CNS02) provides limited information on physical activity in children, while the New Zealand Sport and Physical Activity Surveys (NZSPAS) have monitored children’s participation in active sport and leisure since 1997. While methodological differences mean that the findings of these two surveys cannot be directly compared, a number of themes emerged from these surveys:

1. Approximately 32% of New Zealand children 5-17 years are inactive (NZSPAS).
2. Girls are more likely to be inactive than boys (NZSPAS and CNS02).
3. The proportion of children and young people who are inactive increases with age (NZSPAS and CNS02).
4. Physical activity levels in children and young people are influenced by parental activity levels (NZSPAS).
5. During 1997-2001, physical activity levels in New Zealand children and young people may have declined (NZSPAS).

In addition, an apparent contradiction emerged related to ethnic differences in physical activity, with the CNS02 suggesting that European/Other children were the most inactive group, while the NZSPAS suggested that Pacific children were at greatest risk. In interpreting these findings, it must be remembered that these surveys used different methodologies, with the CNS02 interviewing children about their daily activity levels and incidental physical activity (e.g. travel to school), while the NZSPAS was based on parental report regarding participation in sports and active leisure. It is thus possible that the CNS02 more readily captured elements of children’s day to day activity, while the NZSPAS emphasised those elements relating to organised sport. In addition, the CNS02 combined European and Asian children into a single group, whereas the NZSPAS suggested that these two groups were quite different. Despite these limitations, these findings suggest that a significant minority of Pacific children and young people in New Zealand are either sedentary or relatively inactive and that there is significant potential to achieve gains in the context of the current obesity epidemic.

Exposure to Cigarette Smoke in the Home

In New Zealand during 2006, Action for Smoking and Health (ASH) Surveys suggested that 49.2% of Pacific Year 10 students had a parent who smoked, with smoking rates for Pacific parents being intermediate between those of Māori and European parents. Exposures were also higher for students attending schools in the most deprived areas. While socioeconomic and ethnic differences were also observed for exposure to smoke in the home, exposures were lower than parental smoking rates might predict, potentially suggesting the presence of in-house non-smoking practices for families of all socioeconomic and ethnic groups. Data from the 2006 Census painted a similar picture, with 48.1% of Pacific children living in a household with a smoker and exposures being intermediate between those of Māori and European children. Rates were also significantly higher for those in the more deprived areas.

Tobacco Use in Young People

In New Zealand during 1999-2006, Action for Smoking and Health (ASH) Surveys suggest that daily smoking rates for Pacific students declined, with rates for girls falling by 44% and rates for boys falling by 46%. While smoking rates for other ethnic groups also declined, rates for Pacific students remained intermediate between those of Māori and European students. Once broken down by Pacific ethnic group and gender, daily smoking rates during 2004-2006 were highest for Cook Island > Tongan > Niue and Samoan > Other Pacific girls. In contrast, daily smoking rates were highest for Niue > Cook Island > Tongan > Samoan > Other Pacific boys. Data from the 2006 Census suggested that 24.6% of Pacific young people aged 15-24 years smoked regularly, as compared to 21.8% of young people nationally, with smoking rates again being intermediate between those of Māori and European young people.
**Substance Use**

**Alcohol Related Harm**

In New Zealand during 2002-2006 (using prioritised ethnicity), alcohol related hospital admissions for Pacific young people were *significantly lower* than for Māori and European young people. Admissions were *significantly higher* however, for males and those in the more deprived areas. During the same period (using the Sole / (Any) classification), alcohol related hospital admissions for Pacific young people were similar to those for non-Māori non-Pacific young people in each of the Sole and (Any) Groups (with the exception of (Any) and Sole Fijian and Sole Cook Island Māori young people, where rates were *significantly higher*). Significant methodological constraints however must be taken into consideration when interpreting this data, as with the removal of emergency department cases, these figures reflect the more severe end of spectrum. In addition, it is likely these figures represent an undercount, as they rely on hospital staff at the time of discharge listing alcohol as a contributory cause, something which may occur inconsistently across the country.

**Individual and Whanau Health and Wellbeing**

**Most Frequent Causes of Hospital Admission And Mortality**

During 2000-2004, congenital anomalies and SIDS were the leading causes of post-neonatal mortality for (Any) Pacific babies, while injury / poisoning was the leading cause of mortality for both children and young people. During 2002-2006, the most frequent reasons for acute hospital admissions in (Any) Pacific children were bronchiolitis, injury / poisoning and pneumonia; for arranged admissions they were cancer / chemotherapy and injury / poisoning; and for waiting list admissions they were for the insertion of grommets, followed by dental procedures. For (Any) Pacific young people pregnancy and childbirth were the leading reasons for hospital admission. In terms of other hospital admissions, injury / poisoning and skin infections were the leading reasons for acute admissions; injury / poisoning followed by cancer / chemotherapy the leading reasons for arranged admission; and removal of internal fixation devices, followed by dental procedures the leading causes of waiting list admissions.

**Family Composition**

In New Zealand during the past 25 years, there has been a marked shift away from two-parent families, with the proportion of single parent families increasing from 10.4% in 1976 to 29.2% in 2001. During 2006, 30.8% of Pacific children <15 years lived in sole parent households, compared to 25.2% nationally. Similarly 69.2% of Pacific children lived in two parent households compared to 74.8% nationally. There were marked socioeconomic and ethnic differences in the % of children living in sole parent households during this period, with rates being *significantly higher* for Māori > Pacific > European and Asian / Indian children and those in the most deprived areas. Once broken down by NZDep, the % of Pacific children living in sole parent households was intermediate between those of Māori and Asian / Indian children. When compared to European children however, the pattern was more inconsistent, with a higher % of Pacific children living in sole parent households in more affluent areas, but a lower % living in sole parent households in the more deprived (NZDep decile 9-10) areas.
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| Perinatal and Infancy | Low Birth Weight: SGA and Preterm Birth                 | **SGA Birth**: During 2002-2006 (using prioritised ethnicity), rates of SGA were *significantly* higher for Asian / Indian > Māori > European > Pacific babies and those in the more deprived areas. During the same period (using the Sole / (Any) classification), SGA rates were *significantly* higher for Sole and (Any) Cook Island Māori babies than they were for non-Māori non-Pacific babies. In contrast, SGA rates for Sole and (Any) Tongan and Samoan babies were *significantly lower* than for non-Māori non-Pacific babies.  
**Preterm Birth**: During 2002-2006 (using prioritised ethnicity), rates of preterm birth were *significantly higher* for Māori > European and Pacific babies, males and those in the more deprived areas. During the same period (using the Sole / (Any) classification), preterm birth rates were *significantly higher* for Sole and (Any) Cook Island Māori babies than they were for non-Māori non-Pacific babies. In contrast, preterm birth rates were similar to non-Māori non-Pacific babies for the other Pacific groups, with the exceptions of (Any) Tongan and Sole Samoan babies, where rates were *significantly lower*. |
| Infant Mortality    | Neonatal Mortality: In New Zealand during 2000-2004, the most frequent causes of neonatal mortality in (Any) Pacific babies were extreme prematurity and congenital anomalies. Risk of mortality from congenital anomalies was *significantly higher* for Pacific than for European infants. Risk was also *significantly higher* for those living in the most deprived areas. Risk of mortality from extreme prematurity / perinatal conditions was *significantly higher* for Pacific than for European or Asian / Indian infants. Risk was also *significantly higher* for males and those living in the most deprived areas.  
**Post-Neonatal Mortality**: During 2000-2004, the most frequent causes of post-neonatal mortality in (Any) Pacific babies were congenital anomalies and SIDS, followed by suffocation / strangulation in bed. Risk of SUDI (a composite category combining SIDS, suffocation / strangulation in bed and unspecified causes) was *significantly higher* for Māori > Pacific > European and Asian / Indian infants and those in the more deprived NZDep areas. |
<p>| Well Health         | Immunisation                                            | Immunisation is among the most successful and cost-effective public health interventions and access to immunisation is a priority population objective of the New Zealand Health Strategy [73, 74]. Survey data suggests that NZ’s immunisation coverage rates have improved over the past two decades, with the proportion of children fully immunised at 2 years increasing from &lt;60% in 1991/92 to 77% in 2005. During the second quarter of 2007, data from the National Immunisation Register suggested that 54.2% of Pacific children were fully immunised at 6 months, 78.1% at 12 months and 60.3% at 18 months of age and that coverage rates for Pacific children were intermediate between those of Māori and European children. |
|                     | Hearing Screening                                       | Hearing in infants and young children is essential for speech and language development and its loss during early life may lead to disability, the extent of which depends on the severity and timing of the loss. While the proportion of Pacific children failing their school entry audiometry tests declined during 2002-2006, rates remained persistently higher than for European and Asian children. Adequate referral and follow up for children failing their audiometry tests is essential, in order to ensure that they reach their full potential during their early years of education. |</p>
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<tr>
<td>Well Health</td>
<td>Oral Health</td>
<td>During 2006, School Dental Service data indicate 85.9% of Pacific children aged 5 years had access to fluoridated school drinking water. During 2002-2006, a higher proportion of Pacific children were caries free in schools with fluoridated water supplies. While the proportion of Pacific children who were caries free in fluoridated areas declined, the proportion who were caries free in non-fluoridated areas was more static. Throughout this period, a lower proportion of Pacific and Māori children were caries free at 5 years than European children, in both fluoridated and non-fluoridated areas. Similarly, mean DMFT scores were lower for Pacific children in fluoridated areas. Mean DMFT scores at 12 years for Pacific children in fluoridated areas rose, while mean DMFT scores in non-fluoridated areas were more static. In comparative terms, Māori and Pacific children had higher mean DMFT scores at 12 years than European children, in both fluoridated and non-fluoridated areas.</td>
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<tr>
<td>Safety</td>
<td>Total and Unintentional Injuries</td>
<td>All Injuries: In New Zealand during 2002-06, falls followed by inanimate mechanical forces were the leading causes of injury related hospital admission for (Any) Pacific children, while the order was reversed for (Any) Pacific young people. Transport related injuries as a group made a significant contribution in both age groups. In contrast, during 2000-2004, accidental threats to breathing, followed by transport accidents were the leading causes of injury related mortality for (Any) Pacific children, while transport accidents, followed by suicide were the leading causes for (Any) Pacific young people. Unintentional Non-Transport Injuries: During 2002-2006 (using prioritised ethnicity), unintentional non-transport injury admissions were significantly higher for Pacific and Māori &gt; European &gt; Asian Indian children and young people, males and those in the more deprived areas. During the same period (using the Sole / (Any) classification), admissions for children in each of NZ's largest Sole Pacific groups, as well as those in the (Any) Samoan and Tongan groups, were significantly higher than for non-Māori non-Pacific children. Admissions for (Any) Cook Island Māori, Niue and Tokelauan children however, were significantly lower. Similarly, admissions for young people in each of NZ's largest Sole Pacific groups were significantly higher than for non-Māori non-Pacific young people, as were admissions for (Any) Samoan, Tongan and Fijian young people. Land Transport Injuries: During 2002-2006 (using prioritised ethnicity), land transport injury admissions were significantly higher for Māori &gt; European &gt; Pacific &gt; Asian / Indian children and young people, males and those in the more deprived areas. During the same period (using the Sole / (Any) classification), admissions for (Any) Samoan, Tongan, Cook Island Māori and Niue children were significantly lower than for non-Māori non-Pacific children, while admissions for Sole Pacific groups were similar (with the exception of Sole Fijian children, where rates were significantly higher). Similarly, admissions for young people in each of NZ's largest (Any) Pacific groups (with the exception of “Other” Pacific) were significantly lower than for non-Māori non-Pacific young people, as were admissions for Sole Samoan, Tongan and Cook Island Māori young people.</td>
</tr>
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</table>
### Injuries Arising from Assault

**Children 0-14 Years:** In New Zealand during 2002-2006 (using prioritised ethnicity) admissions for the assault, neglect or maltreatment of children were *significantly higher* for Pacific and Māori > European and Asian / Indian children, males and those in more deprived areas. During the same period (using the Sole / (Any) classification), admissions were *significantly higher* for Sole and (Any) Samoan, Tongan, Cook Island Māori and Fijian children than for non-Māori non-Pacific children. Most differences between individual Pacific groups however, did not reach statistical significance.

**Young People 15-24 Years:** During 2002-2006 (using prioritised ethnicity), assault admissions were *significantly higher* for Māori and Pacific > European > Asian / Indian young people and those in the most deprived areas. During the same period (using the Sole / (Any) classification), assault admissions for Pacific young people were *significantly higher* than for non-Māori non-Pacific young people in each of the Sole and (Any) Groups (with the exception of Tokelauan young people, where rates were similar). Most differences between individual Pacific groups however did not reach statistical significance.

### CYF Notifications

In NZ, the agency with the statutory responsibility for protecting children from recurrent abuse is Child Youth and Family (CYF), who receive notifications from a variety of sources including the police, the education and health sectors, families / whanau and the general public. During 2006, there were 68,681 notifications recorded by CYF, with 65.6% requiring further investigation. While this reflects an increase since 2001, when 28,012 notifications were recorded, the % requiring further investigation declined. Of the notifications investigated further during 2001-2006, a large % resulted in no abuse being found, with the numbers in this category increasing as the period progressed. Nevertheless, recent evidence suggests that only 20% of avoidable child deaths in New Zealand are known to CYF and it is likely that many of the victims of child abuse presenting to health care settings in New Zealand each year remain undetected [75]. While at the time of writing, no ethnic specific data was available from CYF, the available evidence would suggest that these issues are at least of as much concern for Pacific children and thus further effort is required to ensure that their health and safety needs are met.

### Family Violence

In New Zealand during 2006, 9.6% of the victims of family violence incidents attended by police (where ethnicity was recorded) were Pacific, although data limitations precluded the calculation of ethnic specific rates. During this period, children were present at 51.5% of the family violence incidents attended by Police. In addition, in 50% of cases the victim was the spouse / partner of the offender, with a further 23% having been in a previous relationship and in 15% of cases the conflict was between a parent and child. While in 82% of cases injuries were not reported, in 526 cases (0.85%) a hospital attendance was required and in 23 cases (0.04%) the incident resulted in a death. While it is difficult to use Police data to comment on trends in the prevalence of family violence amongst Pacific families over time, what Police data does suggest is that a large number of family violence incidents are occurring in New Zealand each year and that Pacific children and young people are likely to be present at a significant minority of these.

### Infectious Diseases

**Serious Bacterial Infections**

In New Zealand during 2002-2006, the most common reason for a serious bacterial infection admission in (Any) Pacific children and young people was for skin infections, which accounted for 73.7% of admissions in this category. During 2002-2006 (using prioritised ethnicity), admissions were *significantly higher* for Pacific > Māor i > European > Asian / Indian children and young people, males and those in the more deprived areas. Using the Sole / (Any) classification, admissions for Pacific children and young people were *significantly higher* than for non-Māori non-Pacific children and young people in each of the Sole and (Any) Groups. Within the (Any) Category, admissions were *significantly higher* for Samoan, Tongan and Tokelauan children and young people than for Cook Island Māori, Niue and Fijian children and young people, while within the Sole Category, admissions were *significantly higher* for Samoan, Tongan and Tokelauan children and young people than for Cook Island Māori and Fijian children and young people.
### Meningococcal Disease

In New Zealand during 2002-2006 (using prioritised ethnicity), hospital admissions for meningococcal disease were *significantly higher* for Pacific > Māori > European > Asian / Indian children and young people, males and those in more deprived areas. While similar ethnic differences were seen during 1996-2006, in absolute terms admissions declined most rapidly for Pacific children and young people during this period.

Similarly during 2002-2006 (using the Sole / (Any) classification), meningococcal disease admissions for Pacific children and young people were *significantly higher* than for non-Māori non-Pacific children in each of the Sole and (Any) Groups (with the exception of Tokelauan and Sole Fijian children and young people where small numbers precluded a valid comparison). Within the (Any) Category, admissions were *significantly higher* for Tongan children and young people than for Samoan, Cook Island Māori and Niue children and young people, while within the Sole Category, admissions were *significantly higher* for Tongan children and young people than for Samoan and Cook Island Māori young people.

### Rheumatic Fever

**Acute Rheumatic Fever:** During 2002-2006 (using prioritised ethnicity), acute rheumatic fever admissions were *significantly higher* for Pacific > Māori > European and Asian / Indian children and young people, males and those in the more deprived areas. Using the Sole / (Any) classification, acute rheumatic fever admissions were *significantly higher* than for non-Māori non-Pacific children and young people in each of the Pacific Sole and (Any) Groups (with the exception of Fijian children and young people where small numbers prevented a valid analysis).

**Rheumatic Heart Disease:** During 2002-2006 (using the Sole / (Any) classification), rheumatic heart disease admissions were *significantly higher* than for non-Māori non-Pacific children and young people in each of the Pacific Sole and (Any) Groups (with the exception of Fijian, Tokelauan and Sole Niue children and young people where small numbers prevented a valid comparison).

### Skin Infections

During 2002-2006 (using prioritised ethnicity), hospital admissions for serious skin infections were *significantly higher* for Pacific > Māori > European > Asian / Indian children, males and those in more deprived areas. Admissions in young people were significantly higher for Pacific and Māori > European > Asian / Indian young people, males and those in the more deprived areas. Similar ethnic differences were seen during 1996-2006, with admissions increasing for all ethnic groups during this period.

During 2002-2006 (using the Sole / (Any) classification), serious skin infection admissions were *significantly higher* than for non-Māori non-Pacific children in each of the Pacific Sole and (Any) Groups. Within the (Any) Category, admissions were *significantly higher* for Samoan, Tongan and "Other" Pacific children than for Cook Island Māori, Niue, Tokelauan and Fijian children. Within the Sole Category however, differences between individual Pacific groups were less marked. In contrast, only admissions for (Any) and Sole Samoan, Tongan and "Other" Pacific young people and Sole Tokelauan and Niue young people were *significantly higher* than for non-Māori non-Pacific young people. Similarly during 1996-2006, admissions were consistently higher for Tongan and Samoan children and young people than for Cook Island Māori children and young people in both the Sole and (Any) Categories.
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<tr>
<td>Infectious Diseases</td>
<td>Tuberculosis</td>
<td>In New Zealand during 2002-2006, TB admissions were significantly higher for Asian / Indian and Pacific &gt; Māori &gt; European children and young people, females and those in the more deprived areas. During the same period (using the Sole / (Any) classification), TB admissions for Pacific children and young people were significantly higher than for non-Māori non-Pacific children in each of the Sole and (Any) Groups, with the exception of (Any) Niue children and young people (small numbers prevented valid comparisons for Fijian and Tokelauan children and young people). Within the (Any) Category, admissions for Tongan and “Other” Pacific children and young people were significantly higher than for Samoan and Cook Island Māori children and young people. Within the Sole Category, admissions for “Other” Pacific children and young people were significantly higher than for other Pacific groups.</td>
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<td></td>
<td>Gastroenteritis</td>
<td>In New Zealand during 2002-2006 (using prioritised ethnicity), gastroenteritis admissions were significantly higher for Pacific &gt; Asian / Indian &gt; European &gt; Māori children, males and those in more deprived areas. During the same period (using the Sole / (Any) classification), gastroenteritis admissions for all Pacific groups in the Sole Category (with the exception of Sole Tokelauan children), were significantly higher than for non-Māori non-Pacific children. In the (Any) Category, gastroenteritis admissions were significantly higher for Samoan, Tongan and Fijian children than for non-Māori non-Pacific children. In contrast, admission rates for (Any) Cook Island Māori, Niue and Tokelauan children were significantly lower.</td>
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<tr>
<td>Lower Respiratory Morbidity &amp; Mortality</td>
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<td>In New Zealand during 1990-2006, hospital admissions for lower respiratory conditions in children remained relatively static, with large declines in admissions for asthma being offset by large increases in admissions for bronchiolitis. During 2002-2006, these two conditions accounted for 63.5% of lower respiratory admissions amongst (Any) Pacific children. During 2002-2006 (using prioritised ethnicity), admissions for lower respiratory infections were significantly higher for Pacific &gt; Māori &gt; European &gt; Asian / Indian children, males and those in the most deprived areas. During the same period (using the Sole / (Any) classification), admissions for Pacific children were significantly higher than for non-Māori non-Pacific children in each of the Sole and (Any) Groups. Within the (Any) Category, admissions were significantly higher for Tongan and Samoan children than for Cook Island Māori, Niue, Fijian &amp; Tokelauan children. Within the Sole Category, admissions for Niue, Tongan and Samoan children were significantly higher than for Cook Island Māori, Fijian and Tokelauan children.</td>
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<tr>
<td>Respiratory Diseases</td>
<td>Bronchiolitis</td>
<td>During 2002-2006 (using prioritised ethnicity), hospital admissions for bronchiolitis were significantly higher for Pacific &gt; Māori &gt; European &gt; Asian / Indian infants, males and those in the most deprived areas. During 2002-2006 (using the Sole / (Any) classification), bronchiolitis admissions for Pacific infants were significantly higher than for non-Māori non-Pacific infants in each of the Sole and (Any) Groups. Within the (Any) Category, admissions were significantly higher for Tongan and Samoan infants than they were for Cook Island Māori, Niue, Fijian and Tokelauan infants. Similarly, within the Sole Category, admissions were significantly higher for Niue, Samoan and Tongan infants than they were for Cook Island Māori and Fijian infants.</td>
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<td></td>
<td>Pertussis</td>
<td>In New Zealand during 2002-2006 (using prioritised ethnicity), hospital admissions for pertussis were significantly higher for Pacific and Māori &gt; European &gt; Asian / Indian infants and those in the more deprived areas. During the same period (using the Sole / (Any) classification), pertussis admissions for Pacific infants were significantly higher than for non-Māori non-Pacific infants in each of the Sole and (Any) Groups (with the exceptions of Fijian and Tokelauan infants, where small numbers prevented a valid comparison). Within the (Any) and Sole categories however, the majority of differences between individual Pacific groups did not reach statistical significance.</td>
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Respiratory Diseases

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<td>Pneumonia</td>
<td>In New Zealand during 2002-2006 (using prioritised ethnicity), hospital admissions for pneumonia were <em>significantly higher</em> for Pacific &gt; Māori &gt; European and Asian / Indian children, males and those in the most deprived areas. During the same period (using the Sole / (Any) classification), pneumonia admissions for Pacific children were <em>significantly higher</em> than for non-Māori non-Pacific children in each of the Sole and (Any) Groups. Within the (Any) Category, pneumonia admissions for Tongan and Samoan children were <em>significantly higher</em> than for Cook Island Māori, Niue, Fijian and Tokelauan children. Within the Sole Category, pneumonia admissions for Cook Island Māori children were <em>significantly lower</em> than for Tongan, Samoan or Niue children.</td>
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<tr>
<td>Bronchiectasis</td>
<td>In NZ, hospital admissions for bronchiectasis have increased dramatically during the past decade, while deaths due to bronchiectasis have declined. Care must be taken when interpreting these trends however, as it remains unclear whether they represent an increase in the underlying burden of disease, an increase in access to hospitalisation, or an increase in the use of High Resolution CT to diagnose bronchiectasis in this population. During 2002-2006 (using prioritised ethnicity), hospital admissions for bronchiectasis were <em>significantly higher</em> for Pacific &gt; Māori &gt; European &gt; Asian / Indian children and young people and those in the most deprived areas. During the same period (using the Sole / (Any) classification), bronchiectasis admissions for Pacific children and young people were <em>significantly higher</em> than for non-Māori non-Pacific children and young people in each of the Sole and (Any) Groups. Within the (Any) Category, bronchiectasis admissions for Niue, Tongan and Samoan children and young people were <em>significantly higher</em> than for Cook Island Māori and Fijian children and young people. Within the Sole Category, bronchiectasis admissions for Niue children and young people were <em>significantly higher</em> than for the other Pacific groups.</td>
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<tr>
<td>Asthma</td>
<td>In New Zealand during 2002-2006 (using prioritised ethnicity), asthma admissions were <em>significantly higher</em> for Pacific &gt; Māori &gt; European and Asian / Indian children, males and those in the most deprived areas. Similar ethnic differences were seen during 2000-2006, with Pacific children and young people experiencing an upswing in rates during 1998/99 to 2004/05. During 2002-2006 (using the Sole / (Any) classification), asthma admissions for Pacific children were <em>significantly higher</em> than for non-Māori non-Pacific children in each of the Sole and (Any) Groups. Within both the (Any) and Sole categories, asthma admissions for Cook Island Māori children were <em>significantly lower</em> than for Samoan, Tongan, Niue and Fijian children.</td>
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<td>Diabetes &amp; Epilepsy</td>
<td>In NZ, the available evidence would suggest that the incidence of Type 1 diabetes is increasing, and while less trend data is available for epilepsy, analysis of mortality data during 2000-2004 suggests that it a significant cause of mortality in this age group. During 2002-2006, while Type 1 Diabetes was the most common reason for a diabetes admission in both (Any) Pacific and New Zealand children and young people, admission rates for insulin dependent diabetes in (Any) Pacific children and young people were lower than the New Zealand average, while admissions for non-insulin dependent diabetes were higher. Ethnic differences in epilepsy admissions however were much less marked, with no <em>significant differences</em> in admission rates being evident between (Prioritised) Pacific, Māori and European children and young people.</td>
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<td>Cancer</td>
<td>In New Zealand during 2000-2004, the cancer most frequently notified to the Cancer Registry for (Any) Pacific children was lymphoid leukaemia, followed by tumours of the brain, while the leading cause of cancer mortality was cancer of the brain. In the 15-24 year age group, cervical carcinoma in situ was the leading cause of notification to the Cancer Registry for (Any) Pacific young people, while leukaemias, lymphomas and thyroid cancers were the most frequent forms of invasive disease. Leukaemias were the leading causes of cancer mortality for (Any) Pacific young people during 2000-2004.</td>
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<td>Disability</td>
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<td>While many conditions leading to disability are evident at the time of birth, others may not become evident until children fail to reach developmental milestones in later life. In many cases, children with such disabilities are managed predominantly in the primary care / outpatient setting, with little information on them being captured in NZ’s national datasets. As a consequence, while children with autism, intellectual disabilities and cerebral palsy make up a large part of the workload of paediatric outpatient services, little data are available with which to estimate the prevalence of these conditions, or their trends over time. Despite this, it is vital that the needs of these children and young people are considered in future planning and resource allocation decisions.</td>
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<tr>
<td>Disability</td>
<td>Disability Prevalence</td>
<td>In New Zealand the number of children born with Down Syndrome has remained relatively static during the past 25 years, while the number with Neural Tube Defects has declined dramatically. In reality, both trends reflect the complex interplay between opposing factors including access to prenatal diagnosis and the selective termination of pregnancy, the personal choices of parents and population level shifts in known (e.g. maternal age) and unknown risk factors. While it is likely that prenatal diagnosis has also reduced the number of children being born with other major congenital anomalies, nationally a small number of Pacific children are still born each year with these anomalies, and these children require an integrated approach to their health and disability support needs, if they are to reach their full potential.</td>
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<tr>
<td>Disability</td>
<td>Blindness and Low Vision</td>
<td>While it is difficult to precisely estimate the number of Pacific children and young people who are blind or have low vision, the Vision Education Agency noted that in 2006, 95 Pacific children and young people in New Zealand required educational support as a result of a visual impairment. Students enrolled with the Agency nationally had a variety of visual impairments, ranging from low vision, through blindness and deaf-blindness, to cortical visual impairments and used a variety of communication modalities including large print, visual aids, Braille and signing systems. In addition, 60.4% had other disabilities which had minor to major impacts on their functional ability. Irrespective of the underlying cause of their visual impairment however, Pacific children and young people with visual impairments require a range of education, health and disability support services, the coordination of which is vital to ensuring they reach their full developmental potential.</td>
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<tr>
<td>Disability</td>
<td>Permanent Hearing Loss</td>
<td>Hearing loss during early life is of significant concern, as delays in intervention may lead to impaired language development and long term, may impact negatively on cognitive development, academic performance and subsequent career choice. In New Zealand each year, approximately 120 children meet the inclusion criteria for the Deafness Notification Database, with 16% of notifications during 2004 being for Pacific children, the majority of whom had mild-moderate hearing losses. Despite these notifications, evidence would suggest that NZ’s recent approaches to detection have resulted in significant delays, with the average age of detection of moderate or greater loss in 2004 being 45.3 months. It is hoped that the roll out of a Universal Newborn Hearing Programme over the next few years, will lead to a reduction in the age at first detection of hearing loss, and as a consequence to significantly earlier intervention for these children.</td>
</tr>
<tr>
<td>Mental Health</td>
<td>Issues Experienced by Callers to Telephone Counselling Services</td>
<td>In NZ, the need for child and youth mental health services can be seen as spanning a continuum, with the types of issues being dealt with by child and youth telephone counselling services, at one end of this continuum potentially reflecting the everyday issues and concerns experienced by many children and young people. Analysis of the calls received by both the 0800WHATSUP telephone counselling service and Youthline’s Youth Help Line Service during 2006 suggests that many of these concerns relate to issues with peer relationships and bullying, although relationships with family and partners (girlfriends and boyfriends) also feature prominently. Supporting children and young people in dealing with these issues is vital, as it has been suggested that peer relationships contribute substantially to social and cognitive development.</td>
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</tbody>
</table>
### Mental Health

#### Inpatient Admissions

In New Zealand during 2002-2006, the most common reasons for inpatient mental health admissions in young people were for schizophrenia, followed by depression and the mental health effects of drugs and alcohol. For (Any) Pacific young people during this period, schizophrenia and schizotypal and delusional disorders made the largest contribution and while overall, rates for mental health admissions were lower than the New Zealand average, these differences need to be seen in the context of the other services available to Pacific young people in the ambulatory care setting.

During 2002-2006 (using prioritised ethnicity), schizophrenia admissions for Pacific young people were significantly higher than for European and Asian / Indian young people but significantly lower than for Māori young people. In contrast, depression admissions were significantly lower than for European and Māori young people, but significantly higher than for Asian / Indian young people. Bipolar affective disorder admissions for Pacific young people were also significantly lower than for European and Māori young people, but similar to those of Asian / Indian young people. Finally hospital admissions for eating disorders in Pacific young people were significantly lower than for European young people, but similar to those for Māori and Asian / Indian young people. These figures should not be used to estimate population prevalence for Pacific young people however, as access to inpatient facilities may fail to accurately reflect the true burden of illness, or access to mental health services on an outpatient basis.

#### Self Harm and Suicide

During 2002-2006 (using prioritised ethnicity), self inflicted injury admissions for Pacific young people were significantly lower than for European or Māori young people, but significantly higher than for Asian / Indian young people. In contrast, during 2000-2004 suicide rates for Pacific young people were similar to those of European and Asian / Indian young people, but significantly lower than for Māori young people.

During 2002-2006 (using the (Any) / Sole classification), with the exception of Fijian and (Any) Other Pacific young people, self inflicted injury admissions for Pacific young people were significantly lower than for non-Māori non-Pacific young people (small numbers prevented valid comparisons for Tokelauan, Sole Niue and Sole Other Pacific young people). Admissions for Fijian young people however, were significantly higher than for non-Māori non-Pacific young people. In contrast, during 2000-2004 (with the exception of Sole Cook Island Māori young people), there were no significant differences between the suicide mortality rates of NZ's largest Pacific groups and non-Māori non-Pacific young people (small numbers prevented valid comparisons for Niue, Fijian, Tokelauan and “Other” Pacific young people). Suicide mortality for Sole Cook Island Māori young people was significantly higher than for non-Māori non-Pacific young people.

### Sexual and Reproductive Health

#### Teenage Pregnancy

During 2002-2006 (using prioritised ethnicity), teenage birth rates for Pacific women in New Zealand were significantly higher than for European and Asian / Indian women, but significantly lower than for Māori women. Higher teenage birth rates for Pacific women however, need to be viewed in the context of the higher overall fertility rates for Pacific women and the fact that during 2001-2005, birth rates for Pacific women were higher than for European and Asian / Indian women in nearly every maternal age group.

During 2002-2006, (using the (Any) / Sole classification system), teenage birth rates for all of NZ’s largest Pacific groups (with the exception of Sole Fijian women) were significantly higher than for non-Māori non-Pacific women. Within the (Any) category, teenage birth rates for Cook Island Māori and Niue women were significantly higher than for the other Pacific groups. Similarly, within the Sole category, teenage birth rates for Cook Island Māori women were significantly higher than for Samoan, Tongan, Fijian, Tokelauan and “Other” Pacific women.
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<td>Sexual and Reproductive Health</td>
<td>Sexually Transmitted Infections</td>
<td>While no rates were able to be calculated from Sexual Health and Family Planning Clinic data, laboratory based surveillance during 2004-2006 suggested that chlamydia and gonorrhea were both relatively common infections amongst those aged 15-24 years and that rates for both conditions were exhibiting a general upward trend. This is of concern, as STIs can lead to the development of serious sequelae such as pelvic inflammatory disease, ectopic pregnancy and infertility, as well as facilitating the transmission of HIV. While data limitations also meant that reliable ethnic specific rates could not be calculated, the available evidence would suggest that STIs are as much of an issue for Pacific young people in New Zealand as they are for other ethnic groups.</td>
</tr>
</tbody>
</table>
References
References

21. Samoan Community Development Center, Fa’a Samoa - The Samoan Way, Samoan Community Development Center: San Francisco, California.


