

Canterbury

District Health Board

Te Poari Hauora o Waitaha

Canterbury District Health Board

Youth Health Position Paper

2007 - 2009

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1. Introduction

Child and youth health is identified in the Canterbury District Health Board's (CDHB) Strategic Plan Directions: 2010 as a population 'strategic priority'. Keeping our children and young people healthy provides them with better opportunities for becoming healthy adults and sets the groundwork for good health during the years of adulthood. This is the CDHB's first Youth Health Position Paper.

The majority of Canterbury's 91,557 10-24 year olds transition from childhood to adulthood with limited contact with hospital based health services. Their experience with health services will mainly be in a community setting. The Canterbury District Health Board aims to improve outcomes for children and young people in Canterbury, particularly those with high needs, those at risk or in disadvantaged situations. The majority of actions will be achieved in a community setting.

Development of this Youth Paper has been guided by the Child Health Strategy 2003 and the Child Health and Disability Action Plan / Mahere o te Hauora Tamariki me te Hauatanga (2004 – 2007 and beyond) in August 2004. It adopts some of the recommendations of the Ministry of Health's *Youth Health: A Guide to Action*, 2002, which proposes a plan of action to improve the health of New Zealand's 12 to 24 year olds.

This paper suggests a shift in the way the health sector sees young people – from being “at risk” and “a problem to be solved”, to being valued participants in creating a healthier community or society. The *Youth Development Strategy Aotearoa* (YDSA) published by the Ministry of Youth Affairs in 2002 recommended to the government and society, ways to support young people to develop the skills and attitudes they need to take part positively in society, now and in the future. This involves helping young people gain:

- A sense of contributing to society,
- A feeling of connectedness to others and society,
- A belief that they have choices about their future,
- A feeling of being positive and comfortable with their own identity.

It also draws on some of the findings of the Christchurch Health Development Longitudinal Study of a birth cohort. Now into its 25th year¹, the cohort study enrolled 98% of children born in all maternity units in the Christchurch urban region during mid 1977. Sample retention has been good with 80% of the original cohort still enrolled at the 21-year evaluation. While this cohort is not representative of the whole of New Zealand, the authors believe it is broadly

¹ Fergusson, D., Poulton, R., Horwood, J., Milne, B., Swain-Campbell, N., 2003., Comorbidity and Coincidence in the Christchurch and Dunedin Longitudinal Studies – A report for the New Zealand Ministry of Social Development, Department of Labour and the Treasury

representative of the South Island. Given that the findings align to the 1996-97 New Zealand National Health Survey, the authors have suggested that the findings are likely to be generalised to similar aged New Zealanders.

This Paper also takes into account work the CDHB does with other sectors. It is a member of the Christchurch Social Policy Interagency Network (CSPIN). The aim is to improve social outcomes for 13 –19 year olds. 'Tackle Alcohol and Other Drug Abuse', This is an area where the Public Health Nurses (PHN) can engage with students as CDHB takes the lead in raising community awareness of alcohol and other drug problems. In 2003 CSPIN launched *A Collaborative Plan for Christchurch Youth 2003 – 2006* and is presently working on measures and indicators of progress in this plan for each of six desired outcomes identified in the plan. These are being published in a series commencing in 2005.

Information has been drawn from the Youth 2000 survey of Year 9 to Year 13 secondary school students², particularly from the Christchurch City and Canterbury reports.

Further background information on the health status of young people in Canterbury can be found in the Canterbury DHB's *Canterbury Health Needs Assessment 2004*.

There are key linkages with the following CDHB documents:

- District Strategic Plan, A Healthier Canterbury: Directions 2010
- Child Health And Disability Action Plan / Mahere O Te Hauora Tamariki Me Te Hauātanga (2004 – 2007 And Beyond)
- Whakamahere Hauora Māori ki Waitaha / Māori Health Plan 2005-2010
- Pacific Health Action Plan 2006
- Maori Health Action Plan 2006
- Healthy Eating Active Living (HEAL) Plan 2005
- Diabetes Actions 2004/05

While being relatively healthy during transition to adulthood, some young people may experience mental health issues or engage in risk taking behaviours such as alcohol, drug abuse and risky sexual practices which may result in unintentional injury or harm. Our challenge is to influence behaviour and respond appropriately to meet the needs of our young people.

² Adolescent Health Research Group, 2003. *Christchurch Regional Report: A profile of student health and wellbeing*. Auckland: The University of Auckland.

Improving the health of young people requires an approach to service delivery that is “youth friendly”, where young people are supported in an environment that values their belief systems and accepts that the developmental path of adolescence does not always sit naturally with improving health.

The primary focus of this plan is to provide direction in the community, however it will work alongside tertiary services that are Canterbury based, but are used by residents of other South Island District Health Boards, and for some services, to residents from all over New Zealand.

2. Acknowledgments

The CDHB acknowledges the many authors and providers who have contributed to this document. We also thank the valuable input into this plan from Professor David Fergusson and Dr Sue Bagshaw.

3. Objectives

The objectives of this paper are to identify the actions that the CDHB will take to:

- Assist young people to develop resilience to maintain good health throughout their lifetime.
- Support young people to make informed decisions in relation to engaging in risky behaviour.
- Minimise barriers to community and hospital based health services.
- Deliver health care services in an appropriate environment.

The actions within this paper will focus on the relevant health issues as they relate to young people transitioning to adulthood.

4. Definition of Youth

Terms such as ‘youth’, ‘teenagers’, ‘adolescents’ and ‘young people’ are often used interchangeably to describe both the whole group and various sub groups in the age range from around 10 years to the mid-twenties.

This paper will focus on the needs of young people ranging from 15 to 24 years, but in reality also includes people who may be younger, who are accessing services in similar settings. There is no specific funding to provide services for young people aged 19 – 24 years.

Within this document references are made to information, research and other government agency plans that cover similar age ranges. For example, the *Youth Health Strategy and Guide to Action* considers young people to be aged from 12 to 24; and CSPIN’s *Collaborative Plan for Christchurch Youth* considers 13 to 19 year olds; *In Our Hands*, the *New Zealand Youth Suicide Prevention Strategy*

covers 15 to 24; and *the Auckland Youth 2000 Survey* covers secondary school students who are generally 13 to 17-18 year olds.

5. Demographics: Canterbury District Health Board

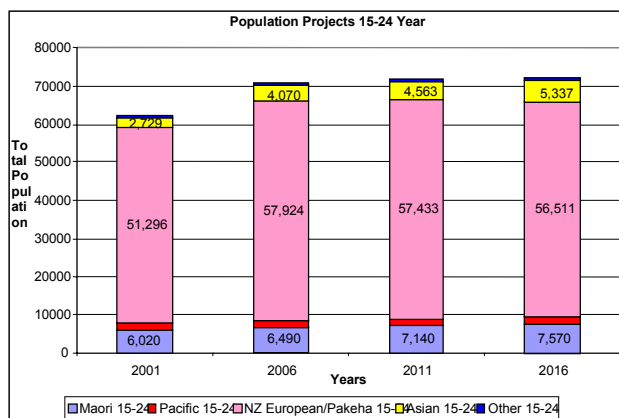
The CDHB is the largest of the 21 DHBs, by geographical area. The CDHB covers six Territorial Local Authorities²(TLA's), which includes Ashburton, Christchurch City, Hurunui, Kaikoura, Selwyn and Waimakariri Districts. At the 2001 census, the total District Health Board population across the TLA Districts was 427,089.³ Young people aged 15-24 years account for 14% of people living in Canterbury.

In 2001, of the 15-24 year olds living in Canterbury, 5,397 identify by ethnicity as Maori (8.7%), 1,620 Pacific (2.6%) 5,196 Asian (8.4%) and 49,581 (80.2%) were classified as 'Other', which includes predominantly European/Pakeha.

TABLE 1) CDHB YOUTH POPULATION NUMBER OF 15 – 19 AND 20 – 24 YEAR OLDS⁴

Ethnic Group	All ethnic groups		European		Māori		Pacific peoples		Asian		Other	
	15-19	20-24	15-19	20-24	15-19	20-24	15-19	20-24	15-19	20-24	15-19	20-24
Age Group	15-19	20-24	15-19	20-24	15-19	20-24	15-19	20-24	15-19	20-24	15-19	20-24
Kaikoura District	222	141	177	111	42	30	0	0	3	0	0	0
Hurunui District	558	372	513	336	36	27	0	3	6	3	3	3
Waimakariri District	2,286	1,503	2,034	1,305	198	162	21	12	30	21	3	3
Christchurch City	24,906	25,506	19,020	20,046	2,274	2,148	777	744	2,565	2,370	270	198
Selwyn District	2,040	1,566	1,779	1,302	141	150	18	27	90	81	12	6
Ashburton District	1,569	1,125	1,422	1,029	111	78	9	9	21	6	6	3
	31,581	30,213	24,945	24,129	2,802	2,595	825	795	2,715	2,481	294	213

GRAPH 1) POPULATION PROJECTIONS BY ETHNICITY



² Community and Public Health, a population-based service which is a division of the CDHB, also delivers health promotion and health protection services to two other District Health Board areas, ie. South Canterbury DHB (covering Timaru, Mackenzie, Waimate TLA Districts), and the West Coast DHB (covering Buller, Grey, and Westland TLA Districts).

² (Adolescent Health Research Group- New Zealand Youth: A profile of their health and wellbeing: Auckland University 2003).

³ 2001 NZ Census data.

⁴ Demographic data is based on the 2001 Census

TABLE 2) DEPRIVATION LEVEL BY AGE ⁵

Age Bands	Total Population	Youth Population Age Bands		
		10 - 14	15 - 19	20 - 24
Total Dep 8 - 10	88,188	4,554	6,525	8,673
Total	427,083	26,016	32,349	32,403
%	21%	18%	20%	27%

This table shows that as young people age up into the next age band the volume of young people living in the deprivation level 8-10 increases. This may suggest young people's standard of living becomes harder to maintain in the community as they become independent from parents and live within their means.

6. Current Health Status

The Youth 2000 survey⁶ shows that overall students in the CDHB district do not differ markedly in their risk taking behaviours, emotional and sexual health activities, from students across New Zealand. The majority of young people (over 90%) report their health as being good, very good or excellent. This survey is about to be repeated in 2007 with results due in late 2008.

The Ministry of Health's 'Youth Plan, A Guide to Action' highlights that for young people aged between 12 and 24 years the chances of engaging in risky behaviour is high. The negative consequences of this behaviour can be life-long.⁷

The following information is available from a variety of sources including the CDHB's Health Needs Assessment 2004. It provides information on hospital admissions and causes of death for children and young people.

6.1 Morbidity and Mortality

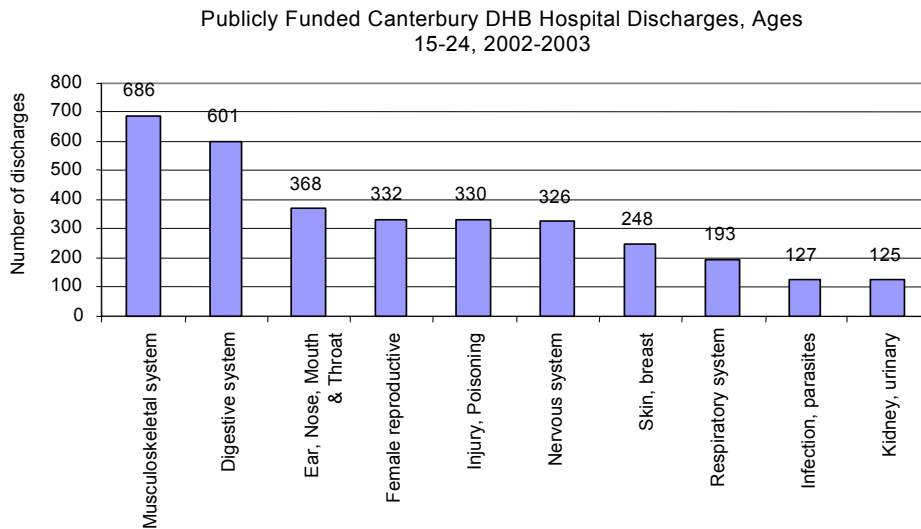
Morbidity and mortality data show that young New Zealanders have higher rates of suicide, teenage pregnancy, and abortion and suffer more injuries – especially from traffic accidents – than their counterparts in other OECD countries.

⁵ NZDep2001 is a small area deprivation index. The NZDep Index uses the level of 10 variables to reflect seven dimensions of deprivation: income, transport, living space, home ownership, employment, qualifications and support. First developed by Salmond et al 1998.

⁶ Adolescent Health Research Group. 2003. *Christchurch Regional Report: A profile of student health and wellbeing*. Auckland: The University of Auckland.

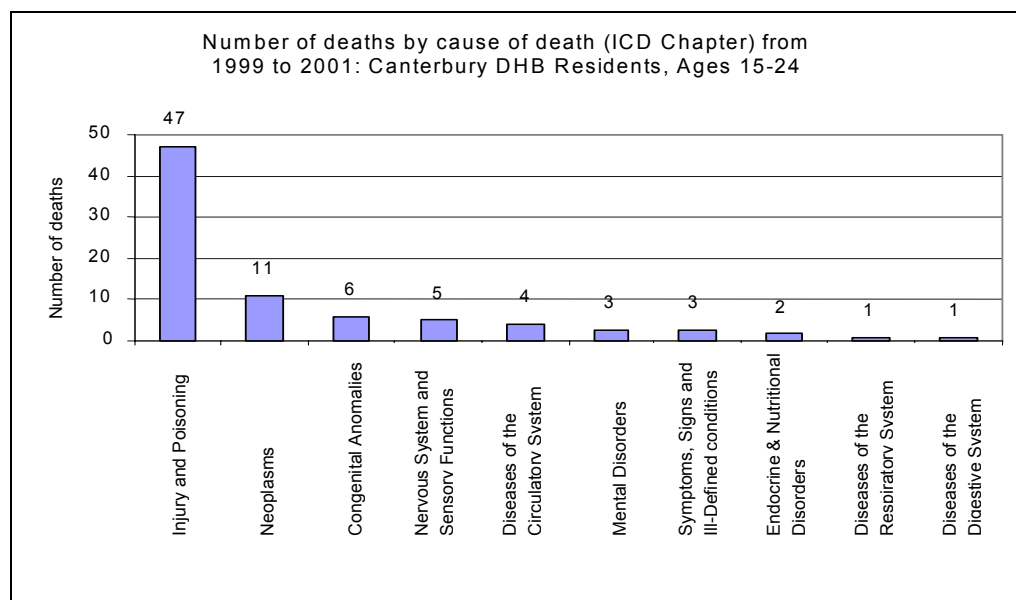
⁷ Ministry of Health 2002 Youth Health: A Guide to Action.

GRAPH 2) TOP TEN DIAGNOSES FOR YOUNG PEOPLE AGED 15 TO 24 YEARS ADMITTED TO HOSPITAL, EXCLUDING PREGNANCY AND BIRTH.



Data source: Ministry of Health CD One, Version 6.0: file – *morbidity data 2002 – 2003*. Time period – 12 months to 30 June 2003

GRAPH 3) YOUTH MORTALITY 1999 – 2001



Data source: Ministry of Health CD One, Version 7.0 – Mortality data ICD10. Time period – 36 months to 31 December 2001

The main causes of death in this age group are injury and poisoning. Young men are nearly 4 times as likely to die of injury and poisoning (37 deaths) compared to young women (10 deaths). This is due to the high rate of traffic injuries among young men.

6.2 Alcohol

The Emergency Department (ED) at Christchurch Hospital has noted that when there is a large social or sporting event in Christchurch, presentations of young people due to alcohol intoxication increases. Generally this is in the under 20-age group.

The Christchurch Health and Development Study (CHDS) showed that 15 year olds who drank on a weekly basis are more likely to engage in activities such as smoking, drug use, and sexual activities and are more likely to have contact with the Police.⁸

Information from the Youth 2000 survey⁹ indicates about 20% of young men and 15% of young women drink alcohol weekly. The table below shows the results for Christchurch, Canterbury and New Zealand as a whole from the survey.

TABLE 3) COMPARISONS BY AREA OF WEEKLY ALCOHOL INTAKE BY GENDER

Alcohol Use	Christchurch		Canterbury		New Zealand	
	Male %	Female%	Male%	Female%	Male%	Female
Have Consumed Alcohol	81.8	81.4	88.9	80.4	83.7	80.4
Drink alcohol weekly	19.9	15.5	25.2	13.8	19.3	15.0
1 or more episodes of binge drinking in last 4 weeks	46.1	38.4	46.2	38.1	41.4	38.5

The Alcohol Advisory Council (ALAC) has undertaken annual monitoring of young people's drinking behaviour since 1997. Bonnaire et al¹⁰ (2003) surveyed a nationally representative sample of 626 young people aged between 12 and 17 in 2003. The survey shows fewer teenagers in this age group are drinking alcohol compared to the previous year's survey. The proportion that consumed five or more drinks on their last drinking occasion (binging) has also dropped (although not significantly), as has the proportion with a risky drinking episode in the last two weeks.

6.3 Illicit Drug Use

The Christchurch Health Development cohort study¹¹ questioned the cohort members about their use of a range of illicit drugs they had used in each year from age 14-15 to 24-25 years. Findings suggest there was an acceleration of illicit drug use from the age of 15 to 18 years with 50% having used cannabis by this age.

By the age of 25 years:

- almost 77% of the cohort had used cannabis
- 43.5% had used other illicit drugs
- 13.6% met the DSM-IV criteria for substance use dependence (12.5% cannabis and 3.6% other drug dependence)

⁸ A Collaborative Plan for Christchurch Youth 2003 –2006 – Christchurch Social Policy Interagency Network

⁹ *Op cit*

¹⁰ Corinne de Bonnaire, Pete McMillan & Emanuel Kalafatelis. 2004. *The Way We Drink*. Report prepared for ALAC by BRC Marketing and Social Research

¹¹ Boden, J.M. etal (2006) Illicit drug use and dependence in a New Zealand birth cohort. Australian and New Zealand journal of Psychiatry 40:156-163

Males are more likely than females to report cannabis dependence and cohort members who identify as Maori, more so. Additionally, the cohort members who left school without qualifications were more likely than those achieving qualifications to report using cannabis, having cannabis dependence, using other illicit drugs or having dependence to other illicit drugs.

6.4 Smoking

Tobacco smoking is a major preventable cause of death. It is addictive: nicotine dependence can occur with only occasional tobacco use and can lead to daily use in a short period of time. This makes quitting smoking very difficult. High levels of smoking in young people therefore, translate into high smoking levels in the older age groups.

The Youth 2000 survey¹² found that more than 50% of students had tried a cigarette. In Christchurch 14% of males and 9% of females smoked daily, compared with 7% of males and 8% of females in Canterbury. These findings are consistent with the ASH smoking in Canterbury rates for 14-15 year olds. (Year 10).

TABLE 4) ASH YEAR 10 STUDENTS (% , 14-15 YEARS)

		1999 (n=3055)	2002 (n=3293)	2005 (n=3920)
National	Daily	15.6	12.4*	9.0*
	Total > monthly	28.6	22.0*	16.7*
	Never smoked	31.6	38.4*	49.4*
Canterbury	Daily	16.3	12.8**	8.2*
	Total > monthly	32.3	22.9*	16.9*
	Never smoked	29.1	35.5*	48.6*
CDHB ranking (daily smoking)		8 th lowest	7 th lowest	6th lowest

** p<0.01, *p<0.001 compared with 1999, adjusted for age, sex and ethnicity¹³

Although this is low by international standards¹⁴ it is higher than is preferable, given the difficulty of quitting and the adverse health consequences associated with smoking.

Nationally there is a high prevalence of smoking within younger age groups, particularly the 20 – 24 years group and among those who identify as Māori of this age, who have a prevalence of 59.1%¹⁵.

¹² *Op cit*

¹³ Data from ASH Year 10 survey 2005

¹⁴ Ministry of Health. 2003. *Tobacco Facts 2003*. Wellington: Ministry of Health

¹⁵ Ministry of Health. 2005. *Tobacco Facts 2005*. Wellington: Ministry of Health

6.5 Sexual Health

In Christchurch just over 25% of the Christchurch health development study's cohort¹⁶ had engaged in sexual activity by the age of 16 years. By the age of 21 years, approximately 90% reported being sexually active on at least one occasion. Males and females appear to follow very similar patterns and those who identify as Maori tend to engage in sexual activity at an earlier age than non-Maori.

The findings from the cohort study suggest there were high rates of risky sexual behaviour by the age of 21 years. Approximately:

- 40% reported unprotected intercourse.
- 25% reported having 10 or more sexual partners.

Adverse outcomes resulted in:

- 8% being diagnosed with a sexually transmitted infection and
- 20% reported a pregnancy.

These findings support those of the Youth 2000 survey, which indicated that just over 60% students in the CDHB area had used a condom the last time they had sex and about 65% always used a condom to prevent pregnancy.

Young women who engaged early onset sexual behaviour were more likely to engage in sexual risk taking (having unprotected sex or multiple sexual partners) and were at substantially greater risk of becoming pregnant or contracting infections. Specifically Corwin et al¹⁷ found the prevalence of asymptomatic chlamydia trachomatis among sexually active young people aged 17-18 years to be 2.0%.

However, in 2004-05 the number of confirmed chlamydia cases increased by 8.7% in sexual health centres¹⁸.

6.6 Teenage pregnancy

Teenage pregnancy accounts for 2% of all pregnancies. Teenage birth rates are highest amongst Maori and Pacific women. While the teenage birth rates have declined in recent years, pregnancies may compound health and social problems for the mother and baby. There is also an associated number of adverse birth outcomes¹⁹. Teenage pregnancy may also have a detrimental impact on educational attainment, for both the mother and the baby.

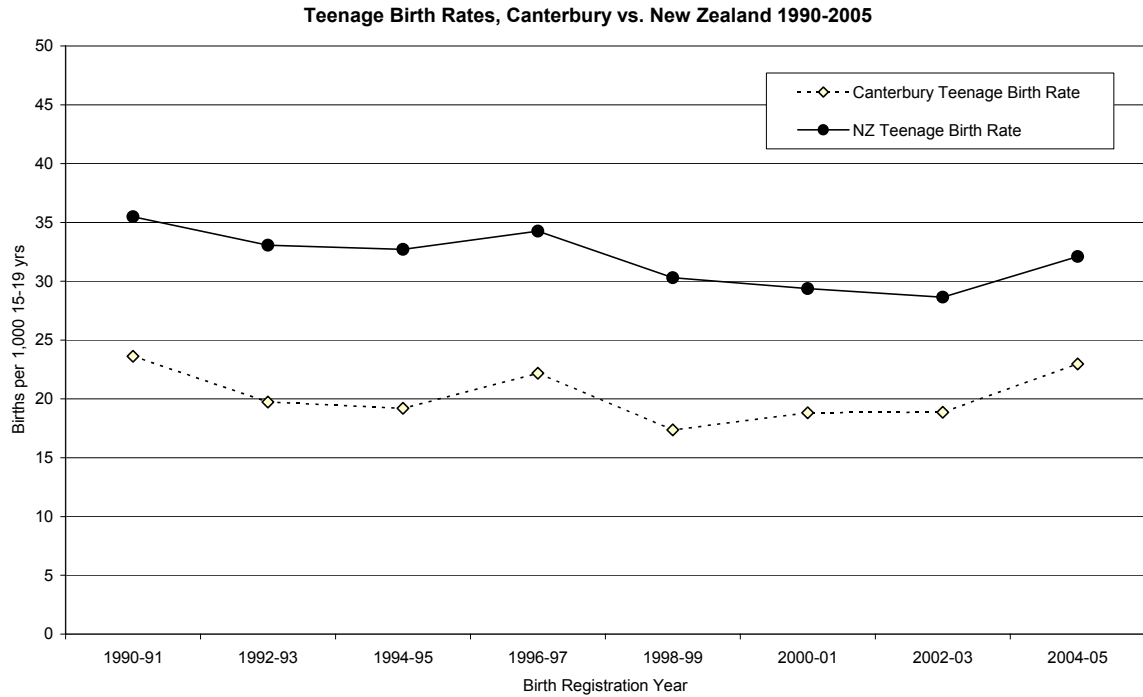
While the teenage birth rates have declined, teenage pregnancies have not. The number of young women having therapeutic terminations has increased resulting in a small overall increase in teenage pregnancy rates in New Zealand.

¹⁶ Fergusson et al (2003) Comorbidity and Coincidence in the Christchurch and Dunedin longitudinal Studies

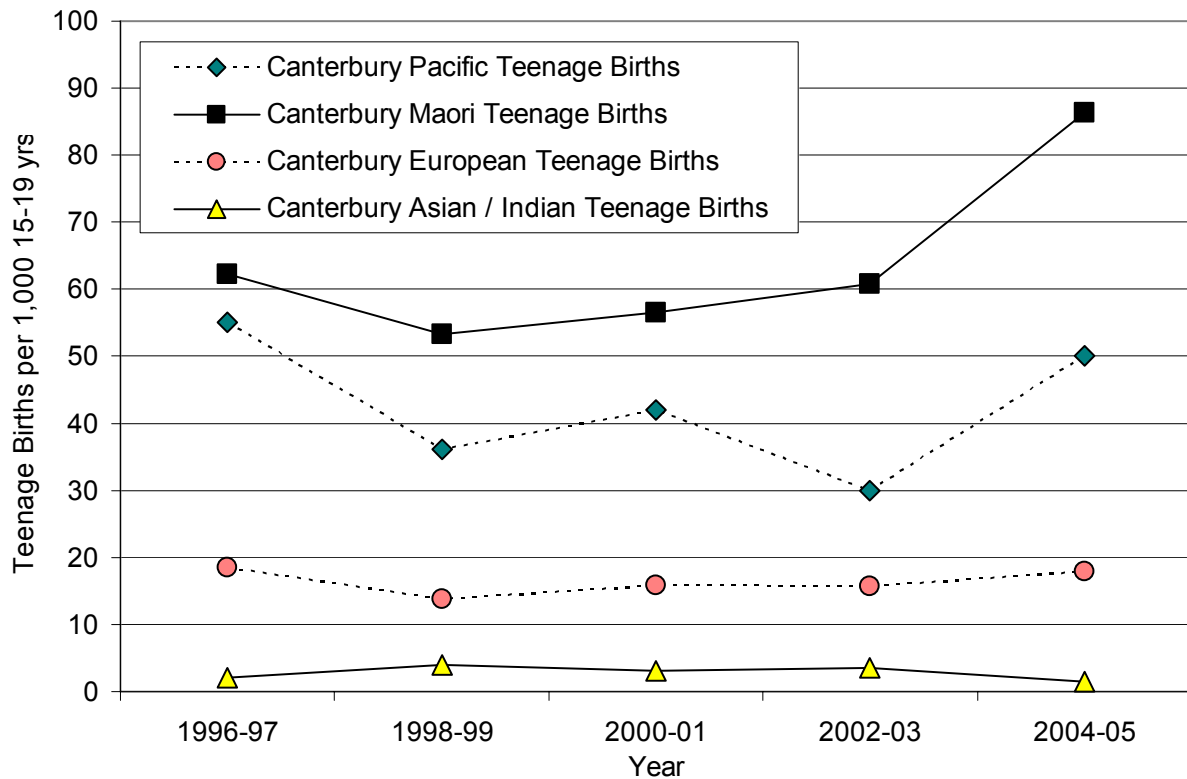
¹⁷ Corwin, Paul et al. 2002. *Chlamydia trachomatis* prevalence and sexual behaviour in Christchurch high school students. *New Zealand Medical Journal* 115 (1158).

¹⁸ Institute of Environmental Science and Research Ltd, (ESR) Sexually Transmitted Diseases in New Zealand, Annual Surveillance 2005

¹⁹ NZ Child and Youth Epidemiology Service 2006 The Health Status of Children and Young People in Canterbury;



Teenage Birth Rates by Maternal Ethnic Group, Canterbury 1996-2005



Fergusson’s cohort study²⁰ also linked young people, irrespective of gender, who engage in early or risky sexual behaviours as more likely to have experienced high rates of mental health problems and were more likely to have left school early.

²⁰ Fergusson et al (2003) Comorbidity and Coincidence in the Christchurch and Dunedin longitudinal Studies

6.7 Mental Health

For some time there has been a growing awareness of the mental health problems of young people.

The Christchurch Health and Development study²¹ identified the incidence of psychiatric disorder using the DSM-1V definitions, in its 1998 cohort of youth. The co-morbidities were examined between disorders, over the period from 16-18 years and data on symptoms was collected on the basis of self-reported symptoms using reputable questionnaires.

Based on a sample of 1025 young people who were studied at the age of 18 years, over 40% met the standardised criteria for at least one psychiatric disorder, with the most common disorders being:

- Substance use disorder – 24%
- Mood disorder – 22%
- Anxiety disorder – 17%
- Conduct disorder – 5%

Gender differences were identified, with females having higher rates of internalising (mood and anxiety) disorders and males having higher rates of externalising (conduct and substance use) disorders.

Ethnicity was also measured using parentally defined ethnic status of the young person and the results highlighted that Maori have higher risks of disorder than non-Maori on all measures of disorder.

When considering gender and ethnicity, the risks of internalising disorders tended to be highest among Maori and females, with Maori females having the highest rates of disorder. Rates of externalising disorders were higher in Maori males than non-Maori males. Maori males were identified as a group susceptible to conduct and substance use disorders.

A common finding was that frequently disorders are co-morbid. Those who meet criteria for one disorder are also at increased risk of other disorders. Multiple disorders were higher amongst Maori and females. However, Maori males appeared to be at highest risk. This suggests that as a group Maori have higher levels of psychiatric morbidity and co-morbidity than non-Maori.

The Christchurch Health and Development Study of mental health problems also found that factors most likely to predict a disorder can be directly related to the individual's immediate environment, ie family, relationships with friends, school/employment and partners.

While this cohort study is representative only of the population surveyed and given that the Ministry of Health fully endorsed this study, priority should be given the mental health of young people.

²¹ Horwood & Fergusson, 1998 Psychiatric Disorders and treatment seeking in a birth cohort of young adults: a report prepared from the Ministry of Health

6.8 Physical Health

6.8.1 Type 1 Diabetes

In Canterbury the number of young people diagnosed per year has shown a statistically significant increase of at least three-fold since 1970. Each year more than 30 children and young people are diagnosed with type 1 diabetes in Canterbury.²²

There is an annual 2.8% increase in incidence of type 1 diabetes in New Zealand. New Zealand is ranked 9th in the worldwide incidence for type 1 diabetes. This is classed in the very high incidence category.^{23 24}

Within this, Canterbury has a higher incidence than Auckland, with Canterbury having an incidence of 22.3 for the 1990-1999 period and Auckland having an incidence of 13.7 for a similar time period.^{21 22} Canterbury's incidence rates rank Canterbury equal to the 4th highest incidence worldwide.^{22.}

Virtually all New Zealand young people presenting with diabetes met the criteria for type 1 diabetes until the last decade. An increase in the number of young people presenting with type 2 diabetes is now apparent, though, there is only limited data available for type 2 diabetes prevalence in New Zealand children and adolescents.²⁵

6.8.2 Asthma

Asthma is the most common chronic condition affecting the health of young people in New Zealand, with data suggesting that up to 15% adults and 27% of children have symptoms suggestive of asthma. For Maori and Pacific people the burden of asthma is higher, with hospital admission rates, which are two to three times higher than Europeans.²⁶

6.1.4 Obesity

Obesity in adult life has its origins in childhood, and childhood obesity is on the rise. Health problems resulting from poor nutrition, lack of physical activity and obesity include diabetes, cancer and cardiovascular disease. Delay in addressing these issues at a primary prevention level will lead to further demand for health services in the future.

The national nutrition survey collected data has shown that 22.8% of 11-14 years females did no physical activity at the weekend.²⁷

²² DAWSON SI, WILLIS JA, FLORKOWSKI CM, SCOTT RS. Cause-specific mortality in insulin-treated diabetic patients: a 20-year follow-up. *Diabetes/Metabolism Research and Reviews* (submitted July 2006).

²³ H Karvonen MH et al. Incidence of childhood type 1 diabetes worldwide. *Diabetes Mondiale (DiaMond) Project Group. Diabetes Care.* 2000 Oct; 23(10):1516-26.

²⁴ HDIAMOND Project GroupH. Incidence and trends of childhood Type 1 diabetes worldwide 1990-1999. *Diabet Med.* 2006 Aug;23(8):857-66.

²⁵ DAWSON SI, WILLIS JA, FLORKOWSKI CM, SCOTT RS. Cause-specific mortality in insulin-treated diabetic patients: a 20-year follow-up. *Diabetes/Metabolism Research and Reviews* (submitted July 2006).

²⁶ NZ Guidelines Group Recommendations on asthma Services of District Health Boards

²⁷ healthy Eating - Healthy Action: Oranga Kai - Oranga Pumau Impelmentation Plan 2004 - 2010Ministry of Health

7. Current service settings and issues

7.1 Community and Primary Care

7.1.1 School clinics

The nation-wide Youth 2000 survey of 10,000 New Zealand secondary school students showed that while the majority of young people are healthy, a significant number of students engage in behaviours that threaten their health. Examples are unsafe sexual activity, suicide attempts and substance abuse²⁸. Barriers to accessing health care were also identified as an issue for school based youth. The Adolescent Health Research Group identified that among New Zealand secondary school students, approximately half have had problems accessing health care in the previous year²⁹. School based clinics have the potential to reduce some barriers associated with access to health care.

All secondary schools are offered access to the public health nursing service. Presently 24 out of 40 secondary schools use this service and a few schools choose to employ a school nurse or counsellor and/or use family planning. The current focus of the school based nursing service is to ensure service coverage of low decile (high social deprivation) schools. Coverage is summarised as follows:

Urban

- decile 1 to 4 - 75% coverage
- decile 5 to 7 - 67% coverage
- decile 8 to 10 – 40% coverage

Rural

- decile 1 to 4 - no schools
- decile 5 to 7 - 100% coverage
- decile 8 to 10 – 88% coverage

Note:

There are no decile 1 high schools in Canterbury.
One school has an alternative health service.

The Public Health Nurses provide a youth health clinic service to secondary schools for year 9 to year 13. They provide the following services:

- Access to information
- Contraception
- Sexual health and
- HEADSS Assessment (homes, education and employment, activities, drugs and alcohol, sexuality, suicide and mood).

The HEADSS Assessment is holistic in nature. It looks at young people's health and

²⁹ A health Profile of New Zealand youth who attend secondary school. NZ Med J. 116,(117). URL: <http://www.nzma.org.nz/journal/116-1171/380H>

well-being. The Public Health Nurse facilitates referral to the most appropriate health professional when required. The Public Health Nurses work closely with other health professionals' ie general practitioners, counsellors, family planning and 198 Youth Health. The service in each school is tailored to meet the needs of the students and is linked in with health coordinators in schools, school councillors and 'Strengthening Families' framework.

The service also supports schools by facilitating the Strengthening Families process when there may be multiple agencies providing intervention with a young person and their family, in order to assist with providing a coordinated approach.

7.1.2 Community Supports

Public Health Services are population - based health promotion and health protection activities that are concerned with whole populations, such as young people, rather than individuals. Community and Public Health (C&PH) are responsible for promoting healthy messages and protecting our community from diseases.

In collaboration with other sectors, C&PH support and facilitate the development and implementation of healthy policies in key young people's settings including early childhood centres, schools and Kura Kaupapa Māori.

Health Promoting Schools assist schools to work with their communities to create a healthy environment. The staff, students, whanau, local community groups and organisations drive the health of the school, and all have a part to play in improving the health of the school community.

They also work with other agencies to provide training to schools on the key messages of the food and nutrition and physical activity guidelines.

Areas of key responsibility include:

- Hauora Matauraka, The Maori health promotion team at C&PH working with Māori and Pacific providers to increase knowledge and skills about nutrition and physical activity.
- Developing and collating new and existing educational resources relevant to youth.
- Providing tools to schools to assist them in identifying and accessing quality health education and other health service programmes, agencies, resources and information to support their health promotion in schools work

C&PH foster the development and maintenance of Interagency networks. This will ensure there is liaison and coordination between schools and other sectors/agencies involved in the school social environment and health promotion initiatives.

7.1.3 Primary Health Services

The Primary Health Organisations (PHOs) in Canterbury are contracted to provide low access fees to young people under 24 years of age in Canterbury. The average consultation fee from 1 July 2006 was \$25.44. All PHO are also contracted to provide free sexual health services to young people under 20 years of age.

Young people enrolled with a PHO also have access to reduced pharmaceutical subsidy for scheduled medications.

The PHOs have identified within their 2005/06 Service to Improve Access Plans and Health Promotion Plans that they will encourage physical activity and smoking cessation. Plans vary among PHOs.

198 Youth Health Centre

Christchurch has a dedicated youth primary care clinic – the 198 Youth Health Centre, which is situated in the heart of the city. It has been open since 1995 and provides free primary health care. It operates on a drop-in basis for about 5,000 10 – 25 year olds.

7.2 Secondary and Tertiary Facilities

7.2.1 Transition to Adult Services

Young people with either a congenital or chronic illness usually have a diagnosis made in childhood and are treated by paediatric services, but continue to need specialist care throughout their life. While there are no fixed rules about where young people are treated, in general children under the age of fifteen are treated by paediatric services and those fifteen years and over are treated by adult services.

Chronic conditions have become a priority not just because of the changing burden of disease and increasing evidence of these conditions, but also because of the associated major financial and social costs for the health sector and society as a whole.³⁰

The management of the transition from paediatric to adult care varies across all specialties according to the needs of the young people and their families and the resources available. According to Viner (1999)³¹ “The most useful definition of transition comes from the American Society for Adolescent Medicine who call for: “the purposeful, planned movement of adolescents and young adults with chronic physical and medical conditions from child centred to adult oriented health care systems.”³²

Australia has specific clinical guidelines³³ relating to type 1 diabetes, but the principles apply across all chronic disease areas. They suggest that the transfer to an adult service should be comprehensive and should involve a well planned

³⁰ Meeting the Challenge of Chronic Health Conditions: Project Background and Approach. Dr Karleen Edwards August 2006

³¹ Viner R. Transition from paediatric to adult care. Bridging the gaps or passing the buck? *Arch Dis Child* 1999;**81**:271-275

³² Blum R, Gavell D, Hodgman C *et al.* Transition from child-centred to adult health-care systems for adolescents with chronic conditions. A position paper of the Society for Adolescent Medicine. *J Adolesc Health* 1992;**14**:570-576 [Medline]

³³ *Op cit* p 192-3

preparation phase; a formal transition phase, with appropriate referral and clear directions for the patient and family (eg in case of emergencies); and an evaluation phase.

Young people should progressively be taught to take responsibility for and manage their illnesses themselves. Appropriate health promotion education about alcohol and smoking should be provided during the transition process, from childhood to adult services. Sexuality issues should be approached with confidentiality and empathy. Assessment of sexual activity, and the need for contraception should be a routine part of adolescent health care.

7.2.2 Environmental Factors: Space for young people in hospital

Internationally, young people have identified a number of issues of importance to accessing health services.³⁴ They want a 'youth friendly' environment; assurance that the area is private and that what they say is confidential. It is important that their peers will be welcome to support them, if this is their choice. Young people want the health professional to be willing to discuss fertility and sexuality issues as a routine part of the consultation.

At present in the CDHB hospitals, neither paediatric nor adult wards, comprehensively meet these needs. It has been commented that there is not an area within the hospital, specifically for young people, where they can hang out, watch television or videos, play pool or computer games or spend time maintaining their education.

This is an issue where a review would be beneficial.

7.2.3 Emergency Department

Anecdotal evidence suggests that more young people are presenting at the Emergency Department with alcohol problems. It also suggests that there is an increase in young people (usually young women) presenting with drug overdoses, particularly since the introduction of 'party pills'.

Recently presentations due to herbal highs, or party pills, have been increasing; there were 13 cases in January 2005. The age range was 14 – 38 years with the average age being 18 –20 years.

Many of these young people need ongoing help; Psychiatric Emergency Services estimate that about 14% of all people they see after hours are aged under 18 years of age. Psychiatric Emergency Services have four staff on duty after hours, one of whom is a social worker. The psychiatric registrar from Hillmorton is utilised as necessary (for admission, medication or risk assessment).

7.3 Respite Care and Carer Support

Young people who are medically fragile and who have high and complex needs are eligible for 28 days of respite care or carer support.

³⁴ Various speakers at the Challenge, Debate, Inspire, Survive Adolescent Health Conference, Melbourne, November 2005

Respite Care is a residential based service for clients who have continuous disability-related support and/or health needs who require 24-hour care and supervision. These services are primarily provided in an aged residential care setting. This is considered an inappropriate environment for young people.

Carer Support Programmes provides support for the family/whanau carers of chronically ill young people. They are designed to help support family/whanau carers, not only to enhance the care they provide, but also to ensure they are physically and mentally safe themselves. There is currently a shortage of specialist community workers to meet demand for these programmes.

7.4 Mental Health Services

CDHB provides an extensive range of mental health services for children and young people. Some of these are regional services for the South Island; most are local services for the people of Canterbury. Adolescent Mental Health Services have grown in the last couple of years with the expansion of non-governmental organizations eg Purapura Whetu and Pacific Trust Canterbury. Youth Respite and Community Support Services, the development of a new Youth Residential Alcohol and Drug Programme.

The age for transition from youth mental health services to adult services is 18 years. This may suggest there is potential for a gap in specific services for 19 – 24 year olds.

Local and national development of mental health services is guided by several key documents:

- The Mental Health Commission Blueprint (1998) which determines the range and volume of mental health services required in New Zealand.
- Te Tahuu, the second mental health plan that provides strategic framework for the development of mental health services for the next 10 years.
- The Werry Centre (National Child and Adolescent Workforce Development Programme) is currently in the final stages of developing a strategic framework for developing the workforce specifically for Child and Adolescent Mental Health Services (CAMHS).

Mental Health Services are often seen as a unique and specialist range of stand-alone services, designed to meet the needs of people with particular diagnoses. While for some parts of the mental health system this may be true, most services recognise the need to integrate with other health, disability, social service and community sectors. This is especially true for the Child and Adolescent Mental Health Services sector. Mental health needs are often the result of, or at least closely associated with other needs. It can be very difficult for young people and their families, who have complex needs to connect with a range of specialist support agencies in order to get assistance. Clinicians, support workers, and managers have developed good working relationships with the education, welfare, justice and disability sectors, to reduce some of the barriers to access for young people. This is evident in the number of cross sector initiatives that Canterbury CAMHS currently participate in. These include:

- YOTS (Youth Offending Teams). A national intersectoral initiative for senior managers and clinicians to address youth offending.
- Strengthening Families. The national intersectoral initiative to facilitate complex case conferences and coordinated support plans for families who are involved with multiple agencies
- High and Complex Needs Programme. A nationally co-ordinated intersectoral funding programme. It is based on a system of care approach, which provides packages of care funding to augment and support locally devised care plans for young people with severe problems, where their care and support plans require additional resources to support what is available from local sources and funding bases. This works in conjunction with the Strengthening Families coordinated care plan.
- Youth Drug Court. A joint sector initiative involving CYFS, Youth Justice, Police, Mental Health and Education to address Alcohol and Other Drug (AOD) issues in Young Offenders. CDHB Youth Specialty Service provides a mental health professional to the Youth Drug Court for up to 1 day a week. This person provides basic Alcohol and Other drugs (AOD) screening for the young people. Young people that score highly on the AOD assessment are referred to Youth Specialty Service.
- Consult Liaison in Schools - Each school counsellor in Canterbury has a key contact within Youth Specialty Service. This person visits regularly to provide training and support. School counsellors are also able to attend annual training offered by Youth Specialty Service.
- Youth Day Programme. A joint sector initiative involving Mental Health and Education to provide clinical and educational support and interventions to youth who have severe mental health problems, who need to transition back to educational and/or vocational systems.
- Intensive Case Management Team. A joint sector initiative involving CYFS, Mental Health and Education to provide intensive clinical support to children and young people who have severe mental health problems, who are in the care of CYFS.

Mental Health Hospital and Specialist Services are planning a new approach to improve the integration of support care throughout all areas of child and adolescent mental health services. Work has already started on designing the first component of this plan, which is a 'Single Point of Entry' into the service.

8. Improving the health status of our young people

The Canterbury DHB's Youth Health Plan will adopt 3 of the goals of the *Youth Health: A Guide to Action*. These are:

- A safer and more supportive environment for young people.
- A measurable improvement in young people's mental health.
- A measurable improvement in young people's physical health.

Achieving these goals will require a collaborative approach across sectors and communities.

The Canterbury DHB youth health plan provides local information on these risks. It also focuses on areas, challenges and issues facing young people in the Canterbury DHB district that have been identified through the Health Needs Assessment, consultation with the community and consultation with the Hospital and Specialist Service during 2004 and 2005.

As well as identifying the risks to mental and physical health, where young peoples' lifestyles make them particularly vulnerable, the action plan proposes ways to make health services more youth focused and youth knowledgeable.

9. CDHB Youth Health Plan Directions

Goal one: A safer and more supportive environment for young people.

"Young people's health is affected by what is happening in their families, with friends and in school. Families, schools, communities and local and central government agencies all have a role to play in improving young people's health and keeping them well."

Goal two: A measurable improvement in young people's mental health.

"New Zealand has high rates of youth suicide, mental illness and alcohol and drug abuse, particularly among rangatahi. Devising effective ways of keeping young people mentally healthy is a priority."

Goal three: A measurable improvement in young people's physical health.

"Taking risks and trying new things are integral to young people's lifestyles. Finding ways of reducing the negative outcomes is part of the action plan."

Goal: 1 A safer and more supportive environment for young people.		
<p>Outcomes:</p> <ul style="list-style-type: none"> • Decreased smoking • Decreased terminations of pregnancy • Decreased STIs (Chlamydia)³⁵ • Increased referrals to Mental Health Services • Improved data about young people accessing health services 		
1.1	Action: Improve the school based health service.	Sponsor: Manager, Public Health Nurses.
	Input	Output
1.1.1	<p>Provide primary health nurse focused training programmes for Public Health Nurses.</p> <p><i>So that all nurses are providing a consistent, evidence based service within the school based health services where they work.</i></p>	<p>By October 2009 70% of all Public Health Nurses will have commenced:</p> <ul style="list-style-type: none"> • The Collaborative Trust HEADDs Training Programme • A youth focused, primary health education programme • The NZQA Family Planning course • The National Heart Foundation, Stage 2, smoking cessation training course.
1.1.2	<p>Identify schools with greatest health needs.</p> <p><i>So that health service can be offered where it is needed most.</i></p>	<p>By February 2008 all Board of Trustees of decile 1-4 schools will have been offered:</p> <ul style="list-style-type: none"> • A school based health service 1-3 hours a week • A health programme that aims to improve the health of the school population. • <p>By February 2008 all school health services will be providing:</p> <ul style="list-style-type: none"> • Smoking cessation counselling • Advice on contraception and STIs • Education on healthy eating and activity • Links to mental health service.
1.1.3	<p>Collect health information regarding school population.</p> <p><i>So that an analysis can be done of the needs of young people to enable forecasting of services.</i></p>	<p>By September 2009 an electronic programme will be available to:</p> <ul style="list-style-type: none"> • Record physical, mental and social related information on each student • Measure changes in health trends within the school population.

³⁵ The difficulty of using absolute numbers to monitor progress is if you have an increase in the number of people screened, then the absolute number will increase. Therefore, while the overall goal is to see a decrease in rates long-term, this may be not achieved short-term.

1.2	Action: Improve access to primary health care for young people.	Sponsor: Portfolio Manager, Primary Health, Planning & Funding.
1.2.1	<p>Provide an improved health service to young people attending alternate education facilities.</p> <p><i>To ensure that young people who have been excluded from the standard school system are provided with an appropriate health service.</i></p>	<p>By December 2008 a programme will have been:</p> <ul style="list-style-type: none"> • Developed • Commenced implementation • Evaluated. <p>By November 2009:</p> <ul style="list-style-type: none"> • A decision will have been made regarding continuation of the service.
1.2.2	<p>Provide alternate settings for primary health services.</p> <p><i>To create an inviting environment for young people to access services.</i></p>	<p>By June 2007 Rural Canterbury PHO will have:</p> <ul style="list-style-type: none"> • Scoped a service for young people at Rangiora, Oxford, Akaroa, Ashburton and Kaiapoi High Schools • Developed a service model • Commenced implementation of the new services.
1.3	Action: Improve links between CDHB and youth health providers and community services.	Sponsor: Portfolio Manager, Personal Health, Planning & Funding.
1.3.1	<p>Participate in inter-sectoral forums, with all youth health providers, both NGOs and government services, to discuss health initiatives related to young people.</p> <p><i>So that all providers have an understanding of the objectives of each provider.</i></p>	<p>By December 2007 formal links will have been established with providers to:</p> <ul style="list-style-type: none"> • Participate in quarterly forums • Evaluate youth services <p>By November 2009:</p> <ul style="list-style-type: none"> • Recommendations will have been for future planning related to young people.
1.3.2	<p>Support the Ministry of Youth Development Strategy for refugees.</p> <p><i>To support young refugees within the community and understand their health needs.</i></p>	<p>By August 2008:</p> <ul style="list-style-type: none"> • A strategic direction will have been agreed.
1.3.3	<p>Support the Ministry of Youth Development Strategy for teen parenting.</p> <p><i>So that young mothers have opportunities to continue their education.</i></p>	<p>By June 2007</p> <ul style="list-style-type: none"> • A teen parenting programme will have been established.

Goal: 2 An improvement in young people's mental health.		
<p>Outcomes:</p> <ul style="list-style-type: none"> • Decreased visits to Emergency Department for alcohol and drug related issues • Decreased hospital admissions to the youth inpatient facility • Decreased length of stay in the youth inpatient facility • Increased referrals to Mental Health Services • Decreased waiting time for appointments at Youth Mental Health • Decrease suicides. 		
2.1	Action: Improve the links between providers of mental health services.	Sponsor: Portfolio Manager, Mental Health, Planning & Funding.
2.1.1	<p>Participate in inter-sectorial mental health initiatives in Canterbury related to youth.</p> <p><i>So that all providers have a clear understanding of other service providers and how they interlink.</i></p>	<p>By March 2007 a meeting will have been held with NGOs and the hospital mental health sector to:</p> <ul style="list-style-type: none"> • Understand the role of each provider. • Discuss a format to enable networking.
2.2	Action: Improve accessibility and responsiveness of Child & Youth Mental Health Services (CAMHS).	Sponsor: Clinical Director, Mental Health, Planning & Funding.
2.2.1	<p>Develop an improved model of service suitable for use in the community.</p> <p><i>So that the service is provided close to the people who access it.</i></p>	<p>By June 2008 the CAMHS team will have:</p> <ul style="list-style-type: none"> • Developed an outreach model of service • Commenced implementing the outreach model.
2.2.2	<p>Implement the 'single point of entry' model within CAMHS.</p> <p><i>To ensure that all young people requiring help get the most appropriate service in the fastest time.</i></p>	<p>By February 2007 the CAMHS team will have:</p> <ul style="list-style-type: none"> • Approved a 'single point of entry' model • Commenced implementing the new model.

2.3	Action: Improve management of suicide prevention services.		Sponsor: Portfolio Manager, Personal Health, Ministry of Health.
2.3.1	<p>Support the implement the 'Seven NZ youth suicide prevention strategy' (both 'In Our Hands' and 'Kia Piki te Ora o te Taitamariki').</p> <p><i>So that the CDHB has a service that is in keeping with the rest of the country.</i></p>	<p>By December 2007:</p> <ul style="list-style-type: none"> • DHB will have agreed on ways of working together. 	
2.4	Action: Improve services for young people with co-morbid drug and alcohol problems.		Sponsor: Portfolio Manager, Mental Health, Planning & Funding.
2.4.1	<p>Develop a partnership model to deliver services to young people with the co-morbid drug and alcohol problems.</p> <p><i>So that the service provides a comprehensive service throughout community and hospital based services.</i></p>	<p>By February 2008 H&SS and NGOs will have:</p> <ul style="list-style-type: none"> • Agreed on a partnership model for providing drug & alcohol services • Commenced implementing the new model. 	

Goal: 3 An improvement in young people's physical health.		
<p>Outcomes:</p> <ul style="list-style-type: none"> • Decreased smoking • Decreased STIs (Chlamydia) • Decreased Type 1 Diabetes • Decreased terminations of pregnancy • Decreased ambulatory sensitive admissions • Increased young people accessing primary health care • Increased physical activity • Healthier food available at school tuck shops 		
3.1	Action: Improve access to health services in primary care/general practice.	Sponsor: Portfolio Manager, Primary Care, Planning & Funding.
	Input	Output
3.1.1	<p>Provide free access for young people under 21 years of age for sexual health services through primary care.</p> <p><i>To remove cost as a barrier to accessing service.</i></p>	<p>By June 2007 all Canterbury PHOs will:</p> <ul style="list-style-type: none"> • Provide free consultations for sexual health education and advice.
3.1.2	<p>Provide one free appointment for young people with a newly diagnosed medical condition.</p> <p><i>So that they can meet their primary care providers to discuss, plan and be supported in the management of their condition.</i></p>	<p>By June 2007 all Canterbury PHOs will have:</p> <ul style="list-style-type: none"> • Developed guidelines for this service • Informed H&SS of this service • Commenced providing this service to young people.
3.1.3	<p>Provide additional counselling services for young people.</p> <p><i>To improve the availability of services.</i></p>	<p>By June 2007:</p> <ul style="list-style-type: none"> • Additional consultation services for young people will be available in the community.

3.2	Action: Improve sexual health of young people.	Sponsor: Portfolio Manager, Personal Health, Planning & Funding
3.2.1	Establish screening and monitoring of STIs (Sexually Transmitted Infections) for young people at risk. <i>To improve surveillance and improved identification of outbreaks.</i>	By June 2007: <ul style="list-style-type: none"> • An STI network will have been established. • The outreach programme, targeted at high risk young people, will have been extended.
3.3	Action: Improve oral health awareness.	Sponsor: Portfolio Manager, Primary Care, Planning & Funding.
3.3.1	Provide information to young people under 18 years of age regarding the free dental service. <i>To ensure that young people are aware of the service and how to access it before their 18th birthday.</i>	By December 2006 CDHB will have: <ul style="list-style-type: none"> • Signed contract with one PHO, with a low decile population, to provide information to their young people.
3.3.2	Promote oral health by encouraging young people to improve oral health habits and visit a dentist. <i>To increase the number of young people accessing the service.</i>	By January 2007 the CDHB Child & Adolescent Development Plan, Oral Health Service model, will have: <ul style="list-style-type: none"> • Explored opportunities for expanding dental community services in decile 1-3 schools • Commenced implementation of new services.
3.3.3	Develop a closer working relationship with Disability Support Services <i>To achieve better outcomes for disabled young people.</i>	By November 2007 CDHB and DSS will have agreed to: <ul style="list-style-type: none"> • Focus areas where they can work together.
3.4	Action: Improve the management of young people with chronic/complex medical conditions that need hospital & specialist care.	Sponsor: Portfolio Manager, Secondary Care, Planning & Funding.
3.4.1	Develop a framework that ensures a streamlined transition, within Hospital & Specialist Services (H&SS), from paediatric to adult services. <i>To ensure that patient, family and providers' needs are met.</i>	By December 2008 H&SS will have: <ul style="list-style-type: none"> • Agreed on a framework for transitioning young people to adult services. • Implemented changes in protocols regarding transition services for young people with: <ul style="list-style-type: none"> • Spina bifida • Cystic fibrosis • Diabetes • Cancer

3.4.2	<p>Consider the provision of an area at Christchurch Hospital for young people, as part of the facilities' master planning.</p> <p><i>So that there is a suitable venue for activities, education and health information for young people who are inpatients.</i></p>	<p>By July 2008 Health Services Planning group will have:</p> <ul style="list-style-type: none"> • Scoped the need for an adolescent area at Christchurch Hospital • Presented it's recommendations to CDHB Executive Management Team (EMT)
3.5	Action: Create environments that promote and support physical activity and/or healthy eating.	Sponsor: Project Manger, HEHA, Planning & Funding
3.5.1	<p>Implement the key actions in the 'Healthy Eating Healthy Action. (HEHA) Implementation Plan 2004 – 2010' that are related to young people.</p> <p><i>To increase physical activity and improve healthy eating to reduce the incidence of obesity and diabetes.</i></p>	<p>By December 2009 the HEHA project will have introduced into all schools:</p> <ul style="list-style-type: none"> • Healthy tuckshops • Health Promoting Schools • Nutrition and physical activity policies.
3.5.2	<p>Strengthen community action to increase healthy food and physical activity in their communities.</p> <p><i>To reduce obesity.</i></p>	<p>By June 2009 the HEHA project will have:</p> <ul style="list-style-type: none"> • Worked with key stakeholders to scope, develop and implement opportunities that promote healthy eating and encourage young people to be physically active within their local community.
3.5.3	<p>Reorient health services to support weight loss programmes for young people who are physically inactive.</p> <p><i>To provide affordable and appropriate programmes and services.</i></p>	<p>By June 2009 HEHA will have:</p> <ul style="list-style-type: none"> • Scoped, developed and implemented services which address overweight/obese and 'at risk' young people.

10. Measuring Outcomes

Youth Health

Long Term Objective: Improved health status for Canterbury's youth. By keeping our young people healthy we give them a better chance of becoming healthy adults.

Key Performance Measures	Actual 05/06	Target 07/08	Improved Youth Health
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A Safer and More Supportive Environment for Young People

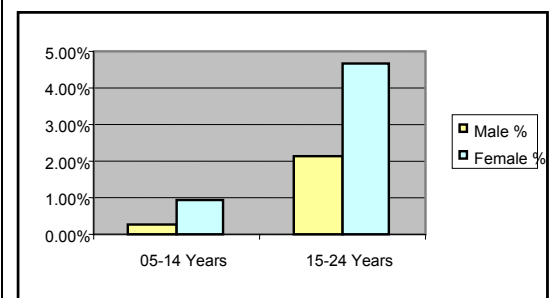
Decrease the smoking rates for people over 15 years.

Smoking rates in Canterbury.	Males	22.5%	<15% ³⁶
	Females	21.5%	<15%

An Improvement in Young People's Mental Health

Decrease in the Rates of ED Admissions for Alcohol or Drug Related Issues.

The % of ED Alcohol and Drug related admission for youth 05-14yrs.	Males	0.24% of total
	Females	0.93% of total
The % of ED Alcohol and Drug related admission for youth 15-24yrs.	Males	2.12% of total
	Females	4.63% of total

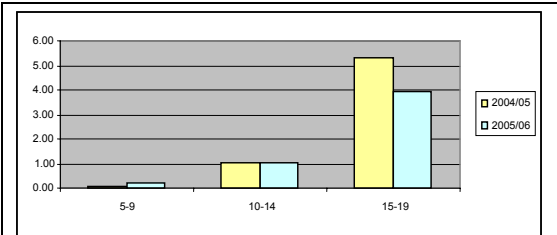


Improved Access to Mental Health Services³⁷

The % of people under 19 accessing mental health treatment and support services.	Maori	0.41%	2%
	Other	0.64%	2%
	Total	0.61%	2%

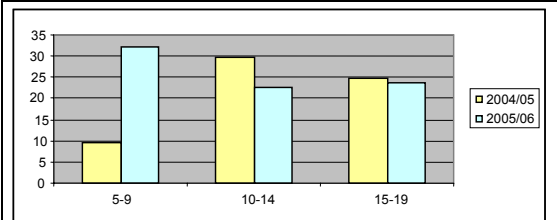
Decreased Admissions to the Youth Inpatient Facility

The number of Youth Inpatient Facility admissions per 1000 youth in Canterbury in the 5-9, 10-14 and 15-19 age groups.	5-9yrs	0.21
	10-14yrs	1.02
	15-19yrs	3.93



Decrease Length of Stay in the Youth Inpatient Facility

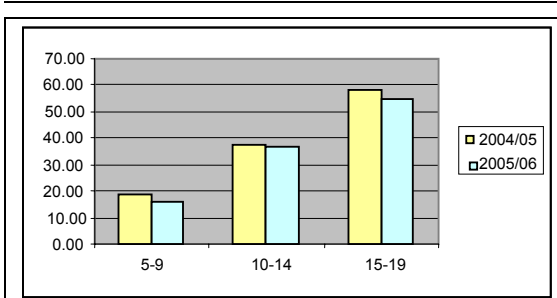
The average number of bed days for each stay for a patient in the 5-9, 10-14 and 15-19 age groups.	5-9yrs	32.2 days
	10-14yrs	22.8 days
	15-19yrs	12.4 days



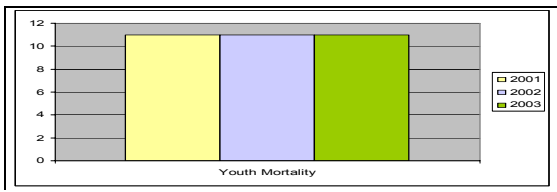
³⁶ These smoking targets are set long-term to 2010 the DHB aims to progress to these over the next five years.

³⁷ These targets are set in line with established proportions of the Canterbury population with mental illness for each age or ethnicity. The higher the percentage the more people accessing services.

Increased Referrals to Mental Health Services			
The number of referrals to mental health services per 1000 youth in Canterbury in the 5-9, 10-14 and 15-19 age groups.	5-9yrs	15.78	
	10-14yrs	36.62	
	15-19yrs	55.00	

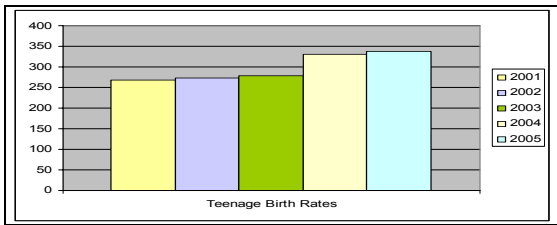


Decreased Teenage Suicide Rates	
The number of deaths amongst Canterbury young people aged 15-25 years where the cause of death was self inflicted.	11 ³⁸

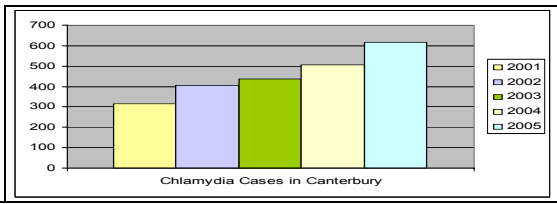


An Improvement in Young People's Physical Health

Decreased Rates of Teenage Pregnancy	
Number of births in Canterbury where the mother was under 20 years of age.	338



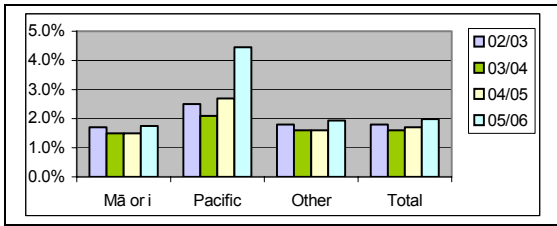
Decrease Chlamydia Rates in Young People.³⁹		
Sexual Health and Family Planning Clinic Notifications of Chlamydia Infections in young people under 25 in Canterbury.	Total	616 cases



Improve the Oral Health of Young Adults.			
The % of young people under 18 years completing episodes of dental care in the Canterbury region.	Total	69%	85%



Reduction in Ambulatory Sensitive Admission Rates⁴⁰ - as an indication of access to, and effectiveness of, primary care services.			
The % of Ambulatory Sensitive Admissions for those aged 5-14 years	Maori	1.8%	1.4%
	Pacific	4.4%	1.6%
	Other	1.9%	1.4%
	Total	2.0%	1.4%

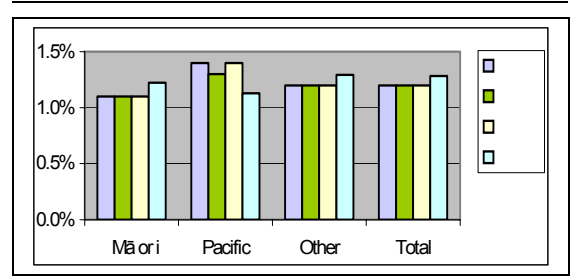


³⁸ This relates to 2003 figures (the latest made available).

³⁹ The Health Status of Children and Young People in Canterbury 2006 (report prepared for the Canterbury DHB) Source ESR, (Chlamydia cases are probable or confirmed).

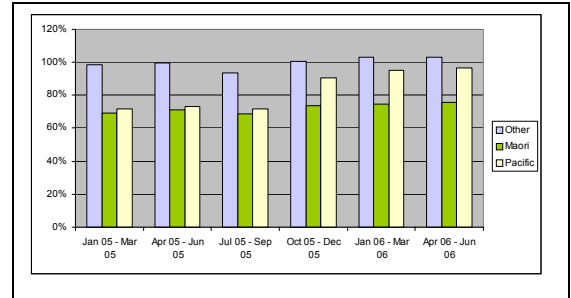
⁴⁰ Ambulatory Sensitive Admissions are admissions to hospital seen as potentially preventable by appropriate care and services.

The % of Ambulatory Sensitive Admissions for those aged 15-24 years	Maori	1.2%	1.1%
	Pacific	1.1%	1.1%
	Other	1.3%	1.1%
	Total	1.3%	1.1%



Increase the number of Young People Accessing Primary Care.

The % aged 5-14 years enrolled with PHOs in the Canterbury region.	Maori	73%
	Pacific	86%
	Other	100%



The % aged 15-24 years enrolled with PHOs in the Canterbury region.	Maori	65%
	Pacific	75%
	Other	81%

