

## **4 LIFESTYLE FACTORS INFLUENCING HEALTH**

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### **4.1 Introduction**

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Lifestyle or health related factors are behaviour factors, material factors (such as the environment and living standards) and psychosocial factors (for example, stress and risk taking). These factors often exist in clusters, for example behaviour and social issues that impact on health including smoking, diet, nutrition, family violence and alcohol. The combined effects of these factors are devastating as they account for many cardiovascular, diabetes and cancer deaths, poor diet and lack of physical activity leading to obesity thereby reducing life expectancy or sexual behaviour leading to teenage pregnancies and sexually transmitted diseases. Both developing and developed countries around the world are experiencing an explosion of these lifestyle diseases.

The goal of nutrition intervention, according to Franz et al. (2002), is “to assist and facilitate individual lifestyle and behaviour changes that will lead to improved metabolic control”<sup>21</sup>.

Effective interventions to address these lifestyle factors require intensive, and therefore expensive, programmes and the challenge is how to achieve maximum impact with limited funding. For further details on lifestyle factors, refer to Chapter: “Health and Population Priorities”.

This chapter addresses the prevalence of some of the key lifestyle factors, such as:

- Obesity and Physical inactivity
- Smoking
- Alcohol and Illicit Drug use/misuse
- Family violence

### **4.2 Obesity and Physical Inactivity**

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At the other end of the malnutrition scale, obesity is one of today’s most blatantly visible – yet most neglected – public health problems. An escalating global epidemic of overweight and obesity – “globesity” – is taking over many parts of the world, New Zealand is no exception. If immediate action is not taken, millions will suffer from serious health disorders<sup>22</sup>.

The New Zealand Health Strategy (Minister of Health 2000) released in December 2000 provides an overarching vision for improving the health and wellbeing of all New Zealanders. It sits alongside the New Zealand Disability

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<sup>21</sup> Reduction of risk for lifestyle diseases: Group diet and physical activity intervention in the workplace, Michelle Brenda Cumin, Auckland University of Technology, Auckland, June 2004

<sup>22</sup> World Health Organisation, Controlling the Global Obesity Epidemic - (<http://www.who.int/nutrition/>)

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Strategy. Improving nutrition, increasing physical activity, and reducing obesity are three of the thirteen health priorities identified in the New Zealand Health Strategy.

In addition, the MoH's 2004 report "Tracking the Obesity Epidemic" identifies excess body weight as one of the most important modifiable risk factors for a number of important diseases, such as diseases of the circulatory system, respiratory system, cancers and diabetes.

Furthermore the Ministry of Health (MoH) report "Health Targets (*Moving towards healthier futures*) 2007/2008" identifies as Target 8: improving nutrition, increasing physical activity, reducing obesity. Commenting on the national Healthy Eating, Healthy Action (HEHA) strategy, the MoH notes that "there are many players involved in implementing such a comprehensive programme as HEHA, from government agencies through to DHBs, local government, provider groups, non governmental organizations and industry groups"

In response to addressing the obesity epidemic, the Ministry of Health developed a national HEHA Strategy in 2004. In addition, other population programmes/initiatives funded by the MoH are: Fruit In School (FIS), Mission On and Family violence Intervention and coordination.

The vision of HEHA was to establish "An environment and society where individuals, families and whanau, and communities are supported to eat well, live physically active lives, and attain and maintain a healthy body weight".

### **4.2.1 HEHA - Project Targets and Outcomes**

The MoH set targets for HEHA project are:

- Proportion of infants exclusively and fully breastfed: 74% at six weeks; 57 % at three months; 27 % at six months.
- Proportion of adults (15+ years) consuming the recommended three or more servings of vegetables and two or more servings of fruit per day: 70% for vegetable consumption; 62% for fruit consumption.

Breastfeeding rates are measured using data from Plunket and other Well Child providers. Vegetable and fruit consumption is measured through the NZ Health Survey, and the National Nutrition Survey.

National target was: 95% of two year olds are fully immunised - with at least 4 to 6 percent point increase on 2005 national immunisation coverage survey baselines. Waikato DHB target for breastfeeding was that 79% of infants exclusively and fully breastfed, however in quarter one November 2007, Waikato DHB achieved only 68% of the target.

### **4.2.2 Waikato DHB Initiatives**

In a highly publicized article in Scientific American, Willett, an eminent Harvard researcher, suggested that the food pyramid currently used as a basis for healthy eating in many countries, is flawed. One of the changes he

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advocates is to make physical activity the base of the pyramid indicating its importance in healthy lifestyle (Willett et al 2003).

Waikato DHB has set up a project team to action HEHA strategies and the planned outcomes. Currently there are no systems or processes in place for measuring the MoH set targets and outcomes.

In addition to HEHA, Waikato DHB funds a school based nutrition and physical activity initiative called "Project Energize" (PE). The original funding was for a two year period from 1 August 2004 to 31 July 2006 with delivery of the project occurring in the 2005 and 2006 calendar years. In March 2007, operational funding was extended for a further 18 months to the end of 2008 calendar year.

Sport Waikato as the lead provider epitomises the coordinated approach to healthy eating and physical activities with the contributing and active partners including:

- Health Waikato (Child Health);
- Waikato Clinical School;
- SPARC;
- Ministry of Education,
- University of Waikato;
- District Health Board;
- WINTEC;
- Primary schools and their communities; and
- Maori and Pacific providers

PE in the first two years of its life was run in 62 schools, involving a total of 11,000 children. It is already delivering positive outcomes however it will take years before the full potential will be realised.

### 4.2.3 Results To Date From Project Energize

- The results from various qualitative analyses undertaken as part of the evaluation indicate that attitudes and behaviours around healthy nutrition and physical activity have been positively impacted by the project.
- The project has considerable success in engaging with school communities and building sustainable relationships with programme schools.
- The project appeared to have more trouble in gaining parental/whanau/community engagement.
- There are important early changes in aspects of body composition, particularly for systolic Blood Pressure (BP), likely to be of long term clinical significance.
- These changes were more apparent for the New Zealand European group, who are more likely to be in higher school deciles, with little change seen as yet in the Maori group.

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Realistically, the changes whilst positive, are small, but represent a step forward in the setting of the tremendous opposing forces of an obesogenic environment.

As most researches have concentrated on effect of lifestyle factors on disease it is difficult to state which risk factors are important and which lifestyle changes work.

### 4.2.4 National Perspective - Lifestyle factors

Some of the key findings from the Public Health Intelligence<sup>23</sup> by ethnic groups are as follows:

#### **Māori:**

- The prevalence of eating recommended number of vegetables and fruits was similar for both Maori and non-Maori children
- Among adults, Maori were slightly less likely than non-Maori to meet the recommended daily intake.
- Females were more likely than males to eat the recommended number of vegetables and fruits.
- For children, Maori and non-Maori males had a similar prevalence of overweight, but Maori females were one-and-a-half times more likely to be overweight than non-Maori females.
- The prevalence of obesity in Maori children was twice that of non-Maori children.
- Maori adults were one-and-a-half times more likely to be obese than non-Maori.
- Findings from the Sport and Physical Activity Surveys in 1997\98, 1998\99 and 2000\2001 conducted by SPARC showed that:
- Maori adults were as likely to be physically active as all New Zealand adults (67% and 68% respectively).
- Maori young people were more likely to be physically active than all young people combined (71% and 68% respectively). For further information, see: <http://www.sparc.org.nz/research-policy/research-/sparc-facts-97-01>.

#### **Pacific People<sup>24</sup>**

- Pacific women are significantly less likely to be physically active than women overall, but the difference is small (not statistically significant) for men.
- 59% of Pacific boys and 65% of girls consumed the recommended three or more servings of vegetables per day than the national averages for boys (55%) and girls (58%).

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<sup>23</sup> Public Health Intelligence, Ministry of Health, Asian Chart Book 2006, Monitoring Report No.4.

<sup>24</sup> The Health of Pacific People, Public Health Intelligence, Ministry of Health, Published in April 2005, <http://www.moh.govt.nz>

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- Fewer Pacific males (43%) and females (39%) consumed the recommended three or more servings of vegetables per day than the corresponding national averages for males (63%) and females (71%).

### Asians<sup>25</sup>

- Longer duration of residence is significantly related to the likelihood of self-reporting high blood cholesterol and high blood pressure among Asian New Zealanders.
- Controlling for age, sex and deprivation, Indians appear to have a higher prevalence of obesity than New Zealand Europeans. After controlling for duration of residence in New Zealand, this association gets stronger.
- Among the Asian ethnic groups, Chinese and Other Asian females are significantly less likely to participate in at least 150 minutes of physical activity per week than their total population counterparts.
- Chinese and Indian males are significantly less likely to participate in physical activity than the total population.
- Controlling for age, sex and deprivation, Indians and Other Asians appear less likely to consume the recommended intake of fruit and vegetables than Europeans. However, after controlling for duration of residence in New Zealand, this association is only statistically significant for Indians (although it is almost so for Other Asians).
- Indians and Other Asians appear less likely to consume the recommended intake of fruit and vegetables than Europeans. However, after controlling for duration of residence in New Zealand, this association is only statistically significant for Indians (although it is almost so for Other Asians).
- Chinese and Other Asian females are significantly less likely to participate in at least 150 minutes of physical activity per week than their total population counterparts.
- Chinese and Indian males are significantly less likely to participate in physical activity than the total population.

### Older People<sup>26</sup>:

- Males aged 75-84 years were significantly more likely to eat the recommended daily number of servings of fruit and vegetables than were males aged 50-64 years. Females are significantly more than males. However, a substantial proportion of older people, female and male did not meet the minimum recommendations.
- The prevalence of physical activity and regular physical activity were considerably lower in older age groups than in their younger counterparts, particularly for females.
- For people aged 85+ years, the combined prevalence of overweight or obesity were significantly lower than for the 50-64 age groups.

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<sup>25</sup> Asian Health Chart Book 2006, Public Health Intelligence, Monitoring Report 4, Ministry of Health, Document available on: <http://www.moh.govt.nz>

<sup>26</sup> Older People's Health Chart Book 2006, Public Health Intelligence, Monitoring Report 4, Ministry of Health, Document available on: <http://www.moh.govt.nz>

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Older males had a significantly higher prevalence of overweight or obesity than older females.

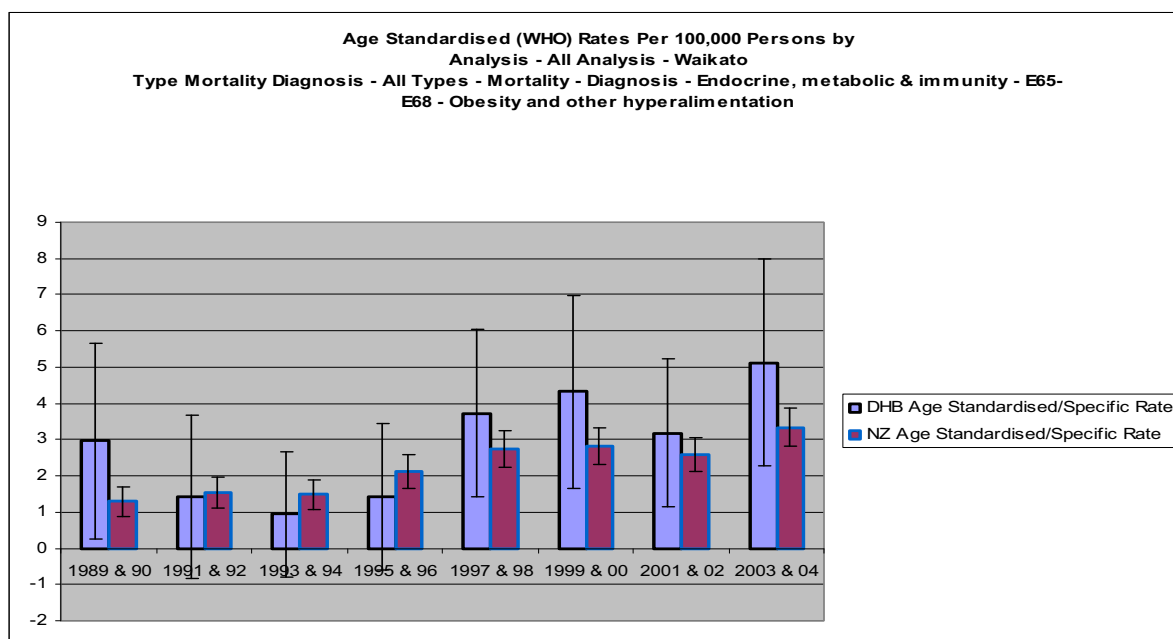
### 4.2.5 Obesity - Mortality in the Waikato

In total there were 51 deaths to obesity and other hyperalimantation illnesses from 1998 to 2004. 43% were Maori, 41% Other and 8% Pacific People. There was no record of Asian deaths. Annually, around 44% of deaths were female and 56% male. Around 56% of the deaths were in NZDep quintile 4 followed by 22% in quintile 5 for 2004.

The age proportion of deaths to obesity was the highest among 25-44 year olds at 33% followed by 45-64 year olds at 44% in 2004.

The age standardised rate of mortality to obesity in the Waikato, increased slightly to 5.12 per 100,000 in 2004.

Graph 11 age standardised rate of mortality to obesity 1989 to 2004



### 4.2.6 Obesity - Hospitalisation in the Waikato

There were 35 hospitalisations related to obesity related illness from 2000 to 2006 with a slight increase from 2003 to 2006.

The age proportion of hospitalisation spread equally across 00-14 year olds to 25-44 year olds. Around 67% of the hospitalisation was in NZDep quintile 5 for 2006 year.

## 4.3 Smoking

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This section of the HNA provides a broad overview of the current situation in New Zealand and the Waikato with regards to the use of tobacco, alcohol and illicit drugs.

This section summarises the content of the report from Population Health, Waikato DHB "Smoking in the Waikato District Health Board, 2006 Census", August 2007, which contains a comprehensive analysis of the smoking status of the population of the Waikato District Health Board region using data from the 2006 Census. The above report is available from the Waikato DHB website.

This HNA acknowledge the writers of the report from Population Health - Sandra Baxendine and Anita Bell. We acknowledge the management agreement for the use of the report content.

### 4.3.1 Key Findings - Smoking

- It is estimated that tobacco causes 5000 deaths in New Zealand every year. Smoking is a major contributor to inequalities in health, is the major cause of lung cancer and chronic obstructive pulmonary disease and is a major cause of heart disease stroke and a variety of other cancers including mouth, larynx, oesophagus and kidney<sup>27</sup>.
- Approximately one fifth of the population of the Waikato District Health Board region is current smokers, which is slightly higher in comparison to the New Zealand population.
- Approximately 30% of the population aged 20 to 24 years is smokers in comparison to only 8% of those aged over 65 years. Twenty percent of those aged 15 to 19 years are smokers.
- Māori, especially female Māori, have the highest rates of smoking. The rates for Pacific people are higher than the European population, but lower than the Māori population. Asian and MELAA<sup>28</sup> populations have lower levels than the European population.
- Generally, in the last ten years, there has been a decline of 1.7 percentage points in the smoking rate of the overall Waikato District Health Board population.

### 4.3.2 Smoking in the Waikato District Health Board region

Approximately 54,000 people in the Waikato DHB region are current smokers; a rate of 22.0%, which is comparable to the New Zealand rate of 19.9% (Graph 12). A similar proportion of Waikato females and males smoke (22%). Nineteen percent of the Waikato population are ex smokers and approximately half have never smoked (Table 26). Detailed information

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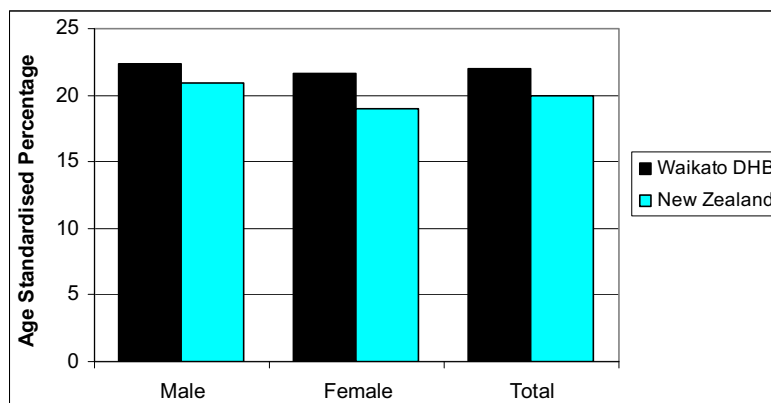
<sup>27</sup> Tobacco Trends 2006: Monitoring tobacco use in New Zealand. Wellington: Ministry of Health, 2006

<sup>28</sup> Middle Eastern, Latin American and African

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broken down by territorial local authority, ethnicity, age and gender is available in the full report.

**Graph 12 Age standardised Percentage smoking for Population 15 years and over, by gender , Waikato District Health Board and New Zealand, 2006**



(1) Standardised to World Health Organisation Standard Population. Source: Statistics New Zealand, 2006 Census of Population and Dwellings.

**Table 26 Age standardised percentage distribution of Smoking Status for Population 15 years and over, by gender, Waikato District Health Board, 2006**

Gender	Regular Smoker	Ex-Smoker	Never Smoked Regularly	Not Elsewhere Included	Total
Male	22.3	19.7	48.8	9.2	100.0
Female	21.7	17.8	52.1	8.4	100.0
<b>Total</b>	<b>22.0</b>	<b>18.7</b>	<b>50.6</b>	<b>8.8</b>	<b>100.0</b>

(1) Standardised to World Health Organisation Standard Population. Source: Statistics New Zealand, 2006 Census of Population and Dwellings.

### 4.3.3 Age and Smoking

The smoking rate in the Waikato varies considerably by age group (**Error! Reference source not found.**). Approximately 30% of those aged 20 to 24 years smoke in comparison to only 8% of those aged over 65 years. Worryingly, 20% of those aged 15 to 19 years are current smokers. However, there is an encouraging trend of ex smokers. There is little difference between the proportion of males and females who smoke within each age group, apart from slightly more females smoke than males in the 15 to 19 years and this is reversed in the over 65 years.

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**Table 27: Percentage Distribution of Smoking Status, by age group, Waikato District Health Board, 2006**

<b>Smoking Status</b>	<b>15-19</b>	<b>20-24</b>	<b>25-34</b>	<b>35-44</b>	<b>45-54</b>	<b>55-64</b>	<b>65 and Over</b>
Regular Smoker	19.2	29.5	28.0	25.1	21.4	16.1	7.6
Ex-Smoker	4.6	10.5	15.9	18.8	22.9	27.9	31.1
Never Smoked Regularly	66.9	50.5	47.4	47.7	47.6	47.9	51.5
Not Elsewhere Included	9.3	9.5	8.7	8.4	8.1	8.1	9.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Statistics New Zealand, 2006 Census of Population and Dwellings.

### 4.3.4 Ethnic Differences in smoking

Approximately, 39% of the Māori population of Waikato are smokers compared to 22% of the European population and 27% of the Pacific population. Only 9% of the Asian population are smokers.

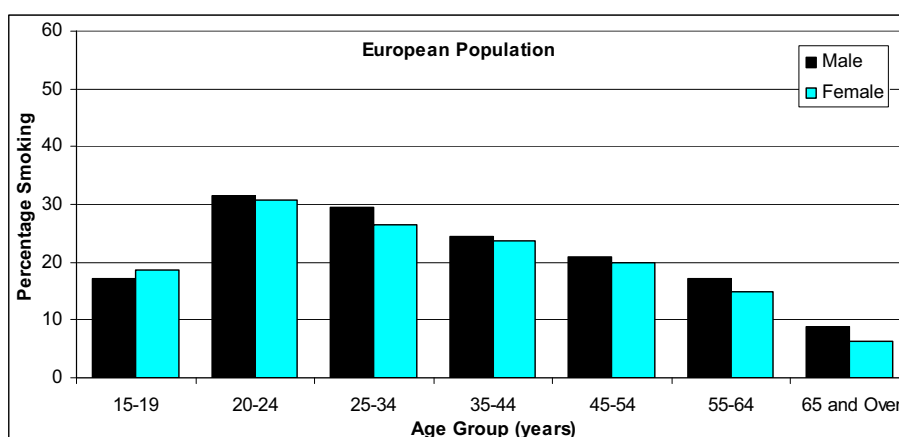
Within the Māori population, 42% of females are smokers compared to 35% of males. For European and Pacific population, males and females have similar smoking rates. However, for the Asian and MELAA populations, there are almost three times as many male smokers (16%) compared to females (5%). Approximately 15 to 20% of the European, Māori and Pacific populations are ex smokers.

In all age groups, Māori have the highest male and female smoking rates; in comparison, Pacific rates are lower, but higher than European rates. The Asian population smoking rates are the lowest in all age groups.

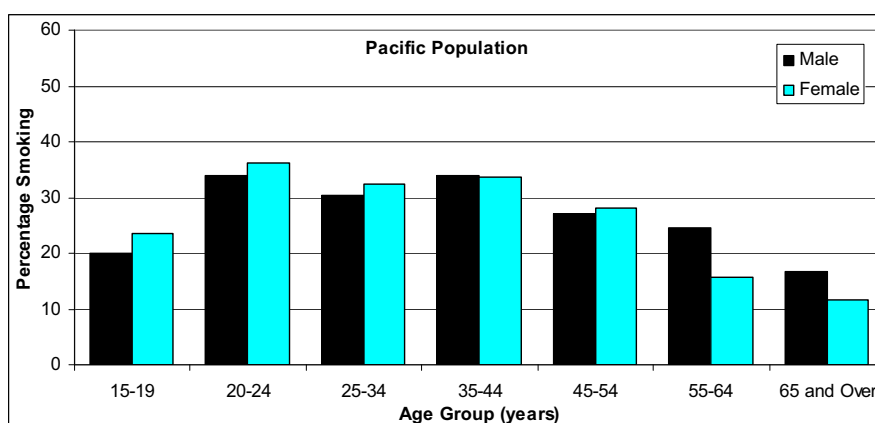
For each ethnic group, the age group 20 to 24 years has the highest rate of smokers, except for Māori females where the rate is highest in those aged 35 to 44 years (50%). Māori have the highest rates in those aged 20 to 24 years, at 43% for males and 49% for females, in comparison to the other ethnic groups. Half of Māori females aged 25 to 44 years smoke. Asian females have the lowest rates for each age group with a smoking rate of only 4.7% in those aged 25 to 44 years.

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Graph 13: Percentage Smoking, by age group, Gender and Ethnicity, Waikato District Health Board, 2006



Graph 14: Percentage Smoking, by age group, Gender for Pacific People in the Waikato District Health Board, 2006



(1) People can belong to more than one ethnic group. Source: Statistics New Zealand, 2006 Census of Population and Dwellings.

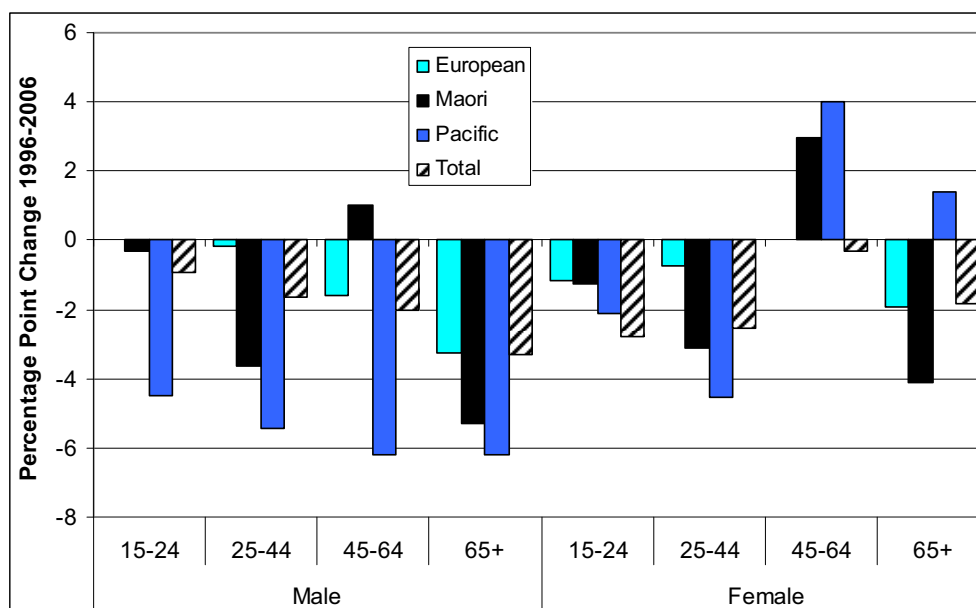
### 4.3.5 Changes in Smoking Rates Since 1996 Census

Over the last ten years, 1996 to 2006, the Waikato smoking rate has declined by 1.7 percentage points. The smoking rate in males has decreased by 1.6 percentage points and for females 1.8 percentage points. This is slightly less than for the New Zealand population with a decline of 2.1 percentage points for males and 2.9 percentage points for females.

For Europeans, the smoking rates have decreased in all age groups with the exception of males aged 15 to 24 years and females aged 45 to 64 years where there was no change in rate. The greatest decrease was seen in males and over 65 years (3.3 percentage points).

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Graph 15: Percentage point change in percentage Smoking, by age group, gender and ethnicity, Waikato District Health Board, 1996-2006



Source: Statistics New Zealand, 1996 and 2006 Censuses of Population and Dwellings.

For Māori, all rates have decreased apart from males (1.0 percentage points) and females (3.0 percentage points) aged 45 to 64 years. The greatest decline has been in males (5.3 percentage points) and females (4.1 percentage points) over the age of 65 years.

### 4.3.6 Smoking and Deprivation

The areas with the highest average NZ Deprivation score 2001 (NZDep2001) have the highest smoking rates; Waitomo, South Waikato, Hauraki, and Part Ruapehu. These territorial authorities also have the highest percentages of their population living in the most deprived areas (mesh blocks). Generally higher levels of deprivation are associated with higher rates of smoking.

Table 28 Average NZDep 2001 Score, percentage of the population living in meshblocks with NZDep 2001 scores of 7 to 10 and age standardised percentage of Smokers for the population 15 years and over (2006), by territorial authority, Waikato District Health Board

Territorial Authority	TA average NZ Dep score	Percentage of the population living in Meshblocks with NZDep 2001 scores of 7-10	Age standardised percentage of smokers
Thames-Coromandel	6.6	53.4	24.9
Hauraki	6.8	52.8	27.6
Waikato	5.8	47.5	23.2

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Territorial Authority	TA average NZ Dep score	Percentage of the population living in Meshblocks with NZDep 2001 scores of 7-10	Age standardised percentage of smokers
Matamata-Piako	5.0	28.0	23.1
Hamilton City	5.9	48.0	18.9
Waipa	4.4	24.1	20.7
Otorohanga	5.8	41.0	25.6
South Waikato	7.0	61.9	29.2
Waitomo	6.6	57.4	29.6
Part Ruapehu	7.8	80.1	27.6
<b>Waikato DHB</b>	<b>5.9</b>	<b>45.7</b>	<b>22.0</b>

Sources: Statistics New Zealand, 2001 and 2006 Censuses of Population and Dwellings. Salmond, C., & Crampton, P. (2002). *NZdep2001 index of deprivation*. Wellington: Department of Public Health, Wellington School of Medicine and Health Sciences

## 4.4 Alcohol and Drug Misuse

New Zealand's National Drug Policy for 2006-2011 is intended to aid government agencies and non government organisations (NGOs) in developing organisational and intersectoral work programmes and action plans<sup>29</sup>

Some of the key strategies are:

- The Crime Reduction Strategy by the Ministry of Justice which relates to the production and sale of illicit drugs.
- The Safer Communities aim to reduce alcohol related violence in addition to reducing community violence and sexual violence.
- Te Tahuu - Improving Mental Health 2005-2015: Aim to improve addiction services and the management of addiction and co-existing mental health problems.
- Health and Physical Education - a learning area within the New Zealand Curriculum: Through learning and accepting challenges in health-related and movement contexts students reflect on the nature of wellbeing and how to promote it. Programmes of learning in schools are developed to meet students' needs and interests. This may include a context related to drug use/misuse.

<sup>29</sup> National Drug Policy 2006-2011, Published in April 2006 by MoH, ISBN 0-478-29951-6 (Book), ISBN 0-478-29952-4 (Internet), website: <http://www.ndp.govt.nz>

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- Reduce Drug and Alcohol Use by Offenders 2005-2008: The Department of Corrections has a specific strategy to minimize harm related to drug use by offenders.
- Youth Health: A joint Ministry of Health (MoH) and Ministry of Youth Development document identifies tobacco, alcohol and drugs as specific health risks for young people.

### 4.4.1 Alcohol Use and Misuse

#### Summary of key findings<sup>30</sup>

- Around 20.1% of all deaths in the 15-34 age group can be attributable to alcohol, mainly from road traffic injuries, suicides and assaults. The 15-24 age group is particularly affected.
- In the New Zealand culture the abuse of alcohol is seen as a “rite of passage” for young people.
- The adverse affects of alcohol related mortality in New Zealand mainly impacts upon people aged 15 to 34, and in particular the 15-24 age group.

#### Challenges

- Individuals and communities must accept their roles and work collectively in changing their behaviours with alcohol consumption
- Focus on the underlying acute problems and consequential social harms
- Reduced tolerance to intoxication and abuse.

It is evident from the campaigns that New Zealand is gradually embracing the idea that the underlying problem is not just alcohol rather it is the way it is consumed. This is a pragmatic approach to reducing alcohol related harm. The Alcohol Advisory Council of New Zealand (ALAC ) ranks alcohol just below tobacco in terms of harm and costs for New Zealand, estimating the costs as somewhere between \$1-4 billion a year (Easton, 2000)<sup>31</sup>. These costs are:

- \$655 million in public health (70% of weekend Accident and Emergency admissions)
- \$240 million in crime and its consequences (70% of police time)
- \$200 million in social welfare
- \$300 million in other Government spending
- \$1.7 billion in lost productivity

Alcohol is a widely used and socially acceptable drink in New Zealand. Hazardous drinking of alcohol is one of the leading causes of injuries and associated health problems.

This HNA draws information from the following reports:

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<sup>30</sup> YATA, Working Together, March 2005

<sup>31</sup> ALAC, Statement of Intent 30 June 2007

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- Ministry of Health's Public Health Intelligence (PHI): Occasional Bulletin No. 40 presents the results from the **New Zealand Health Monitor, the 2004 Health Behaviours Survey - Alcohol Use**, which investigated alcohol use in the New Zealand population. The full report can be found online at Ministry of Health's [website](#).
- Ministry of Justice report, 2006, "[The sale and supply of alcohol to under 18 year olds in New Zealand: A systematic overview of international and New Zealand literature \(FinalReport\)](#)".
- Youth Access to Alcohol (YATA) - "Alcohol and New Zealand Youth, A snapshot of young people's experience with alcohol", findings of Youth 2000, A National Secondary School Youth Health Survey, December 2004.

The Ministry of Health estimated that alcohol-related hospitalisation cost New Zealand more than \$74 million each year and that at some time in their life, nearly one in five New Zealanders will suffer an alcohol use disorder.

### 4.4.2 Findings As Presented in PHI Bulletin 40

#### Prevalence of alcohol consumption:

- An estimated 81.2% (95% confidence interval: 80.1-82.3) of New Zealanders aged 12-65 years had consumed alcohol in the last 12 months.
- Males were significantly more likely to have consumed alcohol in the last 12 months (82.5%; 80.9-84.0) than females (78.4%; 76.8-80.0).
- Non-Maori were significantly more likely to have consumed alcohol in the last 12 months (81.3%; 80.0-82.6) than Maori (74.2%; 72.8-75.7).
- 1.8% (1.4-2.2) of people aged 12-65 years had produced home-made alcohol (beer, wine and/or spirits) in the last 12 months.

#### Drinking patterns:

Among New Zealanders aged 12-65 years who had consumed alcohol in the last 12 months, it was found that:

- 14.7% (13.6-15.7) consumed large amounts of alcohol at least once a week (for males this represents more than six standard drinks on one drinking occasion; for females this represents more than four standard drinks on one drinking occasion) males were significantly more likely to have consumed large amounts of alcohol at least once a week (19.7%; 18.1-21.4) compared to females (11.1%; 9.7-12.5).
- Maori were significantly more likely to have consumed large amounts of alcohol at least once a week (21.0%; 19.7-22.3) compared to non-Maori (14.7%; 13.5-15.9) overall, 9.5% (8.6-10.3) had consumed enough alcohol to feel drunk at least once a week.
- 20.7% (19.3-22.1) had done at least some of their driving under the influence of alcohol in the last 12 months.

#### Alcohol-related problems:

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- Two in five past-year drinkers (37.7%; 36.3-39.2) reported that they had felt the effects of alcohol after drinking the night before, more than once in the last 12 months.
- 15.1% (14.0-16.1) of past-year drinkers aged 12-65 years had felt the effects of alcohol while at work, study or engaged in household duties, more than once in the last 12 months.
- Rates for self-reported problems from own alcohol use among drinkers were significantly higher for males than females, and were also significantly higher for Maori than non-Maori.
- 5.7% (5.1-6.3) of New Zealanders aged 12-65 years had experienced physical assault as a result of someone else's drinking during the last 12 months.
- 5.3% (4.7-5.9) of New Zealanders aged 12-65 years had experienced sexual harassment as a result of someone else's drinking during the last 12 months.
- 2.2% (1.8-2.6) of New Zealanders aged 12-65 years had received help to reduce their level of alcohol consumption in their lifetime.
- 1.0% (0.7-1.2) of New Zealanders aged 12-65 years had wanted help to reduce their alcohol consumption during their lifetime, but had not received it.

### **Alcohol and youth:**

- 55.7% (51.8-59.7) of youth aged 12-17 years had consumed alcohol in the last 12 months ('youth drinkers').
- Among youth, there were no significant differences between males and females, or between Maori and non-Maori, in the prevalence of alcohol consumption in the last 12 months.
- Among youth drinkers, 12.4% (9.4-15.3) consumed large amounts of alcohol at least once a week.
- Maori youth drinkers were significantly more likely to have consumed large amounts of alcohol at least once a week (23.8%; 19.6-28.0) compared to non-Maori youth drinkers (9.8%; 6.4-13.2).
- Among youth drinkers, 62.5% (57.4-67.5) had had alcohol purchased for them by someone else in the last 12 months.

### **Alcohol and pregnancy:**

- 82.4% (71.6-93.1) of female drinkers aged 16-39 years who were currently pregnant reported stopping drinking alcohol during their pregnancy.
- 79.2% (73.9-84.6) of female drinkers aged 16-39 years who were planning a pregnancy had stopped drinking alcohol while planning a pregnancy.

The following findings are from the Ministry of Justice publication on [\*\*"The sale and supply of alcohol to under 18 year olds in New Zealand: A systematic overview of international and New Zealand literature \(FinalReport\)\*\*](#).

Based on annual aggregated results from the 2005-06 ALAC Alcohol Monitor, survey of youth 12-17:

## Lifestyle Factors Influencing Health

- Half (53%) of youth are current drinkers (32% Moderate Drinkers, 21% Binge Drinkers).
- Pacific youth are significantly less likely to be defined as current drinkers (38%).
- Māori are over-represented among Binge Drinkers (27%).
- On average, most drinkers "really" started drinking at age 14 years.
- Youth drink relatively infrequently – 2.5 days per month on average (67% drink on 2 or fewer days per month).
- Binge drinkers drink more frequently – 3.4 days per month on average (29% drink on 3-4 days per month).
- Youth mainly drink beer(40%), RTDs(27%), spirits(19%), wine (13%).
- Binge drinkers are more likely to drink RTDs (36%) or spirits (28%), and less likely to drink beer (28%) or wine (7%).

Two-thirds (66%) of youth drinkers report experiencing some drinking-related harm in the last 12 months, including most binge drinkers (91%) and Pacific drinkers (92%). The most commonly reported alcohol-related harms were:

- Short-term effects (e.g. hangover, memory loss, etc.) (39%).
- Doing something embarrassing or humiliating (34%).
- Accidents (e.g. tripping, hurting self) (30%).
- Arguments (27%).

Findings from the Youth2000 - a national secondary school youth health survey are:

- More than 8 out of 10 students have drunk alcohol at some point in their lives, usually between the ages of 10 and 15, with nearly half consuming their first drink before age 13.
- Approximately 60% of students have easy access to alcohol at home and half of current drinkers consume alcohol in their homes.
- A small but significant number of students reported that they had got into trouble, had been in fights or had sex and later regretted it due to drinking alcohol.

### **How do adults drink in New Zealand?**

- 24% of adults 18 years of age who currently drink reported that they consumed 7+ glasses on the last drinking occasion
- 635,000 (23%) recognize they drink too much but can identify reasons to moderate the quantity they drink on any one occasion, money, work etc.
- 785,000 (29%) recognize they drink too much but can identify little reason to moderate the quantity they drink on any one occasion
- 450,000 drank beyond the point of intoxication on their last drinking occasion
- 275,000 set out to get drunk on their last drinking occasion.

## **4.5 Illicit Drug Use in New Zealand**

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This section presents the findings on illicit drug use in New Zealand, as there is no information available at the local or regional level.

## Lifestyle Factors Influencing Health

The content and statistical information outlined in this section of the HNA are extracted from the following reports:

- “Drug Use in New Zealand, Analysis of the 2003 New Zealand Health Behaviours Survey - Drug Use”, by PHI (Occasional Bulletin No. 45), published in August 2007.
- Centre for Social and Health Outcomes Research and Evaluation and Te Ropu Whariki, “Recent trends in drug use in New Zealand: Key findings from the 2006 Illicit Drug Monitoring System (IDMS) produced the following reports
- Recent Trends in Illegal Drug Use in New Zealand, 2006
- Findings from the Methamphetamine module of the 2005, Illicit Drug Monitoring System (IDMS): “Methamphetamine and Other Illicit Drug Trends in New Zealand, 2005 Module Report”, “Cannabis Module Report, 2005” and “Hallucinogen Module Report 2005”.
- “Recent trends in drug use in New Zealand: key findings from the 2006 Illicit Drug Monitoring System (IDMS) - April 2007<sup>32</sup>”
- “Recent trends in drug related harm in New Zealand: key findings from the 2006 Illicit Drug Monitoring System (IDMS) - April 2007<sup>33</sup>”.

### 4.5.1 Key findings from PHI Bulletin No. 45

This report from PHI focuses on the most commonly used drugs in New Zealand: cannabis, amphetamines and ecstasy; however it also presents information on past-year and lifetime use of a wide range of recreational drugs. Presenting results by sex, age and ethnicity allows analyses of general trends for the population in drug use for recreational purposes.

#### Key results by drug type

Key results are presented below for cannabis, amphetamines and ecstasy, which are the three most commonly used recreational drugs (excluding alcohol and tobacco) in the last 12 months in New Zealand, as well as for selected other recreational drugs.

#### Cannabis

- Cannabis was the most common drug (apart from alcohol and tobacco) used for recreational purposes in New Zealand.
- Over two in five (44.4%; 95% confidence interval: 43.1–45.7) New Zealanders aged 13–65 years had used cannabis during their lifetime.
- Over one in eight (13.7%; 12.8–14.7) New Zealanders aged 13–65 years had used cannabis in the last 12 months.
- Among past-year cannabis users, an estimated 15.8% (13.3–18.3) had used cannabis frequently (10 or more times a month on average).

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<sup>32</sup> Dr. Chris Wilkins, Melissa Giring, Paul Sweetsur

<sup>33</sup> Dr. Chris Wilkins, Melissa Giring, Paul Sweetsur

## Lifestyle Factors Influencing Health

- Among past-year cannabis users, 13.7% (11.0–16.4) had binged on cannabis in the last 12 months (that is, used cannabis continuously for 24 hours or more).
- An estimated 39.5% (35.1–43.9) of past-year cannabis users had done at least some of their driving while feeling under the influence of cannabis.
- Approximately one in four past-year cannabis users (24.1%; 21.0–27.3) had experienced harmful effects to their energy and vitality in the last 12 months, because of their cannabis use.
- One in seven past-year cannabis users (14.2%; 11.4–17.0) had experienced harmful effects to their health because of their cannabis use, in the last 12 months.
- Overall, 6.1% (4.5–7.7) of past-year cannabis users had ever received help to reduce their use of cannabis.

## Amphetamines

- Amphetamines were the second most widely used recreational drug (excluding alcohol and tobacco) in New Zealand, with 6.8% (5.9–7.7) of New Zealanders aged 13–65 years having used amphetamines in their lifetime.
- Amphetamines had been used by 2.5% (2.0–2.9) of New Zealanders aged 13–65 years in the last 12 months.
- Among past-year amphetamine users, over half (56.3%; 47.6–65.0) had used amphetamines only one or two times in the last 12 months.
- Overall, an estimated 28.4% (19.5–37.2) of past-year amphetamine users had binged on amphetamines at least once in the last 12 months (that is, used amphetamines continuously for 24 hours or more).
- Approximately 27.1% (18.7–35.5) of past-year amphetamine users had done at least some of their driving while feeling under the influence of amphetamines.
- The three most harmful effects experienced by past-year amphetamine users because of their amphetamine use were effects on energy and vitality, financial position and health.
- Overall, an estimated 5.3% (1.5–9.1) of past-year amphetamine users had ever received help to reduce their use of amphetamines.

## Ecstasy

- Overall, 3.7% (3.1–4.3) of New Zealanders aged 13–65 years had used ecstasy in their lifetime.
- Ecstasy was the third most commonly used recreational drug (excluding alcohol and tobacco) in the last 12 months, with 1.9% (1.4–2.3) of New Zealanders aged 13–65 years having used ecstasy in the last 12 months.
- Almost two in three past-year ecstasy users (60.8%; 48.7–72.9) had used ecstasy one or two times in the last 12 months.
- Overall, an estimated one in four past-year ecstasy users (24.1%; 13.3–34.9) had binged on ecstasy at least once in the last year (that is, used ecstasy continuously for 24 hours or more).

## Lifestyle Factors Influencing Health

- Overall, an estimated 15.8% (8.2–23.4) of past-year ecstasy users did at least some of their driving while feeling under the influence of ecstasy.
- The most harmful effects experienced by past-year ecstasy users from their ecstasy use were effects on financial position, energy and vitality and health.

### Other Drugs

Among New Zealanders aged 13–65 years, it was found that:

- 6.5% (5.7–7.2) had used LSD in their lifetime
- 5.7% (5.0–6.4) had used magic mushrooms in their lifetime
- 2.9% (2.4–3.4) had used nitrous oxide in their lifetime
- 1.2% (0.9–1.5) had used LSD in the last 12 months
- 1.1% (0.8–1.4) had used magic mushrooms in the last 12 months
- 1.2% (0.9–1.6) had used nitrous oxide in the last 12 months.

### 4.5.2 Key results by population group, age, sex, ethnicity

Analysis showed that past-year drug-taking behaviours differed significantly between population groups, with people younger than 25 years old, males, and Māori being particularly at-risk groups.

#### Age:

People aged 18–24 years had the highest rates of past-year drug use, in particular:

- one in three (33.6%; 29.4–37.8) had used cannabis in the last 12 months
- 8.7% (6.4–11.0) had used amphetamines in the last 12 months
- 7.2% (5.1–9.3) had used ecstasy in the last 12 months.

Furthermore, among people aged 13–17 years, 1 in 5 (20.4%; 17.0–23.7) had used cannabis in the last 12 months.

#### Sex:

Males were significantly more likely than females to have used the following drugs in the last 12 months: cannabis, amphetamines, ecstasy, LSD, magic mushrooms, nitrous oxide and kava.

Among past-year cannabis users, males were significantly more likely than females to be frequent cannabis users (10 times or more per month on average), and to have binged on cannabis in the past year (used cannabis continuously for 24 hours or more). Similarly, among past-year cannabis users, males were significantly more likely than females to have driven while feeling under the influence of cannabis, experienced harmful effects because of their cannabis use and to have ever received help to reduce their use of cannabis.

#### Ethnicity:

## Lifestyle Factors Influencing Health

Māori were significantly more likely than non-Māori to have used cannabis and magic mushrooms in the last 12 months. There were no significant differences in past-year amphetamine or ecstasy use between Māori and non-Māori.

Among past-year cannabis users, Māori were significantly more likely than non-Māori to be frequent cannabis users (10 times or more per month on average). Māori were more likely to have reported experiencing harmful effects from their cannabis use compared to non-Māori, and were also significantly more likely to have ever received help for their cannabis use.

### **4.5.3 Key findings from Illicit Drug Monitoring System 2005 (IDMS)**

The Illicit Drug Monitoring System (IDMS) was established in 2005 to provide ongoing and timely information on changes in drug use and drug related harm in New Zealand. It is conducted annually as part of the National Drug Policy. The data collected in the IDMS is intended to be used by a wide range of people and organisations to inform appropriate and timely responses to drug use in New Zealand. The research protocols used in the IDMS have been approved by the Massey University Human Subjects Ethics Committee<sup>34</sup>.

Detailed findings from the 2006 IDMS can be downloaded from the website: [www.ndp.govt.nz](http://www.ndp.govt.nz) or from the SHORE website: [www.shore.ac.nz](http://www.shore.ac.nz).

Key findings from the “Recent trends in illegal drug use in New Zealand, 2006, Centre for Social and Health Outcomes Research and Evaluation & Te Ropu Whariki, December 2006 report are<sup>35</sup>:

A total of 318 frequent drug users were interviewed for the 2006 IDMS including 114 frequent methamphetamine users, 111 frequent ecstasy users and 93 frequent injecting drug users.

#### **Demographic characteristics of the frequent drug users:**

- Two thirds of the frequent drug users were male
- The median age of the sample was 26 years old,
- The frequent ecstasy users were younger than either the frequent methamphetamine users or the frequent injecting drug users.
- 82% of frequent drug users were European with 15% Maori. Maori were more likely to be frequent methamphetamine users or frequent injecting drug users than frequent ecstasy users.
- 41% of the frequent drug users were unemployed, sick or invalid. Only 34% of the frequent drug users were employed with 20% students (i.e. high school and tertiary).
- 35% of the frequent drug users had no educational qualifications.
- 12% of the frequent drug users identified as non-heterosexual.

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<sup>34</sup> [http://www.shore.ac.nz/projects/idms\\_study.htm](http://www.shore.ac.nz/projects/idms_study.htm)

<sup>35</sup> IDMS Research Briefing 01/06, April 2007, Dr. Chris Wilkins, Melissa Girling, Paul Sweetsur

## Lifestyle Factors Influencing Health

- The frequent drug users had a median annual gross income of \$27,500.

### Prevalence of Use

High proportions of the frequent drug users reported lifetime use of the following drugs:

Table 29: Drug type by prevalence of use and mean age first tried

Drug Type	Prevalence of use	Mean Age - first Tried
Cannabis	99%	14 years olds
Alcohol	98%	13 years olds
Tobacco	86%	14 years old
Ecstasy	85%	
LSD	84%	
Amphetamine Sulphate	80%	
Methamphetamine	75%	25 years old
Legal Piperazine Party Pills	73%.	22 years old

## 4.6 Drug Related Harm

Some of the key findings on the trends in drug related harm in the past six months are:

- **Drug dependency** -- 80% of the frequent injecting drug users (IDU) and 59% of the frequent methamphetamine users were classified as drug dependent. The frequent ecstasy users had low levels of drug dependency.
- **Areas of life harmed** - 72% of the frequent methamphetamine users and 68% of the frequent IDU reported harm to “personal relationships” from their drug use.
- **Physical and psychological problems** - The frequent methamphetamine users reported a mean of 11 physical and 11 psychological problems from their use in the past six months. Psychological problems reported included strange thoughts, hallucinations, paranoia, mood swings and short temper. Three out of ten users reported suicidal thoughts related to their drug use in the past six months.
- **Health services accessed** - Over half of the frequent methamphetamine and IDU users had accessed a health service in relation to their drug use in the past six months. 13% of IDU had

## Lifestyle Factors Influencing Health

visited an Accident and Emergency Department and 12% had accessed an ambulance. One third of the methamphetamine and IDU drug users had visited a GP in relation to their drug use in the past six months.

### 4.7 Substance Use Disorders

The information presented below is sourced from the report "Substance Use Disorders in Te Rau Hinengaro, The New Zealand Mental Health Survey"<sup>36</sup>. The purpose of the survey was to provide information for people whose interest is primarily in substance use disorders, rather than mental health in general. The National Research Bureau, under contract to the MoH, carried out the fieldwork in late 2003 and 2004. The response rate was 73.3%. The total number of interviews was 12,992 (Maori 2,595 and Pacific people 2,374).

Summary of the substance use disorder survey findings are as follows:

#### Prevalence

- 13.8% of the population are predicted to meet criteria for a disorder at some time in their lives, with 12.3% having already done so, and 3.5% having disorder in the past 12 months. The prevalence of hazardous drinking in the past 12 month was 20%.
- The onset of substance use disorders occurs mostly in the late teenage years and early 20s with 75% of those who develop a substance use disorder doing so by 25 years of age.
- Males have prevalence of substance use disorders that are more than double those for females. The same pattern was seen for hazardous drinking in the past 12 months.
- Prevalence of substance use disorders and hazardous drinking are high for people who are disadvantaged, whether measured by education, equivalised household income or NZDep2001 index.

#### Ethnic Comparison

Survey Findings	Maori	Other	Pacific People	Comments
Substance Use disorders	9.1%	2.7%	4.9%	Maori and Pacific people have a greater burden due to substance use problems.
After adjustment for socio demographics	6%	3%	3.2%	

<sup>36</sup> Prepared for: Alcohol Advisory Council of New Zealand, 23 November 2006, Author: Persees Anita, Contracts Manager, Auckland UniServices Limited

## Lifestyle Factors Influencing Health

Hazardous drinking	35.4%	17.9%	21.4%	Pacific People were less likely to drink than Maori or Others, but those who did drink, the prevalence was similar to that of Maori not Others.
After adjustments	29.6%	18.6%	18.1%	Maori have a higher prevalence of hazardous drinking and alcohol disorders.

A slightly different pattern was observed for drug disorders. Maori are much more likely to than Pacific People and Others to use drugs and the prevalence of drug disorders are higher than that for Other drug users, even after adjustment for sociodemographic correlates. The prevalence of drug disorders in Pacific drug users is intermediate between that for Maori and Other drug users and not significantly different from either.

### Comorbidity and Disability

People with substance use disorders often experience other disorders:

- 40% experienced an anxiety disorder and 29% a mood disorder.
- Higher prevalence of some chronic physical diseases (such as chronic pain and respiratory disease) and of chronic disease risk factors (smoking, high blood pressure and hazardous alcohol use) than people without mental disorders.

### Suicidal Behaviour

- Of the population, 15.7% reported having thought seriously about suicide (suicidal ideation), 5.5% had made a suicide plan and 4.5% had made an attempt.
- People with mental disorders had elevated risks, with 11.8% reporting suicidal ideation, 4.1% making a suicidal plan and 1.6% making a suicide attempt.

### Health Services

Of all 12 month cases of substance use disorders:

- 29.9% had a mental health visit to a healthcare or non-healthcare provider in the past 12 months
- Of these 12 month cases:
  - 14.5% had contact with a mental health specialists
  - 20% with a general medical provider
  - 2.6% within the human services sector
  - 5.7% with a complementary and alternative medicine practitioner

Most people with lifetime substance use eventually made contact if their disorders continued. However, the percentage seeking help at the age of onset were small for all disorders and the median duration of delay until contact varied by specific disorder from 3 years to 16 years.

## Lifestyle Factors Influencing Health

### Sociodemographic correlates

Treatment contact was lower in younger people and Pacific people. People with lower educational attainment and resident in rural centres or areas had lower rates of visits to the mental health speciality sector. Unmet need for treatment for any disorder did not vary significantly by socioeconomic status.

#### 4.7.1 Hospital Admissions for drug related illnesses

The data is sourced from the New Zealand Health Information Service (NZHIS) which records data on admissions to public hospitals for drug related poisonings and mental and behavioural disorders.

The broad categories of drug related hospitalisations are:

- Alcohol
- Stimulants
- Hallucinogens
- Opiates
- Cannabis
- Multiple drug use

In the Waikato, there were 1531 admissions for drug related illnesses from 2000 to 2006, with an increase of over 50% in the reporting years.

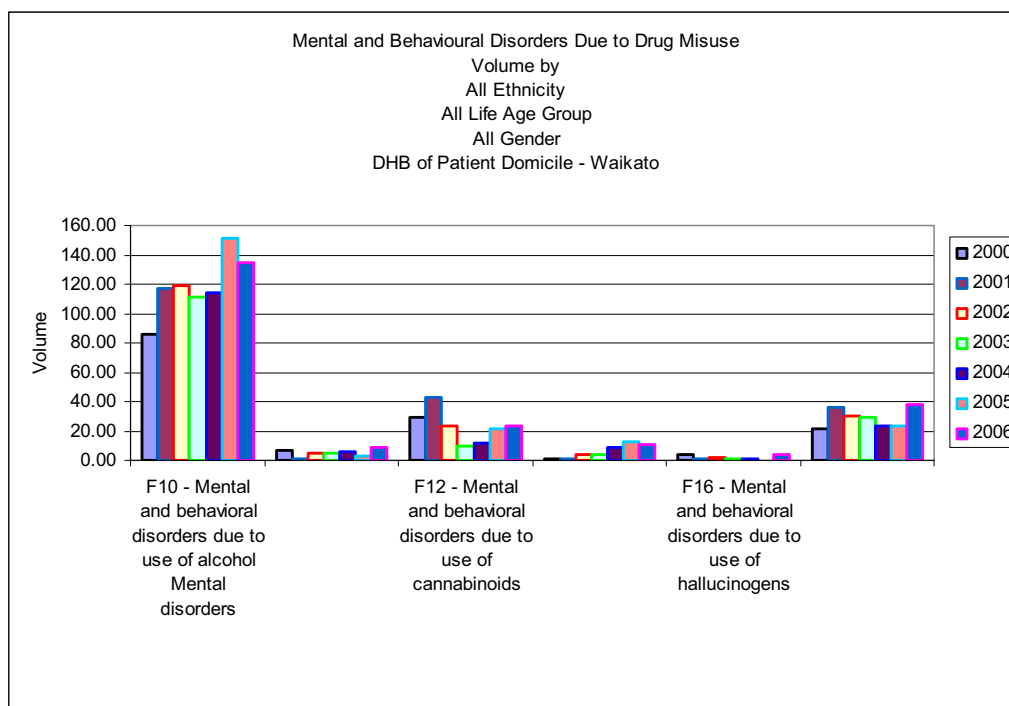
**Table 30: Hospitalisations related to drug misuse, Waikato, 2000-2006**

Hospitalisation - Drug Misuse 2000-2006	2000	2001	2002	2003	2004	2005	2006	Total
F10 - Mental and behavioral disorders due to use of alcohol	86	117	119	111	114	151	135	833
F19 - Mental and behavioral disorders due to multiple-drug use and use of other psychoactive substances	21	36	30	29	23	23	38	200
F12 - Mental and behavioral disorders due to use of	29	43	23	10	12	21	23	161
F15 - Mental and behavioral disorders due to use of other stimulants, including caffeine	1	1	4	4	9	13	11	43
F11 - Mental and behavioral disorders due to use of opioids	7	1	5	5	6	3	9	36
F13 - Mental and behavioral disorders due to use of sedatives or hypnotics	3	1	5	4	1	1	4	19
F16 - Mental and behavioral disorders due to use of hallucinogens	4	1	2	1	1		4	13
F18 - Mental and behavioral disorders due to use of volatile solvents		3	1	1	1	2		8
F17 - Mental and behavioral disorders due to use of tobacco					1			1
T40 - Poisoning by narcotics and psychodysleptics [hallucinogens]	26	32	31	28	17	36	47	217
<b>Grand Total</b>	<b>177</b>	<b>235</b>	<b>220</b>	<b>193</b>	<b>185</b>	<b>250</b>	<b>271</b>	<b>1531</b>

The highest number of admissions was related to behaviour disorders due to use of alcohol, as shown below. *Note that the chart below excludes "Poisoning by narcotics".*

## Lifestyle Factors Influencing Health

**Graph 16: Admissions related to behaviour disorders due to the use of alcohol**



Around 69% of the admissions were among Other ethnic group with Maori at 28% and Asians and Pacific People at 2% each.

**Table 31 Hospitalisations due to drug use, Waikato DHB, 2000-2006**

Hospitalisation - Drug Use - 2000 to 2006	Maori	Asians	Other	Total Other Ethnic Group	Pacific People	Total
F10 - Mental and behavioral disorders due to use of alcohol	153	22	644	666	14	833
F19 - Mental and behavioral disorders due to multiple-drug use and use of other psychoactive substances	95	1	98	99	6	200
F12 - Mental and behavioral disorders due to use of cannabinoids	95		63	63	3	161
F15 - Mental and behavioral disorders due to use of other stimulants, including caffeine	12		31	31		43
F11 - Mental and behavioral disorders due to use of opioids	9		27	27		36
F13 - Mental and behavioral disorders due to use of sedatives or hypnotics	3		15	15	1	19
F16 - Mental and behavioral disorders due to use of hallucinogens	5		8	8		13
F18 - Mental and behavioral disorders due to use of volatile solvents	4		4	4		8
F17 - Mental and behavioral disorders due to use of tobacco			1	1		1
T40 - Poisoning by narcotics and psychodysleptics [hallucinogens]						
<b>Grand Total</b>	<b>428</b>	<b>26</b>	<b>1051</b>	<b>1077</b>	<b>26</b>	<b>1531</b>

The gender proportions were reasonably stable at 36% female and 64% male.

The prevalence of hospitalisation was stable across all quintiles over the seven year reporting periods. The highest was quintile 5 at 44% followed by quintile 4 at 30% in 2006.

The age proportions of hospitalisation were the highest among 25-44 age group at 40% followed by 15-24 age group at 29% and 45-64 age group at 20% for 2006. The risk of hospitalisation was the highest among 15-25 year olds.

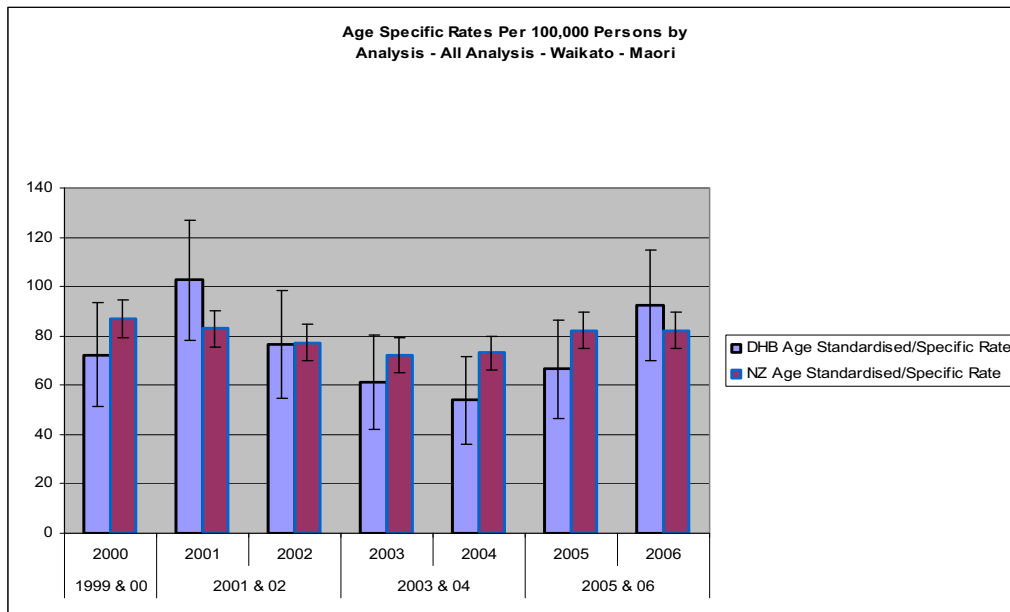
## Lifestyle Factors Influencing Health

The age standardised rate of hospitalisation for mental and behavioural disorders due to psychoactive substance use increased slightly to 67.92 per 100,000 in 2006 and there was no notable difference between the Waikato age standardised rate and the national rate.

### Maori - Age Standardised and Specific Rates

The age standardised rate among Maori increased from 66.59 in 2005 to 92.3 per 100,000 in 2006.

**Graph 17 age standardised rate of hospitalisation related to drug and alcohol use, Maori, Waikato DHB, 2000-2006**



The age specific rate of hospitalisation among 15-24 age groups was 213.2 per 100,000 in 2006. This rate was the highest since 2002.

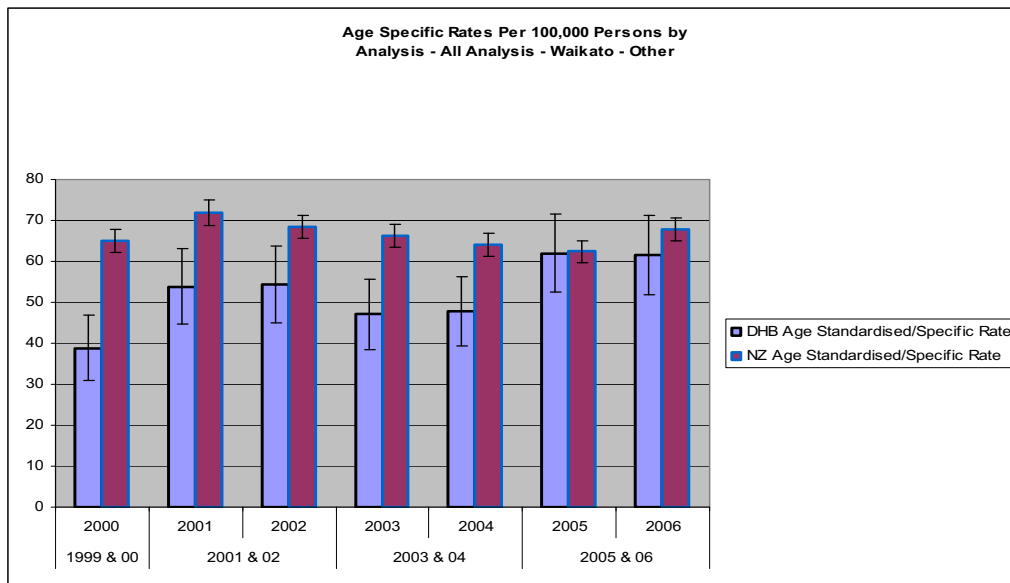
A similar trend was noted among 25-44 age groups with the 2006 age specific rate at 156.2 per 100,000.

### Other Ethnic Group - Age Standardised and Specific Rates

The age standardised rate among Other ethnic group remained stable in 2005 and 2006 at 61.48 per 100,000.

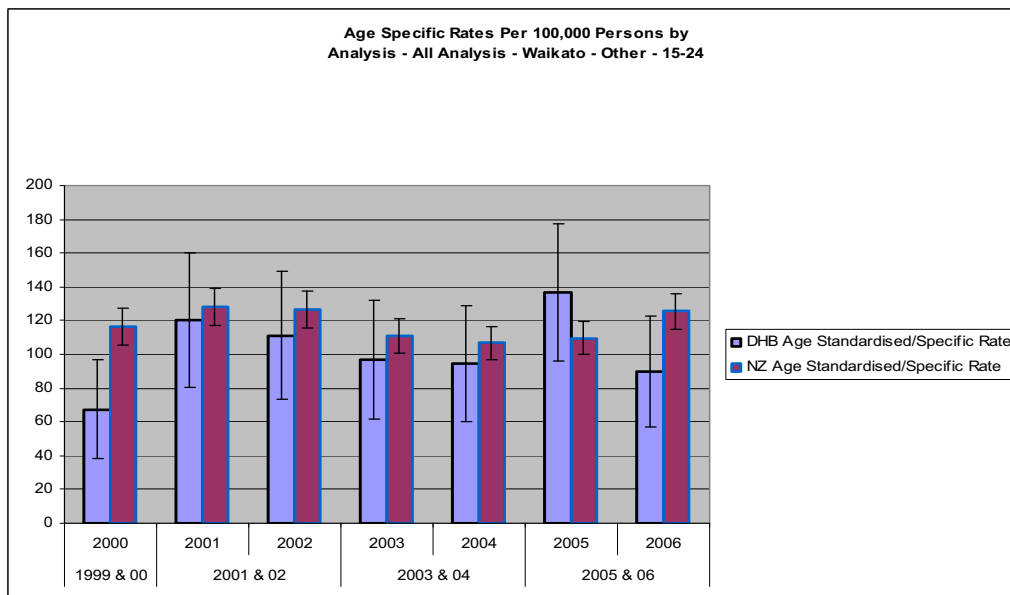
## Lifestyle Factors Influencing Health

**Graph 18: Age standardised rate of hospitalisation related to drug and/or alcohol use, Other ethnicity, Waikato DHB, 2000-2006**



Unlike Maori, the age specific rate of hospitalisation among 15-24 year old Other ethnic group decreased from 136.6 in 2005 to 89.8 per 100,000 in 2006. The Waikato age specific rate was lower than the national rate of 125.4 per 100,000 in 2006.

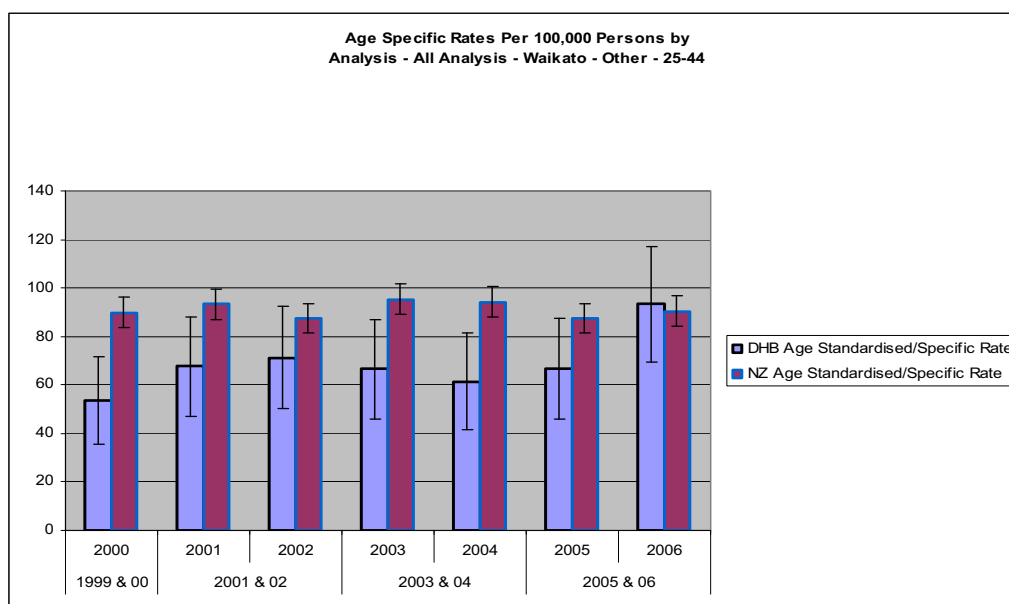
**Graph 19: Age specific rate of hospitalisation related to drug and/or alcohol use, Age 16-24, Other ethnicity, Waikato DHB, 2000-2006**



Like Maori, the age specific rate among 25-44 age group in Other ethnic group increased to 93.3 per 100,000 in 2006 and there was no notable difference to the national rate.

## Lifestyle Factors Influencing Health

**Graph 20: Age specific rate of hospitalisation related to drug and/or alcohol use, Age 25-44, Other ethnicity, Waikato DHB, 2000-2006**



## 4.8 Waikato DHB Emergency Department Key Findings

Waikato DHB data collections showed a significant increase in the number of alcohol related cases being presented to the Emergency Department (ED) from 2003 to 2006.

**Table 32: Emergency Department alcohol related presentations**

Emergency Department - No. of Cases Based on Presenting Problems	2004	2005	2006	Total
Alcohol, unspecified	18	78	84	180
Alcohol / Substance investigation abuse	32	37	30	99
Alcohol / Substance investigation accidental	97	98	90	285
Alcohol / Substance investigation intentional	142	127	153	422
<b>Grand Total</b>	<b>289</b>	<b>340</b>	<b>357</b>	<b>986</b>

ED diagnosed mental and behavioural disorders due to use of alcohol also increased by 69% from 2004 to 2006.

**Table 33 Emergency department alcohol related mental health presentations**

Emergency Department - No. of Cases Based on Diagnosis	2004	2005	2006	Total
Mental and behavioural disorders due to use of alcohol, Acute	26	26	44	96
Mental and behavioural disorders due to use of alcohol, Dependent	33	32	22	87
Mental and behavioural disorders due to use of alcohol, Withdrawal	3	5	2	10
Mental and behavioural disorders due to use of alcohol, Psyc	8	5	3	16
Finding of alcohol in blood	2	3	4	9
<b>Grand Total</b>	<b>72</b>	<b>71</b>	<b>75</b>	<b>218</b>

## Lifestyle Factors Influencing Health

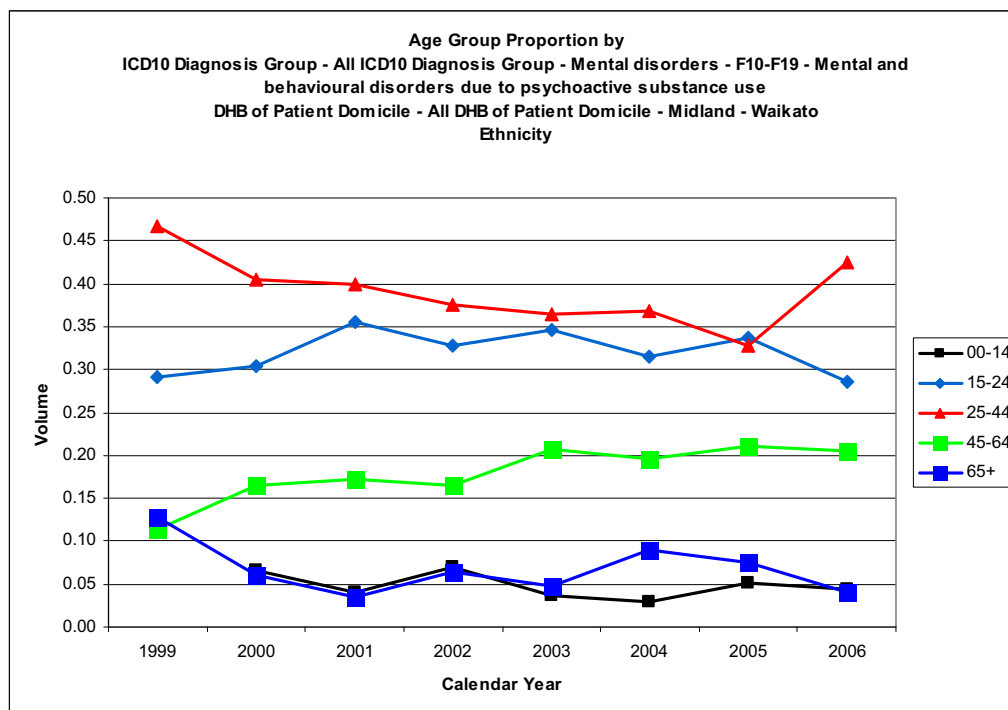
In the Waikato, there were 2228 hospitalisations related to mental and behavioural disorders due to drug use from 2000 to 2006. 68% of these hospitalisations were among Other ethnic groups, followed by 29% among Maori and 2% each among Asians and Pacific People.

**Table 34: Hospitalisations related to alcohol and/or drug use, Waikato DHB**

Hospitalisation - Drug Misuse 2000-2006	2000	2001	2002	2003	2004	2005	2006	Total
F10 - Mental and behavioral disorders due to use of alcohol	86	117	119	111	114	151	135	833
F19 - Mental and behavioral disorders due to multiple-drug use and use of other psychoactive substances	21	36	30	29	23	23	38	200
F12 - Mental and behavioral disorders due to use of	29	43	23	10	12	21	23	161
F15 - Mental and behavioral disorders due to use of other stimulants, including caffeine	1	1	4	4	9	13	11	43
F11 - Mental and behavioral disorders due to use of opioids	7	1	5	5	6	3	9	36
F13 - Mental and behavioral disorders due to use of sedatives or hypnotics	3	1	5	4	1	1	4	19
F16 - Mental and behavioral disorders due to use of hallucinogens	4	1	2	1	1		4	13
F18 - Mental and behavioral disorders due to use of volatile solvents		3	1	1	1	2		8
F17 - Mental and behavioral disorders due to use of tobacco					1			1
T40 - Poisoning by narcotics and psychodysleptics [hallucinogens]	26	32	31	28	17	36	47	217
<b>Grand Total</b>	<b>177</b>	<b>235</b>	<b>220</b>	<b>193</b>	<b>185</b>	<b>250</b>	<b>271</b>	<b>1531</b>

The prevalence of hospitalisation has been increasing in quintile 5 and decreasing in quintile 4 since 2003 while in other quintiles it has remained stable. In 2006, a typical year, 30% of hospitalisation was female and 70% male.

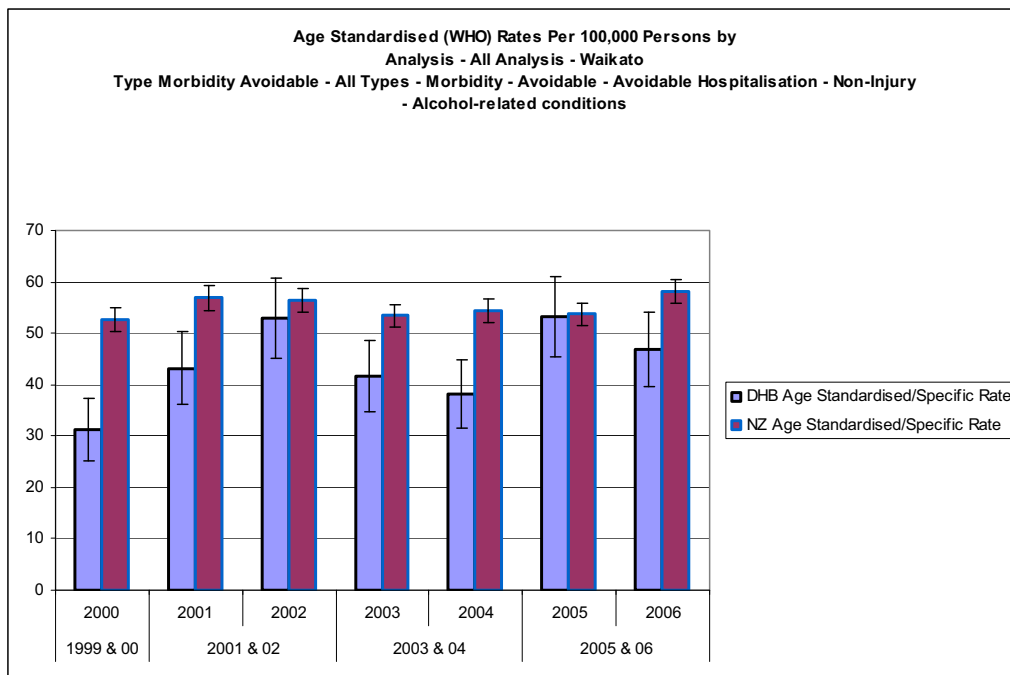
The age proportion of hospitalisation was highest in the 25-44 age group. This increased slightly to 42% in 2006.



## 4.9 Age standardised rate for Alcohol related Conditions

The age standardised rate of avoidable hospitalisation for alcohol related conditions reduced from 53.2 in 2005 to 46.95 per 100,000 in 2006. The Waikato rate was lower than the national rate of 58.05 in 2006.

Graph 21: Age standardised rate of avoidable hospitalisation for alcohol related conditions - Waikato

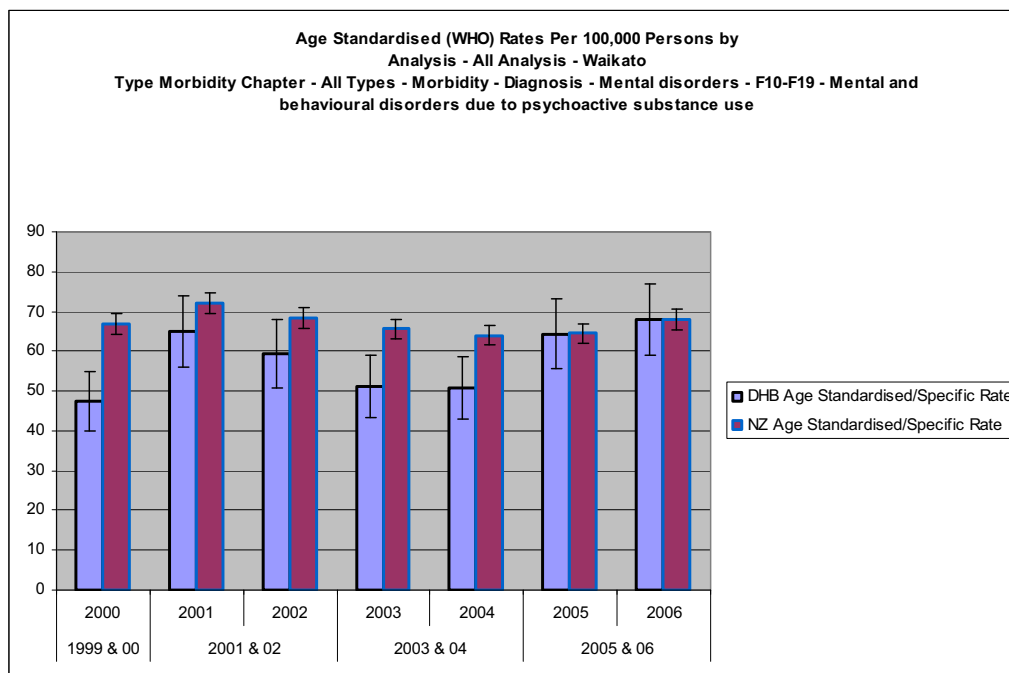


## 4.10 Age standardised rates for Mental and behaviour disorders due to substance use

The age standardised rate of hospitalisation for mental and behaviour disorders due to substance use was stable over 2005 and 2006 at 67.92 per 100,000. There were no notable differences between the Waikato rate and the national rate.

## Lifestyle Factors Influencing Health

Graph 22: Age standardised rates for mental and behaviour disorders due to substance use - Waikato



The age standardised rate among Maori increased steadily from 2004, reaching 92.3 per 100,000 in 2006.

The age standardised rate among Other ethnic group remained stable over 2005 and 2006, at 61.48 per 100,000 and there were no notable variations between the Waikato rate and the national rate.

The volume was too low among Pacific People to calculate meaningful age standardised rates.

### 4.11 Family Violence

The New Zealand Family Violence Clearinghouse is the national centre for collating and disseminating information about domestic and family violence in Aotearoa New Zealand. Family violence covers a broad range of controlling behaviours, commonly of a physical, sexual and/or psychological nature which typically involve fear, intimidation and emotional deprivation. Common forms of violence in family/whanau include:

- Spouse/partner abuse
- Child abuse/neglect
- Elder abuse/neglect
- Parental abuse
- Sibling abuse

The findings outlined below are extracted from following reports:

- NZ Family Violence Clearinghouse, Family violence statistics fact sheet, July 2007 (website: [www.nzfvc.org.nz](http://www.nzfvc.org.nz))

## Lifestyle Factors Influencing Health

- Preventing violence in the home - Te Kakano Tumanako (Website: [www.preventingviolence.org.nz](http://www.preventingviolence.org.nz) )
- National Collective of Independent Women's Refuges (website: [www.womensrefuge.org.nz](http://www.womensrefuge.org.nz) )

Family violence occurrences and offences<sup>37</sup> from New Zealand Family Violence Clearing House, Family violence statistics fact sheet, July 2007 were as follows:

**Table 35: Family violence statistics -Family Violence Clearing House - July 2007**

Description	Figures	Year
Total recorded murder offences coded as family violence *	29 out of 61 (47.5%)	Calendar year ending 31/12/05
Total recorded number of Police attended family violence	56,380	Calendar year ending 31/12/05
Total recorded domestic violence where police determine no crime committed	34,538	Calendar year ending 31/12/05
Total recorded family violence offences (incl. offences other than violent offences)	32,108	Fiscal year 2005/06
Total recorded family violence incidents and offences within the violence category	18,309	Fiscal year 2005/06
Total recorded family violence incidents and offences where children were present	30,823	Fiscal year 2005/06
Number of children present at recorded family violence incidents and offences (witnesses not direct victims of the violence)	65,159	Fiscal year 2005/06
Recorded family violence apprehensions by sex of the offenders	25356 male, 4135 female and 4 unknown/other	Fiscal year 2005/06
* This refers to cases investigated as murders. It does not include other family violence homicides or manslaughters		

Overall the number of recorded offences for male assaults female increased to 8,437 in 2005/06 years.

### 4.11.1 Domestic Violence

Some of the key findings from "Preventing Violence in the Home - Te Kakano Tumanako" were:

- 1 in 32 NZ women experience physical and/or sexual abuse at the hands of a partner throughout their lifetime (Fanslow and Robinson, 2004).

<sup>37</sup> Office of the New Zealand Police Commission

## Lifestyle Factors Influencing Health

- A women is killed by her (ex) partner every two-and-a half weeks
- Between November 2005 and January 2006, NZ Police attended nearly 11,000 instances of reported family violence - this is about one incident every eight minutes.
- In December 2005, CYFS received over 5,000 notifications of suspected child abuse.
- From October to December 2005, Women's Refuge provided 29,230 bednights - 15,562 women and 13,668 children.

Statistics from National Collective of Independent Women's Refuges (July 2007) were:

- Total number of women and children using Women's Refuge services were 28,845 (16,738 women and 12,107 children) in 2006, showing an increasing trend of more than 65% over a five year period (2002 to 2006).
- Ethnicity of women and children using Refuge in 2006
  - Maori – 42% of women and 51% of children
  - Pakeha – 43% of women and 30% of children
  - Pasifika– 8% of women and 6% of children
  - Asian – 4% of women and 3% of children
- Age of Women and Children using Refuge in 2006:

### **Women**

17-25 – 29%  
26-35 - 31%  
36-45 - 26%  
46-59 - 12%  
60+ - 2%

### **Children**

0-4 - 38%  
5-9 – 32%  
10-16 – 29%

## **Characteristics of Abuse**

- 2643 women and 263 children were physically attacked.
- 99 women and 10 children threatened with firearms and 386 women and 15 children threatened with other weapons, including knives and hammers.
- Abuse women are most likely to report (34%) psychological abuse, verbal abuse and threats.
- 25% of women leave their relationship within the first month of the abuse and half within the first two years, while 25% stay more than five years.

## **4.12 Child and Youth at Risk**

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The statistics from the Department of Child, Youth and Family Services showed an alarming increase in the number of notifications received by the organisation from 19,521 in 1999/2000 to 66,210 in 2005/2006.

Consequently, the number of children in care placements also increased from 3533 in 1999/2000 to 5077 in 2005/06 years. In total there were 16,173 children and young people receiving care and protection social work intervention and of the total, 45.3% was Maori, Pakeha 37.4%, Pacific nations 12.5% and 4.9% other ethnicities.

### **4.13 Elder Abuse Statistics**

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As defined by Age Concern New Zealand, elder neglect “occurs when a person aged 65 or more experiences harmful physical, psychological, material/financial and/or social effects as a result of another person failing to perform behaviours which are a reasonable obligation of their relationship to the older person and are warranted by the older person’s unmet needs”.

The information presented below was from Age Concern New Zealand (2005), Age Concern Elder Abuse and Neglect Prevention Services: An analysis of referrals for the period: 1 July 2002 to 30 June 2004. Copy of the detailed report is available from: [orders@ageconcern.org.nz](mailto:orders@ageconcern.org.nz)

#### **4.13.1 Key findings – Elder Abuse and Neglect<sup>38</sup>:**

- 76% of cases resulted from the actions of one or more individual abusers
- 16% were cases of self neglect and 8% fell into the category of institutional abuse.
- 70% of clients were female
- 59% were aged 70 to 84 years of age
- 81% were New Zealanders of European ethnic origin
- 41% were living alone
- Elder abuse and/or neglect can impact significantly on the older person’s health and well-being. Most commonly reported problems were:
  - Feeling extremely distressed or angry (57%)
  - General health significantly affected (51%)
  - Life significantly disrupted (50%)
  - Economic security significantly affected (35%.)

#### **4.13.2 Kind of abuse or neglect**

62% was psychological abuse, followed by material/financial at 42% and physical abuse 20% in 2005/06

Neglect (active neglect -- conscious and intentional deprivation and passive neglect -- carer’s inadequate knowledge, infirmity or disputing the value of prescribed services) occurred in 19% of the cases compared to 16% in the previous reporting period.

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<sup>38</sup> Elder Abuse and Neglect Prevention - Challenges for the Future

## Lifestyle Factors Influencing Health

Health needs were most commonly neglected at 55%, followed by nutritional needs at 42% and advocacy (not accessing available support) 39%.

10% of clients had a diagnosed dementia and this group experienced active neglect more frequently than other clients.

85% of abuse and/or neglect cases involved more than a single incident and 45% occurred over a period of more than one year.