

# Problem gambling

## Introduction

Over the past decade there has been a significant growth in the gambling environment, both in New Zealand and overseas. With the growth of gambling opportunities, problem gambling has also emerged as a public health issue (Ministry of Health 2005).

The Ministry of Health is responsible for monitoring the level of problem gambling in New Zealand, as referred to in the Gambling Act 2003. Problem gambling is defined as patterns of gambling behaviour that comprise, disrupt or damage health, personal, family or vocational pursuits.

### What were the survey questions?

In the 2006/07 New Zealand Health Survey adult participants were asked if in the previous 12 months they had taken part in any of the following gambling activities: Lotto (including Strike, Powerball and Big Wednesday), Keno, Instant Kiwi or other scratch tickets, housie (bingo) for money, horse or dog racing, sports betting, gaming machines (pokies) at pubs or casinos, table games at casinos, internet-based gambling, or any other form of gambling. If they had participated in any gambling activities in the previous 12 months, they were then asked to complete a nine-question 'gambling screen' called the Canadian Problem Gambling Index (CPGI). The gambling screen contains questions about strong predictors of problem gambling (eg, feeling guilty about gambling, having financial difficulties, betting more than one can afford).

All adult participants were also asked if they had experienced any problems due to someone's gambling in the previous 12 months, irrespective of whether they themselves gambled or not.

The definition of gambling used in this report excludes work sweepstakes and fund-raising raffles.

Prevalence for problem gambling has been analysed for the total population aged 15 years and over, and for 'gamblers' (the proportion of the population who have gambled in the previous 12 months). The proportion of 'gamblers' in the population is presented first in this report.

Readers should note that the wording for experiencing problems due to someone's gambling allows for the participant to report problems due to their own gambling as well as due to other people's gambling. In this way, the total number of adults in the population affected by problem gambling can be monitored.

Further analyses of problem gambling data from the 2006/07 New Zealand Health Survey will be available in *A Focus on Problem Gambling*, due to be published late in 2008.

## Gambling in previous 12 months for adults

Two out of every three adults had gambled in the previous 12 months (65.3%, 64.2–66.5), with no difference by gender when adjusted for age. The most common types of gambling activities (for the total population aged 15 years and over) in the previous 12 months were:

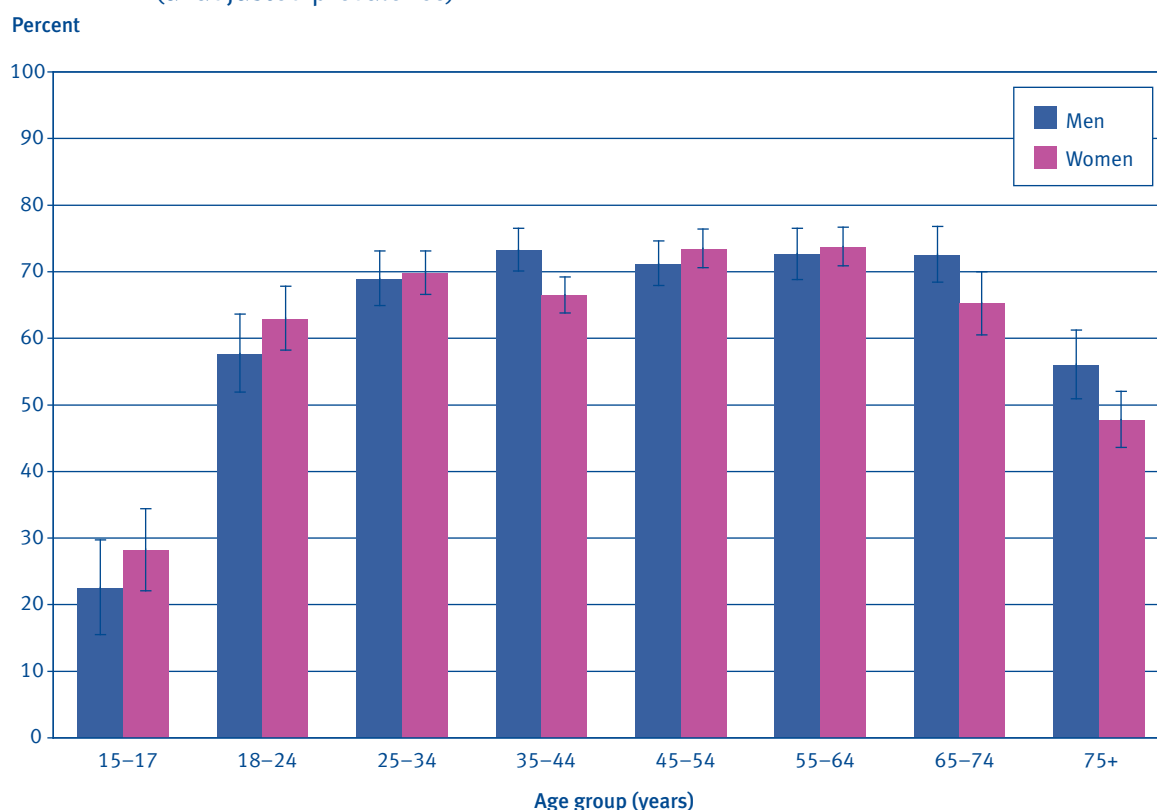
- Lotto (includes Strike, Powerball, Big Wednesday): 55.2% (54.0–56.4)
- scratch tickets (includes Instant Kiwi): 26.5% (25.5–27.6)

- gaming machines or pokies in a pub or club: 10.2% (9.5–10.9)
- track betting (horse or dog racing): 8.7% (7.9–9.4)
- casino gaming machines: 7.7% (7.0–8.4)
- sports betting: 5.2% (4.7–5.7).

The prevalence of gambling in the previous 12 months was fairly stable across age groups, with the exception of younger and older adults, where the rates were lower (Figure 2.38). One in four 15–17-year-olds had participated in gambling in the previous 12 months (25.3%, 20.6–30.1).

There were no significant differences between men and women except in the 35–44, 65–74 and 75+ age groups ( $p$ -values  $< 0.05$ ), where men were more likely than women to gamble (Figure 2.38).

Figure 2.38: Gambling in the previous 12 months for adults, by age group and gender (unadjusted prevalence)

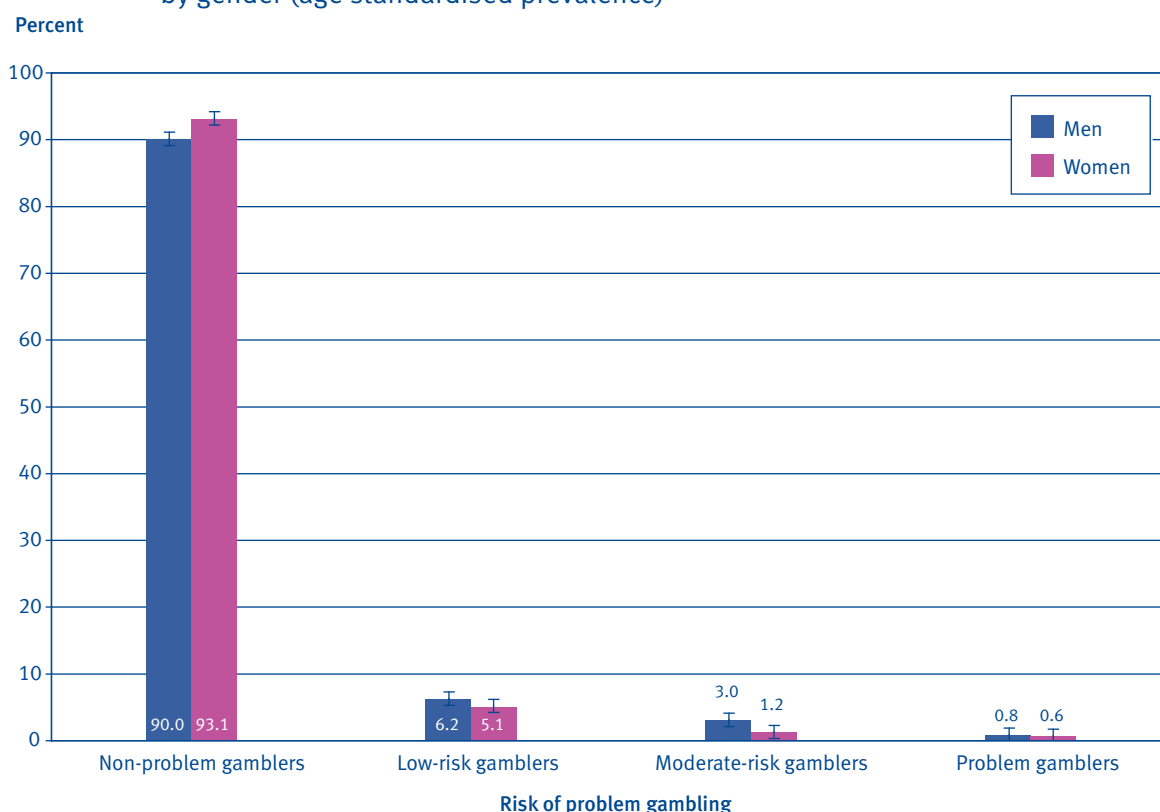


Source: 2006/07 New Zealand Health Survey

## Risk of problem gambling

Most adults who had gambled in the previous 12 months were at no risk of their gambling becoming a problem (Figure 2.39). One in 19 were at low risk (5.4%, 4.8–6.0) and one in 50 were at moderate risk (2.0%, 1.7–2.3) of their gambling being a problem. A further 0.6% (0.5–0.8) of gamblers met the criteria for problem gambling. This equates to 13,000 adults with problem gambling behaviour, or 0.4% (0.3–0.5) of the total adult population.

Figure 2.39: Risk of problem gambling for adults who had gambled in the previous 12 months, by gender (age standardised prevalence)



Source: 2006/07 New Zealand Health Survey

As there was little difference in problem gambling by gender, and due to the small number of people with problem gambling behaviour in the survey, the results in the rest of this section combine men and women.

### Problem gambling, by age group

Due to large sample errors created by the small number of people with problem gambling behaviour in the survey sample, it was difficult to see statistically significant differences by age group; however, problem gambling was most common for 35–44-year-olds (1.2%, 0.6–1.7). This pattern was the same when looking only at those adults who had gambled in the previous 12 months.

### Problem gambling, by ethnic group

Table 2.16 gives an indication of the burden of problem gambling in New Zealand’s main ethnic population groups.

Table 2.16: Problem gambling for adults, by ethnic group (unadjusted)

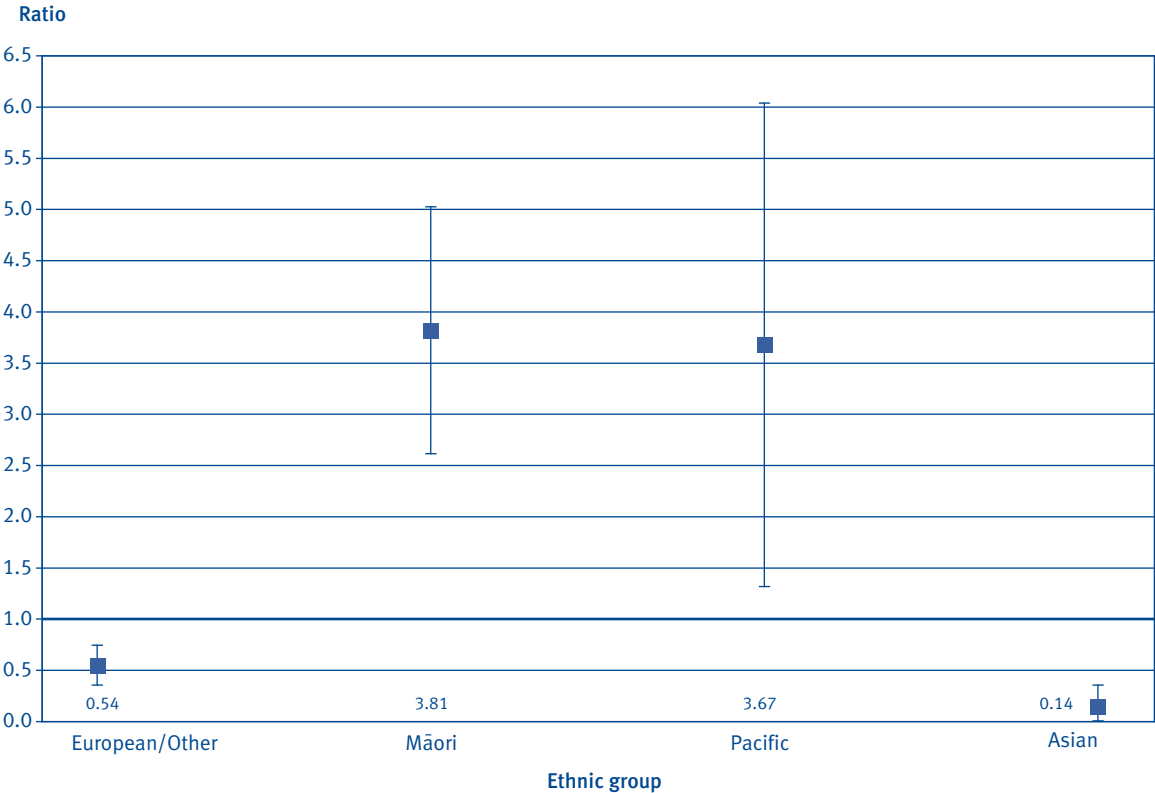
Ethnic group	Prevalence in gamblers (95% CI)	Prevalence in total adults (95% CI)	Number of adults
European/ Other	0.3 (0.2–0.5)	0.2 (0.1–0.4)	5600
Māori	2.4 (1.6–3.1)	1.7 (1.2–2.2)	6000
Pacific	3.0 (1.3–6.0)	1.7 (0.7–3.3)	2700
Asian	0.2 (0.0–0.6)	0.1 (0.0–0.3)	200

Source: 2006/07 New Zealand Health Survey

Note: Total response standard output for ethnic groups has been used.

After adjusting for age, Māori and Pacific adults were more than three and a half times more likely than adults in the total population to be problem gamblers (Figure 2.40).

Figure 2.40: Problem gambling for adults, by ethnic group, compared to the total adult population (age standardised rate ratio)



Source: 2006/07 New Zealand Health Survey

Notes: Age standardised to the WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 15 years and over. Total response standard output for ethnic groups has been used.

When looking at only those adults who had gambled in the previous 12 months (rather than the total population), the above pattern was the same.

**Problem gambling, by neighbourhood deprivation**

The prevalence of problem gambling increased as neighbourhood deprivation increased, from zero prevalence (0.0–0.1) in neighbourhoods of low deprivation (NZDep2006 quintile 1) to 1.2% (0.8–1.7) of people living in neighbourhoods of high deprivation (NZDep2006 quintile 5).

For gamblers the above pattern was the same, with one in 53 adults living in NZDep2006 quintile 5 areas that had gambled in the previous 12 months meeting the criteria for problem gambling behaviour (1.9%, 1.2–2.6).

## Problems due to someone's gambling

One in 36 adults had experienced problems due to someone's gambling in the previous 12 months (2.8%, 2.5–3.1). This equates to 87,000 adults who were affected by problem gambling in the 2006/07 year. In half of these cases, gaming machines or pokies in a pub or club were the type of gambling involved in creating problems (53.0%, 47.5–58.6). Other types of gambling involved in problems were:

- casino gaming machines: 33.0% (27.8–38.2)
- track betting: 16.0% (11.4–20.5)
- Lotto: 14.3% (9.7–18.8)
- sports betting: 11.7% (7.8–15.6)
- casino tables: 8.1% (4.6–13.1).

There was no significant difference between men (2.6%, 2.1–3.2) and women (3.3%, 2.8–3.8) in the prevalence of experiencing problems due to someone's gambling, when adjusted for age.

## Problems due to someone's gambling, by age group

Due to large sample errors created by the small number of people who had experienced problems due to gambling in the survey sample, it was difficult to see statistically significant differences by age group; however, problems due to someone's gambling appeared relatively stable across adult age groups, with a decline in the older age groups.

## Problems due to someone’s gambling, by ethnic group

Table 2.17 gives an indication of the burden of experiencing problems due to someone’s gambling in New Zealand’s main ethnic population groups.

Table 2.17: Problems experienced in the previous 12 months due to someone’s gambling, for adults, by ethnic group (unadjusted)

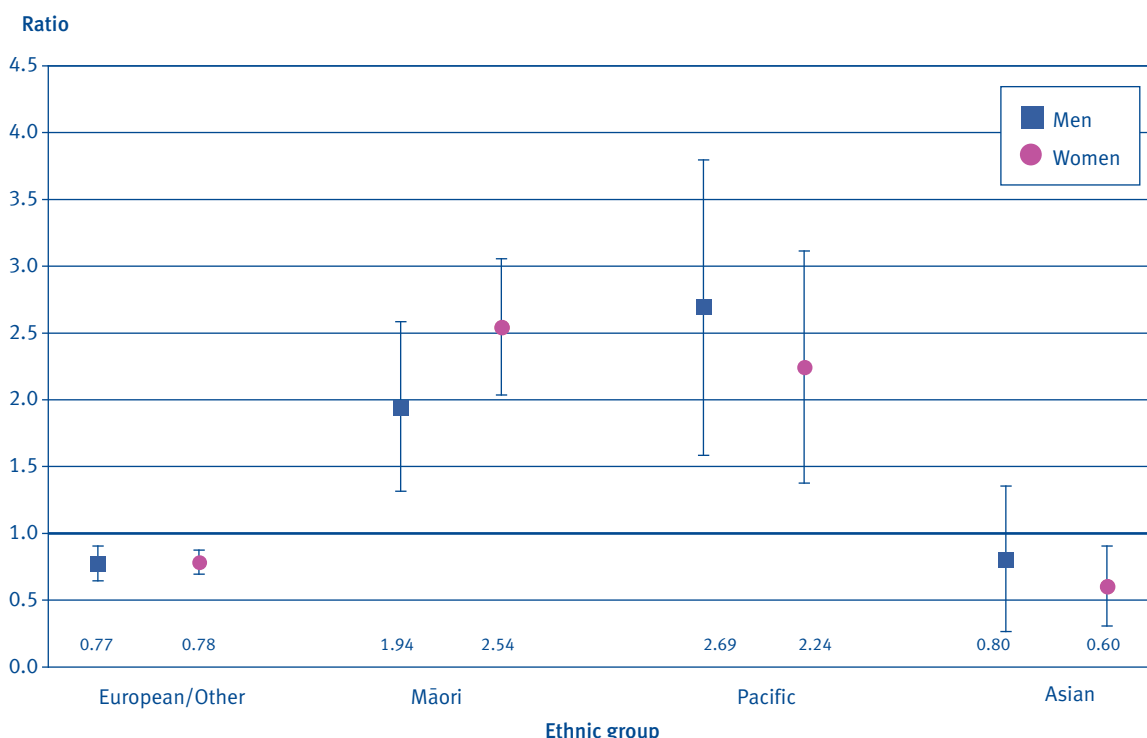
Ethnic group	Prevalence (95% CI)	Number of adults
European/ Other	2.1 (1.8–2.5)	54100
Māori	7.0 (5.9–8.2)	25000
Pacific	7.6 (5.6–9.7)	12600
Asian	2.2 (1.3–3.2)	6300

Source: 2006/07 New Zealand Health Survey

Note: Total response standard output for ethnic groups has been used.

After adjusting for age, Māori and Pacific men and women were 2 to 2.5 times more likely to report experiencing problems due to someone’s gambling in the previous 12 months, compared to men and women in the total population (Figure 2.41). European/Other men and women and Asian women were significantly less likely to report problems due to someone’s gambling, compared to men and women in the total population.

Figure 2.41: Experiencing problems in the previous 12 months due to someone’s gambling, for adults, by ethnic group and gender (age standardised rate ratio)



Source: 2006/07 New Zealand Health Survey

Notes: Age standardised to the WHO world population. Reference group, with a rate ratio of 1.0 (indicated by the bold line), is the total male or female population aged 15 years and over. Total response standard output for ethnic groups has been used.

## Problems due to someone's gambling, by neighbourhood deprivation

One in 20 adults (5.0%, 4.0–5.9) living in areas of high neighbourhood deprivation (NZDep2006 quintile 5) had experienced problems in the previous 12 months due to someone's gambling, compared to one in 53 adults in NZDep2006 quintile 1 areas (1.9%, 1.2–2.6). There were no other statistically significant differences by neighbourhood deprivation quintile.

## Vegetable and fruit intake

### Introduction

Vegetables and fruit are highly nutritious and have been shown to protect against heart disease, stroke and high blood pressure (World Health Organization 2003a). There is also evidence that vegetables and fruit protect against cancers of the mouth, larynx, pharynx, oesophagus and stomach, and fruit also protect against lung cancer (World Cancer Research Fund and American Institute for Cancer Research 2007).

In New Zealand, it is recommended that adults eat at least three servings of vegetables and at least two servings of fruit each day (Ministry of Health 2003a). The Minister of Health's target for 2007/08 for vegetable and fruit intake is 70% of adults with adequate vegetable consumption and 62% of adults with adequate fruit consumption (Minister of Health 2007).

### What were the survey questions?

In the 2006/07 New Zealand Health Survey, vegetable and fruit intake were measured by asking adult participants two questions: how many servings of vegetables they eat each day on average and how many servings of fruit they eat each day on average. Participants were provided with information on serving size and the range and type of vegetables and fruit to include.

Vegetable and fruit intake for children was not included in the 2006/07 New Zealand Health Survey.

### Vegetable intake for adults

Two out of every three adults (64.1%, 62.8–65.3) ate the recommended three or more servings of vegetables each day. Women (68.6%, 66.8–70.4) were significantly more likely than men to eat enough vegetables per day (56.1%, 54.4–57.9) when standardised for age.