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# New Zealanders' Participation in Gambling

Results from the 2010

Health and Lifestyles Survey



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# 1. Executive Summary

## *Methodology*

The 2010 Health and Lifestyles Survey (HLS) is a nationally-representative in-home survey monitoring health behaviours and attitudes of New Zealand residents aged 15 years and over. The gambling section of the questionnaire was designed to compare with the 2006/07 Gaming and Betting Activities Survey, a benchmark survey carried out prior to the Health Sponsorship Council's (HSC's) development of a national health promotion programme to reduce gambling harm. Some of the characteristics of particular interest when looking at gambling participation included frequency of participation in continuous and non-continuous forms of gambling and individual risk of gambling problems, as defined by an international problem gambling screen.

## *Overall participation*

As in previous years, around four in five people had participated in some form of gambling over the past 12 months, and the most commonly reported form of gambling was buying lottery tickets. Taking into account differences in survey wording, participation in most forms of gambling appeared to be similar to the rates recorded in 2006/07. There was a drop in participation in gambling as a fundraising activity, although this remained the second most popular form. There was a slight increase in participation in internet gambling. However, the format of the internet gambling questions was revised in 2010, and the proportion of people engaging in this activity remains relatively low overall.

## *Frequency of participation*

Most people who reported participating in gambling activities had participated less often than monthly in the majority of activities. The exception was the purchase of lottery tickets (defined as Lotto, Strike, Powerball and Big Wednesday). Older people were more likely than younger people to be frequent lottery ticket buyers. People who had gambling problems were more likely to participate regularly in most of the major forms of gambling, compared with those people who had gambled but were not at risk of problems. For moderate risk and problem gamblers, this was particularly true in the case of gaming machines (pokies).

People who had higher household equivalised incomes – that is, more money to spend per member of the household – were more likely to gamble, and to gamble on more activities, than people with low household equivalised incomes. While a third of people with low household equivalised incomes did not gamble at all, they were more likely than people with higher incomes to gamble weekly on the more risky (continuous) forms of gambling.

The overall rates of participation in continuous and non-continuous forms of gambling were very similar to those in 2006/07.

## *Number of gambling activities participated in*

The average number of gambling activities participated in during the previous 12 months was 2.1. It has been recognised in prior research that participation in a higher number of different gambling activities is linked to higher likelihood of gambling problems. The HLS results confirm this observation, with moderate risk or problem gamblers participating in an average of four types of gambling over the previous 12 months.

In 2010 the proportion of people participating in three or more gambling activities was slightly higher than in previous years.

## Acknowledgements

- Danny Tu conducted the data analysis and prepared the graphs and tables in this report.
- The National Research Bureau carried out the fieldwork for the 2010 Health and Lifestyles Survey and for the previous 2006/07 Gaming and Betting Activities Survey, on which the gambling questionnaire was largely based.
- Darren Walton provided peer review for the report. Steven Lamb carried out statistical checks and review.
- Miranda Devlin wrote the 2010 Health and Lifestyles Survey methodology report, on which much of the methodology section in this report is based.
- The 2010 Health and Lifestyles Survey gambling questionnaire was created through a collaborative design process incorporating feedback from the HSC, Department of Internal Affairs, Ministry of Health and National Research Bureau. The Ministry of Health is the funder of HSC's health promotion work and of this survey.



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## 2. Introduction

### 2.1 The Health and Lifestyles Survey

The Health and Lifestyles Survey (HLS) is a monitor of the health behaviour and attitudes of New Zealand adults aged 15 years and over. The HLS is managed by the Health Sponsorship Council (HSC) and collects information relating to the programme areas the HSC works in, including problem gambling. The HLS is carried out every two years, with the first HLS carried out in 2008.

Prior to the 2008 HLS, the HSC undertook a survey to benchmark people's opinion, knowledge and behaviour relating to gambling. This was called the Gaming and Betting Activities Survey (GBAS) and was carried out from mid-December 2006 to May 2007.

Each of these surveys has included between 1,600 and 2,000 adults (aged 15 years and over). Details of the procedures followed to ensure these surveys produced high quality and robust data can be found in the related methodology reports. These can be accessed at <http://www.hsc.org.nz>.

The 2010 HLS involved face-to-face interviews with 1,740 people (aged 15 years and over).

The 2010 HLS included questions relating to tobacco control, healthy eating and sun safety. The 2010 HLS included a comprehensive set of items relating to problem gambling, to enable comparisons with measures from the 2006/07 GBAS.

This report presents descriptive results showing participation in gambling activities according to the 2010 HLS. Comparable data have been included from the GBAS and the 2008 HLS, where this is possible.

### 2.2 Gambling and public health

Gambling in New Zealand is regulated by the Gambling Act 2003. Preventing and minimising the harm caused by gambling is one of the purposes of the Act.

The Ministry of Health is responsible, under the Act, for the prevention and treatment of problem gambling. As part of the Ministry's strategy, the HSC has been contracted to deliver a programme that contributes to the promotion of public health by preventing and minimising the harm from gambling.

The HSC's programme includes mass media campaigns aiming to increase the awareness and understanding of problem gambling and its impacts, and to create a supportive environment for public health and community action. The first stage of communication activities was launched in April 2007, the second in November 2008, and the third is being developed for launch in mid-2011.

Results from the GBAS, HLS and other surveys can be used to monitor and evaluate changes and developments in community awareness of gambling harms. These measures can also monitor the degree to which people are involved in the types of individual, family and community behaviours that the HSC's programme is promoting.

## 3. Survey Design and Method

### 3.1 Questionnaire content

The 2010 HLS questionnaire is available from the HSC website: <http://www.hsc.org.nz/researchpublications.html>.

The gambling section of the 2010 HLS contained more than 80 questions and was the largest section of the questionnaire. The majority of these gambling questions were sourced from the 2006/07 Gaming and Betting Activities Survey and the Department of Internal Affairs' 2005 Gambling Participation and Attitudes Survey to facilitate comparisons with data collected from these surveys previously.

The questionnaire was tested in a pre-survey pilot to assess its length and to ensure that the items were easy to understand and answer.

### 3.2 Data collection

Interviews were conducted in respondents' homes. Interviewers typed responses directly into laptop computers using Blaise Computer Assisted Personal Interview (CAPI) software. Show cards with predetermined response categories were used to assist respondents where appropriate.

Responses were combined into an electronic database that was used to produce the information in this report.

### 3.3 Sample

The HLS is a nationwide survey of New Zealand residents aged 15 years and over. Respondents could only be interviewed at their own usual residence. That is, if they were visiting a household that was selected for inclusion in the HLS they could not be interviewed as part of that household. This process ensured that people did not have a chance of being counted twice.

### 3.4 Weighting

The information in this report incorporates weighted responses (number and percentage) to the questions, among the survey population overall and some sub-groups.

To ensure that no population group is under- or over-represented in estimates from the survey, 'weights' are calculated for every survey participant. The weight can be thought of as the number of people in the population represented by a given survey participant.

Weights are designed to:

- a) reflect the probabilities of selection of each respondent
- b) make use of external population benchmarks (typically obtained from a population census) to correct for any discrepancies between the sample and the population benchmarks – this improves the precision of estimates and reduces bias due to non-response.



## 3.5 Derived variables

A number of derived variables have been created for the 2010 HLS data set. The following variables are referred to in this report:

### Ethnicity

Ethnicity was calculated using prioritisation in the order of Māori, Pacific peoples, Asian, European/Others. Prioritisation involves each person being allocated to a single ethnic group, based on the ethnicities they have identified with, in the prioritised order of Māori, Pacific peoples, Asian and European/Other (Ministry of Health 2004). For example, if someone identifies as being Chinese and Māori, under the prioritised ethnic group method, they are classified as Māori for the purpose of analysis. The way that the ethnicity data is prioritised means that the group of prioritised European/Other effectively refers to non-Māori, non-Pacific, and non-Asian people. Prioritisation is a method outlined in the *Ethnicity Data Protocols for the Health and Disability Sector* as a useful method for grouping people into independent ethnic groups for analysis (Ministry of Health 2004).

### Gambling type

Gambling types are often classified into two categories, those where winnings can be immediately 'reinvested' (for example, gaming machines or pokies) and those where they cannot (for example, lottery tickets). The former are referred to as 'continuous' and the latter 'non-continuous' (Abbott and Volberg 1996). For the HLS analysis, respondents' participation in gambling activities in these two groups were combined with their frequency of participation to create four mutually exclusive gambling types in the same way they were presented for the 2006/07 Gaming and Betting Activities Survey (National Research Bureau 2007).

- *Non gamblers*: did not participate in any gambling activities in the last 12 months.
- *Infrequent gamblers*: participated in any gambling activities less than once a week.
- *Frequent, non-continuous gamblers*: participated weekly or more often only in non-continuous<sup>1</sup> forms of gambling.
- *Frequent, continuous gamblers*: participated weekly or more often in continuous<sup>2</sup> forms of gambling.

### Neighbourhood socioeconomic deprivation: The New Zealand Index of Socioeconomic Deprivation 2006

The New Zealand Index of Socioeconomic Deprivation 2006 (NZDep2006) has been linked to the 2010 HLS as a measure of neighbourhood socioeconomic deprivation and a proxy for individual socioeconomic position. The NZDep2006 was created using nine variables<sup>3</sup> from the 2006 Census data, with a decile value calculated for each meshblock (Salmond et al. 2007). For some analyses of the 2010 HLS, these deciles have been grouped, so that deciles 1–3 are referred to as low deprivation, 4–7 as moderate (or mid) deprivation, and 8–10 as high deprivation.

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<sup>1</sup> Non-continuous forms of gambling include lottery games, going to casino evenings/buying raffle tickets for fundraising, participating in sweepstakes, making bets with family/friends and other gambling activities.

<sup>2</sup> Continuous forms of gambling include playing electronic gaming (pokie) machines, or sports events, table games at casinos, mobile phone games for money, online activities for money or prizes through an overseas website. Betting on horse or dog races or sports events and playing housie or bingo are in this analysis defined as continuous activities, as they have been in previous HSC surveys. The definition is not clear-cut, however, because there tends to be a break in play for these activities meaning that money is not re-invested as quickly as it would be for the other continuous forms of gambling.

<sup>3</sup> Receiving a means-tested benefit, low household income, not owning the home you live in, single-parent family, unemployment, no school qualifications, household overcrowding, no access to a telephone and no access to a car.

## Household Equivalised Income

Respondents were asked to choose an income range that represented their total household income from all sources before tax in the previous 12 months. Household income by itself is not very useful, as a two-person household with a total household income of \$100,000 is likely to be quite different in many characteristics from that of a six-person household with a total household income of \$100,000. To mitigate this, equivalised household income was calculated using the revised Jensen Index (Jensen 1988). The revised Jensen Index is a recognised equivalisation index used within New Zealand (Blakely 2002, Ministry of Health 2010) that takes into account the number of adults, the number of children (younger than 18-years-old) and the ages of the children living in the household.

## Problem Gambling Severity Index

In addition to the term ‘problem gambler’, the terms ‘low-risk’ and ‘moderate-risk’ are also used to describe a person’s gambling behaviour.

The Problem Gambling Severity Index (PGSI) contains nine questions that are strong predictors of gambling harm (eg, feeling guilty about gambling, having financial difficulties, betting more than one can afford) (Ferris and Wynne 2001).

Respondents are asked whether they have experienced these signs of harm caused by gambling and, if so, whether this happened “sometimes, most of the time or almost always”. They are allocated from one point for “sometimes” to three points for “almost always”, and can therefore be allocated up to 27 points. Respondents were then classified into the following categories: non-gamblers (those who did not answer “yes” to any of the questions about participation in gambling in the last 12 months), non-problem gamblers (those who had gambled, but answered “no” to all the PGSI questions about experiencing harm), low-risk gamblers (who got 1 or 2 points according to the PGSI), moderate-risk gamblers (who got 3-7 points) and problem gamblers (who got 8 or more points).

Because the number of people who were classified as problem gamblers was too small to be analysed statistically, moderate-risk and problem gamblers have been combined into one group for the tables in this report.

## 3.6 Differences between sub-groups

Differences between sub-groups are noted as “more likely/less likely” when they are proportionally large in relation to the figures described. For ease of reading, terms such as “significant” or “approaching significance” have been left out of the text, however the differences reported have been assessed for significance using appropriate statistical tests.

When the number of respondents in a sub-group is small (ie, less than 30), any differences between this group and others is not commented on, because results are subject to a very wide margin of error.

Some differences in the tables that appear interesting but not significant have not been reported. While this report cannot cover all differences that may be of interest, the HLS dataset may be made available to other groups for performing more statistical investigation.

## 3.7 How to read the tables

The figures presented in tables and graphs in this report may not sum to 100% due to rounding. There are also a number of questions – for instance, in this report, the question about participation in different types of gambling – to which respondents could provide multiple responses.



Because of rounding, percentages between the figures of 0 and 0.4 are reported as “0”. When a space on the table is marked with “-”, this means that respondents in that year were not asked, or did not provide any response to, that particular option.

The numbers in the tables about participation should be read as the proportion of the people of a certain demographic group (shown in the top row) who have participated in a certain gambling activity (shown in the leftmost column). The base size for each demographic subgroup (that is, the number of respondents in that group) is shown at the bottom of each table.

For example, in this compressed excerpt from the first table:

**Table 4.1: Participation in gambling activities in the previous 12 months, 2010, by demographics**

	Male	Female	15-17	18-24	25-44	45+	Total
	%	%	%	%	%	%	%
Bought Lotto, Strike, Powerball, Big Wednesday	59	61	4	38	60	72	60
Did not participate in any activities	20	18	48	28	19	13	19
Base	711	1029	49	148	702	841	1740

We can see that of the 711 males interviewed (shown in the “base” line under “male” demographic), 59% had bought a Lotto, Strike, Powerball or Big Wednesday ticket. We can see that overall, 60% of the people interviewed had bought a lottery ticket, but among those aged 45 or over, 72% had bought a lottery ticket. We can note that 48% of the 49 15-17 year olds interviewed had not participated in any gambling activities, while among the total sample of 1,740 people, only 19% had not participated in any gambling activities.

In order to make a statement about the results in the table, we would first look at the group of interest in the top row (“Of those aged 45 and over”) then look down the page from this line to the percentage shown (“72%”) on the horizontal line corresponding to the activity of interest (“had bought a Lotto, Strike, Powerball or Big Wednesday ticket”) and finally the title of the table, for further context (“in the previous 12 months”).

## 4. Gambling participation

### 4.1 Introduction

This report presents information about the different types of gambling that New Zealanders have participated in during the previous 12 months and how often they have participated in these different types of gambling.

Gambling activities in New Zealand are classified by the Gambling Act 2003 according to the amount of money spent and the risk of problem gambling associated with each activity. Class 1 represents low-stake, low-risk gambling while Class 4 represents the highest-risk forms of gambling, and is subject to strict licensing criteria. Casino operations and New Zealand Lotteries Commission lotteries are treated as separate classes (DIA 2010a).

The only organisations that are able to conduct remote interactive gambling (such as gambling over the internet) within New Zealand are the New Zealand Racing Board and the New Zealand Lotteries Commission. While it is illegal to advertise overseas gambling in New Zealand, it is not illegal to participate in gambling on an overseas-based website or to gamble on overseas competitions and games.

More information about gambling regulation in New Zealand can be accessed at the Department of Internal Affairs: [www.dia.govt.nz](http://www.dia.govt.nz).

In recent years New Zealanders have spent a total of around \$2 billion across the four main gambling sub-sectors every year. The overall expenditure in 2009/10 was lower than in 2008/09 (DIA 2010b).

### 4.2 Type of gambling activities done in the previous 12 months

#### 4.2.1 Types of gambling activities done in previous 12 months

Everyone was asked whether or not they had engaged in a number of gambling activities in the last 12 months.

Overall, just over four in five (81%) people had taken part at least once in at least one gambling activity in the previous 12 months.

Six in 10 (60%) people reported having purchased a lottery ticket (defined as Lotto, Strike, Powerball and Big Wednesday). Other New Zealand Lotteries products include Instant Kiwi or scratch tickets, which had been bought by one in three (33%) people, and Keno or Bullseye tickets, which had been bought by 6% of people. Keno and Bullseye were asked about separately, but have been combined for this analysis because of the relatively low levels of participation and their similarity (both are daily-drawn New Zealand Lotteries products). The reported figure therefore means that 6% of people had bought a Keno ticket, or a Bullseye ticket, or both. Nearly two in three (63%) people had bought a New Zealand Lotteries product.

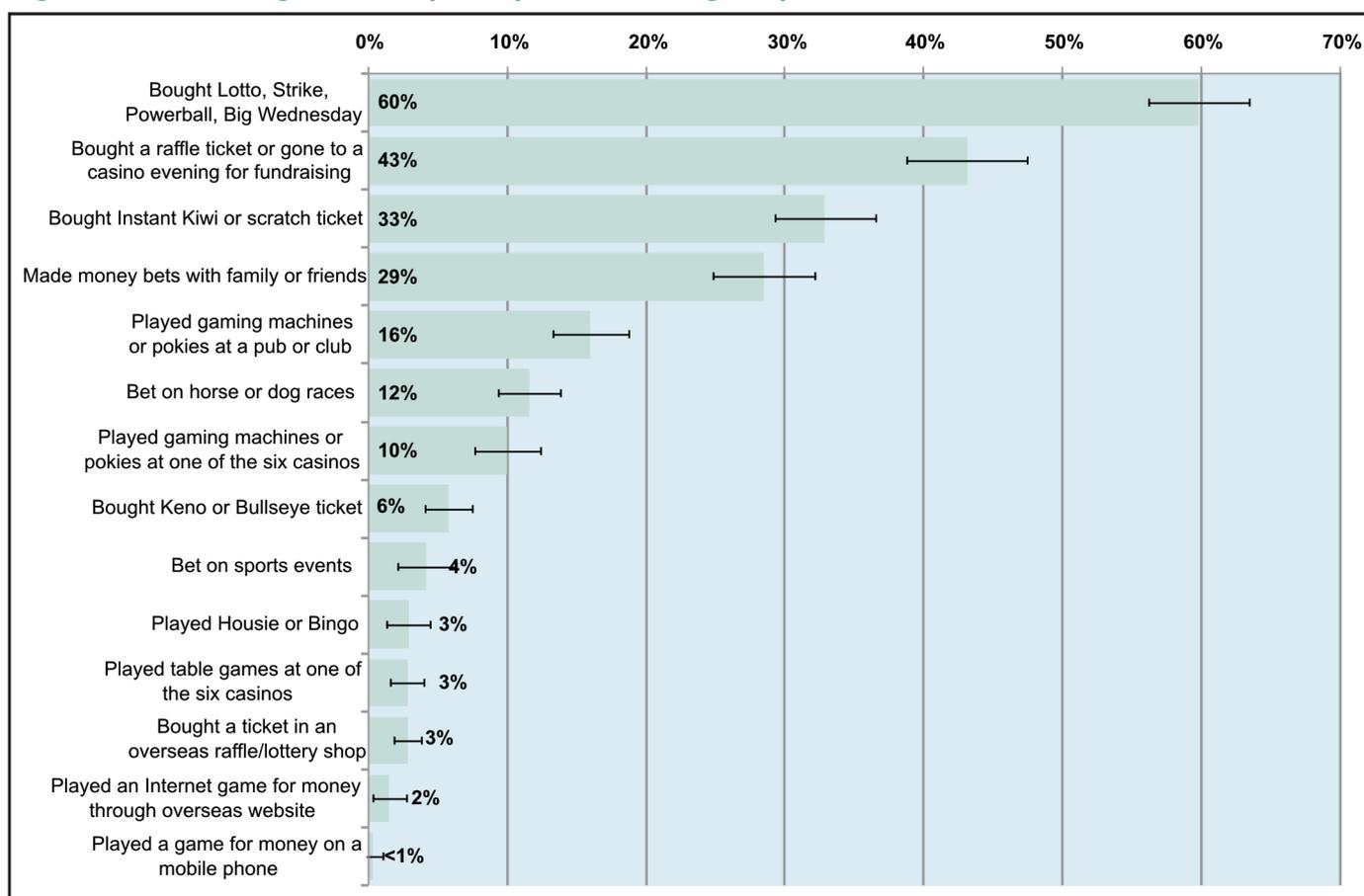
Over four in 10 (43%) people had bought a raffle ticket or gone to a casino evening for fundraising. Three in 10 (29%) had made money bets with family or friends.

One in six (16%) people had played gaming machines, or pokies, at a pub or club. One in 10 (10%) had played gaming machines at a casino.

Around one in eight (12%) people had bet on horse or dog races and 4% had bet on sports events.



**Figure 4.1: Gambling activities participated in during the previous 12 months, 2010**



Base=1,740 (all respondents)

Note: multiple responses allowed. Therefore, respondents may be represented in more than one category.

## 4.2.2 Participation by demographics

This section discusses how participation in the different gambling activities listed varies with the characteristics of the people interviewed (by gender, age, ethnicity, deprivation index, household equivalised income, household composition and PGSI gambling type).

Key differences in Table 4.1 include:

- People aged 45 and over were more likely than younger people to buy lottery tickets. People of Māori and European/Other ethnicities were more likely than Asian or Pacific peoples to buy lottery tickets. Instant Kiwi or scratch tickets were more popular with females than with males, and with Māori than with people of other ethnicities.
- People aged 18 to 24 were more likely than people of other ages, and Māori were more likely than people of other ethnicities to play pokie machines in a pub or club.
- Older people were more likely to bet on horse or dog races, but less likely than younger people to bet on sports events. Males were more likely than females to bet on races or sports.
- Males were more likely than females, and Asian people were more likely than people of other ethnicities, to play either pokie machines or table games at casinos.
- Buying raffle tickets or attending casino evenings for fundraising was more common among Māori and European/Other people than among Asian or Pacific peoples. People aged 25 and over were more likely than younger people, and females were more likely than males, to take part in this sort of activity.

- Making money bets with friends was most popular among males, 15 to 17 year olds and people of European/ Other ethnicity.
- Asian and Pacific peoples were more likely to say that they had not participated in any gambling activity.

**Table 4.1: Participation in gambling activities in the previous 12 months, 2010, by gender, age and ethnicity**

Gambling activities" (multiple response)	Gender		Age (in years)				Prioritised ethnicity				Total
	Male	Female	15-17	18-24	25-44	45+	Māori	Pacific	Asian	Euro /Other	
	%	%	%	%	%	%	%	%	%	%	%
Bought Lotto, Strike, Powerball, Big Wednesday	59	61	4	38	60	72	58	47	33	64	60
Bought a raffle ticket or gone to a casino evening for fundraising	40	46	31	33	46	45	42	31	14	47	43
Bought Instant Kiwi or scratch ticket	29	37	3	32	35	35	43	24	21	33	33
Made money bets, with family or friends	33	24	33	26	30	27	25	23	10	32	29
Played gaming machines or pokies at a pub or club	19	13	1	24	15	16	29	18	3	15	16
Bet on horse or dog races	13	10	0	9	11	14	11	6	4	13	12
Played gaming machines or pokies at one of the six casinos	12	9	0	13	13	8	12	11	14	9	10
Bought Keno or Bullseye ticket	7	5	0	5	6	7	9	8	8	5	6
Bet on sports events	7	2	0	6	7	3	4	2	7	4	4
Played Housie or Bingo for money	3	3	16	3	1	3	7	7	0	2	3
Played table games at one of the six casinos	5	1	0	2	6	1	2	2	5	3	3
Bought a ticket in an overseas raffle/lottery shop	3	2	7	0	2	4	3	1	1	3	3
Played an Internet game for money through overseas website	2	1	1	3	2	1	2	2	4	1	2
Did not participate in any activities	20	18	48	28	19	13	20	30	38	15	19
Base	711	1029	49	148	702	841	460	301	113	866	1740



Key differences in Table 4.2 include:

- Most of the main types of gambling were more popular among people living in medium deprivation areas than among those in high or low deprivation areas.
- People living with their partner and no children were the most likely to buy lottery tickets and people living with family but no children (that is, extended family households or those in which the children were of adult age) were the most likely to buy Instant Kiwi or scratch tickets.
- People living in “other” households (ie, not with their family or partner) were the most likely to play pokies in pubs or clubs.

**Table 4.2: Participation in gambling activities in the previous**

	Deprivation Index			Household composition					Total
	Low 1-3	Mid 4-7	High 8-10	Single person	Couple no children	Family with children	Family no children	Other house holds	
<i>Gambling activities (multiple response)</i>	%	%	%	%	%	%	%	%	%
Bought Lotto, Strike, Powerball, Big Wednesday	57	66	55	61	74	51	53	40	60
Bought a raffle ticket or gone to a casino evening for fundraising	43	49	36	42	45	45	42	27	43
Bought Instant Kiwi or scratch ticket	30	38	30	29	36	29	41	37	33
Made money bets with family or friends	30	32	23	15	35	28	21	28	29
Played gaming machines or pokies at a pub or club	14	18	16	11	16	14	22	25	16
Bet on horse or dog races	10	14	10	11	15	7	16	16	12
Played gaming machines or pokies at one of the six casinos	9	12	9	6	9	9	19	19	10
Bought Keno or Bullseye ticket	4	7	7	5	7	5	7	3	6
Bet on sports events	5	4	4	3	5	4	1	6	4
Played Housie or Bingo for money	1	4	3	3	2	4	5	0	3
Played table games at one of the six casinos	3	3	2	2	3	3	2	1	3
Bought a ticket in an overseas raffle/lottery shop	3	3	3	2	4	3	2	0	3
Played an Internet game for money through overseas website	1	1	2	2	1	2	0	5	2
Did not participate in any activities	22	12	23	19	10	25	23	22	19
Base	407	557	776	271	419	896	114	40	1740

“PGSI” refers to a person’s score on the Problem Gambling Severity Index screen, which contains questions that are strong predictors of gambling problems and is used to classify people into non-problem gamblers, low-risk gamblers, moderate-risk gamblers, and problem gamblers.

Key differences in Table 4.3 include:

- Like non-problem gamblers, the majority of moderate-risk and problem gamblers had bought lottery tickets and bought raffle tickets or gone to casino evenings for fundraising. However, unlike non-problem gamblers, the majority of moderate-risk and problem gamblers bought Instant Kiwi or scratch tickets, played gaming machines at pubs or clubs, and played gaming machines at casinos.
- Buying raffle tickets or going to casino evenings for fundraising was the only gambling activity that non-problem gamblers participated in more than others.
- Moderate-risk and problem gamblers were more likely than other gamblers to play pokie machines at pubs or clubs and at casinos, buy Keno or Bullseye tickets, play table games at casinos, bet on sports events, play internet games for money and play housie or bingo.
- Low-risk gamblers were the most likely to bet on horse or dog races.
- People with low household equivalised incomes were less likely to gamble at all, and participated in most activities at a lower rate than people with medium or high household equivalised incomes.

**Table 4.3: Participation in gambling activities in the previous 12 months, 2010, by PGSI score and household equivalised income**

	PGSI				Household Equivalised Income				Total
	Non Problem Gambler	Low Risk Gambler	Moderate Risk Problem Gambler	Non Problem Gambler	Low Risk Gambler	High	Not stated		
	%	%	%	%	%	%	%		
<i>% saying “Yes” (multiple response)</i>									
Bought Lotto, Strike, Powerball, Big Wednesday	0	73	75	77	48	63	69	43	60
Bought a raffle ticket or gone to a casino evening for fundraising	0	55	34	50	29	50	49	48	43
Bought Instant Kiwi or scratch ticket	0	39	54	55	25	37	36	34	33
Made money bets with family or friends	0	35	38	32	10	30	46	15	29
Played gaming machines or pokies at a pub or club	0	16	42	63	15	16	18	3	16
Bet on horse or dog races	0	12	38	23	9	11	15	10	12
Played gaming machines or pokies at one of the six casinos	0	10	18	53	5	10	15	11	10
Bought Keno or Bullseye ticket	0	6	14	26	6	5	7	8	6
Bet on sports events	0	5	5	10	1	6	6	0	4
Played Housie or Bingo for money	0	3	5	10	3	5	1	5	3
Bought a ticket in an overseas raffle/lottery shop	0	3	4	7	1	3	4	4	3
Played table games at one of the six casinos	0	3	10	15	1	2	5	0	3
Played an Internet game for money through overseas website	0	2	4	6	2	2	1	0	2
Did not participate in any activities	100	0	0	0	31	16	9	20	19
Base	336	1194	133	77	544	708	435	53	1740



### 4.2.3 Comparison with previous years: gambling activities participated in during previous 12 months

Table 4.4 shows the proportions of respondents in the 2006/07 GBAS, 2008 HLS and 2010 HLS who participated at least once in the year preceeding the survey in each type of gambling. Because some questions were asked differently in 2010, the wording in this table differs to that in section 4.2.1. For instance, all lottery products were asked about as a single category and betting on horse or dog races or sports events were also grouped together. While internet gambling was asked about in previous years, in 2010 the questionnaire was expanded and questions were asked about online participation in each of a list of specified forms of gambling and through an overseas website (all online gambling other than buying New Zealand Lotteries tickets or betting on sports or races with the New Zealand TAB would be done through an overseas website).

- The proportion of people buying raffles or doing other gambling activities to fundraise had gone down since 2006/07 from 52% to 43%.
- The proportion of people participating in table games at casinos and playing pokies at either pubs or clubs or at casinos was highest in 2008. By 2010 participation rates had gone back to levels similar to 2006/07.
- Betting on horse or dog races or sports had become less common since 2006/07. The proportion of people buying lottery tickets had gone down slightly over the years.
- The question about making money bets with family or friends was asked differently in 2010. In the previous surveys people were asked one question about whether they had made money bets “for things such as sweepstakes or card games”. In 2010 there was a separate question about participating in sweepstakes “on such things as the Melbourne Cup”, with these responses combined into those about making money bets on other things. The large increase in people saying they had made money bets in 2010 compared with previous years is largely attributable to the proportion who answered that they had participated in a sweepstake. This indicates that people understood the question differently when it was spelled out more explicitly.

**Table 4.4: Participation in gambling activities, 2006/07, 2008, 2010**

	2006/07	2008	2010
	%	%	%
Bought a Lotto, Keno, Strike, Powerball, Big Wednesday, Instant Kiwi or scratch ticket	67	64	63
Bought a raffle ticket or gone to a casino evening for fundraising	52	44	43
Made money bets with family or friends	10	9	29
Played gaming machines or pokies at a pub or club	18	19	16
Bet on horse or dog races or sports events	18	14	14
Played gaming machines or pokies at one of the six casinos	9	12	10
Played Housie or Bingo for money	3	3	3
Played table games at one of the six casinos	3	4	3
Bought a ticket in an overseas raffle/lottery shop, or by telephone or through the post	-	-	3
Played an Internet game for money	0	1	2
Played a text game for money	2	1	0
Did not participate in any activities	18	23	19
Base	1973	1608	1740

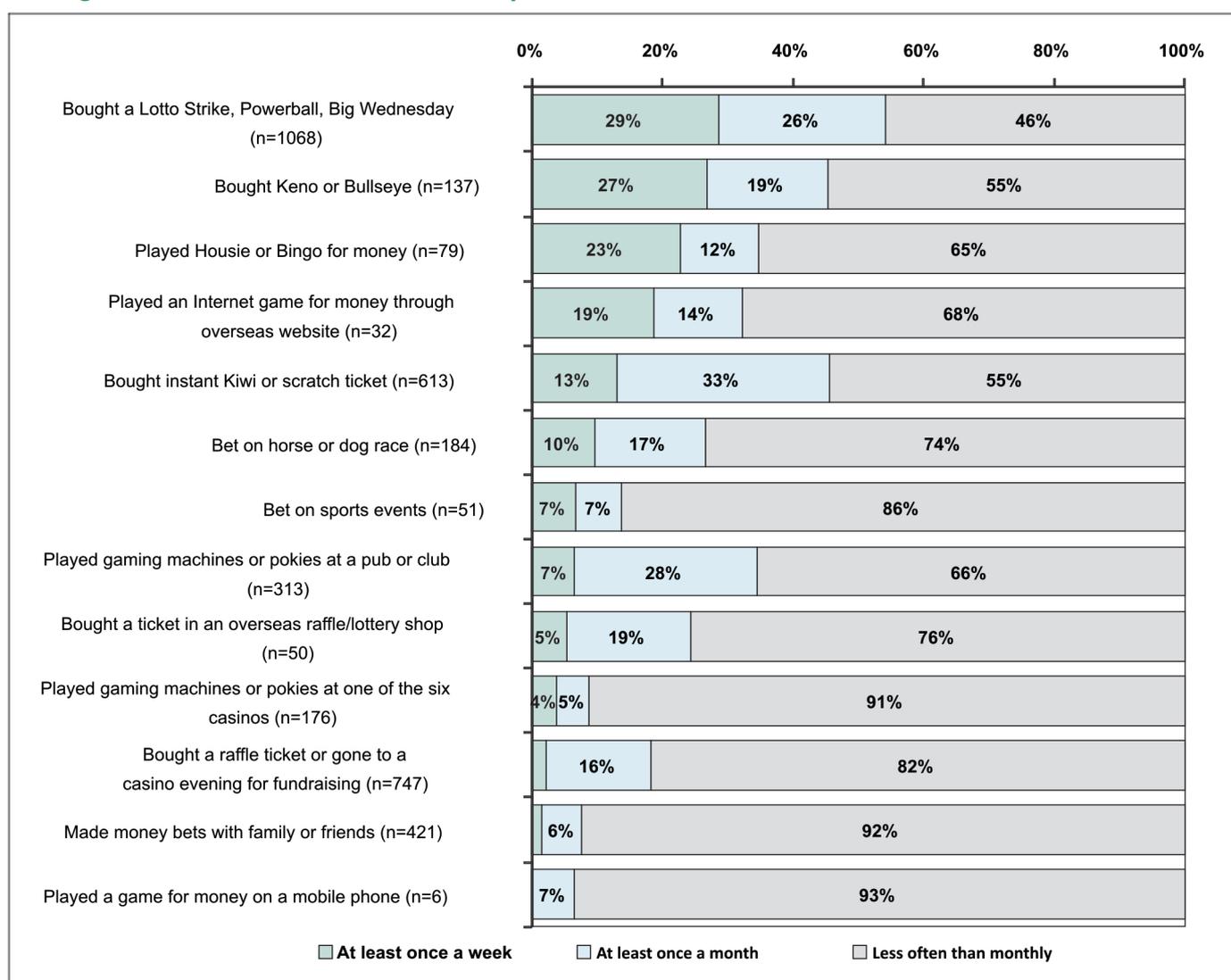
## 4.3 Frequency of participating in gambling activities in the previous 12 months

### 4.3.1 Frequency of participation in gambling activities, 2010

People who said that they participated in any gambling activities were asked how often they participated in those activities.

- Nearly three in 10 (29%) people who had bought a lottery ticket did so weekly, and over half did so at least monthly. Nearly half of those who bought Instant Kiwi or scratchies, or Keno or Bullseye, did so at least monthly.
- At least one in three of the people who played housie or bingo and pokies in pubs or clubs did so at least once a month.
- Most other gambling activities were participated in on an occasional basis – less often than monthly – by the majority of participants.

**Figure 4.2: Frequency of participation in gambling activities, among those who had done them in the previous 12 months, 2010**





### 4.3.2 Comparison with previous years: Frequency of engaging in gambling activities

Table 4.3 shows the frequency with which respondents participated in gambling activities, in the categories that are comparable between previous surveys. It shows responses as a proportion of all respondents, that is, including the proportion of those who do not participate in the activity at all.

**Table 4.5: Frequency of participation in gambling activities, 2006/07, 2008, 2010**

	At least once a week			At least once a month			Less often than monthly			Not participated in activity		
	2007	2008	2010	2007	2008	2010	2007	2008	2010	2007	2008	2010
	%	%	%	%	%	%	%	%	%	%	%	%
Bought a Lotto, Keno, Strike, Powerball, Big Wednesday, Instant Kiwi or scratch ticket	18	16	18	20	21	19	29	27	26	33	36	37
Bet on horse or dog races or sports events	2	2	1	3	3	2	13	9	11	82	86	86
Bought a raffle ticket or gone to a casino evening for fundraising	3	1	1	6	9	7	43	34	35	48	57	57
Played gaming machines or pokies at a pub or club	2	1	1	5	4	5	12	13	11	82	81	84
Played Housie or Bingo for money	1	1	1	1	0	0	2	2	2	97	98	97
Played gaming machines or pokies at one of the six casinos	0	0	0	1	1	1	8	11	9	91	88	90
Played an Internet game for money	0	0	0	0	-	0	0	1	1	100	99	98
Made money bets with family or friends	1	1	1	1	2	2	8	6	26	90	92	72
Bought a ticket in an overseas raffle/lottery shop	-	-	0	-	-	1	-	-	2	-	-	97
Played a text game for money	0	0	-	0	0	-	1	0	-	98	99	-
Played table games at one of the six casinos	0	0	-	0	1	0	3	3	3	97	96	97

- The proportion of people buying lottery products on a weekly, monthly or less frequent basis had not changed significantly over the years.
- The overall proportion of people who bet on races or sports, played gaming machines at pubs or clubs, or did gambling activities for fundraising on a weekly basis, which was always relatively small, had reduced in 2010.
- Most other gambling activities were participated in less often than monthly, or not at all.

In the following sections, a demographic breakdown is shown for frequency of participation only in those activities with a high enough number of participants to be analysed further - lottery tickets, scratch tickets, horse and dog races and sports betting, and pokie machines at pubs or clubs.

### 4.3.3 Frequency of participation by demographics: Lotto, Big Wednesday and Powerball tickets

- People aged 45 and over were more likely than younger people to buy lottery tickets weekly or monthly.
- People living on their own, or with a partner but no children, were more likely than people in other types of households to buy lottery tickets weekly.
- People who had gambling problems, or were at risk of having problems, were more likely to buy lottery tickets weekly or monthly compared with non-problem gamblers.
- People who lived in low deprivation areas, and those who had high household equivalised incomes, were a little more likely than others to buy tickets frequently.

**Table 4.6: Frequency of buying Lottery tickets, by demographics, 2010**

	Gender		Age (in years)				Prioritised ethnicity				Total
	Male	Female	15-17	18-24	25-44	45+	Māori	Pacific	Asian	Euro /Other	
	%	%	%	%	%	%	%	%	%	%	
At least once a week	18	16	0	3	11	27	18	14	7	18	17
At least once a month	19	12	0	11	15	19	17	17	8	16	15
Less often than monthly	22	33	4	24	35	26	23	16	17	30	27
Not participated in activity	41	40	97	63	40	29	42	53	68	36	40
Base	711	1029	49	148	702	841	460	301	113	866	1740

	Deprivation Index			Household composition					Total
	Low 1-3	Mid 4-7	High 8-10	Single person	Couple no children	Family with children	Family no children	Other households	
	%	%	%	%	%	%	%	%	
At least once a week	18	18	15	22	25	12	13	6	17
At least once a month	16	17	13	14	19	13	13	8	15
Less often than monthly	23	31	27	25	30	26	26	26	27
Not participated in activity	43	34	45	39	27	49	47	60	40
Base	407	557	776	271	419	896	114	40	1740

	PGSI				Household Equivalised Income				Total
	Non Gambler	Non Problem Gambler	Low Risk Gambler	Moderate Risk Problem Gambler	Low	Medium	High	Not stated	
	%	%	%	%	%	%	%	%	
At least once a week	0	20	27	31	15	17	20	15	17
At least once a month	0	18	28	26	14	15	18	4	15
Less often than monthly	0	35	20	20	19	31	32	24	27
Not participated in activity	100	27	25	23	52	37	31	58	40
Base	336	1194	133	77	435	544	708	53	1740



### 4.3.4 Frequency of gambling participation by demographics: Betting on horse or dog races or sports events

- Males were more likely than females to bet on races or sports events regularly.
- People aged 45 and over were more likely than younger people to bet on races or sports events frequently.
- People who lived in low deprivation areas, and people who had a high household equivalised income, were unlikely to bet on races or sports weekly.
- Low-risk gamblers were more likely than those at higher risk or with no risk of gambling problems to bet frequently on races or sports events.

**Table 4.7: Frequency of betting on horse or dog races or sports events, by demographics, 2010**

	Gender		Age (in years)				Prioritised ethnicity				Total
	Male	Female	15-17	18-24	25-44	45+	Māori	Pacific	Asian	Euro /Other	
	%	%	%	%	%	%	%	%	%	%	%
At least once a week	2	0	0	1	1	2	2	1	2	1	1
At least once a month	4	1	0	2	1	3	3	3	1	2	2
Less often than monthly	12	10	0	9	14	10	7	3	8	12	11
Not participated in activity	83	89	100	88	85	85	89	93	90	85	86
Base size	711	1029	49	148	702	841	460	301	113	866	1740

	Deprivation Index			Household composition					Total
	Low 1-3	Mid 4-7	High 8-10	Single person	Couple no children	Family with children	Family no children	Other households	
	%	%	%	%	%	%	%	%	%
At least once a week	0	1	2	4	1	1	3	0	1
At least once a month	1	3	2	2	2	1	5	5	2
Less often than monthly	13	10	8	7	14	8	8	17	11
Not participated in activity	86	85	87	87	82	91	85	79	86
Base	407	557	776	271	419	896	114	40	1740

	PGSI				Household Equivalised Income				Total
	Non Gambler	Non Problem Gambler	Low Risk Gambler	Moderate Risk Problem Gambler	Low	Medium	High	Not stated	
	%	%	%	%	%	%	%	%	%
At least once a week	0	1	9	6	2	2	0	0	1
At least once a month	0	2	8	5	2	2	2	0	2
Less often than monthly	0	12	25	13	5	10	17	10	11
Not participated in activity	100	85	58	76	91	86	81	90	86
Base	336	1194	133	77	435	544	708	53	1740

### 4.3.5 Frequency of gambling participation by demographics: Buying Instant Kiwi or scratch tickets

- People of Māori and European/Other ethnicity were more likely than Asian or Pacific people to buy scratch tickets frequently.
- Low-risk, moderate-risk and problem gamblers were more likely than non-problem gamblers to buy scratch tickets weekly.

**Table 4.8: Frequency of buying Instant Kiwi or scratch tickets, by demographics, 2010**

	Gender		Age (in years)				Prioritised ethnicity				Total
	Male	Female	15-17	18-24	25-44	45+	Māori	Pacific	Asian	Euro /Other	
	%	%	%	%	%	%	%	%	%	%	%
At least once a week	4	5	0	4	2	6	6	2	0	5	4
At least once a month	9	12	0	11	10	12	15	8	9	10	11
Less often than monthly	16	20	3	17	22	17	23	14	11	18	18
Not participated in activity	72	63	98	68	65	65	57	76	80	67	67
Base	711	1029	49	148	702	841	460	301	113	866	1740

	Deprivation Index			Household composition					Total
	Low 1-3	Mid 4-7	High 8-10	Single person	Couple no children	Family with children	Family no children	Other households	
	%	%	%	%	%	%	%	%	%
At least once a week	4	5	3	5	6	2	7	3	4
At least once a month	10	10	12	13	9	11	12	15	11
Less often than monthly	15	23	15	11	21	16	22	19	18
Not participated in activity	70	62	70	71	64	71	59	63	67
Base	407	557	776	271	419	896	114	40	1740

	PGSI				Household Equivalised Income				Total
	Non Non Problem Gambler	Low Risk Gambler	Moderate Risk Problem Gambler		Low	Medium	High	Not stated	
	%	%	%	%	%	%	%	%	%
At least once a week	0	4	13	12	4	4	4	8	4
At least once a month	0	12	14	31	10	12	10	12	11
Less often than monthly	0	22	27	12	11	21	23	13	18
Not participated in activity	100	61	46	45	75	64	64	66	67
Base	336	1194	133	77	435	544	708	53	1740



### 4.3.6 Frequency of gambling participation by demographics: Playing gaming machines (pokies) at pubs or clubs

- Māori were more likely than people of other ethnicities to play pokies in pubs or clubs weekly or monthly. Only 3% of Asian people played pokies in pubs or clubs at all compared with 29% of Māori people.
- People living in areas of low deprivation were less likely than people in areas of medium or high deprivation to play pokies in pubs or clubs frequently.
- One in five (21%) moderate-risk or problem gamblers played pokies in a pub or club weekly, compared with one in 100 (1%) people overall.
- Nearly half (48%) of moderate-risk or problem gamblers played pokies at pubs or clubs at least monthly, compared with one in 17 (6%) people overall.

**Table 4.9: Frequency of playing pokie machines in pubs or clubs, by demographics, 2010**

	Gender		Age (in years)				Prioritised ethnicity				Total %
	Male	Female	15-17	18-24	25-44	45+	Māori	Pacific	Asian	Euro /Other	
	%	%	%	%	%	%	%	%	%	%	
At least once a week	1	1	0	0	1	1	3	2	0	1	1
At least once a month	4	5	0	3	3	6	10	7	0	4	5
Less often than monthly	13	8	1	21	11	8	17	9	3	11	11
Not participated in activity	81	87	99	76	85	84	71	82	97	85	84
Base	711	1029	49	148	702	841	460	301	113	866	1740

	Deprivation Index			Household composition					Total %
	Low 1-3	Mid 4-7	High 8-10	Single person	Couple no children	Family with children	Family no children	Other house holds	
	%	%	%	%	%	%	%	%	
At least once a week	0	2	1	2	1	1	0	1	1
At least once a month	2	6	6	4	5	3	9	7	5
Less often than monthly	12	11	9	6	10	11	13	17	11
Not participated in activity	86	82	84	89	84	86	78	75	84
Base	407	557	776	271	419	896	114	40	1740

	PGSI				Household Equivalised Income				Total %
	Non Gambler	Non Problem Gambler	Low Risk Gambler	Moderate Risk Problem Gambler	Low	Medium	High	Not stated	
	%	%	%	%	%	%	%	%	
At least once a week	0	0	4	21	1	2	1	0	1
At least once a month	0	3	25	27	6	5	3	1	5
Less often than monthly	0	13	14	15	8	9	14	2	11
Not participated in activity	100	84	58	38	85	84	82	97	84
Base	336	1194	133	77	435	544	708	53	1740

### 4.3.7 Fortnightly participation in four common forms of gambling, by problem gambling risk

Regular participation in continuous forms of gambling is noted as a risk factor for the development of gambling problems (Abbott 2001).

Table 4.10 shows the proportion of people who participated in gambling activities at least fortnightly<sup>4</sup> whose PGSI scores classified them as non-problem gamblers, low-risk gamblers and moderate risk or problem gamblers.

- The majority of people who bought lottery tickets (85%) and scratch tickets (73%) fortnightly were non-problem gamblers.
- In contrast, only three in 10 (31%) people who played pokie machines at pubs or clubs or bet on races or sports at least fortnightly were non-problem gamblers.
- Over four in 10 (43%) people who played pokie machines in pubs or clubs at least fortnightly were moderate-risk or problem gamblers. One in four (26%) were low-risk gamblers.
- Over half (54%) of the people who bet on races or sports at least fortnightly were low-risk gamblers while one in seven (15%) were moderate risk or problem gamblers.

These results indicate that frequent players of non-continuous gambling forms – like buying lottery tickets – are less likely to report harm from gambling than those who participate frequently in continuous forms of gambling such as playing pokie machines.

Regular sports and racing betting was more likely to be done by low-risk gamblers, whereas regular pokie machine playing was more associated with moderate risk and problem gambling. It should be noted that the low base sizes in Table 4.10 for pokie machines and sports or race betting mean that the estimates may vary widely with a different sample.

**Table 4.10: Fortnightly participation in sports or racing betting, playing pokies in pubs or clubs, buying lottery tickets and buying scratch tickets, by risk of problem gambling, 2010**

<i>PGSI Gambling Type</i>	Sports /racing betting %	Lottery tickets %	Instant Kiwi scratch tickets %	Pokie machines in pubs /clubs %
Non-problem	31	85	73	31
Low-risk	54	10	18	26
Moderate-risk/problem	15	6	9	43
Base	37	422	130	55

<sup>4</sup> The numbers of respondents playing weekly were too small to be analysed.



## 4.4 Number of activities taken part in during the previous 12 months

### 4.4.1 Number of gambling activities, 2010

Figure 4.3 shows the number of types of gambling activities people had taken part in over the previous 12 months.

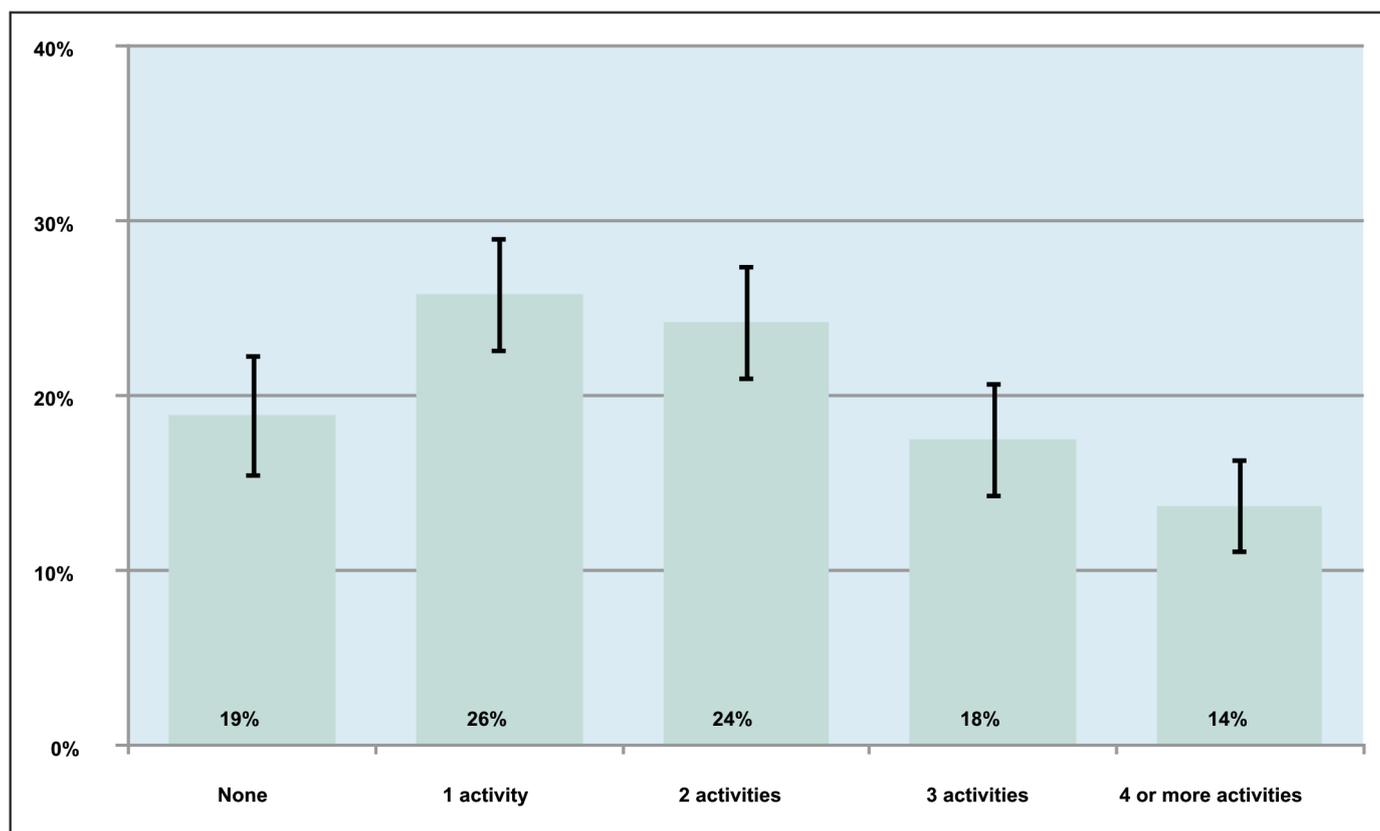
As shown earlier, around one in five (19%) people had not gambled on any activities.

Around one in four (26%) people had gambled on one activity and another one in four (24%) had gambled on two activities.

Almost one in five (18%) had taken part in three activities and around one in seven (14%) had taken part in four or more activities.

The average number of activities people had participated in during the previous 12 months was 2.1.

**Figure 4.3: Number of gambling activities participated in during previous 12 months, 2010**



Base: 1,740 (all respondents)

- Males were more likely than females to have engaged in three or four or more gambling activities while females were more likely to participate in one or two activities. Males were 1.65 times more likely to engage in three or more activities compared with females.
- Older people were more likely to gamble than younger people and on average participated in more activities.
- Asian people were the least likely to gamble on any activities, and participated in the lowest average number of activities.
- People living in areas with medium levels of deprivation were more likely to gamble than people living in the most or the least deprived areas, and participated in a higher average number of activities.
- People living with a partner but no children had participated in a higher average number of activities than people in other types of household.

**Table 4.11: Number of gambling activities taken part in during previous 12 months, by gender, age, ethnicity, deprivation index and household composition, 2010**

	Gender		Age (in years)				Prioritised ethnicity				Total
	Male	Female	15-17	18-24	25-44	45+	Māori	Pacific	Asian	Euro /Other	
	%	%	%	%	%	%	%	%	%	%	%
None	20	18	53	28	19	13	20	30	38	16	19
1 activity	22	30	24	23	25	28	23	24	37	25	26
2 activities	23	26	7	23	23	27	22	21	15	26	24
3 activities	19	16	15	17	16	19	17	12	8	19	18
4 or more activities	16	11	2	10	16	14	18	13	2	14	14
Mean number of activities	2.1	2.0	0.7	1.8	2.2	2.2	2.3	1.8	1.2	2.1	2.1
Base	711	1029	49	148	702	841	460	301	113	866	1740

	Deprivation Index			Household composition					Total
	Low 1-3	Mid 4-7	High 8-10	Single person	Couple no children	Family with children	Family no children	Other households	
	%	%	%	%	%	%	%	%	%
None	22	12	24	19	10	26	23	22	19
1 activity	27	24	28	33	28	23	17	30	26
2 activities	20	27	26	28	26	23	26	16	24
3 activities	18	23	9	11	20	17	22	8	18
4 or more activities	14	14	13	10	17	11	11	24	14
Mean number of activities	1.9	2.3	1.9	1.8	2.4	1.9	2.1	1.9	2.1
Base	407	557	776	271	419	896	114	40	1740



- People who had gambled but were not, according to the PGSI, at risk of having a problem were more likely to have only played one or two types of activities. Moderate-risk or problem gamblers were more likely to have participated in three or four or more activities.
- Among moderate-risk and problem gamblers, 44% had participated in four or more activities, compared with 28% of low-risk gamblers and 15% of non-problem gamblers.
- People with lower household equivalised incomes participated, on average, in fewer gambling activities.
- People with high household equivalised incomes were more likely than others to have participated in three or four or more activities.

**Table 4.12: Number of gambling activities taken part in during previous 12 months, by PGSI score and household equivalised income, 2010**

	PGSI				Household Equivalised Income				Total
	Non Non Gambler	Problem Gambler	Low Risk Gambler	Moderate Risk Problem Gambler	Low	Medium	High	Not stated	%
	%	%	%	%	%	%	%	%	
None	100	0	0	0	31	17	9	21	19
1 activity	0	34	15	16	30	24	23	34	26
2 activities	0	30	31	20	23	25	24	23	24
3 activities	0	21	26	20	9	20	23	20	18
4 or more activities	0	15	28	44	7	15	21	2	14
Mean number of activities	0.0	2.4	3.2	4.0	1.5	2.2	2.5	1.7	2.1
Base	336	1194	133	77	544	708	435	53	1740

#### 4.4.2 Comparison with previous years: number of gambling activities participated in during previous 12 months

- In 2010, the proportion of people who participated in three, or four or more activities was slightly higher than in previous years.

**Table 4.13: Number of gambling activities participated in, 2006/07, 2008, 2010**

	2006/07	2008	2010
	%	%	%
None	18	23	19
1 activity	28	28	26
2 activities	28	26	24
3 activities	16	13	18
4 or more activities	11	11	14
Base	1973	1608	1740

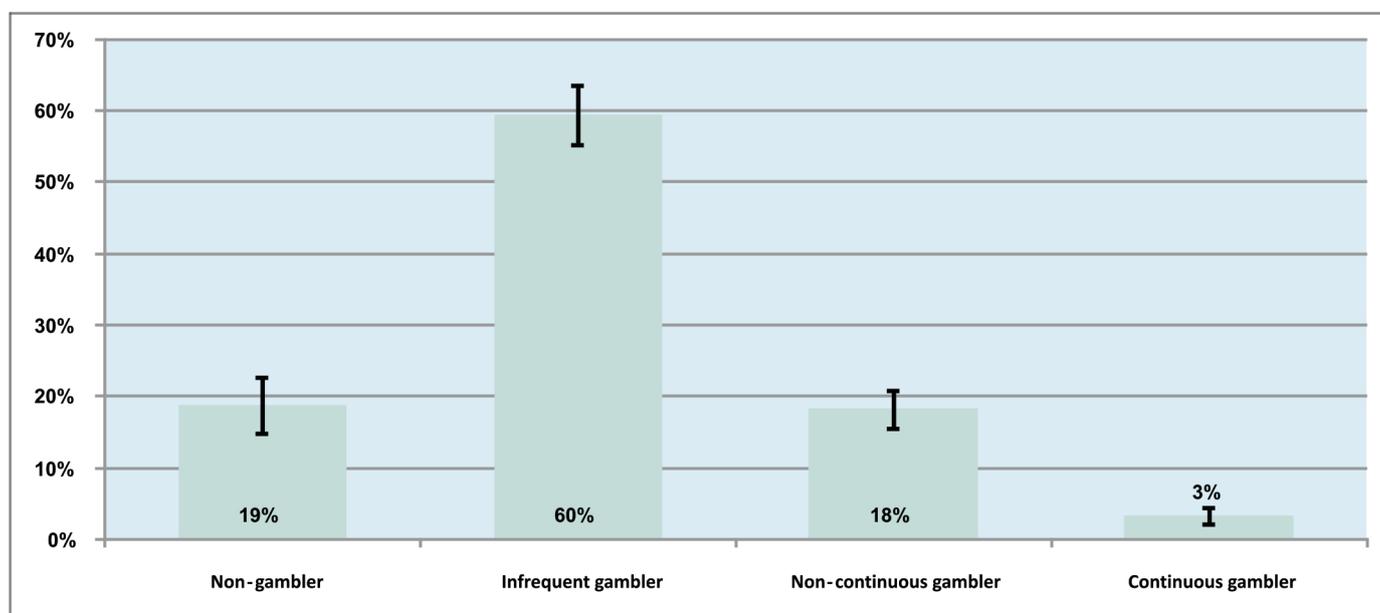
## 4.5 Participation in continuous and non-continuous forms of gambling

### 4.5.1 Gambling participation type, 2010

As noted in section 3.5, all respondents were assigned to a gambling participation group based on the types of gambling they reported participating in and the frequency of their participation.

- Six in 10 (60%) people were “infrequent gamblers” meaning that they participated in gambling activities less often than weekly.
- Nearly one in five (18%) people were frequent non-continuous gamblers (referred to as “non-continuous gamblers” in the chart and table), meaning that they participated in non-continuous gambling forms (such as buying lottery tickets) on a weekly basis.
- One in 33 (3%) people were frequent continuous gamblers (referred to as “continuous gamblers” in the chart and table), meaning that they participated in continuous gambling activities such as betting on races or sports events, playing pokie machines or playing table games at casinos, on a weekly basis.

**Figure 4.4: Participation in continuous and non-continuous forms of gambling, 2010**



Base: 1,740 (all respondents)



- People aged 45 and over were more likely than younger people to be frequent non-continuous gamblers.
- Māori and Pacific people were more likely than people of other ethnicities to be frequent continuous gamblers.
- People who lived in areas of higher deprivation and people who had lower household equivalised incomes, were slightly more likely to be frequent continuous gamblers.
- People who lived in areas of lower deprivation and people who had higher household equivalised incomes were slightly more likely to be frequent non-continuous gamblers.
- People who lived alone were more likely than people who lived in other types of household to be frequent continuous gamblers.
- People who lived with a partner but no children were more likely to be frequent non-continuous gamblers.
- One in three (34%) moderate risk and problem gamblers and one in six (16%) low-risk gamblers were frequent continuous gamblers.

**Table 4.14: Gambling participation type, by demographics, 2010**

	Gender		Age (in years)				Prioritised ethnicity				Total %
	Male	Female	15-17	18-24	25-44	45+	Māori	Pacific	Asian	Euro /Other	
	%	%	%	%	%	%	%	%	%	%	
Non-gambler	20	18	48	28	19	13	21	30	39	16	19
Infrequent gambler	57	62	51	66	65	55	55	48	50	62	60
Non-continuous gambler	19	17	1	4	13	28	18	15	8	20	18
Continuous gambler	4	3	0	3	3	4	7	7	4	3	3
Base	711	1029	49	148	702	841	460	301	113	866	1740

	Deprivation Index			Household composition					Total %
	Low 1-3	Mid 4-7	High 8-10	Single person	Couple no children	Family with children	Family no children	Other house holds	
	%	%	%	%	%	%	%	%	
Non-gambler	22	12	24	19	10	25	23	23	19
Infrequent gambler	57	65	56	52	61	59	60	71	60
Non-continuous gambler	20	19	16	22	26	13	13	5	18
Continuous gambler	2	4	5	7	4	3	3	1	3
Base	407	557	776	271	419	896	114	40	1740

	PGSI				Household Equivalised Income				Total %
	Non Non Gambler	Non Problem Gambler	Low Risk Gambler	Moderate Risk Problem Gambler	Low	Medium	High	Not stated	
	%	%	%	%	%	%	%	%	
Non-gambler	100	0	0	0	32	16	9	21	19
Infrequent gambler	0	76	56	46	47	63	68	60	60
Non-continuous gambler	0	22	28	20	17	17	22	15	18
Continuous gambler	0	2	16	34	5	4	2	5	3
Base	336	1194	133	77	708	544	435	53	1740

## 4.5.2 Comparison with previous years: gambling participation types

- The overall rates of people classified into each gambling participation type were very similar in 2010 to the rates in 2006/07.

**Table 4.15: Gambling participation types, 2006/07, 2008, 2010**

	2006/07	2008	2010
	%	%	%
Non-gambler	18	23	19
Infrequent gambler	61	58	60
Non-continuous gambler	18	15	18
Continuous gambler	4	4	3



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