

Smoking Prevalence Rates Census 2006

**Public Health Intelligence
Ministry of Health**

**District Health Board Report
Otago**

Introduction

The following report presents estimates of smoking prevalence in your District Health Board from the Census 2006. These tables will be placed on PHI online www.phionline.moh.govt.nz and will be available in early 2008. Information from the Year 10 survey and data from the Quitline around usage and providers is currently available on PHI online.

PHI is also currently looking into statistical modelling techniques to provide estimates of prevalence using the NZTUS and the Census for years to come and for indicators not measured by the Census.

If you have any queries about your report, please contact:

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The Census 2006

The census 2006 is the most representative and accurate data for the prevalence of smoking. Currently, this is the only data that provides representative breakdowns of smoking rates by DHB.

Notes on definitions

Two questions were asked in the Census (1996) to determine smoking status (note: these questions were not asked in the 2001 Census):

1. Do you smoke cigarettes regularly?
2. Have you ever been a regular smoker of one or more cigarettes a day?

Smoking of pipes, cigars and cigarillos, other smoked substances such as marijuana and tobacco used for chewing are not included in these definitions.

Non-response rates

The 2006 Census reported a non-response rate of 5.2%; the 1996 Census reported a non-response rate of 7.2%.

Prevalence of Smoking (Census 1996)

The prevalence of smoking reported in the 1996 Census, is as follows: Regular smokers, 23.7%; ex-smokers, 22.0%; never smoked regularly, 54.2%.

Prevalence of Smoking (Census 2006)

The prevalence of smoking reported in the 2006 Census, is as follows: Regular smokers, 20.7%; ex-smokers, 22.1%; never smoked regularly, 57.2%. Further breakdowns of the 2006 Census are presented below.

Table 1: Comparison of regular smokers, ex-smokers and never smoked regularly smokers (%) across all DHBs, 15+ years.

DHB	Regular smokers	Ex-smokers	Never smoked regularly
Auckland	16.5%	18.4%	65.1%
Bay of Plenty	22.3%	25.4%	52.3%
Canterbury	18.8%	22.8%	58.4%
Capital and Coast	17.3%	22.2%	60.5%
Counties Manukau	22.1%	17.0%	60.8%
Hawke's Bay	24.8%	24.2%	51.0%
Hutt Valley	22.9%	22.4%	54.7%
Lakes	27.2%	23.8%	49.0%
Midcentral	22.7%	22.2%	55.2%
Nelson Marlborough	19.3%	26.3%	54.4%
Northland	25.7%	25.6%	48.7%
Otago	19.4%	23.4%	57.2%
South Canterbury	21.2%	24.8%	54.0%
Southland	23.8%	23.4%	52.8%
Tairāwhiti	29.7%	22.3%	48.0%
Taranaki	22.4%	23.5%	54.1%
Waikato	22.6%	22.1%	55.3%
Wairarapa	23.5%	26.4%	50.1%
Waitemata	17.4%	21.8%	60.8%
West Coast	25.7%	24.3%	50.0%
Whanganui	26.3%	23.3%	50.4%
New Zealand	20.7%	22.1%	57.2%

The prevalence of regular smokers in Otago DHB is 19.4%; this is lower than the New Zealand prevalence of 20.7%.

Regular smokers:

The definition of a *regular smoker* used for the census is someone who smokes cigarettes regularly ie. one or more cigarettes a day.

Table 2: Prevalence of regular smokers (%), by gender and age group

	Females	Males	Otago total	NZ total
15-19 years	14.8%	15.9%	15.3%	18.8%
20-24 years	22.0%	26.5%	24.2%	29.8%
25-29 years	26.5%	30.1%	28.3%	28.6%
30-39 years	24.6%	27.8%	26.1%	25.6%
40-49 years	22.3%	23.4%	22.8%	23.3%
50-59 years	17.8%	19.3%	18.6%	18.7%
60-64 years	14.9%	17.3%	16.1%	15.2%
65+ years	7.1%	9.2%	8.1%	8.0%
Otago total	18.2%	20.8%	19.4%	
NZ total	19.5%	21.9%		20.7%

Notes: Otago and NZ totals refer to the population aged 15+ years.

The percentage of regular smokers who are male is higher than regular smokers who are female in Otago DHB. High rates of smoking are observed among 20-49 year olds.

Table 3: Prevalence of regular smokers 15+ years (%), by gender and ethnicity

	Females	Males	Otago total	NZ total
European	18.5%	20.6%	19.5%	19.4%
Maori	38.3%	35.0%	36.7%	42.2%
Pacific peoples	28.1%	28.8%	28.3%	30.3%
Asian	5.6%	15.6%	10.0%	11.1%
MELAA	8.6%	17.9%	13.7%	15.1%
Other ethnicity	15.8%	18.6%	17.2%	16.6%
Otago total	18.2%	20.8%	19.4%	
NZ total	19.5%	21.9%		20.7%

Notes: Ethnicity presented is based on grouped total response
MELAA stands for Middle Eastern, Latin American, African

Higher rates of smoking are observed among Maori (36.7%) and Pacific peoples (28.3%) in this DHB compared to other ethnicities. Consistent with national patterns of prevalence, the percentage of Maori females who regularly smoke is higher than Maori males; the percentage of Pacific males who regularly smoke is comparable to Pacific females.

Table 4: Prevalence of regular smokers (%), by age group and ethnicity

	European	Maori	Pacific peoples	Asian	MELAA	Other ethnicity	Otago total	NZ total
15-19 years	15.7%	27.3%	21.3%	6.5%	9.6%	11.3%	15.7%	18.8%
20-24 years	25.5%	40.1%	30.0%	12.5%	15.3%	20.1%	25.5%	29.8%
25-29 years	29.1%	48.3%	34.8%	12.7%	20.7%	22.8%	29.1%	28.6%
30-39 years	26.3%	41.4%	37.3%	9.4%	12.5%	23.4%	26.3%	25.6%
40-49 years	23.1%	42.0%	33.0%	8.6%	15.2%	19.6%	23.1%	23.3%
50-59 years	18.9%	31.2%	23.5%	9.3%	-	15.9%	18.9%	18.7%
60-64 years	16.6%	30.3%	-	-	-	12.4%	16.6%	15.2%
65+ years	8.0%	15.7%	-	-	-	6.8%	8.0%	8.0%
Otago total	19.5%	36.7%	28.3%	10.0%	13.7%	17.2%	19.5%	
NZ total	19.4%	42.2%	30.3%	11.1%	15.1%	16.6%		20.7%

Notes: Otago and NZ totals refer to the population aged 15+ years.

Ethnicity presented is based on grouped total response

MELAA stands for Middle Eastern, Latin American, African

Boxes with dashes represent rates that have been suppressed due to counts less than 15

Table 5: Prevalence of regular smokers (%), by ethnicity, gender and age group

	European		Maori		Pacific peoples		Asian		MELAA		Other ethnicity		Otago total	NZ total
	females	males	females	males	females	males	females	males	females	males	females	males		
15-19 years	15.5%	15.9%	29.3%	24.7%	25.4%	19.4%	4.0%	9.2%	-	17.2%	9.2%	13.5%	15.3%	18.8%
20-24 years	23.7%	27.4%	39.4%	40.8%	34.5%	30.8%	8.5%	17.4%	-	21.6%	17.1%	22.9%	24.2%	29.8%
25-29 years	27.6%	30.5%	50.0%	46.1%	26.5%	41.9%	6.3%	22.4%	-	-	22.0%	23.8%	28.3%	28.6%
30-39 years	25.0%	27.9%	43.1%	39.3%	32.8%	39.4%	3.7%	18.3%	-	28.6%	21.0%	25.3%	26.1%	25.6%
40-49 years	23.0%	23.2%	44.7%	39.4%	29.8%	31.3%	-	21.2%	-	-	18.5%	20.8%	22.8%	23.3%
50-59 years	18.2%	19.7%	33.0%	30.4%	-	25.9%	-	11.7%	-	-	15.5%	15.8%	18.6%	18.7%
60-64 years	15.2%	18.1%	32.3%	25.8%	-	-	-	-	-	-	11.4%	13.5%	16.1%	15.2%
65+ years	7.1%	9.3%	15.3%	20.3%	-	-	-	-	-	-	6.6%	8.7%	8.1%	8.0%
Otago total	18.5%	20.6%	38.3%	35.0%	28.1%	28.8%	5.6%	15.6%	8.6%	17.9%	15.8%	18.6%	19.4%	
NZ total	18.6%	20.3%	45.5%	38.5%	27.3%	33.5%	4.8%	18.1%	9.6%	20.3%	15.8%	17.4%		20.7%

Notes: Otago and NZ totals refer to the population aged 15+ years.

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Ex-smokers:

An *ex-smoker* is defined as someone who used to smoke regularly, but no longer does

Table 6: Prevalence of ex-smokers (%), by gender and age group

	Females	Males	Otago total	NZ total
15-19 years	5.5%	4.7%	5.1%	4.6%
20-24 years	11.0%	10.7%	10.8%	11.3%
25-29 years	18.6%	16.0%	17.3%	16.2%
30-39 years	22.1%	18.6%	20.4%	19.1%
40-49 years	24.0%	23.5%	23.8%	22.3%
50-59 years	26.0%	32.1%	29.1%	27.6%
60-64 years	31.3%	41.1%	36.2%	32.9%
65+ years	26.9%	52.0%	38.0%	35.1%
Otago total	21.2%	25.8%	23.4%	
NZ total	20.3%	23.9%		22.1%

Notes: Otago and NZ totals refer to the population aged 15+ years.

The prevalence of ex-smokers in Otago DHB is 23.4%, compared to the national prevalence of ex-smokers, 22.1%. Higher percentages of ex-smokers are aged 60 years and over. The percentage of male ex-smokers is higher than female ex-smokers in older age groups.

Table 7: Prevalence of ex-smokers 15 + years (%), by gender and ethnicity

	Females	Males	Otago total	NZ total
European	21.8%	26.5%	24.0%	24.5%
Maori	19.7%	19.4%	19.6%	19.1%
Pacific peoples	13.2%	15.0%	14.3%	10.8%
Asian	4.9%	9.6%	7.0%	7.2%
MELAA	8.6%	15.0%	12.2%	12.8%
Other ethnicity	24.6%	28.0%	26.3%	26.5%
Otago total	21.2%	25.8%	23.4%	
NZ total	20.3%	23.9%		22.1%

Notes: Ethnicity presented is based on grouped total response
MELAA stands for Middle Eastern, Latin American, African

Higher prevalences of ex-smokers are observed among European (24.0%) and Other ethnic groups (26.3%) in Otago DHB.

Table 8: Prevalence of ex-smokers (%), by age group and ethnicity

	European	Maori	Pacific peoples	Asian	MELAA	Other ethnicity	Otago total	NZ total
15-19 years	5.2%	5.5%	5.9%	3.1%	-	5.4%	5.1%	4.6%
20-24 years	11.6%	11.7%	10.9%	4.2%	-	12.9%	10.8%	11.3%
25-29 years	18.2%	15.0%	13.0%	10.2%	-	18.7%	17.3%	16.2%
30-39 years	20.6%	24.0%	17.5%	11.6%	12.5%	22.3%	20.4%	19.1%
40-49 years	23.8%	24.9%	17.0%	8.6%	18.2%	27.1%	23.8%	22.3%
50-59 years	29.1%	29.6%	21.6%	7.8%	40.0%	31.0%	29.1%	27.6%
60-64 years	36.3%	33.3%	33.3%	-	-	37.2%	36.2%	32.9%
65+ years	38.0%	45.2%	31.3%	19.4%	-	42.0%	38.0%	35.1%
Otago total	24.0%	19.6%	14.3%	7.0%	12.2%	26.3%	23.4%	
NZ total	24.5%	19.1%	10.8%	7.2%	12.8%	26.5%		22.1%

Notes: Otago and NZ totals refer to the population aged 15+ years.

Ethnicity presented is based on grouped total response

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Table 9: Prevalence of ex-smokers (%), by ethnicity, gender and age group

	European		Maori		Pacific peoples		Asian		MELAA		Other ethnicity		Otago total	NZ total
	females	males	females	males	females	males	females	males	females	males	females	males		
15-19 years	5.7%	4.6%	7.3%	4.4%	-	-	3.0%	4.3%	-	-	5.8%	5.8%	5.1%	4.6%
20-24 years	11.7%	11.4%	13.0%	10.4%	13.8%	-	3.2%	5.4%	-	-	13.2%	12.5%	10.8%	11.3%
25-29 years	19.7%	16.6%	17.5%	13.9%	20.6%	-	7.3%	14.5%	-	-	19.6%	17.9%	17.3%	16.2%
30-39 years	22.7%	18.1%	24.7%	22.4%	19.0%	16.7%	9.0%	16.1%	-	-	24.1%	20.8%	20.4%	19.1%
40-49 years	24.3%	23.3%	24.8%	25.9%	14.9%	18.8%	3.8%	14.1%	-	-	27.7%	26.3%	23.8%	22.3%
50-59 years	26.4%	32.0%	28.7%	29.6%	-	22.2%	-	16.7%	-	45.5%	27.1%	35.1%	29.1%	27.6%
60-64 years	31.5%	41.2%	29.0%	35.5%	-	-	-	-	-	-	33.3%	40.6%	36.2%	32.9%
65+ years	26.8%	52.3%	39.0%	50.8%	-	38.5%	13.5%	30.0%	-	-	31.8%	52.8%	38.0%	35.1%
Otago total	21.8%	26.5%	19.7%	19.4%	13.2%	15.0%	4.9%	9.6%	8.6%	15.0%	24.6%	28.0%	23.4%	
NZ total	22.8%	26.5%	19.7%	18.3%	10.4%	11.3%	3.9%	11.0%	9.8%	15.6%	24.9%	27.9%		22.1%

Notes: Otago and NZ totals refer to the population aged 15+ years.

Ethnicity presented is based on grouped total response

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People who have never smoked regularly:

The definition for *never smoked regularly* are people who have never been regular smokers

Table 10: Prevalence of never smokers (%), by gender and age group

	Females	Males	Otago total	NZ total
15-19 years	79.7%	79.4%	79.6%	76.7%
20-24 years	67.1%	62.8%	65.0%	58.8%
25-29 years	54.9%	53.8%	54.3%	55.2%
30-39 years	53.3%	53.5%	53.5%	55.3%
40-49 years	53.7%	53.1%	53.4%	54.5%
50-59 years	56.2%	48.5%	52.3%	53.7%
60-64 years	53.9%	41.6%	47.8%	51.8%
65+ years	66.0%	38.8%	53.9%	56.9%
Otago total	60.6%	53.5%	57.2%	
NZ total	60.1%	54.1%		57.2%

Notes: Otago and NZ totals refer to the population aged 15+ years.

The prevalence of people who have never smoked regularly in Otago DHB is 57.2%. The percentage of females who have never smoked regularly is higher compared to males. Encouragingly, higher percentages of young people aged 15 to 24 years have never smoked regularly, compared to older age groups.

Table 11: Prevalence of never smokers (%), by gender and ethnicity

	Females	Males	Otago total	NZ total
European	59.8%	52.9%	56.5%	56.1%
Maori	42.0%	45.7%	43.8%	38.7%
Pacific peoples	58.6%	56.3%	57.4%	59.0%
Asian	89.6%	74.8%	83.0%	81.7%
MELAA	82.8%	67.1%	74.1%	72.1%
Other ethnicity	59.6%	53.4%	56.4%	56.9%
Otago total	60.6%	53.5%	57.2%	
NZ total	60.1%	54.1%		57.2%

Notes: Ethnicity presented is based on grouped total response
MELAA stands for Middle Eastern, Latin American, African

Higher percentages of never smokers are observed among Asian and MELAA ethnic groups. Maori have the lowest percentage of people who have never smoked regularly.

Table 12: Prevalence of never smokers (%), by age group and ethnicity

	European	Maori	Pacific peoples	Asian	MELAA	Other ethnicity	Otago total	NZ total
15-19 years	79.1%	67.2%	72.8%	90.4%	90.4%	83.3%	79.6%	76.7%
20-24 years	63.0%	48.2%	59.1%	83.2%	84.7%	67.0%	65.0%	58.8%
25-29 years	52.7%	36.8%	52.2%	77.1%	79.3%	58.4%	54.3%	55.2%
30-39 years	53.1%	34.6%	45.2%	79.0%	75.0%	54.3%	53.5%	55.3%
40-49 years	53.1%	33.0%	50.0%	82.8%	66.7%	53.3%	53.4%	54.5%
50-59 years	51.9%	39.3%	54.9%	82.9%	60.0%	53.1%	52.3%	53.7%
60-64 years	47.1%	36.4%	66.7%	-	-	50.5%	47.8%	51.8%
65+ years	54.0%	39.1%	68.8%	80.6%	-	51.3%	53.9%	56.9%
Otago total	56.5%	43.8%	57.4%	83.0%	74.1%	56.4%	57.2%	
NZ total	56.1%	38.7%	59.0%	81.7%	72.1%	56.9%		57.2%

Notes: Otago and NZ totals refer to the population aged 15+ years.

Ethnicity presented is based on grouped total response

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Table 13: Prevalence of never smokers (%), by ethnicity, gender and age group

	European		Maori		Pacific peoples		Asian		MELAA		Other Ethnicity		Otago total	NZ total
	females	males	females	males	females	males	females	males	females	males	females	males		
15-19 years	78.8%	79.5%	63.4%	70.9%	74.6%	80.6%	93.1%	86.4%	-	82.8%	85.0%	80.7%	79.6%	76.7%
20-24 years	64.5%	61.2%	47.7%	48.8%	51.7%	69.2%	88.3%	77.2%	-	78.4%	69.6%	64.6%	65.0%	58.8%
25-29 years	52.7%	52.9%	32.5%	40.0%	52.9%	58.1%	86.5%	63.2%	-	-	58.4%	58.3%	54.3%	55.2%
30-39 years	52.3%	54.0%	32.2%	38.4%	48.3%	43.9%	87.3%	65.6%	-	71.4%	54.9%	53.8%	53.5%	55.3%
40-49 years	52.7%	53.5%	30.6%	34.7%	55.3%	50.0%	96.2%	64.7%	-	-	53.8%	52.9%	53.4%	54.5%
50-59 years	55.4%	48.3%	38.3%	40.0%	-	51.9%	-	71.7%	-	54.5%	57.5%	49.1%	52.3%	53.7%
60-64 years	53.2%	40.7%	38.7%	38.7%	-	-	-	-	-	-	55.2%	45.9%	47.8%	51.8%
65+ years	66.1%	38.4%	45.8%	28.8%	-	61.5%	86.5%	70.0%	-	-	61.7%	38.5%	53.9%	56.9%
Otago total	59.8%	52.9%	42.0%	45.7%	58.6%	56.3%	89.6%	74.8%	82.8%	67.1%	59.6%	53.4%	57.2%	
NZ total	58.6%	53.3%	34.7%	43.2%	62.4%	55.3%	91.2%	70.9%	80.6%	64.1%	59.3%	54.7%		57.2%

Notes: Otago and NZ totals refer to the population aged 15+ years.

Ethnicity presented is based on grouped total response

MELAA stands for Middle Eastern, Latin American, African

Boxes with dashes represent rates that have been suppressed due to counts less than 15