

TOBACCO FACTS

May 2001



MINISTRY OF
HEALTH

MANATŪ HAUORA

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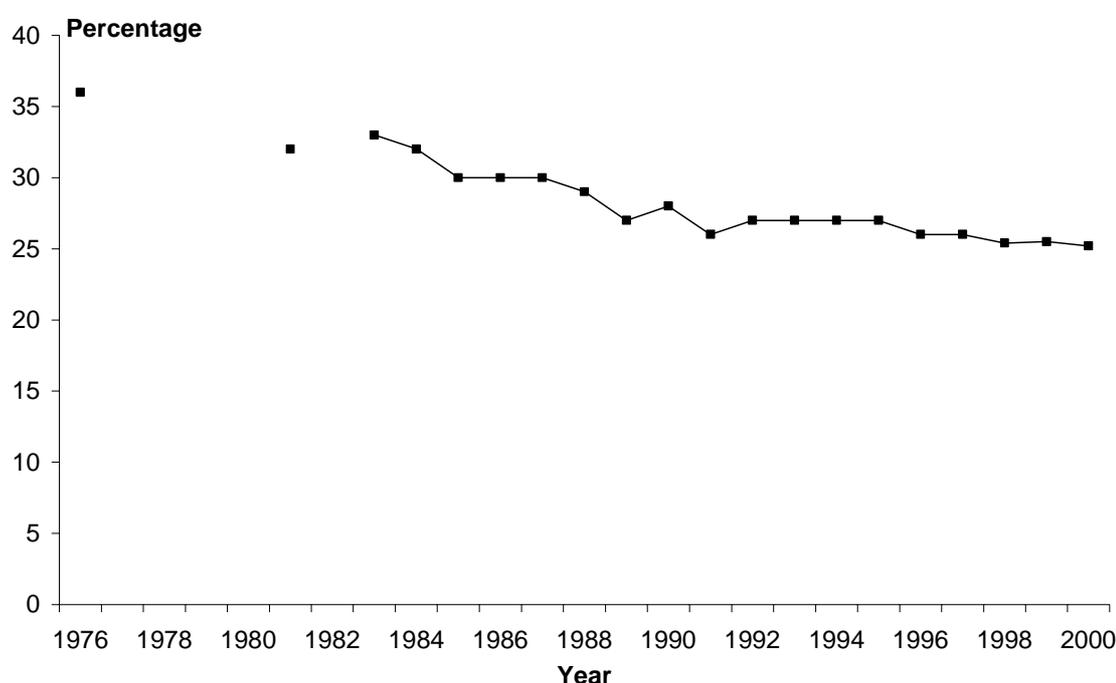
SMOKING SURVEY

The following smoking prevalence information is derived from consumer surveys conducted by ACNielsen (NZ) Ltd in people's homes. These surveys include tobacco-related questions (commissioned by the Ministry of Health). Smoking prevalence information relates to those aged 15 years and over. Further details about the survey are provided in Appendix 1.

Trends in cigarette smoking prevalence

- Smoking prevalence continued to decrease during the last decade of the 20th century (roughly a 2 percentage point reduction from the early 1990s level, see Figure 1 and Appendix 2). In 2000, smoking prevalence among those aged 15 years and over was 25 percent.¹
- Note that unless otherwise specified, in this prevalence survey 'smokers' includes those who smoke, on average, less than one cigarette per day. In 2000, the prevalence of 'daily smokers' (those who indicate that they smoke one or more cigarettes per day) was 24 percent (for details see Appendix 2).
- A two-percentage point decline in smoking prevalence represents approximately 55,000 fewer smokers.

Figure 1: Prevalence of cigarette smoking, ages 15 years and over, 1976–2000



Source: 1976 and 1981 Census of Population and Dwellings, Department of Statistics
1983–2000 ACNielsen (NZ) Ltd
For tabulated data and notes, see Appendix 2

Note:

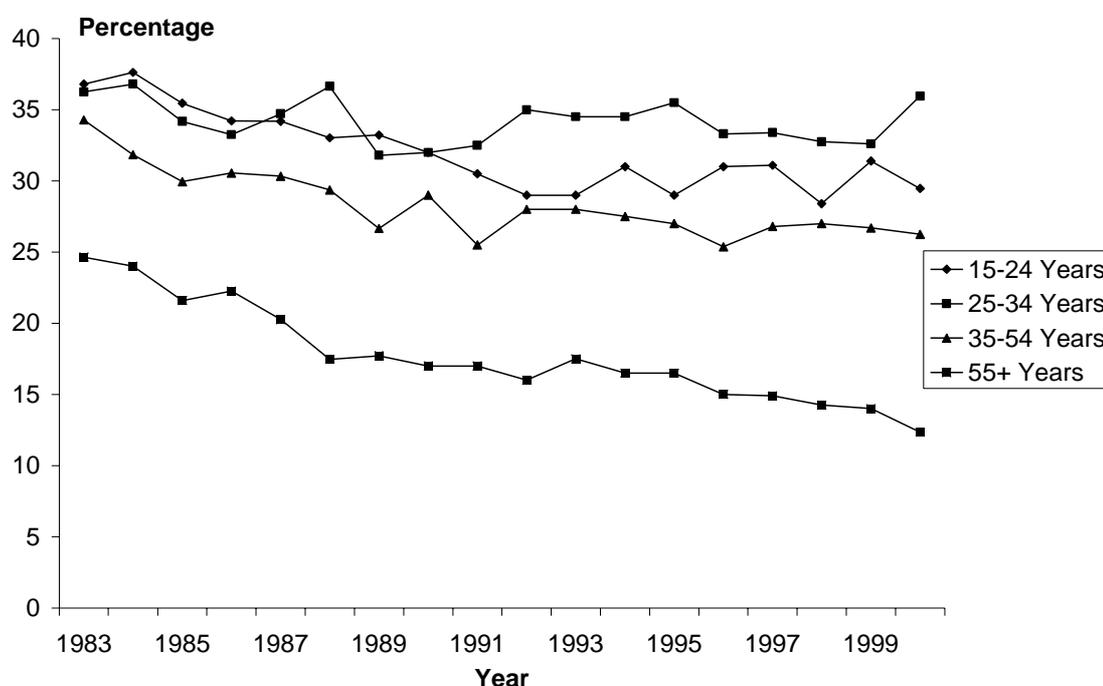
1. Data is not age standardised.

¹ This 2000 overall prevalence figure for those 15 years and over (25.2%, 95% confidence interval (CI) of 24.2–26.3), can be compared to the 25 percent (95% CI, 23.5–26.3) of adults who indicated they were smokers of 'one or more tobacco cigarettes a day' in the 1996–97 New Zealand Health Survey (Ministry of Health 1999b). A lower estimate was provided by the 1996 Census of Population and Dwellings, which found 23.7 percent of people 15 years or older to be 'regular (that is, one or more per day)' cigarette smokers (Borman et al 1999). As noted in Appendix 1, the ACNielsen (NZ) Ltd data used here is weighted to reflect the age, sex and household size characteristics of the 1996 Census population.

Smoking prevalence by age group

- The decline in smoking prevalence experienced by all age groups during the 1980s has slowed for those 35 years and over and appears to have discontinued for those less than 35 years of age in the 1990s.
- For ages 15–24 years, smoking has persistently been more prevalent among females than males, with no decreases evident for either gender during the 1990s.
- For ages 25–34 years, male and female smoking prevalence has been similar, with no decreases evident for either gender during the 1990s.
- For ages 35–54 years, smoking has generally been more prevalent among males, with both genders showing slight decreases in smoking prevalence in the 1990s.
- For those 55 years and over, smoking has generally been more prevalent among males than females, with both genders showing a decreasing prevalence.

Figure 2: Prevalence of cigarette smoking, by age group, 1983–2000



Source: ACNielsen (NZ) Ltd
For tabulated data and notes, see Appendix 2

Note:

1. Data is not age standardised.

Smoking prevalence among youth

- In 2000, approximately one quarter of 15–19 year olds indicated they were smokers, this increased to about a third for 20–24 years olds.
- Smoking prevalence increases rapidly during the late teens. At younger ages there is a large difference between those who have ‘ever smoked’ and daily smokers. (See Appendix 2: caution should be used in interpreting these data, as there are wide confidence intervals (CI) for these population groups with their relatively small sample sizes.)²

Smoking prevalence by household income and labour force status

- The highest cigarette smoking prevalence is reported by those with low incomes and respondents indicating they were ‘beneficiaries’ (see Appendix 2, Figure 1 and 2).

Regional variation

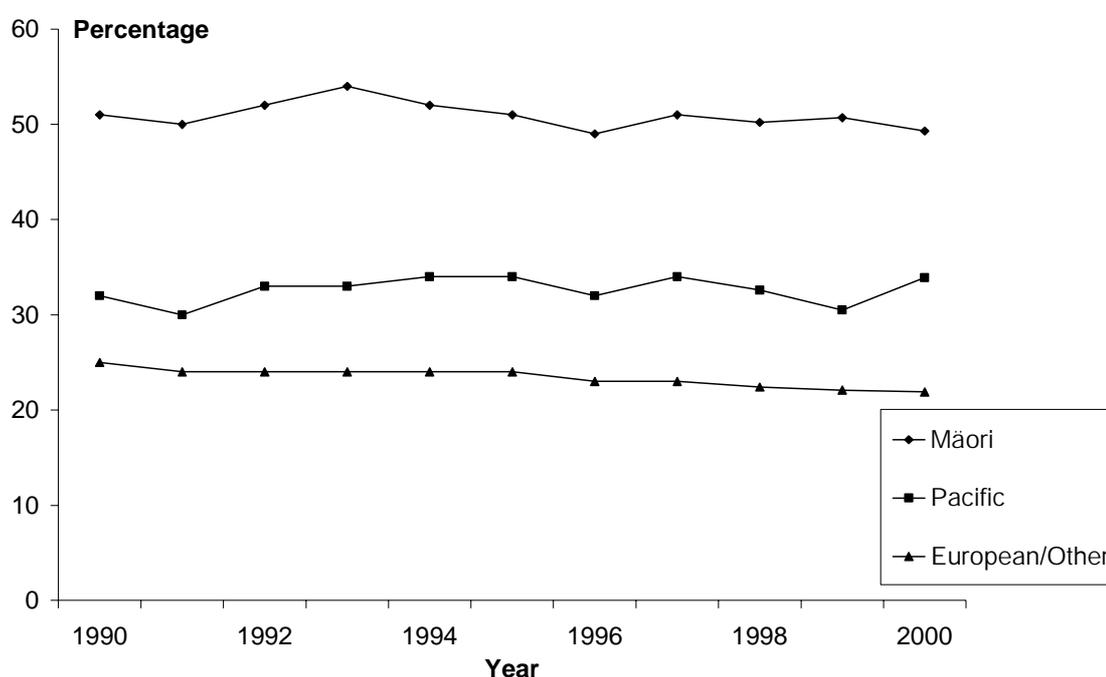
- A previous regional analysis of smoking prevalence noted a clustering of areas of high smoking prevalence in the central and eastern North Island (Wilson and Borman 1998).
- Pooled 1998–2000 prevalence data, indirectly standardised by District Health Board (DHB) region, had high smoking prevalence in the central and eastern North Island, as well as high female smoking rates in Northland and the West Coast. In particular, there was statistically significantly high smoking prevalence in the Tairāwhiti DHB region for both genders, and high male smoking prevalence in the Taranaki and Hawke’s Bay DHB regions and high female smoking prevalence in the Northland, Lakes, Whanganui and the West Coast DHB regions (see Map 1 and 2 in Appendix 2).

² The 95 percent confidence intervals indicate that if the sample is repeated 100 times, the true population prevalence is expected to be within the lower and upper confidence interval values 95 times out of 100. Calculation of confidence intervals has taken account of the clustered nature of the data using the statistical software package SUDAAN, except in the District Health Board (DHB) regional analysis where indirect standardisation was used.

Smoking prevalence by ethnicity

- In 2000, just over one in five European/Other (21.9%), around one in three Pacific peoples (33.9%), and one in two Māori (49.3%) were cigarette smokers. Age adjusted³ smoking prevalence for those in the 25 to 64 year age group are 50.6 percent for Māori, 25.0 percent for European/Other, and 32.9 percent for Pacific peoples (direct standardisation to Segi's world population).
- Smoking prevalence of European/Other decreased (roughly a 2 percentage point reduction from the early 1990s level). No such trend is evident for Māori and Pacific peoples (see Figure 3).

Figure 3: Prevalence of cigarette smoking, ages 15 years and over, by ethnic group, 1990–2000



Source: ACNielsen (NZ) Ltd

For tabulated data and notes, see Appendix 2

Notes:

1. Data is not age standardised.
2. The classification of ethnicity information changed from 1997 onwards. Therefore ethnic-specific data before and after 1997 may not be comparable

³ Comparing smoking prevalence for these populations (with larger proportions of young Māori and Polynesian people than European/Other) is aided by correcting for the differing age structures (age standardising involves applying the age specific rates in a study population to a population with a standard age structure).

Number of cigarettes smoked per day

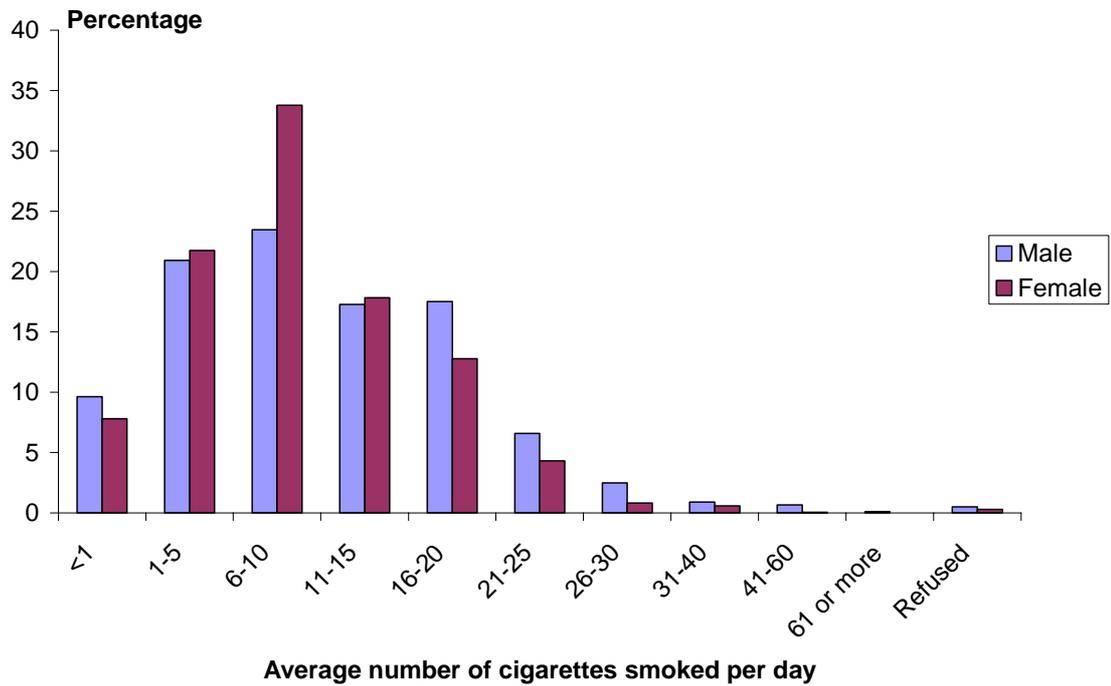
- When asked, 'on average, how many cigarettes do you smoke in an average day?', cigarette smokers most commonly indicated that they smoked between 6 and 10 cigarettes on an average day (23% of males, 34% of females) (see Figure 4). ('Cigarette smokers' includes smokers of ready-made cigarettes and smokers of roll-your-own cigarettes.)
- Overall, 59 percent of cigarette smokers smoked less than 10 cigarettes per day. Thirty-three percent smoked between 11 and 20 cigarettes per day.
- Eight percent of cigarette smokers indicated smoking more than 20 cigarettes per day (11% of males, 6% of females) (see Figure 4).
- Male smokers aged 55 years and older tended to smoke most heavily, with 18 percent reporting that they smoked more than 20 cigarettes on an average day. In the same age group, 8 percent of women smoked 20 or more cigarettes per day (see Figure 5).
- Using midpoints of the response categories, it is estimated that during 2000, the average smoker smoked 12 cigarettes per day (males, 13 cigarettes per day; females, 11 cigarettes per day). Māori and European/Others ethnic groups both reported smoking 12 cigarettes per day, while Pacific respondents reported smoking 9 cigarettes per day.
- From 1997 to 2000, the number of cigarettes smoked per smoker per day decreased from 13 to 12 (see Table 1).

Table 1: Average number of cigarettes smoked per smoker, 1997–2000

Year	Average number of cigarettes smoked per day
1997	13.1
1998	13.6
1999	12.1
2000	11.9

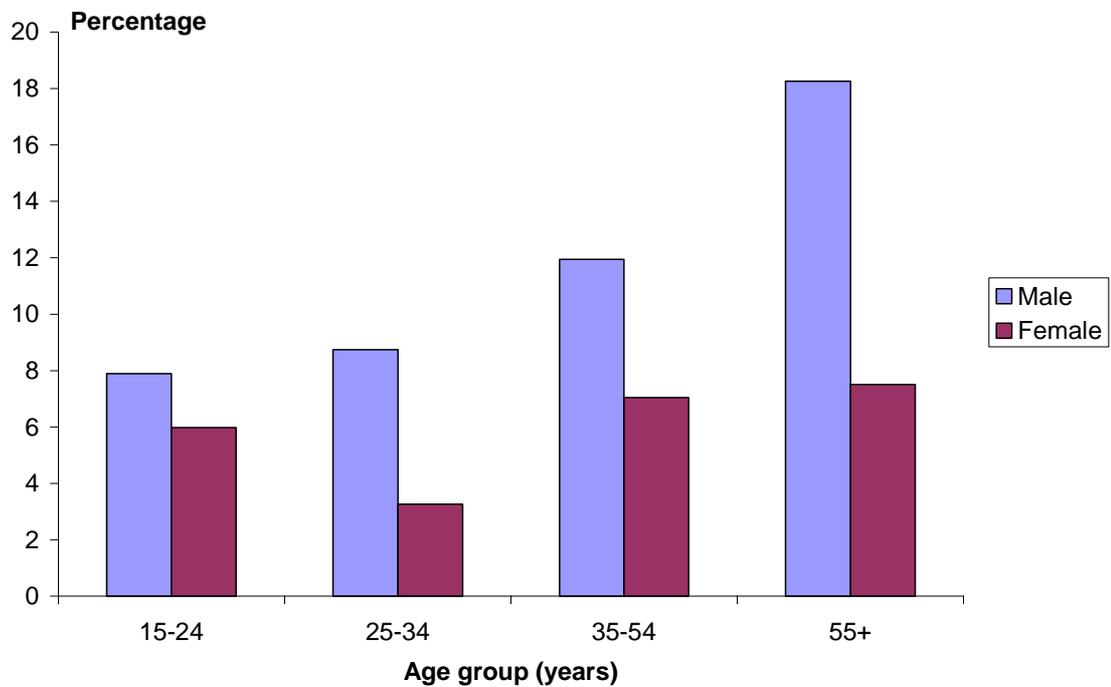
Source: ACNielsen (NZ) Ltd

Figure 4: Average number of cigarettes smoked on an average day, by gender, 2000



Source: ACNielsen (NZ) Ltd

Figure 5: Percentage of smokers smoking more than 20 cigarettes per day, by age and gender, 2000



Source: ACNielsen (NZ) Ltd

Prevalence of cigar smoking

- In 2000, the overall prevalence of cigar smoking was 1.0 percent (95% CI, 0.8–1.2%). For males, 1.9 percent (1.4–2.3) were cigar smokers compared to 0.2 percent (0.1–0.3) of females reported smoking cigars.
- During the four years since 1997, no trend is apparent in the prevalence of cigar smoking (see Table 2).⁴

Table 2: Prevalence of cigar smoking, 1997–2000

Year	Prevalence
1997	1.0 (0.7 – 1.2)
1998	1.0 (0.7 – 1.2)
1999	0.9 (0.7 – 1.1)
2000	1.0 (0.8 – 1.2)

Source: ACNielsen (NZ) Ltd

Notes:

1. *Data is not age standardised.*
2. *The annual estimate is the average of the pooled year's data.*
3. *The 95 percent confidence intervals are presented in parentheses.*

⁴ This contrasts with information from ‘annual tobacco returns’ later in this report, which indicates increasing amounts of cigar tobacco sold to retailers during this time period. It could be that a similar number of cigar smokers now consume a greater number of cigars per day.

FOURTH FORM STUDENT SURVEY

Fourth-form students (14–15 year olds) have been surveyed in November of 1992, 1997, 1998, 1999 and 2000 (Scragg and Laugesen 2000). The results of the 2000 survey are expected to be published in 2001.

Table 3: Prevalence of fourth form student daily smoking (percent)

	1992	1997	1998	1999
Boys	11	13	12	14
Girls	12	16	16	15

Table 4: Prevalence of fourth form student monthly or more smoking (percent)

	1992	1997	1998	1999
Boys	20	23	23	24
Girls	25	32	32	30

TOBACCO PRODUCTS RELEASED

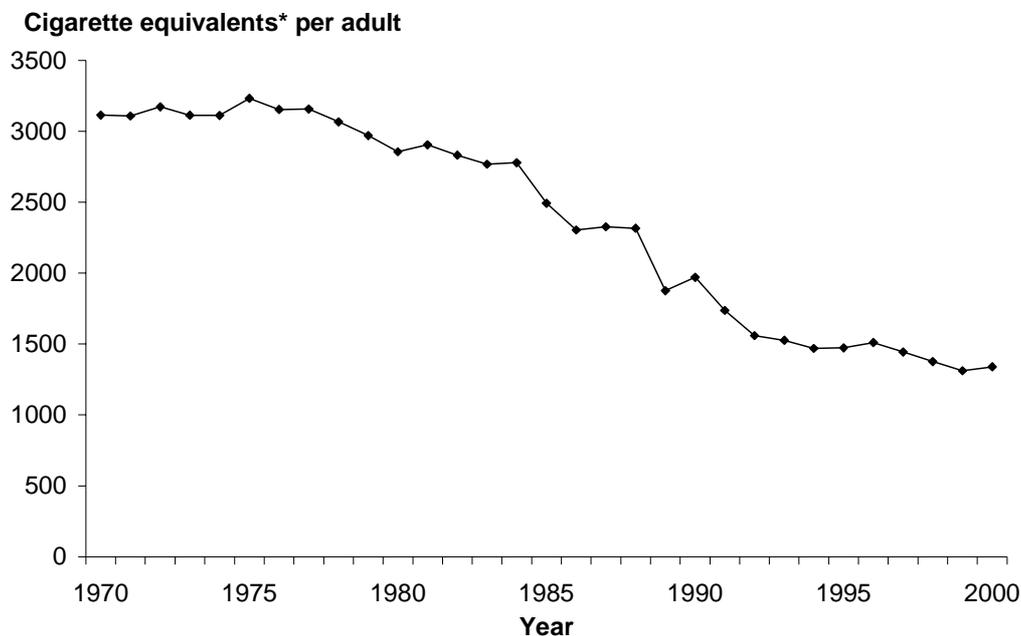
Information about the amount of manufactured cigarettes and loose tobacco released for consumption is provided by Statistics New Zealand.⁵ This information is obtained from External Trade Statistics and New Zealand Customs Service who clear tobacco products on which duty has been paid. For imported tobacco, excise is usually paid when products are brought into New Zealand.

There is a lag between tobacco products being cleared and their eventual consumption by smokers. Following payment of excise and inclusion as 'tobacco products released' data, these products may be stored prior to sale to retailers.

Prior to an increase in tax on tobacco products, there is often an increase in the amount of tobacco products cleared with a decrease following the tax increase. (There is an annual inflation-related adjustment in tax on tobacco products on 1 December.) There was a larger than usual peak in products released during November 2000.

The tobacco products data are an independent indicator of tobacco consumption by smokers, not reliant on smokers' self-reporting of how much they smoked.

Figure 6: Number of cigarette equivalents* per adult aged 15 years and over, released for consumption, 1970–2000



Source: Statistics New Zealand

For tabulated data and notes, see Appendix 3

* One cigarette equivalent equals one manufactured cigarette or one gram of loose tobacco.

⁵ The monthly data includes imports of manufactured cigarettes and loose tobacco not for further manufacture less any re-exports. Also included are locally manufactured cigarettes and tobacco products at the time of payment of excise.

Trends in cigarette consumption

- In 2000, there was a 2 percent increase in the average number of cigarette equivalents per adult released compared to 1999.⁶ However, the main trend is one of decreasing tobacco equivalents released per adult. During the last 10 years, the average number of cigarette equivalents consumed per adult decreased by more than 30 percent.
- The amount of tobacco consumed is influenced both by the prevalence of smoking and the number of cigarettes consumed per smoker. The 30 percent decrease in tobacco consumed per adult during the last ten years is likely to be due mainly to a decrease in the number of cigarettes consumed per smoker.
- People under-estimate the number of cigarettes they smoke per day. Data derived from 'tobacco products released' data in 2000 suggests each adult smoked an average of approximately 15 cigarettes per day. The ACNielsen (NZ) Ltd survey data suggests that each adult smoker smoked about 12 cigarettes per day.

Effect of tax increases

- In May 2000, there was an approximately 20 percent price increase in tobacco products. (An approximately 14 percent tax increase, one dollar per pack of 20 cigarettes, which was accompanied by tobacco company price increases at this time). This change was associated with an 18 percent decrease in total tobacco consumption.⁷ Consumption of loose tobacco increased by 1 percent while manufactured cigarette consumption decreased 23 percent.
- In May 1998, there was a 50 cents (GST exclusive) increase in the excise on a packet of 20 cigarettes (with similar increases for other tobacco products). This change was associated with a 6 percent decrease in total tobacco consumption.⁸
- In December 1995, there was a 38 percent increase solely in the excise on loose tobacco (while the excise on manufactured cigarettes was not changed at that time). This change (which equalised the excise on loose tobacco and manufactured cigarettes) was associated with almost no change in total tobacco consumption. However, consumption of loose tobacco decreased 17 percent, while consumption of manufactured cigarettes increased 5 percent.⁹

⁶ This increase very likely reflects an increase in stocks of cigarettes, rather than increased consumption. The 2000 high value can be explained by the larger than usual peak in tobacco products released in November (prior to the December adjustment to the tobacco excise for inflation).

⁷ These figures relate to the 9 months after the change, compared with the same period before the change (they exclude the month before, during and after the tax increase as these often have atypical amounts of tobacco products released). That is, the comparison is between July 1999 to March 2000 and July 2000 to March 2001.

⁸ Consumption of loose tobacco increased by 2 percent while manufactured cigarette consumption decreased 8 percent. These figures relate to the 9 months after the change compared with a similar period before the change (excluding the month before, during and after the change).

⁹ These figures relate to the 9 months after the change compared with the same months before the change (excluding the month before, during and after the change).

ANNUAL TOBACCO RETURNS

Importers and manufacturers of tobacco are required by the Smoke-free Environments Act 1990 to annually supply information to the Director-General of Health regarding tobacco products sold to retailers during the previous year. This information includes numbers of manufactured cigarettes sold, as well as weight of roll-your-own cigarette tobacco, cigar tobacco and pipe tobacco sold to retailers.

The Smoke-free Environments Act 1990 further requires manufacturers and importers to report the quantity of tar and nicotine per cigarette, for products sold during the previous year. This information is not reported here, but can be found in *Tobacco Statistics 2000*, a Cancer Society of NZ publication (Laugesen 2000). *Tobacco Statistics 2000* also includes ACNielsen (NZ) Ltd survey data, Statistics New Zealand tobacco data, information on the price of tobacco and other tobacco related information.

Compared to Statistics New Zealand's 'tobacco products released' data, the annual tobacco returns reflect data closer in time to the products' eventual consumption. Statistics New Zealand data includes tobacco products at the stage of entry into New Zealand, while annual tobacco returns relate to the stage of sale to retailers. Warehousing of products can occur between these two stages.

- For 1997–99, the annual total cigarette tobacco products quantities provided by annual tobacco returns and 'tobacco products released' data are similar (3% or less difference).
- Annual tobacco returns for 1997–99 provide numbers of manufactured cigarettes that are higher and weights of loose tobacco that are lower than Statistics New Zealand data for a similar period. This difference appears to be due to warehousing of products prior to sale to retailers. This implies that during this three-year period, warehoused stock of manufactured cigarettes have decreased and stocks of loose tobacco have increased.¹⁰
- During 1997–99, the consumption of cigars increased while that of pipe tobacco decreased, as indicated by the weight of these products sold by importers and manufacturers to retailers (see Table 5).

Table 5: Annual tobacco returns (tonnes), 1997–1999

Year	<i>Cigarette tobacco products</i>		Cigar Tobacco (tonnes)	Pipe Tobacco (tonnes)
	Loose tobacco (tonnes)	Manufactured cigarettes (millions)		
1997	699	3622	15	17
1998	724	3300	17	16
1999	727	3215	18	13

Source: Ministry of Health: Report on the tobacco manufacturers' returns for 1999 to the Ministry of Health, 2000 prepared by Dr M Laugesen.

Note:

1. Tobacco weight includes additives and moisture.

¹⁰ Note that cigarettes resulting from the New Zealand production of manufacture cigarettes from loose tobacco are similarly captured in both 'tobacco products released' data and annual tobacco returns.

THE NATIONAL TOBACCO QUITLINE SERVICE

The national freephone Quitline (0800 778 778) has been in operation since mid-1998. Callers to the Quitline can request a pack of quit smoking materials, and talk to a Quit Advisor for support and advice.

Since November 2000, callers to the Quitline have been assessed for their suitability for nicotine replacement therapy (NRT). Those assessed as suitable, are sent an exchange card which can be swapped for patches or gum at a participating pharmacy (\$10 for a four week supply). Smokers using the patches or gum are also offered follow up support and advice.

The availability of subsidized nicotine patches and gum through the Quitline was associated with a marked increase in calls to the Quitline. In November and December 2000, there were approximately 71,000 and 22,000 calls respectively. This compares with approximately 4,000 calls per month prior to the introduction of NRT.

About half of the incoming calls are from new callers wanting to quit smoking. They receive an information kit, can speak with a Quit Advisor and be provided with access to subsidised nicotine patches or gum. The remaining incoming calls are from repeat callers, general enquiries and hang-ups. The Quit Advisors also provide ongoing support in the form of 'callbacks'. Approximately 80 percent of callers who speak with an advisor request and receive 'callbacks'.

For 2 July to 30 September 2000, 27 percent of captured callers were Māori of whom 70 percent were female.

HEALTH EFFECTS OF TOBACCO SMOKING

Risks for the individual smoker

- It is beneficial to stop smoking at any age. The earlier smoking is stopped, the greater the health gain (Doll et al 1994).
- Smoking is the underlying cause of many diseases, including some cancers, respiratory diseases and cardiovascular diseases.
- The average years of expected life lost because of continuing smoking (the difference in median survival between continuing smokers and non-smokers) is about 7.5 years (Doll et al 1994; Prescott et al 1998).
- Continuing smokers have a mortality rate twice that of non-smokers (Doll et al 1994). Approximately half of all continuing smokers die prematurely from smoking (Doll et al 1994; WHO 1997).
- Peto et al (1994) estimate that in New Zealand, the approximately 50 percent of smokers who die prematurely from their smoking, die on average 14 years earlier than non-smokers.

Effects on children

- Maternal smoking is a preventable risk factor for children dying of sudden infant death syndrome (SIDS). In recent years, 46 percent of SIDS deaths in Māori, 24 percent of deaths in Pacific peoples, and 24 percent of deaths in European/Other were attributable to smoking (Ministry of Health 1999a).
- Environmental tobacco smoke increases the risk of croup, pneumonia, bronchitis and bronchiolitis by 60 percent in the first 18 months of life, increases the risk of asthma by 50 percent, and is a cause of glue ear (NHMRC Working Party 1995).

Effects of secondhand cigarette smoke

- 'There are about 388 deaths caused by secondhand cigarette smoke in New Zealand each year. This is equal to an additional 8 [percent] over and above deaths due to direct smoking, or about three quarters of the number of people killed each year on the roads in New Zealand in recent years (509 deaths in 1999)' (Woodward and Laugesen 2000).¹¹
- Exposure to second hand cigarette smoke increases the risk of heart disease and stroke (Bonita et al 1999), lung cancer and SIDS.

¹¹ A report regarding deaths in New Zealand attributable to second hand cigarette smoke is available as an online publication on the Ministry of Health's website (<http://www.moh.govt.nz>).

Preventable future deaths

- Using different methods, the number of total deaths due to smoking is estimated as lying between approximately 4,300 (Ministry of Health 1999a) and approximately 4,700 (using 1996 data and the method published by Peto et al in 1994).
- It is estimated that in New Zealand many deaths due to various diseases could be prevented if smoking was eliminated, including:
 - 68 percent of female deaths and 82 percent of male deaths due to lung cancer
 - 65 percent of female deaths and 79 percent of male deaths due to chronic obstructive respiratory disease
 - 11 percent of female deaths and 18 percent of male deaths due to heart disease
 - 8 percent of female deaths and 15 percent of male deaths due to strokes (Ministry of Health 1999a).
- For Māori, a high percentage of mortality could be prevented if smoking was eliminated. Each year, 21 percent of deaths in female Māori are attributable to smoking and 22 percent of male Māori deaths (Ministry of Health 1999a).
- For Pacific peoples, 8 percent of deaths in females and 19 percent in males could be avoided if smoking was eliminated. For European/Other ethnic groups, the preventable mortality attributable to smoking is 10 percent of deaths in females and 19 percent in males (Ministry of Health 1999a).

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APPENDIX 1: SURVEY METHOD

ACNielsen (NZ) Ltd conducted approximately 11,000 face-to-face interviews during 2000, with different consumers interviewed each quarter.

Those interviewed are provided with a showcard that itemises: ready-made cigarettes, roll-your-own tobacco, cigars/cigarillos, pipe or none of these. They are asked: 'Which of these products, if any, do you ever smoke?' People who ever smoke ready-made cigarettes are then asked: 'On average how many ready-made cigarettes do you smoke on an average day?' and those who indicate they ever smoke roll-your-own cigarettes are then asked: 'On average, how many roll-your-own cigarettes do you smoke on an average day?'

Cigarette smokers are defined as those who ever smoke any ready-made cigarettes or roll-your-own tobacco cigarettes.

In 2000, the interviews were completed in 48.6 percent of the occupied dwellings approached. (Contact was made in 85.1% of the total number of occupied dwellings approached. Interviews were completed in 57.1% of occupied dwellings where contact was made.)

The data obtained from the survey is weighted to reflect the age, sex and household size characteristics of the 1996 Census population. Weighted values are used in the analysis of this report.

APPENDIX 2: SURVEY DATA, 1983–2000

Table 1: Prevalence of cigarette smoking, 1976–2000

	Year																			
	1976	1981	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<i>Males</i>																				
15–24 years	35	33	34	35	31	31	32	27	28	30	28	25	28	28	25	27	27	27	30	28
25–34 years	43	38	38	39	35	32	34	38	30	32	35	34	35	36	35	33	30	34	33	35
35–54 years	44	38	37	35	31	29	34	31	28	30	27	29	30	30	29	26	28	28	27	27
55+ years	35	30	29	27	24	24	22	20	20	18	18	18	19	17	19	19	16	16	16	12
Total Males	40	35	35	34	30	29	31	29	27	28	27	27	28	28	27	26	26	26	26	25
<i>Females</i>																				
15–24 years	34	35	40	40	40	37	36	39	37	34	33	33	30	34	33	36	35	30	33	31
25–34 years	38	34	35	34	34	34	35	35	33	32	30	36	34	33	36	35	36	31	32	37
35–54 years	35	32	31	29	29	32	26	28	25	28	24	27	26	25	25	26	26	26	26	25
55+ years	21	19	21	22	19	21	19	16	16	16	16	14	16	16	14	13	14	12	13	13
Total Females	32	29	31	31	30	31	28	29	27	27	26	27	26	26	26	26	27	24	25	25
<i>Both Sexes</i>																				
Māori	58	56	-	-	-	-	-	-	-	51	50	52	54	52	51	49	51	49	51	49
Pacific peoples	35	33	-	-	-	-	-	-	-	32	30	33	33	34	34	32	34	33	30	34
European/Other ethnic group	-	-	-	-	-	-	-	-	-	25	24	24	24	24	24	23	23	22	22	22
Total Population (15+ years)	36	32	33	32	30	30	30	29	27	28	26	27	27	27	27	26	26	25	26	25

Source: 1976 and 1981 Census of Population and Dwellings, Department of Statistics
1983–99 ACNielsen (NZ) Ltd

Notes:

1. Data is not age standardised.
2. From July 1989 to March 1996, the youngest age group reported was 16–24 years. Adjustment for the expected proportion of smokers aged 15–24 years from those aged 16–24 years has been made.
3. Annual ACNielsen (NZ) Ltd estimates have been calculated from the average of the quarterly results until 1999. The 2000 result is based on the year's pooled data's average prevalence.
4. From April 1996 to June 1998 the youngest age group reported was 18–24 years. Adjustment for the expected proportion of smokers aged 15–24 years from those aged 18–24 years has been made.
5. Smoking prevalence figures include the smoking of both manufactured and roll-your-own cigarettes.
6. The classification of ethnicity information changed from 1997 onwards. Therefore ethnic-specific data before and after 1997 may not be comparable.

Table 2: Prevalence of cigarette smoking, 2000

	Smoking ('ever smoke')	Daily smoking
<i>Males</i>		
15-24 years	27.8 (24.3-31.4)	26.1 (22.4-29.8)
25-34 years	35.1 (31.4-36.9)	32.1 (28.6-35.6)
35-54 years	27.1 (24.6-28.4)	25.3 (22.7-27.9)
55+ years	11.9 (10.2-12.8)	11.2 (9.6-12.9)
Total Males	25.1 (23.7-26.6)	23.4 (21.9-24.9)
Māori Males	45.3 (39.7-50.8)	43.8 (38.4-49.1)
Pacific Males	40.5 (32.1-48.9)	36.0 (27.7-44.4)
European/Other Males	22.0 (20.5-23.5)	20.5 (19.0-21.9)
<i>Females</i>		
15-24 years	31.0 (27.6-34.3)	27.8 (24.6-31.0)
25-34 years	36.8 (33.9-38.3)	34.8 (31.9-37.8)
35-54 years	25.5 (23.5-26.5)	24.4 (22.4-26.4)
55+ years	12.7 (11.2-13.5)	12.4 (10.9-13.9)
Total Females	25.3 (24.1-26.5)	23.9 (22.6-25.1)
Māori Females	52.5 (48.2-56.8)	50.2 (45.8-54.6)
Pacific Females	28.5 (22.7-34.3)	27.6 (21.8-33.4)
European/Other Females	21.7 (20.5-23.0)	20.3 (19.1-21.5)
<i>Both Sexes</i>		
15-24 years	29.5 (26.9-32.1)	27.0 (24.5-29.5)
25-34 years	36.0 (33.6-38.3)	33.5 (31.2-35.8)
35-54 years	26.2 (24.6-27.9)	24.9 (23.2-26.5)
55+ years	12.4 (11.2-13.5)	11.9 (10.7-13.0)
Māori	49.3 (45.8-52.8)	47.4 (43.9-50.9)
Pacific peoples	33.9 (28.4-39.5)	31.4 (25.9-36.9)
European/Other ethnic group	21.9 (20.9-22.9)	20.4 (19.4-21.3)
Total Population (15+ years)	25.2 (24.2-26.3)	23.7 (22.6-24.7)

Table 3: Youth prevalence of cigarette smoking by gender, 2000

	Male	Female	Total
15-19 years	25.0 (20.2-29.8)	25.8 (21.3-30.2)	25.4 (22.0-28.7)
20-24 years	30.8 (25.3-36.2)	36.1 (31.1-41.0)	33.6 (29.8-37.3)

Table 4: Youth prevalence of cigarette smoking by ethnicity, 2000

	Māori	European/Other	Pacific peoples
15-19 years	43.6 (34.5-52.8)	21.1 (17.5-24.7)	30.0 (16.7-43.3)
20-24 years	48.3 (39.7-56.9)	28.7 (24.7-32.6)	49.2 (34.5-63.9)

Table 5: Prevalence of cigarette smoking by year of age, 2000 and 1998-2000 (both genders, all ethnicities combined)

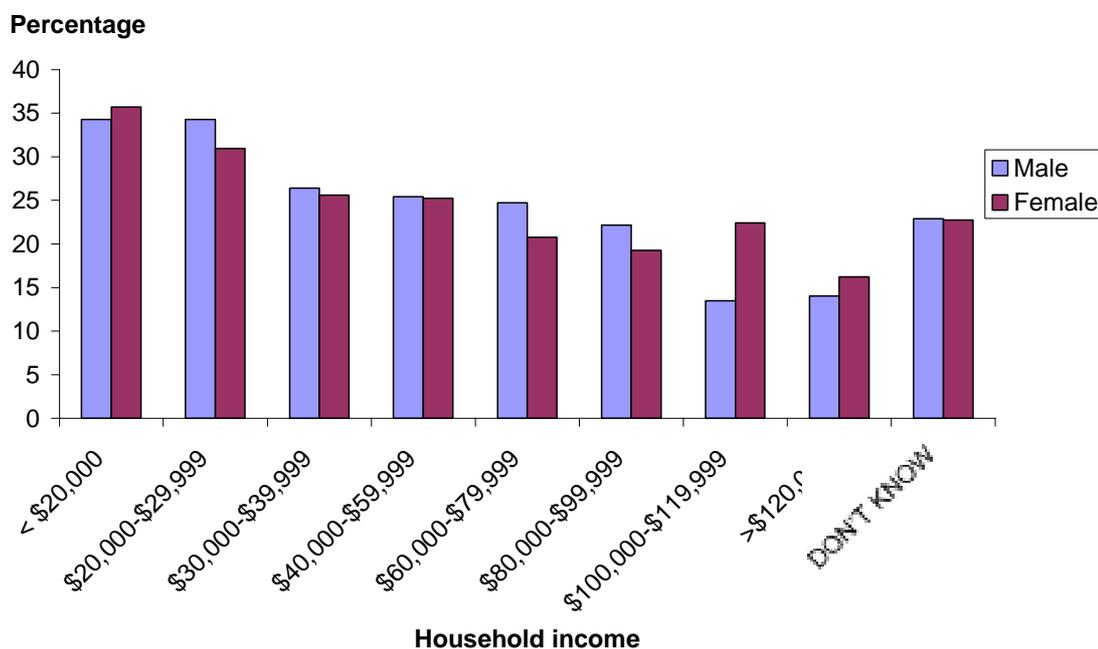
Age	2000	1998-2000 data pooled	
	Smoking ('ever smoke')	Smoking ('ever smoke')	Daily smoking
15	13.7 (8.5-18.9)	13.7 (8.5-18.9)	8.5 (5.8-11.3)
16	17.2 (11.2-23.1)	19.3 (15.3-23.3)	15.5 (11.8-19.2)
17	24.9 (17.4-32.4)	25.6 (21.1-30.1)	18.6 (14.6-22.6)
18	31.7 (23.1-40.2)	31.2 (26.4-36.0)	25.6 (21.1-30.1)
19	41.5 (32.7-50.2)	35.3 (30.6-40.0)	28.8 (24.3-33.4)

Source: ACNielsen (NZ) Ltd

Notes:

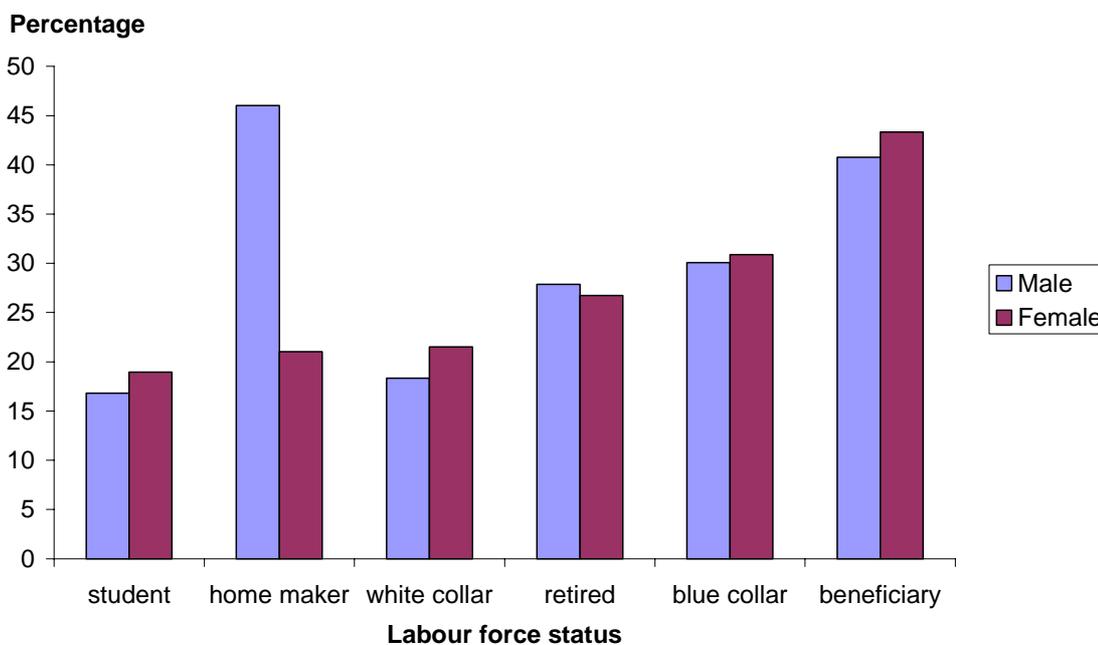
1. Data is not age standardised.
2. The annual estimates are the average prevalences from the pooled year's data.
3. The 95 percent confidence intervals are presented in parentheses.

Figure 1: Prevalence cigarette smoking (indirectly age standardised) by household income and gender, 2000



Source: ACNielsen (NZ) Ltd

Figure 2: Prevalence of cigarette smoking (indirectly age standardised) by labour force status, 2000

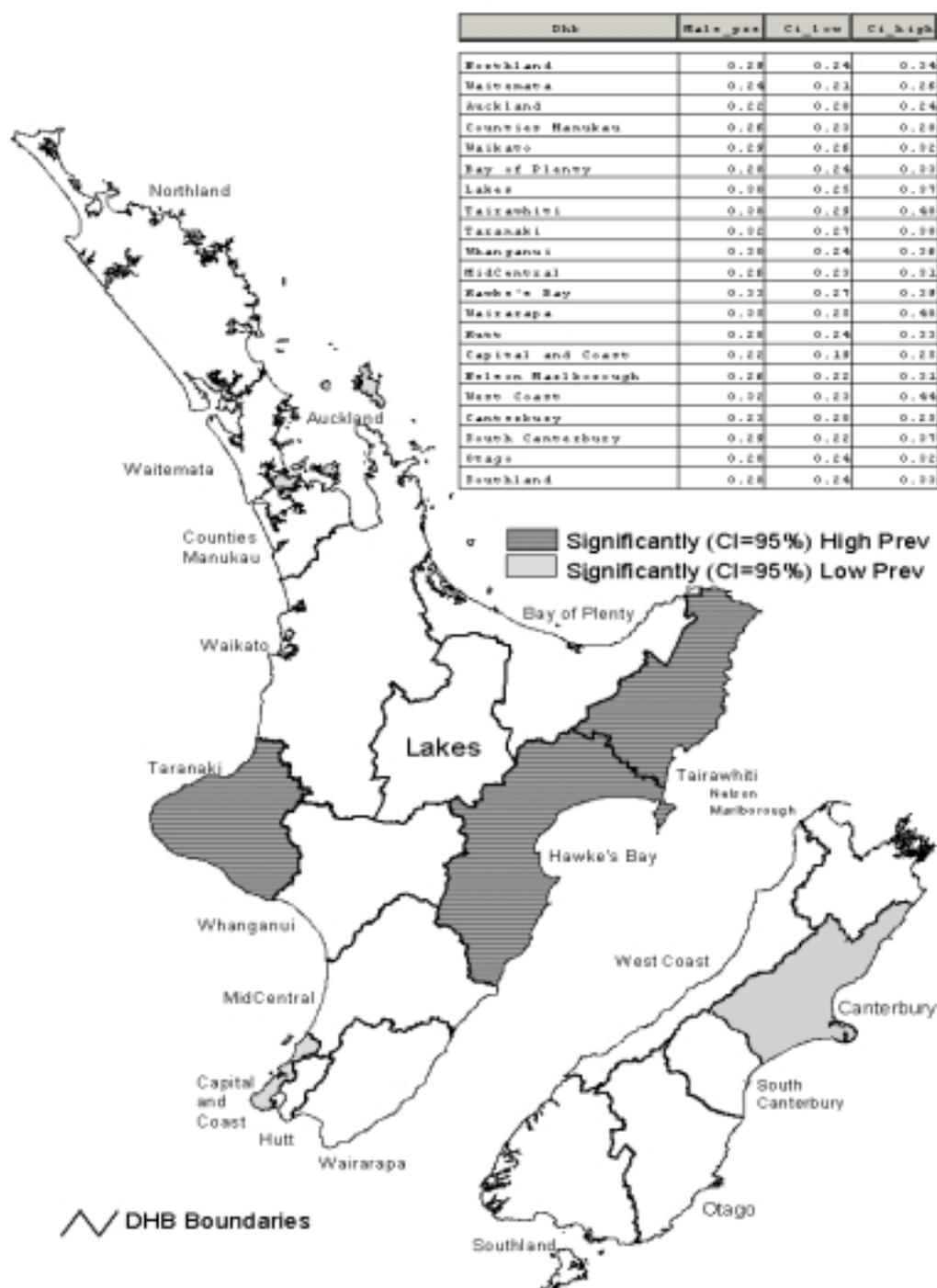


Source: ACNielsen (NZ) Ltd

Notes:

1. The male home maker data is uncertain, as only 20 smoking male home makers were interviewed.

Map 1: Prevalence of male cigarette smoking (indirectly standardised) by DHB region, 1998-2000

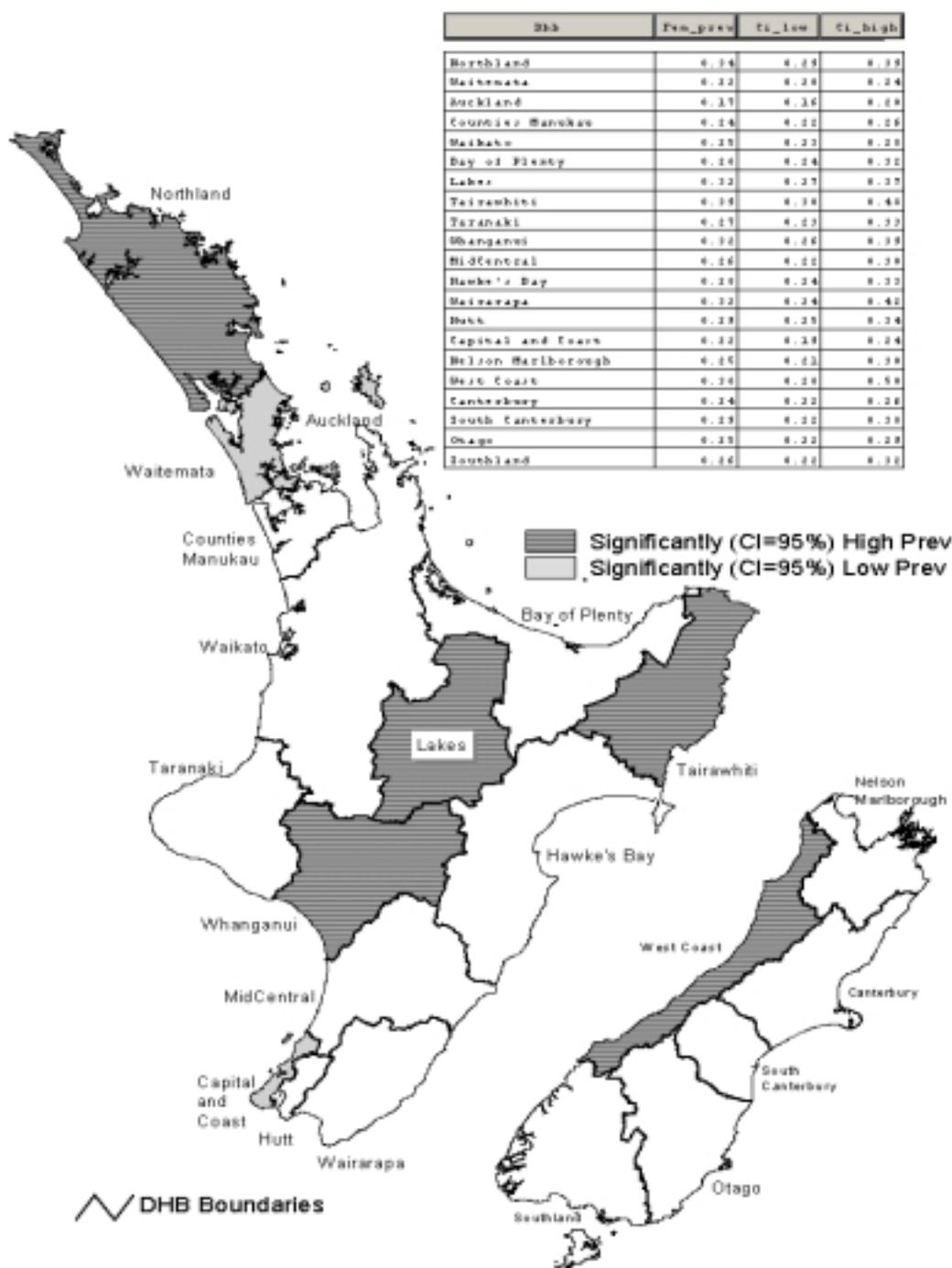


Source: ACNielsen (NZ) Ltd

Notes:

1. The matching from TLAs to DHB regions is approximate only.
2. Prevalence was calculated by multiplying crude New Zealand gender specific rate (male 26%, female 25%) by the indirectly age standardised DHB region rate ratio.
3. Darkly shaded and lightly shaded areas represent indirectly age standardised cigarette smoking prevalence which are statistically significantly different from the male or female New Zealand rate. For example, although there were more smokers surveyed than expected in the Wairarapa region, the number of people interviewed was not large enough to be sure that this finding was statistically significant.

Map 2: Prevalence of female cigarette smoking (indirectly standardised) by DHB region, 1998-2000



Source: ACNielsen (NZ) Ltd

Notes:

1. The matching from TLAs to DHB regions is approximate only.
2. Prevalence was calculated by multiplying crude New Zealand gender specific rate (male 26%, female 25%) by the indirectly age standardised DHB region rate ratio.
3. Darkly shaded and lighted shaded areas represent indirectly age standardised cigarette smoking prevalence which are statistically significantly different from the male or female New Zealand rate. For example, although there were more smokers surveyed than expected in the Wairarapa region, the number of people interviewed was not large enough to be sure that this finding was statistically significant.

APPENDIX 3: TOBACCO PRODUCTS RELEASED, 1970–2000

Table 6: Tobacco products released for consumption in New Zealand, 1970–2000

Year	Tobacco products released		Number of cigarette equivalents** released per adult aged 15+ years		
	Loose tobacco (tonnes*)	Manufactured cigarettes (millions)	Loose tobacco	Manufactured cigarettes	Total
1970	1024	4952	534	2581	3114
1971	965	5118	493	2615	3108
1972	934	5405	468	2705	3173
1973	853	5526	416	2697	3113
1974	782	5769	371	2740	3112
1975	749	6229	347	2885	3232
1976	702	6230	319	2835	3154
1977	666	6346	300	2857	3157
1978	610	6268	272	2794	3066
1979	575	6130	255	2715	2970
1980	548	5991	239	2617	2856
1981	553	6168	239	2666	2905
1982	539	6112	230	2603	2832
1983	546	6089	228	2541	2769
1984	534	6236	219	2560	2779
1985	493	5654	200	2293	2493
1986	501	5223	202	2102	2304
1987	511	5361	203	2125	2327
1988	552	5355	217	2101	2317
1989	554	4270	216	1662	1877
1990	602	4489	233	1738	1971
1991	652	4014	243	1495	1738
1992	768	3466	283	1277	1560
1993	810	3381	295	1232	1527
1994	694	3396	249	1221	1470
1995	808	3338	287	1187	1474
1996	658	3660	230	1280	1511
1997	733	3449	253	1191	1444
1998	757	3263	259	1118	1377
1999	736	3119	251	1062	1312
2000	841	3152	281	1058	1339

Source: *Statistics New Zealand*

* One tonne equals 1000 kg

** One cigarette equivalent equals one manufactured cigarette or one gram of loose tobacco

Notes:

1. Assuming that one cigarette equals one gram of loose tobacco, one million manufactured cigarettes equal one tonne of loose tobacco.
2. Cigarette equivalents per adult for 1991–2000 are calculated using resident population estimates and projections obtained from *Statistics New Zealand in 2000*. These estimates and projections include New Zealand residents temporarily overseas and are adjusted for census undercount. Projections are based on assumptions of medium fertility, mortality and migration.
3. Calculations of cigarette equivalents are based on excise data on manufactured cigarettes and loose tobacco released for sale. Loose tobacco is mainly cigarette tobacco but includes a small amount of pipe tobacco. Cigars are not included.
4. The 1995 tobacco products released figures presented here, and from 1996 onwards the number of cigarettes smoked per adult aged 15+ years, differ from those of *Tobacco Facts 1999*. This is due to updated estimates from *Statistics New Zealand* for both tobacco consumption and denominator population data.