
Changes associated with the National Tobacco Campaign:

Preliminary report on smoking prevalence and consumption, 1997-2002

Melanie Wakefield, PhD
Irene Bobevski, DPsych(Clin)

30 June, 2003



Centre for Behavioural Research in Cancer
Cancer Control Research Institute
The Cancer Council Victoria

Introduction

This preliminary report presents initial findings pertaining to smoking prevalence and cigarette consumption from the November 2002 survey and compares them to figures from previous years.

The National Tobacco Campaign commenced in June 1997 as a cooperative partnership between Federal, State and Territory governments and interested non-government organisations. The campaign was primarily targeted at 18 to 40 year old smokers with the message that “Every cigarette is doing you damage”.

During the first six months of the campaign, a total of around \$8 million was spent by the Federal, State and Territory governments which included around \$4.5 million to broadcast three main advertisements (Lung, Artery and Tumour) (see Table 1). As detailed in Wakefield et al. (1999), after the first six months, the Campaign was influencing smokers in the manner intended.

Table 1. Total and average monthly media spend

	June 1997 –Oct 1997	Nov 1997 –Oct 1998	Nov 1998 –Oct 1999	Nov 1999 –Oct 2000	Nov 2000 –Oct 2001	Nov 2001 –Oct 2002
Commonwealth media spend	\$3,400,000	\$2,213,000	\$2,193,000	\$2,180,000	\$2,074,000	\$2,472,213
% Commonwealth contribution	75%	37%	44%	40%	31%	31%
State media spend	\$1,141,281	\$3,827,689	\$2,765,617	\$3,294,076	\$4,635,972	\$5,281,284
Total media spend	\$4,541,281	\$6,040,689	\$4,958,617	\$5,474,076	\$6,709,972	\$7,708,497
Average monthly spend	\$908,256	\$503,391	\$413,218	\$456,173	\$559,164	\$642,375

Since 1998, the campaign has continued with what has been considered to be a ‘maintenance phase’ budget with the Commonwealth Government providing around \$2.2 million per annum. Including expenditure by state governments, average monthly expenditure since 1998 was much less than it was between June to October 1997. From January to December 1998, another health effects advertisement (Stroke) was added and an advertisement modelling the behaviour of calling the Quitline (Call for Help) was introduced. This period continued strategies that had been successful at the outset, but with a lower level of intensity, particularly in respect of television advertising. Tan et al. (2000) showed that the campaign advertising during 1998 continued to have an impact on smokers, in that gains made in 1997 were largely retained with a reduced television buy. It was concluded that further reductions in smoking prevalence did not appear to be ‘incubating’, since there were no improvements through the stages of change or in quitting intention.

The period between January 1999 to December 2000 included two new 'health effects' advertisements (Tar and Eye). The advertisements were launched in mid 2000. The evaluation report for this period showed that the estimated national television exposure of the target group was slightly higher than that achieved in 1998, but much lower than in 1997 (Wakefield et al., in press). Over this period, there was also a real increase in the price of cigarettes, with the change in the method of taxation of cigarettes from a weight-based to a per stick based system. In addition, there were other changes affecting the price of cigarettes, including the introduction of the Goods and Services Tax, and consumer price index increases (Scollo et al., in press). These evaluation reports concluded that smokers continued to recall the advertising and that gains in awareness of smoking related health risks had been maintained. Scollo et al. estimated that between half to two-thirds of the decline in prevalence and consumption was likely due to changes in tax on tobacco.

During 2001 and 2002, previously developed NTC advertisements were broadcast. Over the period, average monthly media expenditures were higher than between 1998 and 2000, due to an increased funding allocation from States, but did not approach the funding levels observed during 1997.

Method

The main evaluative tool for the National Tobacco Campaign has been a series of Australia-wide cross-sectional surveys. The baseline survey was undertaken in May 1997, and since then, surveys have been undertaken in November 1997, 1998, 1999, 2000, 2001, and 2002. Previous reports have detailed the results of the evaluation surveys up to and including 2001 (Wakefield et al 1999; Tan et al., 2000; Wakefield et al.(in press); Wakefield et al., 2002).

The evaluation surveys were commissioned by the now Commonwealth Department of Health and Ageing, and were conducted by Roy Morgan Research up to 2001 and by the Social Research Centre in 2002. The surveys of households were conducted by telephone and the electronic White Pages were used as the sampling frame from which the survey sample was selected. The sample was selected from each of the six States and two Territories. The Australian Capital Territory (ACT) was included with New South Wales (NSW) and the Northern Territory (NT) was included with South Australia (SA).

The 2002 evaluation survey was conducted using the same methods established in the previous surveys. People aged 18 years and over who answered the telephone comprised the informant sample. The informants reported on the age and gender of all the residents in their household and the smoking status of adults (and 16-17 year olds for some years), and this information is referred to as the enumerated sample. From the enumerated sample, a target group was selected to answer the full survey, referred to as the respondent sample. The respondent sample predominately comprised the target age group of 18-40, and a quota sampling method was used which aimed to generate a sample with 75% of smokers (those who smoke on at least a weekly basis) or recent quitters (defined as those who have, over the past year, stopped smoking cigarettes on a weekly basis or more often). The balance of the respondent sample was non-smokers (defined as those who had never smoked, or had quit smoking more than a year ago). There was a small minority of occasional smokers who did not fall into these categories.

Table 2 shows the number of people aged 18 years and older who comprise the informant and enumeration samples, along with the respondent sample of 18-40 year olds, including the sub-groups of smokers and recent quitters, and non-smokers.

Table 2. Sample size of benchmark and follow-up surveys

Number of people sampled	Benchmark May 1997	Follow-up 1 Nov 1997	Follow-up 2 Nov 1998	Follow-up 3 Nov 1999	Follow-up 4 Nov 2000	Follow-up 5 Nov 2001	Follow-up 6 Nov 2002
Informants aged 18+ years	6,657	17,712	11,156	12,271	13,804	11,898	15,979
Total household enumeration aged 18+ years	13,813	36,763	23,259	25,158	29,297	24,313	32,210
Survey respondents 18-40 years	1,979	4,197	2,289	2,277	2,308	2,041	2,469
Non-smoker respondents	781	1,191	628	645	613	566	676
Smoker and recent quitter respondents	1,192	2,981	1,646	1,611	1,675	1,462	1,769

Table 3 shows the demographic characteristics of smokers and recent quitters for each of the surveys. The demographic composition of the 2002 sample was similar to that of the 2001 sample, with some minor differences. For example, there was a slightly higher proportion of 30-40 year old participants (56% in 2002 vs 53% in 2001), slightly higher proportion of people completing tertiary qualifications (43% vs 38%), and a higher proportion of working participants (78% vs 72%). However, overall, demographic differences in the sample from year to year do not appear to be systematic or substantial.

Table 3. Demographic characteristics of smokers and recent quitters

Smokers and recent quitters (within the last year)	Benchmark May 1997 (n=1,192)	Follow-up 1 Nov 1997 (n=2,981)	Follow-up 2 Nov 1998 (n=1,646)	Follow-up 3 Nov 1999 (n=1,611)	Follow-up 4 Nov 2000 (n=1,675)	Follow-up 5 Nov 2001 (n=1,462)	Follow-up 6 Nov 2002 (n=1769)
Gender							
Male	47%	48%	44%	47%	46%	45%	47%
Female	53%	52%	56%	53%	54%	55%	54%
Age							
18-29 years	50%	46%	46%	45%	48%	47%	45%
30-40 years	50%	54%	54%	55%	52%	53%	56%
Education status							
Completed some or all secondary school	63%	65%	65%	60%	61%	62%	57%
Completed at least some tertiary	37%	35%	35%	40%	40%	38%	43%
Work status							
Working	75%	74%	71%	73%	73%	72%	78%
Retired / Pensioner	2%	3%	2%	3%	4%	3%	1%
Student	6%	6%	6%	6%	6%	6%	4%
Home duties	11%	10%	14%	13%	11%	14%	11%
Unemployed	6%	6%	6%	5%	6%	6%	7%
Socio-economic status							
Blue collar	45%	45%	52%	48%	45%	51%	48%
White collar	55%	55%	48%	52%	55%	49%	52%
Language spoken at home							
English	95%	97%	97%	96%	97%	97%	96%
Other	5%	3%	3%	4%	3%	3%	4%
Region							
Capital city	59%	60%	63%	63%	61%	60%	62%
Other	41%	40%	37%	38%	39%	40%	38%

Questionnaire administration

The telephone questionnaire was similar to the 2001 questionnaire. It included questions about respondent's awareness of advertising about health, their recall and appraisal of campaign advertising, recent learning about smoking and health, and their agreement or disagreement with a range of opinion statements relating to smoking and health. Respondents' current and future intentions regarding their smoking behaviour were obtained. Smokers were also requested to provide information about their level of tobacco consumption and type of tobacco smoked.

As in past years of the campaign, the age and sex of each household member was obtained through the informant for the enumeration survey including the main income earners' occupational status. Additional demographic information was obtained from the respondents who progressed to a full interview, including level of educational attainment, language spoken at home and employment status. A detailed description of the questionnaire administration can be found in Wakefield et al. (1999).

This report presents data on smoking prevalence and cigarette consumption for 2002 and investigates prevalence and consumption differences between 2002 and the previous years of the campaign.

Statistical methods and presentation of data

Differences in prevalence and consumption over time were analysed using logistic regression. Relative changes in means over time were analysed using analysis of variance. In the analyses, the 2002 figures were compared to each of the previous years. In addition, trends over time were tested from benchmark to 2002.

The respondent sample was weighted, as in the previous reports, according to the Australian Bureau of Statistics population estimates, while retaining the original sample size. However, the informant and enumerated sample data are unweighted, consistent with the method of presentation in previous reports. Statistical significance was assessed at the conventional 95% confidence level. Where differences are referred to as significant in the text, they met this criterion.

Results

Smoking prevalence

To estimate the prevalence of smoking in the population as a whole, data from two samples were available. The informant sub-sample was obtained from people aged 18 years or older who answered the telephone and reported their own smoking status. For the enumerated sample, the informant was asked about the smoking status, sex and age group of every adult member of the household. The household's main income earner's occupation was also obtained to code their socioeconomic status (SES).

Prevalence figures for the informant and enumerated samples are shown in Table 4. Logistic regression analysis showed that for the informant sample, the overall linear decline in smoking prevalence across the years remained significant. The logistic regression analysis also showed that the proportion of smokers in 2002 (19.8%) was significantly lower than the proportion at the Benchmark, and the first three follow up surveys (up to and including 1999). However, smoking prevalence in 2002 was not significantly different from prevalence in 2000 and 2001.

In 2002, the smoking prevalence in the enumerated sample was the same as that of the informant sample (19.8%). When logistic regression was carried out, the overall trend of a decline across the years remained significant. The logistic regression showed that the 2002 prevalence for the enumerated sample was significantly lower than all the previous years of the campaign, except for 2001.

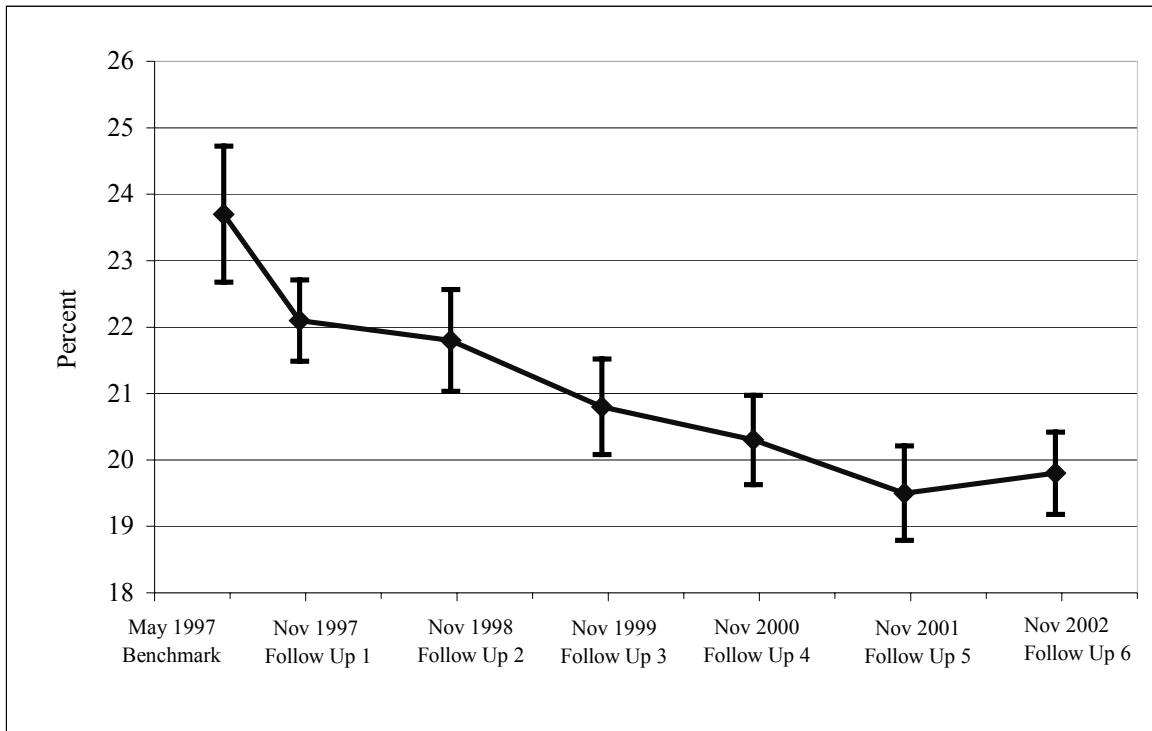
Table 4. Smoking prevalence

	Benchmark May 1997 (E=13,813) (I=6,657)	Follow-up 1 Nov 1997 (E=36,763) (I=17,712)	Follow-up 2 Nov 1998 (E=23,259) (I=11,156)	Follow-up 3 Nov 1999 (E=25,158) (I=12,271)	Follow-up 4 Nov 2000 (E=29,297) (I=13,804)	Follow-up 5 Nov 2001 (E=24,313) (I=11,898)	Follow-up 6 Nov 2002 (E=32,210) (I=15,979)
Enumerated household sample	23.5%	22.1%	21.8%	20.7%	20.5%	20.2%	19.8%
Informant sample	23.7%	21.9%	21.9%	20.8%	20.3%	19.5%	19.8%

The smoking prevalence in different socio-demographic groups of the informant and enumeration sample are presented in Table A1 in the Appendix.

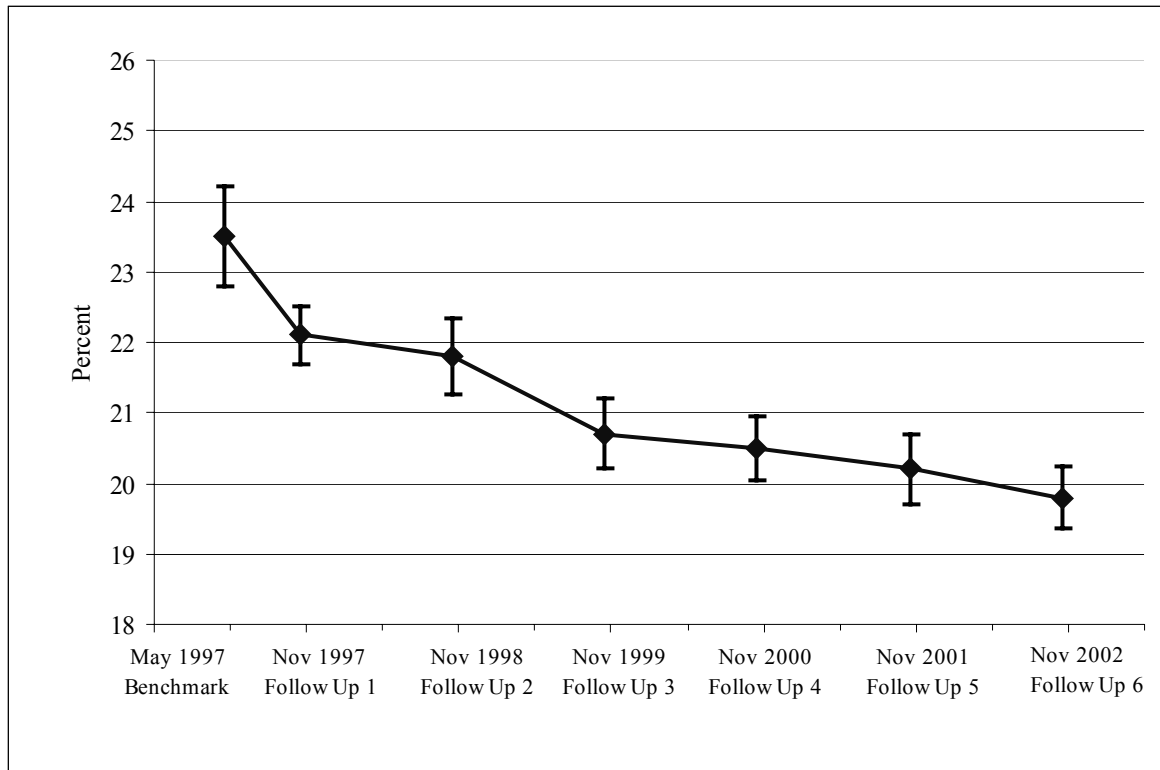
Changes in smoking prevalence for the informant sample and associated 95% confidence intervals are displayed in Figure 1.

Figure 1. Changes in smoking prevalence for the informant sample and associated 95% confidence intervals



Changes in prevalence and associated 95% confidence intervals for the enumerated sample are displayed in Figure 2.

Figure 2. Changes in smoking prevalence for the enumerated sample and associated 95% confidence intervals



Cigarette consumption

Table 5 shows that the percentage of smokers smoking less frequently than daily remained relatively stable over the survey years, including the last year 2002. There was no change in the proportions of daily and weekly cigarette consumption between 2002 and the previous year. Thus the proportions of daily and weekly smokers remained relatively stable across all survey years.

Table 5. Reported cigarette consumption

Smokers	Benchmark May 1997 (n=1, 093)	Follow-up 1 Nov 1997 (n=2, 642)	Follow-up 2 Nov 1998 (n=1, 513)	Follow-up 3 Nov 1999 (n=1, 403)	Follow-up 4 Nov 2000 (n=1, 497)	Follow-up 5 Nov 2001 (n=1,293)	Follow-up 6 Nov 2002 (n=1,595)
% daily	90%	89%	89%	89%	88%	89%	89%
% weekly	10%	11%	11%	11%	12%	11%	11%

Cigarette consumption is based on respondent's answers to the direct question 'How many cigarettes per day would you smoke on average?'. Responses to this question include all smokers, irrespective of whether they smoke factory made or roll-your-own cigarettes and do not depend upon brand smoked.

Below, Table 6 shows the consumption patterns across the years. Logistic regression analyses were carried out to investigate the change in consumption patterns across the years of the survey. The results of the logistic regression showed that for daily smokers and for daily and weekly smokers combined, the mean cigarettes per day consumed in 2002 (15.7 for daily; and 14.4 for daily & weekly) was significantly lower than the mean cigarettes per day at Benchmark, and in late 1997 and 1998. However, there was no difference between subsequent years and 2002.

For weekly smokers, as in previous years, there was no significant trend for a change in mean cigarettes smoked per day. The mean number of cigarettes smoked per day in 2002 (3.1) was only significantly different from the first follow up in 1997 (4.0).

Among weekly smokers, there was no significant trend in the mean number of days smoked across the years. Likewise, the mean number of days per week smoked in 2002 (3.0) was not significantly different from any of the previous years of the campaign.

Table 6. Reported 'factory made' and 'roll-your-own' cigarette consumption

Smokers	Benchmark May 1997 (n=1, 093)	Follow-up 1 Nov 1997 (n=2, 642)	Follow-up 2 Nov 1998 (n=1, 513)	Follow-up 3 Nov 1999 (n=1, 403)	Follow-up 4 Nov 2000 (n=1, 497)	Follow-up 5 Nov 2001 (n=1,293)	Follow-up 6 Nov 2002 (n=1,595)
Daily smokers:	(n=966)	(n=2,344)	(n=1,338)	(n=1,242)	(n=1,307)	(n=1,132)	(n=1,414)
Mean cigs/day (sd)	16.7 (10.1)	17.0 (10.3)	16.8 (9.9)	16.2 (9.3)	15.5 (9.1)	15.0 (8.7)	15.7 (12.2)
% light smokers (14 or less)	42%	41%	42%	43%	45%	48%	48%
% moderate smokers (15-24)	33%	34%	33%	34%	36%	33%	33%
% heavy smokers (25+)	26%	26%	24%	23%	18%	19%	19%
Weekly smokers:	(n=110)	(n=274)	(n=158)	(n=146)	(n=173)	(n=142)	(n=171)
Mean cigs/day (sd)	3.7 (3.7)	4.0 (4.2)	3.1 (2.8)	3.5 (3.6)	3.8 (4.2)	3.3 (3.0)	3.1 (3.4)
Mean days smoked/week (sd)	3.3 (1.3)	3.1 (1.5)	3.1 (1.4)	3.1 (1.6)	3.1 (1.4)	3.1 (1.4)	3.0 (1.4)
Daily & weekly smokers:	(n=1,075)	(n=2,618)	(n=1,496)	(n=1,388)	(n=1,480)	(n=1,273)	(n=1,585)
Mean cigs/day (sd)	15.4 (10.4)	15.7 (10.6)	15.3 (10.3)	14.8 (9.7)	14.1 (9.4)	13.7 (9.1)	14.4 (12.2)

Table 6 also shows that among daily smokers, the percentages of heavy smokers (19%) and light smokers (48%) in 2002 did not change compared to the previous year. The percentages of heavy and light smokers in 2002 were significantly different from Benchmark and from the first three follow ups only (up to and including 1999), with the percentage of light smokers increasing and the percentage of heavy smokers decreasing across the years. The proportion of moderate smokers in 2002 (33%) also remained the same as in the previous year and was significantly different from the 2000 proportion (36%) only. Overall, there was no significant trend for the proportion of moderate smokers to change across the years.

The changes in cigarette consumption among the daily smokers are shown in Figure 3. The changes in the mean cigarettes smoked per day for the daily and weekly smokers combined are shown in Figure 4.

Figure 3. Changes in percentage of light, moderate, and heavy cigarette consumption among daily smokers and associated 95% confidence intervals

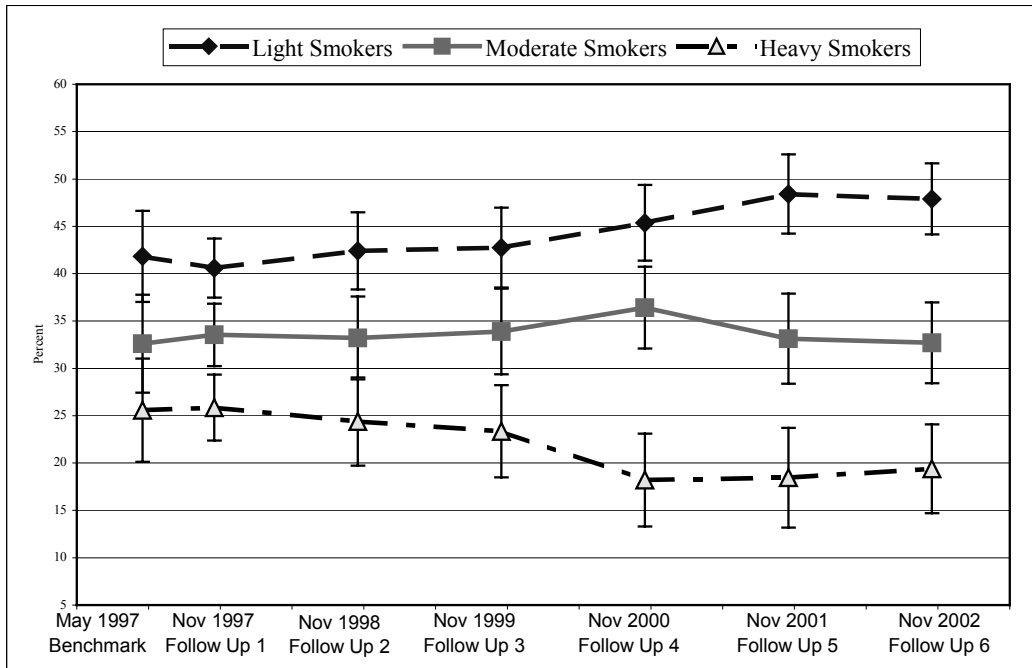
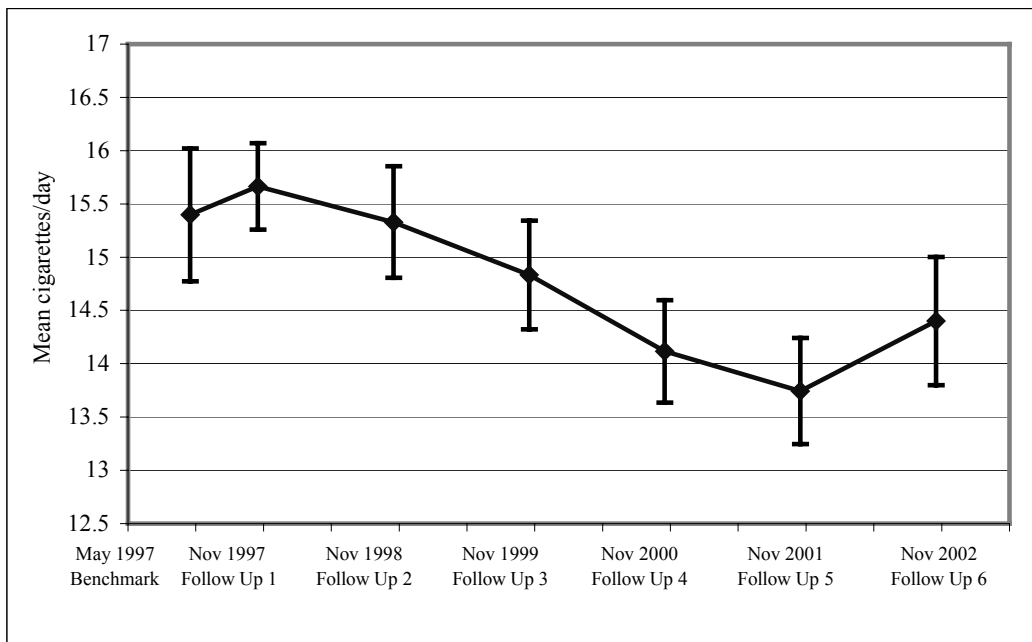


Figure 4. Changes in mean cigarettes consumed per day among daily and weekly smokers combined and associated 95% confidence intervals



Conclusion

This report found no significant changes in smoking prevalence and consumption between 2001 and 2002. However, the overall trend of a decline in smoking prevalence and consumption between the earlier and later years of the campaign remained, as has been documented in the previous reports.

Since the start of the National Tobacco Campaign, only during 1997, the period with the highest media expenditure, evidenced a significant decline in smoking prevalence. On the other hand, as documented in Scollo et al. (in press), at least two thirds of the decline in smoking participation during 1999 and 2000 could be due to the impact of tax reforms. This is consistent with expectations derived from previous econometric studies of the relationship between price and consumption (Jha & Chaloupka, 2000). By comparison with change in prevalence and consumption over these time periods, these most recent data suggest the possibility that the decline in adult smoking prevalence and consumption has slowed. However, further years of data collection will be required to confirm whether this interpretation is correct.

In the event that smoking prevalence and consumption is again stabilising, these data would lend support to new initiatives to increase the amount of expenditure for mass media campaigns and other initiatives likely to influence population-wide smoking prevalence, building on the infrastructure and Commonwealth-State relationships in tobacco control that have been forged as a result of the NTC over the past 5 year period. Recent studies in the peer-reviewed literature provide confirmatory and current evidence that anti-smoking advertising aimed at the general population can have significant and positive effects on both youth and adult smoking (Bauer et al., 2000; Friend & Levy, 2002; Siegel & Biener, 2000; Wakefield, Flay, Nichter & Giovino, 2003; Biener et al., 2000; Sly et al., 2001; McVey & Stapleton, 2000).

Acknowledgment

We thank Michelle Scollo and Tessa Letcher for assistance with data on tobacco expenditures.

References

Bauer UE, Johnson TM, Hopkins RS, Brooks RG. Changes in youth cigarette use and intentions following implementation of a tobacco control program: findings from the Florida youth tobacco survey, 1998-2000. *Journal of the American Medical Association* 2000; 284: 723-728.

Biener L, Harris JE, & Hamilton W. Impact of the Massachusetts tobacco control programme: population based trend analysis. *British Medical Journal* 2000; 321: 351-354.

Farrelly MC, Heaton CG, Davis KC, Messeri P, Hersey JC, Haviland L. Getting to the truth: Evaluating national tobacco countermarketing campaigns. *American Journal of Public Health* 2002; 92: 901-907.

Friend K, Levy DT. Reductions in smoking prevalence and cigarette consumption associated with mass-media campaigns. *Health Education Research* 2002; 17: 85-98.

Jha P, Chaloupka F. The economics of global tobacco control. *British Medical Journal* 2000; 321: 358-61.

McVey D, Stapleton J. Can anti-smoking advertising affect smoking behaviour? Controlled trial of the Health Education Authority for England's anti-smoking TV campaign. *Tobacco Control* 2000; 9: 273-282.

Scollo M, Freeman J, Icasiano F, Wakefield M. *Early evidence of impact of recent reforms to tobacco taxes on tobacco prices and tobacco use in Australia*. VicHealth Centre for Tobacco Control, in press.

Siegel M, Biener L. The impact of an antismoking media campaign on progression to established smoking: Results of a longitudinal youth study. *American Journal of Public Health* 2000; 90: 380-386.

Sly DF, Hopkins RS, Trapido E, Ray S. Influence of a counter-advertising media campaign on initiation of smoking: The Florida "truth" campaign. *American Journal of Public Health* 2001; 91: 233-238.

Tan N, Wakefield M, Freeman J. Changes associated with the National Tobacco Campaign: results of the second follow-up survey. In: Hassard K (Ed.) *Australia's National Tobacco Campaign Evaluation Report Volume Two*. Canberra: Commonwealth Department of Health and Aged Care, 2000.

Wakefield M, Flay B, Nichter M, Giovino G. Effects of anti-smoking advertising on youth smoking: a review. *Journal of Health Communication*. 2003; 8: 229-247.

Wakefield, M, Freeman J, Bobevski I. *Changes associated with the National Tobacco Campaign: preliminary report on smoking prevalence and consumption, 1997-2001*. Centre for Behavioural Research in Cancer, The Cancer Council Victoria, 2002.

Wakefield M, Freeman J, Boulter J. Changes associated with the National Tobacco Campaign: pre and post campaign surveys compared. In: Hassard K (Ed.) *Australia's National Tobacco Campaign Evaluation Report Volume One*. Canberra: Commonwealth Department of Health and Aged Care, 1999.

Wakefield M, Freeman J, Inglis G. *Changes associated with the National Tobacco Campaign: Results of the third and fourth follow-up surveys*. Centre for Behavioural Research in Cancer, The Cancer Council Victoria. In press.

Appendix:

Smoking prevalence by socio-demographic subgroups in the informant and enumerated samples

Table A1 shows the smoking prevalence by socio-demographic subgroups of the informant and enumerated samples. Overall, the prevalence rates in the different socio-demographic subgroups in 2002 are similar to those of previous year. In the informant sample, there appears to be a slightly higher smoking prevalence among blue collar workers in 2002 (28.2%) than in the 2001 sample (26.4%). In the enumerated sample there appears to be a slightly lower smoking prevalence among the 18-29 years group (26.2%) compared to 2001 (28.3%). However, none of the differences between the two samples are substantial, and differences are not systematic, so we interpret these changes as being likely to be due to sampling variation.

Table A1. Smoking prevalence of enumerated and informant samples, by socio-demographic subgroups

	Benchmark May 1997 (E=13,813) (I=6,657)		Follow-up 1 Nov 1997 (E=36,763) (I=17,712)		Follow-up 2 Nov 1998 (E=23,259) (I=11,156)		Follow-up 3 Nov 1999 (E=25,158) (I=12,271)		Follow-up 4 Nov 2000 (E=29,297) (I=13,804)		Follow-up 5 Nov 2001 (E=24,313) (I=11,898)		Follow-up 6 Nov 2002 (E=32,210) (I=15,979)	
	E	I	E	I	E	I	E	I	E	I	E	I	E	I
Total	23.5%	23.7%	22.1%	21.9%	21.8%	21.9%	20.7%	20.8%	20.5%	20.3%	20.2%	19.5%	19.8%	19.8%
Gender														
Male	26.6%	26.0%	24.8%	24.6%	23.6%	23.1%	22.7%	22.8%	22.7%	23.1%	22.4%	22.0%	22.1%	22.6%
Female	20.5%	22.0%	19.6%	20.2%	20.1%	21.1%	18.9%	19.5%	18.3%	18.5%	18.2%	18.1%	17.6%	18.1%
Age														
18-29 years	31.5%	35.7%	29.4%	30.0%	28.8%	30.2%	26.8%	28.6%	28.7%	30.5%	28.3%	28.7%	26.2%	28.6%
30-40 years	27.9%	27.8%	26.8%	27.0%	27.4%	27.6%	25.5%	25.9%	25.2%	25.2%	26.1%	25.6%	25.7%	25.6%
41-60 years	21.1%	21.5%	19.8%	20.3%	18.8%	19.3%	19.6%	20.4%	18.6%	19.2%	18.9%	19.6%	19.5%	20.7%
61+ years	11.9%	11.8%	11.4%	11.3%	11.7%	12.2%	10.0%	9.3%	10.2%	10.1%	9.2%	8.5%	9.8%	9.8%
Socio-economic status														
<i>Blue collar</i>	29.4%	30.0%	28.1%	28.7%	27.9%	28.0%	26.3%	27.4%	26.0%	26.9%	26.9%	26.4%	27.4%	28.2%
Lower Blue	32.3%	33.3%	32.3%	32.3%	30.4%	31.8%	28.5%	29.5%	27.6%	27.5%	29.7%	29.8%	29.3%	29.7%
Upper Blue	27.4%	27.8%	25.7%	26.6%	26.2%	25.3%	25.0%	26.1%	25.0%	26.5%	25.1%	24.2%	26.0%	27.0%
<i>White collar</i>	20.9%	20.8%	19.7%	19.2%	19.1%	19.1%	18.8%	18.6%	18.8%	18.3%	17.8%	17.3%	17.5%	17.9%
Lower White	22.3%	23.4%	22.0%	22.0%	20.6%	21.0%	20.4%	20.2%	20.7%	21.1%	19.3%	18.6%	20.9%	21.1%
Upper White	19.5%	18.2%	17.9%	16.9%	17.9%	17.4%	17.2%	17.0%	17.1%	15.8%	15.9%	15.6%	15.8%	16.2%
Language spoken at home														
English	23.7%	23.7%	22.3%	22.0%	22.0%	22.0%	20.9%	20.9%	20.5%	20.3%	20.3%	19.6%	19.9%	19.8%
Other	17.9%	21.9%	19.2%	18.8%	18.9%	18.4%	16.0%	16.6%	19.6%	19.5%	19.2%	16.6%	17.3%	19.3%
Region														
Capital city	22.3%	22.6%	22.0%	21.6%	21.5%	21.9%	19.9%	19.8%	19.9%	19.7%	19.5%	18.7%	18.5%	18.4%
Other	25.2%	25.1%	22.4%	22.6%	22.5%	21.8%	22.2%	22.5%	21.4%	21.2%	21.4%	20.7%	21.9%	21.8%

Note: Socio-economic subgroups were based on main income earner's occupation, and those reporting no occupation were excluded in the coding of this variable