



Smoking bans in Victorian workplaces: 2001 update

Tessa Letcher

Ron Borland

Abstract

Objective

To monitor the level of smoking restrictions in Victorian workplaces, and to make comparisons between 2001 and previous years to 1988.

Design

Telephone survey of 2000 randomly sampled Victorians conducted in November 2001.

Results

Observation of trends over time indicates there was a period of rapid increase in total smoking restrictions between 1988 and the early 1990s, followed by relatively little change. In 2001, the proportion of indoor workers reporting total bans in the workplace was 69% – no significant change from 70% in 1999. The proportion reporting partial restrictions was 25%, compared with 22% in 1999. This difference was not significant. Only 35% of hospital workers reported a total ban in the workplace.

Conclusions

Around 30% of Victorian workers still do not experience total workplace smoking bans, and 9% of workers have no ban in the place where they usually work. While we might have expected an increase, given that smoking restrictions in dining areas were introduced in 2001, only a small proportion of our sample comprised hospitality workers. In addition, the reported levels of smoking allowed in hospitals are a cause of considerable concern. Hospitals are an area where we might expect examples of exemplary policies.

Introduction

The level of smoking restrictions in Victorian workplaces has been monitored by the Centre for Behavioural Research in Cancer since 1988. Over this time, the level of total bans reported by indoor workers has increased from 17% of workplaces in 1988 (with 47% of workplaces having partial bans) to 70% in 1999 (and 22% with partial bans) (Letcher & Borland 2000). Observation of trends over time indicates there was a period of rapid increase in total smoking bans between 1988 and the early 1990s, followed by relatively little change. In 1999, 8% of indoor workers reported that they worked in workplaces with no smoking restrictions (Letcher & Borland 2000).

This paper reports the findings of the latest population survey in 2001 regarding levels of smoking restrictions in the workplace reported by Victorian workers, and makes comparisons with previous years.

Method

The annual population surveys are commissioned from a large market research company which interviews a representative sample of 2000 Victorians by telephone each year. The questions, designed by the Centre for Behavioural Research in Cancer, are asked in an eight-minute interview conducted on weekends and weeknights during November.

Readers should be aware of some method changes if making comparisons with previous years. Since 1998, annual surveys have been conducted by telephone rather than the face-to-face method used in previous years, and since 1997 the standard tobacco use question (AIHW 1999) has been used rather than the self-definition question that was used in previous years.

Statistical analysis

A comparison of the sample socio-demographic characteristics with the Australian Bureau of Statistics estimates of the Victorian population (ABS 2000) revealed that women and older people were over-represented. To adjust for this in the current paper, as trend data for 1988–2001 are being considered, data were weighted by age and sex according to the population census data for the Victorian population in the year 2001. This procedure has not been conducted in analyses reported in previous *Quit Evaluation Studies*.

In this volume, smoking status is reported using standard questions for tobacco use (AIHW 1999) and has been categorised into four groups: regular smoker, irregular smoker, former smoker and never-smoker. Regular smokers are

defined as those who report smoking daily or at least weekly, irregular smokers are those who report smoking less than weekly, former smokers include those who have smoked at least 100 cigarettes in their lifetime, and never-smokers include those who report not smoking at all and those who have not smoked 100 or more cigarettes in their lifetime.

Sample

In 2001, 2000 respondents across Victoria aged 18 years and over were interviewed by telephone. In each survey, respondents in paid employment were asked about workplace smoking restrictions and their main workplace setting (whether they mainly worked indoors, in a vehicle, or in a varied work situation).

Respondents were asked to classify the smoking restrictions, if any, at their place of work, as follows:

- total ban on smoking
- a ban everywhere except for a smoking room
- a ban in some areas
- no restrictions.

Workers who reported bans in some areas were asked to indicate whether or not the ban applied in the area where they normally worked.

In household surveys from 1990 onwards, only indoor workers were asked to describe their normal workplace, defined as where they spent most time at work, and were shown a card with response options (for example, warehouse, factory, supermarket or school). In 1998 and 2001, indoor workers were asked what was their usual workplace, for example, a shop, own office, open-plan office or workshop/factory floor. In 1999, all except those who worked mainly in a vehicle were asked this question. In this report, results for indoor workers only are reported.

Results

In 2001, 1240 respondents (62% of the sample) were in paid (full- or part-time) employment (compared with 60% in 1999). Of these, 1005 respondents (81% of workers) reported that they usually worked indoors (compared with 77% in 1999).

Participants' responses to the questions about level of workplace smoking restrictions for indoor workers are reported in Table 1 for each survey year, 1988 to 2001.

Table 1 Workplace smoking restrictions for indoor workers aged 18 years and over, 1988 to 2001*

	1988 (n=900) %	1989 (n=962) %	1990 (n=882) %	1991 (n=994) %	1992 (n=933) %	1993 (n=965) %	1994 (n=914) %	1995 (n=954) %	1997 (n=958) %	1998 (n=918) %	1999 (n=870) %	2001 (n=982) %
Total bans	17	29	34	48	59	60	63	65	61	76	70	69
Partial bans	47	47	42	35	29	29	25	24	27	17	22	25
No restrictions	36	24	25	17	12	12	12	11	12	7	8	6

*Due to rounding not all columns sum to 100.

The data presented in Table 1 indicate that the proportion of indoor workers reporting total bans in the workplace was 69% in 2001, compared with 70% in 1999. Looking at the trends over the years, there has been little change in the proportion of workplaces with total restrictions since the period of rapid increase from 1988 into the early 1990s – this figure now appears to have plateaued at around 70%. Indeed, it may even be the case that there has been a slight move from total to partial bans since 1999. There was a rise in the proportion of indoor workers reporting partial bans, at 25% in 2001 compared with 22% in 1999. This increase was not significant.

There has been no significant change since 1998 in the percentage of indoor workers reporting there are no smoking restrictions in their workplace, at 6% in 2001. As explained below, subsidiary analyses suggest the variations observed are likely to be due mainly to sampling factors. The only possible exception to this is hospitals (see later).

As shown in Table 1, there has been some variation in estimates over the last few years, especially between 1995 and 1999. For this reason, as in previous years, potential sampling effects were investigated by comparing the proportions of indoor workers in workplace types represented in the population surveys. The main differences were that in 2001, 11% of workers were in the 'other' or 'can't say' category regarding workplace type, compared with 21% in 1999 and 4–6% since 1995. In 2001, there were more workers in open-plan offices (30%) and own offices (15%) compared with 1999 (22% and 10% respectively), but 2001 levels were comparable with previous surveys since 1995. In 2001, there were slightly fewer workers in schools/classrooms (7% compared with 8–11% in previous years), and fewer who worked in their own

or another's home (2% compared with 3–7% since 1995). Given the higher rate of unspecified workplace type reported since 1999, it is difficult to assess whether workers in largely pre-existing smokefree environments or those in environments where total smoking bans are less prevalent tended to be over- or under-represented.

As suggested in the 1999 update, the variation could be associated with changes in the method of data collection (telephone interviews were conducted from 1998 onwards, while prior to this data were collected during face-to-face interviews), sampling variation (representation of workplace type), and chance. The sudden increase in the proportion of indoor workplaces with total smoking bans in 1998, followed by a sudden decrease, is unlikely to be a real effect.

In an effort to address this issue and to make comparisons between years, an attempt was made to adjust for the differences between the samples in representation of workplace type. Workplace type (for example, the size and type of the working environment) is likely to affect the levels of restrictions reported (Borland, Morand & Mullins 1997). The data for each survey year from 1995 onwards were therefore weighted to the proportions of indoor workers from different workplace types in 2001, following the methods used in previous *Quit Evaluation Studies* (see Mullins & Borland 1998).

The magnitude of the variation between years was reduced to some extent by weighting for workplace type, suggesting that some of the differences may be attributed to sampling effects. However, as there was relatively small change in the reported level of bans associated with weighting for workplace type, and there may be a change occurring across years in the prevalence of work in different workplace types, the figures presented in this paper are unweighted for workplace type.

Smoking restrictions in usual area of work and indoor workplace type

While smoking restrictions in the entire workplace are of interest, this does not necessarily indicate the level of protection provided to workers in the individual working environment. The levels of bans as a function of where the restrictions applied at work were therefore examined. The categories 'A ban everywhere except for a smoking room' and 'A ban in some areas, including where I normally work' were combined to indicate the respondent usually worked in an area where a smoking ban applied. Combining the categories 'A ban in some areas, but not where I normally work' and 'No

restrictions' provided the proportion of employees who usually worked in an area with no smoking restrictions.

Data are presented in Table 2 for levels of smoking bans reported by indoor workers in various workplace types in 2001, as well as for indoor workers overall.

Table 2 *Workplace type by level of smoking ban experienced by indoor workers, 2001*

Workplace type	Type of ban (n=961)		
	Ban where I work	No ban where I work	Total ban
Warehouse/store	32	9	59
Workshop/factory	35	22	44
Shop/supermarket	14	9	76
Open-plan office	20	2	79
Own office	20	3	78
School/classroom	7	0	93
Hospital	36	1	63
Home	18	36	46
Hotel/restaurant	30	35	35
Other (including can't say)	26	19	55
Overall	23	9	69

Consistent with patterns found in previous surveys, the data in Table 2 indicate that, in 2001, those who worked in schools, open-plan and own offices, and shops/supermarkets were more likely to experience total workplace bans. Those least likely to have a smokefree working environment were those who worked in hotels/restaurants, workshops/factories, in their own home and in warehouses/stores. The high levels of smoking allowed in hospitals is a cause of considerable concern. Hospitals are an area where we might expect examples of exemplary policies.

In 2001, there was some decrease in the proportions of indoor workers from hospitals and those who work in the home reporting total bans in the workplace, compared with 1998/1999 data. However, there was little or no change in the proportion of workers from these workplaces who experience a ban in the place they usually work. Given that there has been little change in 2001 in the proportion of indoor workers overall reporting total bans compared with 1999 data, these differences are likely to be associated with

sampling variation of the individual workplaces of survey respondents, rather than a systematic decrease in the proportions of certain workplace types with total bans on smoking.

The data presented in Table 2 also indicate that, in 2001, 92% of indoor workers reported not being directly exposed to smoke where they work (adding those experiencing total bans and those with bans at their usual workstation), little change from the 91% reported in 1999. However, even in workplaces where employees are not allowed to smoke at their workstations, workers may not be sufficiently protected from smoke in adjoining areas where smoking is permitted. This will depend upon the design of the workplace. Clearly, however, protection from exposure to tobacco smoke is not adequate for the 9% of indoor workers reporting that smoking is not banned in the area where they work.

Discussion

The most recent data collected in 2001 show that 69% of Victorian workers experienced total smoking bans in the workplace. There has been little change since the last report on workplace smoking bans and earlier rapid increases seem to have levelled off. Workplaces with total smoking bans are associated with a decrease in smoking prevalence among employees as well as reduced cigarette consumption, as concluded by a recent meta-analysis of 26 studies related to the effect of totally smokefree workplaces on smoking behaviour (Fichtenberg & Glantz 2002).

We might have expected some increase, given the restrictions that were introduced in restaurants on July 1, 2001, meaning that some workers in the hospitality industry would be increasingly protected. However, only 5% of the sample of indoor workers comprised restaurant/hotel workers. In addition, the legislation related to smokefree dining applies to dining areas where and when the consumption of food and non-alcoholic drinks is the predominant activity. Such restrictions apply mainly to restaurants and cafés, and do not include outdoor dining areas. The hospitality staff category in the survey includes hotel workers as well as restaurant staff, and for hotel staff the smoking restrictions do not apply or apply only in some (dining) areas or during certain times of the day. Further legislative amendments that came into effect on September 1, 2002, ban smoking in bingo centres and in gaming rooms of licensed venues, with the extent of other restrictions in licensed venues depending on the number of rooms in the venue and subject to some exemptions.

Given the harm associated with exposure to environmental tobacco smoke (ETS), work remains in protecting Victorian workers from the hazards of ETS. The 2001 data indicate that 9% of indoor workers were potentially exposed to tobacco smoke specifically in the area where they usually work. In addition, one-quarter of workers reported that only partial restrictions apply to smoking in their workplace, while 6% experienced no bans. While the areas where smoking is permitted in workplaces with partial bans may adequately protect non-smokers from exposure, there is a need to explore reasons for any level of lack of protection. In particular, we need to look more closely at hospitals to ensure that they act in ways consistent with total health and preclude smoking altogether. If patients are suffering from nicotine withdrawal, they should be provided with nicotine replacement therapy.

In addition, given that there was some small increase in the proportion of workers in workplaces with partial restrictions, it will be important to monitor the level of partial restrictions reported the next time data are collected. If this rise continues and is not due to separately ventilated smoking rooms, it would be a cause for some concern. It is clear, however, that there is a need for government policy banning smoking in all workplaces, in order to reduce the disparities in protection across employee groups.

References

- Australian Bureau of Statistics (ABS) 2000. *Population by Age and Sex, Australian States and Territories*, Catalogue No. 3201.0. ABS, Canberra.
- Australian Institute of Health and Welfare (AIHW) 1999. *National Health Data Dictionary*. Version 8.0 AIHW Catalogue No. HWI 18. AIHW, Canberra.
- Borland R, Morand M & Mullins R 1997. Prevalence of workplace smoking bans in Victoria. *Australian and New Zealand Journal of Public Health* 21(7): 694–8.
- Borland R & Mullins R 1994. The increasing prevalence of workplace smoking bans in Victoria. *Journal of Occupational Health and Safety: Australia New Zealand* 10(1): 35–40.
- Fichtenberg C & Glantz S 2002. Effect of smoke-free workplaces on smoking behaviour: systematic review. *British Medical Journal* 325: 188–91.
- Letcher T & Borland R 2000. Smoking bans in Victorian workplaces. In L Trotter and T Letcher, eds., *Quit Evaluation Studies No. 10, 1998–1999*. Victorian Smoking & Health Program, Melbourne.
- Mullins R & Borland R 1998. Smoking bans in Victorian workplaces: 1997 update. In L Trotter and R Mullins, eds., *Quit Evaluation Studies No. 9, 1996–1997*. Victorian Smoking & Health Program, Melbourne.