



**Exposure to environmental tobacco
smoke at work: a survey of members
of the Australian Liquor, Hospitality and
Miscellaneous Workers Union**

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Abstract

Objective

To measure staff attitudes towards and experiences of exposure to environmental tobacco smoke (ETS) in the workplace.

Design

Cross-sectional telephone survey of members of the Australian Liquor, Hospitality and Miscellaneous Workers Union (Victorian Branch).

Setting

Victoria, September 2001.

Subjects

Of the 1078 respondents surveyed (77% response rate), hospitality workers comprised 49% of the sample, while community services, property services and manufacturing workers comprised 18%, 16% and 17% respectively.

Results

Overall, 54% of union members were employed in workplaces that did not completely ban smoking and 34% reported being exposed to ETS during their typical working day. Workplaces with total smoking bans had a high level of compliance with these restrictions, with no workers in these settings indicating exposure to ETS at work. Compared with other workers, hospitality workers reported working in environments that had more permissive smoking policies. Consistent with this, 56% of hospitality workers said they were exposed to ETS during a typical day at work, compared with between 6% and 18% of other workers. Overall, 79% of workers expressed concern about exposure to ETS, including 66% of smokers. Hospitality workers reported a higher level of concern about exposure to ETS at work, consistent with their higher exposure to ETS.

Conclusions

These findings provide evidence that many workers, especially those employed in the hospitality sector, are exposed to ETS during their working day and are concerned about the effects of such exposure on their health. The findings provide support for the introduction of smokefree policies at work as an effective way to reduce worker exposure to ETS.

Introduction

Environmental tobacco smoke (ETS) refers to the mixture of sidestream smoke (smoke emitted from the glowing end of cigarettes, cigars and pipes) and exhaled smoke that pollutes the air in locations where tobacco is smoked (NHMRC 1997). The link between exposure to ETS and increased risk of disease has been well established (NHMRC 1987; USDHHS 1986; USEPA 1992), in particular its link with increased risks of cancer and asthma (Winstanley, Woodward & Walker 1995; Jaakkola et al. 2001).

With 20.7% of adults in Victoria smoking cigarettes regularly (Trotter, Mullins & Freeman 2000), there remain many opportunities for non-smoking Victorians to be exposed to ETS in the home and workplace. A recent population survey of workplace smoking restrictions in Victoria found that 8% of indoor workers aged 18 years and over reported no restrictions in their workplace, while 21% reported partial smoking restrictions (Letcher & Borland 2000). Exposure to ETS is of particular concern for people working within industries where smoking is still allowed, especially for those employed in the hospitality industry, where exposures are typically highest (Davis 1998). A meta-analysis of studies comparing indoor air quality in bars, offices and homes with at least one smoker concluded that the average level of ETS in bars was 3.9 to 6.1 times higher than in offices, and 4.4 to 4.5 times higher than in smoking homes (Siegel 1993). In 2001, Victoria saw the introduction of smokefree policies in restaurants and shopping centres. While these laws protect the patrons and workers in these establishments, many other workers, including those in bars, clubs and gaming venues, continue to be exposed to ETS on a daily basis. As a result, they remain at an increased risk for developing serious disease.

In the United States, Eisner, Smith and Blanc (1998) found that the introduction of smoking bans reduced the prevalence of respiratory and sensory irritation symptoms and increased pulmonary function in bartenders. In Western Australia, Musk, Divitini and deKlerk (1999) found that casino employees working in areas where smoking was allowed experienced a decrease in lung function and an increase in respiratory problems after completing a shift. A large study of Hong Kong police officers found that exposure to ETS in the workforce was positively related to increased consultation for respiratory problems and medication use in the last 14 days and increased time off work for illness (McGhee et al. 2000). These effects were found to be independent of demographic variables, smoking status and exposure to ETS at home.

More recently, Jaakkola et al. (2001) reported an association between exposure to ETS and the development of adult asthma. Never-smoking adults

exposed to ETS in the workplace were twice as likely to develop asthma as those with no exposure. Furthermore, adults who were exposed to ETS both in their workplace and in their homes were almost five times more likely to develop asthma than adults who were not exposed. Exposure to ETS in the workplace was significantly associated with all types of respiratory symptoms and current asthma in a large study of 7882 never-smoking adults from 36 centres in 16 countries (Janson et al. 2001). Exposure to workplace ETS also increased bronchial responsiveness and a positive association was observed for current asthma status.

All Australian states and territories have occupational health and safety Acts that require employers to provide a safe workplace for their employees and all visitors. The Attorney-General of Australia provided advice on this situation, tabled in the House of Representatives in November 1986. It stated ‘an employer has a common law of duty of care to take all reasonable steps to protect their employees’ health and safety, including the provision and maintenance of safe workplaces’. Moreover, ‘injury from passive smoking is reasonably foreseeable and that consequently such an injury could give rise to an action for damages at common law’ (Winstanley, Woodward & Walker 1995 p. 109).

In July 1994, the National Occupational Health and Safety Commission issued a guidance note in regard to passive smoking in workplaces. It proposed that employers have a legal responsibility to eliminate or control the risk of passive smoking (Winstanley, Woodward & Walker 1995). These arguments provide support for all workplaces to be smokefree under current Occupational Health and Safety legislation.

In summary, research has provided evidence of a relationship between ETS exposure and disease. High levels of ETS in workplaces have been associated with a higher risk of respiratory problems, asthma and lung cancer among people exposed to ETS in these workplaces. This study aims to describe the magnitude of ETS exposure among members from the various divisions of the Victorian Branch of the Australian Liquor, Hospitality and Miscellaneous Workers Union (LHMU), and to canvass their concerns and opinions on this issue.

Method

Procedure

A stratified random sample of members from the Victorian Branch of LHMU was contacted by telephone in 2001. This sampling frame included four divisions of workers: hospitality (including bar, hotel and restaurant workers), community services (including child care workers, ambulance paramedics, disability workers and zoo keepers), property services (such as cleaners, car parking attendants and security guards) and manufacturing (such as building products, plastics and laundries). A random selection was made of 1500 members from the hospitality division and 528 members each from community, manufacturing and property divisions. To be eligible for inclusion in the survey, members needed to have worked in the preceding four weeks and be able to speak English.

Trained employees of The Cancer Council Victoria conducted telephone interviews from offices of the LHMU. Interviewers introduced themselves as calling on behalf of the LHMU and The Cancer Council Victoria. Interviewers made up to five attempts to contact LHMU members, scheduling call-backs to complete the interview if necessary. The greatest proportion of calls were conducted between 4:00 pm and 8:30 pm weeknights. A small percentage of calls were made to union members on Saturday afternoons, with the remainder being contacted during business hours. The average time for survey completion was less than 10 minutes.

Questionnaire content

The survey began with questions about the participant's type of main occupation and other occupations, hours worked each week, type of workplace and workplace location.

Workplace smoking restrictions were recorded by asking questions about the type of smoking restrictions in the respondent's workplace and whether smoking bans applied to their work area. From responses to these questions, we constructed four main categories of smoking restrictions: total ban, ban at usual workstation, no ban at usual workstation, and no restrictions. Workplace exposure to ETS (during a typical working day) was measured by asking LHMU members to estimate the number of hours at work spent in the same room as people who were smoking. From these responses, we assigned workers to one of three workplace ETS exposure categories: no exposure, greater than 0 to less than or equal to 7.5 hours exposure, or greater than 7.5 hours of exposure per day.

Home exposure to ETS was recorded by asking respondents approximately how many hours during typical work and non-work days they spent at home in the same room as people who were smoking. Participants were also questioned about the presence of other smokers at home and home smoking restrictions. From these measures of home exposure to ETS, we constructed two categories: 0 – no home smokers, and 1 – one or more home smokers (regardless of where they smoked). Exposure to ETS outside work and home was measured by asking how often they were in the same room as others who were smoking, with responses coded as often exposed (about half of the time, or most or all of the time) and rarely exposed (rarely or never, or about a quarter of the time).

Questions assessing respiratory and sensory symptoms were adapted from Bates et al. (2001). The relationship between respiratory and sensory symptoms and exposure to ETS is presented and discussed in a separate report (Wakefield et al. 2002).

Attitudes and opinions to workplace ETS were recorded. We asked questions about the extent of concern about the health effects of exposure to ETS and opinion of such exposure. Furthermore, we asked respondents about their experiences with passive smoking and their employer, including whether they had ever left a job or avoided employment because of a smoky environment; whether they had ever raised concerns about passive smoking at work, their employer's reaction and their preparedness to raise such concerns in future; and whether they had ever been transferred from a smoking area to a non-smoking area at work. Finally, we asked respondents about recall of the Marlene Sharp legal case in NSW (Crawford & Videnieks 2001) and whether it had an impact on their concern about ETS exposure.

Current smokers were defined as people who smoked cigarettes, cigars, pipes or any other tobacco daily, weekly or less than weekly. Former smokers were defined as having quit smoking for 12 months or more and never-smokers were participants who indicated that they had never smoked. Age, gender, highest level of educational attainment, occupation and postcode were also recorded.

Statistical analysis

Statistical analysis was conducted using Stata7 software package. Testing of differences in proportions was conducted at the bivariate level by using chi-square tests, and by analysis of variance for continuous data. In the text, differences are referred to only if they were statistically significant ($P < 0.05$), indicating a less than 1 in 20 probability that the effect was due to chance.

Results

Response rates

Completed interviews were achieved for 1078 LHMU members. Out of all members contacted and eligible, the response rate was 77%. Table 1 details the percentages of members who were unable to be contacted (due to wrong telephone number or no answer), those who were not eligible and members who refused participation. Overall, 331 members refused to participate and 263 members had not worked in the preceding four weeks and thus did not qualify for the study. The differing contact rates between divisions were largely due to variation in ability to contact members (due to incorrect contact details or no answers). A large proportion of the survey population worked shift work, making contact difficult; this is illustrated by the high rates of no answers for all divisions (excluding manufacturing) in Table 1.

Table 1 Survey response rates, by LHMU division

	Division				
	Hospitality %	Community %	Property %	Manufacturing %	Total %
Selected for contacting	(n=1509)	(n=478)	(n=528)	(n=526)	(n=3041)
Incorrect details	19	14	16	25	19
No answer*	31	32	22	11	26
Not eligible	7	3	14	14	9
Contacted & eligible	43	46	48	50	46
Refused	18	21	29	34	23
Completed survey	82	79	71	66	77

*Up to five attempts were made to contact LHMU members..

Sample characteristics

Table 2 Sample characteristics, by LHMU division

	Division				Total %
	Hospitality %	Community %	Property %	Manufacturing %	
Respondents	(n=533)	(n=191)	(n=180)	(n=174)	(n=1078)
Male	42	53	65	78	54
Female	58	47	35	22	46
Age (years)					
Mean (SD)	35.1 (12.1)	41.4 (8.9)	42.8 (10.6)	38.5 (10.4)	38.0 (11.5)
Range	18–68	22–62	20–64	19–63	18–68
Education level	(n=531)	(n=191)	(n=178)	(n=173)	(n=1073)
Primary school	1	0	3	2	1
Some secondary school	36	21	54	53	39
Secondary school	28	9	22	26	23
Some tertiary	17	9	8	9	13
Completed tertiary	16	44	9	10	19
Higher degree/diploma	2	16	2	1	5
Employment	(n=532)	(n=191)	(n=179)	(n=173)	(n=1075)
1 job	85	85	73	95	85
More than 1 job	15	15	27	5	15
Hours worked/week					
Mean (SD)	32.1 (11.8)	37.5 (11.2)	35.3 (13.7)	39.7 (7.8)	34.8 (11.9)
Usual workplace	(n=531)	(n=190)	(n=178)	(n=173)	(n=1072)
Indoors	97	44	80	84	83
Vehicle	0	20	4	8	6
Outdoor	1	6	4	3	3
Can't say	2	29	12	5	9
Smoking status	(n=514)	(n=187)	(n=171)	(n=165)	(n=1037)
Never-smoker	53	57	37	32	48
Former smoker	18	26	26	25	22
Smoker*	29	17	37	44	30
Cigarettes/day#					
Mean (SD)	14.7 (8.5)	12.5 (7.1)	16.8 (9.8)	17.9 (9.9)	15.7 (9.1)

Due to rounding not all columns sum to 100.

*Smoker – smokes cigarettes, cigars, pipes or any other tobacco daily, weekly or less often than weekly.

#Calculated for participants who reported they smoked daily.

Of the 1078 respondents, hospitality members made up 49% of the sample population, while community, property and manufacturing divisions made up 18%, 16% and 17% respectively. Table 2 shows that the mean age of the sample was 38.0 years (SD=11.5) and 54% were male. Thirty-seven per cent had completed at least some tertiary qualification. Eighty-five per cent of the population worked in one job only, with the average number of hours worked per week being 34.8 (SD=11.9 hours). The greatest proportion of respondents worked indoors, whilst 9% of respondents could not give a single response for their workplace location (as their work covered two or more locations). Just over one-quarter of community service workers (29%) were unable to select one response from workplace location. Their workplace was a combination of more than one location and in many instances involved all three locations (indoor, vehicle and outdoors). Thirty per cent were current smokers, whilst 48% were never-smokers and 22% were former smokers. There was considerable variation in smoking status between divisions. Community workers reported the lowest proportion of smokers (17%), while 44% of manufacturing workers reported they smoked.

Workplace smoking restrictions and exposure to ETS

Workplace smoking restrictions and exposure to ETS in the workplace, home and other exposure are shown in Table 3. Approximately 50% of survey respondents reported a total ban on smoking in their workplace. However, 27% of union members had either no smoking restrictions at work at all or no ban in the area in which they worked. Close to 50% of hospitality workers reported they had either no restrictions at their workplace or no smoking bans at their workstation, and this was significantly more common compared with other workers. By comparison, between 88% and 96% of other workers were working in environments with complete workplace smoking restrictions or workstation bans. Overall, 34% of respondents estimated that they were exposed to ETS during their typical working day. Compared with other workers, hospitality workers reported having significantly greater exposure to ETS at work. Thus, 57% of hospitality workers reported they spent some of their work day in the same room as people who were smoking, compared with between 6% and 18% of other workers. Furthermore, 25% of hospitality workers indicated they spent more than 7.5 hours on a typical working day being exposed, compared to 0–4% of other workers.

Table 3 Workplace restrictions and exposure to ETS, by LHMU division

	Division				
	Hospitality %	Community %	Property %	Manufacturing %	Total %
Workplace restrictions	(n=532)	(n=191)	(n=180)	(n=174)	(n=1077)
Total ban	28	78	62	46	46
Banned at workstation	24	18	24	48	27
No ban at workstation	39	3	9	4	22
No restrictions	9	1	3	1	5
Exposure to ETS	(n=514)	(n=170)	(n=165)	(n=158)	(n=1007)
No exposure	44	94	82	92	66
>0 to ≤ 7.5 hrs/day	32	6	14	7	21
>7.5 hrs/day	25	0	4	1	13
Home ETS exposure	(n=532)	(n=191)	(n=179)	(n=173)	(n=1075)
No home smokers	89	97	88	87	90
1 or more home smokers	11	3	12	13	10
Other ETS exposure	(n=532)	(n=187)	(n=179)	(n=173)	(n=1071)
Often	25	3	17	21	19
Rarely	75	97	83	79	81

Due to rounding not all columns sum to 100.

Table 4 Relation between workplace smoking restrictions and exposure to ETS

Workplace restrictions	Workplace exposure			Total (n=1002) %
	No exposure %	> 0 to ≤ 7.5 hrs of exposure %	> 7.5 hrs of exposure %	
Total ban at workplace	100	0	0	43
Banned at workstation	76	20	4	28
No ban at workstation	6	51	43	24
No restrictions	9	46	44	5

It was notable that respondents who reported a total ban on smoking in their workplace also reported no exposure to ETS (Table 4) during their usual working day, indicating high levels of compliance with workplace smokefree policies. However, it was interesting to note that of the respondents who reported a ban at their workstation, 24% were still being exposed to ETS in

the workplace, suggesting either poor compliance with partial smoking restrictions or the need to enter work areas where smoking was permitted. Not surprisingly, among respondents who had no bans on smoking at their workstation or no smoking restrictions at work at all, exposure to ETS at work was common.

Opinions and actions relating to exposure to ETS

Table 5 details responses to the series of questions pertaining to opinion and actions concerning exposure to ETS by union division. In total, 42% of workers indicated they were bothered ‘a lot’ by exposure to ETS, with community workers being significantly more likely to respond in this way than others. When respondents were questioned in regard to the potentially harmful effects to their own health of exposure to ETS, close to 80% of the sample was concerned (a little and a lot) and this pattern was consistent across divisions. Approximately 20% of all respondents stated that they were not concerned about the potentially harmful effects to their health of exposure to ETS, and as Table 6 later shows, this is likely to be mostly attributable to the smokers in the sample. This measure was not significantly different between divisions.

Despite these findings, it was rare for union members to indicate they had left a job or avoided employment due to a smoky environment, and this experience did not differ by division. Overall, 19% had raised concerns with their employer about exposure to ETS. Considering that hospitality workers reported higher levels of exposure to ETS than other workers, it was not surprising that significantly more of these workers (26%) had raised concerns about exposure to ETS at work, compared with workers from other divisions. Just under half (46%) of all workers indicated their employers had reacted positively to concerns about exposure to ETS in the workplace. Only 40% of hospitality employers reacted positively to concerns about passive smoking; this did not differ significantly from the other divisions. Overall, 19% of union members indicated they were reluctant to raise (further) concerns about exposure to ETS with their employers. Compared to other workers, significantly more hospitality employees (25%) responded in this way.

Table 5 Opinions, concerns and actions, by LHMU division

	Division				Total %
	Hospitality %	Community %	Property %	Manufacturing %	
I find other people's tobacco smoke:					
Enjoyable	0	2	0	1	1
Doesn't bother me	24	14	28	42	26
Bothers me slightly	31	29	36	28	31
Bothers me a lot	45	55	36	28	42
Can't say	0	0	0	1	0
Are you concerned about the potentially harmful effects to your health of exposure to ETS?					
Yes, a little concerned	29	25	29	32	29
Yes, a lot concerned	53	54	45	40	50
No	18	20	24	27	21
Can't say	0	1	2	1	0
Left a job due to smoky environment					
Yes	3	5	3	1	3
No	97	95	97	99	97
Avoided employment due to smoky environment					
Yes	5	8	5	1	5
No	95	92	95	99	95
Have you raised concerns about passive smoking in the workplace?					
Yes	26	14	8	13	19
No	74	86	92	87	81
Employer's reaction					
Positive	40	65	43	62	46
Negative	21	23	21	19	21
Neutral	39	12	36	19	33
Would you feel reluctant to raise (further) concerns with your employer?					
Yes	25	8	18	12	19
No	67	76	69	70	69
Don't have concerns	7	16	11	17	11
Can't say	1	0	2	1	1
Have you ever been transferred from a smoking to non-smoking area in your workplace?					
Yes	10	2	2	1	6
No	90	98	98	99	94
Do you recall any media coverage about a non-smoking NSW female bar worker who was awarded a payout in a ruling that her throat cancer was caused by passive smoking at work?*					
	(n=304)	(n=17)	(n=29)	(n=19)	(n=369)
Yes	79	76	66	53	77
No	20	24	34	47	23
Can't say	1	0	0	0	0
Has this case made you more concerned about your exposure to tobacco smoke in your workplace?					
	(n=241)	(n=13)	(n=19)	(n=10)	(n=283)
Yes, a lot concerned	34	23	37	10	33
Yes, a little concerned	30	23	11	20	28
No	35	54	53	70	38
Can't say	2	0	0	0	1

Due to rounding not all columns sum to 100.

*Asked only of people exposed to ETS in their workplace at time of survey.

Table 6 Opinions, concerns and actions, by smoking status

	Never-smoker (n=497) %	Former smoker (n=226) %	Current smoker (n=314) %	Total (n=1037) %
I find other people's tobacco smoke				
Enjoyable	0	1	1	0
Doesn't bother me	10	22	52	26
Bothers me slightly	29	35	32	31
Bothers me a lot	61	42	15	43
Are you concerned about the potentially harmful effects to your health of exposure to ETS?				
Yes, a little concerned	24	28	36	29
Yes, a lot concerned	63	49	30	50
No	13	22	34	21
Left a job – smoky environment				
Yes	4	3	1	3
No	96	97	99	97
Avoided employment – smoky environment				
Yes	8	5	1	5
No	92	95	99	95
Have you raised concerns about passive smoking in the workplace?				
Yes	25	19	10	19
No	75	81	90	81
Employer's reaction				
Positive	39	51	69	46
Negative	27	15	7	21
Neutral	35	33	24	33
Would you feel reluctant to raise (further) concerns with your employer?				
Yes	22	18	15	19
No	67	73	71	68
Don't have concerns	11	9	13	11
Can't say	1	0	2	1
Have you ever been transferred from a smoking to non-smoking area in your workplace?				
Yes	7	5	4	6
No	93	95	96	94
Do you recall any media coverage about a non-smoking NSW female bar worker who was awarded a payout in a ruling that her throat cancer was caused by passive smoking at work?*				
	(n=183*)	(n=56*)	(n=118*)	(n=357*)
Yes	75	79	78	76
No	24	21	22	23
Can't say	1	0	0	1
Has this case made you more concerned about your exposure to tobacco smoke in your workplace?				
Yes, a lot concerned	42	34	16	32
Yes, a little concerned	26	32	30	28
No	31	30	53	38
Can't say	1	5	0	1

Due to rounding not all columns sum to 100.

*Asked only of people exposed to ETS in their workplace at time of survey.

Overall, 77% of union members who were still being exposed to ETS in their workplace recalled media coverage regarding a non-smoking Australian female bar worker (Marlene Sharp) who had been awarded damages for throat cancer caused by passive smoking at work. For those who recalled the case, we queried whether it had raised their personal level of concern about exposure to ETS. In response, 33% of respondents indicated they were concerned ‘a lot’ and 28% ‘a little’ with regard to their own workplace. Hospitality workers reported a slightly higher level of concern than others for their own health (although this was not statistically significant).

Table 6 shows the opinions, concerns and attitudes of the workers by smoking status. Not surprisingly, there were different responses from current smokers, former smokers and never-smokers. Current smokers were significantly more likely than former smokers or never-smokers to indicate that exposure to other people’s tobacco smoke did not bother them. Although it was not unexpected that a high percentage of never- and former smokers would report being concerned about the potentially harmful effects of exposure to ETS, it was notable that 66% of current smokers were concerned. Significantly fewer smokers (but still 10%) reported raising concerns about passive smoking with their employers, compared with never-smokers (25%) and former smokers (19%). Smokers reported that employers reacted positively to concerns about ETS significantly more often than never-smokers or former smokers. Overall, smokers were more accepting of exposure to ETS at work; nevertheless, considerable numbers of them were concerned that their exposure to ETS may affect their health.

Discussion

This survey of members from the Victorian Branch of the Australian Liquor, Hospitality and Miscellaneous Workers Union found 54% of union members to be working in environments that do not completely ban smoking and 34% to report being exposed to ETS during their typical working day. The study confirmed that workplaces with total smoking bans had a high level of compliance with these restrictions, with no workers in these settings indicating exposure to ETS at work. Given the weight of evidence for the adverse health effects of exposure to ETS, these findings suggest that in a state where, with some exceptions, workplace smoking policies are primarily left to the employer, a considerable percentage of union members run an increased risk of disease from exposure to ETS. The survey clearly indicates that, compared with other workers, hospitality workers are working in environments with more permissive smoking policies. Consistent with this, 56% of hospitality workers report being exposed to ETS during a typical day at work, compared with

between 6% and 18% of other workers. This means that hospitality workers are at comparatively higher risk of disease from ETS than other worker groups.

Overall, 79% of workers were concerned about exposure to ETS, including 66% of smokers. Hospitality workers reported a higher level of concern about exposure to ETS at work, consistent with their higher exposure to ETS. While hospitality workers were found to have previously raised more concerns about passive smoking with their employers than other worker groups, they were more likely to indicate reluctance to raise further concerns. Compared with the level of concern about exposure to ETS, taking personal action to limit one's exposure or to raise concerns was relatively uncommon.

These are consistent with the findings of many previous studies, that at an individual level, 'people tend to suffer in silence' rather than ask a smoker not to light up, in order to avoid a potentially difficult social interaction (Davis, Boyd & Schoenborn 1990; Wakefield et al. 1995). Smokefree policies exempt people from having to advocate at the individual level not to be exposed to ETS, by providing a clear guideline for smokers and non-smokers that smoking is not permitted in the workplace. This principle applies as much to workers as it does to customers and to the public at large.

One respondent commented on this very situation: 'It is so exasperating constantly being around smoking. A lot of workers are very angry, the workers see it as managers not caring (they sit in their smokefree offices). The managers are more concerned about losing profit than the health of their workers'. Another said she 'asked for transfer because I had quit smoking and was using patches and had felt ill due to passive smoking. I was unable to transfer due to popularity of the non-smoking area'.

This information provides support for efforts to further strengthen smokefree policies in the workplace. One respondent summed up her feelings on being exposed to ETS and wanting protection. She said, 'I am hoping for smoking bans in gaming rooms and hotels. I believe it is unfair that other employees in other industries are protected, but those working in gaming venues/hotels are not. I feel like a second-class citizen; why should I have to breathe in someone else's smoke?'

When attitudes, opinions and concerns were compared according to smoking status, we clearly observed less opposition to passive smoking in the workplace by current smokers as compared with never- and former smokers. However, the high level of concern reported by current smokers (66%) is noteworthy. Further, two-thirds of smokers reported being concerned about the harmful effects to health of ETS, while nearly 50% also reported being at least slightly

bothered by other people's tobacco smoke. Population survey data from 1998/1999 found that 36% of tobacco smokers reported being bothered by exposure to other people's tobacco smoke (Mullins, Trotter & Letcher 2000). Our results suggest that in the past three years, there has been an increase in smokers' concerns. While the sample populations were different in the two surveys, the results underline the point that, even among smokers, exposure to other people's tobacco smoke is offensive and a health concern.

This study demonstrates that many workers, especially hospitality workers, continue to be exposed to ETS during their work day. These workers are concerned about the health effects from this exposure and, while they continue being exposed to ETS, they have an increased risk of disease. The study also showed that the only workers who are not exposed to ETS in the workplace have completely smokefree policies at their workplace. Thus partial restrictions do not eliminate ETS from the workplace and the only way to effectively protect workers and patrons is to introduce total bans on smoking.

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