

**《2005 年吸煙(公眾衛生)(修訂)條例草案》委員會  
政府當局就下列事項作出回應 -  
擴大法定禁煙區**

**目的**

1. 本文件旨在闡述政府當局就《2005 年吸煙(公眾衛生)(修訂)條例草案》(條例草案)下有關擴大法定禁煙區修訂建議的最新立場，並回應多個業界團體和組織在二零零五年十月六日、十月二十四日及十月三十一日在立法會對條例草案表達的意見及訴求。

**背景**

2. 根據現行《吸煙(公眾衛生)條例》(條例)，法定禁煙規定不適用於 200 個座位或以下的食肆。室內座位超過 200 個的食肆，須最少把三分一的面積劃為禁煙區。事實上，由於二手煙會從吸煙區擴散至非禁煙區，這項規定無法有效保障食肆的顧客和員工免受二手煙影響，而且在執行上亦對食肆管理層造成不便，以及導致吸煙者與非吸煙者發生衝突。在其他公眾地方及工作間，二手煙也對公眾造成影響。

3. 為解決這些問題，我們在條例草案中建議把室內工作間和公眾地方納入成為法定禁煙區。我們也建議所有食肆的室內地方，不論其面積及座位數目，一律禁止吸煙。禁煙規定亦應適用於酒吧、卡拉 OK 場所、麻將館、商營浴室和公眾街市等的室內地方。

4. 為了令以上所有處所適應新安排，我們在條例草案中，有關擴大禁煙區的條文內，附註有 90 天的適應期。

**討論重點**

5. 然而，自條例草案推出以來，我們注意到飲食及娛樂業界提出條例草案對他們經營的行業可能受到的影響及具體顧慮。他們早前向法案委員會和政府當局表述了他們行業的營運特質，以及擔心條例草案對其造成的可能經濟損失，包括他們擔心禁煙會影響客人光顧的意慾，因而減少經營者的利潤，也可能令員工失業。

6. 在過去的一段日子，局方與法案委員會以及業界代表進行了多次討論。期間，有建議認為政府應該發出「吸煙」和「非吸煙」兩種牌

照予經營者，讓他們和顧客可作出選擇。我們認為有關建議不可行，理由是基於兩大考慮：（一）有關建議未能有效地防止顧客和員工吸入二手煙，與保障公眾健康的大前提相違背；（二）發出兩種牌照會造成不公平競爭，對相同行業不能一視同仁。

7. 也有建議要求政府容許在室內場所設立「吸煙房間」，把吸煙和不吸煙的客人分開，或分時段容許客人在某些時間（主要為深夜）才可吸煙，而其他時間（主要日間）為不吸煙。我們認為，由於國際間包括世界衛生組織，均未能在室內進行吸煙的情況下為空氣質素訂下所謂「安全水平」。香港不能貿貿然為「吸煙房間」以及「非吸煙房間」訂下有科學根據，並為醫學界和國際接受的「健康」或「安全」的空氣質素。此外，醫學上也證明，香煙內的有毒物質會長期停留在室內。因此，分時段的建議也未能保障客人不受二手煙的影響。事實上至今仍未有國際認可的抽風系統可以把二手煙的殘留完全抽離房間。在附件是一些國際組織在這方面的文件，供各位議員參考。

8. 從公眾衛生和保障市民健康的立場而言，我們以循序漸進方式推行控煙的政策一直貫徹至今。經過二十多年在禁煙工作上的努力，我們覺得現在是適當的時候在有關工作方面踏出重要的一大步。立法會內，醫學界，反吸煙團體、地區人士和市民大眾都支持我們的控煙工作。另外，根據世界銀行經濟學家的評估，在室內工作間實施全面禁煙能為僱主減省多項支出，包括員工倦勤或不適的代價，員工醫護開支、人壽及火災保費、維修費及清潔費等。

### **政府當局的最新立場**

9. 我們必須重申，在原則方面，我們認為無論是吸煙者本身、顧客以及員工，都絕對沒有必要吸入二手煙。不過，我們理解個別受影響較大的行業可能需要較有彈性的特別安排，以協助他們過渡和轉型，及協助他們顧客中的吸煙者逐步適應條例的要求。我們有需要在兩者之間找出平衡。我們因此建議，在實施室內禁煙的措施時，容許下列行業在適應期方面作出以下的調整：

	條例草案 原訂的適應 期	最新擬訂實施 禁煙的日期
室內工作間、食肆、桌球室、卡拉 OK 以及容許各年齡層光顧的酒吧	90 天	二零零七年 一月一日
只准年滿 18 歲以上人士光顧的酒吧、麻將館、商營浴室、麻將會所以及夜總會	90 天	二零零九年 七月一日

### 考慮重點

10. 由於絕大部份市民都支持在室內工作間及食肆的室內地方內全面禁煙。加上在食肆方面，光顧的客人來自不同年齡，包括小孩、長者、孕婦和其他非吸煙的市民，我們認為此等場所必須率先實施全面室內禁煙的措施，以保障大眾和員工的健康。同樣地，桌球室、卡拉 OK 及容許所有年齡人士進入的酒吧，我們認為也必須盡早禁煙，以保障來自社會上不同階層、行業及類型的顧客。我們知道很多青少年、學生和不吸煙的人士也會光顧這類場所。只有盡快在這些處所推行禁煙，才可有效保障他們免受二手煙的影響。

11. 香港的酒吧業有著獨特的經營模式。相比其他的國家和地區，我們有較多的酒吧開設在高層商業樓宇內。吸煙的顧客需要離開酒吧到達室外的地方吸煙，可能會對經營者和客人構成不便。為了方便這些酒吧改變他們的營運模式，甚或搬遷到其他地方，我們建議准許那些只容許 18 歲以上人士進入的酒吧在二零零九年七月一日實施禁煙。我們也會要求它們在處所門外清楚註明該等酒吧只容許成年人進入。

12. 至於其他可在二零零九年七月一日實施禁煙的四類行業，則分別為根據《賭博條例》(第 148 章)第 22(1)(b)條獲發牌照批准在其內進行使用麻將牌或天九牌的博彩遊戲的處所(統稱麻將/天九館)、根據商營浴室規例(香港法例第 132I 章)發出牌照的商營浴室，以及沒有指定牌照的麻將會所及夜總會。我們主要考慮到業界向我們反映，他們的顧客和員工絕大部份都是吸煙的成年人。此外，由於他們有獨特的經營運作，以致客人很難選擇在任何時候離開場所，到室外吸煙，之後再

返回該場所。我們認為這類行業可能需要較長的適應期。我們會在條例草案中訂定條件，規限成為「麻將會所」及「夜總會」的要求。

13. 我們希望，較長的適應期能夠平衡我們實施室內全面禁煙的最終目標，同時回應業界的訴求。我們希望業界可以利用適應期，妥善訓練員工進行控煙工作，和協助員工戒煙，並向顧客解釋禁煙的安排，政府亦會大力推動控煙和戒煙的工作。到二零零九年中，社會上整體，包括光顧這些場所的人士，應該接受並習慣了禁煙的規定。屆時在娛樂場所實行禁煙便會相對容易為社會各階層接受和適應。

14. 與此同時，儘管我們建議為上述的娛樂場所設立較長的適應期，我們希望這些場所可以在過渡期間，主動地設立一些「非吸煙」的房間或劃定場地，盡量減低不吸煙的客人在室內受到二手煙的禍害。

### **業界諮詢**

15. 一直以來，我們和飲食及娛樂業界的代表們均有保持溝通。飲食界代表期望政府當局延長寬限期，給予他們更多時間做準備；另外也有代表希望政府當局容許現存食肆設立「吸煙房」，直至其他所有公眾處所都已實行全面禁煙為止。娛樂業的代表則認為，基於他們的行業的獨特性，最理想的做法就是他們完全豁免於禁煙的規限、或設立吸煙/非吸煙房間、或分時段實行禁煙。

### **雪茄專賣店**

16. 經過審慎考慮，我們決定對雪茄專賣店的「試煙房間」實行豁免禁煙的安排。我們明白有關零售店的營運模式 – 顧客需要在店內先作嘗試，才會購買雪茄。我們必須強調，此豁免只適用於**純粹**售賣雪茄的商舖，我們會要求此類店舖提供有徹底間隔，以及獨立抽風系統的房間讓顧客進行試食。在此期間，僱主亦不可要求員工到試食房內提供任何服務。

### **跟進行動**

17. 根據現行法例和發出牌照的規定，「酒吧」、「麻將會所」、「夜總會」和某些食肆或酒樓經營所獲發的牌照分別不大。為了執行不同的控煙安排，我們因此有需要進一步明確地分辨出這幾類場所。我們會透過法律條文，鈎劃出「麻將會所」、「夜總會」以及「只限 18 歲以

上人士進入的酒吧」三類沒有特定牌照的行業特徵，包括嚴格限制這些場所出售食物的類別和數目。此舉主要是杜絕其他非真正經營以上行業的處所，例如食肆，以改變名稱等方法獲得較長的適應期。

18. 請法案委員會注意政府當局的最新立場。我們就有關條文擬訂委員會審議階段修正案，稍後提交委員會審議。

衛生福利及食物局  
二零零六年一月

## frequently asked questions about second-hand smoke

### ***What is second-hand smoke?***

Second-hand smoke results from the "sidestream" smoke that comes from the burning tip of a cigarette and the "mainstream" smoke that is exhaled by the smoker. Second-hand smoking, passive smoking, involuntary smoking or exposure to environmental tobacco smoke (ETS) all refer to the phenomena of breathing other people's smoke.

### ***What's in second-hand smoke?***

Second-hand smoke is the smoke that individuals breathe when they are located in the same air space as smokers. Second-hand smoke is a mixture of exhaled mainstream smoke from the tobacco user, sidestream smoke emitted from the smoldering tobacco between puffs, contaminants emitted into the air during the puff, and contaminants that diffuse through the cigarette paper and mouth end between puffs.<sup>1</sup> It is a complex combination of over 4000 chemicals in the form of particles and gases. It includes irritants and systemic poisons such as hydrogen cyanide, sulphur dioxide, carbon monoxide, ammonia, and formaldehyde. It also contains carcinogens and mutagens such as arsenic, chromium, nitrosamines, and benzo(a)pyrene. Many of the chemicals, such as nicotine, cadmium and carbon monoxide, damage reproductive processes. Second-hand smoke is a major indoor air pollutant. It has been classified by the United States Environmental Protection Agency as a "class A" or human carcinogen for which there is no safe level of exposure.

### ***How does second-hand smoke affect health?***

Non-smokers who breathe second-hand smoke suffer many of the same diseases as regular smokers. Heart disease deaths as well as lung and nasal sinus cancers have been causally associated with second-hand smoke exposure. Second-hand smoke also causes a wide variety of adverse health effects in children including bronchitis and pneumonia, development and exacerbation of asthma, middle ear infections, and "glue ear", which is the most common cause of deafness in children. Exposure of non-smoking women to second-hand smoke during pregnancy reduces fetal growth, and postnatal exposure of infants to second-hand smoke greatly increases the risk of sudden infant death syndrome (SIDS). Tobacco smoke also causes immediate effects such as eye and nasal irritation, headache, sore throat, dizziness, nausea, cough, and respiratory problems.

### ***What is the extent of the problem of second-hand smoke?***

Exposure to second-hand smoke is a widespread problem that affects people from all cultures and countries. This exposure occurs throughout ordinary situation in daily life: in homes, at work and school, on playgrounds and public transport, in restaurants and bars--literally everywhere people go.

Surveys conducted around the world confirm widespread exposure. One survey estimated that 79 % of Europeans over age 15 were exposed to second-hand smoke. Another estimated that 88% of all non-smokers in the United States were exposed to second-hand smoke. Recent data from South Africa shows that 64 % of children below age five in Soweto live with at least one smoker in the house. The Cancer Society of New Zealand reports that second-hand smoke is the third largest killer in the country, after active smoking and alcohol use.

### ***Are well-ventilated non-smoking sections the answer?***

No. Although good ventilation can help reduce the irritability of smoke, it does not eliminate its poisonous components. When smoking sections share ventilation with non-smoking areas, the smoke is dispersed everywhere. Smoking sections only help protect non-smokers when they are completely enclosed, have a separate ventilation system that goes directly outdoors without re-circulating air in the building, and when employees are not required to pass through them.

<sup>1</sup> Environmental Protection Agency. Respiratory health effects of passive smoking: Lung cancer and other disorders. Washington, D.C.: Office of Health and Environmental Assessment, 1992.



### ***So how can we protect people from second-hand smoke?***

Governments can regulate and legislate smoking bans in public places, educate people about the dangers of second-hand smoke, and provide support for those who wish to quit smoking. Employers can initiate and enforce smoking bans in workplaces. Parents can stop smoking in the house and car, particularly around children, and ask others to do the same. They can also ensure that their children's day-care, school and after-school programs are smoke-free. Individuals can let their family, friends and co-workers know that they do mind if they smoke near them.

Work with your local organizations to initiate actions on second-hand smoke.

### ***Are smoking restrictions hard to enforce?***

Most of the public -- even smokers -- support smoke-free spaces. Smoking bans in workplaces and public places work when people are aware of them. The public should know in advance that smoking bans are being implemented, and they should know the health reasons for smoking bans. Good education and advance planning lead to self-enforcement and success of smoking restrictions.

### ***Do smoking restrictions hurt business?***

No. Most employers who go smoke-free save money by increasing productivity, lowering maintenance and cleaning costs, and lowering insurance coverage. Studies of sales receipts from restaurants and bars in the US before and after smoking bans have found that sales usually stay the same or go up after a smoking ban.

### ***...then why are smoke-free places so rare?***

The tobacco industry spends millions to fund misinformation campaign on second-hand smoke. Scientists and consultants have been hired to not only confuse the public about the validity of scientific data, but to also create doubt about the researchers who produce the data and about the science itself. In addition to attacking legitimate studies, bogus research projects that downplay the seriousness of second-hand smoke are funded and promoted.

Tobacco lobbyists and lawyers deflect government regulation of second-hand smoke, and this has been supplemented, aided by huge tobacco contributions to political campaigns. When money and misinformation don't work, the industry promotes false solutions to control second-hand smoke.

Although evidence shows that ventilation is *not* an effective solution to the problem of second-hand smoke, the industry continues to push for this option, even forming indoor air consulting "front groups" who downplay the risks of second-hand smoke.

A campaign to promote "courtesy of choice" as an alternative to banning smoking in public places has been launched worldwide. This implies that the serious problem of second-hand smoke can be solved merely by smokers asking for permission before they light up, or by having separate smoking and non-smoking sections. Second-hand smoke is thus portrayed as a mere annoyance for non-smokers, rather than as a health issue. The industry also funds smokers rights' movements to create so-called independent opposition to smoking bans. People concerned about second-hand smoke are then branded as zealots.

Fortunately, tobacco industry opposition to clean air can be defeated. Your actions will make a difference. Become a leader in your workplace, your organization, your community, and your home. Speak up for clean air and make your voice heard! Let's clear the air.



## how second-hand smoke harms and kills non-smokers

Second-hand smoke is a complex mix of thousands of chemicals. At least 40 substances in second-hand smoke have been shown to cause cancer. Tobacco smoke also contains large quantities of carbon monoxide, a gas that inhibits the blood's ability to carry oxygen to body tissues including vital organs such as the heart and brain, as well as other substances that contribute to heart disease and stroke.

According to a 1997 report of the California Environmental Protection Agency, the estimated annual tobacco-induced death rates among non-smokers in California range from 147 to 251 people per million inhabitants. If the same rate applied in the European Union, this would work out to an annual toll of 55,000 to 94,000 victims of second-hand smoke. In China, the same rate would result in a staggering death toll of 185,000 to 317,000.

Exposure to second-hand smoke can cause both long-term and immediate effects on human health. Immediate effects include irritation of the eyes, nose, throat and lungs. Nonsmokers, who are generally more sensitive to the toxic effects of tobacco smoke than smokers, may experience headaches, nausea, and dizziness. Second-hand smoke places extra stress on the heart and affects the body's ability to take in and use oxygen. The long-term health impact of second-hand smoke is increased cancer and heart disease rates after years of exposure. For asthma sufferers, however, tobacco smoke can cause immediate danger by triggering attacks. The majority of asthma sufferers report symptoms ranging from discomfort to acute distress from exposure to second-hand smoke.

### second-hand smoke and children

Children's vulnerability to second-hand smoke is a particular concern, both for medical and ethical reasons. Children's lungs are smaller and their immune systems are less developed—which make them more likely to develop respiratory and ear infections triggered by second-hand smoke. Because they are smaller and breathe faster than adults, they breathe in more harmful chemicals per pound of their weight than an adult would in the same amount of time. Finally, children simply have less choice than adults. They are less likely to be able to leave a smoke-filled room if they want to: infants cannot ask, some children may not feel comfortable asking, and others may not be allowed to leave if they do ask.<sup>1</sup>

Extensive studies of the health effects of second-hand smoke on children found the following:

- Exposure to tobacco smoke causes an increase in bronchitis, pneumonia and other respiratory illnesses.
- It causes both acute and chronic middle-ear infections. In 1997, the California Environmental Protection Agency estimated that this effect alone accounted for 0.7 to 1.6 million visits to doctors per year across the United States.<sup>2</sup> A 1996 study suggested that 13% of ear infections in the United States were caused by tobacco.<sup>3</sup>
- It triggers asthma attacks in children who already have asthma and some authorities have concluded that it actually induces asthma in healthy children: in 1992, the U.S. Environmental Protection Agency estimated that every year, second-hand smoke exposure resulted in 8,000 to 26,000 new cases of asthma amongst children.<sup>4</sup>

<sup>1</sup> Canadian Health Network, [www.canadian-health-network.ca](http://www.canadian-health-network.ca).

<sup>2</sup> Office of Environmental Health Hazard Assessment of the California Environmental Protection Agency, *Health Effects of Exposure to Environmental Tobacco Smoke*, 1997. [http://www.oehha.org/air/environmental\\_tobacco/finalets.html](http://www.oehha.org/air/environmental_tobacco/finalets.html).

<sup>3</sup> DiFranza J and Lew R, "Morbidity and Mortality in Children Associated with the Use of Tobacco Products by Other People," *Paediatrics*, 1996; 97:560-568.

<sup>4</sup> U.S. Environmental Protection Agency (U.S. EPA, 1992). *Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders*. U.S. EPA Publication No. EPA/600/6-90/006F.





- Exposure to second-hand smoke very substantially increases the risk of Sudden Infant Death Syndrome (SIDS), also known as crib or cot death. This may be due to *in utero* exposure to tobacco smoke or exposure to second-hand smoke as infants. A WHO panel of international experts in 1999 concluded that maternal smoking causes one-third to one-half of SIDS cases.<sup>5</sup>
- Smoking by pregnant women and exposure of non-smoking pregnant women to tobacco smoke reduces the average birth weight of their babies. Babies with low birth weight may face an increased risk of developing medical problems and learning disabilities.

### second-hand smoke in the workplace

Second-hand smoke also poses a threat in the workplace. Toxins and carcinogens spread quickly throughout offices, hotels, restaurants and other indoor places of work. Most workers are not in a position to change their work environment or leave their jobs to protect their health. In many cases, where smoke-free workplaces are not guaranteed, employees find themselves obliged to spend the majority of their waking hours in a health-threatening situation. In the case of a restaurant employee, the table below shows a selection of chemicals he or she would inhale directly in a 300m<sup>2</sup> area during one 8-hour shift!<sup>6</sup>

<i>chemical</i>	<i>amount (ug)</i>	<i>chemical</i>	<i>amount (ug)</i>
carbon monoxide	5606	<b>benzo[a]pyrene</b>	<b>18</b>
tar	3128	propionaldehyde	17
nicotine	678	resols	15
<b>acetaldehyde</b>	<b>207</b>	hydrogen cyanide	14
nitric oxide	190	styrene	13
isoprene	151	butyraldehyde	12
resorcinol	123	<b>acrylonitrile</b>	<b>11</b>
acetone	121	<b>crotonaldehyde</b>	<b>10</b>
toluene	66	<b>cadmium</b>	<b>9.7</b>
<b>formaldehyde</b>	<b>54</b>	1-aminonaphthalene	8.5
phenol	44	<b>chromium</b>	<b>7.1</b>
acrolein	40	<b>lead</b>	<b>6.0</b>
<b>benzene</b>	<b>36</b>	<b>2-aminonaphtalene</b>	<b>5.2</b>
pyridine	33	<b>nickel</b>	<b>4.2</b>
<b>1,3-butadiene</b>	<b>25</b>	3-aminobiphenyl	2.4
hydroquinone	24	<b>4-aminobiphenyl</b>	<b>1.4</b>
methyl ethyl ketone	23	<b>quinoline</b>	<b>1.3</b>
catechol	22		

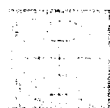
The chemicals in bold are known carcinogens. Among this list are irritants, mutagens, toxins, and substances that increase blood pressure, promote tumors, effect the central nervous system, damage lungs and cause kidney malfunction.

Whether it is at home, at work, at school, in restaurants, theatres or bars—second-hand smoke is a proven health threat to the young and old, from all walks of life, in all countries.

<sup>5</sup> Consultation Report, *International Consultation on Environmental Tobacco Smoke (ETS) and Child Health*, 11-14 January 1999, Geneva. Available on-line at <http://tobacco.who.int/en/health/papers/ets-report.pdf>.

<sup>6</sup> These calculations assume only 10 smokers per 300m<sup>2</sup> each smoking 2 cigarettes per hour and take into account standard ventilation rates. Courtesy of Physicians for a Smoke-Free Canada. More information available at <http://www.smoke-free.ca/factsheets/Chemicals.htm>.





# Smoke-free workplaces

at a glance

## Why should workplaces be smoke-free?

**Smoking harms health:** Smoking harms the health of smokers and those around them. Smokers are at far higher risks of strokes, heart attacks and other cardiovascular diseases; cancers of the lungs, mouth, larynx, bladder, pancreas, kidneys and stomach; emphysema, bronchitis, and tuberculosis. These diseases cause serious illness, disability and premature death. Tobacco causes 4 million deaths worldwide each year, and the numbers are rising fast.

Tobacco smoke also harms non-smokers exposed to so-called second-hand smoke or environmental tobacco smoke (ETS). In addition to smell and irritation to eyes, ETS exposure increases the risk of lung cancer and cardio-vascular and respiratory diseases. In the USA alone, each year ETS kills an estimated 35,000 to 65,000 adult non-smokers from heart disease and 3,000 non-smokers from lung cancer (California Environmental Protection Agency, 1997 and U.S. Environmental Protection Agency, 1993). This is a small fraction of global deaths from ETS.

ETS exposure is common in workplaces. In 1996, an estimated 130 million adult non-smokers in China were exposed to workplace ETS. In the UK in 1999, more than 3 million non-smokers were continuously or frequently exposed to tobacco smoke at work. In France, where there are laws restricting smoking in public spaces, 40% of employees are still exposed to ETS. ETS can interact with chemicals and radiation in workplaces to produce an additive or multiplicative effect and increase significantly the risk of many occupational diseases. In some countries, employers have a legal responsibility to protect the health of their employees. Smoke-free workplaces can reduce employers' legal liability, create safer working environments, improve workers' health and enhance corporate image.

## Employers who keep their workplaces smoke-free and help employees to quit enjoy net benefits

**Smoking costs employers money:** Employers bear direct and indirect costs as a result of employees' smoking, including:

- ▣ More employee absenteeism
- ▣ Decreased productivity on-the-job
- ▣ Increased early retirement due to ill health
- ▣ Higher annual health-care costs for smokers and higher health insurance costs

- ▣ Higher life insurance premiums
- ▣ Higher maintenance and cleaning costs
- ▣ Higher risk of fire damage, explosions and other accidents related to smoking
- ▣ Higher fire insurance premiums.

These costs add up to significant amounts. A 1996 study of Scottish workplaces estimated the total related costs of employee smoking in Scotland at around three quarters of a billion US\$ per year (smoking related absence: \$60 million; productivity losses: \$675 million; losses from fire: \$6 million (Parrot *et al.*, 1996). A 1995 Canadian study estimated the cost to employers at \$3,022 per smoker per year (in 2002 US\$; adjusted for inflation from the original estimate of \$2,565 in 1995 US\$. Conference Board of Canada). Cost data from developing countries are lacking.

The adverse effects of ETS exposure on health and productivity of non-smoking employees add to employers' smoking-related costs.

The benefits from making workplaces smoke-free are far larger than the costs. Cessation programs are relatively low-cost and yield financial returns over the long run that far outweigh their costs. A theoretical model for the US estimates potential long term net benefits of a smoking cessation program at around \$4.5 million for large employers (Warner *et al.*, 1996).

Fears in the hospitality industry (hotels, restaurants etc.) that smoking bans may damage business interests are largely unfounded. Studies of hotels, bars and restaurants in several U.S. states, Canada and Australia all show that smoking bans do not result in business drop-off.

## What can employers do about workplace smoking?

Employers can protect the health of their employees and reduce smoking-related costs by making workplaces smoke-free, and implementing programs to encourage and help smokers to quit. Smoke-free workplaces reduce ETS exposure for all workers, reduce employees' daily tobacco consumption, increase quit rates, and reduce cleaning costs and fire risk. Smoke free policies are easy to implement. Compliance is usually high, especially if employees (smokers and non-smokers) have helped develop the policy and are well-informed about its rationale. Smokers are usually the minority. Surveys show that many smokers and almost all non-smokers support clean air policies.

The goal should be a completely smoke-free workplace. There is no safe level of exposure to ETS. Ventilation cannot "clear the air" and protect workers from exposure. Enclosed smoking rooms may be used as a transitional arrangement, but should be phased out as quickly as feasible. Furthermore, provision of well-ventilated smoking rooms can be costly.

On-site smoking cessation programs make it easier to implement smoke-free workplaces and increase the benefits for employees and employers. Worksite cessation programs are effective in reducing smoking prevalence among employees. A meta-analysis of 20 studies of worksite smoking cessation programs found an average

quit rate after 12 months of 13%, much higher than the national average among all smokers of 2.5% (US, 1990 data). Quit rates were even higher for heavy smokers. Cessation programs are relatively low-cost and are highly cost-effective (Novotny *et al.*, 2000).

As people become better informed about the harm that tobacco products cause to smokers and those who live and work with them, smoke-free environments are becoming the norm. Most airlines, many workplaces and other enclosed public places are now smoke-free. There is a global trend towards safer, cleaner indoor environments.

Goals: Protect workers from harmful effects of second-hand smoke; encourage smokers to quit, to gain health benefits for employees and economic benefits for employers.

Main Activities	Beneficiaries/ Target Groups	Indicators
<b>Make workplaces smoke-free, protect employees from second-hand smoke exposure</b>		
<ul style="list-style-type: none"> <li>establish a written policy with active participation of employees and managers</li> <li>communicate the policy and its rationale clearly and sanctions for non-compliance</li> <li>implement the policy according to agreed timetable</li> <li>monitor, enforce and adjust the policy if necessary</li> </ul>	all employees (including managers)	<ul style="list-style-type: none"> <li>✓ written policy exists that clearly states rationale, time frame, and where – if at all – smoking is permitted in work place</li> <li>✓ % of employees exposed to ETS at work</li> </ul>
<ul style="list-style-type: none"> <li>decide whether the policy should apply to customers, visitors and clients (preferably yes)</li> </ul>	customers, visitors and clients	
<b>Help employees to quit smoking, reduce risks of disease and premature death caused by smoking</b>		
<ul style="list-style-type: none"> <li>for workers who want to quit, ensure access to trained counsellors, cessation support and pharmacological treatments, including nicotine replacement therapy</li> <li>provide information to all workers on benefits of quitting and how to support colleagues</li> </ul>	employees who smoke	<ul style="list-style-type: none"> <li>✓ % of smokers who attempt to quit each year</li> <li>✓ % of quitters still not smoking 12 months after quitting</li> <li>✓ % of employees who smoke (and decreases in this prevalence)</li> </ul>

## How to make a workplace smoke-free

- **Establish a workplace committee.** The committee should include representatives from all parts of the organization. Senior management support and commitment are crucial for the success of the policy.
- **Involve employees and workers' organizations.** Involving employees fully is essential to ensure their cooperation in implementing the policy and to incorporate their suggestions in the program. It is important to know the attitudes of employees and management towards smoking in the workplace before embarking on a smoke-free initiative. Use questionnaires, meetings and focus groups to gather the necessary information. Include representatives from across the organization. Listen to smokers and non-smokers and make sure that employee groups who have high rates of smoking are fully engaged.
- **Formulate a written policy.** The committee should formulate a policy that clearly states objectives and how to achieve them. If possible, integrate the policy with other programs and procedures related to health and safety in the workplace. The policy should include:
  - purpose of the policy (to avoid the harmful effects of smoking and ETS on health)
  - a link between the smoke-free policy and corporate values (e.g. performance or employees as an asset)
  - time frame for implementation
  - a clear statement of whether smoking is permitted on the premises and if so where
  - number and duration of acceptable smoking breaks (breaks should not exceed those for non-smokers)
  - details of support available for smokers, such as counselling and cessation support
  - disciplinary actions or consequences of non-compliance
  - names of contact persons who can answer questions related to the policy.
- **Communicate the policy to employees.** Inform employees from the outset and well before implementation. Focus on smoke, not the smoker, and on health and safety, not on individual rights. Emphasizing benefits of a clean air policy for both smokers and non-smokers is less confrontational and probably more acceptable than emphasizing individual rights of non-smokers. Use available communication tools to reach out to all employees, especially supervisors who will need to implement the policy, and smokers, who will need to adapt to the changes.
- **Provide information and support to smokers.** Provide employees with information about the risks of smoking and benefits of quitting. Use the organization's newsletter, posters, flyers, email and the intranet to deliver the information. Offer practical advice on how to quit. Provide support to smokers willing to quit, which can include time off work to attend counselling and cessation groups, and access to pharmacological cessation products such as nicotine replacement therapy or bupropion. Quitting is very difficult because nicotine is highly addictive; these products increase the success rate of quit attempts. Most smokers make 4–11 quit attempts before finally succeeding.
- **Determine disciplinary measures.** Develop a written disciplinary process and communicate it clearly to all employees. Monitor to ensure proper enforcement by managers.
- **Follow a time table for implementation.** The time table should have clear stages. After the policy is announced, a transition period is required before implementation starts to give employees time to adapt to the new environment. The time frame should not be too long, lest momentum is lost. Development and implementation should generally take 4–12 months.
- **Provide training.** Train middle managers and supervisors to communicate and enforce the policy. Provide training to workers' representatives and peer educators on how to stop smoking and how to provide support for colleagues. Train health and safety professionals to provide advice to smokers or refer workers to available cessation services in-house or to services outside the workplace.
- **Evaluate and monitor implementation.** Periodically assess whether the policy is achieving its objectives. Solicit staff views and review any problem areas, and decide whether the policy needs updating. Review is recommended every 12–18 months.

## Resources

### INSTITUTIONS

- **Safework Program of the International Labor Organization** [www.ilo.org/safework](http://www.ilo.org/safework)  
Carin Håkansta [hakansta@ilo.org](mailto:hakansta@ilo.org)
- **Office on Smoking and Health of the US Centers for Disease Control and Prevention**  
<http://www.cdc.gov/tobacco/index.htm>

## DOCUMENTS AND DATA

### General Information for Employers:

- "Why Smoking in the Workplace Matters: An Employer's Guide", WHO, Regional Office for Europe, 2002. A publication of the WHO European Partnership Project to Reduce Tobacco Dependence. Online at: <http://www.euro.who.int/document/e74820.pdf>, or hard copy from Tobacco Free Initiative, WHO Regional Office for Europe. Explains the rationale for developing an organizational tobacco control policy from an employer's perspective. Concise, readable and clear.
- "Workplace smoking: trends, issues and strategies", Health Canada, 1996. Available online at: [http://www.hc-sc.gc.ca/hppb/cessation/air/workplace\\_smoking/index.html](http://www.hc-sc.gc.ca/hppb/cessation/air/workplace_smoking/index.html) or from the Publications Unit, Health Canada. Telephone: (613) 954-5995 Fax: (613) 941-5366. Comprehensive overview – trends, issues, impact of restrictions, economics, compliance, public support.

### Economic Analysis:

- "Smoking and the bottom line: costs of smoking in the workplace". The Canadian Conference Board. Toronto, 1997. Available online at: <http://www.hc-sc.gc.ca/hppb/cessation/air/bottomline/report.html> or from the Publications Unit, Health Canada. Telephone: (613) 954-5995 Fax: (613) 941-5366. Short study that calculates costs to employers of employee smoking (productivity, absenteeism, insurance premiums and smoking areas).
- The Economics of Health, Safety and Well-being; *Barefoot Economics*: "Assessing the economic value of developing an healthy work environment", Finnish Ministry of Social Affairs and Health and ILO- Safe Work programme. <http://www.ilo.org/public/english/protection/safework/econo/barefoot.pdf> A simple guide on how to estimate costs and benefits of measures to improve workplace safety. A practical tool for use by small businesses, and other decision makers.
- KE Warner, RJ Smith, DG Smith, BE Fries, "Health and Economic Implications of a Work-Site Smoking-cessation Program: A Simulation Analysis," J. of Occupational & Environmental Med. 1996;38: 981-992. A comprehensive simulation analysis of a workplace smoking cessation program that includes benefits to society as well as to employers. A helpful

guide for employers considering potential costs and benefits of smoking cessation programs.

### Evidence:

- J Repace, I Kawachi, S Glantz, "Fact Sheet On Secondhand Smoke", UICC, 1999. <http://www.tobaccopedia.org/cgi-bin/search/seek.cgi?ID=963401235> Comprehensive review and summary of evidence on health hazards caused by Environmental Tobacco Smoke. Explains clearly why ventilation and air cleaning cannot reduce second-hand smoke to acceptable levels. Also summarizes studies on impact of clean air policies on revenues of hotels, restaurants and bars.

### Practical Guides:

- "Tobacco in the Workplace: Meeting the Challenges. A Handbook for Employers", WHO, Regional Office for Europe, 2002. A publication of the WHO European Partnership Project to Reduce Tobacco Dependence. Online at: <http://www.euro.who.int/document/e74819.pdf>, or hard copy from Tobacco Free Initiative, WHO Regional Office for Europe. A step-by-step guide on how to adopt a strong and cost-effective response to the problem of smoking in the workplace.
- "Making Your Workplace Smokefree: A Decision Maker's Guide", US Department of Health and Human Services, 2000. Available online at: [http://www.cdc.gov/tobacco/research\\_data/environmental/etsguide.htm](http://www.cdc.gov/tobacco/research_data/environmental/etsguide.htm) Details on the costs, consequences, benefits of a smoke free workplace policy. The guide provides step-by-step directions on how to develop and implement smoke free policies.
- "Guidebook on Tobacco Reduction in the Workplace: an Alberta Perspective", Alberta Tobacco Reduction Alliance, 1999. Available online at: <http://www.smoke-free.ca/WNTD2001-cdcontents/wntd2001-letscleartheair/Resources/Alberta/ATRAguidebook.pdf> A step-by-step guide to help companies plan and implement a smoking-reduction program.
- J. Mackay *et al.*, "A Guide to Creating a Smoke-free Workplace". Provides practical and specific help, including an example of an employee survey and smoke-free policy, detailed information on costs and benefits. Available online, hot linked to this fact sheet at [www.worldbank.org/hnp](http://www.worldbank.org/hnp), at a glance series (by kind permission of J. Mackay).

Online versions of the "at a glance" series, with e-linkages to resources and more information, are available on the World Bank Health, Nutrition and Population web site: [www.worldbank.org/hnp](http://www.worldbank.org/hnp)

# Environmental Tobacco Smoke

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**Position Document**

**Approved by ASHRAE Board of Directors  
June 30, 2005**



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**AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC.**  
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## Executive Summary

This position document has been written to provide the membership of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and other interested persons with information on the health consequences of exposure of nonsmokers to tobacco smoke in indoor environments, and on the implications of this knowledge for the design, installation and operation of heating, ventilating, and air-conditioning (HVAC) systems. ASHRAE's sole objective is to advance the arts and sciences of heating, refrigeration, air conditioning and ventilation, and their allied arts and sciences and related human factors, for the benefit of the public. Therefore, the health effects of indoor exposure to emissions from cigarettes, cigars, pipes, and other tobacco products have long been relevant to ASHRAE.

For more than three decades, researchers have investigated the health and irritant effects among non-smokers exposed to tobacco smoke in indoor environments. The preponderance of credible evidence links passive smoking to specific diseases and other adverse health effects in people. A number of national and global review groups and agencies have concluded that exposure of nonsmokers to tobacco smoke causes adverse effects to human health. No cognizant authorities have identified an acceptable level of environmental tobacco smoke (ETS) exposure, nor is there any expectation that further research will identify such a level.

International experience has been gained over several decades with using various strategies to reduce ETS exposure, including separation of smokers from nonsmokers, ventilation, air cleaning and filtration, and smoking bans. Only the last provides the lowest achievable exposures for nonsmokers and is the only effective control method recognized by cognizant authorities (see *Findings of Cognizant Authorities*). At the time of this writing, several nations, eleven states in the U.S. and hundreds of municipalities and other jurisdictions have banned tobacco smoking completely in all public buildings and workspaces. The U.S. government has banned smoking in its workplaces. Experience with such bans documents that they can be effective, practically eliminating ETS exposure of non-smokers. While exposure is decreasing internationally because of these smoking bans in public and private buildings, and a decrease in the prevalence of smoking, substantial portions of the population are still regularly exposed in workplaces, homes and public places, such as entertainment venues.

ASHRAE concludes that:

- It is the consensus of the medical community and its cognizant authorities that ETS is a health risk, causing lung cancer and heart disease in adults, and exacerbation of asthma, lower respiratory illnesses and other adverse effects on the respiratory health of children.
- At present, the only means of effectively eliminating health risk associated with indoor exposure is to ban smoking activity.
- Although complete separation and isolation of smoking rooms can control ETS exposure in non-smoking spaces in the same building, adverse health effects for the occupants of the smoking room cannot be controlled by ventilation.
- No other engineering approaches, including current and advanced dilution ventilation or air cleaning technologies, have been demonstrated or should be relied upon to control health risks from ETS exposure in spaces where smoking occurs. Some engineering measures may reduce that exposure and the corresponding risk to some degree while also addressing to some extent the comfort issues of odor and some forms of irritation.
- An increasing number of local and national governments, as well as many private building owners, are adopting and implementing bans on indoor smoking.
- At a minimum, ASHRAE members must abide by local regulations and building codes and stay aware of changes in areas where they practice, and should educate and inform their clients of the substantial limitations and the available benefits of engineering controls.
- Because of ASHRAE's mission to act for the benefit of the public, it encourages elimination of smoking in the indoor environment as the optimal way to minimize ETS exposure.