

MÉMOIRE

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Présenté à : **COMMISSION PARLEMENTAIRE**
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MÉMOIRE

En janvier 2005, le gouvernement du Québec a lancé une vaste consultation populaire, dans le but de permettre aux citoyens de se prononcer sur l'évolution de la lutte contre le tabagisme, dans laquelle le gouvernement a pris qualité de fer de lance.

Pour diriger les intervenants dans leur réflexion, le gouvernement a produit un document de consultation intitulé « **Pour notre progrès vers un avenir sans tabac / Développement de la législation québécoise contre le tabagisme** ».

À lui seul, le titre de ce document fait réfléchir. Qui donc a la prétention de dire que l'ensemble des citoyens du Québec veut se tourner résolument vers un avenir sans tabac? Est-ce là vraiment la volonté de tous? Est-ce même la volonté de la majorité? Pourquoi le bannissement pur et simple de l'activité légale de fumer devrait-il l'emporter sur des solutions intégrées faites sur mesures pour certains commerces?

C'est précisément à cet aspect que s'intéresse la Corporation des propriétaires de bars, brasseries et tavernes du Québec (ci-après CPBBTQ), lorsqu'il est question d'interdire de fumer dans ce type de commerce.

Éviter une approche trop radicale

À l'évidence même, le gouvernement comme chef de file dans cette lutte, semble favoriser la thèse anti-tabagiste « presque tous azimuts », comme le démontre l'écrasant plaidoyer en ce sens que contient son document de consultation de janvier 2005, de même que son projet de loi 112 sur l'interdiction de l'usage et de la vente du tabac dans les bars, les tavernes et les brasseries du Québec. La CPBBTQ trouve malheureux que le débat actuel, précisément sur le type de commerce qui l'intéresse, n'ait pas pris place bien avant janvier 2005, afin de permettre à l'industrie du divertissement de s'adapter graduellement à ce courant populaire qui, du reste, n'a rien d'illégitime.

Il y a dans le projet de loi 112 du gouvernement des éléments de réflexion qui ne doivent pas échapper à son jugement ni à son devoir d'éviter de victimiser une tranche de la population, pour répondre aux aspirations d'une autre, lorsque

vient le temps de faire ou de modifier une loi. Il y a ici un devoir de ne pas agir trop radicalement.

Des distinctions à faire

Dans un premier temps, la CPBBTQ soumet que le gouvernement se doit d'apprécier le fait qu'il y a une nette différence entre la situation d'un bar et celle d'un restaurant. Dans ce dernier commerce, l'idée de ne pas fumer là où les gens mangent n'est ni plus ni moins qu'un exercice de gros bons sens.

Aussi l'application d'une loi anti-tabac renforcée dans ces lieux, n'aurait certainement pas le même impact financier que dans un débit d'alcool à proprement parler. Bien que liés tous deux aux rencontres sociales, il reste qu'ils sont dans l'ensemble socialement différents dans leurs objectifs et leurs outils de divertissement.

À cet égard, plusieurs études, jusqu'à tout récemment, ont traité essentiellement de l'incidence économique de l'interdiction de fumer dans divers lieux en Amérique du Nord et notamment au Canada, et plus précisément dans la province de l'Ontario. Or, peu d'études ont restreint la portée de leurs variables utilisées aux fins d'analyse statistique principalement aux bars, brasseries, pubs et tavernes. Toutefois, une récente étude, évaluant l'impact de l'interdiction de fumer en Ontario, démontre clairement les torts au niveau des ventes globales qui ont été subis uniquement dans le secteur des bars et des pubs.

Les résultats du rapport Evans, dont il est question, sont plus que frappants! Après l'entrée en vigueur de l'interdiction de fumer, les ventes des bars et des pubs ont été inférieures à 23,5% à Ottawa, de 18,7% à London, de 24,3% à Kingston et de 20,4% à Kitchener.

Une seconde étude, cette fois-ci applicable à la ville de New York, reflète également une réalité plus qu'éventuelle, et voir même plus qu'inquiétante pour tous les tenanciers et les propriétaires de bars du Québec. Ainsi, depuis l'abolition de la vente de tabac, et de l'application de la restriction de l'usage du tabac dans les bars et les pubs de New York en 2003, plus de 2650 pertes d'emploi ont été recensées de même qu'une diminution en termes de salaire de 50 millions en dollars américains!

À la lumière de ces données, il est à craindre que la diminution des ventes et des pertes d'emploi dans les bars et les pubs, suite à l'adoption d'un tel projet de loi, affecte également le Québec, tel que le démontrent clairement les données recueillies dans lesdits rapports d'observation.

À notre avis, et basé sur des expériences passées, il en résulterait des pertes financières importantes, tel que l'ont vécu un grand nombre de tenanciers ailleurs au Canada, aux États-Unis, en Europe et au Royaume-Uni où la baisse des ventes par rapport à l'année précédente a oscillé de 13% à presque 24% dans certains cas, comme l'ont relevé certains observateurs. D'ailleurs, beaucoup de commerçants ont choisi d'intenter des poursuites judiciaires contre les autorités législatives impliquées ce qui, dans un contexte de paix sociale, n'est certainement pas souhaitable. Peu de commerçants dans cette industrie au Québec peuvent se permettre de risquer de telles pertes financières.

Il faut absolument éviter des fermetures de commerces, des mises à pied de personnel et des affaiblissements financiers pour ceux qui résisteraient malgré tout à cette onde de choc, les plaçant ainsi en état de survivance encore plus grave que celui dans lequel ils sont plongés, dans le cadre du réaménagement des appareils vidéo poker.

De tout temps, le bar en tant que tel, s'est constitué une vocation de rencontre entre personnes dont la grande majorité fume. Aussi, bien que minoritaires, ce n'est pas 100% des non-fumeurs qui fréquentent ces lieux qui sont intolérants aux fumeurs et à leur fumée secondaire. Cet ensemble de fumeurs majoritaires et de non-fumeurs tolérants minoritaires forment le noyau principal de clients et constituent, à eux deux, la très grande majorité des gens qui fréquentent les bars en général, d'après nos observations sur le terrain.

Par ailleurs, selon un sondage Léger Marketing commandé par la CPBBTQ à l'automne 2004, afin d'évaluer l'opinion de la population à l'égard de l'exemption, dans l'application de la loi sur l'usage du tabac dans les lieux publics, dont pourraient bénéficier les bars jusqu'en 2008, il s'avère que 51% des répondants, fumeurs et non-fumeurs tolérants ou non confondus, incluant ceux qui n'ont jamais fumé, manifestent leur appui à cette exemption comparativement à 44% qui la désapprouvent.

Alors, dans ce contexte, faire une loi qui répondrait uniquement aux aspirations des non-fumeurs intolérants, (quoiqu'il y ait lieu de penser que les non-fumeurs tolérants ne s'y opposeraient probablement pas), ne serait-il pas pratiquer maladroitement une ponction immédiate à l'égard d'une tranche de clientèle fumeuse extrêmement importante dans ce genre d'industrie? De plus, même s'il est envisageable que l'usage du tabac comporte des risques pour la santé, n'est-il pas essentiel, dans un pays comme le Canada, que les adultes soient libres d'exercer leur choix de fumer? En partant de ce principe, en gardant à l'esprit qu'une autre tranche de clientèle a fait le choix de ne pas fumer, est-il possible d'envisager, par exemple, la construction de pièces séparées et ventilées qui permettraient à ces deux groupes de cohabiter dans une province et un pays où prônent les libertés individuelles de tous et chacun ?

La CPBBTQ pose la question : est-il raisonnable de passer une loi dont l'objectif est de satisfaire un groupe minoritaire fréquentant un lieu précis, dans un contexte et avec des outils de divertissement précis et dont la majorité de ceux qui le fréquentent et de ceux qui l'opèrent seraient désavantagés par cette même loi? Selon nous, la réponse est non. Ailleurs au Canada, là où l'interdiction totale de fumer en ces lieux a été appliquée, il appert qu'il y a des observations à l'effet que les clients préfèrent rester chez eux, plutôt que d'être obligés d'aller fumer dehors lorsqu'ils sont au bar.

De plus, les clients qui désirent fumer n'auraient d'autres choix que de sortir à l'extérieur pour ce faire. Et si les clients devaient aller fumer dans leur voiture, et ce faisant qu'ils consommaient de l'alcool par le fait même à l'intérieur de leur véhicule? Conclusion : des pertes financières devront inévitablement être envisagées à divers plans pour tous les tenanciers et les propriétaires de bars du Québec. Par ailleurs, dans la ville de New York, où les autorités ont aboli l'usage et la vente de tabac en 2003, plusieurs bars huppés en sont arrivés à satisfaire leur clientèle de fumeurs en leur proposant un service de limousine où il est permis de consommer de l'alcool et de fumer. Cette nouvelle situation a engendré des pertes monétaires énormes pour les petits propriétaires de bars qui, manque de moyens financiers, n'ont pu suivre la cadence! Une telle problématique pourrait également voir le jour au Québec suite à l'adoption du projet de loi 112 selon nous.

Et si les clients devaient sortir? Et s'ils le faisaient à toutes heures du jour et de la nuit? Est-ce qu'il pourrait y avoir une augmentation du vandalisme sur les propriétés adjacentes des établissements? Se poser la question est en quelque sorte y répondre. Inévitablement, une telle situation engendrerait un problème de sécurité pour la clientèle, et ce sans compter les nombreux problèmes de voisinage qui risquent de surgir!

Ainsi, il faut éviter que la pratique d'envoyer les clients de ce type d'établissement fumer dehors, hiver comme été, ne se traduise en fait par un rassemblement de personnes dans le stationnement du commerce et contribue à engendrer de la nuisance publique, par des personnes qui s'obstineraient à apporter leurs consommations avec eux et à jeter par terre leurs mégots de cigarettes ou autres objets de consommation. Il faut éviter les débordements dans les attitudes des clients qui pourraient plus difficilement être contrôlés à l'extérieur du commerce.

Aussi, quelles preuves quiconque peut-il avancer qu'une bonne part des non-fumeurs intolérants iraient au bar plus souvent s'il n'y avait pas de fumée?

Faudra-t-il, dépendant de l'acharnement des groupes de pression, surveiller prochainement l'arrivée de dispositions législatives de même nature, concernant les spectacles rock ou la musique dans les discothèques par exemple?

Nous disons que tant et aussi longtemps que le tabac sera un produit légal et en vente libre, le gouvernement devrait, là où il veut en interdire l'usage, tenir compte des particularités commerciales et des mœurs implantées depuis de nombreuses années, pour éviter de mettre en sérieuse difficulté financière des commerçants qui, souvent péniblement, ont bâti leur commerce à la sueur de leur front. L'application de la nouvelle loi suscite des questionnements quant à la « légalité » de la vente de tabac. Nous savons tous que le tabac est une substance légale au Québec et au Canada, mais lorsqu'on s'attarde aux présomptions de cette loi, et surtout au fardeau de preuve incombant aux tenanciers et aux propriétaires de bars et de pubs, nous sommes en droit de se poser la question quant à la légalité de fumer et de vendre de tels produits!

À cet égard, les bars et les pubs devraient être les derniers à se voir interdire la vente de tabac puisque leur clientèle se compose uniquement de personnes âgées de 18 ans et plus. De plus, qu'arriverait-il si un client avait besoin de s'acheter des cigarettes? Il devrait inévitablement prendre sa voiture, dans l'optique où il n'y aurait pas de points de vente près du bar fréquenté, ce qui pourrait causer une problématique majeure en termes d'augmentation inévitable de conduite avec les facultés affaiblies! Et si un nouveau marché de contrebande était créé à l'intérieur de ces établissements par l'application de cette nouvelle loi? Que ferait le gouvernement pour le contrer?

CONCLUSION

En considération de ce qui précède, et tel qu'il a déjà été soumis auparavant au gouvernement, la CPBBTQ soumet respectueusement que l'industrie des bars, brasseries et tavernes devrait être exemptée de l'application de la loi sur l'usage du tabac dans les lieux publics, en raison du caractère très particulier de ses activités commerciales et du type de clientèle majoritairement fumeuse qu'elle dessert. À ce égard, la majorité des intervenants lors de leur participation aux consultations publiques sont demeurés perplexes quant à l'application du projet de loi 112 dans l'industrie des bars du Québec.

Subsidiairement, la CPBBTQ propose que le commerçant puisse s'exempter de l'application de la nouvelle loi afin de lui permettre de procéder dans un délai prédéterminé (mai 2008) à la construction d'un fumoir fermé à l'intérieur de son établissement. Le délai demandé est essentiel vu, entre autre chose, la pénurie

de la main-d'œuvre. De plus, les tenanciers et les propriétaires de bars doivent également envisager des déboursés importants pour lesdites constructions.

Il va sans dire que les fumoirs sont, au sens du projet de loi 112, autorisés pour les employés des bars et pubs du Québec. Ainsi, la CPBBTQ propose que l'utilisation de fumoirs soit également permis pour leur clientèle. De plus, leurs clients fumeurs pourraient être desservis par du personnel fumeur, la liberté de ceux-ci et la sécurité des autres clients non-fumeurs étant ainsi entièrement respectées. Dans le cas où il ne serait pas possible pour le commerçant de s'assurer les services de personnel fumeur, le fumoir serait alors un endroit où aucun service de boissons ne serait dispensé.

D'autre part, des solutions d'installation d'appareils dédiés à l'élimination de la concentration néfaste de la fumée de cigarettes pourraient être envisagées dans lesdits fumoirs, puisque ces appareils existent déjà sur le marché au cas où il serait impossible pour le commerçant de construire un fumoir. Une étude indépendante sur la performance réelle de ces appareils pourrait servir à déterminer si la portion résiduelle de fumée non éliminée serait inoffensive le cas échéant.

À défaut par le gouvernement d'accéder à cette demande de l'industrie, La CPBBTQ estime que la solution de rechange se situe alors au niveau d'une approche graduelle. Il est clair que pour les propriétaires et les tenanciers, de même que pour la clientèle, l'application de la loi dès le mois de janvier suscite une très grande inquiétude notamment à l'égard de la température. En effet, une période transitoire jusqu'au mois de mai 2008, à compter de l'entrée en vigueur de la nouvelle loi modifiée, serait accordée aux commerçants de l'industrie, au cours de laquelle le gouvernement pourrait mettre en place un programme de publicité de masse spécifique aux objectifs poursuivis par cette loi.

Cette approche aurait sans doute au moins l'avantage de réduire au minimum les coûts sociaux reliés aux pertes commerciales appréhendées, de même qu'aux mises à pied qui en découleraient. Parallèlement, la CPBBTQ verrait d'un bon œil que ses membres et peut-être même ceux qui ne le sont pas, joignent leurs efforts à ceux du gouvernement pour éduquer la population qu'ils desservent dans leurs établissements, afin d'en arriver doucement mais sûrement à réaliser les objectifs poursuivis par cette loi. Une campagne de sensibilisation pourrait être mise sur pied auprès des employés pour les amener à devenir des partenaires dans l'éducation populaire. D'ailleurs des efforts en ce sens ne se font-ils pas actuellement en matière de consommation d'alcool et de jeu?

Bien sûr rien n'est parfait mais au fil du temps qui, somme toute serait relativement court compte tenu des habitudes de fréquentations incrustées

depuis longtemps, le gouvernement, les patrons, les employés, les clients, le public en général, chacun y trouverait son compte. Que ce soit par le biais de journées sans fumée, de semaine ou de mois même, il y a lieu de penser que la méthode progressive portera fruit et n'effarouchera pas la clientèle quand viendrait le temps d'appliquer la loi intégralement dans ce type de commerce.

Le tout respectueusement soumis.

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CORPORATION DES PROPRIÉTAIRES
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Sondage d'opinion compilation

	Etablissement	Ville	Question 1		Question 2		Question 3	
			favorable à une extension		S'il y a interdiction de fumer cela		Êtes vous fumeur	
					pourrait'il affecter les ventes d'alcool			
			OUI	NON	OUI	NON	OUI	NON
1	Bar Sergiri	Adstock	13	0	13	0	4	4
2	Bar Motel Le Perroquet	Alma	8	0	8	0	6	9
3	Dooly's Alma	Alma	7	0	7	0	2	1
4	Le Bordelais	Alma	3	1	2	2	1	6
5	Resto Bar Union	Alma	12	1	12	1	9	1
6	Atmosphère Complexe	Amos	6	1	6	1	4	9
7	Brasserie Fiesta	Anjou	6	1	6	1	4	0
8	Bar Le Porto	Beloeil	2	0	2	0	2	3
9	Club de Billard l'Ardoise	Boucherville	10	0	10	0	6	5
10	Bar Fuzzy	Brossard	17	4	20	1	7	2
11	L'Ecluse Bar Terrasse	Chambly	9	0	9	0	8	3
12	Disco Bar Gwillim	Chibougamau	15	0	15	0	11	5
13	Hôtel Chibougamau	Chibougamau	12	3	15	0	12	4
14	311326 Canada Inc	Chicoutimi	10	2	12	0	6	6
15	Manoir du Parc	Chicoutimi	9	0	9	0	4	1
16	Bar Terrasse Ste-Anne	Chicoutimi Nord	10	0	10	0	7	1
17	Bar Le Sportif	Colombier	4	0	4	0	3	5
18	Bar Le Tonneau	Crabtree	7	0	7	0	5	0
19	Riviera le Club	Delson	15	0	15	0	8	2
20	Bar des Bleuets	Dolbeau-Mistassini	11	3	12	2	6	2
21	Bar Mercure	Drummondville	5	0	5	0	3	2
22	Bar Tropical	Drummondville	6	0	6	0	3	1
23	Bar Le Pub	Gatineau	9	0	9	0	7	5
24	Bar Taverne Val Tétrauit	Gatineau	11	0	11	0	9	2
25	Café Renaissance	Gatineau	5	0	5	0	3	0
26	Hôtel Deschênes	Gatineau	7	0	7	0	7	2
27	Pigale	Gatineau	15	0	15	0	9	6
28	Resto Billard Terminus	Gatineau	8	6	13	0	4	10
29	Bar Rustique	Granby	3	1	4	0	2	6
30	Roger Bar Salon	Hemmingford	4	0	4	0	4	0
31	Aux Bons Vivants	Huberdeau	6	0	6	0	4	8
32	Cosmo Bar	Hull	12	3	12	3	12	3
33	Le Bop Bar Café Aubry	Huil	8	15	19	4	12	3
34	Bar 4 Chemins	Jonquière	15	0	15	0	9	1
35	Brassette du Capitaine	Jonquière	9	0	9	0	6	2
36	Bar Le Rodrigue	La Plaine	7	0	7	0	5	1
37	Cab Country Americain	La Pocatière	7	0	7	0	5	2
38	Bar l'Aventurier	LaBaie	6	0	6	0	4	5
39	Bar Chez BB	Lachenaie	6	0	6	0	6	2
40	Resto Bar 4 Étoiles	Lachenaie	15	0	15	0	7	11
41	Bar chez mon Ami	L'Ascension	12	0	12	0	7	2
42	Bar Salon Vénus	Latuque	10	0	10	0	4	4
43	Resto Bar Le Parasol Enr.	Latuque	5	6	8	3	5	2
44	Bar Bistro 1098	Laval	25	0	25	0	16	4
45	Bar Terrasse Dagenais	laval	14	0	14	0	7	5
46	Champion Bar Inc	Laval	57	3	60	0	37	1
47	Place Elle et Lui	l.aval	14	1	15	0	8	3
48	Récréathèque	Laval	10	0	10	0	9	7
49	Restaurant chez Larry	Lemoyne	8	1	9	0	6	3
50	Bar des Îles	L'Étang du Nord	15	1	12	4	7	2
51	Bar La Boulathèque	Lévis	15	0	10	5	10	3
52	Club 75	Longueuil	7	0	7	0	6	1
53	Motel Oscar 1989	Longueuil	14	0	14	0	8	3
54	Restaurant du Parc	Longueuil	11	0	11	0	9	5
55	Bar Parent Ltée	Loretteville	14	1	15	0	14	2
56	Le Bar Zotti	Loretteville	8	0	8	0	8	4
57	Salon de Billard Loretteville	Loretteville	5	0	5	0	0	2
58	La Plaza des Sports	Marieville	4	0	4	0	1	5
59	Bar Clandestin	Matane	3	0	3	0	1	6
60	Bar 750 inc/ Bar Dickson	Montréal	15	0	15	0	9	5
61	Bar Fullum	Montréal	15	1	15	1	13	3
62	Bar Pie IX	Montréal	8	1	9	0	3	1
63	Bar Salon Midway	Montréal	7	0	7	0	6	0
64	Bar St-Vincent	Montréal	6	0	6	0	2	2
65	Bar Triple 7	Montréal	9	0	9	0	3	0
66	Brasserie de l'Eglise	Montréal	2	0	2	0	0	10
67	Le Coin des Champions	Montréal	5	0	5	0	3	3
68	Le St-laurent Frappé	Montréal	0	9	2	7	3	23
69	Living	Montréal	8	7	6	9	6	2
70	Pub Paré	Montréal	12	0	12	0	9	4
71	Resto Bar Krausmann	Montréal	9	5	11	3	6	2
72	Sir winston churchill Pub	Montréal	12	3	10	5	6	5
73	Taverne Gambrius	Montréal	6	0	6	0	3	2

Sondage d'opinion compilation

	Établissement	Ville	Question 1		Question 2		Question 3	
			favorable à une extension		S'il y a interdiction de fumer cela		Êtes vous fumeur	
					pourrait'il affecter les ventes d'alcool			
			OUI	NON	OUI	NON	OUI	NON
74	Brasserie Charleroi	Montréal Nord	5	0	5	0	4	3
75	Traveler's Inn	Napierville	8	0	8	0	7	4
76	Bar Le Châtel	Neufchâtel	8	0	8	0	7	1
77	Bar La Bavaroise	Nicolet	4	0	4	0	2	7
78	Au Vieux Manoir	Notre-Dame de Stanbrige	10	0	10	0	6	9
79	Bar Salon Chez Paul	Pierrefonds	6	3	9	0	4	3
80	Bistro du Jardin	Pointe aux Tembles	13	1	14	0	7	2
81	Bar Le Voilier	Portneuf	4	0	4	0	4	6
82	Bar Le Bal du Léopard	Québec	1	8	6	3	7	1
83	Dooly's Charlebourg	Québec	7	9	13	3	8	7
84	Club de Billard Rawdon	Rawdon	9	1	10	0	6	2
85	Bar La Ripaille	Repentigny	14	0	14	0	9	0
86	Bar La Boulathèque	Rimouski	10	0	10	0	4	6
87	Bar Iberville	Rivière du Loup	7	0	7	0	4	5
88	O-Martha Resto Bar	Roxton Falls	10	0	10	0	9	9
89	Bar Sept-Iles	Sept-Iles	11	0	11	0	6	5
90	Bar Cité Pub	Shawinigan	6	0	6	0	6	0
91	Bar Fleur de Lys	Shawinigan	7	0	7	0	5	6
92	Broadway Pub	Shawinigan	1	11	7	5	2	6
93	Pub du Nord de Sherbrooke	Sherbrooke	7	0	7	0	5	2
94	Bar Le Relais des Pins	St-alexis des monts	2	0	2	0	2	7
95	Motel St-Pierre	St-antoine des Laurentides	22	0	22	0	3	6
96	Bar de l'Hétrière	St-Augustin	5	0	5	0	4	3
97	Bar Le Druide	St-Boniface	5	0	5	0	2	6
98	Bar Dédé	St-Christostome	5	0	5	0	4	19
99	Bar Casino Joes	Ste-Adèle	10	4	11	3	8	0
100	Le petit Forum	Ste-Catherine	5	0	4	1	3	2
101	Bar Neilson	Ste-Foy	4	0	4	0	4	3
102	Cabaret Carol	Ste-Foy	10	7	12	4	6	6
103	Bar St-Thomas 2000	Ste-Julienne	7	0	7	0	5	2
104	Bar Le Houblon	Ste-Marie	9	0	8	1	4	3
105	Café Notre-Dame	Ste-Marie de Beauce	12	1	13	0	7	1
106	Centre de danse/Bingo	Ste-Thérèse	7	0	7	0	5	0
107	Patio Poulet	St-Eustache	5	0	3	2	2	4
108	Bar Lavallière	St-Félicien	8	0	8	0	2	5
109	Auberge St-Fortunat	St-Fortunat	15	0	15	0	10	6
110	Bar Le Laser	St-Honoré	5	0	4	1	5	9
111	Bar Taverne Concorde	St-Hyacinthe	15	0	15	0	5	3
112	Bar Zipper	St-Hyacinthe	6	0	6	0	5	6
113	Bar Le Chivas	St-Jean Chrisostome	15	0	15	0	8	0
114	Bar D.G.	St-Jérôme	4	0	4	0	4	14
115	Bar Lilas	St-Jérôme	7	0	7	0	5	0
116	Hôtel Plouffe	St-Jérôme	7	0	7	0	5	2
117	Resto Bar du Parc	St-Jérôme	5	0	5	0	4	10
118	Taverne le Père Jean	St-Jérôme	3	0	3	0	3	7
119	Brasserie Le tombereau	St-Lin Laurentides	8	0	8	0	3	2
120	Bistro Le Spot	St-Pie	6	0	6	0	4	8
121	Brasserie 500	St-Tite	5	0	5	0	2	1
122	Bar Athos	Terrebonne	6	1	6	1	7	6
123	Bar de l'île Fantastique	Terrebonne	6	0	6	0	4	9
124	Bar Le Step	Terrebonne	8	1	9	0	5	6
125	Bar Chez Ti noir	Thetford Mines	15	0	15	0	8	0
126	Bistro le 77	Thetford Mines	5	1	6	0	2	1
127	Cabaret le Pignon Vert	Thetford Mines	5	0	5	0	4	6
128	Le Guilly Bar	Trois-Rivières	2	1	2	1	2	2
129	Le P'Tit Pub TR	Trois-Rivières	10	1	9	2	5	8
130	Pub en ville	Trois-Rivières	12	3	12	3	9	1
	Total		1149	133	1198	82	753	525

The Economic Impact of the New York State Smoking Ban on New York's Bars

Prepared for the
New York Nightlife Association
Empire State Restaurant and Tavern Association

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by

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About REA and its Founder, Brian O'Connor, Ph.D.

Brian O'Connor, formerly IBM's director of U.S. economics, is credited with creating a database combining elements of macroeconomics, industry and regional forecasting to gauge the impact of the economy on the company's business. He established an internal consulting practice to serve the planning needs of IBM U.S. and many of its key clients.

Brian's doctorate, at the University of Maryland, was in input/output analysis and econometric modeling. He served as technical consultant to the Federal Trade Commission in the late 1960's, where he designed a quantitative system to support the agency's enforcement mission.

Brian came to IBM in 1969 to develop an input/output model for forecasting the industrial composition of the United States. He took over the running of IBM's quarterly econometric model in 1975 and was responsible for all U.S. macroeconomic forecasting: assessing current conditions, evaluating public policy and providing IBM senior management with economic forecasts to run its domestic operations.

For twenty-five years, he has worked with IBM and customer executives to help them assess the impact of economic conditions on their businesses, to anticipate developments in their markets and to track their performance against potential.

In 1993, Brian founded Ridgewood Economic Associates (REA), a consulting firm, dedicated to helping business clients meet the challenge of today's competitive environment. Its primary focus is on the development of economic databases and a system of interlocking forecasting models designed to improve operating and strategic planning systems.

For the last few years, Brian has held the position of Senior Technical Consultant to Texas Perspectives, Inc., an economic consulting firm based in Austin, Texas which specializes in regional economic and public policy analysis.

The Economic Impact of the New York State Smoking Ban on New York's Bars

I. Executive Summary

Since its passage in July 2003, a significant amount of anecdotal evidence has suggested that New York's statewide smoking ban has negatively affected bars, clubs and taverns across New York State. Countless media accounts have described a dramatic drop in customers for bars throughout the state, as well as a steep decline in bar revenue and significant job losses.

To date, the only statistical evidence put forth to gauge the ban's economic impact has analyzed the combined revenue and job totals from both restaurant and bar industries. The following economic study is the first detailed economic analysis focused exclusively on the economic effects of the state smoking ban on New York State's bars. This report measures the direct and indirect economic impact of the New York smoking ban on bars, taverns and clubs*.

The major findings are that the passage of the state smoking ban in 2003 has directly resulted in a dramatic loss in revenue and jobs in New York's bars, taverns and clubs.

Specifically, the following statewide economic losses have occurred in New York's bar and tavern industry as a direct result of the statewide smoking ban:

- 2,000 jobs (10.7% of actual employment)
- \$28.5 million in wages and salary payments
- \$37 million in gross state product

In addition, there are indirect losses to other businesses which supply and service the state's bars and taverns:

- 650 jobs
- \$21.5 million in labor earnings
- \$34.5 million in gross state product

In summary, the enactment of the New York State smoking ban has had a dramatic negative impact on the bar and tavern business and related businesses. The total economic impact is:

- 2650 jobs
- \$50 million in worker earnings
- \$71.5 million in gross state product (output)

**This analysis, defines bars, taverns and clubs using the following North American Industry Classification System (NAICS) definition: "This industry comprises establishments known as bars, taverns, nightclubs, or drinking places primarily engaged in preparing and serving alcoholic beverages for immediate consumption. These establishments may also provide limited food services."*

Direct Economic Impacts

The main focus of the economic analysis is on industry employment. While industry revenue would be a preferred indicator of industry economic health, these data are normally not available at the regional level on a consistent basis over time. In these instances, economists tend to study industry employment patterns. An industry employment function was estimated separately for the bar/tavern and restaurant industries. A multiple regression approach was used to explain the number of employed workers in each industry as a function of personal income, an industry price factor and proxy variables to capture the impacts of anti-smoking regulations and the transitional recovery from the 2001 attack on the World Trade Center. These functions were estimated at the state level, using a log - log format (see Appendix II for the regression results).

The employment function for the bar/tavern industry exhibited strong statistical properties. The coefficient of the price deflator is negative, reflecting the normal inverse relationship that exists between price and sales volume and, in a derived manner, with employment. Adjusting the estimated price impact from the regression by industry labor productivity, the price elasticity of demand (customer sensitivity to changes in product price) is -1.9. The magnitude of the number puts the elasticity in the elastic zone, indicating a relatively high price sensitivity of bar/tavern patrons to prices. The income elasticity (the responsiveness of product demand to changes in consumer income) derived from the employment function is estimated to be 1.65, indicating that the bar/tavern industry provides products that economists call "normal" goods. These types of products respond positively to income gains. Both elasticities are consistent with the existing body of research literature.

Employment losses from the anti-smoking regulations are estimated by comparing two versions of industry employment predictions. The first estimate of employment comes from the fitted regression with the ban-coverage proxy variable coded to reflect the current status of these regulations. The alternate estimate uses the same regression parameters, but sets the proxy variable to zero to simulate the removal of all anti-smoking rules. The difference between these two estimates indicates that approximately 2,000 jobs (10.7% of actual employment) were lost in New York State last year.

Using data from the New York State Department of Labor, the average wage per employed worker in 2003 was approximately \$14,175 per year. Combining the job loss with the average annual worker compensation estimate, lost wage and salary payments amounted to \$28.5 million in 2003. These 2,000 workers would have added nearly \$37 million to constant-dollar Gross State Product (output) in New York State.

A similar approach was used to calculate loss jobs in the restaurant industry. The price elasticity of restaurant meals is quite similar to the price sensitivity of bar/tavern patrons (-1.8 versus -1.9 for bars). However, in contrast, the income elasticity in this segment of the hospitality industry is significantly greater than for bars/taverns. Based on the fitted regression, the elasticity is approximately 2.1 (versus 1.65 for bars/taverns). This

difference is a major reason why the recent employment pattern in the restaurant industry is substantially stronger than for bars/taverns. The upturn in general economic conditions, combined with the increase in State tourism following 9/11, have added significant income to the local economy. Also, the data analysis suggests that the impact of the anti-smoking regulations is smaller on restaurants than on bars/taverns.

Indirect Economic Impacts

These direct output/employment/earnings effects are only the first wave of economic change. In addition to the direct economic impacts, there are indirect and induced changes to the local economic landscape. A system of regional input/output multipliers was used to assess these total changes. These effects are: (1) the change in output for a given industry needed to meet the initial dollar change in spending by final users (customer purchases at bars/taverns); (2) changes in the output of all industries to meet the direct requirements of a given industry; (3) changes in the output of all industries to meet the changes in production in (2) above; and (4) the regional production required to meet changes in demand by final users created by higher local income generated by the first three effects. These regional impact factors were developed by researchers at the U.S. Bureau of Economic Analysis, U.S. Department of Commerce. These output, employment and earnings multipliers provide the basis for translating the estimated direct impacts on the bar or restaurant industry into total economic change.

The New York State employment multiplier for the bar and tavern industry is 1.33. This factor implies that for each job created in the bar industry, the ultimate change in employment across all industries in New York State is 1.33 jobs. The direct loss of slightly more than 2,000 workers from the 2003 smoking ban regulations means a total reduction in job count of more than 2,650 jobs across the State.

The local regional earnings multiplier is 1.76, indicating a decline of \$1.76 dollars for each dollar lost in the bar/tavern industry. The direct earnings loss of \$28.5 million by workers in the bar/tavern industry would result in a total change of labor earnings of \$50 million. When the indirect impacts are taken into account, the \$37 million loss in gross state product by the bar industry would translate into a total decline in production of slightly more than \$70 million. These losses are occurring in the context of the current weakness in local job markets and the lack of strong growth in the State's economy.

Conclusion

New York State's public smoking ban has resulted in dramatic economic losses in bars and taverns across the state. This reduction translates into a negative overall economic impact in 2003 of more than \$70 million in economic activity, \$50 million in lost wages, and the elimination of more than 2,650 jobs statewide. These dramatic economic losses to the state should be factored into the public policy debate going forward.

II. Background

Overview

Restrictions on the time, place and manner in which public smoking may occur have been increasing over the last several years. While the early focus of anti-smoking initiatives was on consumer education and industry advertising restrictions, over past two decades, smoking opponents have increasingly taken their battle to state and local governments, seeking prohibitions on smoking in a wide variety of public establishments. Advocates of these bans claim to be protecting the nonsmoking public and workers from the adverse health effects of secondhand smoke. Opponents of smoking restrictions dispute the existence and/or severity of these adverse consequences and claim that bans have the unintended consequence of hurting business.

State and Local Smoking Ordinances Nationwide

Nationwide, the number of local communities implementing full or partial bans on smoking in public facilities --including worksites, bars and restaurants -- has increased more than eight-fold over the past two decades. More than 200 U.S. municipalities had local clean indoor air laws in effect during 1985; by April 2004, over 1,700 communities had enacted such laws.¹ Almost one-third of the U.S. population now is subject to some type of smoking restriction, with various combinations of constraints being imposed.

Some smoking laws are less restrictive than others. Many provide for full or partial bans on smoking; some apply only to workplaces, restaurants, or bars, or a combination of these three.

A total of 80 out of 291 municipalities with 100% smoke free provisions apply that restriction to all three target environments - workplaces, restaurants, and bars, more than four times the number of communities with such full-scale bans in effect in the year 2000. Approximately one-third of the U.S. population is estimated to live in areas covered by these ordinances and laws providing for 100% smoke free workplaces, restaurants and bars.

While these 80 municipalities are scattered across 15 states, Massachusetts (with 45 such areas) and California (with 11) account for 70 percent of the total. Eight states have only one municipality within their borders that has this blanket prohibition. The first such comprehensive ban was enacted just over 11 years ago, and the movement did not grow rapidly, reaching a total of just 20 localities over seven years by 2000. Sixty more municipalities have signed on to full-scale bans since then.

¹ See <http://no-smoke.org/lists>. Unless otherwise noted, all data concerning the spread of smoking ban ordinances in the United States are derived from the ANRF surveys reported at this website.

Statewide Bans

While every state except Alabama has some kind of clean indoor air legislation or policy in effect, only a handful have enacted complete smoking bans in workplaces, restaurants, or bars. Proposed anti-smoking regulations failed to pass in at least 21 states during 2003.

As of April 2004, a total of eight states had enacted 100% smoke free bans in workplaces, restaurants, or bars. In most cases, these laws are more stringent than any local ordinances that preceded them, creating potential conflicts between local and state requirements.

California and Utah initiated the process, with laws banning all smoking in restaurants that took effect January 1, 1995. Three years later, California extended this prohibition to all free-standing bars in the state.

At the time it implemented the statewide ban in restaurants, California was at the tail end of a recessionary period, with the economy exhibiting essentially zero growth. Nevertheless, eating establishments that do not serve alcohol had increased sales of about 11.7 percent in the four years leading up to the ban, while restaurants and bars increased sales by just 1.2 percent. Following the ban, taxable sales statewide increased by 31.9 percent in the following five years, but restaurants and bars were well below this figure, and more than a thousand went out of business.²

More than seven years passed before another state, South Dakota, implemented a smoking ban. South Dakota's ban applied only to workplaces, exempting alcohol-serving restaurants and bars. One of the interesting and unanticipated consequences of this legislation was the surge in applications for liquor licenses by restaurants that had previously been dry. The law exempted restaurants that served alcohol, and many business owners felt it necessary to begin serving alcohol so that their patrons could continue to smoke and their revenue streams would be safeguarded.

Delaware's ban was signed into law in November 2001. Delaware's law included a preemption provision under which municipal governments couldn't implement their own anti-smoking policies. Similar preemption laws are included in state laws in 18 other states. The Delaware smoking ban was modified in March 2003. Among other things, the amendment permitted smoking in bars, casinos that install air systems, and nursing homes.

About a year later, Florida banned smoking in workplaces and restaurants. In contrast to most other states where bans have been put into place, the issue was settled by voter referendum (November 2002), rather than enacted as legislation by state lawmakers.

Connecticut banned smoking in restaurants effective October 1, 2003, and extended the

² See <http://www/forces.onz/evidence/files/ban-csr.html>.

ban to bars on April 1, 2004. Workplaces remain free of state restrictions. The ban exempts private clubs and the state's two casinos. While an analysis of the impact of this law has not yet been prepared, some Connecticut bar owners claim to have seen a drop of 60 percent in revenues as smokers flock to places where they can still light up while they drink, and these owners are forming an alliance to fight for repeal of this measure.

Maine implemented full bans on smoking in restaurants and bars at the beginning of 2004, keeping workplaces free of state intervention. Within weeks of the ban's effective date, the Associated Press reported that many restaurant and bar patrons were driving across the border to New Hampshire or Canada in order to avoid standing out in the winter cold if they wished to light up. An unusual degree of opposition has arisen in Maine, with one former state representative going so far as to advise bar owners to file a class-action suit against the measure.

New York Smoking Policy

In August of 2002, New York City Mayor Michael Bloomberg signaled his intention to prohibit smoking in establishments that had been exempted from the City's earlier smoking ban enacted in 1995. Free-standing bars, smaller restaurants, pool halls, bingo parlors and bowling alleys were now to be required to implement smoke free policies and environments. Predictably, there was much acrimony in the months that followed, as representatives of the city's 13,000 bars and smaller restaurants that had allowed smoking complained businesses would suffer, while public health advocates pushed the case for protecting the tens of thousands of customers and workers in those establishments from second-hand smoke.

By the end of the year, however, New York City had adopted its new law and businesses had three months to prepare their facilities and clientele for a smoke free environment by the end of March 2003. Many bars and smaller restaurants took advantage of those three months to construct separate smoking areas and install costly ventilation systems that they anticipated would qualify them for exemptions from the ban, as had been negotiated.

However, just days before the New York City ban was scheduled to go into effect, the New York State Legislature approved a statewide smoking ban in workplaces, including bars and restaurants, that was considerably more stringent than the City ordinance and superseded most of the exemptions that had been included in the City version. New York joined just five other states - California, Delaware, Utah, Vermont and Maine - that had implemented smoking bans at that time, and the severity of its provisions was only surpassed by the original Delaware law (which was subsequently weakened with respect to bars).

Comprehensive economic evidence is difficult to assemble with respect to assessing the impact of this new law. In early December of 2003, eight months after the City's ban went into effect, International Communications Research (ICR) released an impact study³ claiming that:

³ Reported at <http://www.bantheban.ori/archives/009491.php>.

- One-third of New York City bars, hotels and nightclubs have reduced staffing by an average of 16 percent since the ban took effect, and three-fourths of them cited the ban as the cause.
- Three-fourths of all affected bars and restaurants have experienced a decline in patronage averaging 30 percent, and almost 80 percent of businesses claim to have been negatively affected by the bans.
- Bars and nightclubs that do not offer food reported a reduction in alcohol sales approaching 20 percent.

But the City and Mayor remain upbeat about the consequences of the ban. One year after the ban went into place, four City departments released a joint report⁴ asserting that:

- Business tax receipts in bars and restaurants had grown almost 9 percent.
- An additional 10,600 jobs had been created in these establishments.
- 150,000 fewer New Yorkers were exposed to second-hand smoke on the job.

Each of these analyses has been subjected to criticism from the opposition, generally either because it is overly anecdotal or overly aggregated.

The Status of the Bar and Restaurant Industries in New York

Historically, the financial performance of eating and drinking establishments has tended to track the overall economy, as economic growth creates disposable income which is spent at New York's bars and restaurants. However, the recent past has seen a deviation from the long-term trend, as bars have reduced payrolls more sharply in the last two years than restaurants and the overall economy.

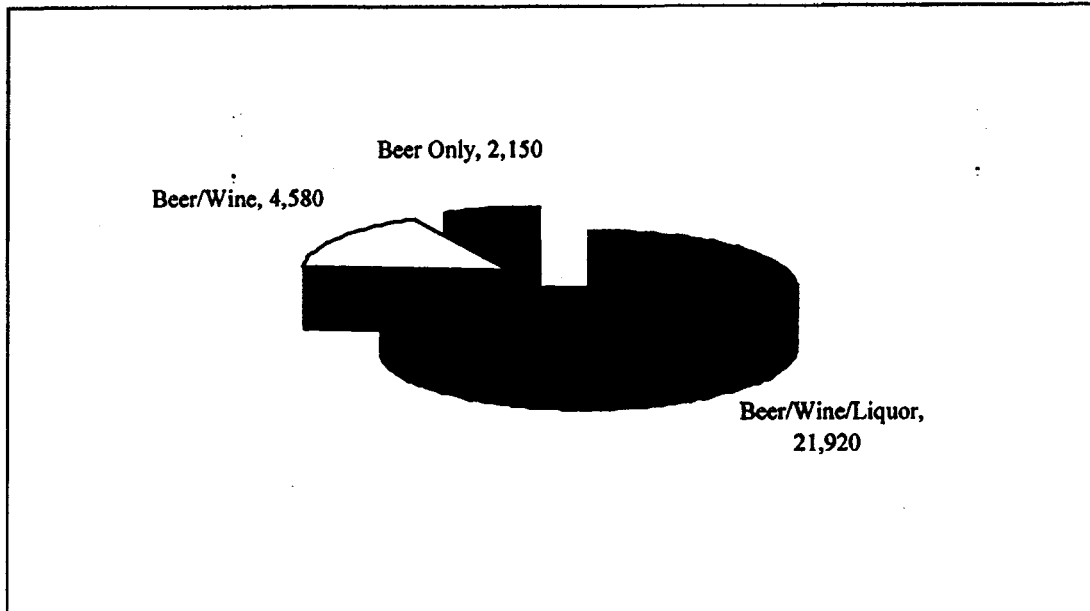
In terms of structure, bars and restaurants are somewhat different, as bars tend to employ far fewer people per establishment. As Figure 1 indicates, nearly 75% of all bars employ less than 5 people, while the comparable figure for restaurants is 41%. Overall, average bar employment across New York is 5 workers, while restaurants average over 15 employees per establishment statewide. Within the alcoholic beverage sector, bars and restaurants account for a rising share of liquor licenses, with the vast majority of those licenses authorizing the sale of beer, wine, and liquor. See Figures 2 and 3 for more details.

⁴ "The State of Smoke-Free New York City: A One-Year Review," New York City department of Finance, New York City Department of Health & Mental Hygiene, New York City Department of Small Business Services, New York City Economic Development Corporation, March 2004.

Figure 1: Distribution of New York Establishments by Number of Employees (2001)

Figure 2: 2004 Bar and Restaurant Share of Total New York state Liquor licenses

Figure3: 2004 Distribution of New York Bar and Restaurant Liquor Licenses by Type



Source: New York State Liquor Authority

Appendix I

Table 1: 2002 Employment and Establishment Profile

	NAICS 7224 (Bars)		NAICS 7221 (Restaurants)	
	Employees	Establishments	Employees	Establishments
New York State	19,158	3,831	222,541	14,328
Bronx	400	114	2,945	324
Kings	611	186	6,672	781
Manhattan	4,602	518	64,542	3,375
Queens	928	327	8,528	977
Richmond	119	47	2,124	188
Nassau	940	231	18,193	1,024
Suffolk	1,043	253	15,109	1,000
Rest of State	10,515	2,155	104,428	6,659

Table 2: New York Bar Employment

	NY State	NY City	Bronx	Queens	Kings	Manhattan	Richmond	Long Island	Nassau	Suffolk	Rest of State
1975	19,232	7,926	924	1,604	1,407	3,695	296	2,196	1,201	995	9,110
1976	19,355	7,672	865	1,543	1,301	3,712	251	2,238	1,179	1,059	9,445
1977	19,504	7,364	774	1,522	1,225	3,595	248	2,276	1,224	1,052	9,864
1978	19,491	7,130	702	1,437	1,133	3,629	229	2,391	1,310	1,081	9,970
1979	20,170	7,242	653	1,384	1,065	3,915	225	2,556	1,413	1,143	10,372
1980	21,275	7,638	653	1,390	1,109	4,260	226	2,864	1,537	1,327	10,773
1981	21,057	7,351	631	1,378	1,038	4,087	217	2,837	1,579	1,258	10,869
1982	21,138	7,166	613	1,398	974	3,992	189	2,923	1,645	1,278	11,049
1983	21,081	6,853	613	1,328	914	3,808	190	3,109	1,709	1,400	11,119
1984	21,056	6,731	578	1,325	868	3,759	201	3,254	1,721	1,533	11,071
1985	20,892	6,747	548	1,267	837	3,869	226	3,146	1,636	1,510	10,999
1986	19,954	6,485	559	1,207	801	3,708	210	2,876	1,541	1,335	10,593
1987	19,852	6,501	592	1,239	729	3,715	226	2,917	1,501	1,416	10,434
1988	19,989	6,379	577	1,274	707	3,603	218	2,904	1,446	1,458	10,706
1989	20,193	6,417	581	1,251	693	3,665	227	2,911	1,426	1,485	10,865
1990	20,433	6,446	583	1,290	746	3,595	232	2,828	1,329	1,499	11,159
1991	19,261	5,781	580	1,220	725	3,022	234	2,669	1,301	1,368	10,811
1992	18,536	5,415	517	1,117	630	2,911	240	2,599	1,238	1,361	10,522
1993	18,268	5,524	448	1,078	642	3,153	203	2,469	1,131	1,338	10,275
1994	18,220	5,677	419	932	581	3,549	196	2,302	1,065	1,237	10,241
1995	18,136	5,853	409	912	589	3,758	185	2,174	1,067	1,107	10,109
1996	18,009	6,074	370	937	578	4,003	186	1,967	943	1,024	9,968
1997	18,095	6,271	402	922	655	4,111	181	1,907	897	1,010	9,917
1998	18,113	6,362	426	907	628	4,243	158	1,890	858	1,032	9,861
1999	18,750	6,532	453	999	625	4,340	115	2,010	867	1,143	10,208
2000	19,905	6,832	448	1,039	645	4,591	139	2,183	1,024	1,159	10,890
2001	19,867	6,975	425	1,025	644	4,740	141	2,095	982	1,113	10,617
2002	19,158	6,662	400	928	612	4,602	120	1,983	940	1,043	10,513
2003	18,757	6,586	395	845	601	4,635	110	1,881	850	1,031	10,290

Table 3: New York Restaurant Employment

	NY State	NY City	Bronx	Queens	Kings	Manhattan	Richmond	Long Island	Nassau	Suffolk	Rest of State
1975	126,642	54,657	1,709	6,544	5,427	40,190	787	18,636	11,901	6,735	53,349
1976	133,587	56,466	1,853	6,685	5,499	41,507	922	20,884	13,359	7,525	56,237
1977	138,749	57,163	1,880	6,779	5,528	41,979	997	21,759	13,606	8,153	59,827
1978	145,671	59,218	1,934	6,950	5,621	43,664	1,049	22,435	13,859	8,576	64,018
1979	151,671	60,968	1,784	6,796	5,507	45,786	1,095	23,744	14,710	9,034	66,959
1980	152,161	60,819	1,623	6,793	5,431	45,857	1,115	24,185	15,115	9,070	67,157
1981	153,258	61,370	1,681	6,766	5,378	46,435	1,110	24,558	15,399	9,159	67,330
1982	154,334	60,469	1,651	6,561	5,297	45,610	1,350	25,317	15,471	9,846	68,548
1983	161,672	62,845	1,632	6,845	5,535	47,508	1,325	26,400	16,093	10,307	72,427
1984	171,283	66,329	1,754	7,224	5,829	50,040	1,482	27,816	16,740	11,076	77,138
1985	178,650	68,843	1,849	7,338	5,858	52,310	1,488	28,570	17,083	11,487	81,237
1986	187,297	70,715	1,823	7,580	5,980	53,608	1,724	29,252	17,142	12,110	87,330
1987	191,812	71,970	2,141	7,809	6,238	53,957	1,825	28,865	16,849	12,016	90,977
1988	194,666	72,541	2,221	8,281	6,281	53,937	1,821	28,691	16,958	11,733	93,434
1989	197,548	73,191	2,069	8,367	6,445	54,435	1,875	28,811	16,711	12,100	95,546
1990	196,728	71,592	2,001	8,445	6,321	53,079	1,746	27,930	15,624	12,306	97,206
1991	189,389	65,608	1,951	7,641	5,888	48,561	1,567	27,321	15,179	12,142	96,460
1992	186,580	64,307	1,961	7,727	5,653	47,435	1,531	27,160	15,092	12,068	95,113
1993	188,393	64,689	2,095	7,596	5,642	47,797	1,559	27,389	15,129	12,260	96,315
1994	193,494	67,459	1,999	7,800	5,899	50,148	1,613	28,000	15,366	12,634	98,035
1995	197,886	69,839	2,089	7,936	5,862	52,224	1,728	28,749	15,759	12,990	99,298
1996	200,003	72,656	2,173	8,753	6,005	53,909	1,816	28,415	15,491	12,924	98,932
1997	204,093	73,396	2,314	8,876	6,155	57,147	1,904	28,762	15,740	13,022	98,935
1998	208,836	79,871	2,419	9,066	6,352	60,079	1,955	29,262	16,195	13,067	99,703
1999	215,625	81,585	2,674	8,710	6,526	61,505	2,170	29,982	16,484	13,498	104,058
2000	220,144	86,834	2,682	8,582	6,606	66,821	2,143	30,833	17,200	13,633	102,477
2001	220,484	87,227	2,815	8,529	6,871	66,903	2,109	31,927	17,643	14,284	101,330
2002	222,561	84,810	2,945	8,528	6,671	64,542	2,124	33,302	18,193	15,109	104,449
2003	222,979	85,045	2,715	8,120	6,865	65,230	2,115	32,910	17,975	14,935	105,024

Table 4: 2001 Bar Establishment Size by Number of Employees Distribution

	1 to 4	5 to 9	10 to 19	20 to 49	50 to 99	100+
New York State	72.0%	17.8%	6.3%	3.3%	0.5%	0.1%
Bronx	91.1%	7.3%	1.6%	NA	NA	NA
Kings	82.0%	15.8%	1.8%	0.4%	NA	NA
Manhattan	48.8%	24.8%	14.6%	9.3%	2.2%	0.3%
Queens	83.5%	13.6%	2.0%	0.9%	NA	NA
Richmond	79.3%	19.0%	1.7%	NA	NA	NA
Nassau	81.2%	10.9%	4.6%	2.9%	0.4%	NA
Suffolk	81.2%	12.4%	4.9%	1.5%	NA	NA
Rest of State	72.5%	18.7%	5.7%	2.7%	0.3%	0.1%

Table 5: 2001 Restaurant Establishment Size by Number of Employees Distribution

	1 to 4	5 to 9	10 to 19	20 to 49	50 to 99	100+
New York State	41.0%	21.1%	17.4%	14.2%	4.7%	1.6%
Bronx	59.9%	24.5%	8.3%	5.7%	1.3%	0.3%
Kings	56.8%	24.3%	11.7%	5.5%	1.2%	0.5%
Manhattan	36.9%	21.8%	19.2%	12.9%	6.2%	3.0%
Queens	60.5%	20.7%	11.0%	6.3%	1.1%	0.4%
Richmond	46.3%	21.6%	19.1%	7.5%	5.0%	0.5%
Nassau	37.9%	22.7%	17.2%	14.2%	5.7%	2.3%
Suffolk	41.3%	20.7%	16.5%	15.3%	4.6%	1.6%
Rest of State	37.7%	20.0%	18.6%	17.6%	4.8%	1.3%

Table 6: New York Liquor Licenses by Type

	Total	Bars/Restaurants	Other Licenses
1995	48,544	24,966	23,578
1996	48,607	25,117	23,490
1997	48,249	25,041	23,208
1998	48,670	25,515	23,155
1999	48,587	25,848	22,739
2000	49,178	26,319	22,859
2001	49,135	26,478	22,657
2002	50,261	27,514	22,747
2003	52,775	29,080	23,695
2004	52,000	28,650	23,350

Table 7: New York Bar & Restaurant Liquor Licenses by Type

	Beer/Wine/Liquor	Beer/Wine	Beer Only
1995	19,831	3,372	1,763
1996	19,782	3,497	1,838
1997	19,708	3,490	1,843
1998	19,853	3,712	1,950
1999	20,325	3,640	1,883
2000	20,694	3,748	1,877
2001	20,545	3,991	1,942
2002	21,192	4,256	2,066
2003	22,245	4,650	2,185
2004	21,920	4,580	2,150

Appendix II

Price Elasticity

The price elasticity of demand is the percentage change in quantity demanded in response to a given change in product price, all other conditions held constant. Price elasticity is normally a negative number, reflecting the inverse relationship between price and quantity in the demand function. Price elasticity is often characterized in reference to its numerical value, dropping the negative sign. A price elasticity coefficient greater than one would indicate strong sensitivity to price changes; a value less than one, weak price sensitivity. An elasticity of zero would indicate complete indifference to market price. Customer preferences, the prices of other goods and the number and quality of substitutes all have a major impact on price elasticity. The relative price of a product will itself influence price sensitivity. Because the purchase of a lower-cost product would deplete less of household income than a higher-cost alternative, inexpensive products are generally less price-sensitive than expensive ones. Products that have few close substitutes will be less price-sensitive, while goods that have many alternatives will tend to be highly elastic.

The estimated demand functions for employment in the bar and restaurant industries used a modified definition of price elasticity. Instead of focusing on the sensitivity between price changes and purchase volume changes, the employment functions estimated the linkage between shifts in price and changes in the number of employed industry workers. However, this concept can be converted to the more standard definition of price elasticity by taking into account industry labor productivity. For example, an estimated price elasticity with respect to employment of -0.5, in an industry which has an average annual labor productivity gain of 1.5%, would yield a price elasticity of demand (output change relative to a price change) of approximately -2.0. Based on research conducted by the U.S. Department of Labor, Bureau of Labor Statistics, productivity gains (output per worker) in the bar/tavern and restaurant industries average approximately 1.5% per year.

Income Elasticity

The income elasticity of demand measures the response of demand for a product to changes in money income. For the vast majority of products in the economy, this elasticity measure is positive. That is, the demand for a product is directly related to changes in buyer income. These types of products are called "normal" goods. A minority of products in the marketplace have an inverse relationship between demand and money income (a negative income elasticity). These latter products are called "inferior" goods.

The estimated income elasticity in the employment demand functions for the bar and restaurant industries reflect the same procedure as discussed above for the price elasticity. That is, the estimated income elasticity measures the change in industry employment in response to a change in money income. Adjusting for industry labor productivity, these estimated elasticities can be converted to the standard definition.

Industry Employment Demand

A multiple regression was fit, in log - log terms, to estimate the impact of changes in money income, industry prices and the imposition of smoking-ban regulations on industry employment. Individual functions were estimated for the bar/tavern and restaurant industries. In each case, industry employment was regressed against state personal income, an industry price deflator, and "dummy" variables to capture the effects of anti-smoking regulations at the local/state levels and to handle transitional issues associated with the terrorist attack on the World Trade Center.

Regression of Ln (NYS employment in the bar industry) on the following:

	coefficient	t-value
intercept	9.54044	15.394
Ln (NYS personal income)	0.1542	1.35
DummyB	-0.24276	-2.687
Dummy2	0.11653	2.394
Ln(industry price)	-0.37411	-1.805
Ln(emp-1 / emp-3)	0.61591	3.668

r-square = 0.7148

r-bar square = 0.6435

where

- NYS personal income - household income in millions of dollars adjusted one year forward 1978-2003
- industry price - price deflator for the bar industry (2000=100.0) 1978-2003
- DummyB - category variable coded to reflect industry coverage of 1995 NYC ban and 2003 NYC/NYS bans 1978-2003
- Dummy2 - category variable to capture transitional period following the WTC attack 1978-2003
- emp-1 / emp-3 - ratio of industry employment (lagged one period) divided by industry employment (lagged three periods) included for statistical estimation reasons 1978-2003

The estimated coefficient of the State personal income variable, adjusted by industry labor productivity, implies an income elasticity of approximately 1.65. This estimate is consistent with other research studies. The bar/tavern industry is seen as a “normal” good industry by economists. The positive sign of this coefficient supports this theoretical “a priori” view. However, the magnitude of the coefficient strongly suggests that consumers do not view this industry’s product as a necessity - the further away from zero, the more the good is deemed a non-necessary or “luxury” good. On the other hand, the income elasticity in this industry is significantly less than for many high-end, super-luxury goods, such as BMWs, yachts, etc.

The price elasticity of demand for the bar/tavern industry is estimated to be approximately -1.9, after adjusting the regression price coefficient by industry labor productivity. While the demand for alcoholic beverages is inelastic (less than -1.0), the consumption of these drinks in a bar or tavern environment has been found by other researchers to be significantly more price sensitive. The magnitude of the estimated price elasticity puts the measurement in the elastic zone, implying relatively high price sensitivity by bar patrons.

The negative coefficient for the smoking-ban “dummy” variable indicates a statistically significant detrimental impact on industry employment which dates back to the earlier initiative by New York City in 1995 and worsened by the NYC/NYS action in 2003.

A similar function was fit for the restaurant industry. A log - log employment demand equation was estimated linking restaurant industry employment to personal income, an industry price deflator and dummy variables for the WTC attack transition and the introduction of smoking-ban regulations. The anti-smoking ban dummy was customized to reflect the coverage impact on the restaurant industry, distinct from the bar/tavern industry

Regression of Ln (NYS employment in the restaurant industry) on the following:

	coefficient	t-value
intercept	6.00247	8.626
Ln (NYS personal income)	0.5761	5.231
DummyR	-0.14156	-6.585
Dummy2	0.04052	2.48
Ln(industry price)	-0.30538	-1.798
Ln(emp-1 / emp-3)	0.73679	7.525

r-square = 0.9914
 r-bar square = 0.9893

where

- industry price - price deflator for the restaurant industry (2000=100.0) 1978-2003
- DummyR - category variable coded to reflect industry coverage of 1995 NYC ban and 2003 NYC/NYS bans 1978-2003

The income elasticity for the restaurant industry is estimated to be 2.1. Like the bar/tavern industry, this industry provides products that are viewed as “normal” goods by its customers. The magnitude of the elasticity is somewhat larger than that of the bar/tavern industry, suggesting a bigger industry response to changes in general economic conditions. Other studies have found the income elasticity for the restaurant industry in the 2.0 - 3.0 range.

The price elasticity of demand is similar to that estimated for the bar/tavern industry. An elasticity of -1.8 puts the price sensitivity of restaurant meals in the elastic range, indicating a high degree of customer sensitivity to price changes.

The coefficient of the smoking-ban variable in this equation shows a statistically significant negative impact on industry employment. However, the magnitude of this impact is smaller for restaurants than for bars/taverns. While the regression results do not offer an explanation for this difference in response, the statistical results may likely reflect the differing demographic characteristics of each market’s customer set.

Regional Input/Output Multipliers

An input/output (I/O) model is used to estimate the implications for economic activity in different industries. Because of the interdependencies among the industries, the growth of any single industry cannot be studied in isolation. The I/O approach is best suited to take explicit account of the direct as well as indirect relationships among all industries.

The basic parameters of any I/O model are derived from a set of identities known as the transaction tables. These tables show the flows of goods and services among different industries and the flows to each industry’s final users (households, businesses, exporters, importers, and governments). These identities also show the link between the broad GDP components and the demand for individual industry products. Industries buy in one range of markets and sell in another set.

Every firm can be examined from two points of view: first, as a producer of the output it sells to other firms and to the final users of its product, and second, as a user of the inputs it buys from other firms and the primary factors of production it purchases (labor, land, capital, etc.). If all business firms, households and governments are grouped into industries, the same two-fold market structure holds. Industries buy in one range of markets and sell in another set. The I/O transaction tables show these dual market relationships among all industries in the economy.

Each row of the main transaction table shows the sales distribution of a given industry's output to every other industry and to each of the major final users (households, businesses, exporters, importers and the public sector) in the economy. Meanwhile, each column of the table shows the distribution of a given industry's purchases of materials from other industries and the use of primary factors of production.

This study employed the use of regional input/output multipliers to assess the total (direct, indirect and induced) changes associated with a change in economic activity in the bar or restaurant industry. The direct effects are only the first wave of economic changes. There are four separate effects that collectively account more fully for the regional economic repercussions of producing a dollar's worth of output in a given industry. These effects are: (1) change in output for a given industry needed to meet the initial dollar change in spending by the final users; (2) changes in the output of other industries to meet the direct requirements of a given industry; (3) changes in the output of all industries to meet the changes in production in (2) above; and (4) the regional production required to meet changes in demand by final users created by higher local income generated by the first three effects.

These regional impact factors, which were used to capture the total economic effects by industry, are based on research conducted by the U.S. Bureau of Economic Analysis. Researchers at the U.S. Department of Commerce have developed regional I/O models called RIMS II (Regional Input/Output Modeling Systems) that capture the specific industrial composition of the local economy. This study used three impact multipliers from this body of research - output, employment and earnings multipliers. The output multiplier represents the total constant dollar change in the output of all industries for a dollar change in final demand in the bar or restaurant industry. The earnings multiplier represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to workers employed in the bar or restaurant industry. In a similar manner, the employment multiplier represents the total change in the number of jobs in all industries for each additional job in the bar or restaurant industry.

L'incidence économique de l'interdiction de fumer en Ontario

Résumé et conclusion

Au cours des dernières années, de nombreuses villes d'Ontario ont adopté un règlement interdisant l'usage du tabac. La présente étude est une analyse de l'incidence de ces interdictions sur les ventes et les taxes perçues dans les bars et les pubs d'Ottawa, de London, de Kingston et de Kitchener. L'analyse concernant Ottawa se fonde sur des calculs distincts pour le cœur du centre-ville, les autres secteurs du centre-ville, le secteur résidentiel ouest et le secteur résidentiel est.

Les résultats sont frappants. Après l'entrée en vigueur de l'interdiction de fumer, les ventes des bars et des pubs ont été inférieures de 23,5 % à Ottawa, de 18,7 % à London, de 24,3 % à Kingston et de 20,4 % à Kitchener par rapport au niveau qu'elles auraient pu atteindre sans l'interdiction de fumer.

Nous avons effectué une analyse statistique pour déterminer l'impact économique de l'interdiction de fumer et produire ces résultats. Dans tous les cas, le ratio entre les ventes ou les taxes perçues dans les bars et les pubs et les ventes au détail totales dans la région étudiée est fonction de l'interdiction de fumer, de diverses variables économiques et de variables nominales saisonnières. Pour obtenir du ministère des Finances les données sur les ventes des bars et des pubs et sur les taxes perçues dans les régions traitées, nous avons soumis une demande en vertu de la *Loi sur l'accès à l'information*, comme expliqué plus loin.

Les variables économiques significatives étaient la valeur du dollar canadien par rapport au dollar américain, l'indice de la production industrielle et le taux de chômage. Ces données ont été obtenues de Statistiques Canada et d'autres sources courantes.

Durant la dernière décennie, les activistes anti-tabac ont publié une série de travaux visant à démontrer que l'interdiction de fumer n'avait pas de conséquence nuisible sur les ventes des établissements de restauration et des débits de boissons. Ces articles sont entachés de plusieurs erreurs graves, qui ont été corrigées dans la présente étude. Dans certains articles, les auteurs ne mesuraient l'incidence de l'interdiction que pendant le mois de son entrée en vigueur; or, nous montrons qu'il faut plusieurs mois pour que son effet se fasse sentir totalement. D'autres articles ne font pas de distinction entre les différentes sortes de restaurants et ne traitent pas à part les ventes des bars et des pubs; nous sommes parvenus à le faire grâce à notre demande d'accès à l'information. D'autres auteurs, encore, ignorent complètement les variables économiques ou utilisent des tendances simplistes; nous avons introduit diverses variables économiques avec la structure de retards appropriée. En conséquence, nos constatations sont précises sur le plan statistique et solides du point de vue économétrique. L'interdiction de fumer réduit substantiellement les ventes des bars et des pubs.

Le rapport Evans – en résumé

Cette étude constitue l'analyse la plus complète effectuée à ce jour sur l'incidence économique de l'interdiction totale de fumer dans les bars et les boîtes de nuit.

Ce rapport est unique en son genre parce qu'il décrit uniquement l'incidence économique sur les bars et les pubs – alors que les études précédentes incluaient les restaurants, les chaînes de restauration rapide, les beigneries, etc. L'approche économétrique utilisée a été élaborée d'après des analyses similaires antérieures effectuées sur le sujet. Quatre municipalités ont été incluses aux fins de l'étude : Ottawa, Kingston, Kitchener et London.

Le rapport :

- Mesure les ventes et les revenus réels d'après des données provenant du ministère des finances de l'Ontario
- Compare les données antérieures et postérieures aux interdictions de fumer
- Utilise des équations de régression et d'autres méthodes d'analyse statistique
- Inclut des données qui reflètent l'ensemble des tendances économiques
- A été revu par un économiste indépendant

Les bars et boîtes de nuit retenus ont été sélectionnés en fonction des critères suivants :

- Posséder un code postal indiquant qu'il est situé dans une des municipalités étudiées
- Être en activité depuis janvier 2000
- Avoir été répertorié dans les annuaires de la ville en tant que pub, bar, brasserie, bar-salon, restaurant routier, boîte de nuit ou salle de billard
- Ne pas faire partie d'une chaîne nationale
- Ne pas être identifié exclusivement comme restaurant, pâtisserie ou café
- Ne pas appartenir à la Légion canadienne et ne pas être une salle de bingo
- Tous les établissements devaient faire partie de la liste des plus importants points de ventes de bière selon la *Brewer's Retail List*.
- L'étude portant sur Ottawa et Kitchener se fonde sur des données couvrant une période de quatre ans.
- L'étude portant sur Kingston et London se fonde sur des données couvrant une période de six mois. Les interdictions dans ces villes ne sont entrées en vigueur qu'en 2003. Les données de 2004 ne sont pas encore disponibles.

Le rapport a été produit par Michael Evans, un ancien professeur d'économie à la Kellogg Graduate School of Management de l'Université Northwestern. L'auteur est un ancien conseiller auprès du comité sénatorial américain sur les finances, de l'U.S. Environmental Protection Agency (agence américaine de protection de l'environnement), de la National Aeronautics and Space Administration (administration nationale de l'aéronautique et de l'espace) et du Trésor américain.

Le rapport a été vérifié par Wade Cook, Ph.D, vice-doyen à la recherche, Schulich School of Business. « Dans l'ensemble, l'étude démontre de façon convaincante et statistiquement défendable que les interdictions de fumer ont des répercussions négatives sur les bars et les pubs », a déclaré le professeur Cook.

La liste ci-dessous énumère les critères employés par les activistes anti-tabac de l'OCAT pour juger d'une « bonne » étude.

Critère	Rapport Evans
L'étude mesure-t-elle ce qui s'est produit réellement?	Oui. L'étude se fonde sur une analyse des ventes réalisées et des taxes de vente perçues.
L'étude porte-t-elle sur des chiffres indéniables obtenus auprès d'une source impartiale?	Oui. Les données utilisées proviennent du ministère des Finances. Les indicateurs économiques proviennent de données de Statistique Canada et d'autres sources standard.
L'étude inclut-elle des données portant sur une période de temps raisonnable avant l'entrée en vigueur de la politique pour un environnement sans fumée?	Oui. Les données portent sur des périodes antérieures aux interdictions allant jusqu'à 3 ans et demi.
L'étude tient-elle compte des tendances sous-jacentes dans le cycle économique?	Oui. L'étude tient compte de quantité de facteurs économiques directs et indirects.
L'étude utilise-t-elle des données portant sur au moins un an pour évaluer les incidences de l'interdiction?	Oui en ce qui concerne Ottawa et Kitchener. Dans le cas de London et de Kingston, les données disponibles portent sur une période de seulement six mois.
L'étude tient-elle compte des conditions économiques sous-jacentes?	Oui. Les variables économiques utilisées tiennent compte de la valeur du dollar canadien par rapport au dollar américain, de la production industrielle et du taux de chômage.
La source de financement de l'étude est-elle divulguée?	L'étude a été financée conjointement par la Pub and Bar Coalition of Canada et par l'Association canadienne Air pour tous.
L'étude a-t-elle examinée par des pairs?	Oui. L'étude a été revue par Wade D. Cook , Ph.D., et Gordon Shaw, professeur de science de la gestion et vice-doyen à la recherche, Schulich School of Business
L'étude est-elle financée par un organisme qui n'a pas de lien avec l'industrie du tabac?	Non

Critique

du

Rapport Evans

**L'incidence économique de l'interdiction de fumer à Ottawa, à
London, à Kingston et à Kitchener, en Ontario
(Evans Carroll and Associates)**

Par

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Février 2005

Cette étude réalisée par Evans, Carroll and Associates traite des répercussions de l'interdiction de fumer imposée dans différentes villes ontariennes sur les ventes des pubs et des bars (PB). L'analyste a effectué un travail crédible en rassemblant un ensemble de données assez complet portant non seulement sur les ventes et les taxes perçues dans ces établissements, mais également sur les facteurs connexes, c'est-à-dire les ventes au détail totales dans la région, le taux de change entre le dollar canadien et le dollar US, le taux de chômage et l'indice de la production industrielle. De plus, il a pris soin de distinguer les bars et les pubs des restaurants proprement dits, où l'interdiction de fumer a généralement des effets très différents. À cet égard, on peut soutenir que l'étude éclipse les nombreuses analyses antérieures sur l'incidence de l'interdiction de fumer, dont la portée était habituellement plus étroite.

La question fondamentale au centre de l'étude est la suivante : « Après l'imposition de l'interdiction de fumer, les ventes des PB ont-elles suivi une évolution différente **par rapport à ce qu'elles auraient été sans cette interdiction?** » Ce dernier aspect (souligné en gras) renvoie à une lacune possible des nombreuses études précédentes, dont le but principal était de démontrer que l'interdiction de fumer *n'avait pas eu* d'incidence néfaste sur ces établissements. Plus précisément, ces études soutenaient dans l'ensemble que, puisque dans certaines villes, les ventes des PB n'avaient pas diminué comme prévu après l'interdiction, il fallait en conclure que l'interdiction n'avait pas nui aux bars et aux pubs. Les auteurs de ces analyses ont cependant négligé de reconnaître en général que, *en l'absence d'une interdiction*, les ventes des PB auraient fort probablement été substantiellement plus élevées qu'elles l'ont été. Si c'est le cas, alors, l'interdiction a réellement eu des conséquences nuisibles d'un point de vue relatif. Dans l'étude réalisée par Evans et Carroll, les analystes prennent soin de ne pas utiliser directement comme variable les ventes des PB, mais plutôt **le ratio entre ces ventes et les ventes au détail totales dans la région visée** (que nous désignerons ci-après ratio PB). En termes simples, sous réserve que les conditions économiques soient les mêmes avant et après l'entrée en vigueur de l'interdiction de fumer, on devrait normalement s'attendre à ce que le ratio PB ne varie pas de manière significative. Si l'on observe un changement, il importe d'en déterminer la cause fondamentale. Ainsi, quelle part du changement peut-on attribuer à l'interdiction plutôt qu'à d'autres facteurs (taux de change, indice de la production, saisonnalité, etc.)? Conformément à cette approche, les analystes ont calculé l'incidence de l'interdiction sur le ratio PB, lorsqu'on tient compte des autres facteurs et lorsqu'on n'en tient pas compte. Dans les deux cas, les modèles qu'ils ont élaborés confirment avec un niveau de signification raisonnable que l'interdiction de fumer a eu une incidence défavorable sur le secteur des bars et des pubs.

Sur le plan méthodologique, les analystes ont pris les mesures appropriées pour garantir la crédibilité de leurs modèles. Concrètement, ils ont effectué tous les tests classiques pour vérifier les irrégularités qui, dans les données, auraient pu biaiser leurs résultats. Ils ont examiné en particulier la présence de phénomènes indésirables dans les données, c'est-à-dire, la multicollinéarité, l'hétéroscédasticité et l'autocorrélation. (La définition exacte de ces termes pour les non-statisticiens importe peu.) Le cas échéant, ils ont apporté des ajustements aux données afin de corriger ces irrégularités. Les analyses tiennent compte de la question importante de la variation saisonnière des ventes des PB et du fait que certains facteurs (comme l'interdiction) peuvent agir de manière différée ou avec un retard. Dans ce dernier cas, des variables retardées ont été introduites dans les équations.

Dans l'ensemble, l'étude défend de manière convaincante et fondée sur le plan statistique le point de vue que **l'interdiction de fumer a eu une incidence nuisible sur le secteur des PB.**

Sondage d'opinion auprès des Québécois

CORPORATION DES PROPRIÉTAIRES DE BARS, BRASSERIES
ET TAVERNES DU QUÉBEC

ÉTUDE OMNIBUS

Opinion de la population à l'égard de certaines lois sur le fonctionnement des bars au Québec

Septembre 2004

Dossier : 12742-004

Leger
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Introduction

Contexte et objectifs de l'étude

Léger Marketing a été mandatée par la *Corporation des propriétaires de bars, brasseries et tavernes du Québec* afin d'évaluer l'opinion de la population à l'égard de certaines lois sur le fonctionnement des bars au Québec.

De façon plus précise, l'étude visait à évaluer l'opinion des Québécois à l'égard de :

- ✓ L'exemption, dans l'application de la loi sur l'usage du tabac dans les lieux publics, dont pourraient bénéficier les bars jusqu'en 2008;
- ✓ Le transfert de 1500 appareils de loterie vidéo des bars vers les hippodromes du Québec.

Méthodologie

La présente étude, effectuée par Léger Marketing, a été réalisée au moyen d'entrevues téléphoniques auprès d'un échantillon représentatif de 1000 Québécoises et Québécois âgé(e)s de 18 ans ou plus et pouvant s'exprimer en français ou en anglais.

Les entrevues ont été réalisées du 15 au 19 septembre 2004 à partir de notre central téléphonique de Montréal. Nous pouvions effectuer jusqu'à 10 rappels dans les cas de non-réponse.

À l'aide des statistiques du recensement de Statistique Canada, les résultats ont été pondérés selon le sexe, l'âge, les régions et la langue parlée à la maison afin de rendre l'échantillon représentatif de l'ensemble de la population adulte du Québec.

Finalement, nous obtenons avec les 1000 personnes sondées, une marge d'erreur maximale de $\pm 3,4\%$, et ce, 19 fois sur 20.

Note aux lecteurs

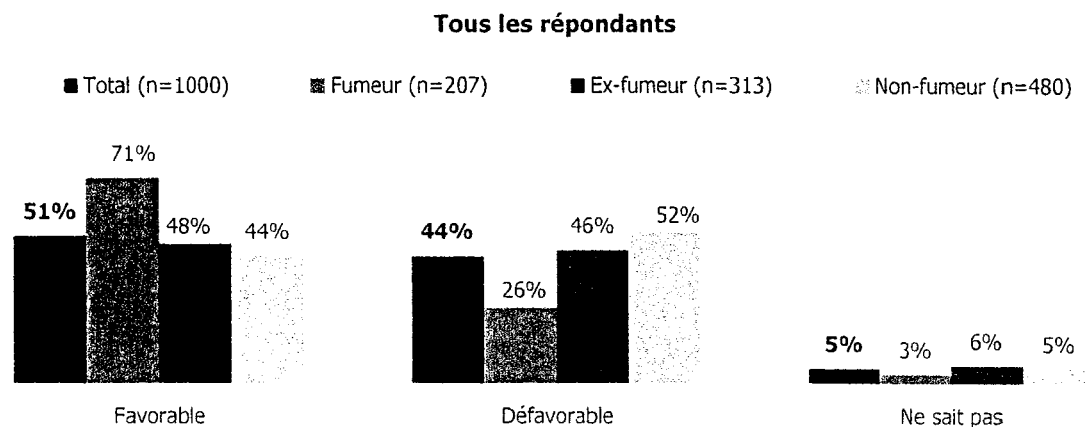
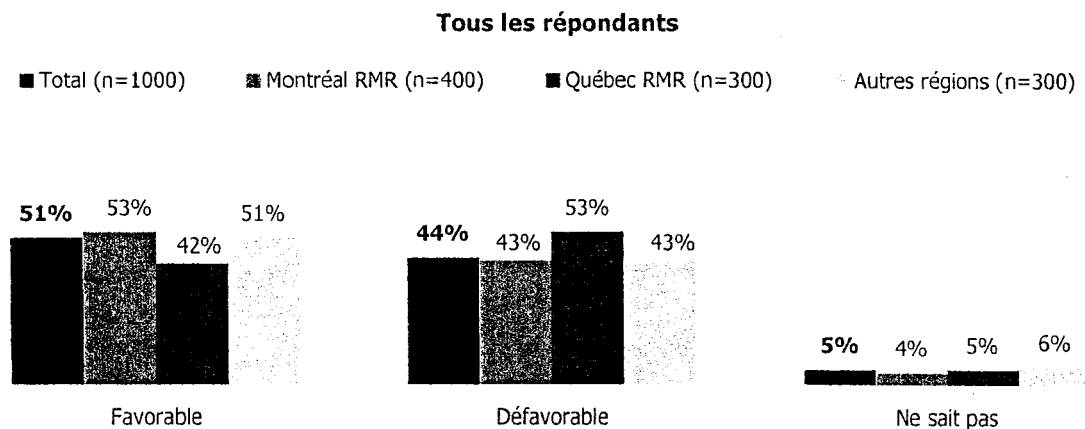
- Les résultats sont présentés sous forme de graphiques selon la région de résidence des répondants.
- Les données présentées dans les graphiques étant arrondies, le total des colonnes peut légèrement différer de 100%.
- La forme masculine utilisée dans le texte désigne aussi bien les femmes que les hommes. Elle n'est utilisée qu'à la seule fin d'alléger le texte et d'en faciliter la compréhension.

Résultats de la recherche

1. Exemption temporaire à la loi sur l'usage du tabac

- ▶▶ De façon globale, l'exemption qui serait accordée aux bars (dans l'application de la loi interdisant l'usage du tabac dans les lieux publics au Québec) ne fait pas le consensus. Ainsi, **51% des répondants manifestent leur appui comparativement à 44% qui désapprouvent cette exemption.**
- ▶▶ Les fumeurs sont les plus nombreux (71%) à manifester leur appui à l'exemption proposée.
- ▶▶ Par ailleurs, le rejet de l'exemption est nettement plus marqué chez les non-fumeurs (52%), les résidents de la région métropolitaine de Québec (53%), les personnes dont le revenu annuel brut du ménage est de 80 000 \$ ou plus (55%), les professionnels (51%) et chez les personnes ayant une formation universitaire (50%).

Graphique 1 *QC1. Le gouvernement du Québec va adopter une loi interdisant l'usage du tabac dans les lieux publics au Québec à partir de 2005. Les bars du Québec pourraient bénéficier d'une période d'exemption jusqu'en 2008, dans l'application de cette loi interdisant l'usage du tabac dans les lieux publics. Seriez-vous favorable ou défavorable à ce que les bars du Québec bénéficient d'une telle exemption jusqu'en 2008 ?*

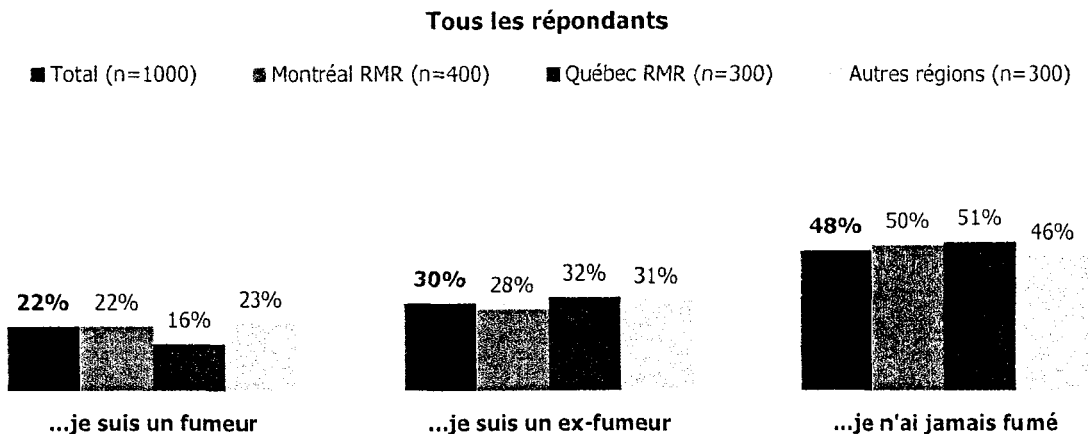


2. Consommation de tabac dans la population du Québec

▶▶ Moins du quart (**22%**) des Québécois interrogés s'identifient comme étant des **fumeurs** comparativement à **30%** qui ont cessé de fumer.

▶▶ Près de la moitié (**48%**) des Québécois interrogés **affirment n'avoir jamais fumé**.

Graphique 2 QC2. Lequel des énoncés suivants correspond le mieux à votre situation actuelle?



CARACTÉRISTIQUES DES RÉPONDANTS QUI SONT ...

...FUMEURS :

- ▶ 45-54 ans (31%)
- ▶ Revenu annuel brut du ménage inférieur à 20 000 \$ (31%) ou entre 20 000 \$ et 39 999 \$ (29%)
- ▶ Travailleurs manuels (29%)
- ▶ Personnes sans emploi (45%)
- ▶ Scolarité de niveau secondaire (28%)

...EX-FUMEURS :

- ▶ Centre du Québec (40%)
- ▶ Hommes (33%)
- ▶ 45-54 ans (40%), 55-64 ans (48%) et 65 ans ou plus (46%)
- ▶ N'ont pas d'enfants mineurs à la maison (33%)
- ▶ Personnes retraitées (45%)
- ▶ Scolarité de niveau primaire (46%)

...NON-FUMEURS :

- ▶ Femmes (53%)
- ▶ 18-24 ans (71%) et 25-34 ans (62%)
- ▶ Revenu annuel brut du ménage de 80 000 \$ ou plus (59%)
- ▶ Professionnels (58%) et étudiants (74%)
- ▶ Formation universitaire (59%)

3. Financement de l'industrie des courses de chevaux

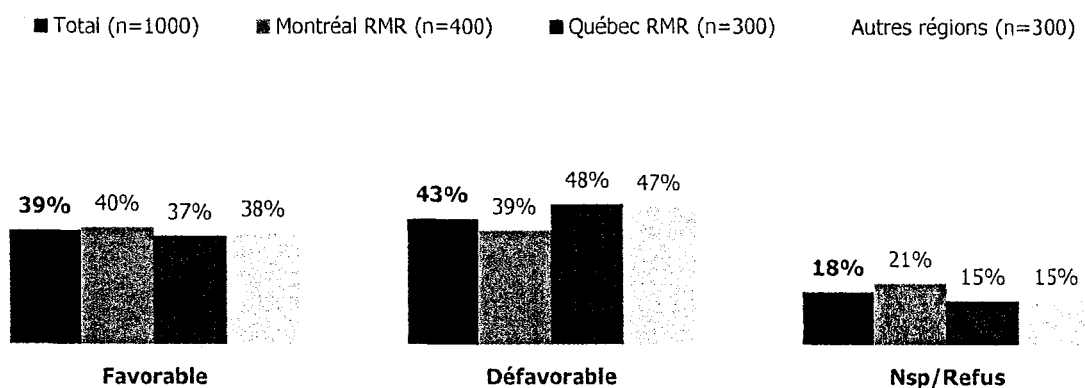
▶ L'opinion est divisée à l'égard du transfert de l'exploitation de 1500 appareils de loterie vidéo des bars vers les hippodromes, au Québec. Ainsi, **39%** des Québécois interrogés **sont en faveur de ce transfert** alors que **43%** des répondants **s'opposent au transfert** de 1500 appareils de loterie vidéo des bars vers les hippodromes du Québec.

▶ Près d'un répondant sur cinq (**18%**) n'a pas su ou voulu exprimer son opinion sur le sujet.

Graphique 3 *QC3. Plutôt que de continuer à subventionner directement l'industrie des courses de chevaux, le gouvernement du Québec propose de lui transférer 1500 appareils de loterie vidéo présentement exploités dans les bars.*

Sachant que cette solution engendrerait une augmentation des revenus de l'industrie des courses de chevaux alors qu'elle signifierait une réduction de revenu pour les bars, seriez-vous favorable ou défavorable à ce qu'une telle solution soit appliquée ?

Tous les répondants



CARACTÉRISTIQUES DES RÉPONDANTS QUI, EN CE QUI A TRAIT AU TRANSFERT DE 1 500 APPAREILS DE LOTERIE VIDÉO DES BARS VERS LES HIPPODROMES, SE DISENT... :

...FAVORABLES

- ▶ Hommes (42%)
- ▶ Employés du secteur des services, de la vente ou du travail de bureau (45%)

...DÉFAVORALES

- ▶ 18-24 ans (56%)
- ▶ Francophones (45%)
- ▶ Étudiants (59%)

Questionnaire

QC1

QC1. Le gouvernement du Québec va adopter une loi interdisant l'usage du tabac dans les lieux publics au Québec à partir de 2005. Les bars du Québec pourraient bénéficier d'une période d'exemption jusqu'en 2008, dans l'application de cette loi interdisant l'usage du tabac dans les lieux publics.

Seriez-vous favorable ou défavorable à ce que les bars du Québec bénéficient d'une telle exemption jusqu'en 2008?

- Favorable 1
 - Défavorable 2
 - Ne sait pas 8
 - Refus 9
-

QC2

QC2. Lequel des énoncés suivants correspond le mieux à votre situation actuelle?

LIRE - UNE MENTION POSSIBLE

- ...je suis un fumeur 1
 - ...je suis un ex-fumeur 2
 - ...je n'ai jamais fumé 3
 - Ne sait pas 8
 - Refus 9
-

QC3

QC3. Plutôt que de continuer à subventionner directement l'industrie des courses de chevaux, le gouvernement du Québec propose de lui transférer 1500 appareils de loterie vidéo présentement exploités dans les bars.

Sachant que cette solution engendrerait une augmentation des revenus de l'industrie des courses de chevaux alors qu'elle signifierait une réduction de revenu pour les bars, seriez-vous favorable ou défavorable à ce qu'une telle solution soit appliquée?

- Favorable 1
 - Défavorable 2
 - Ne sait pas 8
 - Refus 9
-

Environmental Tobacco Smoke in the Nonsmoking Section of a Restaurant: A Case Study

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This study tested the concentrations of environmental tobacco smoke (ETS) components in a small restaurant/pub with smoking and nonsmoking areas—a facility outfitted with a heat-recovery ventilation system and directional airflow. The ETS levels in the nonsmoking area were compared with those in other similar restaurants/pubs where indoor smoking is altogether prohibited. The results indicate that ETS component concentrations in the nonsmoking section of the facility in question were not statistically different ($P < 0.05$) from those measured in similar facilities where smoking is prohibited. The regulatory implications of these findings are that ventilation techniques for restaurants/pubs with separate smoking and nonsmoking areas are capable of achieving nonsmoking area ETS concentrations that are comparable to those of similar facilities that prohibit smoking outright. © 2001 Elsevier Science

INTRODUCTION

Several studies have examined environmental tobacco smoke (ETS) concentrations and/or personal exposure in a variety of public restaurants and drinking establishments ("hospitality facilities"). Earlier studies tended to focus on either short duration area measurements or personal monitoring measurements on surrogate "customers" (Brunnemann *et al.*, 1992; Thompson *et al.*, 1989; Oldaker *et al.*, 1990; Turner *et al.*, 1992; Collett *et al.*, 1992; Lambert *et al.*, 1993). More recent investigations have focused on the personal exposure to ETS of night-club musicians (Bergman *et al.*, 1996), casino workers (Trout *et al.*, 1998), or wait staff and bartenders (Maskarinec *et al.*, 2000). With the strict segregation of smoking and nonsmoking areas in those hospitality facilities that still permit smoking, the use of directional airflow and heat-recovery ventilation systems has become increasingly popular. However, little

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data have been reported with which to assess the effectiveness of such systems in securing adequate air quality in the nonsmoking areas of such facilities. The intuitive benchmark for such a comparison is the air quality level in hospitality facilities where indoor smoking is prohibited. In most instances, such facilities will not be absolutely free of ETS, since smoking is often permitted immediately outside the establishments and traces of ETS components could be introduced from human and material traffic and other sources extraneous to smoking. The purpose of this study was to test a directional-flow heat-recovery ventilation and filtration system in a pub that segregates smoking and nonsmoking areas and its effectiveness in providing nonsmoking areas ETS concentrations comparable to the ETS concentrations in similar facilities where indoor smoking is prohibited.

METHODS

Two organizations were involved in the conduct of the study. The Chemical and Analytical Sciences Division of Oak Ridge National Laboratory (Oak Ridge, TN) was responsible for overall protocol development, preparation of the ETS sampling media and analysis of the collected samples, interpretation of the data, and overall reporting. Finn Projects (Toronto, Ontario, Canada) was responsible for the system conceptual design and modifications, field sampling, and real-time field measurements.

Facilities Surveyed

The facility to be studied, the Black Dog Pub, is located in Scarborough, Ontario, Canada, a suburb of Toronto. Prior to the selection of the Black Dog Pub as the test site, a number of restaurants were reviewed and inspected. The Black Dog was selected as the owner had already shown commitment to improving air quality, having previously invested in heat-recovery ventilation technology, and was willing to cooperate in retrofitting the ventilation system. Also, it was believed that the test facility should have a very high



average occupancy and a high percentage of smokers, so that it could represent a wide spectrum of bars and restaurants.

The Black Dog Pub has a designated smoking area of approximately 110 m², with a seating capacity of 45 individuals. Patrons may order drinks from a bar in this area (15 seats at the bar) and/or food from several (8) tables located around the bar. A nonsmoking eating area, approximately 70 m² in area, with a seating capacity of 99, is located adjacent to the smoking bar/eating area. It is separated from the smoking area by a wall with two pass-through windows and by two open doorways. Patrons may order drinks or food in this area from one of 20 tables. Note that there are no physical barriers in the pass-through and doorways, in order to ensure the free flow of air from the nonsmoking to the smoking section.

Ventilation for the Black Dog Pub is provided by a 3100 ft³/min (cfm) energy/heat recovery ventilation system (ERV or HRV), with a desiccant wheel that was retrofitted in 1999. The HRV is tied into two existing rooftop heating, ventilation, and air conditioning (HVAC) units, with a capacity of 5 tons each. The new system creates directional flow of air (west to east of the facility in Fig. 1) from the nonsmoking area to the smoking area where it is exhausted, while energy (heating and cooling) is recovered by the HRV desiccant wheel on the exhaust side. The ventilation system was redesigned such that 1600 cfm of fresh air was introduced from the west side into the nonsmoking area and 1500 cfm was introduced at the borderline between the smoking and nonsmoking areas through

three new ceiling diffusers. Also, the design included two new exhausts on the opposite (east) side of the bar, near the entrance doorway, with an exhaust volume of 1550 cfm each.

The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE 62-99) for food and beverage service facilities prescribes a rate of 20 cfm/occupant fresh-air input for dining room areas and 30 cfm/occupant for bars and cocktail lounges. Thus, based on an occupancy of 90 in the dining room and 45 in the bar/lounge, 3150 cfm of outdoor air is required to meet this standard for the Black Dog Pub. No make-up air is provided to the pub; only 100% fresh outdoor air is provided.

The rooftop intake hood of the HVAC unit is fitted with an aluminum mesh prefilter and a secondary bank of disposable filters to remove pollen, dust, etc. The filters are replaced ever 3 months. Since 100% fresh air is used, the filtration system only needs to reduce outdoor contaminants and does not have to address ETS, cooking fumes, or other indoor contaminants. The net result is that the air flows from the nonsmoking area into the smoking area, where it is exhausted, while the energy (heat/cool) is transferred to the incoming fresh air. It is estimated that 78% of the energy is recovered by the HRV unit.

Smoke tests were carried out to ensure that the directional airflow prevented intrusion from the smoking to nonsmoking areas of the Black Dog Pub. The tests were primarily concentrated at the interface of the two sections, i.e., at the open doorway and pass-through in the walls that separate the areas (Fig. 1). Smoke tests

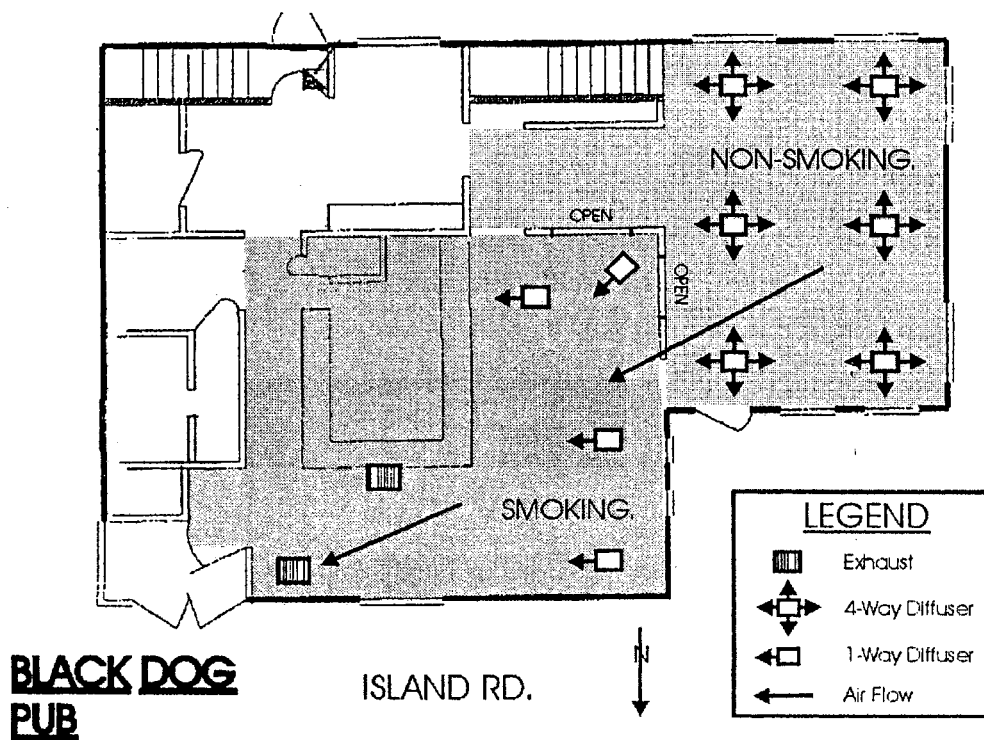


FIG. 1. Schematic diagram of layout of Black Dog Pub.

were also carried out in the smoking section to ensure effective removal of the ETS in that section as well.

Following initial sampling of the Black Dog Pub in December 2000, a purge unit was added to the HRV unit, to correct a potential carry over of the exhausted air into the fresh air stream from 4% to a much reduced 0.4%. At the same time an additional bank of filters was added downstream of the HRV to capture any nicotine/particles that might be carried over to the fresh air supply.

Control Facilities

Three "control" facilities were regulated by local ordinance as nonsmoking hospitality establishments and were used for comparative purposes. No smoking was observed in any of the facilities during the test periods.

The Eaton Centre North Food Court is located in the north end of the Eaton Centre Building in downtown Toronto. An atrium extends from the third level below grade to the second floor above grade. Three levels of escalators lead down to the food court after entering the complex from the Yonge & Dundas street level entrance, and access is also provided by elevators. The building in which the food court is contained is a regulated nonsmoking establishment. The only areas where smoking is allowed in this facility are in the restaurants located on the ground level and second floor above grade, a significant distance from the North Food Court and separated by several levels of escalators.

Facility M is located approximately 15 km southeast of Kitchener, Ontario, Canada. The building in which the facility is located is an indoor sports complex including indoor climbing walls, batting cages, a video arcade, etc. On one side of Facility M is the bar, with seating at the bar and at tables for approximately 70 people. The bar has an exit to the patio where staff and customers can smoke. On the other side of the facility is the restaurant area with seating at tables for approximately 150. The entrance to the kitchen is located in the restaurant area. In between the bar and the restaurant area is the host/hostess station at the entrance to the facility.

Facility B is located on the second and third floors of an historic hotel in downtown Waterloo, Ontario, Canada. The hotel consists of three bars, one of which is Facility B. A pool hall is located on the second floor, and a restaurant occupies the basement. One entrance to Facility B is from the stairwell at the entrance of the hotel; Facility B can also be accessed through an entrance from the pool hall. Facility B has seating for approximately 75 people on its first level and another 60 people on its second level. The entrance to the kitchen and the washrooms are located on the first level. Also on the first level is an exit to an outdoor patio with additional seating. The patio is often used as a smoking area year-round.

Details of the ventilation systems in the control facilities were not sought, for they had been installed in accordance with local building codes.

Real-Time Measurements

Respirable suspended particulate concentrations were determined in real time, using a DustTrak 8520 aerosol monitor (TSI, Minneapolis, MN). The DustTrak operates on the principle of nephelometry (light scattering by particles) and employs a 90° light-scattering laser photometer. The instrument had been recently factory calibrated using the respirable fraction of standard ISO 12103-1 for A1 test dust (Arizona Test Dust). Although data were measured continuously (once per second), data were reported as 1-min averages. For these studies, the calibration factor was maintained at 1.00. Average particle concentrations were determined by calculating the mean concentration reported from 1-min averages over the duration of the measurement interval. In each facility, the single DustTrak was colocated with an ETS component sampler in the facilities in question. In the Black Dog Pub, this was at the cashier/wait station in the nonsmoking section of the facility. In two of the other facilities, the DustTrak was located behind the bar. In the food court, the DustTrak was located in the middle of the seating section.

The carbon dioxide (CO₂), humidity, and temperature monitor used was the YES-206LH Falcon (Young Environmental Systems, Richmond, British Columbia, Canada), acquiring data at a 2-min interval. In all cases except the food court, the CO₂ (a nondispersive infrared-based sensor) and humidity/temperature sensor was colocated with the DustTrak. In the food court, the sensors were placed in the southwestern corner of the seating area. The data were measured continuously and reported as 2-min time-weighted averages.

Sampling Durations and Schedules

All facilities were sampled during a traditionally very busy time at Toronto/Waterloo/Kitchener restaurants: the week between Christmas and New Years 2000. The Black Dog Pub was sampled on two evenings, whereas the others were sampled for one evening each. Following a minor modification in the ventilation system, the nonsmoking areas of the Black Dog Pub also were re-sampled on two evenings in early January 2001. All facilities were sampled during what was perceived to be their busiest time of day. For the taverns, this was typically in the time period of 5:30 PM until 11:30 PM. For the food court, sampling was conducted between 10:20 AM and 3:40 PM. Sampling periods are summarized in Table 1. The number of patrons present in the facility was counted on an hourly basis and averaged over the course of the sampling period. Those data are presented in Table 1 as well.

TABLE 1
Dates and Times of Indoor Air Quality Sampling

Facility	Date	Sampling time	Average hourly patron count
Black Dog Pub			
Night 1	December 29	6:10 PM–11:30 PM	79
Night 2	December 30	5:30 PM–10:20 PM	58
Night 3	January 9	5:20 PM–11:10 PM	29
Night 4	January 10	5:10 PM–10:35 PM	25
Nonsmoking Facility M	December 27	6:20 PM–11:25 PM	123
Nonsmoking Facility B	December 28	6:20 PM–11:25 PM	34
Mall food court	December 28	10:20 AM–3:40 PM	216

Sampling Locations at the Designated Facilities

The initial sampling at the Black Dog Pub included simultaneously collecting two ETS marker samples from the smoking section and three from the nonsmoking section. The sampling locations in the nonsmoking area were located at the cashier station (immediately adjacent to the smoking station), on a fireplace (across from the opening to the smoking section), and on a window sill (south wall of the nonsmoking section) (see Fig. 1). In the second sampling at the Black Dog Pub, samples were collected only in the nonsmoking section. For the mall food court, three ETS marker samples were collected: one in the northwest corner of the food court, one in the southwest corner, and one on the east side of the court. In Facility M, five ETS marker samples were collected, one each from the following locations: left of the fireplace in the restaurant area, one at the condiment station at the kitchen entrance in the restaurant, one at the hostess station, one near the entrance to the outdoor patio/smoking area in the bar, and one behind the circular bar. In Facility B, five samples were also collected, one each in the northwest and northeast corners of the bar, one behind the bar, one near the entrance to the outside patio and smoking area, and one near the wait station.

ETS Constituent Sampling System

The sampling equipment for ETS markers and particle phase species was similar to that described by Ogden *et al.* (1996) and is now commercially available as the Double Take sampler, manufactured by SKC, Inc. (Eighty-Four, PA). Two sound-insulated constant-flow pumps are built into a single unit and were used to collect the vapor phase and particulate phase samples. Vapor phase samples were collected using XAD-4 cartridges (Cat. No. S2-0361, SKC, Inc.) at a rate of approximately 1.1 L/min. Particulate phase samples were collected using 37-mm Fluoropore filters at a flow rate of 2.2–2.3 L/min, through a BGI-4 (BGI, Waltham, MA) cyclone separator. The cyclone vortex provided a 50%

cutoff of particles of 4- μm diameter. Primary differences between the sampling system described by Ogden *et al.* (1996) and the units used in this study were the use of two pumps in a single unit, an opaque conductive plastic sampling train for the particles, and a modified cyclone vortex. Particle phase markers determined as part of this study were ultraviolet-absorbing particulate matter (UVPM), fluorescing particulate matter (FPM), and solanesol. The filter cassette was fabricated from opaque conductive plastic. A cyclone vortex assembly preceded the filter cassette, such that the material collected on the filter was all of respirable (50% cutoff at 4 μm mass median aerodynamic diameter) size. The sampling systems were assembled in a nonsmoking office area in a building geographically removed from the establishments to be sampled, using the following procedure. Filters were placed in cassettes identified by unique labels that were, in turn, affixed in the sampling head. Vapor phase samples were collected on XAD-4 cartridges located in a secondary airflow path and analyzed for nicotine and 3-ethenyl pyridine. XAD-4 cartridges were labeled, and the glass tips were broken off and installed in the sampling head. Using two mass flow meters, the particulate phase flow was adjusted to 2.2–2.3 L/min, vapor phase flow was adjusted to 1.0–1.1 L/min, and both were recorded. When the sampling systems were returned to the nonsmoking office area at the end of the sampling period, sample durations and flow rates were recorded again. Average flow rates (mean of start and ending) and sampling duration were used to calculate the volume sampled and thus the ETS marker concentrations. Following sample collection, samples were stored at 4°C and shipped while being maintained at this same temperature to Oak Ridge National Laboratory for analysis. Field blanks were collected for each facility sampled.

Analysis of Indoor Air and ETS Components

Analytical chemical procedures used in this study were identical to those used in our previous studies (Jenkins *et al.*, 1996; Maskarinec *et al.*, 2000). Vapor phase samples were analyzed for nicotine and 3-ethenyl pyridine, according to the method of Ogden (1991). The XAD-4 cartridges were extracted using 1.5 ml ethyl acetate containing 0.5% (v/v) triethylamine and 8.2 $\mu\text{g}/\text{ml}$ quinoline (internal standard). The analysis was performed using a Hewlett-Packard Model 5890A gas chromatograph equipped with a Model 7673 autosampler, a 30-m DB-5MS fused silica capillary column (0.32 mm i.d., 1 mm film thickness) (Part No. 123-5533, J & W Scientific, Folsom, CA), and a nitrogen/phosphorus detector.

Methods used for the determination of particulate phase ETS markers have been described in detail elsewhere (Ogden *et al.*, 1990; Conner *et al.*, 1990; Ogden and Maiolo, 1992). UVPM, FPM, and solanesol were

TABLE 2
Environmental Conditions in Surveyed Establishments

Facility	Temperature, °C			Relative humidity, %			Carbon dioxide concentration, ppm			DustTrak particle concentration, ^b µg/m ³		
	Average ^a	Mini- mum	Maxi- mum	Average ^a	Mini- mum	Maxi- mum	Average ^a	Mini- mum	Maxi- mum	Average ^a	Mini- mum	Maxi- mum
Black Dog Pub												
Night 1	20.6	15.9	21.6	20.8	13.5	31.4	701	468	1216	24	11	49
Night 2	21.7	15.5	22.4	23.4	20.5	36.5	578	471	691	21	4	162
Night 3	21.9	14.0	23.1	18.7	16.8	27.4	504	446	630	NA	NA	NA
Night 4	21.4	15.3	22.0	23.2	21.7	34.0	587	535	723	49	34	132
Nonsmoking Facility M	23.6	12.9	24.5	25.0	20.9	49.6	1083	769	1277	16	0	61
Nonsmoking Facility B	19.4	15.4	20.1	27.9	24.0	36.9	1156	674	1734	36	27	57
Mall food court	21.2	16.7	22.8	19.0	17.5	28.9	841	557	1270	127	45	269

^a Average responses were determined by taking the mean response of 1-min averages over the duration (see Table 1) of the measurements.

^b Note that DustTrak reading may over- or underrepresent actual gravimetric respirable suspended particulate values in these venues.

determined after extraction of the filter with 1.5 ml methanol. UVPM and FPM were determined simultaneously using a Hewlett-Packard Model 1090 HPLC equipped with an autosampler, a short section of 0.2-mm tubing (to replace the column), and sequential diode array and fluorescence detectors. 2,2',4,4'-tetrahydroxybenzophenone was used as a surrogate standard for the UVPM measurement, while scopoletin was used for the determination of FPM. Solanesol was determined using a Hewlett-Packard Model 1090 HPLC equipped with an autosampler, a Deltabond ODS column, 250 × 3 mm, 5 µm particle diameter (Part No. 255-204-3, Keystone Scientific, Inc., Bellefonte, PA), and a diode array detector operated at 205 nm. The mobile phase was acetonitrile/methanol (95/5 v/v), operated at 0.5 ml/min.

All values were measured in micrograms per sample and converted to micrograms per cubic meter using the flow rate and duration data. Conversion factors (to convert the response to the standard to a particulate matter equivalent) were taken from those reported by Nelson *et al.* (1997) for a sales-weighted average for Canadian cigarettes. Actual conversion factors used were as follows: FPM, 41; UVPM, 7.3; Sol-PM, 68. Limits of detection for an individual sample depends on the sample volume, which in turn is dependent on the sampling flow rate and duration. Assuming a 5-h sample collection period, estimated limits of detection (typically 3× the signal background) for UVPM, FPM, Sol-PM, nicotine, and 3-EP were 0.9, 0.8, 9.4, 0.09, and 0.11 µg/m³, respectively. This assumes a total volume sampled for the particle phase and vapor phase constituents of 0.66 and 0.33 m³, respectively.

RESULTS AND DISCUSSION

The environmental conditions, CO₂, and optical particle concentrations measured in the facilities are re-

ported in Table 2. Average temperatures ranged from ca. 19 to 24°C. Since this study was conducted in the winter, outside air was especially dry, and thus, as expected, the relative humidity (RH) inside these facilities was relatively low. Average RHs ranged from ca. 19 to 28%. The effect of the improved heat recovery ventilation in the Black Dog Pub is evident in the CO₂ concentrations. Average CO₂ concentrations ranged from 500 to 700 ppm, compared with average concentrations of ca. 840–1150 ppm in the other facilities. In general, the maximum observed concentrations were also lower in the Black Dog Pub, compared with the wholly nonsmoking facilities. Differences in overall ventilation is likely to contribute to some of these differences. Interestingly, the highest maximum CO₂ concentration was observed in the facility with one of the lower mean patron counts, Facility B.

The optical particle concentrations, as measured by the DustTrak (only in nonsmoking areas) were, on the whole, quite low. The highest observed average concentrations were in the food court facility, where the mean level was 127 µg/m³. It should be noted that using a calibration factor of 1.00, when measuring ETS, the DustTrak will tend to overestimate the actual respirable suspended particulate matter (RSP) levels considerably. For example, in some as-yet-unpublished studies in hospitality venues in the United States conducted by our laboratory, the mean ratio of the time-averaged DustTrak reading to gravimetric RSP was 3.01 ± 0.92 for 56 instances in which a DustTrak was colocated with a gravimetric RSP sampler. Some preliminary measurements in our laboratory suggest that the instrument may underreport gravimetric particle concentrations that are composed predominantly of cooking oil aerosol. Given that this represents a relatively limited data set, probably the most useful information to be gleaned from the optical particle measurements is relative airborne

TABLE 3
Concentrations of Environmental Tobacco Smoke
Constituents Nonsmoking Areas in Black Dog Pub vs
Comparative Nonsmoking Facilities

	Concentrations, $\mu\text{g}/\text{m}^3$				
	UVPM	FPM	Sol-PM	Nicotine	3-EP
Black Dog Pub nonsmoking areas, $N=12$					
Median	3.4	5.4	0.0	0.00	0.18
Mean	3.5	5.8	2.5	0.44	0.23
SD	1.8	2.5	3.7	0.76	0.28
80th percentile	4.9	7.6	7.0	0.77	0.48
95th percentile	6.4	9.6	8.1	1.75	0.70
Nonsmoking tavern/food court data, $N=13$					
Median	5.2	8.6	1.5	0.00	0.00
Mean	4.6	7.2	2.6	0.21	0.07
SD	2.3	4.0	3.0	0.28	0.10
80th percentile	6.3	10.7	5.5	0.49	0.16
95th percentile	7.9	12.1	7.1	0.64	0.23

particle concentrations, rather than absolute quantitative measures.

Based on the data collected in this study and reported in Table 3, mean ETS component concentrations in the nonsmoking section of the Black Dog Pub were not statistically different (at the 95% confidence level, i.e., $P < 0.05$, for all measured constituents) from those determined in the control nonsmoking facilities. (Note that the number of measurements in each category is not large, so that while medians and percentiles are reported to provide a sense of the data distribution, absolute values for anything other than means should be used with caution.) In the Black Dog Pub nonsmoking section, mean concentrations of UVPM, FPM, and ETS particles as Sol-PM, nicotine, and 3-EP were 3.5, 5.8, 2.5, 0.44, and 0.23 $\mu\text{g}/\text{m}^3$, respectively. This compared with levels of 4.6, 7.2, 2.6, 0.21, and 0.07, respectively, for the control facilities. Maximum levels of constituents observed in the Black Dog Pub nonsmoking section were 6.7, 9.8, 9.1, 2.54, and 0.82, $\mu\text{g}/\text{m}^3$, respectively.

Note that for the combustion-derived particles (UVPM and FPM) the FPM levels were determined to be somewhat higher than those of UVPM. At these low particle concentrations, the differences may be due to minor compositional differences in the atmospheres. The ETS-specific components were present in many of the samples in measurable concentrations. While initially counterintuitive for nonsmoking facilities, it is not unexpected to find low but measurable levels of ETS components in nonsmoking establishments. Virtually all of these facilities permit outdoor smoking immediately outside their establishments, and thus it is not unexpected that, depending on the location of air intakes for the facilities (including entryway doors), some ETS would be entrained into incoming air. Moreover, certain ETS components are generated from sources other than tobacco smoking. Field or analysis blanks did not contribute to the apparent level of ETS components in the comparative facilities. All blanks contained no detectable levels of the measured components. Note that the nonsmoking area levels are lower than those determined for the limited number of studies that have examined such in similar venues. For example, Lambert *et al.* (1993) reported mean nicotine levels in the nonsmoking sections of seven restaurants to be 1 $\mu\text{g}/\text{m}^3$, with a range of 0.2–2.8 $\mu\text{g}/\text{m}^3$, compared with a mean level of 0.44 $\mu\text{g}/\text{m}^3$ (and a median of 0.00) for this study. In a previous study (Jenkins and Counts, 1999), we reported that subjects in workplaces where smoking was banned or banned but smoking was observed (which did not include hospitality venues) experienced 8-h time-weighted average mean nicotine concentrations of 0.086 and 0.122 $\mu\text{g}/\text{m}^3$, respectively.

In Table 4, the smoking area concentrations observed in this study are compared with those determined from a subset of establishments (single room bars) most similar to the layout existing at the Black Dog Pub in a study of area and personal exposure samples in the hospitality industry reported previously (Maskarinec *et al.*, 2000; Jenkins and Counts, 1999). With the exception of 3-EP concentrations, there are no statistically significant differences ($P < 0.05$) between the levels of

TABLE 4
Comparison of ETS Component Concentrations in Smoking Areas Black
Dog Pub vs Single-Room Bars

	Concentrations, $\mu\text{g}/\text{m}^3$, mean \pm SD				
	UVPM	FPM	Sol-PM	Nicotine	3-EP
Black Dog Pub ($N=8$)	95 \pm 32	153 \pm 32	165 \pm 49	12.2 \pm 19.3	1.7 \pm 2.7
Knoxville single-room bars ($N=26$) ^a	146 \pm 107	133 \pm 104	123 \pm 113	21.9 \pm 17.1	5.2 \pm 3.3

^aFrom Maskarinec *et al.* (2000) (these data are a subset of those facilities which resemble most closely those described in this study.)

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