Towards 100% Smoke-Free Environment: The Case Study of Mexico City, Mexico

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Abbreviations

CANIRAC Cámara Nacional de la Industria Restaurantera

CMCT Mexican Council against Tobacco

COFEPRIS Federal Commission for the Protection from Sanitary Risks

DF Federal District

FIC Inter American Heart Foundation

MoH Ministry of Health

PAHO Pan American Health Organization

US\$ United States dollar

WHO World Health Organization

WHO FCTC WHO Framework Convention on Tobacco Control

Foreword

All people have a fundamental right to breathe clean air. There is no safe level of exposure to second-hand smoke (SHS), which causes heart disease, cancer and many other diseases. Even brief exposure can cause serious damage. Only a total ban on smoking in all indoor public places, including workplaces, protects people from the harms of SHS exposure, helps smokers quit and reduces youth smoking. Guidelines to Article 8 of the WHO Framework Convention on Tobacco Control (WHO FCTC) help countries know exactly what to do to protect their people from SHS. An increasing number of countries have adopted legislation to accomplish smoke-free environments. Smoke-free legislation is popular wherever it is enacted, and these laws do not harm business. Any country can implement effective smoke-free legislation. However, only a small proportion of the world's population currently has meaningful protection from SHS.

While a national law protecting all the people in a country is ideal, cities can often pass legislation sooner than countries. In many cases public sub-national legislation or local regulations can be effective ways to address the issue with measures beyond the legal or political scope of national governments, and even to anticipate or promote national interventions. A growing number of cities and counties across the globe have already taken action. Many cities have every authority to pass comprehensive smoke-free laws to eliminate SHS exposure. If comprehensive smoke-free legislation does not exist at another jurisdictional level, these cities should use their authority to adopt laws or other available legal instruments to prohibit tobacco smoke in these places. Some cities may not have adequate authority to pass strong, comprehensive legislation. However, this does not mean that they should not take action. Most cities will at least have the authority to prohibit tobacco smoke in certain types of workplaces, for example, local public transportation and municipal public buildings. They can adopt legislation prohibiting smoking indoors in whatever categories of establishments they have authority to regulate. In addition, all cities can advocate for action at other governmental levels. Mayors and other city leaders can directly advocate for national comprehensive smoke-free laws.

In a joint project, WHO Centre for Health Development, Kobe (WKC) and the WHO Tobacco Free Initiative (TFI) aimed to facilitate local action by documenting the experiences of nine selected cities in becoming smoke-free. Their interventions and processes were examined by local experts, based on evidence from a wide range of local sources. These included documentation, archival records, direct observation, interviews and participant-observation. A case study database was created and the most relevant documents kept on file, including statements from key-informants. Some cities have banned smoking in enclosed public places including workplaces, educational facilities, transportation, shopping malls, restaurants, and bars. Other cities have implemented smoking bans as part of

comprehensive tobacco control regulations, while imposing other restrictions, for example on tobacco sales and advertisements. Cities use different mechanisms to introduce such regulations and their impact goes beyond the cities adopting the smoke-free policies.

The present case is one in a series of nine case studies of cities that have engaged in the process of becoming smoke-free. Although not all of the cities have yet accomplished the goal of becoming a "smoke-free city", they provide lessons learnt in relation to political commitment for local action towards smoke-free air for their citizens and the role of civil society in urging city governments to take action, helping them to build effective partnerships and to conduct awareness campaigns that benefit enforcement and maximize compliance. We hope that these lessons can be used by municipalities to succeed with local smoke-free legislation or tobacco control programmes. Municipal success may trigger action in other cities and countries, and thus contribute to worldwide protection from exposure to SHS.

1. Introduction

On 26th February 2008, the Legislative Assembly of Mexico DF (Federal District), also known as Mexico City, passed a law – *La Ley de Protección a la Salud de los No Fumadores* (the Law for the Protection of the Health of Non-Smokers) requiring all indoor workplaces and public places in the city to be smoke-free. The law protects workers, clients and customers from exposure to second-hand smoke. Mexico DF's smoke-free law has few exemptions and its rejection of smoking rooms sets it apart from the national law. This case study examines Mexico DF's smoke-free agenda and how it has been implemented. It discusses the impact of the law and lessons learned.

2. The Context

2.1 City Background

2.1.1 Mexico DF is the capital city of Mexico and seat of the federal government. It has a population of 8.8 million. The wider metropolitan area, which mainly comprises Mexico State, has a population of close to 20 million and is the third largest metropolitan area in the world.

2.2 Tobacco Use and Smoking Behaviour

- 2.2.1 National surveys conducted by the MoH (SSA) show that smoking prevalence in Mexico remained unchanged between 1988 and 2002 at 26% among 12 to 65 year olds in urban areas. Some sources suggest lower prevalence. The 2006 the National Health Survey (ENSA) suggested it was 21% among adults over 20 years old and living in places with more than 2,500 inhabitants. It has been argued that these differences may result from the different ways that the surveys define smokers.
- 2.2.2 Notwithstanding these discrepancies, several distinctive trends stand out. Specifically in Mexico, and by implication, in Mexico City, the 2002 national survey⁴ and the 2003 and 2006 Youth Tobacco surveys⁵ show that:
 - men are more likely to smoke than women amongst men, smoking prevalence is over 36 %, whereas just 13 % of women smoke⁶;
 - smoking is increasing among young people, particularly young females in Mexico City, smoking prevalence amongst secondary school pupils increased from 20% to 28% between 2003 and 2006;

- smoking prevalence is highest amongst those from higher socioeconomic groups – in contrast to the relationship between smoking and socio-economic status found in many parts of the world;
- smokers' consumption of cigarettes is, on average, relatively low in comparison with many other countries.
- 2.2.3 In relation to second-hand smoke, a research study, conducted before the city passed its smoke-free law, identified high concentrations of nicotine in public places with the highest concentrations found in bars, restaurants, airport and government buildings. This confirmed findings from elsewhere that shared smoking and non-smoking areas do not prevent exposure to second-hand smoke. ⁷

2.3 The Health Costs of Tobacco

2.3.1 It is estimated that in Mexico there are more than 17 million smokers and about 60,000 persons die every year from diseases related to smoking - about 165 deaths per day. 38% are due to ischemic heart disease, 29% by emphysema, chronic bronchitis and obstructive pulmonary disease, 23% by cerebrovascular disease, and 10% by cancer of the lung, bronchus and trachea. On a proportional population basis, this would suggest that annual mortality due to tobacco consumption in Mexico DF is about 5,000. The government estimates annual expenditures of 29 billion pesos (US\$ 2.6 billion) to treat tobacco-related illnesses in Mexico.

2.4 The Smoke-Free Policy and Legal Context

National Tobacco Control Legislation

- 2.4.1 On 12 August 2004, the Mexican State signed the WHO FCTC. However, in Mexico, institutional measures for tobacco control started more than two decades ago with the creation of the *National Council against Addictions* (CONADIC) a government agency. Since then, the *General Health Law*, which is the supreme Law on Health in the country, has established *inter alia*:
 - the inclusion of health warnings on the labels of cigarettes packages in 2005, national guidelines stated that the size of warnings must be equal to half of the rear face of the cigarette pack;
 - prohibiting the sale or supply of tobacco to minors sales are forbidden to those under 18 years old and cigarettes should not be sold in packs fewer than 14 units;
 - a focus on education and communication to raise awareness of tobacco control issues;
 - restrictions on advertising tobacco products including a ban on advertising on television and radio and in the print media.;

• Improvements to stop smoking services.

National Smoke-Free Legislation

- 2.4.2 The General Health Law of 1990 restricted smoking in some public indoor places. However, the law was effectively discretional, did not require smoking areas to be physically separate and was open to differing interpretations. Combined with a very weak enforcement process, it had little effect in reducing exposure to second-hand smoke¹¹. In 2000, a regulation issued under the General Law restricted smoking in federal government buildings and offices. This included buildings in which public services are provided (such as airports, schools and public healthcare settings). The new regulation, however, reiterated the pre-existing mandatory requirement to have smoking areas in all facilities covered by the regulations though for the first time, specified that they should be physically separate and have ventilation installed.
- 2.4.3 More recently, the *Ley General para el Control del Tabaco* (General Law on Tobacco Control) was published on 30 May 2008 and came into force on 28 August. It restricts smoking in indoor workplaces and enclosed public places but requires smoking areas in all establishments, although these areas can be outdoors. The Regulations under the law were eventually issued on 31 May 2009. Because the national law permits designated indoor smoking rooms (subject to appropriate ventilation and air extraction systems), it is less protective than the DF law.

The Previous Legal Framework for Smoke-Free Public Places in Mexico DF

2.4.4 In January 2004, the *Ley de Protección a la Salad de los No Fumadores en el Distrito Federal* [Law for the Protection of the Health of Non-Smokers in the Federal District] came into force. However, the Executive did not support the law, regulations were not published and it was effectively ignored. Moreover, this law only required establishments to set aside at least 30 % of their premises for non-smokers. While the law was exceedingly weak, its existence meant that it could subsequently be amended to require smoke-free spaces. This avoided the need to introduce completely new legislation.

3. The Mexico DF Smoke-Free Law

3.1 On 26 February 2008, the Legislative Assembly for Mexico DF approved amendments to the 2004 Law for the Protection of the Health of Non-Smokers. The law came into effect on 3 April 2008. It aimed to reduce significantly, second-hand smoke exposure in the general population and, particularly, amongst non-smokers who are involuntarily exposed to tobacco smoke. The Assembly simultaneously approved the accompanying Law for the Functioning

of Commercial Establishments. (*Ley para el Funcionamiento de Establecimientos Mercantiles*). Changes to this law were required for it to be consistent with the amendments to the smoke-free law.

Extent of smoke-free spaces

The law requires all enclosed public places and workplaces to be 100% smoke-free including offices, commercial establishments - such as shops, restaurants and bars - industries and enterprises, and public transportation. The law defines an enclosed space as one in which air does not freely circulate in an interior area. Windows, doors and other openings or gaps are not considered spaces of free circulation of natural air. Unlike the national law, designated smoking rooms are not allowed.

Exemptions

Hotels and similar businesses may have 25 % of their place as smoking areas. However, these spaces have to meet certain conditions including relating to ventilation and air circulation. They must: (a) have mechanical ventilation able to purify and remove air to the outside of the property, (b) prohibit minors from smoking rooms, and (c) prohibit these rooms from being used for recreation. In other words, they must be used as guest accommodation only.

Compliance requirements

3.4 The law requires the clear display of no smoking signs and prohibits ashtrays in smoke-free establishments or areas.

Penalties

Regulations to the law set out penalties for individual smokers and for the owners and managers of premises where smoking violations occur. However, sanctioning penalties in Mexico is the exclusive responsibility of the Federal level - through the COFEPRIS. This has led to a strategy in Mexico DF of promoting compliance by making awards and recognition to the general population and restaurants that comply with the law. (see section 4.2).

4 Key Elements in the Development and Implementation of the DF Law

4.3 The Political and Legislative Process

4.3.1 In autumn 2007, Assembly deputies from various political parties put forward a bill to amend the existing 2004 law to make all indoor workplaces and public places in Mexico DF completely smoke-free. Unfortunately, there was insufficient

support for the bill as proposed to pass. To secure the bill's approval, it was modified to allow establishments to designate part of their premises as smoking areas, subject to physical separation, mechanical air extraction and signage. These weaker amendments to the law were published on 1 November 2007.¹²

- 4.3.2 However, during the process of preparing the regulations to accompany the law, a range of economic, health and practical concerns emerged that ultimately created the political environment needed to strengthen the law. In particular, individual restaurant owners and the restaurant owners association, CANIRAC, expressed concern about the financial implications of requiring smoking areas to be physically separate and to have extraction systems fitted. Other restaurant owners were concerned that they simply would not have the space to establish separate smoking areas. Both aspects, it was argued, would create an "uneven playing field" from which only larger businesses would benefit.
- Pragmatic and health considerations also came to the fore. There was a growing realisation about the complications associated with drafting and enforcing effective regulations for a law that allowed indoor smoking areas. The DF's Minister of Health, Manuel Mondragón, was particularly concerned about the implications of partial restrictions. He felt that partial restrictions were incompatible with the aim of protecting staff and customers from exposure to second-hand smoke. He was also concerned that the law would require "an army of engineers" to check whether smoking areas were correctly constructed and operating as they should be. Moreover, there was concern that the law gave rise to ambiguities and left room for injunctions to prevent its application. A broad consensus grew that a 100% smoke-free law would be much clearer, simpler to draft, fairer and easier to enforce.¹³
- 4.1.4 The result was that amendments reverted to the original proposal to for a comprehensive smoke-free law. The amendments were published on 4 March¹⁴ and came into effect 30 days later on 3 April, giving businesses just one month to comply. Regulations under the law were published the following day and established mechanisms for enforcement and other implementation details.¹⁵ Having the regulations in place when the law came into effect was seen as an important tactic in the legislative process. It closed down opportunities for opponents to challenge specific aspects of the law and reduced the likelihood of attempts to weaken it. However, some felt that the short-time frame did not give businesses sufficient time to prepare.
- 4.1.5 It is important to mention that Federal Laws on any matter specify the minimum requirements to comply, so state agencies and Mexico City can make their own Laws even when they are stricter than the Federal one. Mexico City's policies and legislation regarding involuntary smoke exposure are different from but are more protective than the Federal Law. Hence, in a legal challenge, following the publication of the regulations, when it was argued that the weaker Federal law

should have precedence over the DF law, the court ruled in favour of the DF Government. It stated, moreover, that because the law addressed fundamental human rights, the State had the authority to enact a law that went further than the Federal law in protecting public health.

4.2 Campaigns and Compliance Building

- 4.2.1 In lobbying and campaigning for a 100% smoke-free law, civil society provided support, advice and guidance to supportive politicians. The actors of the civil society and academics that supported this work included:
 - Researchers from the National Institute of Public Health who produced scientific evidence to highlight the extent of the health burden and spending in relation to smoking related diseases. The Institute also participated in the monitoring of the mass media regarding the law.
 - The FIC that helped with the implementation of the campaigns, organised by the DF MoH, to inform the population about the smoke-free law and to thank them for complying with it.
 - The CMCT that developed a public opinion survey before the law was implemented demonstrating support for smoke-free places.
 - The Mexico City representative of Human Rights who provided arguments
 inter alia that the Law was aiming to protect the rights of workers in
 bars, restaurants, taverns and clubs to work in a healthy smoke-free
 environment.
- 4.2.2 CMCT partners together with leading politicians secured extensive media exposure. They expressed arguments to support and defend the law at press conferences, hearings and through radio and television interviews. According to the interviews conducted as a part of this study, the efforts of these academic and civil society partners, combined with the political will of the Mayor and key Deputies, was crucial for the effective management and implementation of the 100% smoke-free policy and law.
- 4.2.3 A series of media and information campaigns promoted, supported and reinforced the law. With funding and technical support from the Bloomberg Initiative to Reduce Tobacco Use and the World Lung Foundation, FIC partnered with the DF MoH to run media campaigns before and after the publication of the regulations in April 2008. These included:
 - Initial efforts to raise awareness -in January 2008 with the slogan "Aire sin humo es vida" (air without smoke is life). The campaign disseminated a series of radio and print media advertisements to highlight the benefits of smoke-free areas for restaurant workers, customers and the general public.

- A second stage of the media campaign started in late February 2008, when the law was approved. The "Se respira respeto" (Breathe respect) campaign focused on raising awareness of the law and the reasons for it.
- Shortly after, a third phase was launched under the slogan "Gracias a ti"
 (Thanks to you). This continued to raise awareness of the law while
 highlighting early successes in implementation and encouraging the
 public to feel positive about it. During this phase, MoH staff visited over
 21,000 premises.
- In September 2008, the "Porque todos respiramos lo mismo" (Because we all breathe the same air) campaign ran on radio, TV, press and posters to build further support for the smoke-free law.

4.3 Issues, Debate Topics and Arguments

- 4.3.1 As elsewhere, the smoke-free ambitions of tobacco control advocates generated voices against the 100% smoke-free law. Some Deputies that were debating the Federal Law argued that Mexico City's Act was unconstitutional as it violated individual freedoms. Among the high profile personalities opposed to the DF law was a journalist who argued that it was a "fascist law" which turned smokers into second class citizens. It was argued that it was a law that would lead to fighting between smokers and non-smokers.
- 4.3.2 The tobacco industry, for its part, argued that such a law would not help to reduce smoking. According to the opinion of one of the experts interviewed for this study, there was a possibility that the tobacco industry had tried to block DF's 100% smoke-free law through independent lobbying of specific deputies. It was argued that they had inexplicably changed their vote. Opposition to the DF Law also found support in CANIRAC. Although, as already observed, restaurant owners considered the 100% law fairer than a law that asked for expensive ventilation systems for smoking areas, they argued that the measure would lead to lower sales in restaurants and bars and in the hospitality sector generally.
- 4.3.3 To counter these attacks, tobacco control advocates pointed to evidence and deployed a series of arguments. These included emphasising that the 100% smoke-free law protects the human rights of non-smokers to health in working places; that the legislation is also supported by many smokers; and that evidence from elsewhere suggests that smoke-free laws do not impact negatively on restaurant sales.

5. Compliance and Enforcement

5.1 Specific actions to encourage compliance with the DF law have included:

- Letters, raising awareness of the law, from the DF MoH to establishments that were subject to complaints because of violations of the law;
- Campaigns to reinforce the rationale for the law and to encourage compliance;
- Training programmes for workplaces to support them in making smoke-free premises.
- Early indicators of the compliance of the law were announced by the MoH of Mexico City at a press conference in February 2009. It was reported that a high percentage of restaurants (at least 90%) had adopted the measures to achieve a smoke-free environment.

6. Impact of the Mexico DF Smoke-Free Law

- **6.1** This section considers the impact of the DF smoke-free law in terms of:
 - exposure to second-hand smoke;
 - public opinion;
 - economic impact;
 - political benefits;
 - wider influence of the DF smoke-free law.

Exposure to second-hand smoke

- In 2008, after the smoking ban in Mexico City, a study¹⁶ compared four cities of the Mexican Republic that differed in smoking prevalence and in their control of involuntary exposure to tobacco smoke in public places. The study examined Mexico DF (28% smoking prevalence), Colima (18%), Cuernavaca (22%) and the State of Mexico (24%). The results demonstrated the usefulness of the total ban of smoking in public spaces in Mexico DF. DF had the lowest nicotine concentrations in the environment, even though it has the highest smoking prevalence. The study demonstrated that differences were not due to the characteristics of the establishments, but to the type of smoking ban (for instance, customers and workers cannot smoke in indoor areas and the establishment is considered as a non-smoking place).
- The study also measured nicotine levels in bars and restaurants in Mexico DF and compared them to three Mexican cities without 100% smoke-free laws. The study found that the air was up to 15 times cleaner in restaurants and bars in Mexico DF.
- 6.3 Household surveys¹⁷ also explored whether respondents had seen someone smoking in an enclosed public space, including workplaces, restaurants, cafes, bars and taverns. On March, 2009, before the law came into force, 45% of respondents reported that they had seemed someone smoking in an enclosed

workplace. By August 2009, once the Law and the public policy was implemented, this percentage decreased significantly to 32% and by November it was in less than half (21%). All the studied public places presented a similar trend. In restaurants and bars, the trend fell from 67% in March, to 23% and 17% in August and November, respectively. At the taverns, the reduction was from 47% to 17% and 12%. In the bars, where the highest amount of smoking was detected, it decreased by two-thirds, from 92% in March, to 36% in August and 34% in November.

Public opinion

Public awareness of the Health benefits of the law, which was already high before it came into force, increased further after its introduction. Equally, surveys showed increased agreement that customers and workers have the right to a smoke-free environment. ¹⁸ Just a few months after the implementation of the law, almost the entire population, even smokers, agreed with banning smoking in indoor spaces. ¹⁹

Economic impact

Economic studies demonstrated that the feared negative economic impact for restaurants, bars and canteens, did not emerge, as has been found in other jurisdictions where comprehensive smoke-free laws have been implemented (such as New York, Montevideo and California). When data from January 2005 until April 2009 were compared, National Institute of Public Health researchers observed that the pattern of incomes and employment for the period was similar before and after the Law came into force. Trends in Mexico City were similar to the other analysed regions (Jalisco, Nuevo Leon and the State of Mexico) - where 100% smoke free places had not been applied. The study provides evidence that the law did not negatively affect the income of or employment in restaurants, nightclubs, bars or canteens.²⁰

Political benefits

6.6 The personalities, media and places that supported the law were perceived positively by the community, as they were perceived as caring for the health and welfare of citizens.²¹

Wider influence

6.7 The interviews conducted for this case study indicated that the Mexico DF smoke-free law can have a positive impact in bringing about 100% smoke-free measures in other States of the Country, as those visiting the city are more likely to support smoke-free agendas within their own State. There is also evidence that the DF experience can influence national level tobacco control action.

7. Conclusions and Lessons

Lessons learnt

- 7.1 The Mexico DF Smoke-Free City experience highlights a series of factors that have contributed to the city's achievements. These highlight success factors and other important lessons for taking forward smoke-free agendas. These include:
- Political will. The active role taken by key politicians and senior civil servants both Members of the DF Legislative Assembly and from the DF MoH in steering the law through the legislative process and engaging with a high profile media debate was vital to achieving a comprehensive smoke-free law. For instance, publishing the regulations just the day after the law came into effect helped ensure that the strategy and its legal basis was not negotiable.
- 7.3 Successful implementation strategy. The argument that the law was to protect non-smokers but was not "anti-smoker" and the positive presentation of the case as promoting "smoke-free" places rather than placing an emphasis on "prohibiting" smoking were successful tactics. Equally, placing emphasis on giving recognition to places that complied with the law had positive benefits for businesses and also helped to counter verification and enforcement constraints.
- **Support from academics and experts.** Previous studies and expertise was important in generating evidence to support the law and to counter arguments against it. Equally, research studies following the implementation of the law, enabled positive health impacts and levels of community satisfaction to be demonstrated.
- **7.5 Co-ordinated and well-funded communication actions.** The DF experience reinforced the value of having coherent campaigns to inform and reassure workplaces and the public about the reasons for the law, what the law means for them, and how it will work in practice. At the same time, it highlighted the benefits of using promotional campaigns and the media to counter opponents' arguments and mobilise support for comprehensive smoke-free laws.
- Verification and sanctions. The lack of an institution in Mexico City capable of both verifying compliance with the law and issuing sanctions for violations is a significant weakness. At the same time, COFEPRIS does not have sufficient staff to check compliance effectively. It was argued by interviewees for this study that the availability of a toll-free violation reporting line would simplify and facilitate reporting processes and could be beneficial for promoting compliance and tackling violations.

Final remarks

7.7 Mexico DF's law for the Protection of the Health of Non-Smokers has reduced involuntary exposure to tobacco smoke. It also, particularly because of its rejection of smoking rooms, provides valuable experience to share with other cities that wish to implement effective smoke-free legislation. Indeed, several international organisations, including WHO/PAHO through the WHO FCTC and the Bloomberg Philanthropies Foundation have acknowledged the achievements of the DF MoH and its partners.

¹ Valdés-Salgado R, Lazcano-Ponce EC, Hernández-Ávila M. *Primer informe sobre combate al tabaquismo. México ante el convenio Marco para el Control del Tabaco*. México. Cuernavaca: Instituto Nacional de Salud Pública, 2005.

² Villalobos A, Rojas R. Consumo de tabaco en México. Resultados de las Encuestas Nacionales de Salud 2000 y 2006. Salud Publica Mex 2007;49 supl 2:S147-S154.

³ The ENA survey considers persons who have smoked during the past 12 months (even though they have not smoked during the last 30 days) as smokers, while the ENSA survey only includes those smoking at the time of the survey. See: Valdés-Salgado R, Lazcano-Ponce EC, Hernández-Ávila M. *Primer informe sobre combate al tabaquismo. México ante el convenio Marco para el Control del Tabaco.* México. Cuernavaca: Instituto Nacional de Salud Pública, 2005.

⁴ ibid

⁵ Valdés-Salgado R, Reynales-Shigematsu LM, Lazcano-Ponce E, Hernández-Ávila M. "Before and after the Framework Convention on Tobacco Control in Mexico: A comparison from the 2003 and 2006 Global Youth Tobacco Survey", *Salud Publica Mex* 2007;49 suppl 2:S155-S169.

⁶ Valdés-Salgado R, Lazcano-Ponce EC, Hernández-Ávila M. *Primer informe sobre combate al tabaquismo. México ante el convenio Marco para el Control del Tabaco.* México. Cuernavaca: Instituto Nacional de Salud Pública, 2005.

⁷ Barrientos T, Valdés R, Reynales LM, Navas A y Lazcano E. (2007). Exposición al humo de tabaco en lugares públicos de la Ciudad de México. *Salud Pública de México*, 49 (supl. 2): S205-S212.

⁸ Kuri PA, González-Roldán JF, Hoy MJ y Cortés M. (2006). Epidemiología del tabaquismo en México. *Salud Pública de México*, 48 (supl. 1): S98.

⁹ Dawson J & Romo J. (2009). *Mexico DF: Smoke-Free City Case Study*. México D.F.: International Union Against Tuberculosis and Lung Disease.

¹⁰ Source: www.conadic.salud.gob.mx/interior/cirt tabaco.html

¹¹ Dawson J & Romo J. (2009). *Mexico DF: Smoke-Free City Case Study*. México D.F.: International Union Against Tuberculosis and Lung Disease.

¹² Decreto por el que se Reforman, Adicionan y Derogan la Ley de Protección a la Salud de los No Fumadores en el Distrito Federal. Gaceta Oficial del Distrito Federal. Décima Séptima Época, No. 204, 1 de noviembre de 2007.

¹³ Dawson J & Romo J. (2009). *Mexico DF: Smoke-Free City Case Study*. México D.F.: International Union Against Tuberculosis and Lung Disease.

¹⁴ Decreto por el que se Reforman, Adicionan y Derogan la Ley de Protección a la Salud de los No Fumadores de Distrito Federal y la Ley para el Funcionamiento de Establecimientos Mercantiles del Distrito Federal. Gaceta Oficial del Distrito Federal. Décima Séptima Época, No. 287, 4 de marzo de 2008.

¹⁵ Decreto por el que se Expide el Reglamento de la Ley de Protección a la salud de los No Fumadores en el Distrito Federal. Gaceta Oficial del Distrito Federal. Décima Séptima Época, No. 307, 4 de abril de 2008.

¹⁶ Barrientos T, Reynales LM, Lazcano E, Hernández M, Amick B, Delclos G y Harrist R. (2009). *Exposición a Humo de Tabaco Ambiental en Bares y Restaurantes: Prevalencia, Efectos a la Salud y Medidas de Control.* Trabajo presentado en el Foro público abierto "Tabaquismo en México: ¿cómo evitar 60,000 muertes prematuras cada año? El Colegio Nacional, México DF: 21 de Agosto de 2009.

¹⁷ Thrasher J, Pérez-Hernández R, Dorantes-Alonso A y Arillo-Santillán E. (2009b). *Evaluation of a Comprehensive smoke free law in Mexico City.* Smoke Free Americas Workshop. University of South Carolina e Instituto Nacional de Salud Pública.

¹⁸ Dawson J & Romo J. (2009). *Mexico DF: Smoke-Free City Case Study*. México D.F.: International Union Against Tuberculosis and Lung Disease.

¹⁹ Reynales LM, Valdés R, Rodríguez R, Lazcano E y Hernández M. (2009c). *Encuesta de Tabaquismo en Jóvenes en México*. *Análisis descriptivo 2003, 2005, 2006, 2008*. Cuernavaca, México: Instituto Nacional de Salud Pública.

²⁰ INEGI. II Conteo de Población y Vivienda 2005. México. Instituto Nacional de Salud Pública. (2009). *Impactos sociales, ambientales y económicos de los espacios 100% libres de humo de tabaco. El caso de la Ley de Protección a la Salud de los No Fumadores, Distrito Federal,*

México. Material informativo repartido en el 2do. Congreso SRNY-FIC Latinoamericano para el Control del Tabaco, 14-16 de Octubre de 2009, Ciudad de México, México).

²¹ Dawson J & Romo J. (2009). *Mexico DF: Smoke-Free City Case Study.* México D.F.: International Union Against Tuberculosis and Lung Disease.