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ABBREVIATIONS

AMI	acute myocardial infarction
Article 8 Guidelines	Guidelines on Protection from Exposure to Tobacco Smoke
BRICS	Brazil, Russian Federation, India, China and South Africa
China CDC	Chinese Center for Disease Control and Prevention
COP	Conference of the Parties
CTFK	Campaign for Tobacco-Free Kids
DSA	designated smoking area
DSR	designated smoking room
GDP	gross domestic product
ITC Project	International Tobacco Control Policy Evaluation Project
NCD	noncommunicable disease
NHFPC	National Health and Family Planning Commission
PM2.5	particulate matter measuring less than 2.5 micrometers
SHS	second-hand smoke
WHO FCTC	World Health Organization Framework Convention on Tobacco Control
WLF	World Lung Foundation

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Message from Dr Bernhard Schwartländer, WHO Representative in China

China is the tobacco capital of the world: in 2014, an astonishing 44% of the world's cigarettes were consumed here, more than the next top 29 cigarette-consuming countries combined. Most of those cigarettes are smoked by Chinese men – more than half of whom smoke.

China's addiction to tobacco is taking a dreadful toll on its health, its society and its economy. More than one million people die a tobacco-related death every year in China, and this number will continue to grow – to around 3 million by 2050 – if China does not act fast to break its tobacco addiction. China's smokers are not only hurting themselves: rates of exposure to second-hand smoke are extraordinarily high. The level of smoking in workplaces in China, for instance, is by far the highest in the world.

But the winds of change are blowing. On 1 June 2015, a comprehensive smoke-free law came into effect in China's capital city, Beijing. The Beijing law is the strongest tobacco control law adopted in China: the law requires all indoor public places (and many outdoor places) in Beijing – including restaurants, hotels, workplaces, airports – to be 100% smoke-free, with no exceptions. The law includes strong penalty provisions, and is fully compliant with Article 8 of the WHO Framework Convention on Tobacco Control.

The adoption of the Beijing smoke-free law was a genuine breakthrough for tobacco control in China. The law sets a new benchmark for smoke-free laws elsewhere, and has generated a real sense of momentum for the adoption of a national smoke-free law.

That is why this report is so timely. The report – a collaboration between WHO and the International Tobacco Control Policy Evaluation Project – shows that once adopted and fully implemented, a national smoke-free law will improve health, and benefit businesses and the economy. A national smoke-free law will also be immensely popular with the public, including smokers. Support for a complete smoking ban in bars and restaurants in China is already higher than it was in many other countries before passage of comprehensive smoke-free laws. Most importantly, a national smoke-free law will save many millions of lives.

In 2015, China stands on the cusp of a quantum leap forward on tobacco control. The evidence and recommendations in this report, if adopted, will help China take that leap – and in doing so, put China on the path to a much healthier and more prosperous future.

A handwritten signature in blue ink, appearing to read 'Bernhard Schwartländer'.

Dr Bernhard Schwartländer
WHO Representative in China
October 2015



Message from Dr Wang Yu, Director, Chinese Center for Disease Control and Prevention

Smoking and second-hand smoke are deadly. China is the biggest tobacco producer and consumer in the world. According to the 2010 Global Adult Tobacco Survey (GATS), China has more than 300 million smokers, and 52.9% of Chinese male adults smoke.

Tobacco use causes more than 1 million deaths in China annually. In addition, exposure to second-hand smoke is a major public health issue. The GATS China data show that 72.4% of non-smokers aged 15 years and older are exposed to second-hand smoke. In the 2013–2014 China Global Youth Tobacco Survey (GYTS), 72.9% of middle-school students reported being exposed to second-hand smoke at home, in indoor public places, outdoor public places or on public transportation in the 7 days before the survey. Studies show that more than 100 000 people die from second-hand smoke every year in China. Cutting down tobacco use and reducing exposure to second-hand smoke are therefore important measures to improve the health of the Chinese people.

There is no safe level of exposure to second-hand smoke. Article 8 of the World Health Organization Framework Convention on Tobacco Control (WHO FCTC) requires all indoor public places, indoor workplaces, public transportation and, as appropriate, outdoor public places to be smoke-free. In China, 18 cities have adopted local legislation on tobacco control – including the Beijing Smoke-free Law which came into force on 1 June 2015. The Beijing law is by far the strongest in China, is compliant with WHO FCTC requirements, and has been described in the media as the “strongest smoking ban in history”.

To assess the effect of China’s implementation of WHO FCTC policies, the Chinese Center for Disease Control and Prevention has been working with the University of Waterloo in Canada on the International Tobacco Control Policy Evaluation Project in China (ITC China Project), conducted in 5 waves since 2006. This report presents data from the ITC China Project, and shows how China compares with other countries. The report highlights that it is only through strict compliance with the WHO FCTC and its implementation guidelines – in particular, the development and strict enforcement of legislation and regulations to make public places 100% smoke-free – that we can effectively protect non-smokers from the harms of second-hand smoke.

Making public places smoke-free requires laws, multisectoral support for implementation, and community awareness and compliance. Only with such joint efforts can we create smoke-free environments and enjoy a healthy life.

A handwritten signature in black ink, consisting of the Chinese characters '王宇' (Wang Yu).

Wang Yu
Director, Chinese Center for Disease Control and Prevention
October 2015



Message from Dr Geoffrey T. Fong, Principal Investigator, ITC Project

China is the world's largest country – whatever happens in China is monumental. And “monumental” is a word that very well describes the public health, social and economic devastation that is unfolding in China because of tobacco use. China's annual tobacco-related death toll of 1.4 million, including approximately 100 000 deaths due to exposure to second-hand smoke, is expected to triple by 2050. Tobacco use is the most prominent single cause of noncommunicable disease, which is being recognized by the United Nations as a significant threat to public health and the economic health of nations. Nowhere is this more true than in China. Strong and sustained action is required to reduce tobacco use. The key in China, and throughout the world, is to engage in strong and effective implementation of the WHO Framework Convention on Tobacco Control (WHO FCTC), the first treaty ever negotiated under WHO. A central component of a strong tobacco control programme is smoke-free laws.

Article 8 of the WHO FCTC obligates Parties to implement measures to protect people from tobacco smoke in workplaces, public transport and indoor public places. The Article 8 Guidelines describe the key ingredients for successful smoke-free policies: public education campaigns that successfully motivate behaviour change, coupled with clear mechanisms for inspection and enforcement. Research studies, including those conducted in many countries by our International Tobacco Control Policy Evaluation Project (ITC Project), have demonstrated that countries that follow the Article 8 Guidelines in their smoke-free laws can nearly eliminate smoking in public places.

However, before Beijing's June 2015 comprehensive smoke-free law was adopted, no smoke-free initiatives in China had met the Article 8 Guidelines; instead, they consisted mainly of partial bans that allowed for loopholes and led to difficulties with enforcement. As a result, among ITC countries, China has the highest level of smoking in workplaces, the second-highest level of smoking in restaurants and bars, and the highest rate of smoking in the home. Consequently, every day, hundreds of millions of people in China who do not smoke themselves continue to be exposed to dangerous tobacco smoke.

This report provides scientific evidence that supports the adoption of a strong, comprehensive national smoke-free law that aligns with the Article 8 Guidelines. With over 300 million smokers who consume more than 40% of the world's cigarettes, China can make tremendous public health and economic gains through strong implementation of a true comprehensive smoke-free law.

A handwritten signature in black ink that reads "Geoffrey T. Fong". The signature is written in a cursive, flowing style.

Dr Geoffrey T. Fong, PhD, FCAHS
Professor of Psychology and Public Health and Health Systems, University of Waterloo
Senior Investigator, Ontario Institute for Cancer Research
Principal Investigator, International Tobacco Control Policy Evaluation Project (ITC Project)
October 2015

EXECUTIVE SUMMARY

The terrible toll of tobacco use in China

The public health toll of tobacco use in China is enormous. Smoking causes more than one million deaths each year, and exposure to second-hand smoke (SHS) causes an additional 100 000 deaths. Close to 740 million people, including 182 million children, are exposed to the harms of tobacco smoke every day. Without effective measures to ban smoking in public places, death and disease due to SHS will continue in China, worsening the devastation caused by tobacco use.

The importance of 100% smoke-free laws

There is no safe level of exposure to SHS. Therefore, comprehensive smoke-free laws are crucial to protect public health. China ratified the World Health Organization Framework Convention on Tobacco Control (WHO FCTC) in 2005. The treaty requires Parties to adopt laws or regulations to make all public places, workplaces and public transport smoke-free.

A national smoke-free law based on Article 8 of the WHO FCTC and the Guidelines on Protection from Exposure to Tobacco Smoke (Article 8 Guidelines) is the only effective way to protect all of China's population from the harms of tobacco smoke. China lags behind other countries in implementing a strong national comprehensive smoke-free law and is still the only BRICS – Brazil, Russian Federation, India, China and South Africa – country without a national smoke-free law.

From 2004 to 2014, more than a dozen cities in China implemented smoke-free initiatives. While initial evaluations of these local regulations have shown the potential of these initiatives in reducing smoking, up until 2014 none of these initiatives have been comprehensive (i.e. require 100% smoke-free areas without exceptions), and they had not yet exhibited the strong enforcement and public education campaigns that are necessary to increase their effectiveness.

Beijing: a game changer

However, from 1 June 2015 a new smoke-free law came into effect in Beijing, China's capital. The Beijing law is comprehensive, requiring all indoor public places (and many outdoor places such as schools and kindergartens) to be 100% smoke-free. The Beijing law is fully compliant with Article 8 of the WHO FCTC, and as such, it is the strongest tobacco control law adopted in China. While it is too early to measure impact, the Beijing smoke-free law has set the bar very high – both for other cities in China that follow its lead and for the draft national smoke-free regulation currently before China's State Council.

China: highest rates of smoking in public places in the world

The International Tobacco Control Policy Evaluation Project (ITC Project) is a research project conducted in 22 countries. The project's main objective is to evaluate the effectiveness of WHO FCTC policies, including smoke-free laws. In China, the ITC Project has conducted cohort surveys of smokers and non-smokers for more than six years (April 2006 to November 2012) in seven cities: Beijing, Changsha, Guangzhou, Kunming, Shanghai, Shenyang

and Yinchuan. Findings from the ITC China Survey are presented in this report. Key indicators include the effectiveness of smoke-free initiatives in each city and in comparison to the many ITC countries that have implemented smoke-free policies, including those that have met their obligations under Article 8 of the WHO FCTC, and others with only partial smoking bans in public places.

As a Party to the WHO FCTC since 2006, China is obligated to implement effective measures to reduce tobacco use and protect the public from the harms of SHS. However, the assessed impact of smoke-free policies in China shows that progress towards achieving this goal has been slow – though the new Beijing smoke-free law may be about to change this. The ITC China Survey provides evidence that the current patchwork of national and city smoke-free policies did not significantly reduce exposure to tobacco smoke in public places. The smoke-free measures in the 2007–2012 study period led to small decreases in smoking in public places. However, high rates of exposure to SHS were still found in most indoor public places, including workplaces (52–81% of those surveyed in 2011–2012), restaurants (67–91%) and especially bars (more than 90% of those surveyed observed smoking in three of the cities surveyed).

In comparison with 15 other countries included in the ITC Project, China has the highest level of smoking in workplaces (70%), the second-highest level of smoking in restaurants and bars (82% and 89% respectively), and the lowest percentage of smokers with smoke-free homes (20%). Evidence from other countries demonstrates that if China were to implement a comprehensive national smoke-free law, enormous reductions in exposure to SHS in public places could be achieved. For example, after France and Ireland implemented smoking bans covering restaurants and bars, smoking in these venues decreased to less than 5%.

The public wants smoke-free policies

There is a common perception that smokers will resist smoke-free laws. However, as in most countries that have implemented smoke-free laws, the ITC China Survey found high levels of support in China for stronger smoke-free policies, even among smokers. Support for smoking bans in public places is increasing in China, and evidence from other countries shows that support will continue to grow after implementation of a strong national smoke-free law. The majority of Chinese smokers in 2011–2012 (44–70% across the cities) believe that indoor workplaces should be smoke-free, while over one third of smokers (34–53%) across the cities support a complete smoking ban in restaurants. Support was lowest for bars but has increased over time to an average of 35% of smokers in 2011–2012. The level of support among smokers in China for bars to be smoke-free is higher than in other countries (e.g. France, Ireland, and the United Kingdom of Great Britain and Northern Ireland) before those countries implemented successful smoking bans in bars.

Urgent need for a national smoke-free law in China

The findings in this report demonstrate an urgent need for policy-makers to accelerate adoption of a comprehensive national smoke-free law in order to meet China's WHO FCTC obligations. Adoption of a national law will also support the Government in meeting its obligations – as enshrined in the Constitution of the People's Republic of China – to protect the health of China's 1.3 billion citizens. The comprehensive smoke-free law now in force in Beijing sets an excellent precedent. With strong implementation and enforcement, a national smoke-free law will build on this progress and protect the hundreds of millions of people who are regularly, and involuntarily, exposed to toxic SHS. If adopted, such a law will significantly contribute to achieving national and global smoking reduction targets – and will be a quantum leap forward in fighting the number one cause of death and disease in China.

INTRODUCTION

Tobacco use in China and the need for smoke-free laws

China is the world's largest producer and consumer of tobacco, with over 300 million smokers, comprising 28% of the adult population. Over half of Chinese men smoke, consuming around one third of the world's cigarettes. The public health toll of tobacco use in China is enormous. Currently, 1.4 million people in China die annually from tobacco use. This number is expected to rise to over 3 million by 2050 if current smoking rates continue. (1)

China's high smoking prevalence causes high levels of exposure to second-hand smoke (SHS) in homes, workplaces and other public places. While the prevalence of smoking among women in China is low (2.4%), rates of exposure to SHS among women (and by proxy, children) are among the highest in the world. (2) It is estimated that 740 million non-smokers in China, including 182 million children, are exposed to SHS at least once a day in a typical week and that exposure to SHS causes 100 000 deaths annually. (3)

With growing public concern in China about the health and environmental impacts of air pollution, there is evidence to show that the concentration of PM2.5 (particulate matter measuring less than 2.5 micrometers – a widely used health-related measure of air quality caused by pollution) is significantly worse in indoor venues filled with SHS, than outdoors – even on heavily polluted days. (4,5)

SHS is known to contain more than 7000 chemicals, including hundreds that are toxic, and at least 69 known carcinogens. (6) SHS causes many adverse health effects, such as lung cancer, heart disease and stroke in non-smoking adults. Among babies and children, SHS causes sudden infant death syndrome, low birth weight, respiratory problems and ear infections and worsens the severity of asthma attacks.

There is no safe level of exposure to SHS. (7) Accordingly, the WHO Framework Convention on Tobacco Control (WHO FCTC) requires the adoption and implementation of legislative and other measures to protect people from exposure to tobacco smoke in indoor public places, workplaces, public transport and other public places.

Creating comprehensive smoke-free environments is the only effective way to protect the population from the harms of SHS. (7,8) Smoke-free policies have also been shown to reduce tobacco consumption and increase smoking cessation. (7, 9,10)

Overview of this report

This report aims to accelerate the adoption and implementation of a strong and effective national smoke-free law in China by presenting policy-makers with evidence of effective smoke-free laws. The report summarizes global best practices and lessons learnt from other countries in the design and implementation of smoke-free policies. Research findings from China demonstrate the high prevalence of exposure to SHS in public places, particularly in comparison with other countries, and show that the majority of Chinese smokers and non-smokers support a strong national smoke-free law.

The evidence is primarily based on findings from the International Tobacco Control Policy Evaluation Project (ITC Project), the first-ever international cohort study to evaluate the psychosocial and behavioural effects of tobacco control policies and the only research project that focuses on measuring the impact of key policies of the WHO FCTC. The ITC Project conducts surveys of smokers and non-smokers in China and 21 other countries. Four waves of ITC China Survey data have been collected between 2006 and 2012 from 5600 adult smokers and 1400 non-smokers in seven cities in China. Findings from the ITC China Survey and other ITC countries can provide policy-makers with a road map to guide the adoption and implementation of a comprehensive smoke-free law.

SMOKE-FREE POLICIES

The WHO FCTC – key elements of effective smoke-free laws

The WHO FCTC is the world's first global public health treaty – adopted by the World Health Assembly in 2003 and entered into force in 2005. The WHO FCTC is one of the most rapidly and widely embraced treaties in United Nations history, registering 180 Parties as of June 2015. China ratified the WHO FCTC in October 2005, and the treaty came into legal force in January 2006.

Article 8 of the WHO FCTC requires Parties to adopt and implement legislative and other measures to protect against exposure to tobacco smoke in indoor public places, workplaces, public transport and, as appropriate, other public places. This is because 100% smoke-free environments are the only way to effectively protect against the health hazards of exposure to SHS. (8)

The Article 8 Guidelines adopted by the Conference of the Parties¹ to the WHO FCTC in 2007 recommend that all Parties achieve “universal protection” from exposure to tobacco smoke within five years of the WHO FCTC coming into force for the Party. For China, the five-year anniversary of the treaty coming into force was January 2011. Guidelines to the WHO FCTC are intended to assist Parties in meeting their obligations under the treaty. The Article 8 Guidelines provide a framework for effective smoke-free legislation, as summarized below. (11)

Article 8 Guidelines: Summary of key underlying principles for effective smoke-free laws

- Eliminate tobacco smoke in indoor public places without exemptions
- Protect all people from exposure to tobacco smoke
- Use legislation that is simple, clear and enforceable, not voluntary measures
- Provide resources to implement and enforce the law
- Include civil society as an active partner in developing, implementing and enforcing legislation
- Monitor and evaluate smoke-free laws
- Strengthen and expand the law if needed, and as new evidence-based measures are identified

The language of the WHO FCTC requires protective measures in all “indoor” public places and in “other” (that is, outdoor or quasi-outdoor) public places where “appropriate”. To identify “other” public places where a smoking ban is appropriate, governments may consider the evidence as to possible health hazards in various settings and adopt protective measures wherever a hazard is shown to exist.

¹ The Conference of the Parties (COP) is the governing body of the WHO FCTC and is comprised of all Parties to the Convention.

Summary of other recommendations in the Article 8 Guidelines

In addition to the key principles outlined above, the Article 8 Guidelines also include three main recommendations agreed upon by the Conference of the Parties, to identify the necessary measures that Parties must take in order to meet their obligations under Article 8.

1. Inform, consult and involve the public

The Article 8 Guidelines emphasize the importance of ongoing public education campaigns on the harms of SHS exposure to build support among the public and opinion leaders in the absence of strong smoke-free laws, to educate and mobilize the community, and to facilitate support for legislation after it is adopted. Education campaigns for business owners and building managers in the lead-up to implementation of the law – to inform them of the law and their responsibilities – are critical to ensure smooth implementation and strong compliance. Messages to empower non-smokers and to thank smokers for complying with the law will also build support for enforcement and implementation.

2. Enforcement

The Article 8 Guidelines recommend that effective smoke-free legislation should clearly identify the legal duties and responsibilities of business establishments and specify sufficiently large penalties to deter violations. Legislation should provide a clear enforcement infrastructure including identifying authorities responsible for enforcement and a system to monitor compliance through processes to inspect businesses and prosecute violators. Legislation should also specify the public's role in monitoring compliance and reporting violations. Enforcement activities immediately following the law's implementation, in combination with a campaign to educate business owners, are critical to successful implementation.

3. Monitoring and evaluation

The Article 8 Guidelines emphasize the importance of monitoring and evaluation of smoke-free measures to build political and public support for stronger laws, to document successes that will inform and assist other countries, and to identify and publicize efforts by the tobacco industry to undermine implementation measures. The Guidelines identify a series of process and outcome indicators, including public knowledge, attitudes and support for smoke-free policies; enforcement and compliance with smoke-free policies; reductions in exposure to SHS in workplaces, public places and private homes; changes in smoking prevalence; and economic impacts. In addition to the Article 8 Guidelines, other guiding resources include information products, technical assistance and examples to illustrate the key principles. (12,13)

Progress towards stronger smoke-free policies in China

National smoke-free laws and policies

China has been slow in implementing its obligations under Article 8 of the WHO FCTC: as noted above, the Article 8 Guidelines recommend that each Party should strive to achieve universal protection from exposure to SHS within five years of the WHO FCTC coming into force for that Party. However, in recent years China has taken important steps towards the adoption of a comprehensive national smoke-free law.

In its 12th Five-Year Plan (2011–2015), China committed to banning smoking in public places. In 2009, the Ministry of Health announced a decision to ban smoking in all health-care facilities by the end of 2011. In May 2011, the ministry issued an executive order on public sanitation, including a requirement that some public places be smoke-free. However, these regulations were weak – for example, they lacked provisions for enforcement and

penalties for violations. As a result, the regulations have not been effectively enforced and have not made a significant impact on reducing smoking in public places. In December 2013, the General Office of the Communist Party of China and the General Office of the State Council jointly issued a proclamation that banned all Government officials from smoking in public places. In January 2014, the Ministry of Education reissued a notice regarding a national ban on smoking in schools, colleges and universities that complies with the Government notice issued in late 2013. In February 2014, the National Health and Family Planning Commission issued a notification on “further strengthening the implementation of the WHO FCTC” that provides detailed provisions for smoke-free health-care and family planning facilities across the country.

In November 2014, China’s State Council issued a draft regulation on “Smoking Control in Public Places” that calls for a comprehensive ban on smoking in public places, workplaces and public transport without exceptions; a ban on tobacco advertising, promotion and sponsorship; and graphic health warnings on tobacco packages. The draft regulation also provides a detailed framework for monitoring and enforcement.

China has also set ambitious targets to reduce smoking prevalence: the National Tobacco Control Plan released in December 2012 included the goal of reducing the smoking rate from 28.1% in 2010 to 25% by 2015, a relative reduction of over 10%. This goal is in line with the global noncommunicable diseases (NCD) target, adopted by WHO’s Member States in 2013, of achieving a 30% relative reduction in tobacco smoking rates by 2025 (from 2010 levels).

A comprehensive national smoke-free law in China would be a major step towards China meeting its obligations under the WHO FCTC. With strong implementation and enforcement, the law would protect the hundreds of millions of people who are regularly, and involuntarily, exposed to toxic SHS and make a significant contribution towards achieving national and global smoking reduction goals.

According to some estimates, the implementation of a comprehensive smoke-free law in China would achieve an estimated 10% relative reduction in smoking rates by 2050, and potentially avert more than 3.4 million deaths between 2015 and 2050. (14) If implemented as part of a comprehensive set of tobacco control policies including increasing taxation; implementing pictorial health warnings; banning all forms of tobacco advertising, promotion and sponsorship; and strengthening public education campaigns as specified by the WHO FCTC, the projected reductions in smoking prevalence and prevention of smoking-related deaths could increase even further – to approximately 12.8 million deaths averted by 2050. (14)

City-level smoke-free laws

Since 2008, more than 12 cities, including the national capital of Beijing, have moved to enact or amend subnational smoke-free public places legislation or directives. Table 1 details the key smoke-free policy measures in the six cities across China with the strongest legislation. Of the six cities, only Beijing’s new smoke-free law, effective 1 June 2015, fully aligns with Article 8 of the WHO FCTC.

TABLE 1. Details of local-level smoke-free initiatives in selected cities in China²

City	WHO FCTC compliant	Implementation date	Places covered	Penalties for violations
Beijing (15)	Yes*	1 May 2008; new law effective as of 1 June 2015	All indoor public places, workplaces and public transport without exceptions; some outdoor areas*	2000 to 10 000 CNY (US\$ 322–1611) for managers; 50 to 200 CNY (US\$ 8–32) for individuals*
Guangzhou (16)	No	1 September 2010	Selected public places, including indoor Government offices, schools and on all public transport; other indoor public places, including bars, karaoke establishments, restaurants, and waiting areas of public transport are covered by a partial smoking ban which allows for designated smoking rooms (DSRs); hotels are required to have designated smoke-free areas	10 000 to 30 000 CNY (US\$ 4834) for employers and 3000 to 5000 CNY (US\$ 483–806) for managers for serious, repeated violations; 50 CNY (US\$ 8) for individuals
Harbin (17)	No	31 May 2012	All indoor public places, workplaces and public transport except hotels and restaurants where smoking is allowed in designated areas	Up to 30 000 CNY (US\$ 4834) for serious, repeated violations for owners and managers; 200 CNY (US\$ 32) for individuals
Shanghai (18)	No	1 March 2010; amendments to legislation are in process	Selected places, including schools, hospitals, libraries, arenas, Internet bars and museums, and on all public transport; some other indoor public places are covered by a partial smoking ban or have designated smoke-free areas, including hotels, restaurants, karaoke establishments and Government offices. No regulation on other indoor workplaces	2000 to 10 000 CNY for employers for repeated violations; 50–200 CNY for individuals
Shenzhen (19)	No	1 March 2014	All indoor public places, workplaces and public transport; but bars and other entertainment venues are exempt until 31 December 2016	30 000 CNY for managers for serious, repeated violations; 50–200 CNY for individuals
Tianjin (20)	No	31 May 2012	Selected public places, including indoor Government offices, schools, shopping malls, supermarkets and on all public transport; other indoor public places and workplaces, including bars, entertainment venues, hotels and restaurants, are covered by a partial smoking ban which either allows for DSRs or requires provision of smoke-free areas	5000 CNY (US\$ 806) for employers and 500 CNY (US\$ 81) for managers for serious, repeated violations; 50–200 CNY for individuals

*Beijing's law is only WHO FCTC compliant as of 1 June 2015, when the new legislation took effect. The information in Table 1 refers to the new law.

Source: ITC Project, University of Waterloo, unpublished table based on information in References (15–20), 2015.

² All currency conversions for Table 1 and throughout this report were calculated using xe.com based on rates as of 23 June 2015 (1 CNY/RMB = US\$ 0.16)

Impact of city-level smoke-free laws

Evidence from evaluations of city-level smoke-free policies in China outlined in Table 1 demonstrates that partial bans on smoking in public places – e.g. allowing exemptions for certain venues or designating smoking rooms – are not as effective as comprehensive bans in reducing SHS.

Beijing

In November 2014, the Beijing Municipal People's Congress passed a comprehensive smoke-free law banning smoking in all indoor public places, workplaces and public transport without exceptions, as well as some outdoor areas such as kindergartens and schools, and child and maternal hospital campuses. The law includes stringent fines for non-compliance, between 2000–10 000 CNY (approximately US\$ 322–1611) for managers and 50–200 CNY (US\$ 8–32) for individuals for a single violation – a huge increase from the previous 10 CNY (US\$ 1.61) fine.

Beijing's smoke-free legislation, which came into effect on 1 June 2015, is the strongest subnational smoke-free law in China. The law is expected to go a long way towards reducing the number of smokers in the city and protecting the population of more than 20 million from the harms of tobacco smoke. By setting such a strong example of smoke-free legislation that aligns with the WHO FCTC, the Beijing law will help pave the way for similar legislation to be adopted nationwide.

Guangzhou

A study to compare SHS exposure in public places before and after implementing the 2010 smoke-free law in Guangzhou found a significant self-reported reduction in SHS exposure in public places where smoking was fully banned. However, in hotels, indoor workplaces, restaurants and cafés/bars/nightclubs, smoking prevalence declined only slightly and SHS exposure remained high. (21)

Harbin

Harbin was one of the first cities in China to implement a comprehensive smoke-free law in 2012, although a smoking ban in restaurants and hotels has not yet been fully implemented. (7) When combined with public education about the harms of tobacco use and SHS exposure, the law helped to strengthen public understanding and support for protection from SHS. An evaluation of the smoke-free law conducted one year after the ban among 1860 venues found that overall compliance with the law (as measured by observed smoking) was high (88%), with 100% compliance in public transport areas and schools. However, compliance was lower in other venues, such as restaurants, Internet bars and pubs. Greater enforcement of the law is needed in these venues to increase compliance, including ensuring that “no smoking” signs are present in all venues, and removing allowances for designated smoking areas. (22)

Shanghai

A 2015 report on smoking control released by the Shanghai Government provides evidence of progress in reducing smoking in public places since implementation of the smoke-free law in 2010. Smoking prevalence in the public places where smoking is banned was 14.6% in 2014 – 2.6% lower than that in 2013 (the largest annual decrease since 2010). From 2013 to 2014 the prevalence of smoking in entertainment venues declined by 4% and in restaurants by 6.4%. From 2012 to 2014 the prevalence of smoking in Internet bars declined by 11.5% – although an increase of 1.1% was reported from 2013 to 2014. (23)

Shanghai is taking steps to amend the 2010 smoke-free law to ban smoking in all indoor public places, set up more effective enforcement mechanisms, and implement a ban on tobacco advertising, promotion and sponsorship. A tobacco control hotline was also set up effective 1 March 2014.

Shenzhen

The Shenzhen Government recently released a report on the revised 2014 smoke-free law one year after its implementation. (24) The report indicated that there was a significant reduction of smoking in many public places, especially in hospitals, hotels and indoor waiting areas for public transport. However, smoking was still quite prevalent in Internet bars – which were given a grace period until the end of 2016 to comply with the law, along with restaurants, market places and offices. There is strong public support for the 2014 smoke-free law – 91% of the premises owners and managers and 81% of the respondents visiting the public places supported a comprehensive smoking ban in public places.

Tianjin

An evaluation of the 2012 smoke-free law in Tianjin conducted among 1852 venues in August and September 2013 found that overall compliance in these venues was 73%. Similar to Harbin, compliance was lowest in Internet bars, pubs and restaurants, where smoking was observed in the majority of venues. These findings suggest that greater awareness of the smoking ban, as well as removing exemptions in restaurants, is needed to reduce smoking in these venues. (25) A Tianjin study found that from 2010 to 2013, overall hospital admissions for myocardial infarction rose by 4.2%. However, hospital admissions among those who work indoors decreased by 26.8% after the introduction of the Tianjin smoke-free law – highlighting the health benefits of smoke-free policies to the population. (26)

Evidence of the impact of national smoke-free policies in other countries

Comprehensive smoke-free laws lead to dramatic reductions in smoking indoors

Comprehensive smoke-free laws, designed in accordance with Article 8 Guidelines and well enforced – including strong penalties for violations and a clear set of responsibilities for enforcement agencies – have been shown to greatly reduce or eliminate SHS in public venues. This, in turn, can positively impact the health of smokers and non-smokers through fewer respiratory health problems and heart attacks. (27–29)

The ITC Project has conducted cohort surveys of smokers and non-smokers in several countries to evaluate the effectiveness of policies designed to reduce smoking in public places. Respondents in each country were asked whether they noticed people smoking inside various venues before and after the implementation of indoor smoke-free policies. The results of these surveys consistently demonstrate dramatic reductions in smoking indoors in countries where there was strong implementation of comprehensive smoke-free policies. For example:

- In France, eight months after the 2008 national smoke-free law,³ smokers reported a decrease in observed smoking in restaurants (71% to 2%), bars (97% to 4%) and workplaces (48% to 20%). (30)

³ A national ban on smoking in public places was implemented in two phases in France. The ban is considered “nearly” comprehensive as designated smoking rooms are permitted, however there are strict technical requirements for their construction (the room must be separately ventilated, no service is to be provided in the room, the room must not occupy more than 20% of the overall surface of the establishment, and it must also not exceed 35 square metres) and as a result, they remain uncommon in France. (32)

- In Ireland, nine months after the 2004 smoke-free law in workplaces, bars and restaurants, smokers reported a decrease in observed smoking in workplaces (62% to 14%), restaurants (85% to 3%) and bars/pubs (98% to 5%). (31)

In contrast, less dramatic reductions in indoor smoking were seen in countries where smoke-free laws were not designed or implemented well, such as allowing exemptions or being implemented without effective mass media campaigns. For example, post-ban reductions in smoking in bars were lower in Germany and the Netherlands (countries with partial bans) than in France and Ireland (countries with comprehensive bans). In each country, smokers who were more supportive of the ban, more aware of the harms of SHS and who had negative opinions of smoking were less likely to smoke in bars after the ban. (32)

- In Germany, after smoking bans were implemented in several states between August 2007 and July 2008, the percentage of smokers who observed smoking in restaurants decreased from 86% to 29% and in bars from 94% to 50%. (33)
- In the Netherlands, eight months after the 2008 smoking ban in restaurants and other hospitality venues, the percentage of smokers who observed smoking in these venues decreased from 83% to 5% in restaurants, but the decrease was less dramatic in bars, where reported smoking decreased from 93% to 30%. (34)

Levels of air pollutants in public venues decrease after smoke-free policies are implemented

Air quality studies have shown that smoke-free laws lead to dramatic reductions in indoor air pollution. Smoke-free laws decrease PM2.5 levels in bars, restaurants and other hospitality venues:

- In Ireland, there was an 83% reduction in PM2.5 levels in smoke-free pubs one year after the implementation of the 2004 100% smoke-free law compared to pre-ban levels. (35)
- Across 32 countries, PM2.5 levels were on average 87% lower in countries with comprehensive smoke-free laws in comparison to countries without comprehensive smoke-free laws. (36)

As noted in the Introduction, the available evidence from China shows that PM2.5 levels are worse in indoor venues that contain SHS than outdoors – even on heavily polluted days. (4,5)

Smoke-free policies reduce the health harms of SHS among smokers and non-smokers

Comprehensive smoke-free legislation is associated with significant health benefits – within relatively short periods of time. Smoke-free laws can rapidly lead to marked improvements in respiratory and cardiac health outcomes:

- In Ireland, non-smoking employees working in bars showed significant improvements in lung function and reductions in respiratory and irritation symptoms one year after workplace smoking bans were implemented in 2004. (35) In the three years following the smoking ban, there was also a 13% reduction in deaths from all causes in the population, a 26% reduction in deaths from ischemic heart disease, a 32% reduction in deaths from stroke and a 38% reduction in deaths from chronic obstructive pulmonary disease. (37)

- In Uruguay, hospital admissions for acute myocardial infarction (AMI) decreased by 22% in the two years following the implementation of a comprehensive national smoke-free law in 2006. (38) A four-year post-implementation follow-up (the longest follow-up of any study of the effect of comprehensive smoke-free laws on AMI) continued to show a substantial and sustained drop in AMI admissions (17% decrease over four years). (38)

Global evidence is consistent in demonstrating that people living in communities that have enacted smoke-free laws have lower risks of suffering smoking-related cardiac, cerebrovascular and respiratory diseases. A 2012 meta-analysis of 45 studies examining 33 smoke-free laws found that comprehensive smoking bans were associated with significantly lower rates of hospital admissions (or deaths) for coronary events, other heart disease, cerebrovascular accidents and respiratory disease. The more comprehensive a smoke-free law, the greater the reductions in hospital admissions. Several studies included in this analysis documented reductions in health-care costs associated with fewer hospitalizations for cardiovascular or respiratory diseases. (39)

There is also growing evidence for the positive effects of smoke-free legislation on perinatal and child health. A meta-analysis of 11 studies (five local bans in North America and six national bans in Europe) found that smoke-free laws were associated with substantial reductions in preterm births (10.4% reduction) and child hospital admissions for asthma (10.1% reduction). (40)

Smoke-free laws help smokers quit

In addition to reducing the amount of toxic chemicals in the air and protecting non-smokers from exposure to tobacco smoke, smoke-free laws have been positively associated with quitting among smokers and preventing youth from initiating smoking. (41)

- In Ireland, 46% of smokers reported that the 2004 law made them more likely to quit and 80% of those who did quit said the law helped them to quit. (31)
- After smoke-free legislation was enacted in 2006, 44% of quitters in Scotland (United Kingdom) reported that the law had helped them quit. (42)

Comprehensive smoke-free laws also help to change social norms around smoking: they lead to increased public support for smoking bans, (31) reduce the perceived social acceptability of smoking, (43–45) and limit opportunities and reduce social cues for smoking. (46,47) This is especially important in China, where smoking has long been associated with a positive image and is embedded in many social events and customs. (1)

Smoking in homes decreases after smoke-free laws are implemented

Research from the ITC Project provides strong evidence that the implementation of smoke-free laws in public venues and workplaces does not lead to more smoking in the home. By raising awareness of the dangers of tobacco smoke, smoke-free laws may encourage smokers to voluntarily adopt smoke-free rules in their own homes:

- After implementation of smoke-free legislation in France, Germany, Ireland and the Netherlands, the proportion of smokers with a total home smoking ban increased significantly in all four countries, from an increase of 17% in France to a 38% increase in Germany. (48)
- Following the implementation of their comprehensive smoke-free law in 2006, an increase in smoke-free homes was also found in Uruguay – from 21% of smokers in 2006 to 37% of smokers in 2012 who said they do not allow smoking in the home. (49)

Similar to the effects of smoking bans in public places, studies have established that smoke-free households also help to promote quit attempts and cessation among smokers. (50–52)

Longitudinal data from the ITC Project extend research in this area by showing that in addition to encouraging smokers to quit smoking, smoke-free homes may play an important role in helping smokers to successfully quit: smoke-free homes facilitated quit attempts and reduced relapse after quitting among nationally representative samples of smokers in Australia, Canada, the United Kingdom and the United States of America. (53)

Smoke-free laws benefit business and the economy

Smoking in workplaces and public places imposes a significant financial burden through increased medical costs, lost productivity due to illness, higher insurance premiums, and increased cleaning and property maintenance costs. In China, health-care expenditures have increased since 2004, with treatment costs for acute myocardial infarction and stroke reaching 50 billion CNY (US\$ 8 billion) in 2012. (1) Moreover, tobacco taxes in China only cover a fraction of total health-care expenditure. (1)

Studies on the economic impact of smoke-free laws on the hospitality industry conducted around the world consistently show either no economic impacts on patronage, sales or profits from smoke-free laws, or small positive effects (in restaurants and the wider hospitality industry). (54–57) Indeed, smoke-free policies have been shown to benefit the economy by reducing health-care costs associated with SHS exposure, lost productivity costs among smoking employees, and workplace maintenance and insurance costs. (58,59)

How do China's smoke-free laws compare with other countries and Hong Kong SAR (China)?

Smoke-free laws in other countries and areas

Smoke-free legislation is the most widely adopted tobacco control policy measure. Globally, more than 1 billion people, or 16% of the world's population, are currently protected by comprehensive smoke-free laws. (60) As of December 2012, 43 WHO Member States offered the highest level of protection from SHS (i.e. all public places are completely smoke-free, or at least 90% of the population is covered by complete subnational smoke-free legislation). This includes 11 high-income countries, 29 middle-income countries and three low-income countries. (61)

China is a member of BRICS: an association of five countries (Brazil, Russian Federation, India, China, South Africa) with rapidly developing economies, accounting for 20% of the world's gross domestic product (GDP) and 50% of the world's population. Currently, China is lagging behind other BRICS countries in terms of tobacco control efforts. (62) While China has the greatest cigarette consumption and the most number of tobacco-related deaths per year of the five countries, it is still the only BRICS country without a national smoke-free law. All other BRICS countries have implemented national smoke-free laws – albeit with different levels of WHO FCTC compliance and effectiveness in enforcement (Table 2).

TABLE 2. National smoke-free legislation in other BRICS countries

Countries	WHO FCTC compliant	Implementation date	Places covered	Penalties for violations
Brazil (63)	No	3 December 2014	All enclosed areas open to the public, including shared enclosed spaces. Exemptions include places where religious rituals involve tobacco products; establishments for research and development of tobacco products; studios and filming locations when necessary for production of the work; tobacco shops with specific building design requirements for smoking; and health-care institutions if doctors authorize patient smoking	Premises may be fined or have their business license revoked. Fines range from BRL 2000–1 500 000 (US\$ 648–486 123). Individual smokers are not fined
India (65)	No	2 May 2004	Public places, including workplaces, health-care and educational facilities, and public transport; designated smoking areas (DSAs) are permitted in airports, in hotels with 30 or more rooms, and in restaurants with 30 or more seats. A draft bill proposed in January 2015 seeks to eliminate all DSAs except in international airports.	Draft regulations seek to increase the fine for individuals who smoke in restricted areas from 200–1000 Rupees (US\$ 3–16). Owners are also liable for fines totalling the amount of the fines for each individual violation
Russian Federation (64)	Yes	1 June 2014	Indoor public places including restaurants and bars; designated smoking sections in restaurants are not allowed. The only exception to the comprehensive ban is long-distance passenger ships	Up to RUB 90 000 (US\$ 1670) for premises; RUB 500–1500 (US\$ 9–28) for individuals
South Africa (66)	No	January 2001	Indoor public places, workplaces and public transport; effective January 2001. DSAs (up to 25% of floor space) are allowed, but the National Department of Health is working to finalize regulations to strengthen the law by removing DSAs and including some outdoor areas in the bans	Up to R 50 000 (US\$ 4106) for business owners; R 500 (US\$ 41) for individuals

Source: ITC Project, University of Waterloo, unpublished table based on information in References (63–66), 2015.

Smoke-free law in Hong Kong SAR (China)

Smoking in Hong Kong SAR (China) was prohibited in indoor public places and workplaces as of 1 January 2007 under the Smoking (Public Health) Ordinance. In 2009, the smoking ban was extended to include covered public transport interchanges with superstructures and hospitality establishments. A fixed penalty of HK\$ 1500 (US\$ 193) was imposed for smoking in restricted areas. In 2014, more than 8000 fixed penalty notices were issued for smoking in non-smoking areas. (67) Because of the proximity of Hong Kong SAR (China) to Shenzhen, millions of Chinese citizens who cross the border each year are informed by the China National Tourism Administration that they must observe these more stringent smoke-free regulations while in Hong Kong SAR (China). (68) While the Hong Kong SAR (China) smoke-free law is regarded as a good example, the law is not fully compliant with WHO FCTC Article 8 because it allows for exceptions to the smoking ban, including hotel rooms, designated areas in airports

and correctional/detention facilities, and tasting rooms in cigar shops. Compliance with the law is also poor in bars, especially open-fronted venues, as the owners are not held liable for violations.

There is evidence of reductions in smoking as a result of the smoking ban in Hong Kong SAR (China). For example, smoking prevalence among people aged 15 and over decreased from 14% in 2005 before the law to 10.7% in 2012. Smoking in restaurants also decreased after the ban – one school-based study found that only 13% of children were exposed to SHS in restaurants one year after the ban, compared to 35% in 2000. However, evaluation studies have still found a significant amount of smoking in public places – even in places that are covered by the smoke-free law. For example, a 2013 survey found that over one third of those who worked outside the home (39%) reported people smoking inside the workplace, and almost two thirds (65%) of people who visited bars noticed people smoking indoors. (69)

Case studies: best practice in implementation of smoke-free policies

Ireland

In March 2004, Ireland became the first country to implement a comprehensive smoke-free law in all workplaces, including restaurants and pubs, with no allowances for designated smoking rooms. The law has been hailed as a successful example for other countries to follow. The law has contributed to fewer smoking-related deaths in Ireland and a decrease in smoking prevalence by more than 7% from 2004 to 2013. (70)

Strong stakeholder support – including from the public, Government and opposition parties, health-care organizations, trade unions, public health advocates and others – resulting from extensive public education on the harms of SHS, as well as a well-defined monitoring and evaluation system, has led to strong compliance with the law. Ireland's experience shows that with strong political leadership, effective and well-supported smoke-free policies can be implemented in countries where smoking is deeply rooted in "pub culture" and where there is strong opposition from the tobacco industry, the hospitality industry and other groups. (70)

Uruguay

Uruguay implemented comprehensive smoke-free legislation in 2006, becoming the first middle-income country in the world to adopt a 100% smoke-free law. The Uruguay law prohibits smoking in all indoor public places and workplaces, including bars and restaurants, and on public transportation, with no exceptions for designated smoking areas. Before the legislation came into force, levels of SHS in Uruguay were among the highest in Latin America. After the law was implemented, SHS exposure in public places was similar to levels achieved in high-income countries, and lower than in comparable cities in Mexico where comprehensive smoke-free legislation had not been implemented, demonstrating the effectiveness of a comprehensive law over weaker policies that allow for exceptions. (71) Smoking prevalence has also decreased in Uruguay after the smoke-free law and a series of other tobacco control measures were introduced in 2005, with a 3.3% annual decrease in prevalence among adults from 2005 to 2011. (72)

Factors contributing to the success of Uruguay's smoke-free law include strong political will and support of civil society, public health and medical communities, the hospitality sector and academia; a strong framework for inspection and enforcement; strong public education campaigns including those that thank smokers for their compliance; and including smoke-free laws as part of a comprehensive tobacco control strategy. (73,74)

EFFECTIVENESS OF CURRENT SMOKE-FREE LAWS IN CHINA AND SUPPORT FOR A COMPREHENSIVE NATIONAL SMOKE-FREE LAW

The ITC China Survey

The ITC China Survey is a face-to-face longitudinal survey of smokers and non-smokers in seven cities in China which were selected for their diversity with respect to geographic region, economic development, tobacco use and tobacco production. The survey was conducted at the city level because the complexity of the survey meant that a nationally representative sample was not feasible. (75) Four survey waves have been conducted between 2006 and 2012 in Beijing, Changsha, Guangzhou, Shanghai, Shenyang and Yinchuan. Kunming joined the survey at Wave 3 (2009). In each city, a random sample of approximately 800 adult smokers and 200 adult non-smokers was surveyed. The data in this report was collected from Waves 2 (2007–2008) to 4 (2011–2012). Further information on the ITC China Project methodology is presented in Wu et al. 2010 (75), Wu et al. 2014 (76) and at <http://www.itcproject.org/countries/china>.

ITC evaluation of smoke-free policies

A major objective of the ITC survey is to measure the impact of policies of the WHO FCTC. The ITC survey includes questions that evaluate the impact of specific policies, including smoke-free policies. These questions include awareness of smoking bans and self-reported observed smoking in indoor workplaces, restaurants, bars and other venues. The survey also asks respondents about rules on smoking in their homes and whether they support complete bans on smoking in workplaces, restaurants, bars and other venues.

Data collected from these questions when asked among the same cohort of smokers and non-smokers before and after the implementation of smoke-free policies (that vary in strength and level of enforcement) provide a measure of smoke-free policy effectiveness in China and across countries. Among the seven cities, two cities (Changsha and Kunming) have had smoke-free policies in place since the early 1990s, before the WHO FCTC came into force. The other five cities introduced smoke-free regulations after China ratified the WHO FCTC. Therefore, comparisons can also be made across cities in China to evaluate the effectiveness of smoke-free policies pre- and post-WHO FCTC implementation.

The use of standardized methods and measures across all ITC surveys ensures that the effectiveness of smoke-free laws and other policies can be compared across more than 20 ITC countries⁴ to provide guidance on best practices in tobacco control.

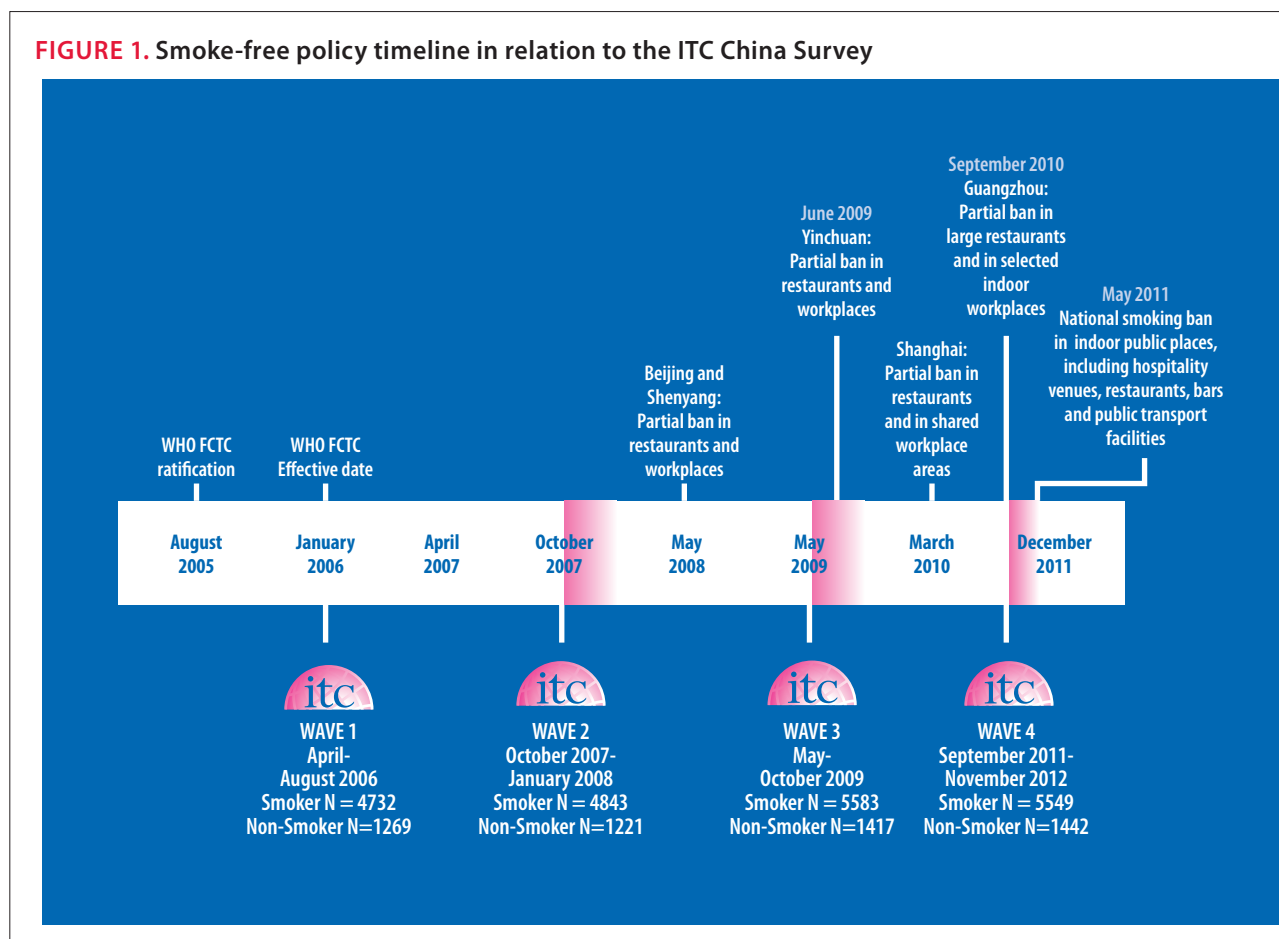
The ITC China Survey questions are available at <http://itcproject.org/surveys>.

⁴ Cross-country comparisons may vary in the number of countries included because they only include ITC countries where the question of interest was asked and where the last wave of data collection was no earlier than 2008.

Effectiveness of China's smoke-free laws

Between 2008 and 2011, various city-level smoke-free policies were implemented in indoor workplaces and restaurants across most ITC cities, while other local regulations were already in place. A national directive on smoking in indoor public places was also announced by the Ministry of Health effective May 2011. The ITC China Waves 2 to 4 surveys measured the impact of these policies, before and after they were implemented (Figure 1). Policies implemented after 2012, including Beijing's new comprehensive smoke-free law passed in 2014, were not evaluated in the survey findings presented below.

FIGURE 1. Smoke-free policy timeline in relation to the ITC China Survey



Source: Updated based on Figure 1 in Reference (77)

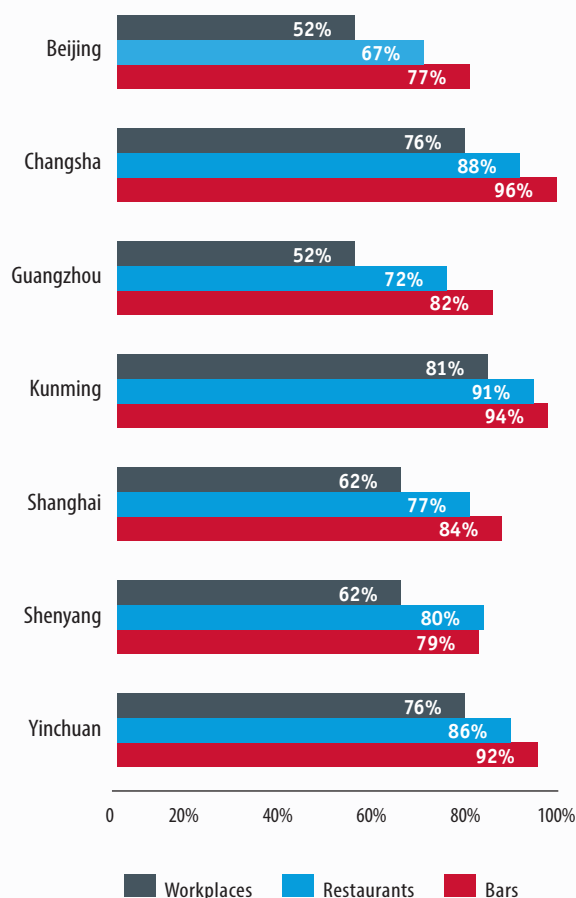
The findings of the ITC China Project on the effectiveness of China's smoke-free laws in indoor workplaces, restaurants and bars are provided below. In line with the findings of other studies, these findings show that the various city-level smoke-free policies and fragmented national smoke-free regulations have resulted in minimal reductions in smoking in public places in China. (78) As a result, hundreds of millions of people in China are not protected from the harms of exposure to SHS. A strongly enforced comprehensive national ban on smoking in public places with no exceptions, as described in the WHO FCTC Article 8 Guidelines, is urgently needed.

Observed smoking in public places

Figure 2 summarizes the prevalence of smoking in workplaces, restaurants and bars in 2011–2012 in each city as reported by smokers who are employed outside the home and work indoors, and smokers who visited bars/restaurants in the last six months. The percentages reflect the percentage of smokers who saw people smoking inside the bar/restaurant the last time they visited and the percentage of smokers who saw people smoking in indoor areas of their workplaces in the last six months.

The results indicate alarmingly high rates of smoking in public places in each city, despite the national ban on smoking in indoor public places. In 2011–2012, smoking was observed in more than half of workplaces in Beijing and Guangzhou and in more than three quarters of workplaces in Changsha, Kunming and Yinchuan. In restaurants, smoking was observed in more than two thirds of restaurants in all seven cities. The absence of smoke-free policies in bars has resulted in extremely high rates of smoking in these venues – smoking was observed in more than 90% of bars in Changsha, Kunming and Yinchuan. Trends in observed smoking in these venues from 2007–2008 to 2011–2012 and cross-country comparisons of smoking in these venues are provided in the following sections.

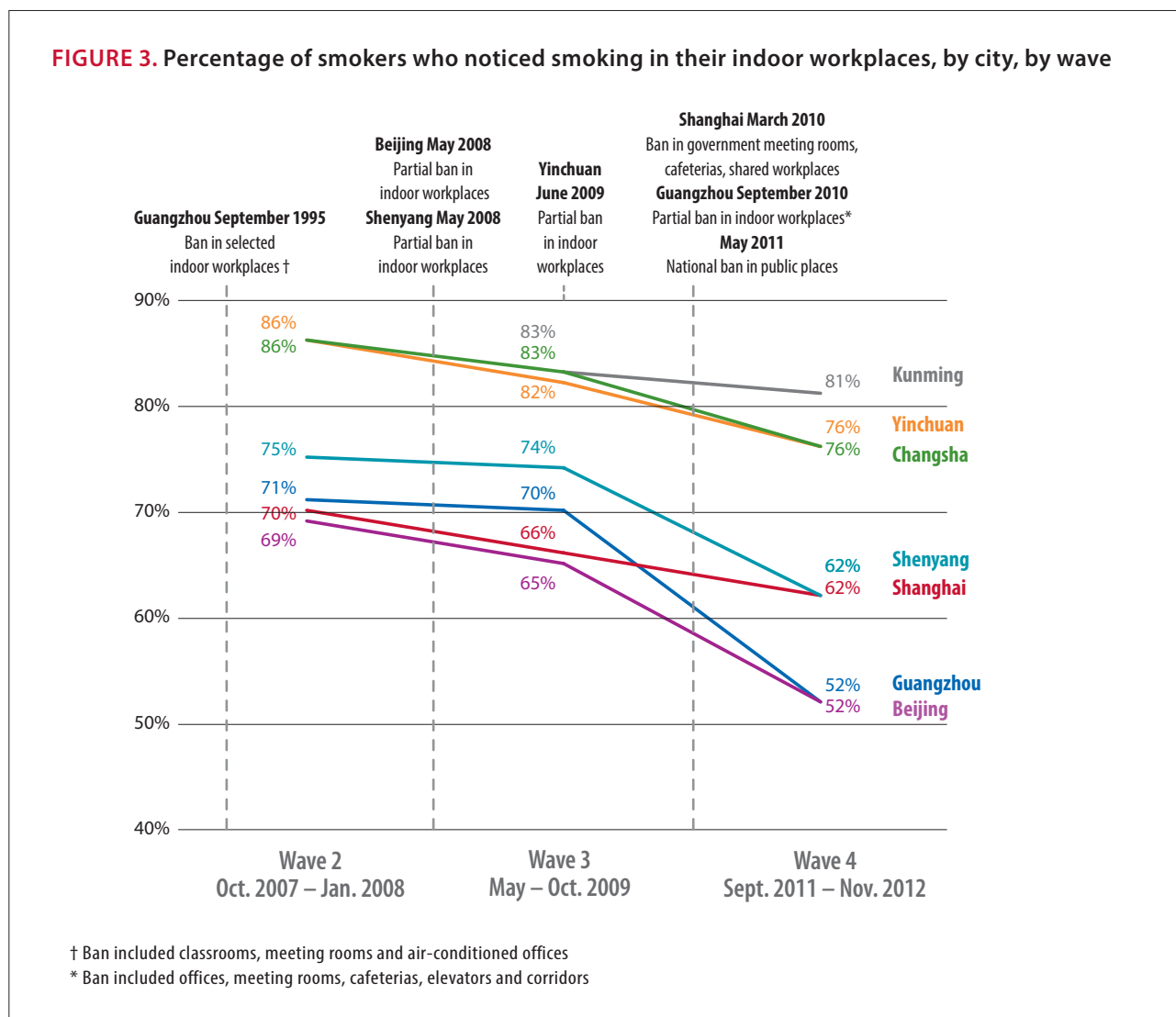
FIGURE 2. Percentage of smokers who noticed smoking in workplaces, restaurants and bars in Chinese cities, Wave 4 (September 2011–November 2012)



Source: ITC Project, University of Waterloo, unpublished data, 2015.

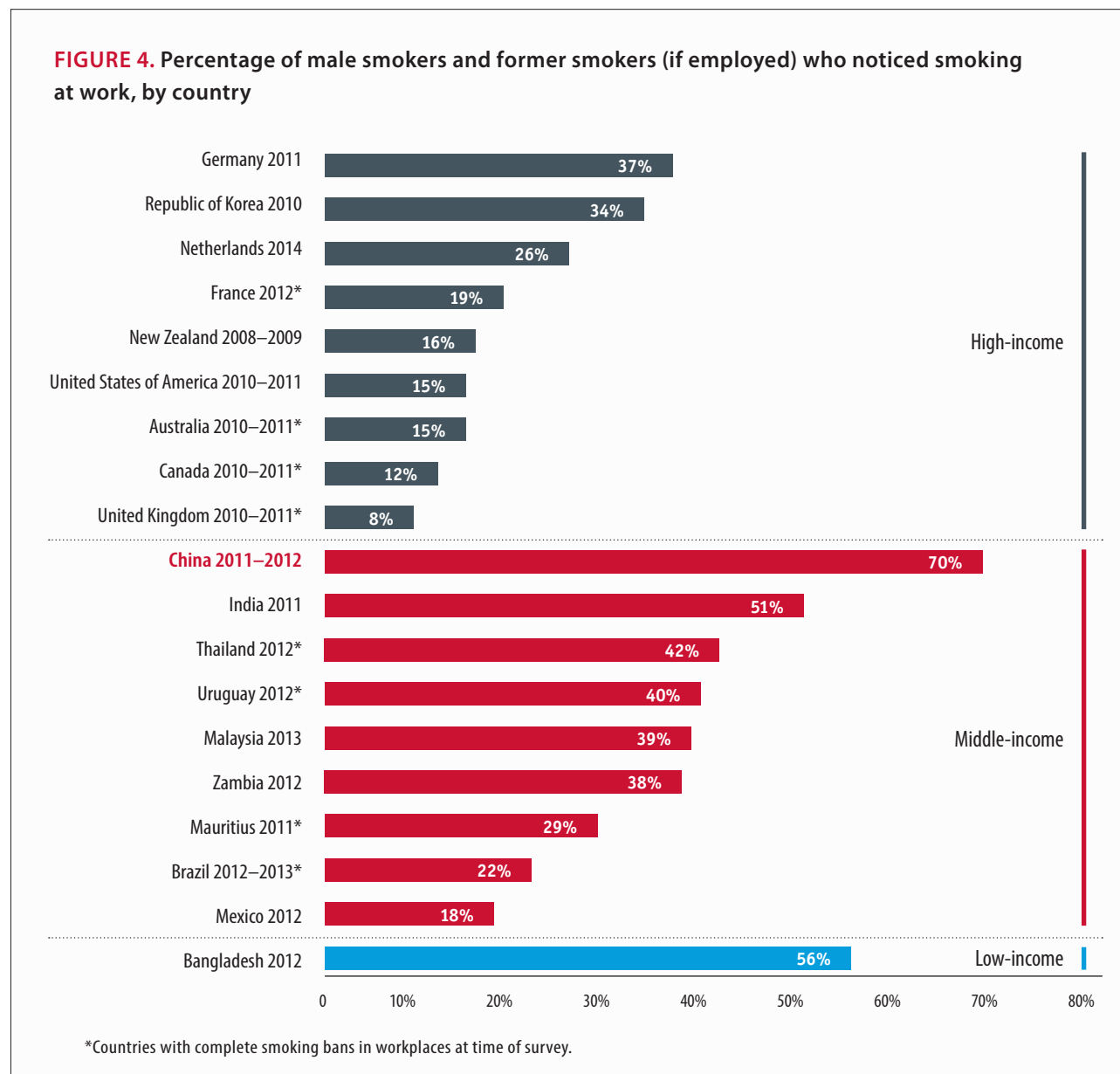
Smoking in indoor workplaces

Evidence from the ITC China Survey in seven cities shows that there have been some reductions in indoor smoking in workplaces from 2009 to 2012. However, although there were decreases in observed indoor smoking in all cities, the reductions were statistically significant only in Beijing and Shenyang (cities which have restricted smoking in indoor workplaces). In every city, there was still some smoking observed in over half of indoor workplaces, from a high of 81% of workplaces in Kunming and 76% of workplaces in Changsha and Yinchuan to a low of 52% in Beijing and Guangzhou in 2011–2012 (Figure 3).



Source: ITC Project, University of Waterloo, unpublished data, 2015.

The ITC Project has been conducted in 22 countries. Data collected through the project enable comparison of the prevalence of smoking in workplaces in China to those of many other countries. That comparison is presented in Figure 4. China has by far the highest level of smoking in workplaces: 70% of Chinese smokers who work indoors observed exposure to SHS in indoor workplaces in 2011–2012.⁵

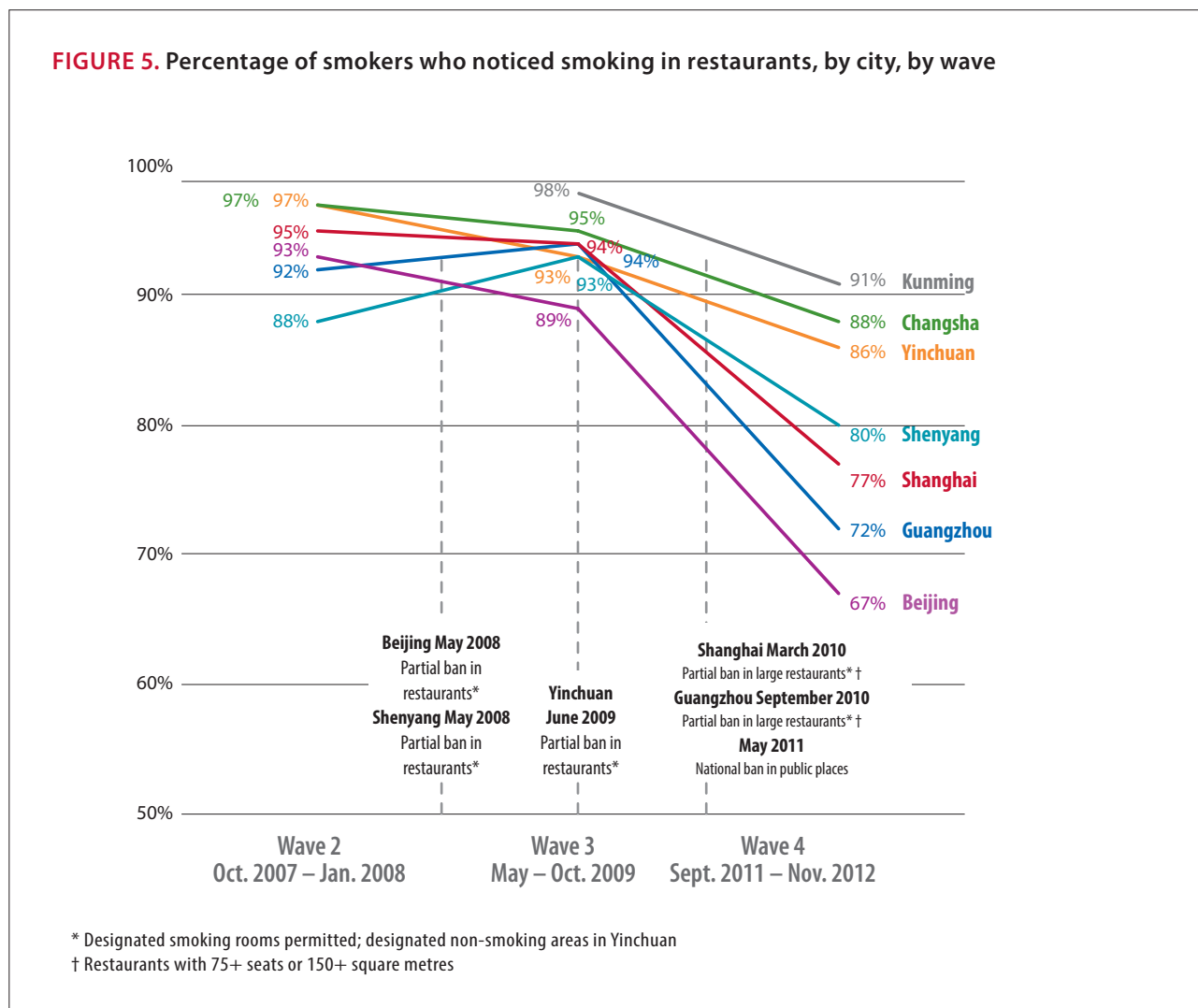


Source: ITC Project, University of Waterloo, unpublished data, 2015.

⁵ This estimate is adjusted based on the set of countries in the cross-country comparison model and the results in those countries. It only includes male smokers and male former smokers. Therefore, Figure 4 does not present an average of the Wave 4 survey results in each city in China shown in Figure 3.

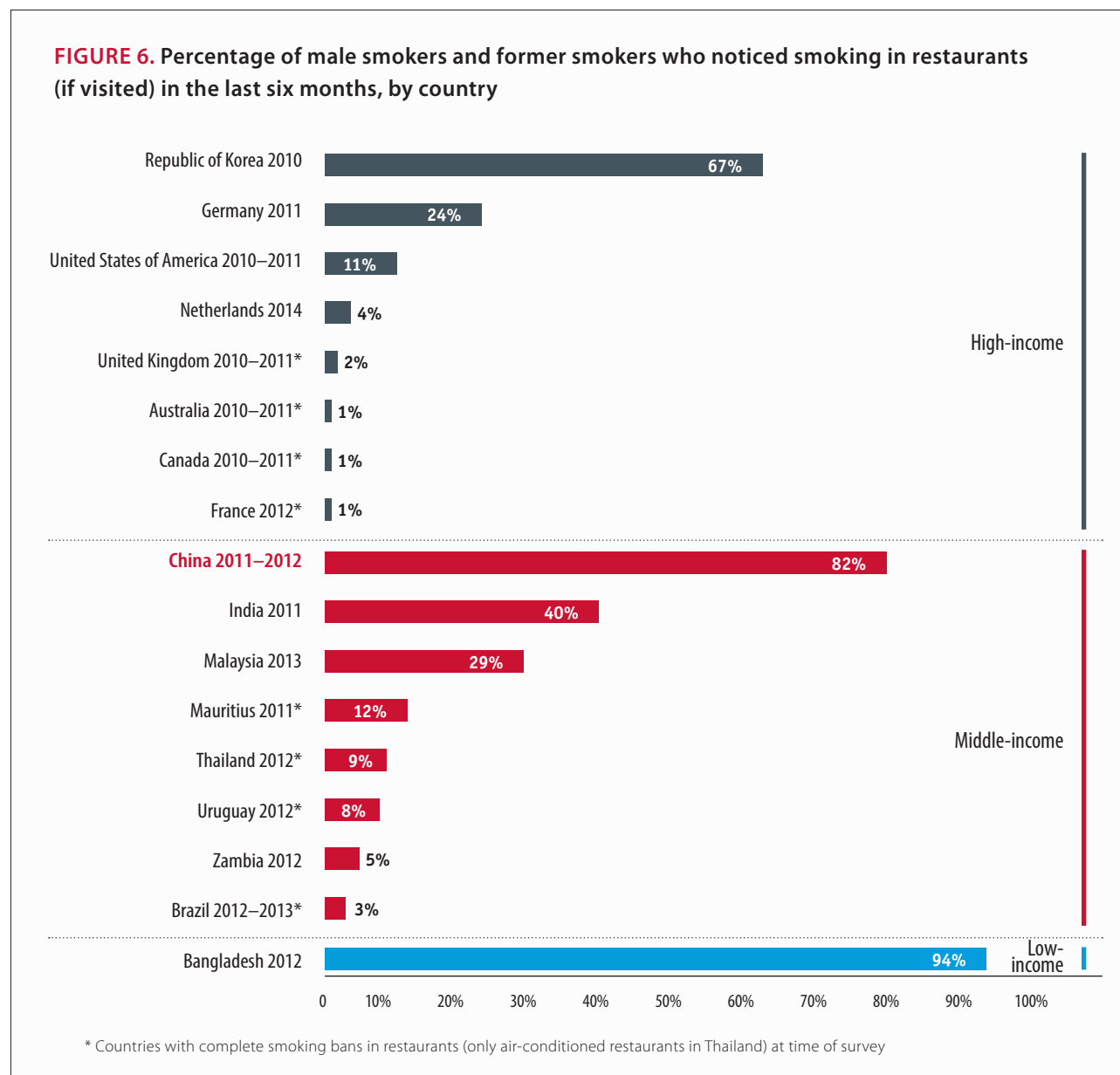
Smoking in restaurants

ITC data from seven cities shows that the vast majority of smokers observed exposure to SHS in restaurants. For example in Changsha, Kunming and Yinchuan, smoking was observed in more than 85% of restaurants (Figure 5). The largest reductions in restaurant smoking (more than a 15% decrease) were found in Beijing, Guangzhou and Shanghai from 2009 to 2012 – cities where smoking in restaurants is partially banned. A strong, comprehensive national ban on smoking in public places would achieve much more significant, and nationwide, reductions.



Source: ITC Project, University of Waterloo, unpublished data, 2015.

Figure 6 shows that China has the second-highest level of smoking in restaurants among ITC countries. In 2011–2012, smoking was observed in more than 80% of restaurants when smokers last visited – second only to Bangladesh where smoking was observed in 94% of restaurants.⁶

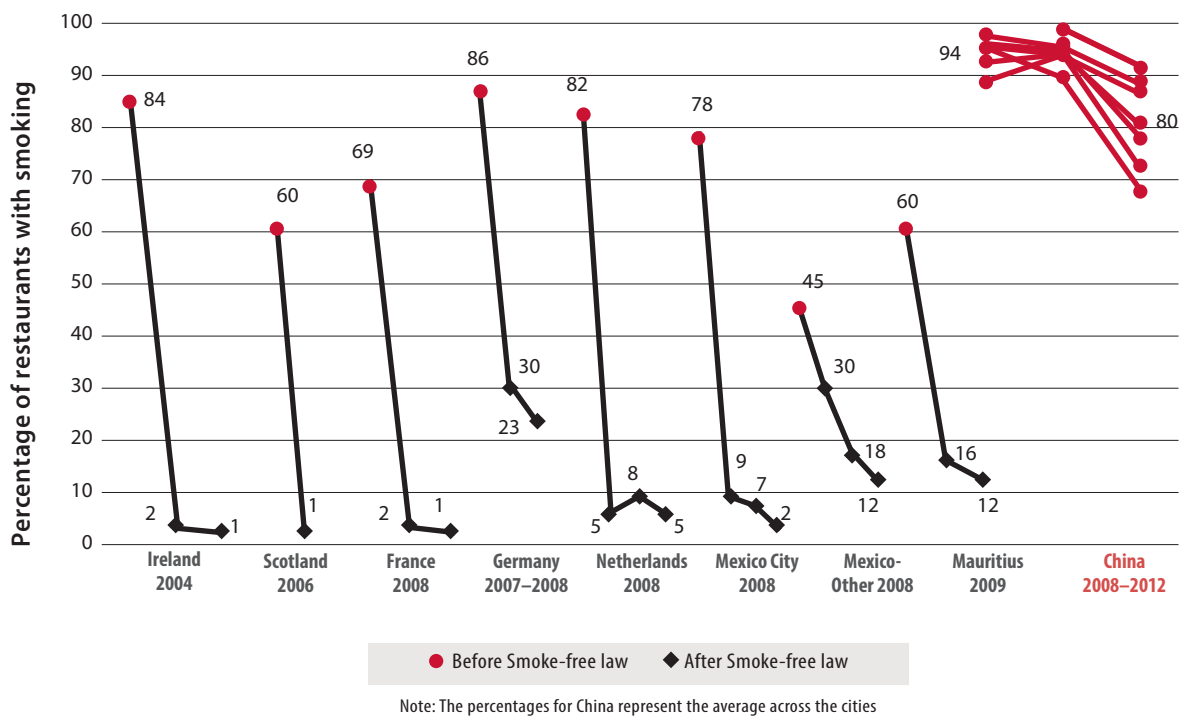


Source: ITC Project, University of Waterloo, unpublished data, 2015.

⁶ This estimate is adjusted based on the set of countries in the cross-country comparison model and the results in those countries. It only includes male smokers and male former smokers. Therefore Figure 6 does not present an average of the Wave 4 survey results in each city in China shown in Figure 5.

With a strongly enforced comprehensive national smoking ban, China could achieve a near total elimination of SHS in restaurants – similar to Ireland, Scotland (United Kingdom), France, Germany, the Netherlands, Mexico City, other Mexican cities and Mauritius after comprehensive smoke-free laws were implemented. Figure 7 shows the large decreases in smoking in restaurants that were achieved after these smoke-free laws were implemented, in comparison to the high level of smoking still found across China’s seven ITC cities.

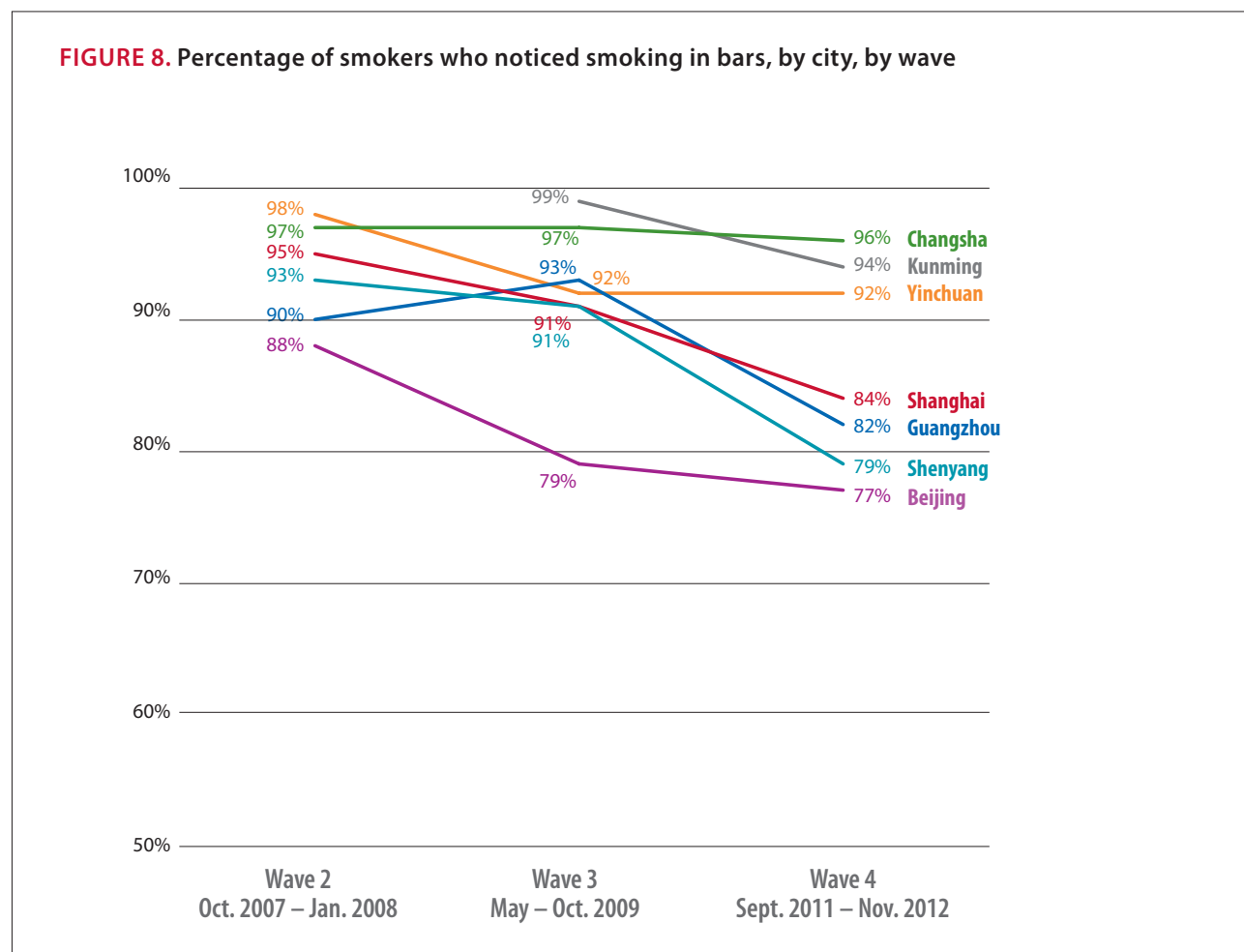
FIGURE 7. Smoking prevalence in restaurants in seven ITC China cities from 2008 to 2012 compared with other countries before and after comprehensive smoke-free laws: Ireland (2004), Scotland (United Kingdom) (2006), France (2008), Germany (2007–2008), the Netherlands (2008), Mexico City (2008), other Mexican cities (2008) and Mauritius (2009)



Source: Adapted from Fong, G.T. *Non-price policies: Smoke-free policies and health warnings*. Paper presented at the WCTOH, Abu Dhabi, United Arab Emirates, March 2015.

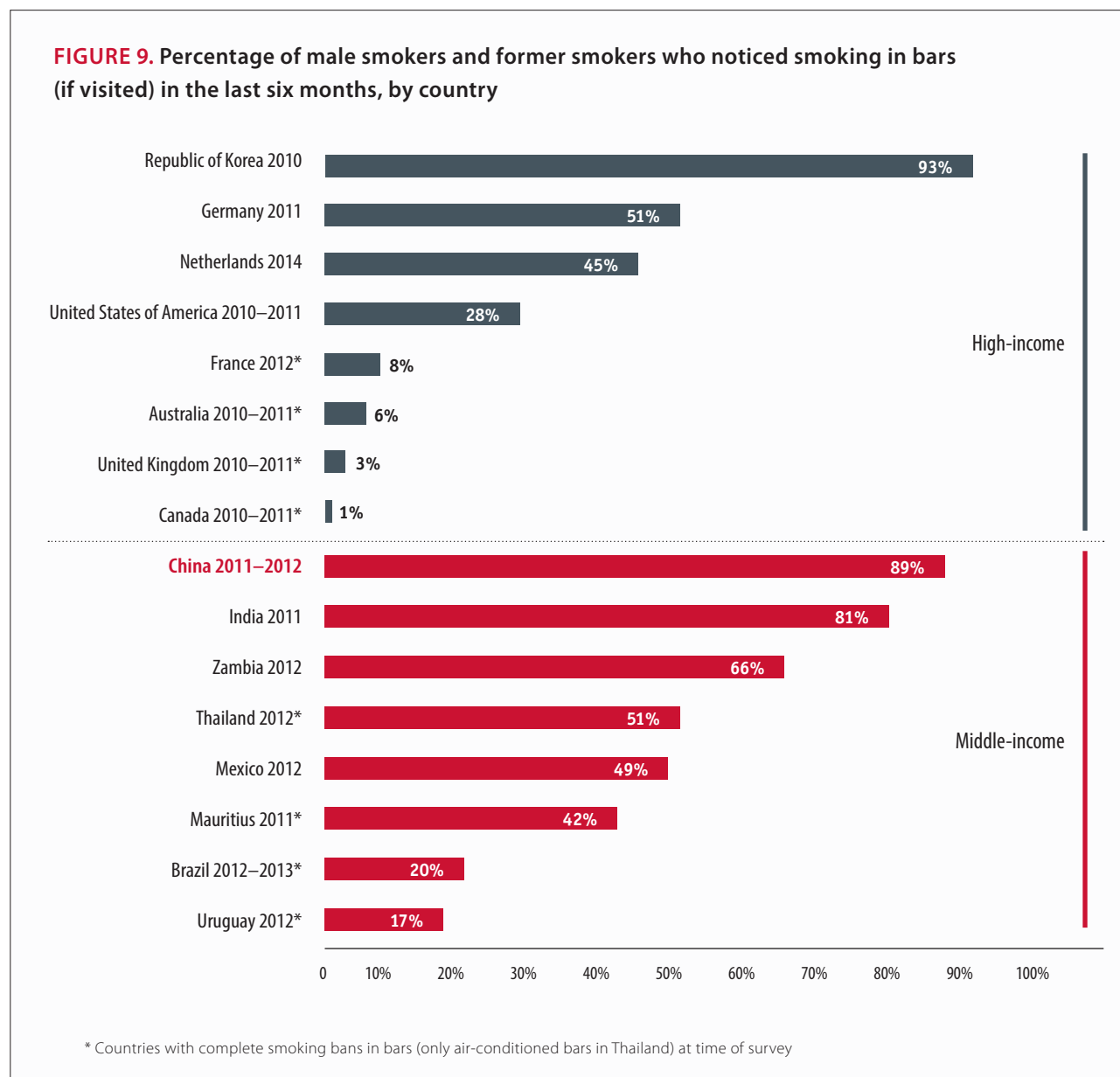
Smoking in bars

In 2011–2012, smoking was observed in almost every bar in three Chinese cities – Changsha (96%), Kunming (94%) and Yinchuan (92%). The level of observed smoking was extremely high in the other cities, and it was lowest in Beijing (77%) (Figure 8).



Source: ITC Project, University of Waterloo, unpublished data, 2015

ITC cross-country comparisons show that China has the second-highest level of smoking in bars of 16 ITC countries (Figure 9). In 2011–2012, there was smoking in 89% of bars.⁷ Again, with a strong, well-enforced comprehensive ban on smoking in all public places, the prevalence of smoking in bars would be significantly reduced. For example, smoking levels of less than 10% in bars have been achieved in Australia, Canada, France and the United Kingdom.

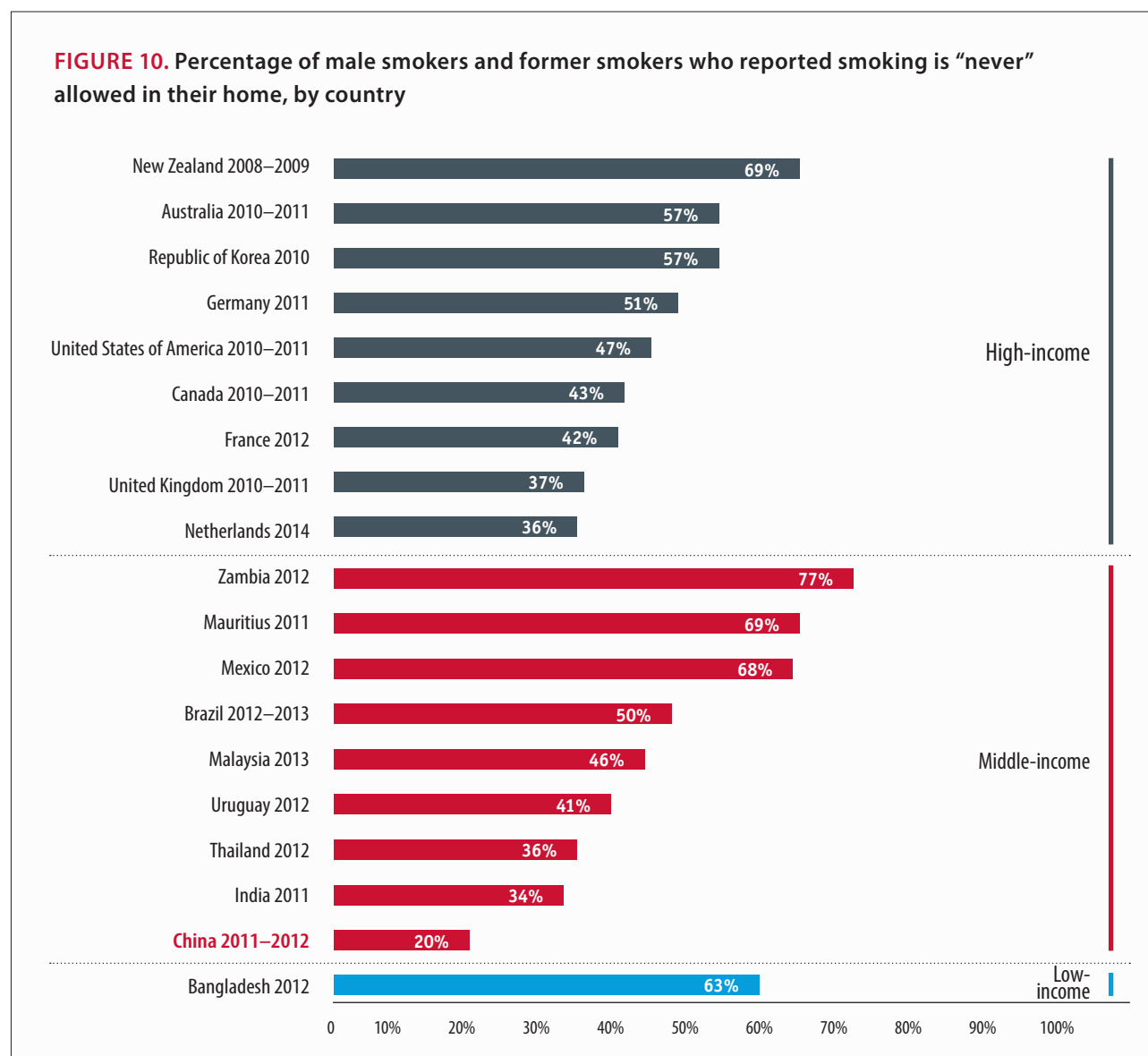


Source: ITC Project, University of Waterloo, unpublished data, 2015.

⁷ This estimate is adjusted based on the set of countries in the cross-country comparison model and the results in those countries. The estimate only includes male smokers and male former smokers. Therefore, Figure 9 does not present an average of the Wave 4 survey results in each city in China shown in Figure 8.

Smoking in homes

ITC cross-country comparisons show that China has the lowest percentage of smoke-free homes (20% in 2011–2012) and therefore the highest rate of smoking in the home among 19 ITC countries (Figure 10). The ITC Project has consistently found that smoking bans in public places do not lead to more smoking in the home. In fact, smoking bans in public places lead to less smoking in the home: after smoking bans are implemented in public places, the ITC Project has found an increase in smokers making the inside of their own homes smoke-free. (31,48,79) This provides strong evidence that comprehensive smoke-free laws in China will reduce SHS in public places and in private spaces, such as homes. This is especially important to protect the health of women and children, as rates of exposure to SHS among women (and by proxy, children) in China are among the highest in the world, including exposure at home. (2)

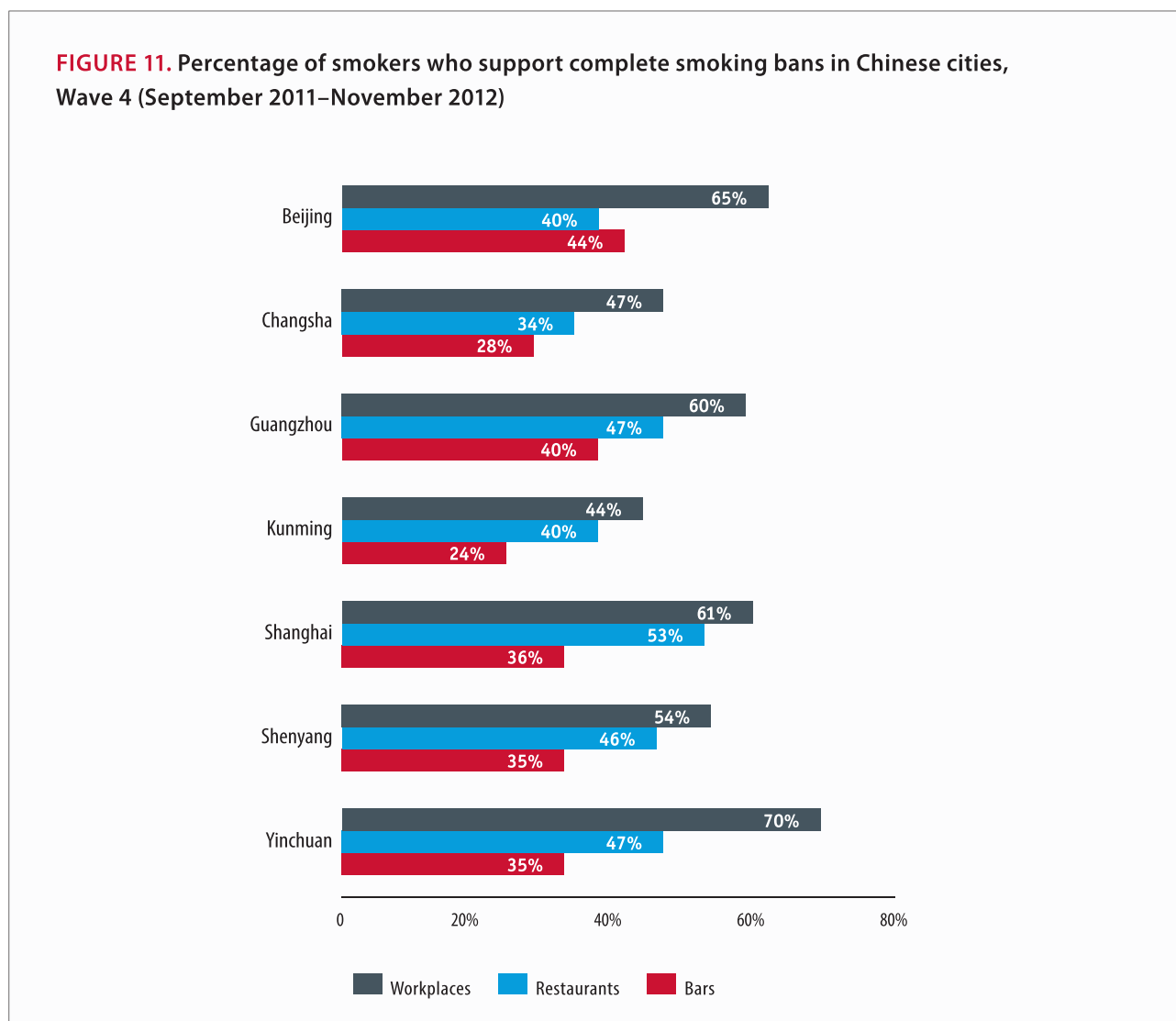


Source: ITC Project, University of Waterloo, unpublished data, 2015.

Public support for smoke-free laws in China

Figure 11 summarizes the level of support for complete smoking bans in workplaces, restaurants and bars in 2011–2012 in each Chinese city. The percentages reflect the percentage of smokers who said that smoking should not be allowed in any indoor areas in each venue.

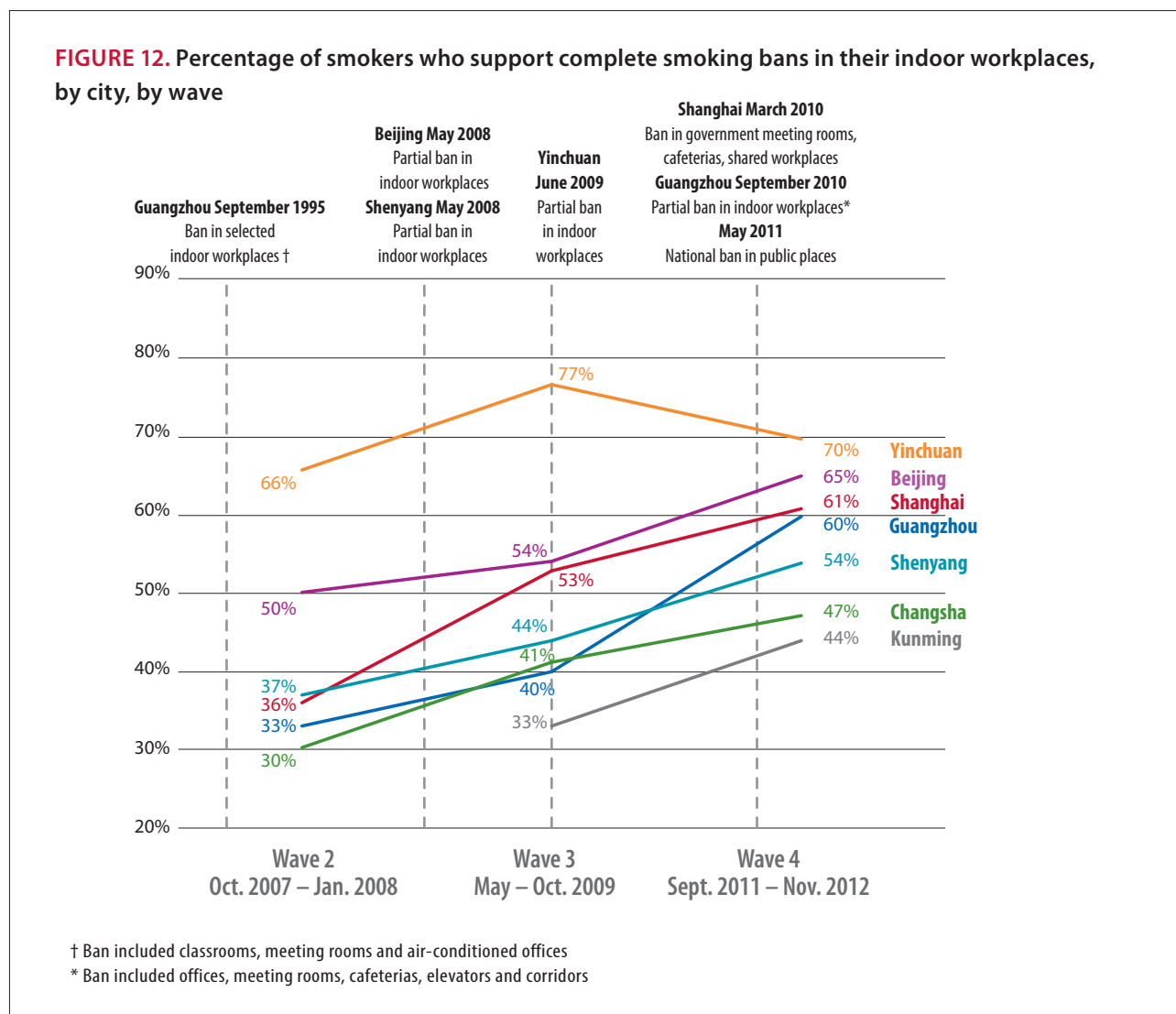
The results indicate relatively high levels of support for smoke-free policies in China, although support varied across cities and venues. Over half or close to half of smokers in each city supported a complete ban on smoking in indoor workplaces while over one third of smokers in each city supported a complete ban on smoking in restaurants. Support was lowest for bars (24–44% of smokers), where no smoke-free policies are in place. Trends in smokers' support for smoke-free policies in these venues from 2007–2008 to 2011–2012 are presented in the following sections.



Source: ITC Project, University of Waterloo, unpublished data, 2015.

Support for smoke-free indoor workplaces

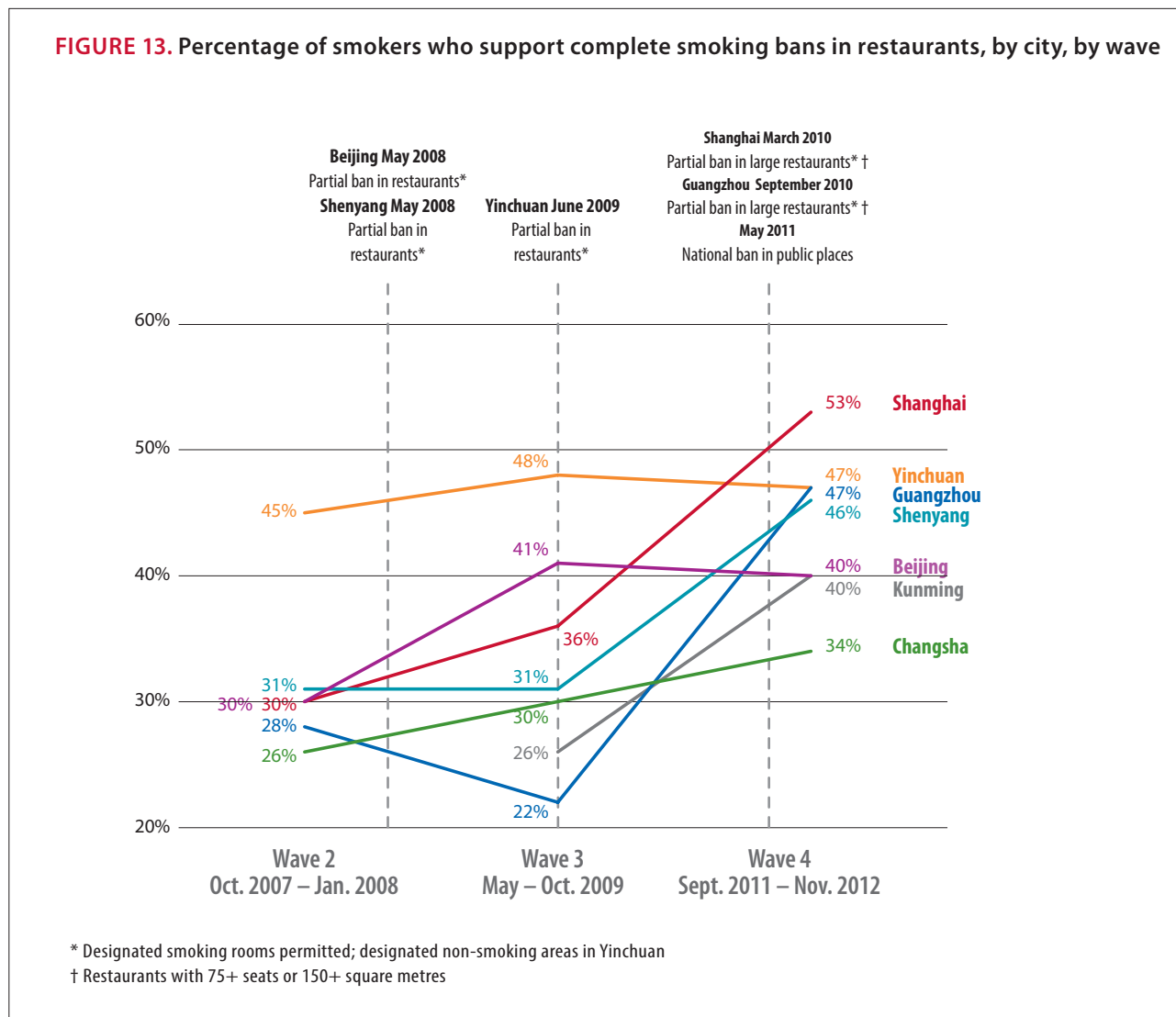
Support among smokers for a complete indoor smoking ban in workplaces has significantly increased in Beijing (from 54% of smokers in 2009 to 65% in 2011–2012), Guangzhou (from 40% to 60%), Shenyang (from 44% to 54%) and Kunming (from 33% to 44%) (Figure 12). In 2011–2012, at least 60% of smokers in four Chinese cities supported a complete ban on smoking in indoor workplaces – Guangzhou (60%), Shanghai (61%), Beijing (65%) and Yinchuan (70%). About half of smokers supported a complete ban in the remaining three cities: Shenyang (54%), Changsha (47%) and Kunming (44%). These increases show that there is strong public support for a ban on indoor smoking in workplaces nationwide.



Source: ITC Project, University of Waterloo, unpublished data, 2015.

Support for smoke-free restaurants

Support among smokers for a complete smoking ban in restaurants has increased in four cities from 2009 to 2011–2012 (Figure 13): Shanghai (support increased from 36% of smokers in 2009 to 53% in 2011–2012); Guangzhou (from 22% to 47%); Shenyang (from 31% to 46%); and Kunming (from 26% to 40%). In 2011–2012, about half of smokers in four cities (Shenyang (46%), Guangzhou (47%), Yinchuan (47%) and Shanghai (53%)) indicated that they support a complete smoking ban in restaurants. In all of these cities, support for the law is comparable to the percentage of smokers in Ireland (46%) that supported a complete ban on smoking in restaurants before the implementation of Ireland’s very successful law in 2004.

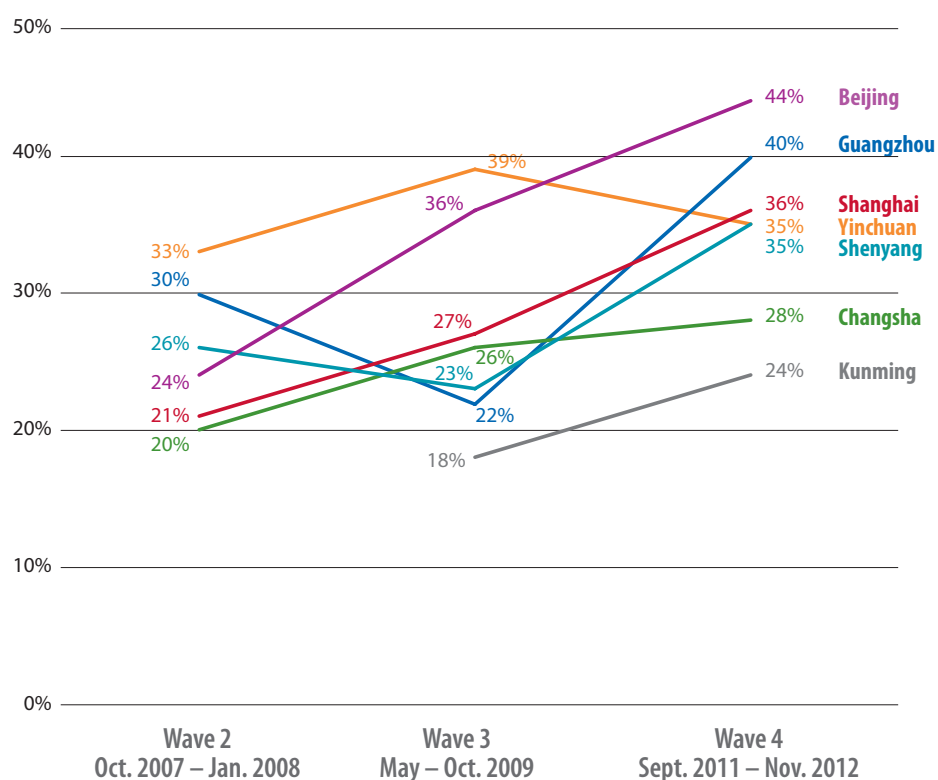


Source: ITC Project, University of Waterloo, unpublished data, 2015.

Support for smoke-free bars

Support for a complete ban on smoking in bars is lower than support for bans in other venues. However, smokers' support for a ban on smoking in bars has increased among smokers in three cities from 2009 to 2011–2012. In Guangzhou smokers' support increased from 22% to 40%; in Shenyang support increased from 23% to 35% and in Kunming support increased from 18% to 24%. In 2011–2012, more than one third of smokers supported this ban in five cities: Shenyang (35%), Yinchuan (35%), Shanghai (36%), Guangzhou (40%) and Beijing (44%) (Figure 14).

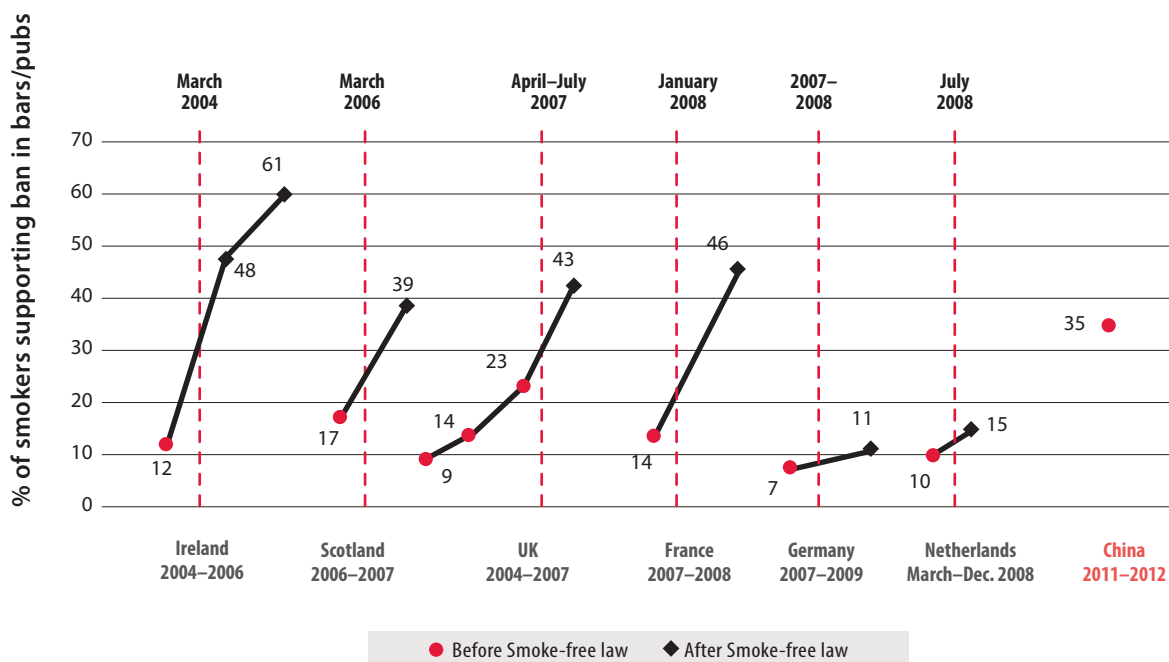
FIGURE 14. Percentage of smokers who support complete smoking bans in bars, by city, by wave



Source: ITC Project, University of Waterloo, unpublished data, 2015.

Figure 15 shows that the average level of support for smoke-free bars among smokers in China is much higher than the support among smokers in six other countries before those countries became smoke-free. In Ireland, the first country to make its bars smoke-free, the percentage of smokers supporting the smoke-free law in bars before it was implemented was only 12% compared with Scotland (United Kingdom) at 17%, France at 14%, Germany at 7% and the Netherlands at 10%. In China, the average support among smokers across the cities in 2011–2012 for smoke-free bars is 35%.

FIGURE 15. Support among smokers for bans in bars/pubs in China (2011–2012) compared with other countries



Note: The percentage for China represents the average across the cities

Source: ITC Project, University of Waterloo, unpublished data, 2015.

CONCLUSION

There is no safe level of exposure to second-hand smoke (SHS): only 100% smoke-free public places can provide effective protection from the serious health hazards of exposure to SHS. The WHO FCTC requires a total ban on smoking in indoor public places. Currently, 740 million people including more than 180 million children in China are routinely exposed to SHS, which causes 100 000 deaths annually. (3)

China is the only BRICS country that does not have a national smoke-free law: Brazil and the Russian Federation have implemented strong smoke-free laws with very few or no exemptions, while India and South Africa are finalizing regulations to strengthen their national smoke-free laws. The adoption of the draft national smoke-free regulation currently before China's State Council would allow China to be on par with and even surpass the other BRICS countries with respect to compliance with the WHO FCTC Article 8 Guidelines.

Evidence from the ITC Project conducted in more than 20 countries has shown that China's smoke-free regulations are fragmented and weakly enforced, and consequently do not provide adequate protection against exposure to SHS. China has by far the highest level of smoking in the workplace among the ITC countries – 70% of Chinese smokers who work indoors were exposed to SHS in indoor workplaces in 2011–2012. China also has the second-highest level of smoking in restaurants and bars, at 82% and 89% respectively in 2011–2012.

While more than 12 large cities in China have taken encouraging steps to enact smoke-free policies, evidence from the ITC China Survey suggests that there have been only small smoking reductions in public places in the ITC cities between 2009–2012. This is consistent with other studies from China which have found only minor decreases in cities where smoking bans were implemented without effective enforcement or full public support, and higher levels of smoking in public places with only partial bans. (80) The reductions in smoking observed in Chinese cities are much lower than what can be achieved by effectively implementing a strong, comprehensive national ban, as seen in other countries. However, the recent adoption of strong laws in Shenzhen, and more recently, Beijing, have set a new benchmark for smoke-free legislation in China.

ITC Project evidence demonstrates that smoke-free policies are effective only if they are comprehensive, well implemented and strongly enforced, and are understood and supported by the public, as recommended in the WHO FCTC Article 8 Guidelines. Comprehensive smoke-free laws must be accompanied by campaigns to educate stakeholders about the health benefits of the law and elicit behaviour change, to protect the public from the harms of SHS.

The findings of the ITC China Project clearly demonstrate that smokers and non-smokers are ready for a strong, national comprehensive smoke-free law. Smokers' support for a complete smoking ban in bars and restaurants is already higher than in any of the other ITC Project countries before those countries passed their comprehensive smoke-free laws. ITC evidence suggests that public support will increase further after a strong, national smoke-free law is implemented.

RECOMMENDATIONS

- **To protect the 1.3 billion citizens of China from the serious health hazards of exposure to second-hand smoke (SHS), the Government is recommended to adopt a comprehensive national smoke-free law without delay. The evidence is clear that partial smoking bans have very little impact on exposure to SHS and only a complete smoking ban can provide effective protection from SHS. Adoption of the State Council's 2014 draft national smoke-free regulation offers vast potential to decrease smoking in public places and in homes, reduce exposure to SHS, improve public health, and reduce the tobacco-related economic burden in China.**
- **A comprehensive national smoke-free law for China must be accompanied by a strong, rigorous enforcement effort that includes compliance monitoring and a strategic communications campaign to educate the public, elicit behaviour change and change social norms regarding tobacco use.**
- **The draft national regulation recently issued by the State Council includes measures to ban tobacco advertising, promotion and sponsorship, and to introduce graphic health warnings on cigarette packages. These supporting regulations are recommended to be implemented in conjunction with national smoke-free measures as part of a comprehensive tobacco control strategy.**
- **Cities and civil society organizations play a key role in the success of smoke-free laws in China in line with a bottom-up approach. A national smoke-free policy can only succeed if it is accepted and enforced at the local level. Civil society organizations can also build support for and improve compliance with smoke-free laws. Central and local government engagement of cities and civil society organizations in a conscious, well-planned and well-executed effort will enhance public support for tobacco control and change social norms regarding tobacco use.**

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