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WHO report on the global tobacco epidemic 2017: Monitoring tobacco use and prevention policies

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**World Health
Organization**

WHO REPORT ON THE GLOBAL TOBACCO EPIDEMIC, 2017
Monitoring tobacco use and prevention policies

fresh and alive

mpower



**Tobacco use kills
more than 7 million
people each year.**

million people

**Tobacco use is lethal
and urgent action is
needed to save lives.**

mpool



- Monitor** Monitor tobacco use and prevention policies
- Protect** Protect people from tobacco smoke
- Offer** Offer help to quit tobacco use
- Warn** Warn about the dangers of tobacco
- Enforce** Enforce bans on tobacco advertising, promotion and sponsorship
- Raise** Raise taxes on tobacco

Strong monitoring keeps countries on track to combat the tobacco epidemic.

WHO report on the global tobacco epidemic, 2017: Monitoring tobacco use and prevention policies is the sixth in a series of WHO reports that tracks the status of the tobacco epidemic and interventions to combat it.

WHO report on the global tobacco epidemic, 2017: monitoring tobacco use and prevention policies
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WHO REPORT ON THE GLOBAL TOBACCO EPIDEMIC, 2017

Monitoring tobacco use and prevention policies

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Bloomberg Philanthropies

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The number of people protected by at least one best-practice measure has quadrupled to 4.7 billion – almost two thirds of the world’s population.

More than half of the top performers are low- and middle-income countries, showing that progress is possible regardless of economic status.

Dr Tedros Adhanom Ghebreyesus, WHO Director-General

TWO THIRDS OF THE WORLD’S POPULATION IS NOW PROTECTED BY AT LEAST ONE WHO-RECOMMENDED MEASURE TO REDUCE TOBACCO USE

The sixth *WHO report on the global tobacco epidemic* is testament to the remarkable progress many countries have made to reduce tobacco use and thereby cut the risk of people developing cancers, and heart and lung disease.

It is almost a decade since WHO first introduced the six MPOWER measures to help countries implement the WHO Framework Convention on Tobacco Control (WHO FCTC). At that time, only 42 countries were protected by at least one measure at best-practice level. Today, 121 countries have put at least one of these measures into place at the highest level to protect people from tobacco – and eight have four or more of the measures in place. More than half of the top performers are low- and middle-income countries, showing that progress is possible regardless of economic status. Systematic tracking of MPOWER measures (which began in 2007) reveals that the number of people protected by at least one best-practice measure has quadrupled to 4.7 billion – almost two thirds of the world’s population.

Effective tracking depends on stringent monitoring. As other health programmes have illustrated, routine data collection and monitoring are critical in performance evaluation, in identifying areas of concern, opportunities and challenges, and in helping inform policy decisions.

Article 20 of the WHO FCTC calls for global surveillance of tobacco consumption trends and their determinants. Some countries are making good progress on

this: 76 countries effectively monitor tobacco use through recent, representative and periodic surveys of adults and young people.

But as well as monitoring use, countries need to look at policy development and implementation. They need to mainstream tobacco data collection into their health information systems. They need to use statistics not just to show how well they are doing, but where and how they could do better. In effect, they need to use that knowledge to inform and drive policies. The results presented in this report show, for instance, that sufficient tobacco taxation is still the least implemented measure in terms of population coverage (since 2014 global coverage has remained steady at 10%) yet it is the most impactful and cost-effective of all the MPOWER measures – indeed it even generates revenue for countries while reducing tobacco use.

When the WHO FCTC was adopted in 2003, few would have imagined that tobacco control would set a new gold standard in global health. Fourteen years later, the Sustainable Development Goals contain a specific target to “Strengthen the implementation of the WHO Framework Convention on Tobacco Control in all countries, as appropriate” in order to save more lives.

Governments around the world must waste no time in incorporating all the provisions of the WHO Framework Convention on Tobacco Control into their national tobacco control programmes

and policies. They must also clamp down on the illicit tobacco trade, which is exacerbating the global tobacco epidemic and its related health and socioeconomic consequences. Forty Parties are needed for the Protocol to Eliminate Illicit Trade in Tobacco Products, under the WHO FCTC, to come into force. Currently, only a few more Parties are needed for this important step to occur.

Working together to fully implement these internationally agreed steps, countries can prevent millions of people from dying each year from preventable tobacco-related illness, and save billions of dollars a year in avoidable health-care expenditures and productivity losses.



Dr Tedros Adhanom Ghebreyesus
Director-General
World Health Organization

UNPRECEDENTED MPOWER PROGRESS SHOWS THAT THE BATTLE AGAINST THE TOBACCO EPIDEMIC IS WINNABLE

One in 10 deaths around the world is caused by tobacco use. To fight this deadly epidemic, Bloomberg Philanthropies has committed nearly US\$1 billion over the past 10 years to support tobacco control efforts in low- and middle-income countries. Working in partnership with WHO and governments across the globe, we have helped save at least 30 million lives. This is very encouraging, but there is still a long way to go. We remain committed to staying in – and winning – the fight.

Over the past decade, the percentage of the world's population covered by at least one of the six MPOWER measures – a group of policies shown to reduce tobacco use – grew from 15% to more than 60%. Today, thanks to these measures and the WHO Framework Convention on Tobacco Control, over 3.5 billion people are better protected from tobacco, and global sales of cigarettes are down.

This WHO report does more than lay out the global momentum building to tackle the tobacco epidemic: it helps motivate countries by showing the effectiveness of proven – and replicable – solutions.

Some of the greatest gains in the fight against tobacco have come over the past two years. For instance, graphic pack warnings are now in place in India and

throughout the European Union. Today, nearly half the world's population lives in countries with strong graphic warnings on tobacco packaging – more than twice the number of people than were protected at the time of the last edition of this report in 2015. Yet, while increasing tobacco taxes to an adequate level is the most effective measure to reduce use, only 10% of the world's population is covered by such a tax – the lowest adoption rate of any MPOWER policy.

Last year I was appointed WHO Global Ambassador for Noncommunicable Diseases. Noncommunicable Diseases (NCDs) are a global health crisis, killing nearly 40 million people each year – many from tobacco-related causes. Yet efforts to stop these diseases remain overlooked and underfunded. Despite NCDs accounting for 67% of all deaths in low- and middle-income countries, only 1% of all global health funding goes towards preventing them.

The good news: there are proven, life-saving strategies to combat this global challenge, and the MPOWER tobacco control measures are at the top of the list. The progress that has been made worldwide – and documented throughout this report – shows that it is possible for countries to turn the tide. Bloomberg Philanthropies looks forward to partnering

with Director-General Ghebreyesus and continuing our work with WHO to fight all of these preventable causes of death.

More countries are making tobacco control a priority. But not enough. Together, we can encourage more of them to follow the examples highlighted in this report – and save millions more lives.



Michael R. Bloomberg
WHO Global Ambassador for
Noncommunicable Diseases
Founder of Bloomberg Philanthropies

This WHO report does more than lay out the global momentum building to tackle the tobacco epidemic: it helps motivate countries by showing the effectiveness of proven – and replicable – solutions.

The progress that has been made worldwide – and documented throughout this report – shows that it is possible for countries to turn the tide.

Michael R. Bloomberg, WHO Global Ambassador for Noncommunicable Diseases
Founder of Bloomberg Philanthropies

THE NEED TO TRACK PROGRESS IS GREATER THAN EVER NOW THAT THE SUSTAINABLE DEVELOPMENT GOALS HAVE BEEN AGREED

Since the WHO Framework Convention on Tobacco Control (WHO FCTC) took effect in 2005, and the first *WHO report on the global tobacco epidemic* was published in 2008, huge strides have been made to protect the world's people from what is now globally one of the biggest single preventable cause of death. This report, and the accompanying WHO FCTC Secretariat's *Global progress report on implementation of the WHO Framework Convention on Tobacco Control* (published in November 2016) outline progress to date.

And there is much to applaud. First and foremost, special acknowledgement goes to governments around the world that have put tobacco demand-reduction measures in place so that today, about 4.7 billion people – 63% of the world's population – are covered by at least one comprehensive tobacco control measure.

A recent study to measure the impact of the WHO FCTC on tobacco use analysed WHO data from 126 countries that tracked implementation of the five key demand-reduction measures from 2007 to 2014, examining the links between the number of measures fully implemented and specific countries' smoking rates from 2005 to 2015. On average, smoking rates across the 126 countries fell from 24.7% in 2005 to 22.2% in 2015 – a reduction of 2.5%. The results of this study, published in the *Lancet*, clearly testify to the effectiveness of the WHO FCTC and the measures prioritized by WHO as "best buys" in tobacco control.

The need to track progress is greater than ever now that the Sustainable Development Goals (SDGs) have been agreed – among them SDG Target 3A, which requires the strengthening of WHO FCTC implementation in all countries. The Convention Secretariat and WHO, as joint custodians of this target, will monitor progress towards the achievement of this key global development indicator. This will require a renewed recognition that the treaty and its evidence-based, legally binding provisions represent the world's best chance of tackling the tobacco epidemic in the agreed time frame.

The WHO FCTC provides a comprehensive strategy and internationally agreed roadmap for 180 Parties, addressing both demand and supply sides of tobacco control, and offers measures applicable to the entire tobacco chain – from farm to shop.

The WHO FCTC's key demand-reduction provisions, which have been packaged by WHO as MPOWER, are contained in Articles 6 to 14, and cover everything from price and tax measures to protection from exposure to tobacco smoke; regulation of tobacco product contents; rules on product packaging and labelling; restrictions on tobacco advertising, promotion and sponsorship; as well as reducing tobacco dependence and encouraging quitting. Supply measures include support for tobacco growers to find economically viable alternatives; sales by and to minors; and ending the illicit trade in tobacco products (Article 15). The importance of combatting smuggling has given rise to the Protocol to Eliminate Illicit Trade in Tobacco Control, the first protocol to the WHO FCTC. We hope that the Protocol will take effect before our next Conference of the Parties session in 2018 as a powerful new tool in the tobacco control armoury.

The SDGs will drive a fresh focus on Article 20 of the treaty, which highlights the importance of research, surveillance and information-exchange programmes, and gives decision-makers material with which to improve evidence-based policies and strengthen WHO FCTC implementation. Article 20's five provisions will bolster research programmes, epidemiological surveillance systems and data standardization; foster cooperation with intergovernmental and nongovernmental bodies; and promote the exchange of information.

The latest research suggests that smoking-related mortality has risen to 7.2 million lives annually, killing more people than HIV/AIDS, malaria and tuberculosis combined. Equally alarming is the fact that the epicentre of this epidemic has moved to the developing world, where low- and

middle-income countries struggle to combat a tobacco industry seeking to pursue new markets, often through shameless interference with public health policy-making.

Rooting out such interference is key to making progress on Article 5.3 of the WHO FCTC, which requires Parties to protect public health policy from the tobacco industry. Measures pursued by the Convention Secretariat to do this include the establishment of knowledge networks that link respected academic and other research institutions worldwide to establish observatories to monitor tobacco industry misbehaviour. By gathering evidence of tobacco industry tactics, observatories will act as early warning systems for policy-makers and others who need to be aware of the latest developments on the frontline of the tobacco control struggle.

The Convention Secretariat has also worked to establish a network of six knowledge hubs within academic institutions of the Parties. Each of these hubs specializes in a given area, such as taxation, water pipe and smokeless tobacco use, or research and surveillance, and assists Parties in their implementation work, not least through analysing and disseminating information.

Overall, there is much welcome progress in tobacco control, and much more to do. By surveying the landscape we can judge where to allocate limited resources and so accelerate the advent of a world where tobacco and its disastrous consequences are nothing more than a bad memory. This report brings that day a little closer.



Dr Vera Luiza da Costa e Silva
Head of the WHO FCTC Secretariat

Huge strides have been made to protect the world's people from what is now globally one of the biggest single preventable cause of death.

The SDGs will drive a fresh focus on Article 20 of the WHO FCTC, which highlights the importance of research, surveillance and information-exchange programmes.

Dr Vera Luiza da Costa e Silva, Head of the WHO FCTC Secretariat

Summary

Remarkable progress has been made in global tobacco control since MPOWER was introduced a decade ago as a tool to help implement the World Health Organization's Framework Convention on Tobacco Control (WHO FCTC). Nearly two thirds of countries (121 of 194) – comprising 63% of the world's population – have now introduced at least one MPOWER measure at the highest level of achievement (not including Monitoring or Mass media campaigns, which are assessed separately).

Overall progress has been steady, with roughly 15 new countries reaching best-practice level on one or more measures every 2 years. As a result, about 4.7 billion people are now covered by at least one best-practice policy intervention at

the national level. This is a substantial increase from the 42 countries protecting a total of 1 billion people (15% of the world's population) at best-practice level in 2007, and shows what can be achieved when tobacco control is prioritized by governments and civil society.

Tobacco control monitoring is vital but needs attention

Monitoring tobacco use and prevention policies – the focus of this sixth *WHO report on the global tobacco epidemic* – is an area neither sufficiently prioritized nor adequately funded by countries. As the foundation of effective tobacco control policy development and implementation, monitoring is an essential component of the WHO FCTC, but as of 2016 only about one third of countries, with a total of

2.9 billion people, have comprehensive monitoring systems in place at best-practice level. The comprehensive level requires recent, representative and periodic surveys for both adults and youth to have taken place.

While this is an improvement from 2007, when only about one in four countries were monitoring tobacco use at recommended levels, the number of countries with best-practice monitoring has dropped from 77 to 76 since 2014. This is primarily because previously conducted surveys were not repeated within the recommended 5-year window. There are 35 countries (most of which are low- or middle-income) that have weak tobacco use monitoring systems or conduct no surveys at all.

Population protected by two or more MPOWER measures is seven times higher than in 2007

More than a third of countries (71) have two or more MPOWER measures in place at the highest level of achievement, protecting a total of 3.2 billion people (43% of the world's population) – nearly seven times as many people as in 2007. Eight countries (Brazil, Islamic Republic of Iran, Ireland, Madagascar, Malta, Panama, Turkey and the United Kingdom of Great

Britain and Northern Ireland), including five low- and middle-income countries, have four or more MPOWER measures in place at the highest level compared with 2007 (when no country had as many as four best-practice measures in place). As of 2012, Turkey became (and remains) the only country to adopt all MPOWER measures at the most comprehensive level.

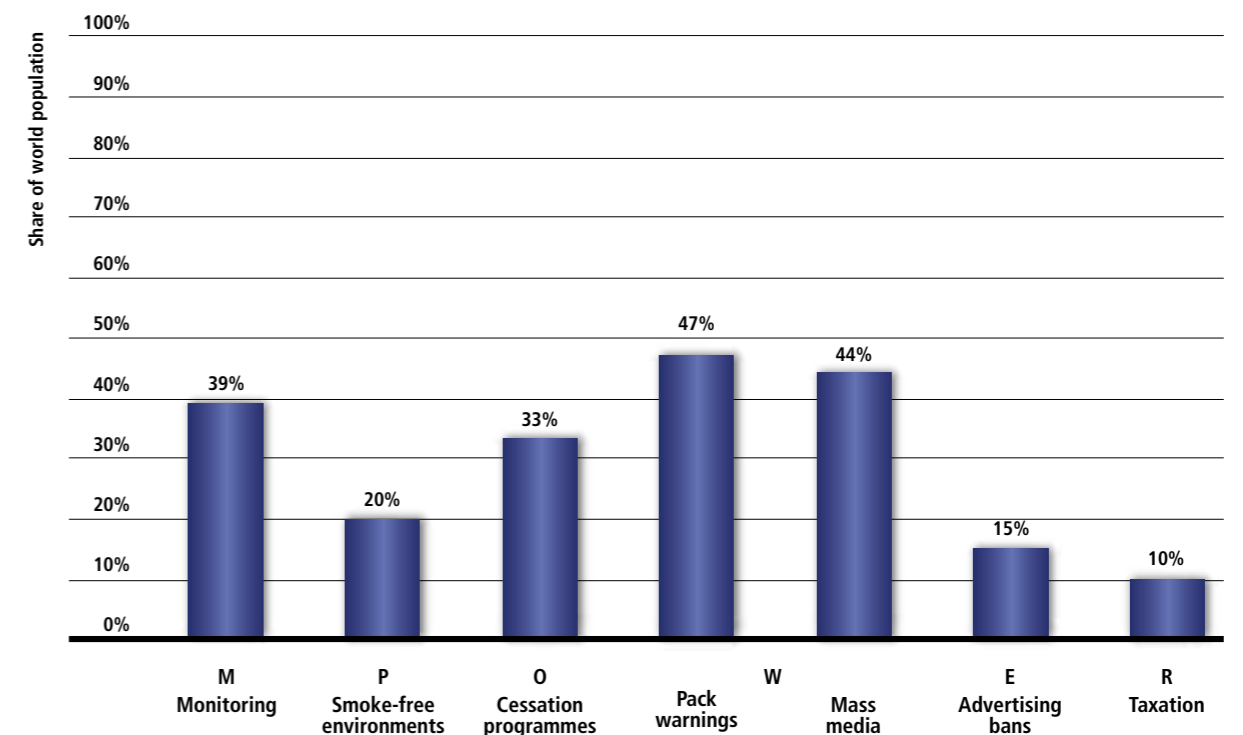
In the 2 years since publication of the *WHO report on the global tobacco*

epidemic, 2015, there has been notable progress in global tobacco control. An additional 2.3 billion people in 42 countries have been protected by at least one new or strengthened measure at the highest level of achievement. Of these 42 countries, 19 are low- and middle-income countries with a combined 1.9 billion population (Senegal, a low-income country, has introduced three best-practice policy interventions since 2014). There are 10 countries (with a total 1.4

Nearly two thirds of countries – comprising 63% of the world's population – have now at least one MPOWER measure in place at the highest level of achievement.



SHARE OF THE WORLD POPULATION COVERED BY SELECTED TOBACCO CONTROL POLICIES, 2016



Note: The tobacco control policies depicted here correspond to the highest level of achievement at the national level; for the definitions of these highest categories, refer to Technical Note I.

billion people) that have introduced two new or strengthened measures, and 16 countries (with a total 1.8 billion people) have adopted a comprehensive MPOWER measure for the first time.

New countries are adopting measures

Each MPOWER measure (except Monitoring tobacco use and prevention policies) saw new countries adopting best tobacco control practices since the last report.

- Six countries (Afghanistan, Cambodia, El Salvador, Lao People's Democratic Republic, Romania and

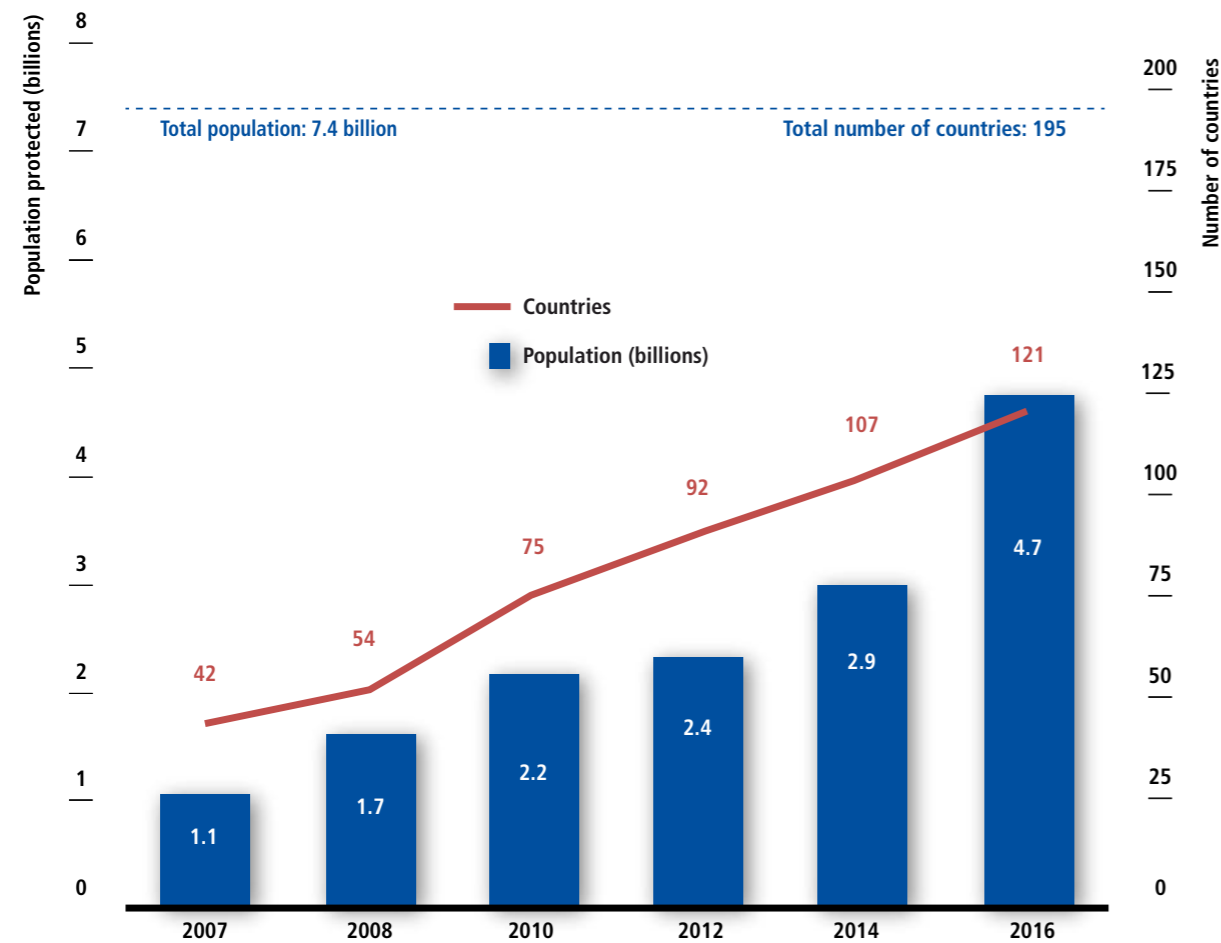
Uganda) newly adopted complete smoke-free laws covering all indoor public places and workplaces. (One country, Saudi Arabia, introduced the possibility of designated smoking rooms in drinking and catering facilities and thus dropped from the group of highest achieving countries, for a net gain of five countries).

- Six countries (El Salvador, Estonia, India, Jamaica, Luxembourg and Senegal) advanced to best-practice level with their tobacco use cessation services.
- Thirty-four countries with a total of 2 billion people adopted large graphic pack warnings, including Bangladesh

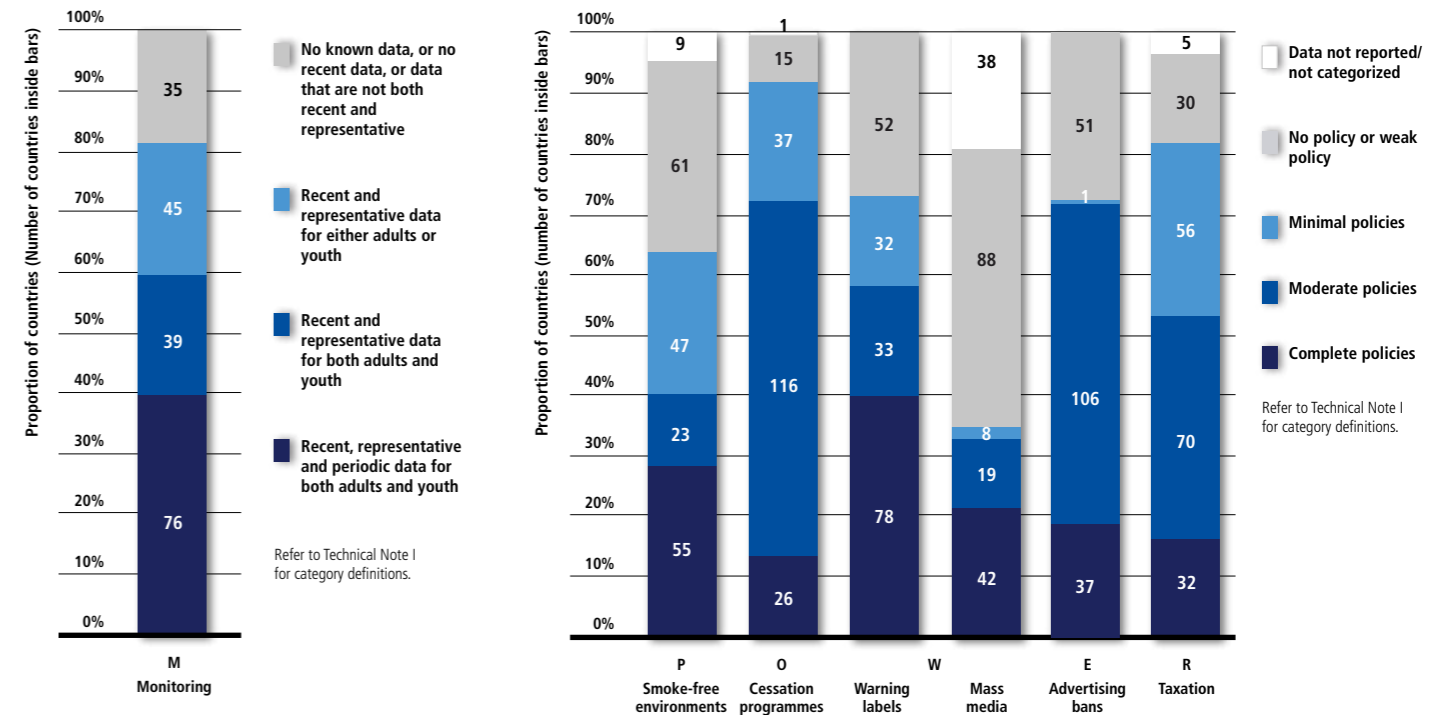
and India, as well as 23 countries in the European Union that incorporated the EU warning label directive into their national laws.

- Seven mainly low- and middle-income countries (Afghanistan, Kuwait, Nigeria, Qatar, Republic of Moldova, Senegal and Uganda) introduced a comprehensive ban on all tobacco advertising, promotion and sponsorship (TAPS), including at the point-of-sale.
- Three countries (Argentina, Austria and Malta) newly raised tobacco taxes so that they comprise at least 75% of the retail price. However, because five countries did not

AT LEAST ONE SELECTED TOBACCO CONTROL POLICY AT HIGHEST LEVEL OF ACHIEVEMENT (2007–2016)



THE STATE OF SELECTED TOBACCO CONTROL POLICIES IN THE WORLD, 2016



One in three countries, with a total 2.9 billion people, have comprehensive monitoring systems in place at best-practice level.

maintain high taxes at best-practice level, there was a net loss of two countries with taxes at appropriately high levels.

Significant progress in low- and middle-income countries

As in previous years, low- and middle-income countries continued to make significant progress. 10 low- and middle-income countries that previously had no comprehensive tobacco control policy have introduced one or more best-practice MPOWER measure since 2014.

However, two countries dropped from one measure in 2014 to none in 2016, for a net gain of 1.6 billion people in low- and middle-income countries covered by at least one MPOWER measure at the

highest level. About 3.7 billion people in low- and middle-income countries – 59% of all people living in those countries – are now covered by at least one best-practice MPOWER measure, and one in four people living in low- and middle-income countries are now covered by an MPOWER measure at the highest level for the first time.

Some countries have yet to adopt a single MPOWER measure

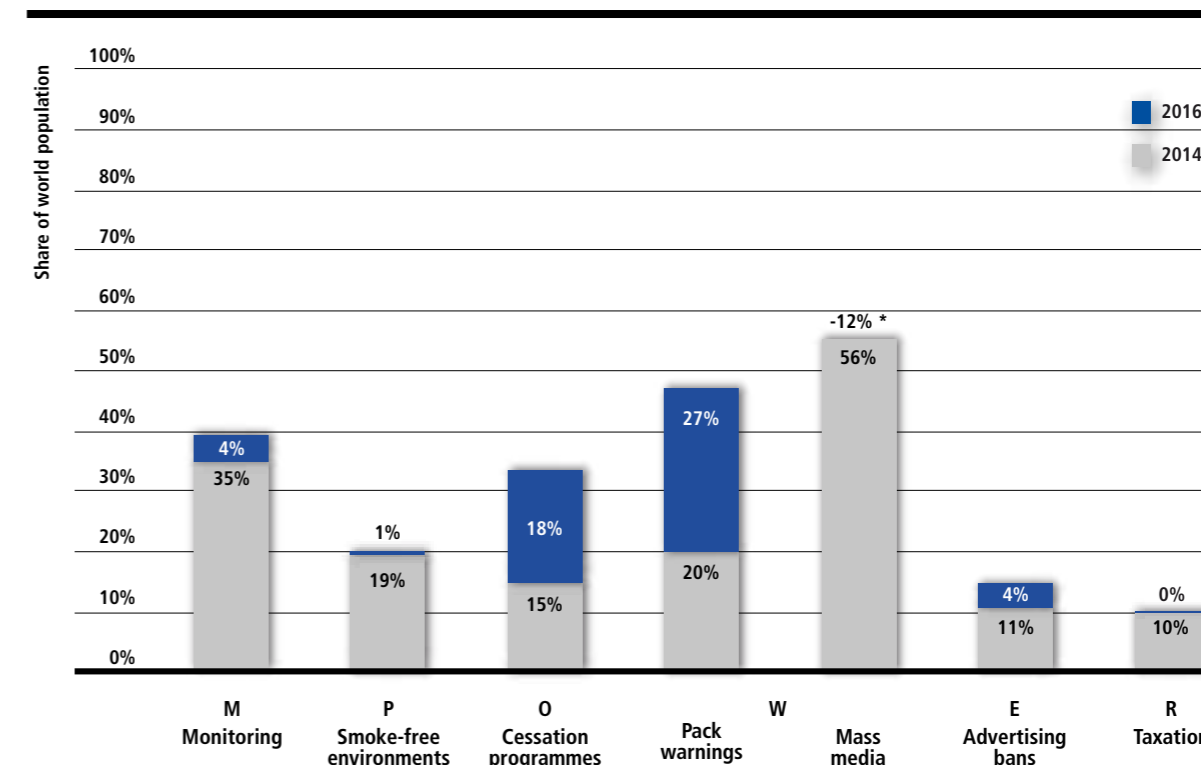
All countries have the ability to implement strong tobacco control policies to protect their populations from tobacco use and second-hand smoke exposure, and the illness, disability and death that they cause. Although the adoption of comprehensive tobacco control policies has advanced steadily since 2007, there is much work to be done. There are 57

countries that have yet to adopt a single MPOWER measure at the highest level of achievement (including Monitoring and Mass media campaigns). Additionally, the pace of progress for adopting some MPOWER measures has been slower than for others. For example, adoption of complete TAPS bans and raising tobacco taxes to sufficiently high levels is much too slow in the majority of countries.

It is critical that all countries act urgently to more effectively protect their people with evidence-based tobacco control policies at the most comprehensive level. Doing so will help countries meet their fundamental responsibilities to improve the health of their people and save lives.



INCREASE IN THE SHARE OF THE WORLD POPULATION COVERED BY SELECTED TOBACCO CONTROL POLICIES, 2014 TO 2016



Note: The tobacco control policies depicted here correspond to the highest level of achievement at the national level; for the definitions of these highest categories, refer to Technical Note I.

* The share of the world population covered by a national mass media campaign with all best-practice criteria was 44% in 2016, a decline of 12% compared to 2014.

It is critical that all countries act urgently to more effectively protect their people with evidence-based tobacco control policies.

WHO Framework Convention on Tobacco Control

The World Health Organization's Framework Convention on Tobacco Control (WHO FCTC) provides a strong, concerted response to the global tobacco epidemic and its enormous health, social, environmental and economic costs. It also gives Parties the necessary foundation and framework – both legal and technical – to enact comprehensive, effective tobacco control measures spanning all sectors of government. Through its 180 Parties, the WHO FCTC covers more than 90% of the world's population.

WHO Member States came together in 1999 under the authority of WHO's Constitution to negotiate the WHO FCTC – their first treaty – which was adopted by the World Health Assembly in 2003. WHO FCTC's first protocol, the Protocol to Eliminate Illicit Trade in Tobacco Products, was adopted by the Conference of the Parties (COP) during its fifth session in 2012 (1).

The COP, composed of all WHO FCTC Parties, is the Convention's governing body. It is responsible for guiding implementation of the WHO FCTC, including adoption of protocols, guidelines and decisions. The COP meets every 2 years to discuss progress, identify challenges and opportunities, and review

ongoing business. Hosted by WHO, the Convention Secretariat organizes the COP and its subsidiary bodies. It also provides ongoing support to WHO FCTC Parties to implement the Convention and works closely with WHO to ensure complementarity and synergy in its technical assistance to countries.

Tobacco companies' constant development of new and more effective methods to influence and expand their markets around the world, and the industry's strong political influence, together represent major threats to public health. Accounting for over 7 million lives lost worldwide annually, tobacco-related diseases claim more lives than HIV/AIDS, malaria and tuberculosis combined (2). Implementing the evidence-based, legally binding provisions of the WHO FCTC to their fullest extent represents the world's best chance of reducing this toll.

Provisions of the WHO FCTC

The WHO FCTC combines measures to reduce both demand for and supply of tobacco products, and includes other key provisions, such as a requirement that

Parties act to protect public health policies from interference by commercial and other vested interests of the tobacco industry. The treaty's scope covers the full chain of tobacco production and distribution, from farm to factory to point of sale.

The core **demand-reduction provisions** in the WHO FCTC are contained in articles 6–14:

- Price and tax measures to reduce the demand for tobacco.
- Non-price measures to reduce the demand for tobacco:
 - Protection from exposure to tobacco smoke (Article 8).
 - Regulation of the contents of tobacco products (Article 9).
 - Regulation of tobacco product disclosures (Article 10).
 - Packaging and labelling of tobacco products (Article 11).
 - Education, communication, training and public awareness (Article 12).
 - Tobacco advertising, promotion and sponsorship (Article 13).
 - Demand-reduction measures concerning tobacco dependence and cessation (Article 14).

The core **supply-reduction provisions** in the WHO FCTC are contained in articles 15–17:

- Illicit trade in tobacco products (Article 15).
- Sales to and by minors (Article 16).
- Provision of support for economically viable alternative activities (Article 17).

The WHO FCTC also requires Parties to implement cross-cutting measures such as developing multisectoral tobacco control strategies, adopting tobacco control legislation and preventing tobacco industry interference with public health policies.

The WHO FCTC calls for research and surveillance programmes and reporting, exchange of information, and scientific and technical cooperation (Articles 20, 21 and 22).

In 2011 the UN General Assembly adopted (by consensus) the Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-Communicable Diseases, which included the commitment to “accelerate implementation ... of the WHO Framework Convention on Tobacco Control” (3). WHO FCTC implementation is also included in WHO's Global Monitoring Framework on Noncommunicable Diseases

(NCDs) as a key policy measure for meeting the global voluntary target of a 30% relative reduction in prevalence of current tobacco use among persons aged 15 years or older (4). Member States that are not yet a Party to the WHO FCTC should consider action to ratify, accept, approve, or accede to it at the earliest opportunity, in accordance with World Health Assembly resolution WHA56/8 Rev.1 (5).

The WHO FCTC provides a strong, concerted response to the global tobacco epidemic and its enormous health, social, environmental and economic costs.



The Seventh session of the WHO FCTC Conference of the Parties (COP7) held in Delhi, India, in November 2016.

WHO FCTC and the UN Sustainable Development Goals

In 2016 the Seventh session of the COP to the WHO FCTC welcomed the UN's 2030 Agenda for Sustainable Development, including Sustainable Development Goal (SDG) 3, to "ensure healthy lives and promote well-being for all at all ages". Target 3A of the goal is to "strengthen the implementation of the WHO FCTC in all countries, as appropriate" as means of reaching SDG 3 by 2030 (6).

At the session, WHO FCTC Parties affirmed their commitment to achieving SDG Targets 3.4 and 3A, while the COP called upon Parties to report at its next session on efforts to set national tobacco use reduction targets in line with the global voluntary NCD targets of WHO's Global Monitoring Framework on NCDs, and to report on progress towards reducing tobacco use (7).

The combination of countries coalescing behind a common goal, the power of international law and the focus of global intergovernmental bodies operating in concert gives countries confidence and support as they work to implement the treaty. Global tobacco control efforts continue to progress despite the covert and overt tactics of the tobacco industry, which continuously attempt to undermine governments' tobacco control measures.



Monitoring implementation of the WHO FCTC and the MPOWER measures

There are two key, complementary reports produced by WHO on global tobacco control. The first is the *Global progress report on the implementation of the WHO FCTC*, produced by the WHO FCTC Convention Secretariat. This report uses Member States' self-reported data to monitor their implementation of the WHO FCTC and its specific provisions, and is published biennially. The second report is the biennial *WHO report on the global tobacco epidemic* (of which this report is the sixth edition), published in alternate years to the *Global progress report*. It tracks the status of MPOWER measures over time and includes an assessment of

achievement levels attained based on pre-set benchmarks. WHO collects national-level legislation from all Member States and creates a comparable assessment matrix, offering a like-for-like comparison of progress between different policy areas (i.e. areas covered by the MPOWER measures).

The Convention Secretariat and WHO work together when elaborating these reports to ensure that their work is complementary and coordinated. This includes exchanging data and information and mutual analyses of report sections to ensure clarity, accuracy and objectivity.

Similarities and differences between WHO's two key tobacco control reports

	<i>Global progress report on implementation of the WHO FCTC</i>	<i>WHO report on the global tobacco epidemic</i>
Source of data	Parties to the WHO FCTC (180)	Member States to WHO (194)
Independently verified information	No (countries self-report data)	Yes
Tracks progress in tobacco control	Biennially (even-numbered years)	Biennially (odd-numbered years)
Demand side measures	All measures addressed	Some measures addressed
Supply side measures	All measures addressed	Not addressed
Comparison between countries possible	Qualitative and some quantitative comparisons	Qualitative and quantitative comparisons
Comparison between time periods possible	Yes	Yes

Article 20 – Research, surveillance and exchange of information

Robust research, surveillance and information exchange programmes increase evidence-based decision- and policy-making, thereby strengthening and ensuring full implementation of the WHO FCTC. Article 20 of the WHO FCTC, Research, surveillance and exchange of information, has five clauses, implementation of which is encouraged at national, regional and international levels (8).

Under Article 20, Parties agree to:

- Develop and promote national research and coordinate research programmes. To this end, Parties should either initiate, cooperate, promote or strengthen scientific research, training and engagement in tobacco control activities.
- Either establish or strengthen surveillance tools to monitor tobacco control. These surveillance programmes should be integrated into national, regional and global health programmes to promote standardization of data, including global comparability, as appropriate.
- Recognize the importance of financial and technical assistance from intergovernmental organizations and other bodies. As such, Parties will work to establish epidemiologic surveillance systems to monitor tobacco consumption and associated social, economic and health indicators. Parties also cooperate with intergovernmental and nongovernmental bodies, including WHO, in the development of general guidelines or procedures in defining the collection, analysis and dissemination of tobacco-related surveillance data.
- Promote and facilitate the exchange of publicly available information, including on the practices of the tobacco industry, tobacco cultivation, and other scientific, technical, socioeconomic, commercial and legal information. All of these should be progressively maintained and updated, including through cooperation with international organizations to maintain global systems that standardize data collection and dissemination of information.

- Cooperate with intergovernmental organizations, financial and development institutions of which they are members to promote the provision of technical and financial resources to the Secretariat, to assist Parties that have developing or transitional economies to meet their commitments under Article 20.

Guidelines for the implementation of Article 20 have not been drafted by the Parties. The Convention Secretariat has developed a WHO FCTC Indicator Compendium to promote the collection and sharing of standardized data by and between the Parties (9).

The combination of countries coalescing behind a common goal, the power of international law and the focus of global intergovernmental bodies gives countries confidence as they work to implement the WHO FCTC.

Knowledge networks to assist Parties with implementation of the WHO FCTC

Cooperation in the scientific, technical and legal fields; provision of related expertise; and research, surveillance and exchange of information are important means of strengthening the capacity of Parties to meet their obligations under the WHO FCTC.

As part of its overall knowledge management activities, and in response to the increasing demand from Parties for targeted technical assistance, the Convention Secretariat has established a collaborative network of six knowledge hubs at academic institutions. One knowledge hub has been established in each WHO Region to assist Parties in their work on a number of important technical areas of the WHO FCTC. Their primary aim is to analyse, synthesize and disseminate information and knowledge relating to matters in which they have expertise (10).

Areas covered by existing knowledge hubs include: smokeless tobacco use; water pipe tobacco smoking; tobacco taxation (Article 6); international cooperation on implementation of smoke-free environments (Article 8); packaging and labelling (Article 11); tobacco cessation (Article 14); illicit trade (Article 15); trade and tobacco litigation (Article 19); and research, surveillance and health impact assessment (Article 20).

The Convention Secretariat provides knowledge hubs with technical and, where appropriate, financial assistance to establish their operations, including for development of a web-based platform for information dissemination and exchange. Additional knowledge hubs are planned pending authorization by the Conference of the Parties.

A second type of knowledge network is one incorporated into the Tobacco Industry Monitoring Centres (observatories). Observatories help generate understanding of the approaches used by the tobacco industry (both currently and projected in the future), and the way in which the industry attempts to interfere with public health policy development. They will also inform policy-makers and governments to help prevent such interference, in accordance with Article 5.3 of the WHO FCTC. One observatory is already operational in Brazil, with two others in the process of establishing their operations; there are plans to establish observatories in all six WHO regions and in subregions where appropriate (10).

Monitor tobacco use and prevention policies

Monitoring is the foundation of successful tobacco control

Tobacco control monitoring includes: monitoring tobacco use indicators (often understood as the surveillance of tobacco use patterns and trends); monitoring exposure to tobacco smoke; and monitoring policies designed to reduce tobacco use or exposure to tobacco smoke.

Monitoring strengthens the evidence base for tobacco control

Tobacco is one of the leading causes of preventable illness and death

worldwide (2). Monitoring systems for tobacco use and exposure to tobacco smoke are essential components of any tobacco control programme and are critical to understanding and reversing the tobacco epidemic (11–13).

Understanding patterns and trends in tobacco use and exposure to tobacco smoke helps policy-makers design stronger, more targeted tobacco control policies and allocate adequate resources for implementing and supporting these policies (12).

To maximize impact, monitoring tobacco use and exposure to tobacco smoke

should be as extensive and comprehensive as resources allow, and include all forms of tobacco consumption.

When combined with other types of research, routine surveillance can be instrumental in helping policy-makers and practitioners understand tobacco's full impact (14) – on health as well as economic well-being, gender equality, and the environment.

Tobacco use patterns typically differ according to socioeconomic and demographic characteristics (15, 16). Having a full picture of tobacco use patterns and trends helps tailor

interventions to best meet the needs of different population subgroups.

It is important to note that effective monitoring of tobacco use and exposure to tobacco smoke should be an ongoing process and not considered as a one-off activity. Trends change over time, and good monitoring should be understood as a long-term commitment that must be well-planned and regularly conducted.

Monitoring prevention policies is key to sustaining tobacco control progress

Monitoring the implementation and evaluating the effectiveness of tobacco control policies are two equally important activities (14) – only what is measured

can be managed and improved. Without effective monitoring, tobacco control programmes will struggle to assess the impact of interventions or to improve them.

Countries should also aim to monitor the enforcement of tobacco control policies (17), and any tobacco industry activities that may interfere with a new or existing policy. Such monitoring should include the effectiveness of firewalls between government staff and the tobacco industry (18).

Monitoring tobacco use is within all countries' reach

Even with resource constraints, countries can focus on a limited number of basic monitoring activities that will generate

the minimum data necessary to improve tobacco control programmes. Governments have a clear role in leading the monitoring of public health indicators, but are not always responsible for producing and analysing these data (19). In some countries, the non-profit sector, academia, tobacco control advocacy organizations and other stakeholders may already be generating some of this useful analysis (20). Governments can maximize the use of existing data sources to consolidate tobacco control indicators and fill any gaps to obtain a fuller picture of tobacco use patterns and tobacco smoke exposure.

Global monitoring builds on national monitoring



The WHO report on the global tobacco epidemic is an example of how regular monitoring and tracking of best-practice measures can improve global tobacco control. These reports have been produced biennially by WHO since 2008, and contain data and analysis of tobacco use and policies in WHO Member States. Progress on

policy implementation is assessed by a standard set of comparable indicators that allow progress to be monitored between countries and regions, and over time. Gaps in global policy coverage are readily identifiable in the report, which prompts stakeholders to intensify efforts to fill those gaps.

Understanding patterns and trends in tobacco use and exposure to tobacco smoke helps policy-makers design stronger, more targeted tobacco control policies.

Monitoring demographics and trends

Countries use different types of population surveys to track tobacco products used; who uses them; patterns of use; and how these patterns change over time. Countries also use surveys to monitor the frequency and intensity of exposure to second-hand tobacco smoke. These surveys may be either stand-alone tobacco surveys, or surveys on multiple health issues of national interest in which tobacco is included. The Global Tobacco Surveillance System (GTSS) (21, 22) and a subset of core questions (Tobacco Questions for Surveys) (23) both provide examples of validated questions that can be used by any country or institution surveying adult or youth behaviour, knowledge and attitudes related to tobacco use.

Monitoring the health impact

Epidemiologic studies and reviews of vital registration and death registration data

can help determine the burden of disease and death directly attributable to tobacco use and exposure to tobacco smoke (24).

This evidence is invaluable for highlighting the serious harms caused by tobacco use and the need for swift action to design and implement effective tobacco control policies.

Monitoring tobacco control policies

Monitoring tobacco control policies is needed for better planning and implementation of necessary public health interventions. There are a number of cost-effective policy interventions incorporated into the MPOWER package that build on the demand-reduction measures contained in the WHO FCTC (25). Countries adopting the WHO MPOWER package of interventions need an accurate overview of their existing tobacco control policies, and must be able to assess the effects of each intervention and identify policy areas that

need further strengthening to have the greatest impact on saving lives.

From an implementation perspective, monitoring can improve the impact of a new tobacco control policy by identifying factors that may hinder its success, such as legal loopholes or industry interference. Targeted steps can then be taken to mitigate these barriers and improve the effect of the policy quickly and effectively (26). Regular monitoring allows progress to be measured, giving a clear picture of tobacco control progress over time.

Monitoring of demand-reduction policies should include efforts to protect populations from exposure to tobacco smoke; warn about the dangers of tobacco (through warning labels and anti-tobacco mass media campaigns); provide cessation services; enforce bans on tobacco advertising, promotion and sponsorship; and raise taxes on tobacco (27).



BASIC QUESTIONS FOR MONITORING MPOWER MEASURES

INDICATOR AND DESCRIPTION	
MONITOR	<p>Current tobacco users Percentage of respondents who currently use any tobacco products (smoked and smokeless)</p> <p>Current tobacco smokers Percentage of respondents who currently smoke any tobacco products</p> <p>Daily tobacco smokers Percentage of respondents who currently smoke tobacco products daily</p> <p>Current smokeless tobacco users Percentage of respondents who currently use smokeless tobacco</p> <p>Daily smokeless tobacco users Percentage of respondents who currently use smokeless tobacco daily</p>
PROTECT	<p>Exposure to second-hand smoke at home Percentage of respondents who report that smoking occurs inside their home</p> <p>Exposure to second-hand smoke at work Percentage of indoor workers who were exposed to tobacco smoke at work in the past 30 days</p>
OFFER	<p>Tobacco use quit attempt in the past 12 months Percentage of current tobacco users who tried to quit during the past 12 months</p> <p>Health care provider's advice to quit using tobacco Percentage of current tobacco users who visited a doctor or health care provider during the past 12 months and were advised to quit tobacco use</p>
WARN	<p>Awareness of anti-tobacco information in newspapers or magazines Percentage of respondents who have noticed information about the dangers of tobacco use or that encourages quitting in newspapers or magazines in the last 30 days</p> <p>Awareness of anti-tobacco information on television Percentage of respondents who have noticed information on television about the dangers of tobacco use or that encourages quitting in the last 30 days</p> <p>Noticing health warning labels on tobacco packages Percentage of current tobacco users who noticed health warnings on tobacco packages in the last 30 days</p> <p>Thinking of quitting because of health warning labels on tobacco packages Percentage of current tobacco users who reported thinking about quitting tobacco use in the last 30 days because of the warning labels on tobacco packages</p>
ENFORCE	<p>Awareness of tobacco advertising in stores Percentage of respondents who have noticed any advertisements or signs promoting tobacco products in stores where tobacco products are sold in the last 30 days</p> <p>Awareness of specific types of tobacco promotions Percentage of respondents who noticed [free samples of tobacco products, tobacco products at sales prices, coupons for tobacco products, free gifts or discounts on other products when buying tobacco products, clothing or other items with a tobacco product brand name or logo, tobacco product promotions in the mail] in the last 30 days</p>
RAISE	<p>Cost of manufactured tobacco products Average amount spent on a pack of manufactured tobacco products (in local currency)</p> <p>Tobacco product affordability Average cost of 100 packs of manufactured tobacco products as a percentage of Gross Domestic Product (GDP) per capita</p>

Source: Adapted from TQS (23).

Different levels of monitoring exist – from basic to comprehensive

All countries have a vested interest in monitoring tobacco use and exposure to tobacco smoke; the impact of tobacco use; the status of tobacco control policy interventions; and progress on these interventions. This can be done at varying levels of comprehensiveness – from core level activities to expanded and advanced level activities. These levels differ in their scope, frequency and costs. While thorough monitoring efforts yield the strongest evidence for tobacco control, the cost and complexity of monitoring often limits how much can realistically be accomplished on a regular basis (28).

Tobacco types

Tobacco use takes multiple forms: cigarettes and other forms of smoked tobacco (e.g. cigars, pipe, bidis, water pipes); and smokeless tobacco products, such as chewing tobacco and snuff. To properly understand consumption patterns, surveys measuring prevalence could seek more details on rates of consumption (how

much tobacco is used and how frequently) and different types of tobacco products used (including substitute and emerging products). Different tobacco control strategies may be needed to address issues related to specific product types or the rate and frequency of consumption (15).

Tobacco product inventories

Tobacco products are constantly evolving. During the past decade various new tobacco products and product types have appeared throughout the world. This is partly because manufacturers regularly alter the contents and design features of tobacco products in order to make them more attractive and more addictive (29). There is constant reformulation or rebranding of products to enable classification in a category or price band that attracts less regulatory scrutiny or is taxed at lower levels (30), to attract new user groups, or to encourage those making a quit attempt to select products branded “lower risk” instead (31). Product inventories should be tracked in order to understand what types of new products are being sold, to what extent they differ

from existing products, and the potential aims of any reformulation.

Monitoring compliance

Monitoring a country’s compliance with its tobacco control laws and regulations can be done through direct compliance checks. These include inspections of designated smoke-free places (including worksites and indoor public places) to verify compliance with regulations (32); inspections of retail locations to check compliance with restrictions on product displays, point-of-sales advertising and sales to minors (33); and monitoring of print and broadcast media to verify that bans on advertising, promotion and marketing are being followed (33). With dedicated resources, compliance monitoring can be frequent and can cover a large number of venues and jurisdictions. When resources are scarce, sampling methods provide a representative overview of overall compliance. A complementary approach is to identify and access data sources that are readily available from official government records.

Social and economic impact of tobacco

Health outcomes are predictably a key area of interest for decision-makers and advocates alike, with commonly measured indicators that include direct mortality and individual or public health spending on tobacco-related illness. In addition to the individual and public health impact, however, the tobacco epidemic has a significant non-health-related effect on society at large (34). Topics that benefit from monitoring and research include the social and economic impact of the tobacco epidemic on families and households (e.g., money spent on tobacco rather than on other goods, medical costs and income losses from tobacco-related illness and premature mortality); economy-wide impacts of tobacco product manufacturing and of tobacco use; the impact of tobacco policies such as smoke-free spaces on cultural norms and values; and the environmental effects of tobacco growing, product use and waste disposal (35). Identifying all of the potential indicators of interest for a country will facilitate collection of data as early as possible and adapting of policies based on the realities of implementation.

Monitoring builds support for tobacco control

Tobacco control policies that attract broad public support are more likely to be successful (36). Surveying opinions of tobacco users as well as non-users can reveal the level of support for or against specific tobacco control measures. Policies that are relatively unpopular may need to be altered, or reframed with better advocacy and communication strategies, so that they gain the popular support needed for success. Surveys that ask both current and former tobacco users about whether and how tobacco control measures affect their behaviour, especially their intentions or attempts to quit, help predict the likely success of a policy in bringing about actual behavioural change. Additionally, the act of responding to a survey can raise awareness about health issues among the community being surveyed, with the effect strengthened by repeat surveys on the same issue (37).

Monitoring exposes industry interference

The tobacco industry’s interests are in irreconcilable conflict with the interests of public health policy (38, 39). In its efforts to derail or weaken effective tobacco control policies, tobacco industry interference takes many forms. These include: manoeuvring to hijack the political and legislative process; exaggerating the economic importance of the industry; manipulating public opinion to gain the appearance of respectability; fabricating support through front groups; discrediting proven science; and intimidating governments with litigation or the threat of litigation (40). Systematic monitoring of industry efforts to interfere with effective tobacco control policies, as well as sharing information within and across governments, serve to protect public health by raising awareness among stakeholders and by providing evidence to respond to myths created by the tobacco industry (41).

EXAMPLES OF CORE, EXPANDED AND ADVANCED MONITORING OF EXPOSURE TO TOBACCO SMOKE

CORE	EXPANDED	ADVANCED
Direct observation Inspections of smoke-free public places and workplaces	Measuring airborne nicotine levels Objective measurement of airborne nicotine levels through use of detection monitors at a representative number of public places	Measuring cotinine levels Measurement of cotinine in urine, saliva or blood samples of a representative sample of the population
Self-reported exposure questionnaires Include questions on exposure to second-hand smoke in national or subnational surveys	Measuring particulate matter Measuring particulate matter can be an indication of the level of exposure to second-hand tobacco smoke	

Note: All countries should implement core monitoring measures, and once these are well-established, can apply expanded and advanced measures subject to availability of resources.

Monitoring provides evidence to respond to myths created by the tobacco industry.

The mechanics of monitoring

Different tools for different goals

Because tobacco use is one of the most significant risk factors for disease and premature death (2), tobacco monitoring activities should be integrated into national and local health information systems (42). Decision-makers at the highest level of government should be made aware of the importance of gathering evidence, and of what this entails from a practical perspective (43). This includes providing monitoring activities with sufficient political support and resources, and ensuring that data collected are used to take appropriate action.

Countries should assess their capacity for monitoring and surveillance by identifying their tobacco control priorities and how existing systems can support them, and then investing to fill any gaps (44, 45).

Multiple methods of surveillance will form the foundation of a comprehensive and robust monitoring system, and should be coordinated to increase efficiency and improve overall usefulness, quality and timeliness (46). Approaches include:

Censuses

Regular, official censuses, usually conducted by governments or their agents, provide systematic information about a population (47). While censuses are expensive, most countries conduct them at periodic intervals and maintain repositories of the data. Countries that collect tobacco use data through censuses include: Austria, Brunei Darussalam, Germany, New Zealand, Niue, Tonga and Tuvalu.

Surveys

Population surveys of a representative sample of the total population take a snapshot of health status, behaviours, attitudes or intervention impact at a single

point in time (47). Repeating the survey using the same questions and methodology allows changes to be monitored over time.

Longitudinal studies

These types of observational studies involve repeated observations of the same (usually limited) group of people and topics of interest over long periods of time, often over many decades or over the full life course (48). One of the longest longitudinal studies ever conducted was the British Doctors Study in the United Kingdom, which ran from 1951 through to 2001, and provided the first convincing statistical proof that tobacco smoking was a cause of lung cancer (49). The International Tobacco Control Policy Evaluation Project (ITC) is conducting longitudinal cohort surveys in more than 28 countries and includes over 150 tobacco control collaborators (50, 51). Bangladesh has completed four rounds of ITC surveys; Thailand has completed six rounds.



Types of surveys

Single risk-factor surveys include the Global Youth Tobacco Survey (GYTS) (52, 53) and the Global Adult Tobacco Survey (GATS) (22, 54). GYTS provides a global standard for systematically monitoring youth tobacco use. It is a nationally representative school-based survey of youth aged 13 to 15 years that generates comparable data within and across countries because of its standard, systematic and consistent protocols for all countries. GYTS has been implemented in 173 countries since 1999 and has been repeated at least once in 106 countries. GATS provides a global standard for systematically monitoring adult tobacco use through a nationally representative household survey of people aged 15 years and older. It also generates comparable data within and across countries because of its standard, systematic and consistent process for all countries. GATS has been implemented in 33 countries since 2008 and repeated in 11 countries.

Multi-risk factor health surveys can assess tobacco use in the context of broader health status and other health behaviours to determine influence and/or correlating factors. National health surveys that assess status for a broad range of health indicators may already include a number of tobacco-related questions. The WHO STEPwise approach to Surveillance (STEPS) (55, 56) is a simple, standardized method for collecting, analysing and disseminating data on NCD risk factors. STEPS is designed to help countries build and strengthen their surveillance capacity with an approach that focuses on obtaining core data on the established NCD risk factors that determine the major disease burden. It is sufficiently flexible to allow each country to expand on the core

variables and risk factors, and to incorporate optional modules related to local or regional interests. Since 2003, 125 countries and territories have implemented STEPS. In 2013, the WHO STEPS survey modified its tobacco module, enabling the STEPS instrument to provide information on all TQS indicators. The Global School Based Student Health Survey (GSHS) is another multi-risk factor survey designed to help countries measure and assess the key behavioural risk and protective factors related to the leading causes of illness and death among young people aged 13 to 17 years, including tobacco. The GSHS has been implemented in 104 countries since 2003 and repeated in 36 countries.

Social, economic and other surveys can also assess tobacco use and exposure to tobacco smoke in the context of economic and social conditions. Montenegro, for example, regularly monitors tobacco use and exposure to tobacco smoke using the World Bank Living Standards Measurement Survey (57). The inclusion of TQS in broader social and economic surveys would be an efficient way for countries to strengthen their tobacco use surveillance capacity.

School-based surveys. Many countries monitor health and well-being issues concerning youth through school-based surveys. Surveying young people at school yields different results than when surveying them at home, where other family members around may influence responses. Khartoum State in Sudan used school-based surveys in 2011 to assess the extent of tobacco use in public and state schools, and how these were affected by socioenvironmental factors (58).

Monitoring activities need sufficient political support and resources, and data collected has to be used to take appropriate action.

Civil registration

In order to assess tobacco-attributable mortality, a civil registration and vital statistics (CRVS) system needs to be in place. The CRVS records cause of death for all deaths, making it possible to calculate the number of deaths attributable to tobacco use and second-hand smoke.

Health Information Systems and administrative systems

Information from existing administrative systems, whose primary purpose may be billing, patient record management or another administrative function can provide a secondary source of tobacco data (59). Electronic health records can also be used to gather data on tobacco-related issues (14, 59). Data on tobacco use that have already been collected for other purposes (e.g. public health facility client registrations, anonymised medical record data, health insurance data, tobacco

importation and excise tax collection records) can be used (aggregated and subject to ethics committee approval), as an important supplement to data from targeted surveillance systems. Indonesia, for example, has included tobacco use prevalence in its national health insurance system reporting.

Tools for monitoring tobacco control policies

Monitoring of policies can comprise a range of activities, including assessing the strength of existing policies against best-practice criteria (for example, the WHO FCTC requirements and guidelines for tobacco control policies), identifying potential gaps in existing policies and legislation, and outlining areas for improvement. An effective monitoring tool for tobacco control policies should incorporate the following characteristics (60):

- Include all relevant tobacco control policies and be regularly updated to include new policies.
- Assess the policies against current best-practice standards.
- Include the degree of enforcement of policy interventions.
- Cover national-level policies as well as those of relevant subnational jurisdictions.
- Be updated as changes occur, or at least at brief, regular intervals, while also maintaining historical information.
- Span a sufficiently long period to enable (where appropriate) the linking of changes in tobacco control policies to changes in the prevalence of tobacco use and other impact indicators.



Standardized monitoring and surveillance tools help keep data comparable.

Characteristics of effective monitoring systems

- **Simple**
Simplicity helps to ensure a monitoring system works properly and reduces the need for intensive, expensive training. This is particularly important in environments where resources for developing or providing training are limited.
- **Flexible**
A monitoring system needs to be able to adapt to include information on emerging threats and opportunities, as well as the effect of new policies that may be introduced over time.
- **Valid**
Protocols need to be in place to ensure that results are collected in a consistent format. This is critical for scientific validity and data reliability. It also helps minimize the possibility of errors in data collection, entry, storage and reporting.
- **Representative**
Surveys should be designed to be as representative of the general population as possible, so that tobacco control measures can be developed to protect as many people as possible.
- **Standardized**
Standardized monitoring and surveillance tools help keep data comparable even when collected at different times, by different authorities, using different systems. This is important for bringing disparate sources together to reveal bigger pictures and trends.
- **Periodic**
Repeating surveys at regular intervals – keeping methods and questions as consistent as possible – allows positive and negative changes over time to be captured and addressed.
- **Timely**
Turnaround between data collection and analysis and the availability of results should be as quick as possible so that information is available while it is still accurate.
- **Sustainable**
Monitoring needs to be seen as an integral part of any tobacco control programme, and as such investment should be made from both a human and financial perspective. Budget lines should be specifically established for monitoring and surveillance, and training and career opportunities for technical experts should be prioritized.
- **Usable**
Plans for data dissemination, publication and promotion should be in place to ensure that results and analysis of the data can be shared and used as quickly as possible. This includes public dissemination and research. It also means regularly checking with stakeholders that the data indicators being collected are still useful to them – i.e. that they are topics of academic, advocacy or public interest.

Note: Adapted from Glynn and Backer. (61)

Standardized protocols improve monitoring

Standardized monitoring protocols increase the speed and efficiency with which data are collected and used to improve tobacco control efforts (62).

Article 20 of the WHO FCTC commits Parties to conduct surveillance activities and share data with each other. This is one of the primary reasons why data must be comparable. Article 20 explicitly commits Parties to “integrate tobacco surveillance programmes into national, regional and global health surveillance programmes so that data are comparable and can be analysed at the regional and international levels, as appropriate” (8).

Standardization is useful for obtaining a regional or global picture of the wider tobacco epidemic. To maximize

information sharing and cross-country comparison, standardization needs to be considered at all stages of surveillance system design, from sampling and questionnaire design to analysis and reporting (42). WHO and its partners have developed various tools to enhance standardization of surveillance efforts for tobacco control between countries. Some of the most popular are standardized questionnaire templates.

Standard questionnaires

Standardized questions and questionnaires are used by many countries because they have been tested and validated across a number of different contexts and audiences and have proven to be reliable instruments for monitoring specific indicators. These standardized survey protocols can be adopted and adapted

by countries at minimal cost to collect basic information and meet the need for comparable data across surveys and between countries. The most common source is the GTSS (63–65), which includes the TQS (23).

Global Tobacco Surveillance System (GTSS)

The GTSS protocols cover various aspects of tobacco use by different demographic groups. Examples of survey protocols include the school-based GYTS (52) and the household-based GATS (22). These survey instruments use standard sampling procedures, a core questionnaire and common field and data management procedures. Countries with insufficient capacity to conduct population-based surveys can also receive technical assistance from the GTSS partners.

Tobacco Questions for Surveys (TQS)

TQS, a subset of 22 core questions from GATS, provides a standard set of questions on tobacco use and key tobacco control measures as defined by the WHO FCTC (23). These questions can either be used as a standalone module or incorporated into other surveys in any combination. Currently, 73 countries have integrated TQS into their national surveys. The WHO STEPwise approach to Surveillance (STEPS) also integrates the TQS instrument and allows countries to generate all TQS indicators (66).

Monitoring must lead to action

Data are only a means to an end. They must be analysed and findings quickly compiled and disseminated so that governments and other stakeholders can use them to advocate for and develop tobacco control policies.

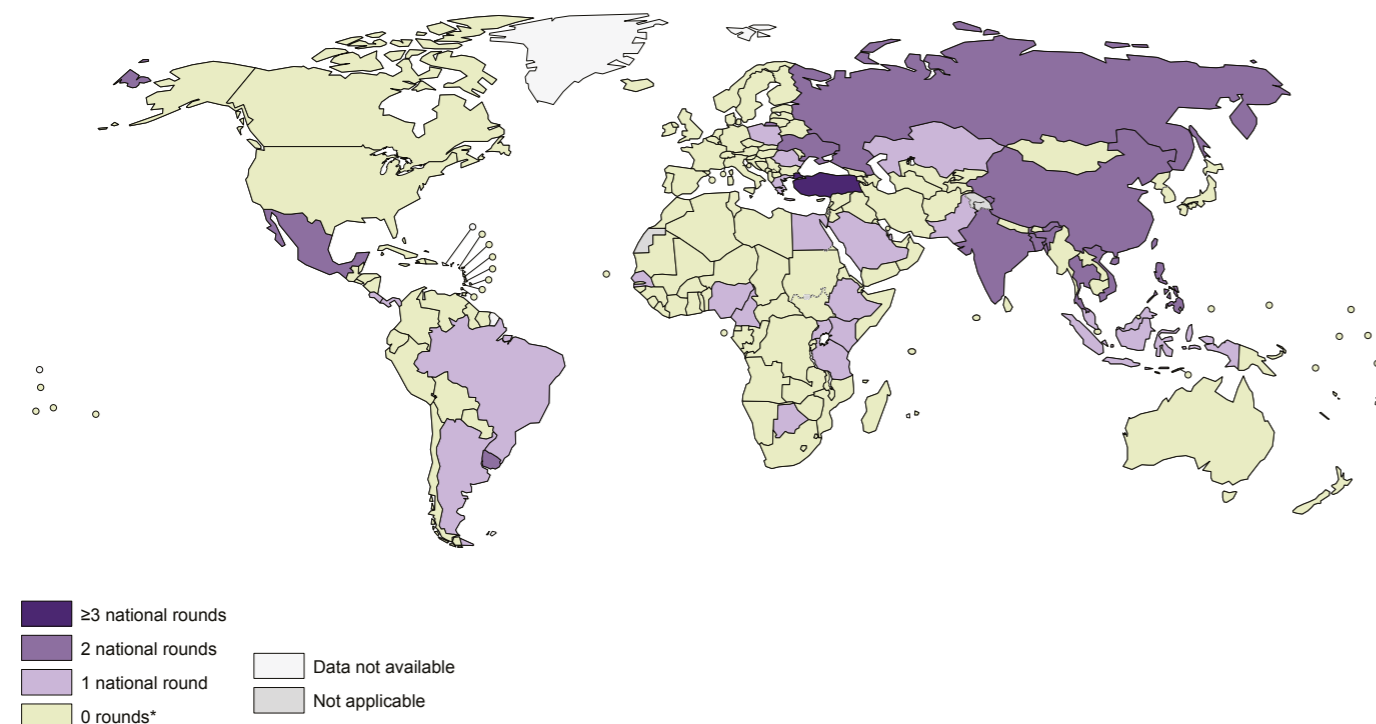
A variety of communication tools – including fact sheets, comprehensive reports and white papers, newspaper and television/radio news, medical journal articles, business intelligence tools, social media messaging and anti-tobacco mass media campaigns – can be used to help translate raw data into usable information. This information should then be shared via as many channels as possible in formats appropriate to each intended audience. Communication that draws on hard evidence is key to changing opinions and attitudes, but content also needs to be shared and promoted as broadly as possible. The tobacco industry has long been a master of strong communication tactics; the tobacco control community needs to catch up.

Some countries have already determined how to progress from data to action.

Uganda’s use of the GATS helped the government win support for a new tobacco control law that completely bans smoking in public places (67). Prior to the survey, policy-makers were not convinced that indoor tobacco smoking and second-hand smoke exposure were sufficiently serious problems in their country. Similarly, conducting the GATS in India made it possible to defend a number of tobacco control measures adopted between 2009 and 2016, including smoke-free laws and large graphic health warnings on packaging (68, 69). Without data, these initiatives would have been vigorously opposed by the tobacco industry and at risk of being undermined or even revoked.

Data may also catalyse action beyond the health sector. The SDGs emphasize the broader implications of tobacco to human development (70, 71), and tobacco control should aim to support this by using data to advance action in other areas, such as environmental protection and gender

COUNTRIES IMPLEMENTING THE GLOBAL ADULT TOBACCO SURVEY, 2008–2017



*Most high-income countries have established independent, national monitoring systems and are therefore not expected to adopt the Global Adult Tobacco Survey.

Data must be analysed and findings quickly disseminated so that governments and other stakeholders can use them to advocate for and develop tobacco control policies.

equality. In return, this could lead to these sectors sharing the results of their programmes with tobacco control, which could strengthen the effectiveness of anti-tobacco policies and create a virtuous knowledge cycle where data and action continually reinforce each other.

Maximising monitoring efforts

Despite the clear benefits of monitoring and the relative simplicity of implementing basic monitoring systems, there are a number of challenges that prevent many countries from moving to a more comprehensive model. These centre mainly

around capacity: sufficient technical and human resources to collect, analyse and use data to the level of detail required for effective action. However, this barrier can often be overcome by the strategic sharing of key resources already available in the country (14). Several common challenges include:

Technical capacity

The perception that countries may lack sufficient technical capacity or technically qualified staff to monitor tobacco use and prevention policies is usually inaccurate. Technical capacity for tobacco monitoring is not significantly different from capacity to monitor any other behavioural risk factor or risk factor mitigation policies, and

staff skilled in monitoring and surveillance of any kind can be trained in tobacco-specific activities with few additional resources. In addition, skilled surveillance staff could be shared between different sectors of a health agency, and partnering with other government agencies, academia or NGOs to outsource the surveillance work could be considered (14).

Multisectoral engagement

Multisectoral approaches to monitoring can help countries use scarce resources more efficiently, resulting in more comprehensive and useable data. In many countries, for example, the GYTS is conducted jointly by the Ministry of Health and Ministry of Education. Every country

already has some form of surveillance system in place with accompanying local expertise and experience. Research institutions within a country often study topics or collect data that would be of interest to policy-makers, but the tendency for that work to be compartmentalized consequently hinders their ability to share this information (80).

More effective sharing of the surveillance load also helps countries with monitoring systems that are partially in place to leverage the capacity of other institutions and focus their own available resources on closing gaps, rather than building new systems that may duplicate other efforts. The inclusion of TQS in other population

surveys when there is insufficient capacity to administer a full GATS or GYTS has already demonstrated that countries can use this approach to strengthen their surveillance agenda. Many health ministries have established partnerships with NGOs such as the Campaign for Tobacco-Free Kids (81) and the African Tobacco Control Alliance (82). Oversight can be provided by a country's central statistics authority in order to manage and coordinate multiple stakeholders engaged in monitoring efforts.

Data sharing

Authorities that collect data should consider themselves "custodians" rather than owners of the data. It is preferable

that a data-collecting agency should not be the only body entrusted with analysing, packaging and disseminating data. A data custodian's task is to facilitate the use of data by encouraging its use and reuse while protecting its integrity and anonymity (83). Every survey involves a large investment of financial and human resources, which can be better justified if the largest possible number of researchers and policy-makers are able to use the data to produce evidence and advocacy to combat tobacco use and exposure to tobacco smoke.

Data use

Tobacco control programmes need access to experienced data analysts who can

Data-driven actions to advance MPOWER progress

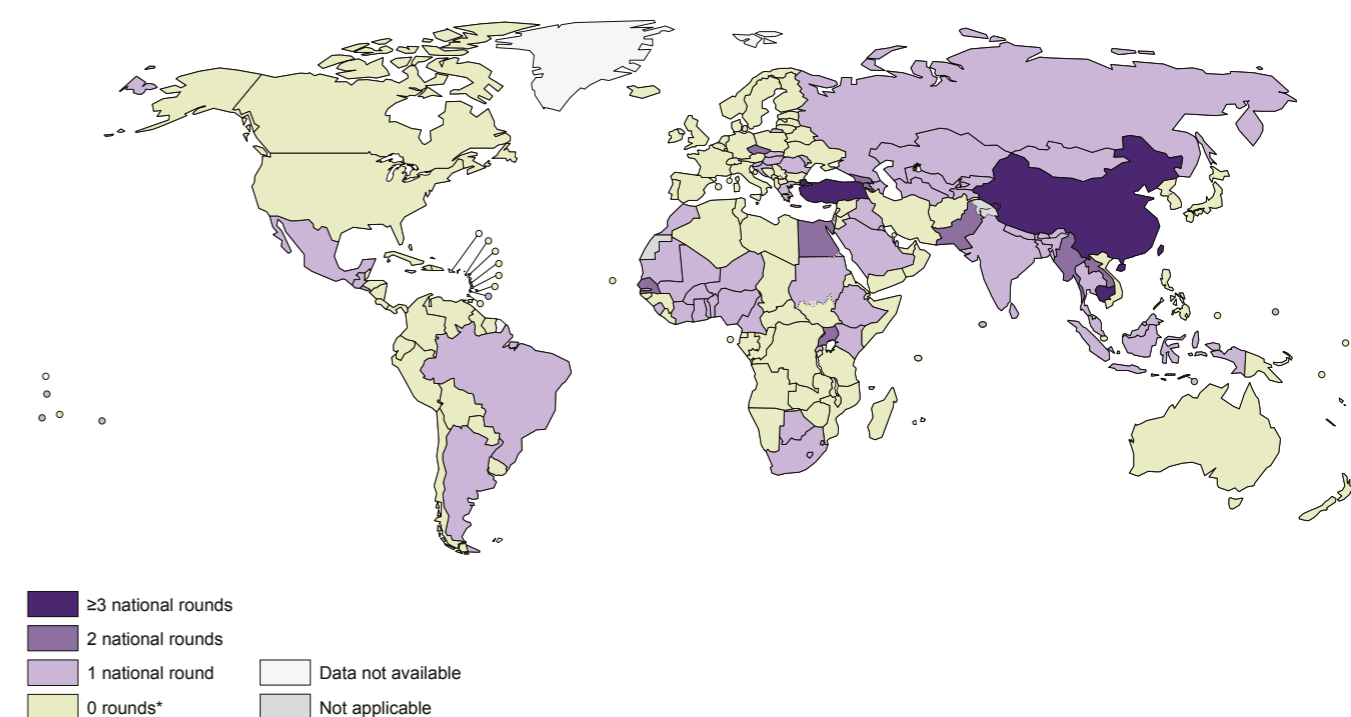
Nepal used the TQS module in its STEPS survey conducted in 2013. The high prevalence of both smoking and smokeless tobacco use among adult males (with 27% of males current smokers and 31% who use smokeless products) (72) motivated the government to enact legislation increasing the size of graphic health warnings to 90% of tobacco packaging surfaces in May 2015 – making them the world's largest health pack warnings (73).

The GATS survey conducted in **India** in 2009–10 revealed that 47% of current smokers and 46% of current users of smokeless tobacco planned to quit tobacco use eventually, with more than half of these planning or considering doing so within the next 12 months (74). Considering the high interest in quitting among tobacco users, the Government of India launched a countrywide tobacco cessation programme in January 2016 and national toll-free quitline in May 2016. Almost 40% of tobacco users who called the quitline and

registered for a cessation programme remained abstinent after 3 to 5 weeks, with 9% experiencing nicotine withdrawal symptoms for which they were referred to cessation clinics (75). The 2016 GATS factsheet released by India further confirms the declining tobacco use prevalence due to adoption of key demand-reduction measures (76).

In 2012, the **Philippines** used findings from its 2009 GATS survey, which showed high rates of smoking particularly among men (47.4%) and boys (12.9%), to drive passage of its landmark Sin Tax Reform Law (Republic Act 10351) (77). This legislation simplified a complex tobacco excise structure, equalizing excise tax rates across all price levels and substantially increasing taxes and retail prices, with taxes set to automatically increase by 4% annually beginning in 2018 (78). The 2015 GATS confirmed the continuing declining trend of tobacco use prevalence due to stronger demand-reduction measures (79).

COUNTRIES IMPLEMENTING TOBACCO QUESTIONS FOR SURVEYS, 2008–2017



*Most high-income countries have established independent, national monitoring systems and are therefore not expected to adopt the Tobacco Questions for Surveys.

perform the necessary technical work and share their findings with policy-makers. Again, this can be achieved by partnering with other organizations that possess sufficient data analytical capacity if direct engagement is not feasible. National statistics authorities or academic institutions can provide the necessary expertise if it is not available within a tobacco control programme itself. If governments overlook this important analytical work, the tobacco industry will rush to fill gaps with biased studies and misinformation (84).

Communication strategy

Even the best tobacco control programme can be hindered if it is not supported by an effective communication strategy. Well-crafted communication can help convince the public of the importance of participating in surveys, and ensure that survey results are used for maximum impact on policies and for driving behavioural change. In a larger context, the public sees the battle between tobacco control advocates and the tobacco industry play out largely through their use of media. Whichever side has the better

communication strategy will often prevail in convincing the public that its arguments are more credible (85, 86). To increase public awareness, surveillance data should always be publicized through the media, but should be structured in a format that will maximize understanding by different audiences. Communication experts should be involved to extract powerful and convincing messages from the data and academic literature. Tangible changes that result from public exposure to information and evidence will enhance the cost-effectiveness of carrying out the original surveillance work.

Funding

While funding a single survey is more straightforward than planning long-term funding for a series of surveys, it is not an effective investment. Resources spent on longer-term activities such as survey capacity building and infrastructure will offer better returns if there is a clear series of follow-up surveys planned. Funding is important not only for data collection but also for analysis, dissemination and evaluation, since this will ultimately ensure that information collected is used to maximum effect to trigger policy change (87).

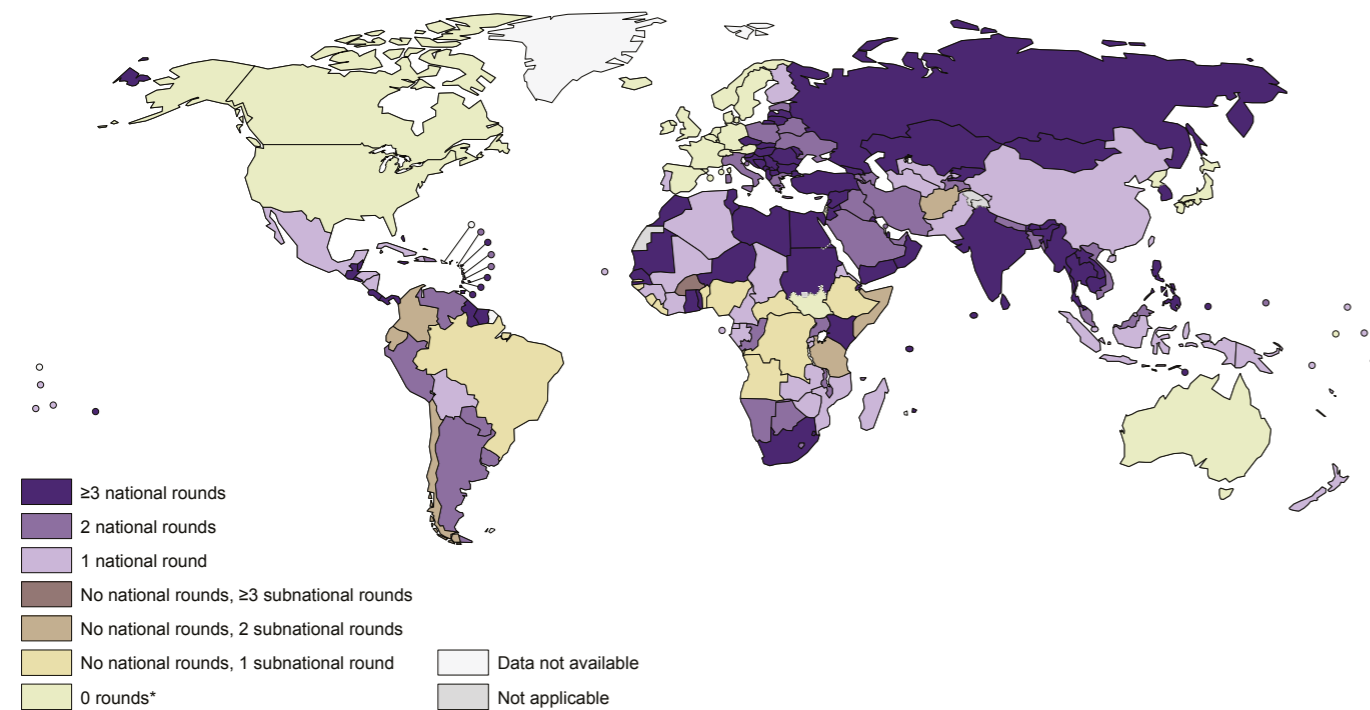
Political commitment

High-level political commitment to monitor the tobacco epidemic is still lacking in many countries. There has been significant progress enhancing the profile of tobacco control in the international development community, largely due to the inclusion of the implementation of the WHO FCTC as a specific goal in the SDGs (Goal 3A) (6).

The high-level commitment shown by the international community to implementing the WHO FCTC makes it easier for national policy-makers to prioritize tobacco control,

and in particular to allocate sufficient funding and resources to allow all countries to engage in effective monitoring of the tobacco epidemic.

COUNTRIES THAT IMPLEMENTED THE GLOBAL YOUTH TOBACCO SURVEY, 1999–2016



*Most high-income countries have established independent, national monitoring systems and are therefore not expected to adopt the Global Youth Tobacco Survey.

High-level political commitment to monitor the tobacco epidemic is still lacking in many countries.

Protection from tobacco industry interference – a key requirement for full WHO FCTC implementation

WHO FCTC Parties have committed to overcoming tobacco industry interference in their efforts to control and reverse the tobacco epidemic, recognizing that tobacco industry interference is the most critical barrier to the WHO FCTC effective implementation and specific provisions (88). The importance of eliminating tobacco industry interference in tobacco

control efforts is recognized by WHO FCTC Article 5.3, which requires Parties to “act to protect [their public health] policies from commercial and other vested interests of the tobacco industry in accordance with national law” (8).

Understanding that this provision is a keystone to effective tobacco control, the

Conference of the Parties (COP) to the WHO FCTC has also adopted guidelines on its implementation (38). A monitoring system for the tobacco industry, with relevant exchanges of information at regional and global levels, is considered an important tool for implementation of the Article 5.3 guidelines (40).

The right side of the law: Preventing industry interference

Problem

The tobacco industry is increasingly using domestic and especially international trade litigation in attempts to block progress on many tobacco control measures, such as smoke-free public places, pictorial health warnings, plain packaging and product regulation (89). This strategy includes bringing lengthy and expensive legal challenges against countries to intimidate them into retracting their tobacco control policies (41).

Although countries need to take account of their trade and investment obligations in legislating or regulating, they should not be deterred by unfounded claims – the time and money countries typically spend in defending themselves against industry claims usually pay off. Recently, Australia and Uruguay won investment treaty challenges against the tobacco industry, showing the scope of their sovereign right to regulate and protect their population against the harms of tobacco. But low- and middle-income countries may think twice before expending the time and money required to defend themselves against such claims.

Solution

Governments need support to build their legal and technical capacity to respond to legal threats from the tobacco industry. In order to address international litigation, the Anti-Tobacco Trade Litigation Fund – supported by Bloomberg Philanthropies and the Bill and Melinda Gates Foundation – provides technical and financial assistance to low- and middle-income countries (90). The Fund supports countries to cover intermediary legal costs when facing suits before international trade tribunals. It also provides technical assistance such as drafting industry-proof legislation and documents; litigation advice and assistance; access to a network of tobacco experts and senior trade lawyers; advocacy support; and a wealth of global experiences from other countries.

Sharing experiences means results generated in one country can be used to support litigation efforts in other countries. For example, data generated in Australia on the effects of plain packaging (91) were used by the UK to defend its own new plain packaging legislation, which became fully effective in May 2017 after the Supreme Court rejected tobacco industry appeals to overturn the law.

In addition to this guidance provided by the WHO FCTC, the UN Economic and Social Council (ECOSOC), in its resolution adopted on 7 June 2017, encourages its members to use a new model policy to prevent tobacco industry interference and ensure a consistent and effective separation between the activities of the United Nations system and those of the tobacco industry (92).

Tobacco industry interference can take many forms

The tobacco industry has long operated with the express intention of subverting the implementation of public health policies that aim to combat the tobacco epidemic (93). The industry devotes substantial resources and a wide range of tactics to interfere with the comprehensive implementation of provisions of the WHO FCTC. Industry interference with tobacco control activities in low- and middle-income countries is especially pervasive (94).

Tobacco industry interference takes many forms, but all have the goal of weakening, undermining and obstructing effective tobacco control policies. Some activities are conducted openly, while others are

more covert. Tactics commonly used by the tobacco industry to interfere with tobacco control efforts include (40):

- manoeuvring to hijack the political and legislative process;
- exaggerating the economic importance of the industry;
- manipulating public opinion to gain the appearance of respectability;
- fabricating support through front groups;
- discrediting proven science;
- intimidating governments with litigation or the threat of litigation.

Through the Final Political Declaration of the UN High-level Meeting on Prevention and Control of Non-Communicable Diseases, global leaders recognized in 2011 the fundamental conflict between tobacco industry interests and public health policy interests (3). This conflict is also deemed irreconcilable in the Article 5.3 guidelines (38).

Full implementation of Article 5.3 guidelines has not yet occurred

Although an increasing number of countries have begun to implement the recommendations in the WHO FCTC Article

5.3 guidelines, no country has yet fully implemented all of these provisions at best-practice level (95, 96). A Tobacco Industry Interference Index based on the Article 5.3 guidelines, designed with the help of tobacco control experts and validated through focus group discussions, has been developed by the Southeast Asia Tobacco Alliance (SEATCA) to assess the levels of tobacco industry influence on countries' tobacco control policy development (97).

Used initially in seven South-East Asian countries, this index is a useful advocacy tool to identify both progress and gaps in national efforts to prevent tobacco industry interference in tobacco control, and can be adapted for use by other countries and regions. Initial results show that, in general, countries that do not effectively implement measures to prevent tobacco industry interference will experience a greater level of tobacco industry involvement in their policy development (97).

A number of countries experience difficulties in implementing the provisions of Article 5.3 because of legal conflicts between tobacco control-related laws, government economic interests in the tobacco industry that have led to lack of effective regulation, and tobacco industry lobbying activities that have actively

Firewalls between government and the tobacco industry must be in place to block industry attempts to influence the tobacco control decision-making process.

interfered in the country's policy-making process. Recommendations to such countries on how to fully implement Article 5.3 include eliminating the tobacco industry as a legitimate stakeholder, raising awareness of tobacco industry interference, and securing transparency between the government and the tobacco industry (98).

Countering industry tactics

All industry attempts at interference – if identified and regularly monitored – can be successfully countered. However, understanding the various practices employed by the industry is critical to successfully countering these attempts. Clear, practical and comprehensive recommendations have been included in guidelines issued by the Conference of the Parties to assist Parties in meeting their legal obligations to implement Article 5.3, drawing on the best available scientific evidence and experience in countering

tobacco industry interference (38). WHO also developed a technical resource outlining practical steps countries can take to implement Article 5.3 provisions (41).

Ongoing research to identify and monitor industry interference in tobacco control policy, and sharing this information among countries and the wider public, are key to countering interference. Research can provide the evidence needed to better understand interference strategies and help governments take all necessary steps, including enacting legislation and setting out regulations to counter interference and implement effective tobacco control measures. Involving civil society in identifying and uncovering industry tactics helps to inform and mobilize public participation, and is an important contributor to success.

Although the industry tirelessly attempts to position itself as a "legitimate" partner and stakeholder in tobacco control, its interests are in irreconcilable conflict with

the interests of public health policy, and thus no element of the tobacco industry as defined by the WHO FCTC can be allowed to have any involvement in developing and implementing tobacco control measures.

Legal mechanisms that define roles and responsibilities must be put in place to ensure monitoring. Additionally, firewalls between government and the tobacco industry must be in place to block industry attempts to influence the tobacco control decision-making and implementation process, as well as prevent any conflict of interest by government officials and elected representatives. Transparency and disclosure of tobacco industry conduct and finances, including lobbying activities, campaign contributions, and tobacco advertising, promotion and sponsorship expenditures, are also important.

More specifically, effective government action to counter tobacco industry interference includes (38):

- Raising awareness about the addictive and harmful nature of tobacco products and about tobacco industry interference with tobacco control policies.
- Establishing measures to limit interactions with the tobacco industry and ensure the transparency of those interactions that do occur.
- Rejecting partnerships and non-binding or non-enforceable agreements with the tobacco industry, including financial support and endorsement of tobacco industry activities related to tobacco control.
- Requiring that information provided by the tobacco industry be transparent and accurate, with regular, truthful, complete and precise information on tobacco industry activities, as well as disclosure or registration of tobacco industry entities, affiliated organizations and individuals acting on their behalf, including lobbyists.
- Denormalizing and, to the extent possible, regulating activities described as "socially responsible" by the tobacco industry, including but not limited to activities described as "corporate social responsibility".
- Avoiding giving preferential treatment to the tobacco industry.
- Treating state-owned tobacco companies in the same way as the rest of the tobacco industry.
- Avoiding conflicts of interest among government officials and employees.

Overall, a comprehensive, national, multisectoral tobacco control programme

that puts specific measures into effect based on WHO FCTC provisions and implementation guidelines with clear mandates and responsibilities for authorities, as well as effective firewalls against tobacco industry interference, is ultimately the best protection from the vested interests of the tobacco industry.

Lessons learned from countries' successes include enacting and enforcing evidence-based tobacco control measures at best-practice level; communicating to the public and relevant authorities about tobacco control policies and regulations; building strong anti-tobacco coalitions across government agencies as well as with civil society; and enlisting credible and popular tobacco control champions capable of convincingly revealing the truth about the harms of tobacco use and industry tactics.

The tobacco industry's interests are in irreconcilable conflict with the interests of public health policy.

Kenya successfully defends tobacco control regulations against tobacco industry legal challenges

In 2014, Kenya introduced new tobacco control regulations, as authorized by the country's Tobacco Control Act 2007. The new regulations introduced a number of tobacco control measures, including requirements for graphic health warnings on tobacco packaging; ingredient disclosure requirements; smoke-free environments adjacent to public places; and regulating interactions between public officials and the tobacco industry.

They also introduced a requirement that tobacco companies make an annual contribution to a compensation fund based on the quantity of tobacco products manufactured or imported.

British American Tobacco Kenya Ltd (BAT) brought a case in the High Court of Kenya challenging several of the measures introduced, as well as the constitutional validity of the process for making these regulations (99). The court held that the major policy measures contained in the regulations, including graphic health warnings, were constitutional and could be implemented. Minor aspects of the regulations were eliminated by the court, including requirements that the tobacco industry provide evidence of its market share to the government, and that penalties for violation could not exceed the maximums authorized by law. BAT then appealed the decision to the Court of Appeal in Nairobi, which dismissed their appeal entirely (100).



Protest by the Consumer Information Network, Kenya.

Effective tobacco control measures gain momentum



Monitor tobacco use and prevention policies



Protect people from tobacco smoke



Offer help to quit tobacco use



Warn about the dangers of tobacco



Enforce bans on tobacco advertising, promotion and sponsorship



Raise taxes on tobacco

Monitor tobacco use and prevention policies

Almost 40% of the world's population is covered by strong monitoring of tobacco use

To date, almost 2.9 billion people in 76 countries – 39% of the world's population – are protected by strong, full-scale monitoring systems that incorporate recent, representative and periodic surveys for both adults and youth. An additional 39 countries (30 of which are middle-income countries) have recent and representative data for both adults

and youth, and only need to routinely collect that data for both groups every 5 years to ensure adequate monitoring of tobacco use within their populations.

Monitoring tobacco use continues to rise

The number of countries engaged in full-scale monitoring of tobacco use increased from 46 in 2007 to 76 in 2016, while the percentage of the world's population adequately monitored rose from 20% to

39%. However, since 2014, the number of countries monitoring tobacco use at best-practice levels declined from 77 to 76, even as the population covered by full-scale monitoring rose from 35% to 39%. This shift comprised six countries conducting tobacco use monitoring at the highest level in 2014 that could not maintain that effort, while five countries strengthened their monitoring efforts to reach best-practice levels (Azerbaijan, Brazil, Brunei Darussalam, Indonesia and Lao People's Democratic Republic). Results from most countries that

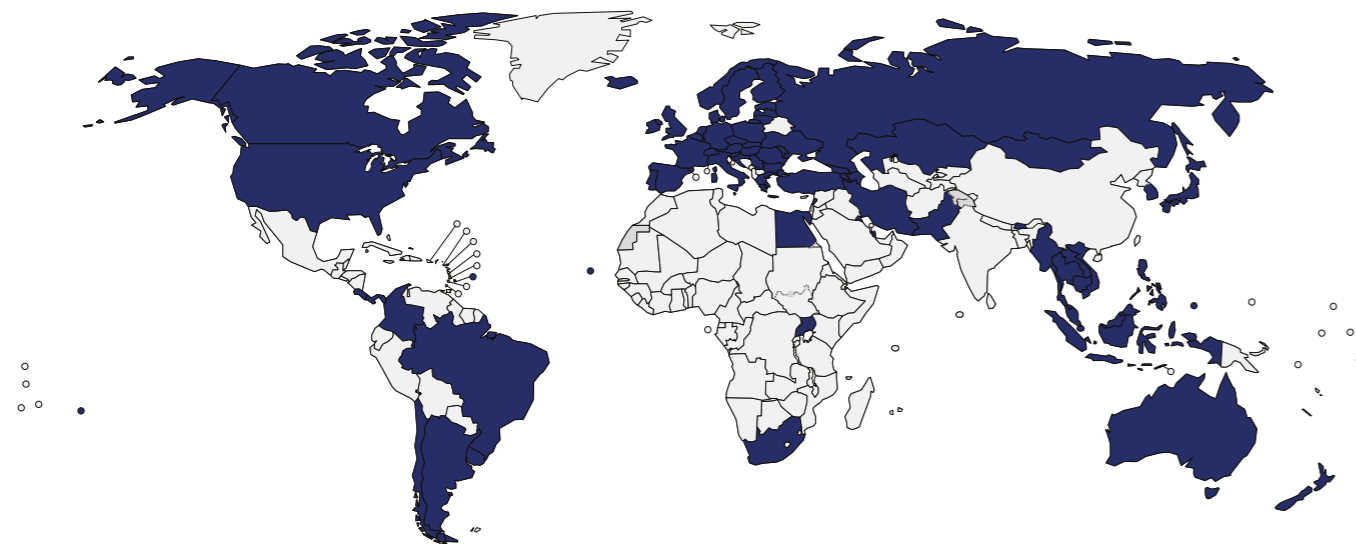
completed survey fieldwork in 2016, and many that did so in 2015, are not yet available because of the time lag between data collection and publication and are not included in this assessment. Since publication of the *WHO report on the global tobacco epidemic, 2015*, countries have released results from an additional 42 adult surveys and 20 youth surveys for the period 2009–2014. Consequently, status of the Monitoring measure for all years back to 2007 has been updated using the most current information from countries.

Effective monitoring remains a challenge for low- and middle-income countries

More than 70% of high-income countries (42 countries) are adequately monitoring tobacco use among both adults and youth. Around one third of middle-income countries (33 countries) have implemented the same high level of monitoring. Only one low-income country (Uganda) has an effective monitoring system.

In contrast, only 5% of high-income countries (three countries) have weak tobacco use monitoring systems or conduct no surveys, which is the case for 15% of middle-income countries (16 countries). Among low-income countries, more than half (16 countries) have weak tobacco use monitoring or no national surveys at all.

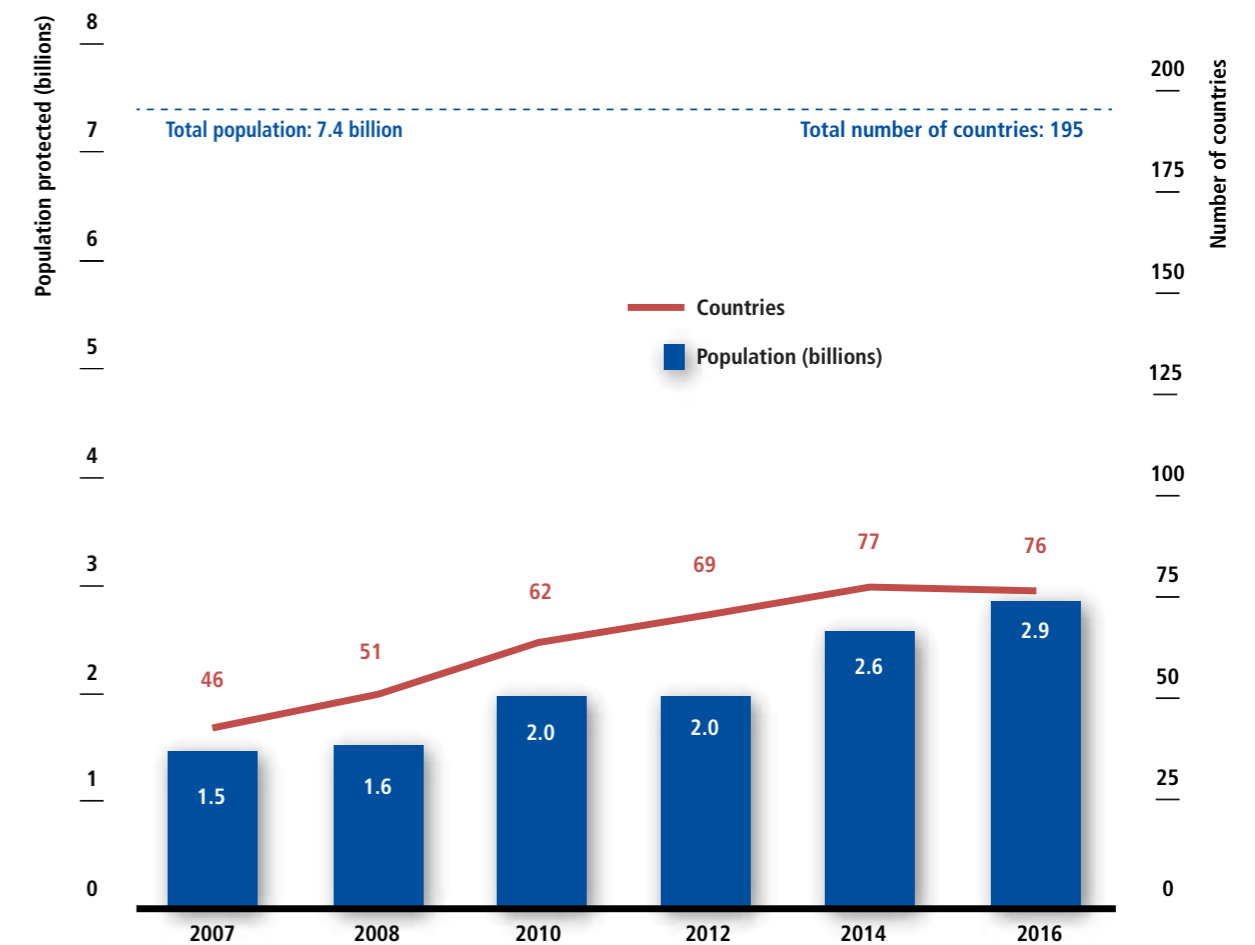
MONITORING THE PREVALENCE OF TOBACCO USE – HIGHEST ACHIEVING COUNTRIES, 2016



Countries with the highest level of achievement: Argentina, Armenia, Australia, Austria, Azerbaijan, * Barbados, Belgium, Bhutan, Brazil, * Brunei Darussalam, * Bulgaria, Cabo Verde, Cambodia, Canada, Chile, Colombia, Cook Islands, Costa Rica, Croatia, Czechia, Denmark, Egypt, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Indonesia, * Iran (Islamic Republic of), Ireland, Italy, Japan, Kazakhstan, Kuwait, Lao People's Democratic Republic, * Latvia, Lebanon, Lithuania, Luxembourg, Malaysia, Malta, Mongolia, Myanmar, Netherlands, New Zealand, Norway, Pakistan, Palau, Panama, Philippines, Poland, Portugal, Qatar, Republic of Korea, Republic of Moldova, Romania, Russian Federation, Serbia, Singapore, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Thailand, Turkey, Uganda, Ukraine, United Kingdom, United States of America, Uruguay, and Viet Nam.

* Country newly at the highest level since 31 December 2014.

PROGRESS IN MONITORING (2007–2016)



Sustaining ongoing monitoring is a challenge

Monitoring of tobacco use among adults

Recent and nationally representative data on one or more types of tobacco use among adults are available in 133 countries: 86% of high-income countries (49) and 66% of middle income countries (71) had completed a national survey of adults within the past 5 years (during or after 2011). This is in contrast with just 42% of low-income countries (13) surveying adults during that period. While high- and middle-income countries implemented a wide range of survey types and protocols, the most recent surveys implemented in the 13 low-income

countries were all STEPS surveys, with the exception of a GATS survey in Senegal and a country-designed tobacco survey in Democratic People's Republic of Korea.

Two thirds of countries that recently conducted a national adult survey had also completed a national survey within the 5 previous years in order to monitor changes over time. Some of these countries are just beginning to establish their monitoring systems, while others are conducting infrequent surveys, primarily because they have not established an ongoing monitoring system.

Of the 49 high-income countries that had conducted a recent adult survey, 44 were following up on a survey conducted in

the previous 5 years. All but four of these 44 countries implemented a follow-up of the same survey. Only four of the 44 implementing follow-up surveys used an international protocol survey such as STEPS or GATS. In contrast, low- and middle-income countries were less able to sustain a series of surveys over time. Only 46 of 84 low- and middle-income countries (just over half) that completed a recent adult survey had also implemented a previous survey within the 5-year window. Of these countries, only slightly more than half (26) were conducting a follow-up of the same survey.

Monitoring of tobacco use among youth

Recent nationally representative data on

tobacco use among youth are available in 142 countries: more than 90% of high-income countries (52) and 78% of middle-income countries (83) had completed a national survey of youth in the past 5 years. This is in contrast with just over 20% of low-income countries (7) that had conducted a recent survey of youth.

Almost all countries (93%) with recent data on youth tobacco use obtained it using one of the three largest international school-based survey protocols that survey tobacco use: the Global Youth Tobacco Survey (GYTS), the Health Behaviour in School-aged Children survey (HBSC), or the Global School-based Student Health Survey (GSHS). Only 10 countries used their own national

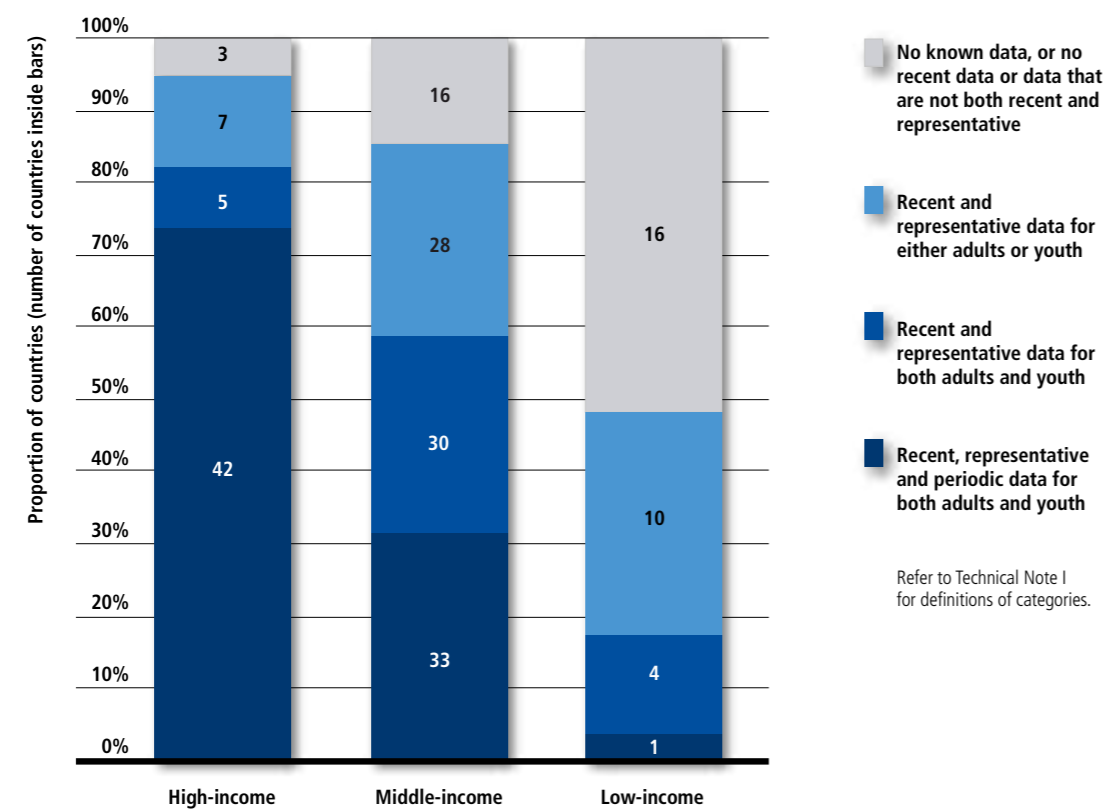
surveys exclusively to monitor youth tobacco use.

Most of the high-income countries that conducted a recent youth survey were repeating an earlier survey. However, low- and middle-income countries were generally less able to sustain a series of surveys over time, with fewer than two thirds of low- and middle-income countries repeating a youth survey within the recommended 5-year window.

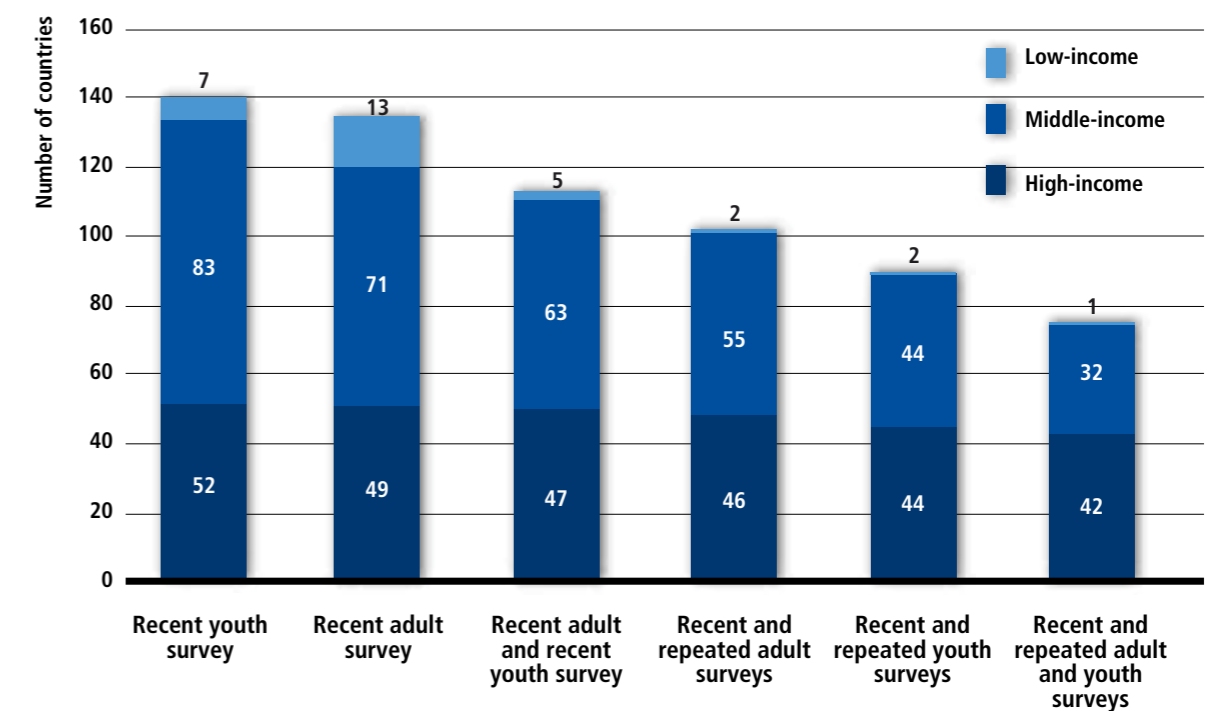
Conversely, seven countries have never implemented a national survey to measure tobacco use in their populations (Afghanistan, Angola, Central African Republic, Democratic Republic of the Congo, Guinea-Bissau, South Sudan and

Somalia). All are low-income countries except Angola, a middle-income country. The Democratic Republic of the Congo collected some information on tobacco use from its 2013 Demographic and Health Survey, but only among the population aged 15–59 years. Afghanistan has gathered some information on cigarette smoking from a 2010 subnational survey among men in Kabul. All seven countries have completed a subnational GYTS.

MONITORING



COUNTRIES WITH RECENT AND REPRESENTATIVE SURVEYS, 2016



Note: Categories are not mutually exclusive; each country can appear in more than one category.

More countries need to monitor smokeless and other forms of tobacco use

Effectively combatting the tobacco epidemic requires all types of tobacco use to be monitored in all countries. *Current tobacco use* is the key tobacco indicator countries have agreed to monitor under both the Global Action Plan on Noncommunicable Diseases, and the SDGs (101). However, most countries historically have only asked about smoked tobacco, and only 61 countries (less than a third of countries) collected and reported the broader “tobacco use” indicator in at least one survey within the past decade. Unless surveys ask about all types of tobacco use, countries can neither monitor the

full picture of their tobacco epidemics nor meet international reporting commitments.

In all national surveys completed since 2007, tobacco smoking is the most common indicator assessed (80% of countries with surveys, 123 out of 153 countries). Smoked tobacco includes manufactured cigarettes, roll-your-own cigarettes, cigars, pipes, bidis, kreteks and water pipes. In addition, 20 countries asked about cigarette smoking but did not ask about other kinds of smoked or smokeless tobacco use. Smokeless forms of tobacco (such as snuff, snus, gutka and chewing tobacco) represent a major part of the tobacco burden in South Asian countries, and these countries generally do monitor smokeless tobacco use

well. However, fewer than two thirds of countries globally ask about and report smokeless tobacco use, even though these surveys reveal that smokeless tobacco use has become a global phenomenon.

Owing to widespread use of the GYTS and GSHS survey protocols, most countries collect information on the full range of tobacco products used by youth aged 13–15 years who attend school. Recent GYTS surveys also collect data on use of products such as Electronic Nicotine Delivery Systems and Electronic Non-Nicotine Delivery Systems (ENDS/ ENNDS). Specific questions on water pipe use are being introduced in more and more countries, as well as questions on emerging tobacco products such as Heat

Not Burn (which heat rather than burn the tobacco to release an aerosol containing nicotine).

Most of the world’s smokers live in middle-income countries

Male smokers living in middle-income countries are by far the largest group of smokers in the world, numbering 765 million – or 68% of all smokers. Around half of the world’s female smokers (85 million) live in high-income countries.

These estimates are modelled using the full set of nationally representative population-based surveys gathered

from countries since 1990 to produce comparable estimates for a single year (2015). Smoked tobacco, as the most widely surveyed tobacco product type, lends itself to robust global prevalence estimates. Once sufficient data exist for all tobacco types, global estimates of total tobacco use will be calculated.

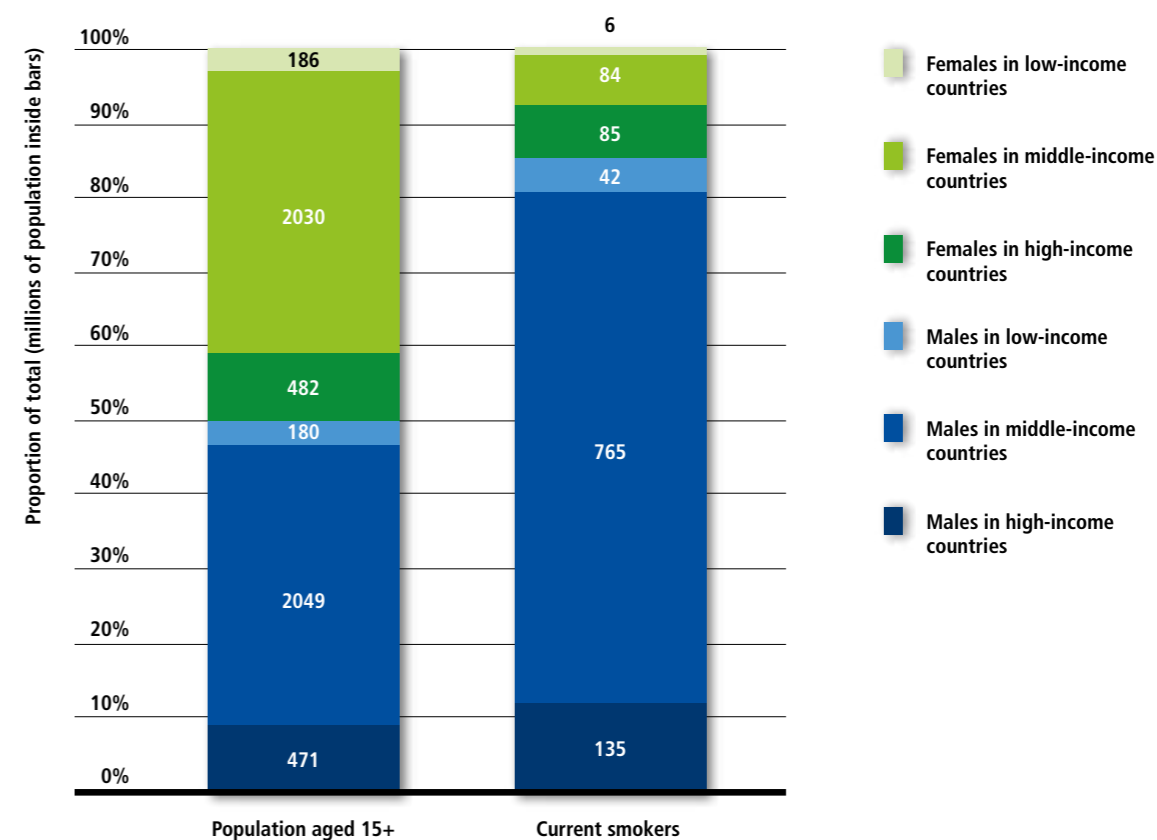
WHO estimates that there are at least 346 million adult smokeless tobacco users globally, 86% of whom live in the South-East Asia Region (102). Given the lack of data on smokeless tobacco use, this is likely to be an underestimation.

Globally, the number children aged 13–15 years who smoke cigarettes is estimated to be around 25 million, with almost 13

million using smokeless tobacco products. These estimates were based on GYTS and HBSC surveys from 2007 to 2014 (102).



GLOBAL NUMBER OF SMOKERS COMPARED WITH POPULATION AGED 15 AND OVER, 2015



Source: WHO estimates, refer to Technical Note II for more details.

Global smoking prevalence is decreasing, but progress is not uniform

WHO estimates that there has been notable progress in reducing smoking prevalence, with the overall global rate of current smoking among adults aged over 15 years declining from 23.5% in 2007 to 20.7% in 2015 – a reduction in smoking of 2.8% in 8 years. However, not all countries' rates are declining; of the 195 countries monitored in this report, 94 are experiencing declines, five have increasing rates, 47 are seeing no significant change and 49 are not conducting sufficient monitoring to identify a trend.

Much of the global decline in smoking prevalence since 2007 has occurred in high-income countries. While 85% of the population residing in high-income countries has benefitted from declining smoking prevalence, only half of those in middle-income countries and a third in low-income countries saw reductions in their countries.

In high-income countries, smoking prevalence declined from an overall average of 27.5% in 2007 to 23.1% in 2015, with over half of high-income countries experiencing declining trends in smoking. However, they also remain the group of countries with the highest average smoking rate in 2015.

It is particularly encouraging that in middle-income countries, where there are the most smokers, prevalence rates are also declining on average, with overall rates down from 23.2% in 2007 to 20.8% in 2015. However, while almost half of middle-income countries are reducing smoking rates (47 countries), one in five is experiencing no change (22 countries) and a small number (five countries) have rising prevalence rates. Thirty-three countries do not conduct sufficiently comprehensive monitoring to identify a trend.

Overall smoking prevalence in low-income countries has changed little on average (15.0% in 2007 and 13.2% in 2015). Because monitoring in low-income

countries is relatively sparse, these results are not as reliable as those for other income groups.

Unfortunately, the global decline in the rate of smoking has not translated into a smaller number of people who are smokers (103). This is because of population growth: while the proportion of the population that smokes has declined, the number of smokers has not. In 2007, there were 1.1 billion smokers in the world and this number did not change by 2015.

Smoking prevalence remains high among men and low among women

WHO estimates that men's average overall smoking rates are declining slowly, from 39% globally in 2007 to 35% in 2015.

The biggest reductions are occurring in high-income countries, which have declined from an overall average of 34% in 2007 to 29% in 2015.

Just over half of high-income countries (32) have experienced a decline in male smoking rates since 2007, while only a third of middle-income countries (35) and a little over a third of low-income countries (12) have achieved a statistically significant decline.

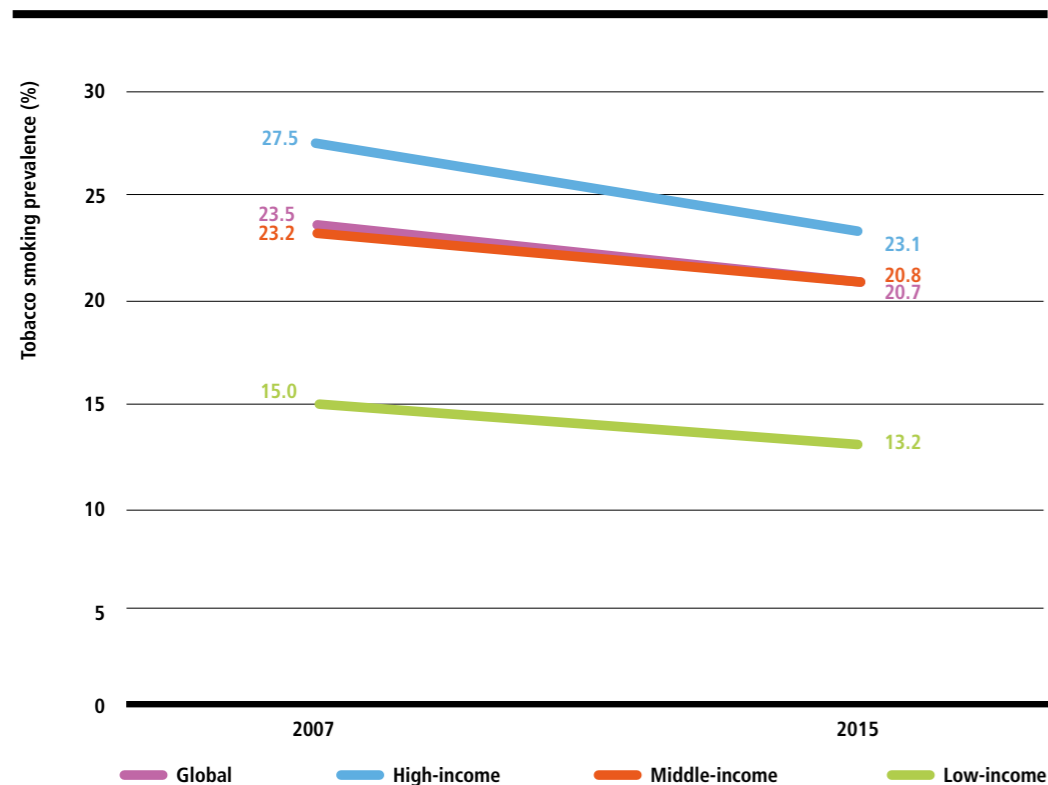
Women's average overall smoking rates have declined slightly, from 8% globally in 2007 to 6% in 2015. Women's smoking rates in low- and middle-income countries remained around 5% or lower between 2007 and 2015. A total of 113 countries (over half of countries globally and in each income group) experienced declines in women's rates between those years,

with 32 countries registering no change in women's smoking rates.

In 66 countries (with 43% of the world's population), smoking prevalence is declining among both men and women simultaneously, while 18 countries (8% of the world's population) are experiencing no change in smoking rates for both men and women. Of particular note is that no countries are experiencing simultaneously rising rates for both men and women.

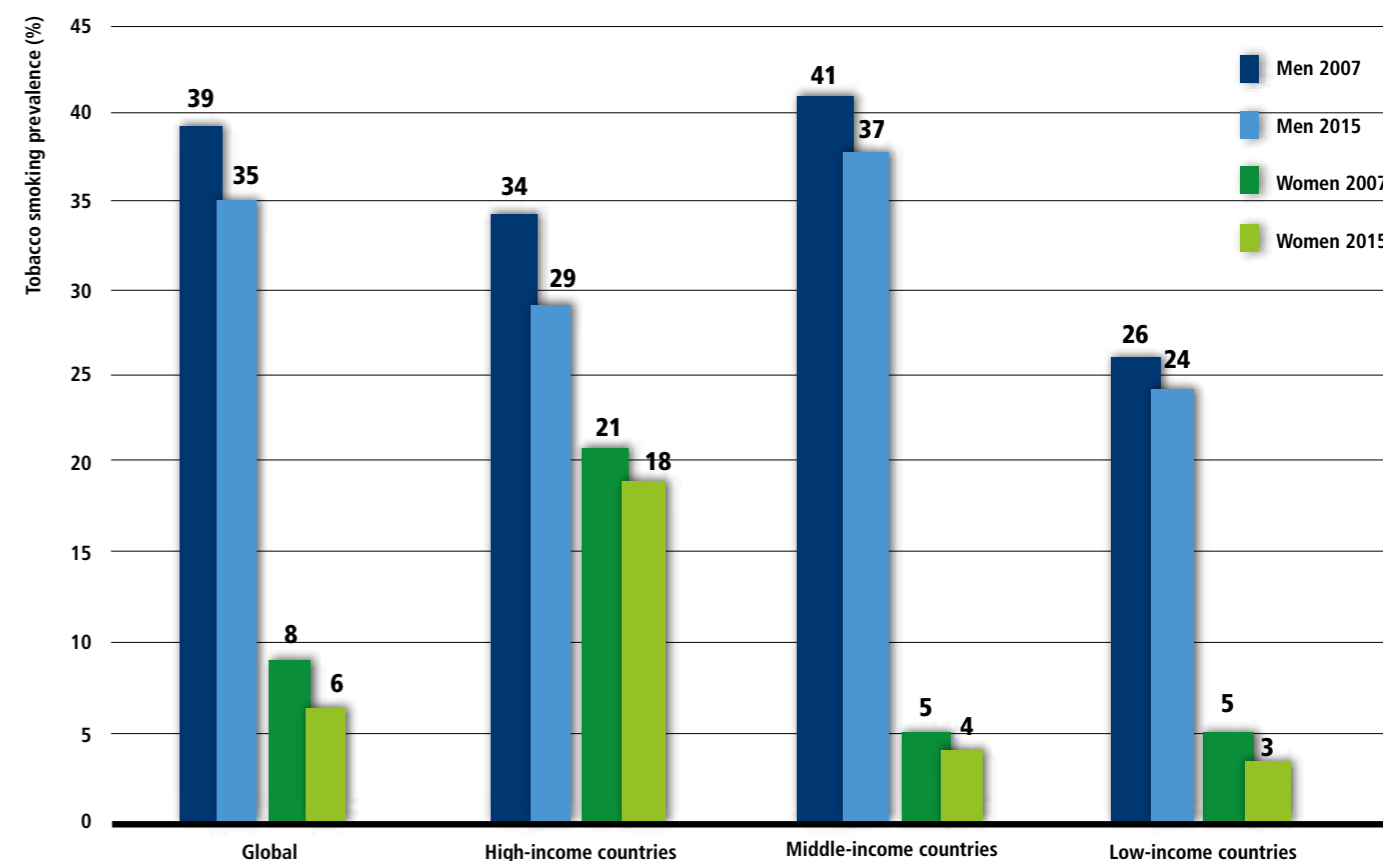
Average rates of current smoking among adults have declined globally from 24% in 2007 to 21% in 2015.

CURRENT ADULT TOBACCO SMOKING PREVALENCE, 2007–2015



Source: WHO estimates; refer to Technical Note II for more details.

CURRENT ADULT TOBACCO SMOKING PREVALENCE, 2007–2015



Source: WHO estimates; refer to Technical Note II for more details.

The tobacco epidemic needs to be prevented in low- and middle-income countries

If countries maintain tobacco control activities at current levels (i.e. without further strengthening), it is expected that by 2030 smoking prevalence in low- and middle-income countries will decline more slowly than in high-income countries.

Men's smoking rates in high-income countries will drop from current percentages in the high 20s to the low 20s. Men's smoking rates in low- and

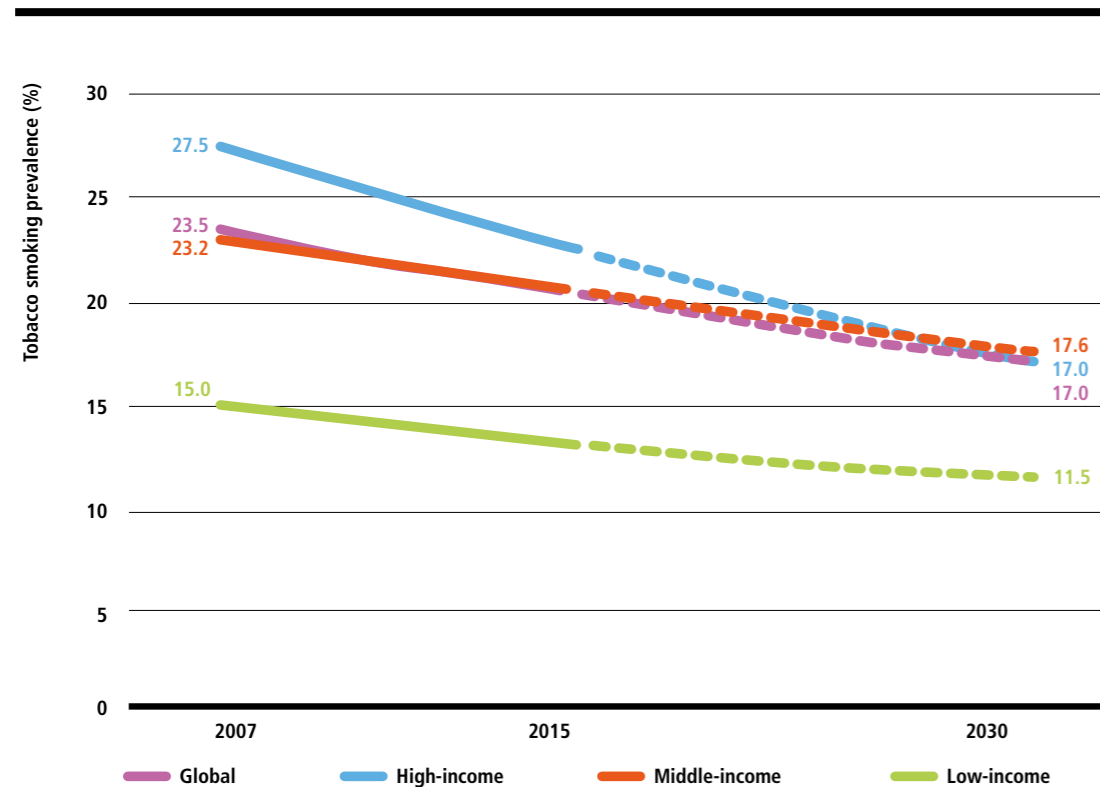
middle-income countries will remain at a high level on average, above 30%.

Women's smoking rates in high-income countries are projected to drop below 15%. Women's smoking rates in low- and middle-income countries should remain at a low level on average, under 5%, if current tobacco control efforts are maintained.

The GYTS reveals that trends in prevalence of tobacco use among school children aged 13–15 show little overall change since the survey began in 1999. Of the

108 countries that have completed at least two GYTS surveys, 43 countries saw no significant change in tobacco use rates among boys or girls. In 20 countries, both boys' and girls' rates declined. Eighteen countries saw rising rates among both boys and girls. In the remaining 27 countries, there was a mix of upward, downward and flat trends for boys and girls.

WHO-ESTIMATED TREND IN CURRENT SMOKING PREVALENCE, AGES 15+



Source: WHO estimates, refer to Technical Note II for more details.

Smoking prevalence in low- and middle-income countries is projected to decline more slowly than in high-income countries.

Azerbaijan uses survey findings to support tobacco control initiatives



Tobacco use data are presented to journalists at a media briefing organized by Azerbaijan's Ministry of Health and WHO in Baku, Azerbaijan, May 2016.

Azerbaijan has conducted several national surveys to monitor progress on tobacco control, including the annual Household Budget Survey; the WHO STEPwise Approach to Noncommunicable Disease Risk Factor Surveillance (STEPS) Survey in 2011; and the Global Youth Tobacco Survey (GYTS) in 2011 and 2016.

According to its current Strategic Plan for NCD Prevention, Azerbaijan will evaluate progress towards national NCD prevention goals by running STEPS Surveys again in 2017 and 2020. Additional studies are also anticipated, including the Health Behaviour in School-Aged Children Survey in 2017 (among children aged 11–15 years), and the GYTS in 2020 to assess adolescents' tobacco use. It also plans to incorporate WHO's Tobacco Questions for Surveys (TQS) in consumer surveys and household studies in future years.

To address Azerbaijan's comparatively high tobacco smoking prevalence (35.5% in 2016), relevant tobacco-related legislation was assessed in 2016 and a need for extensive changes in national laws was identified to enable them to comply with the requirements of the WHO FCTC. Recent legislative amendments – including bans on tobacco advertising and other tobacco control measures – were supported by survey findings and data on tobacco use prevalence. Azerbaijan is currently developing new legislation to ban tobacco use in all public places, extend its current ban on tobacco advertising, and promote tobacco cessation initiatives by relevant health care agencies.

Tobacco monitoring shows need for stronger tobacco control in Guyana



Fieldwork being undertaken for the STEPS Survey 2016, Guyana.

Tobacco monitoring in Guyana dates back more than 20 years, when its early tobacco control legislation included tobacco use surveillance and reporting provisions for second-hand smoke exposure. Reporting of second-hand smoke exposure has been required since Sanitation and Safety Acts No. 1 (1996) and No. 32 (1997), which both mandated quarterly reporting on second-hand smoke exposure in workplaces (mainly government ministries and industries such as bauxite and sugar production, and their associated offices).

In 2000 Guyana conducted a Global Youth Tobacco Survey (GYTS), the first nationally representative study on tobacco use among adolescents. Guyana is one of only a few countries

Guyana continues to experience challenges in finding adequate resources for tobacco use monitoring. Most tobacco surveillance data are currently collected through surveys, which demand planning and resources. The dissemination of tobacco surveillance findings to policy-makers and other stakeholders is an important tool to advocate for the implementation of appropriate tobacco control regulations as quickly as possible. The country could ensure that periodic implementation of surveys under the Global Tobacco Surveillance System is conducted and that data for key tobacco use indicators are included in its national surveillance databases.

in the Americas to have completed four GYTS rounds (2000, 2004, 2010 and 2015).

In 2016, the WHO STEPwise Approach to Noncommunicable Disease Risk Factor Surveillance (STEPS) was conducted for the first time in Guyana and included a component on tobacco control. The survey sought to generate baseline data on NCD risk factors and for the first time presented data on tobacco smoking among adults aged 18–69 years in Guyana.

Strong monitoring systems support tobacco control policies and interventions in Brazil

Brazil's Constitution defines public health surveillance as an essential function of the country's public health system. Since 2000, the Ministry of Health has invested in the National Surveillance System for Noncommunicable Diseases and Risk Factors. In 2003, the National Cancer Institute (INCA) and the Health Surveillance Secretariat conducted a household survey on NCDs and risk behaviours among adults aged 15 years and older in 15 state capitals and in the Federal District.

Tobacco monitoring accelerated after Brazil implemented the Global Adult Tobacco Survey in 2008 as a joint initiative by the Ministry of Health and the Brazilian Institute of Geography and Statistics, in collaboration with the Pan-American Health Organization/WHO and the US Centers for Disease Control and Prevention. A consolidated monitoring system was established through creation of the National Health Survey, which is carried out every 5 years and incorporates the Tobacco Questions for Surveys (TQS) subset of the Global Adult Tobacco Survey. In addition to household surveys, a telephone-based survey has been conducted annually since 2006 to collect information on NCDs and their risk factors from adults aged 18 years and older in all 26 state capitals and the Federal District.

Actions to specifically monitor tobacco use among adolescents started in 2002 when Brazil, through INCA, joined the

Global Tobacco Surveillance System and implemented the Global Youth Tobacco Survey (GYTS) in several state capitals. Beginning in 2009, the Ministry of Health and the Brazilian Institute of Geography and Statistics agreed to implement the National School Health Survey, which integrates questions from GYTS, every 3 years.

These actions have contributed to the development of a sustainable monitoring system led by the Ministry of Health. Information produced throughout the national surveillance system enables Brazil to effectively monitor key tobacco control indicators and respond to global commitments on NCDs.



Logo of the National Health Survey, which integrated TQS.

Article 8 of the WHO FCTC states: "... [S]cientific evidence has unequivocally established that exposure to tobacco smoke causes death, disease and disability ... [Parties] shall adopt and implement ... measures providing for protection from exposure to tobacco smoke in indoor workplaces, public transport, indoor public places and, as appropriate, other public places" (8). WHO FCTC Article 8 guidelines are intended to assist Parties in meeting their obligations under Article 8 of the WHO FCTC and provide a clear timeline for Parties to adopt appropriate measures (within 5 years after entry into force of the WHO FCTC for a given Party) (38).

Enforcing smoke-free laws can be simple and cost-effective

Problem

Comprehensive smoke-free legislation is in place in 55 countries and covers almost 1.5 billion people – 20% of the world's population. Progress in adopting smoke-free laws has been particularly impressive in low- and middle-income countries – since 2007, 35 low- and middle-income countries have introduced comprehensive smoke-free legislation covering all categories of public places.

However, enforcing smoke-free legislation can be challenging. Data on compliance compiled for this report show that of the 55 countries with complete smoke-free legislation in place, only 22 (40%) have high compliance rates. Data also show that enforcing smoke-free laws is particularly challenging in cafés, pubs and bars, where only 25% of countries report high compliance. Smoking bans in universities are almost as challenging, with only 27% of national bans scoring high compliance.

Solution

Enforcing smoke-free legislation should be straightforward and cost-effective. Simple measures advocated by WHO include (104, 105):

- **Mass media campaigns.** These are important not just to raise public awareness, but also to increase the law's standing and acceptance in the eyes of policy-makers, opinion leaders, enforcement agents and the public.
- Ensuring that any **enforcement agency** should be competent, committed and completely free from any connection to the tobacco industry.
- Ensuring **adequate funding** is available. This can be obtained from many tobacco control-related sources, including fines collected from those breaking the law, or earmarked tobacco tax revenues.
- Establishing **penalties** for violations. Penalties should maintain a balance between being sufficiently punitive to deter violations and not so excessive as to seem vindictive and risk undermining public support. Penalties for violations should apply primarily to businesses and, possibly, smokers (38).
- Finally, **regular monitoring** of a new law will provide a benchmark against which progress can be measured, and the law modified if progress is insufficient.

The only intervention that has been demonstrated to fully protect people from second-hand tobacco smoke is completely smoke-free environments.

Second-hand smoke kills

There is no safe level of second-hand smoke exposure (106). Even occasional exposure can lead to serious and often fatal diseases, including cardiovascular and respiratory disease as well as lung and other cancers (106–108). Children, newborn infants and fetuses are especially susceptible to the harms of second-hand smoke exposure, and are at increased risk of severe and potentially lifelong health consequences or even death (109–114).

Smoke-free laws save lives

The only intervention shown to fully protect people from the health dangers of second-hand tobacco smoke is establishing environments that are completely smoke-free and that permit

no exceptions (38, 115, 116). Measures intended to accommodate smoking, such as separate smoking rooms and ventilation systems, do not prevent exposure because they cannot effectively eliminate all second-hand smoke (38, 117–122). To achieve high compliance with smoke-free laws, it is essential that governments enact and enforce comprehensive legislation and aim to achieve strong public and political support (123).

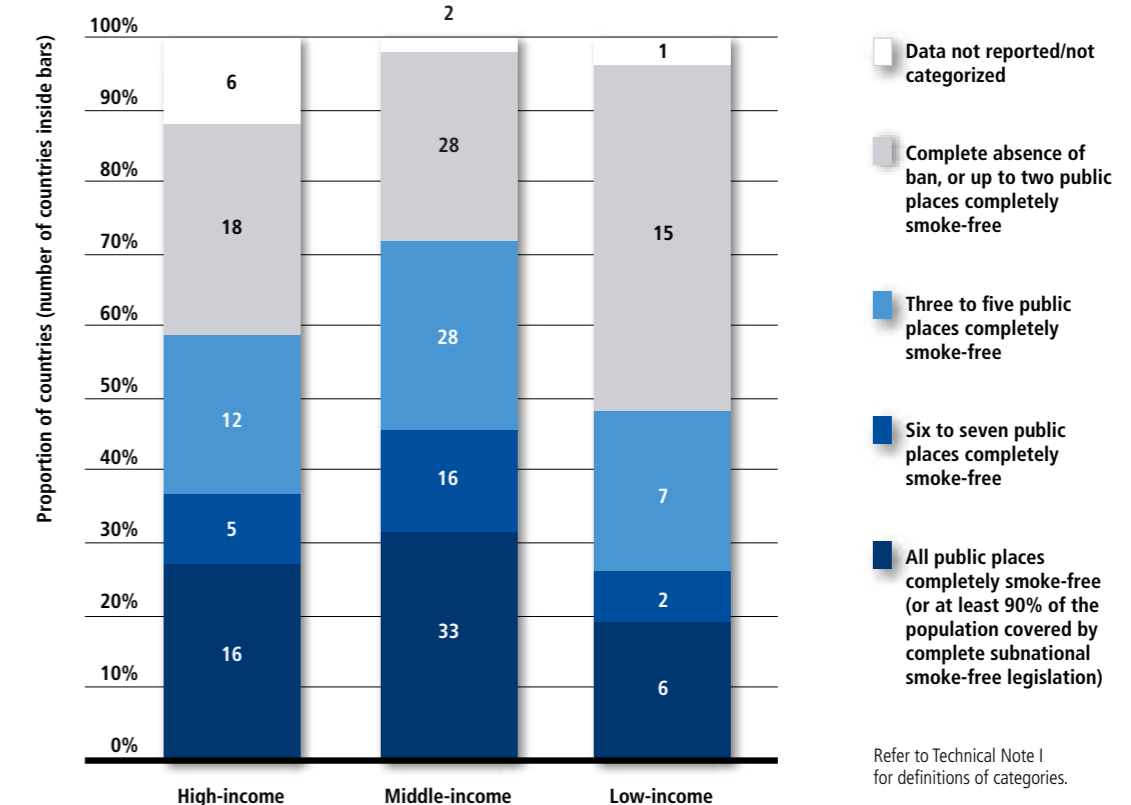
Smoke-free laws are popular, do not hurt business, and improve health

It is relatively easy to pass and enforce effective laws establishing smoke-free places, as evidenced by the continuing increase in the number of countries and

subnational areas that have adopted comprehensive smoke-free legislation. Effective smoke-free laws invariably achieve overwhelming public support (124), sufficiently enhance indoor air quality to improve the health of smokers and non-smokers (125, 126), and have no negative financial impact on businesses (125, 127).

Establishing smoke-free environments makes it more likely that smokers will reduce tobacco use or make a quit attempt, and increases successful long-term quit rates (128, 129). Smoke-free laws can also motivate people to make their homes and automobiles smoke-free to protect the health of other non-smokers, especially children, as well as reduce smoking by both adults and youth (130–136).

SMOKE-FREE LEGISLATION



Globally, comprehensive smoke-free legislation is widely adopted

Comprehensive smoke-free legislation is currently in place for almost 1.5 billion people in 55 countries (20% global population coverage in 2016). Since 2014, six countries have made their public places completely smoke-free (Afghanistan, Cambodia, El Salvador, Lao People's Democratic Republic, Romania and Uganda). One country (Saudi Arabia) stepped back from its complete smoke-free law by introducing the possibility of designated smoking rooms (DSRs). About 72% of all countries (and 81% of low-income countries) continue to leave their populations vulnerable to the dangers of second-hand smoke through weak or nonexistent smoke-free laws.

Since 2007, progress among low- and middle-income countries in protecting people from tobacco smoke has been dramatic. There are 35 low- and middle-income countries (25% of all such countries) that have adopted a complete smoke-free law since 2007, while only 10 high-income countries (18% of all high-income countries) have done so. There are 41 high-income countries whose people remained poorly or completely unprotected in 2016.

Worldwide, many venues are newly smoke-free

Globally, since 2014 many public places and workplaces have become smoke-free. Education facilities are the best protected public space, with two thirds of countries

mandating they be smoke-free. Health facilities are a close second, with 64% of countries covering such facilities. The lowest level of protection from second-hand smoke is afforded to employees and patrons of restaurants, pubs and bars; only about a third (36%) of countries globally offer 100% smoke-free restaurants, pubs and bars. Among high-income countries, the public places best covered by smoke-free laws are education facilities, with the least protected places being indoor offices. Among low- and middle-income countries, the public places best covered by smoke-free laws are health care facilities, with restaurants, pubs and bars the least protected.

Exceptions dilute strong smoke-free laws

In 2016, seven countries are only one public place away from having a complete smoke-free law in place. Three still allow smoking in private offices and workplaces; one still allows smoking in restaurants; one in pubs, bars and cafés; one in universities; and one on public transport. An additional 16 countries are missing just two public places from their smoke-free laws; for the majority of these (10), restaurants and pubs and bars are the last two remaining categories of unprotected places.

Designated smoking rooms (DSRs) with strict technical requirements have been established by 19 countries for at least one type of public place – 13 of them would

have a complete smoke-free law if they removed DSRs from their provisions. Since 2014, one country (Uganda) improved its smoke-free law by removing previously allowed DSRs, while four countries allowed DSRs for the first time (Ethiopia, Ghana, Portugal and Senegal).

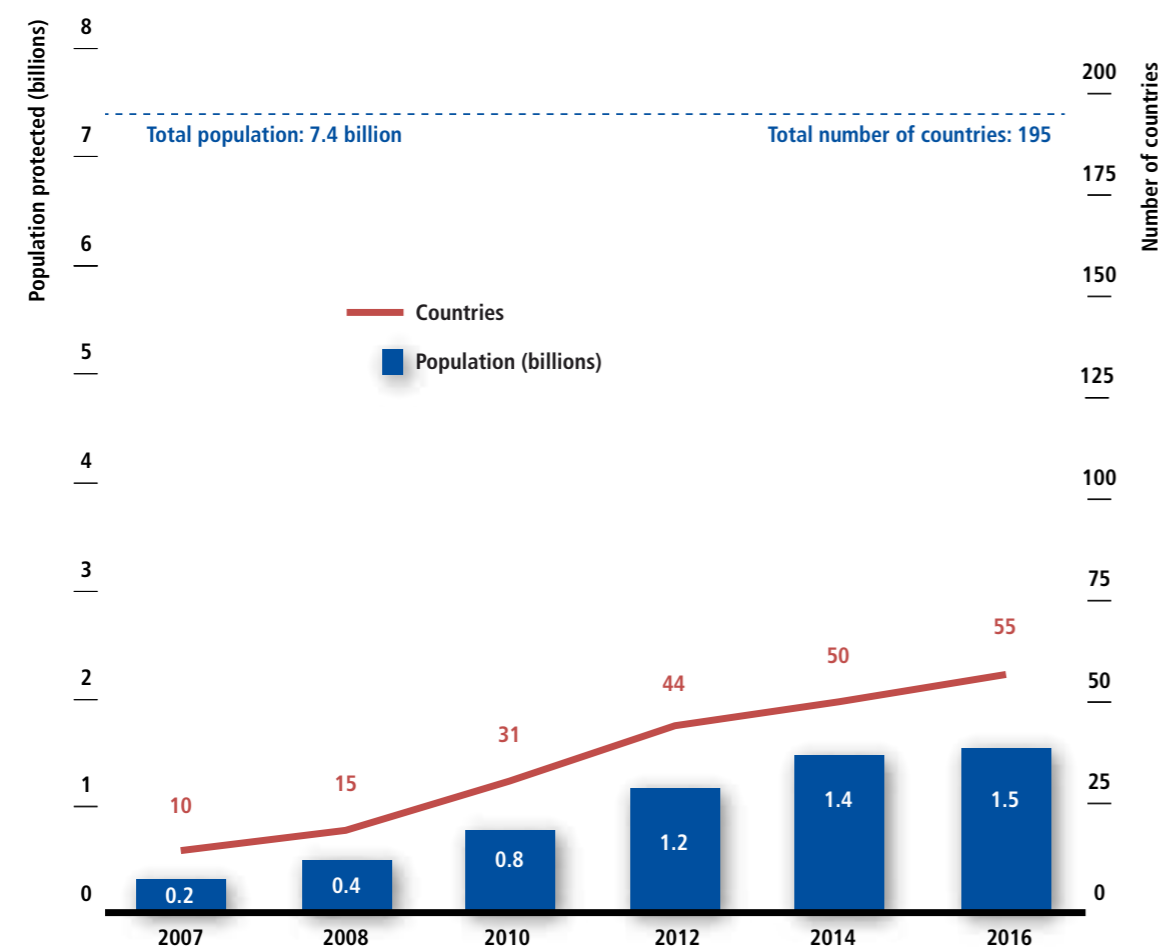
Cities are making important gains in protecting their populations

Of the 492 million people (6.7% of the world's population) who live in one of the world's 100 largest cities, only 253 million (in 47 cities) are protected by a comprehensive smoke-free law.

To protect their citizens from second-hand smoke, three large cities (Mexico

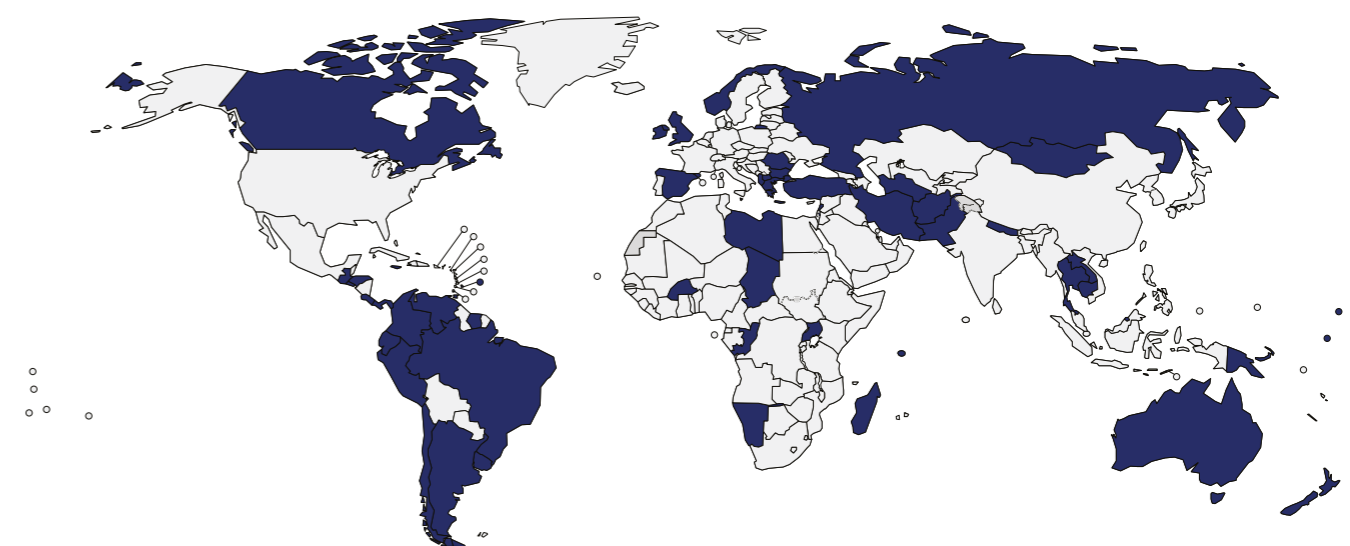
City, Beijing and Hong Kong Special Administrative Region of China); and nine states/provinces containing the cities of Montréal, Toronto and Vancouver (Canada); Monterrey and Toluca (Mexico); Hyderabad (India); and Brisbane, Melbourne and Sydney (Australia) have comprehensive smoke-free laws in place that are independent of national laws. People living in the remaining 35 smoke-free cities are covered under national legislation. An additional four of the largest 100 cities (Addis Ababa, Ethiopia; Puebla-Tlaxcala, Mexico; Paris, France; and Rome, Italy), with a combined population of 19 million people, are one step away from being completely smoke-free and need only to outlaw designated smoking rooms to achieve this.

PROGRESS IN SMOKE-FREE LEGISLATION (2007–2016)



Comprehensive smoke-free legislation is currently in place for almost 1.5 billion people in 55 countries.

SMOKE-FREE ENVIRONMENTS – HIGHEST ACHIEVING COUNTRIES AND TERRITORIES, 2016



Countries, territories and areas with the highest level of achievement: Afghanistan,* Albania, Argentina, Australia, Barbados, Brazil, Brunei Darussalam, Bulgaria, Burkina Faso, Cambodia,* Canada, Chad, Chile, Colombia, Congo, Costa Rica, Ecuador, El Salvador,* Greece, Guatemala, Honduras, Iran (Islamic Republic of), Ireland, Jamaica, Lao People's Democratic Republic,* Lebanon, Libya, Madagascar, Malta, Marshall Islands, Mongolia, Namibia, Nauru, Nepal, New Zealand, Norway, Pakistan, Panama, Papua New Guinea, Peru, Romania,* Russian Federation, Seychelles, Spain, Suriname, Thailand, The former Yugoslav Republic of Macedonia, Trinidad and Tobago, Turkey, Turkmenistan, Uganda,* United Kingdom, Uruguay, Venezuela (Bolivarian Republic of), and West Bank and Gaza Strip.

* Country newly at the highest level since 31 December 2014.

Two major cities in China (Shanghai and Shenzhen) go smoke-free

In November 2016 and after months of intense debate and deliberation, the Shanghai People's Congress adopted a strong law amending the Shanghai Regulations on Control of Smoking in Public Places. Persistence and strong support from the National Health and Family Planning Commission, the Shanghai Health and Family Planning Commission, the international community, domestic NGOs, the public and media led to passage of the law. Since March 2017, smoking has been completely banned in indoor public places, workplaces and public transport in Shanghai city, as well as in many outdoor public places.

Extensive public education and awareness programmes were initiated to promote the smoke-free law, and there have also been strong enforcement efforts. More than 30 000 venues were inspected in March 2017 alone, with fines for noncompliance issued to 277 venues and 115 individuals. The Shanghai Health Promotion Center and Shanghai Centers for Disease Control and Prevention (CDC) will continue to evaluate smoking prevalence and second-hand smoke exposure so that the law's impact can be calculated.

The city of Shenzhen enacted local smoke-free regulations in 1998, but with a number of exceptions and loopholes. To meet

the requirements of Article 8 of the WHO FCTC, the regulation was amended in 2014. Deliberations for possible exemptions to the regulation and its enforcement mechanisms meant it took several years between introduction and enactment, and a grace period was granted to certain entertainment venues until January 2017 when all indoor public places, workplaces and public transport became 100% smoke-free.



Shanghai celebrates its smoke-free law by displaying tobacco control messages on its skyline, February – May 2017.

Public places go 100% smoke-free in Lao People's Democratic Republic



Second smoke-free Lao PDR workshop, March 2015.

In 2009, 3 years after the Lao People's Democratic Republic became a Party to the WHO FCTC, the country's National Assembly enacted a National Tobacco Control Law. However, the Lao Tobacco Company – a joint venture between the government and the Imperial Tobacco Group – attempted to weaken the law, in particular attacking provisions creating smoke-free public places and banning the advertisement, promotion and sponsorship of tobacco. The Lao Tobacco Company met key government officials in an effort to include

exceptions to the law or prevent its passage altogether, including proposals to provide technical support for the law's development.

With strong leadership of the Health Minister and lawyers from related ministries, the attempt by the tobacco industry to weaken the legislation was countered and the National Assembly endorsed the Tobacco Control Law in 2009. Although the law included designated smoking areas in some public places, it was clarified in 2016 that the designated smoking areas could only be established outdoors. Since enactment of the Law, the 2016 Global Youth Tobacco Survey has revealed that the smoking rate among students aged 13–15 years in Lao People's Democratic Republic decreased from 14.3% in 2011 to 10.7% in 2016. Surveys among adults showed a slight decrease in female and increase in male smoking prevalence between 2012 and 2015, calling for further strengthening of measures that reduce demand for tobacco.



Article 14 of the WHO FCTC states: “Each Party shall ... take effective measures to promote cessation of tobacco use and adequate treatment for tobacco dependence... Each Party shall ... design and implement effective programmes aimed at promoting the cessation of tobacco use” (8). WHO FCTC Article 14 guidelines are intended to assist Parties in meeting their obligations under Article 14 of the WHO FCTC (38).

New technologies expand access to tobacco cessation services

Problem

Treatment for tobacco use and dependence is a critical part of reducing tobacco use, and WHO recommends offering cessation services as part of primary health care (137). However, helping people access cessation support can be a challenge as it requires sustained commitment from governments that often find it difficult to identify sufficient resources for such programmes.

Solution

One way to expand access is to use mobile technology (mTobaccoCessation) to provide personalized tobacco cessation advice (138). Text messages can be an efficient and cost-effective way to provide support, especially when used in conjunction with other cessation programmes, such as brief advice sessions and toll-free quit lines. mTobaccoCessation reinforces the behavioural aspect of the cessation process, using motivation and real-time support at moments of stress.

In India, such initiatives have expanded significantly through the use of mobile phones. Since the launch of the country’s national, bilingual mCessation programme in 2016 (139), more than 2 million tobacco users have enrolled. Data monitored regularly through a real-time dashboard indicates improvements in both outreach and impact. A Ministry of Health and Family Welfare evaluation at the end of the programme’s first year, covering a sample of more than 12 000 registered users, demonstrated an average quit rate of about 7% among both smokers and smokeless tobacco users 6 months after enrollment. Based on its success, the Indian government has decided to expand this service by introducing Interactive Voice Response (IVR) technology to increase user access, and to make the service available in five additional languages.

There is a debate about whether Electronic Nicotine Delivery Systems (ENDS) and Electronic Non-Nicotine Delivery Systems (ENNDS), which include e-cigarettes, can help people quit smoking. Scientific evidence regarding the effectiveness of ENDS/ENNDS as a smoking cessation aid is scant and of low certainty, so it cannot currently be determined whether ENDS helps or hinders most smokers in quitting (140, 141). In the meantime, increasing numbers of countries are beginning to regulate ENDS and ENNDS. There are 52 countries that currently have legislation regulating ENDS/ENNDS: two thirds as therapeutic or consumer products, and a third that specifically treat ENDS/ENNDS as a tobacco product. Europe leads on this, with 57% of countries in the region having ENDS legislation.

WHO submitted a report on ENDS/ENNDS to the Seventh session of the Conference of the Parties to the WHO FCTC (COP7) in New Delhi, India in November 2016 (FCTC/COP/7/11) (140). The report provides a non-exhaustive list of options for Parties to regulate ENDS/ENNDS products. The COP welcomed the report and invited Parties to consider applying the regulatory measures referred to in the report.

Most tobacco users want to quit

Most tobacco users want to quit, especially if they are aware of the full range of harms caused by tobacco use (142), and the majority of users regret ever having started (143). However, the extremely addictive nature of nicotine makes it difficult for most people to quit without some form of assistance (144). Although most tobacco users who quit eventually do so unaided, cessation interventions greatly increase the likelihood that a quit attempt will be successful (145). People who quit tobacco begin experiencing significant health benefits within minutes or hours of last use, and reduce most of their excess health risk within 5 to 15 years of quitting (49, 146).

Tobacco cessation interventions are effective

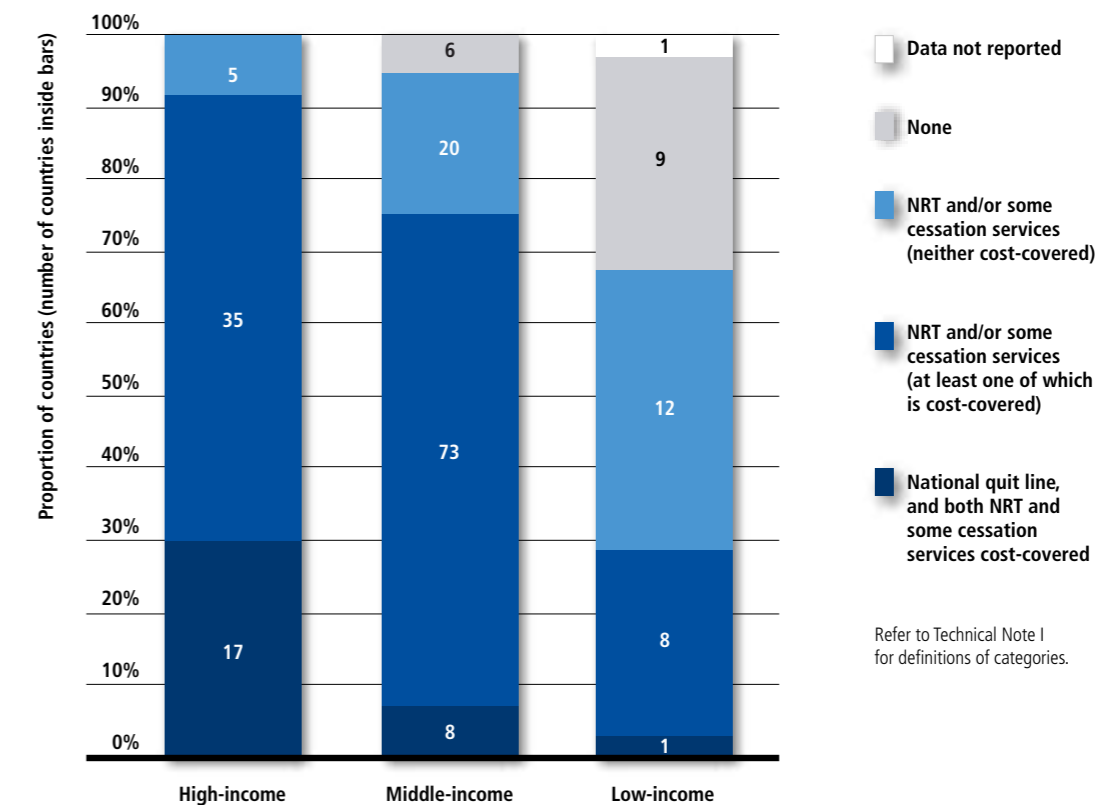
Tobacco cessation interventions are not only effective (145), but are also extremely cost-effective compared to interventions delivered by health care systems for most other health conditions (147). At a minimum, these three primary cessation interventions should be included in a comprehensive tobacco control programme (145).

- **Cessation advice in primary health care systems.** Brief, personalized advice from physicians and other health care providers increases quit rates by about 3% (145).
- **Quit lines.** Cessation advice and counselling can also be provided

through free telephone help lines (known as quit lines), which are estimated to increase quit rates by about 4% (145), and can be even more likely to help tobacco users quit if counsellors make follow-up calls after initial contact (148).

- **Pharmacological therapy.** Clinical cessation treatment should, at the very least, include nicotine replacement therapy (NRT), which comes in a variety of different formulations and which most countries already make available without the need for a medical assessment or prescription (145). Pharmacological therapy with NRT, either alone or in combination with other prescription cessation medications, can increase quit rates by about 7% (145, 149).

TOBACCO DEPENDENCE TREATMENT



Refer to Technical Note I for definitions of categories.

One way of expanding access to cessation interventions is by using mobile technology to provide personalized smoking cessation advice (mCessation) (38, 138).

Governments must support cessation treatment

It is critical that each country's health care system assumes primary responsibility for developing and implementing tobacco cessation programmes that have the capacity to reach the entire population (8). Cessation services will be most effective if integrated as a component of a comprehensive national tobacco control programme (14). Each country should also include NRT in its Essential Medicines List (150).

More tobacco users than ever have access to quit lines and NRT

Appropriate cessation treatment is in place for 2.4 billion people in 26 countries. However, this is the most under-used of the MPOWER measures in terms of the number of countries achieving best-practice level. Less than one third of high-income countries offer complete cessation support, as do fewer than one in 10 middle-income countries, with only one low-income country (Senegal) offering full cessation support.

There has been little progress since 2007, when 11 countries had best-practice cessation support in place. Only eleven high-income countries, six middle-income countries and one low-income country

(Senegal) have advanced to the highest level since 2007, while 3 countries have receded. There has been much more improvement over the past several years in cost coverage of cessation services than in establishing quit lines or cost coverage of NRT. In 2007, 70% of countries offered quit services but only half of them covered costs either partially or fully. In 2016, 87% of countries (169 countries) offered quit services, with more than three quarters covering costs partially or fully.

The proportion of the world's population assisted by comprehensive cessation services increased significantly between 2014 and 2016, from 14% to 33%, mainly due to India introducing cost-covered cessation services and a national toll-free quit line.

More progress is needed on access to cessation services

There are 49 countries – home to 1.5 billion people – that are only one step away from implementing best-practice cessation services. Almost half of them (24) are high-income countries; only one is a low-income country (United Republic of Tanzania). All of them already have cessation services and NRT available, with only one not yet covering costs of cessation services either partially or fully.

To reach the highest level of achievement, 26 countries need only to launch a national toll-free quit line and 22 need only to offer some cost-coverage for NRTs. The most implemented measure is availability of clinical cessation services, regardless of whether costs are covered

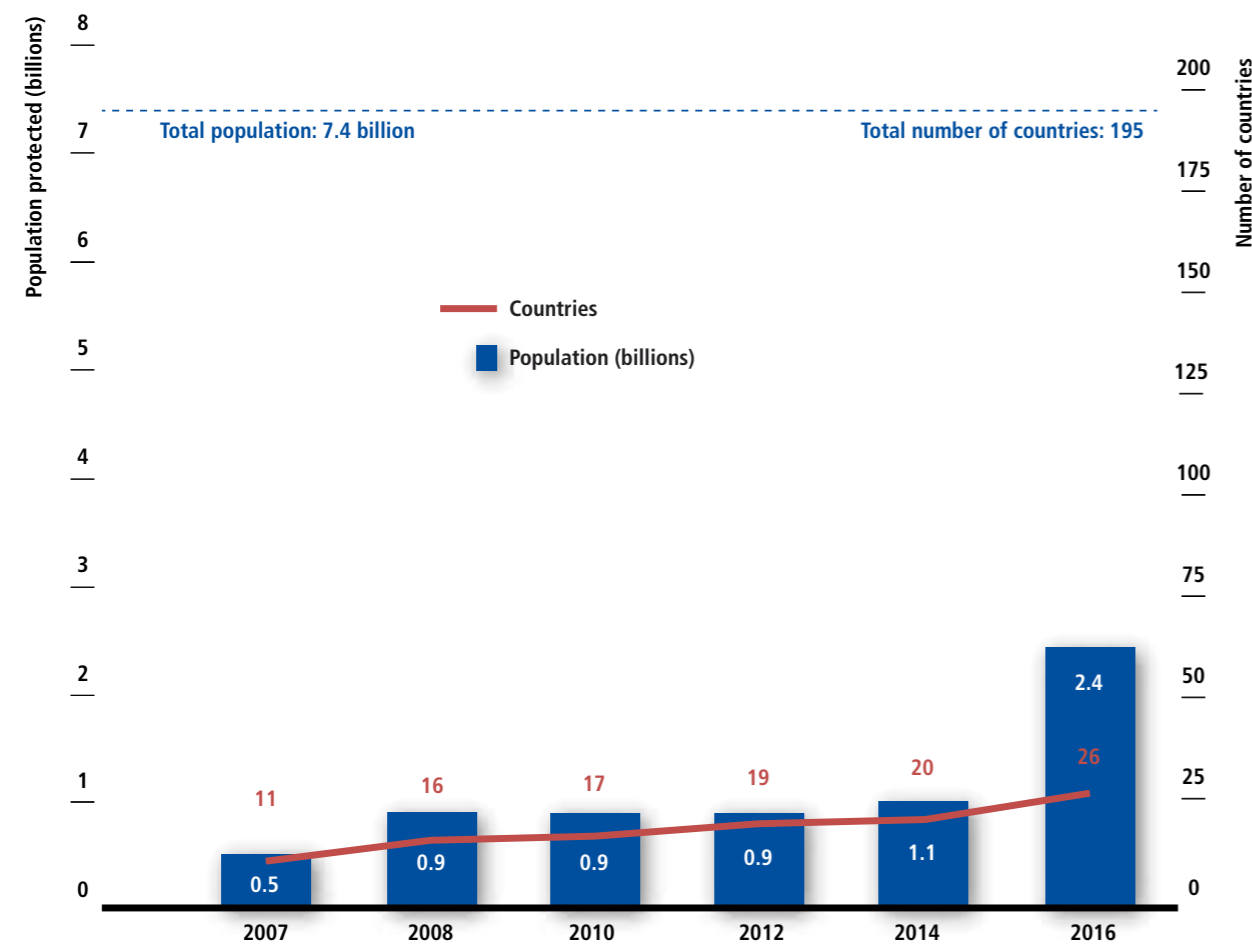
by a national health service or another insurance programme: 86% of countries do this. More than two thirds of countries have NRT available, whether costs are covered or not. The least implemented measure is cost coverage of NRTs, which is done by only 30% of countries. Fewer than one in 10 countries (16 countries – six middle-income and 10 low-income countries) provide their people with no access to cessation programmes at all.

Worldwide, while almost all high-income countries make cessation services available and over 90% offer some or full cost coverage of these services, only about 55% of low-income countries make services available, with 26% offering some cost coverage. Among low-income countries, cost coverage of NRTs is more likely to be implemented than toll-free

quit lines (10% of low-income countries implement NRT cost coverage versus 3% implementing quit lines). In high-income countries and middle-income countries, quit lines are more likely to be implemented than cost coverage of NRT.

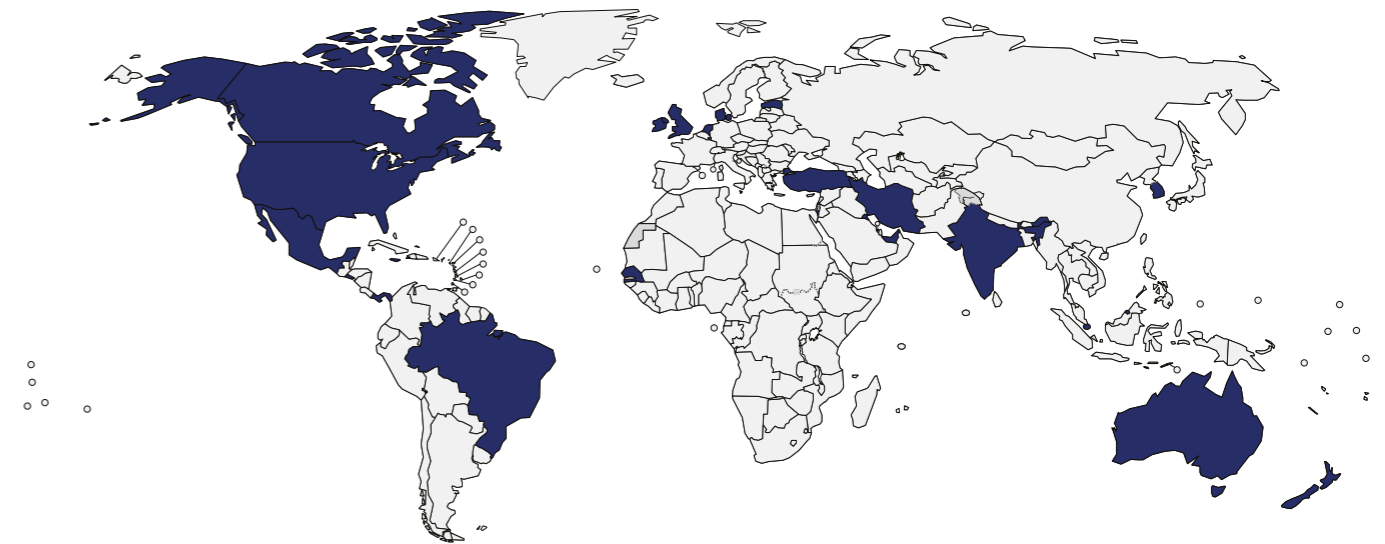
Of the 492 million people (6.7% of the world's population) who live in the world's 100 largest cities, only 266 million (in 54 cities) have access to appropriate cessation support. All but one city (Hong Kong Special Administrative Region of China) is located in a nation that provides such access to its entire population.

PROGRESS IN TOBACCO DEPENDENCE TREATMENT (2007–2016)



Appropriate cessation treatment is in place for 2.4 billion people in 26 countries.

TOBACCO DEPENDENCE TREATMENT – HIGHEST ACHIEVING COUNTRIES, 2016



Countries with the highest level of achievement: Australia, Brazil, Brunei Darussalam, Canada, Denmark, El Salvador,* Estonia,* India,* Iran (Islamic Republic of), Ireland, Israel, Jamaica,* Kuwait, Luxembourg,* Malta, Mexico, Netherlands, New Zealand, Panama, Republic of Korea, Senegal,* Singapore, Turkey, United Arab Emirates, United Kingdom, and United States of America.

* Country newly at the highest level since 31 December 2014.

Strong tobacco cessation programmes achieve lasting quit success in El Salvador

El Salvador has implemented substantial progress in tobacco control in recent years. The country has had complete smoke-free legislation in place since 2015, as well as large, graphic health warnings on tobacco products since 2011 and strong anti-tobacco mass media campaigns that are aired regularly. In addition, El Salvador has achieved best-practice cessation services with a national toll-free quit line and access to free pharmacological cessation therapy.

Health reform initiatives were implemented in El Salvador in 2010 with the objective of guaranteeing the human right to health through an integrated health system. As part of this, tobacco cessation was integrated into primary health care services to provide tobacco users with advice to quit. In addition, tobacco cessation clinics were strengthened and transformed into more comprehensive Centres for Addiction Prevention and Treatment (CPTA). Tobacco users motivated in the primary care setting to quit tobacco use are referred to the CPTAs for a cessation treatment that lasts 14 months. The CPTAs are made up of a basic health team that offers free, specialized help to users of tobacco and other psychoactive substances.

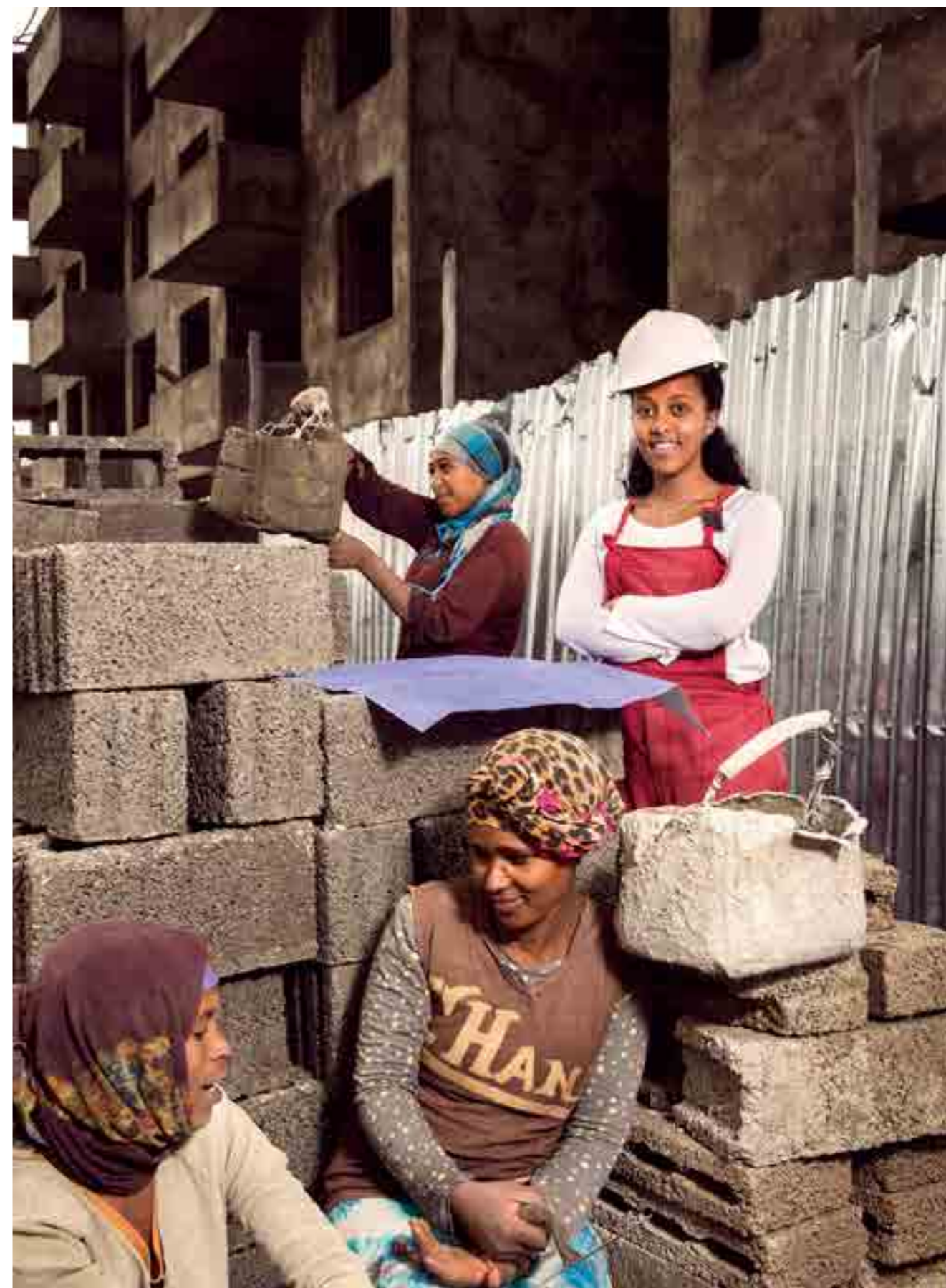
This multidisciplinary approach includes general practitioners, psychiatrists, psychologists, social workers and nurses trained and accredited to provide tobacco use cessation treatment. Nicotine replacement therapy (NRT) is available free-of-charge to tobacco users seeking advice at the CPTAs. The specialized treatment consists of an evidence-based cognitive behavioural therapy programme and is reinforced by spouses, family, community and peers who are part of the cessation groups.



Spirometry (lung function test) performed at CPTA to motivate smokers to quit.

The national toll-free quit line refers tobacco users to the CPTA closest to their home. The goal is to encourage cessation and prevent relapse through early detection, early diagnosis and timely treatment, including NRT.

During 2016, CPTA programmes achieved a nearly 70% smoking cessation rate among registered patients one year after the end of the cessation treatment, more than twice the success rate of previous years. This increase in programme effectiveness indicates that there has been good adherence to treatment as a result of human resource formation, pharmacological treatment, use of health technology, increased patient motivation and continuous monitoring. An impact assessment of tobacco control cessation programmes and their cost-effectiveness is planned.



Health warning labels

Article 11 of the WHO FCTC states: “Each Party shall ... adopt and implement ... effective measures to ensure that ... tobacco product packaging and labelling do not promote a tobacco product by any means that are false, misleading, deceptive or likely to create an erroneous impression about its characteristics, health effects, hazards or emissions” (8). WHO FCTC Article 11 guidelines are intended to assist Parties in meeting their obligations under Article 11 of the WHO FCTC, which provides a clear timeline for Parties to adopt appropriate measures (within 3 years after entry into force of the WHO FCTC for a given Party) (38).

Pack warning labels: a picture is worth a thousand words

Problem

More people are protected by large pictorial health warning labels than by any other MPOWER measure. Strong, graphic warnings on tobacco product packs are in place for almost 3.5 billion people in 78 countries – covering almost half of the global population (47%). However, this policy intervention is in some sense a victim of its own success.

Because these warning labels feature graphic images that are effective in warning about the dangers of tobacco use, the tobacco industry regularly threatens countries with litigation against this type of warning label. To prevent or delay implementation, the industry makes various false claims about its cost and impact, or trademark rights, and uses these to attempt to block strong health warning legislation (151).

Solution

The tobacco industry’s global efforts to challenge the use of warning labels were dealt a significant blow in July 2016, when the arbitral tribunal dismissed a case brought by Philip Morris (PM) against Uruguay.

PM had challenged Uruguay’s strong packaging and labelling laws by bringing an international case against its government in early 2010 – the first claim under an investment treaty challenging WHO FCTC implementation. At the World Bank International Centre for Settlement of Investment Disputes, the company claimed that Uruguay had violated its bilateral investment treaty with Switzerland.

However, Uruguay was able to actively confront the tobacco industry and defend its national laws. WHO and the WHO FCTC Secretariat, as well as the Pan-American Health Organization, supported WHO FCTC implementation by filing independent amicus briefs that described the WHO FCTC and the underlying evidence base for the measures. Financial assistance was also provided to Uruguay by national and international NGOs and by Bloomberg Philanthropies.

In July 2016, the tobacco company finally lost its 6-year landmark battle for compensation concerning Uruguay’s strong tobacco packaging and labelling measures, and had to reimburse Uruguay US\$ 7 million to cover its legal fees. This decision represented a major victory for the people of Uruguay, and shows countries everywhere that they can stand up to tobacco companies and win. Uruguay’s experience is an important example for other countries that are considering implementing similar legislation, and will strengthen the resolve of governments to not be intimidated by tobacco industry threats of litigation (152).

Health warnings are critical

People have a fundamental right to access information about their health and how to improve it, including receiving accurate and detailed information about the health harms of tobacco use (153–155). Despite a clear and overwhelming evidence base that spans decades, many tobacco users still do not fully understand the dangers that tobacco use presents to their health or to the health of other people (156).

Accurate warnings about the harms of tobacco use and of exposure to second-hand smoke encourage people to make decisions not to use tobacco (157–159). Health warnings also change social norms around tobacco use, which not only has the direct effect of denormalizing and reducing tobacco use but also increases support for strong tobacco control measures (160).

Warning labels on tobacco packaging are effective

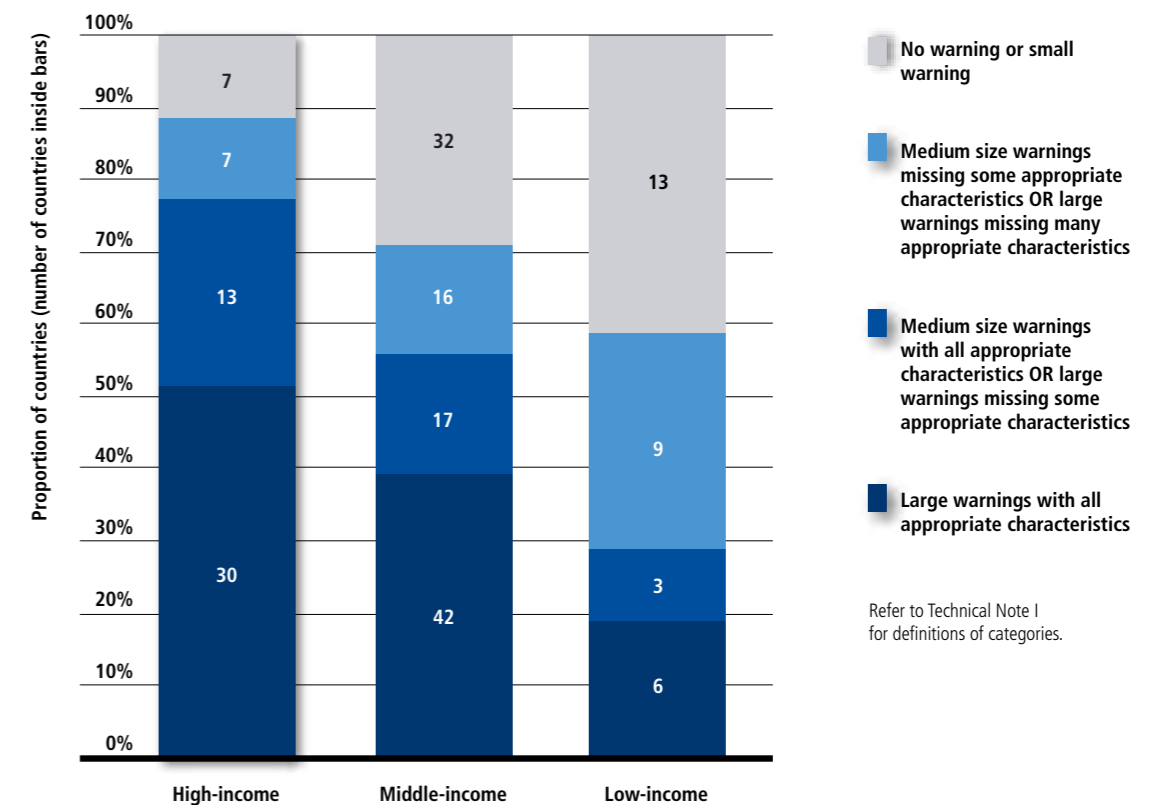
Effective health warning labels provide health messages directly to tobacco users, which raises awareness of their health risks and increases the likelihood that they will reduce tobacco use or quit altogether (156). They also communicate the dangers of smoking and second-hand smoke exposure to non-smokers (161).

Large graphic warnings that cover at least half of both primary tobacco package surface areas (front and back) are more effective in raising awareness and changing behaviours than smaller warnings or those that contain only text (156, 162, 163). Requirements for warning labels on tobacco packaging can be introduced at little cost to governments (162, 163).

Adoption of larger warnings is supported by the public (164) and generally achieves stronger levels of public support than most other tobacco control interventions (165, 166).

Warning labels should illustrate the specific health effects of tobacco use, and should also be periodically rotated so that they maintain their impact over time (38). Use of deceptive terms (e.g. “light,” “mild” or “smooth”) that suggest that some products are less harmful than others should be prohibited (38), although evidence suggests that this may be more successful if other changes are also made to tobacco packaging (167, 168). Plain (standardized) tobacco packaging using uniform fonts and colour schemes for all products will further enhance the impact of health warnings, as well as reduce the effect of package design on consumer behaviours (169–172).

WARNING LABELS



Strong graphic pack warnings are the most widely adopted policy measure

Strong graphic pack warnings are in place for almost 3.5 billion people in 78 countries – almost half of the global population (47%). More people are protected by this tobacco control policy than by any other MPOWER measure. About 14% of countries (27 countries – eight low-income countries, 13 middle-income countries and six high-income countries) have not adopted warning label legislation, and a further 20 require

warnings that cover less than 30% of the principal package display areas.

In 2007, only nine countries, with 364 million people, had large graphic pack warnings on cigarettes. Progress in adopting pack warnings has been dramatic among countries of all income groups since then. Six low-income countries (19% of all low-income countries) have adopted a full warning label policy since 2007, along with 38 middle-income countries (36% of middle-income countries) and 25 high-income countries (44% of high-income countries).

Strong health warnings is the measure currently making greatest progress

Pack warnings represent the largest improvement of any single MPOWER measure within the past 2 years in terms of the number of newly adopting countries (34 new countries) as well as in the increase in total population covered (2 billion additional people protected). Of these 34 countries, 23 are members of the European Union (EU) that have incorporated the 2014 EU warning label directive into their national legislation. There are 10 middle-income countries

and three low-income countries (Burkina Faso, Chad and Senegal) among the 34 countries that have adopted this measure at the highest level since 2014.

While 86% of countries have pack warning legislation, only 53% mandate pictorial or graphic warnings (a substantial increase from 2014, when only 39% of countries mandated graphic warnings). By 2016, 52% mandated that the warning labels cover at least 50% of the pack, an increase from 2014 when only 34% of countries did so. In all income categories, requirements for large warnings (at least 50% of main pack surfaces) and graphic

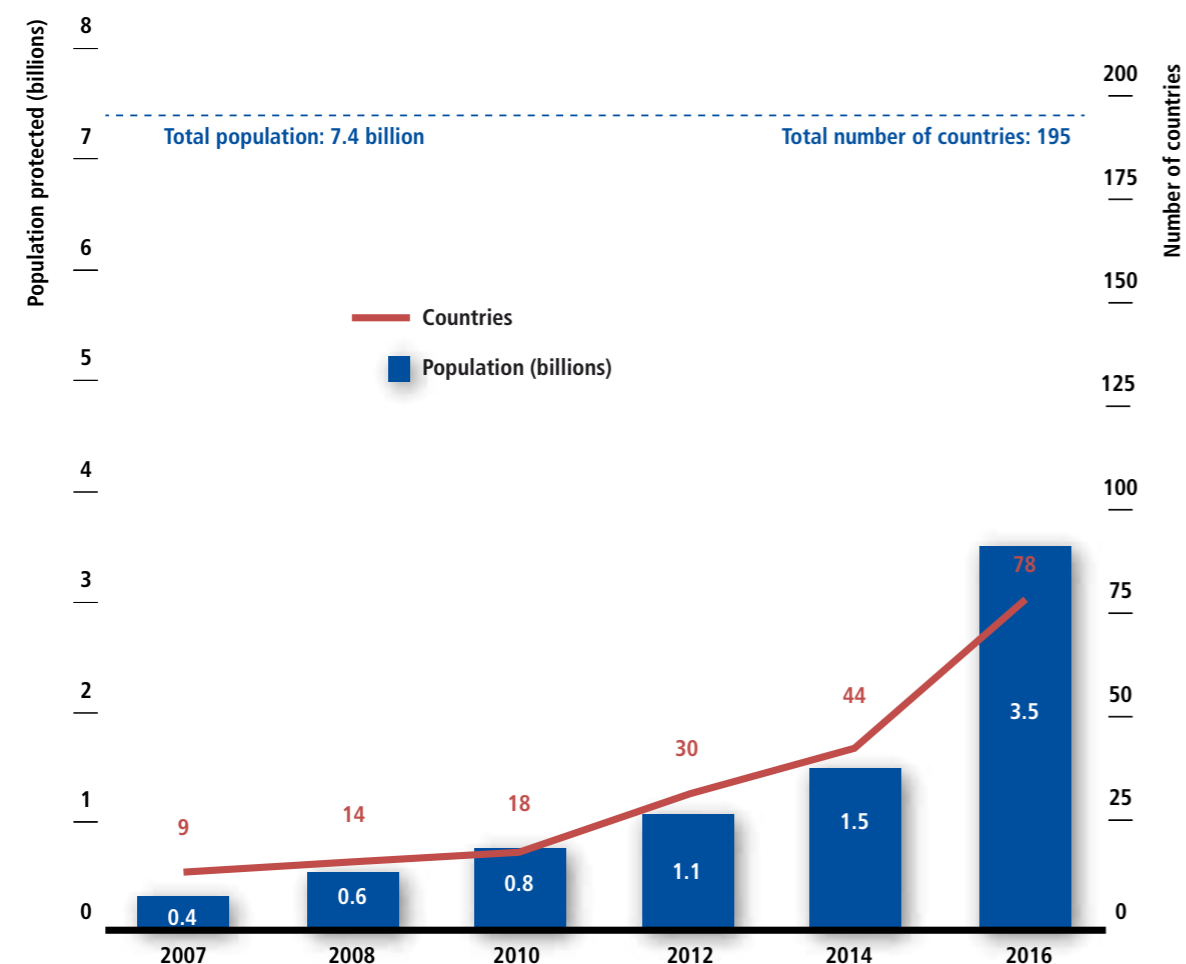
warnings were the least adopted of the eight best-practice characteristics.

There are 25 countries with 15% of the world's population (1.1 billion) that would reach the highest level of achievement by adding a single provision to their law. Of these countries, ten need only increase the size of their warnings to at least 50%, nine need only to require warnings that appear on each individual pack and the outside packaging of multiple packs, five need only require graphic warnings, and one needs only to mandate a specific font size style and colour.

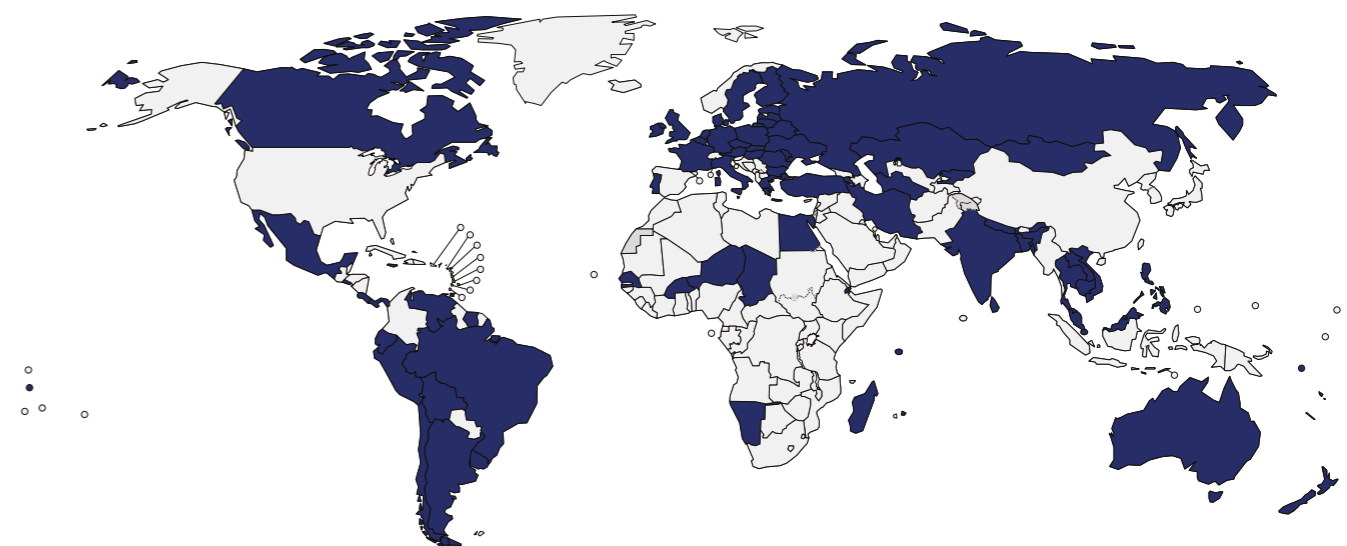
Of the 492 million people (6.7% of the world's population) who live in one of the world's 100 largest cities, 326 million (in 62 cities) are protected by graphic pack warnings containing all appropriate characteristics. All but one city (Hong Kong Special Administrative Region of China) is located in a country with national legislation stipulating strong pack warnings, and has established graphic pack warnings ahead of national policy.

Strong graphic pack warnings are in place for almost half of the global population.

PROGRESS IN WARNING LABELS (2007–2016)



HEALTH WARNING LABELS – HIGHEST ACHIEVING COUNTRIES, 2016



Countries with the highest level of achievement: Argentina, Armenia,* Australia, Austria,* Bangladesh*, Belarus,* Belgium,* Bolivia (Plurinational State of), Brazil, Brunei Darussalam, Bulgaria,* Burkina Faso,* Cambodia,* Canada, Chad,* Chile, Costa Rica, Czechia,* Denmark,* Djibouti, Ecuador, Egypt, El Salvador, Estonia,* Fiji, Finland,* France,* Germany,* Greece,* Hungary,* India,* Iran (Islamic Republic of), Ireland,* Italy,* Jamaica, Kazakhstan, Kyrgyzstan, Lao People's Democratic Republic,* Latvia,* Lithuania,* Madagascar, Malaysia, Malta,* Mauritius, Mexico, Mongolia, Namibia, Nepal, Netherlands,* New Zealand, Niger, Panama, Peru, Philippines, Poland,* Portugal,* Republic of Moldova,* Romania,* Russian Federation, Samoa, Senegal,* Seychelles, Singapore, Slovakia,* Solomon Islands, Sri Lanka, Suriname,* Sweden,* Thailand, Trinidad and Tobago, Turkey, Turkmenistan, Ukraine, United Kingdom,* Uruguay, Vanuatu, Venezuela (Bolivarian Republic of), and Viet Nam.

* Country newly at the highest level since 31 December 2014.

Plain packaging

Plain packaging (also called standardized packaging) is defined as a measure “to restrict or prohibit the use of logos, colours, brand images or promotional information on packaging other than brand names and product names displayed in a standard colour and font style” (38).

Plain packaging reduces the attractiveness of tobacco products, eliminates the effects of tobacco packaging as a form of advertising and promotion, minimizes the use of misleading product descriptor language and enhances the effectiveness of health warnings (173, 174).

In December 2012, Australia became the first country to implement plain tobacco packaging. By May 2016, plain packaged

tobacco products were available for sale in the United Kingdom and France (with full implementation achieved in those countries in 2017). By the end of 2016, Hungary, Ireland, New Zealand and Norway had passed legislation mandating plain packaging of tobacco products. Slovenia and Thailand passed plain packaging legislation in 2017, and other countries have the policy under active consideration, with some at an advanced stage of the policy process.

Plain packaging of tobacco products has been the subject of a number of legal challenges. Australia, the United Kingdom and France all faced domestic legal challenges to their laws; in each instance the claims were dismissed by domestic courts. In December 2015, a claim against Australia under a bilateral

investment treaty was dismissed when the arbitral tribunal decided that there was no authority to hear the case. In May 2016, the European Court of Justice upheld the validity of the European Union’s Tobacco Products Directive, including provisions to permit plain packaging in individual Member States. The dispute settlement body at the World Trade Organization is expected to release the panel report on Australia’s plain packaging measure in 2017.

Plain packaging increases the effectiveness of health warnings.

India and Nepal are regional and global leaders in implementing large, pictorial warning labels on tobacco packaging



Indian bidi pack with large graphic warning label.

In April 2016, the Government of **India** implemented a new regulation mandating large pictorial health warnings that graphically depict the hazards of tobacco use. With the increase in the size of the pack warnings to 85% of both front and back panels on all tobacco products (from just 40% on the front panel previously), India now has the third largest pack warning labels of any country (175). Two pairs of warnings, rotating every 12 months – one for use on smoked and the other for use on smokeless tobacco products – were approved after field testing for efficacy. All smoked (cigarettes, bidis, cigars, hookah, etc.) and smokeless tobacco products (chewing tobacco, khaini, zarda, snuff, or any chewing material with tobacco as one of its ingredients) must display these health warnings.

India faced overwhelming resistance to introducing pictorial warnings and increasing the size of tobacco package warning labels from the tobacco industry and its front groups, which caused a year’s delay in implementing the larger pack warning requirements. However, concerted effort by the Ministry of Health and Family Welfare, and timely intervention of the Rajasthan High Court and Supreme Court of India, allowed the new warning label requirement to go into effect. Legal intervention and strong advocacy by civil society organizations and partner agencies provided much needed support for implementation.

The results of the latest Global Adult Tobacco Survey proved that the graphic warning labels depicting throat cancer (labels for smoked tobacco products) and oral cancer (labels for smokeless tobacco products) are a strong tool to discourage youth from initiating tobacco and have motivated 275 million current users to quit (74).

Legal requirements in **Nepal** (effective since mid-2015) mandating warning labels to cover 90% of tobacco packaging made them the world’s largest labels, before being matched by those mandated in Vanuatu in 2016.

These legal requirements mandate that pictorial health warnings graphically depicting the hazards of tobacco use appear on the top 90% of both the front and back of tobacco packages – 70% of which is reserved for pictorial warnings showing the effects of tobacco-related disease, and 20% of which is reserved for statutory text warnings in the Nepali language. In addition,

text warnings are also required on 90% of both package sides, and on the entire top end of the package. Other tobacco products, including bidis, gutkha-like tobacco products (a sweetened mixture of chewing tobacco, betel nut and palm nut), raw tobacco and khaini (chewing tobacco), must also display warning messages on 90% of the principal carton, parcel and packaging areas, as well as on individual packages.

Tobacco industry interference has been a major challenge, with the industry and its allies (including a farmers’ organization) filing several lawsuits in the country’s Supreme Court to challenge the government’s introduction of pictorial graphic health warnings and their increased size from the previous 75%. The Supreme Court’s verdict in favour of the introduction of large graphic health warnings on all tobacco products gave new impetus to the implementation of tobacco control laws in Nepal.



Use of tobacco products leads to cancer of the mouth and throat.

Anti-tobacco mass media campaigns

Article 12 of the WHO Framework Convention on Tobacco Control states: "Each Party shall promote and strengthen public awareness of tobacco control issues, using all available communication tools, as appropriate" (8). WHO FCTC Article 12 guidelines are intended to assist Parties in meeting their obligations under Article 12 of the WHO FCTC (38).

Well-designed anti-tobacco mass media campaigns work

Because they are effective at increasing public awareness of the harms of tobacco use, hard-hitting anti-tobacco mass media campaigns have been used in many high-income countries to reduce tobacco use, increase calls to quit lines and quit attempts, strengthen support for smoke-free policies and reduce second-

hand smoke exposure (176–181). The same types of campaigns can be used to similar effect in low- and middle-income countries, where smokeless tobacco products are in wider use (182).

The more a campaign advertisement is aired, the more likely it is that tobacco users will make a quit attempt or express an intention to quit (183). Campaigns that are sustained over long periods are more

likely to result in long-term behavioural change, although more limited campaigns can have some impact if they are run for as little as 3 weeks (184–186).

Despite the relatively high expense, mass media campaigns can reach large populations more quickly and efficiently than other communication programmes (185). Television advertising containing graphic imagery is especially effective in

convincing tobacco users to quit (185, 187–190).

Campaigns must be sustained

Around 44% of the world's population (3.2 billion people) live in a country that had aired at least one comprehensive national anti-tobacco mass media

campaign in the past 2 years. However, almost half of countries (88) had not run any kind of sustained media campaign in the past 2 years, with about 18% of the world's population not recently exposed to a far-reaching campaign.

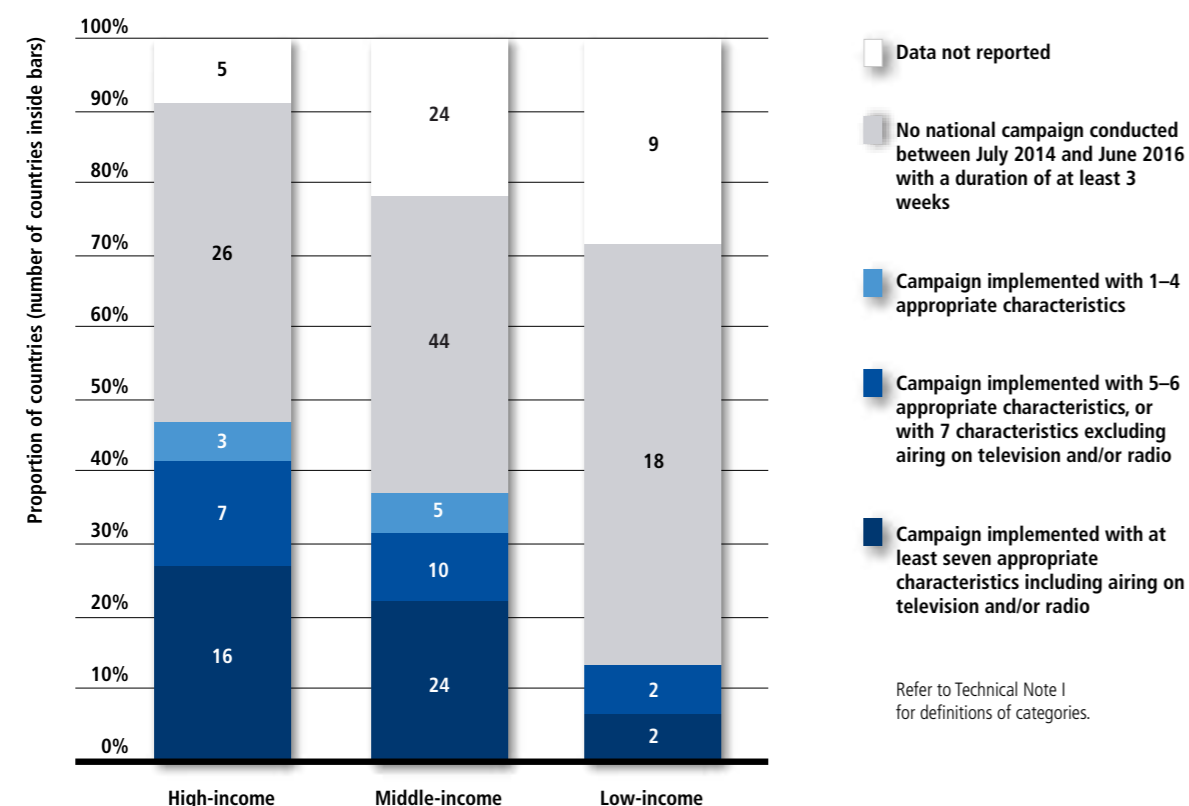
People in low-income countries are the least likely to be exposed to anti-tobacco mass media: 58% of low-income countries (18 countries with more than half the total

population of low-income countries) had not aired any kind of campaign in the past 2 years.

Since 2010 (the first year mass media campaigns were monitored), the number of countries running a best-practice mass media campaign increased from 35 to 42. Between 2010 and 2016, an even larger number of people in total were exposed to at least one best-practice campaign, since

Mass media campaigns increase calls to quit lines and quit attempts, and reduce tobacco use.

MASS MEDIA CAMPAIGNS



Sustainable funding for anti-tobacco mass media campaigns

Problem

Mass media campaigns publicizing the harms of tobacco use are effective for changing social norms and behaviours (38, 176). They also significantly reduce tobacco use prevalence and thus avert deaths in high-, middle- and low-income countries (Vital Strategies, unpublished data). However, sustaining mass media campaigns can be expensive.

Solution

There are a number of strategies countries can use to secure sustainable funding for national mass media campaigns (185). Such strategies include (191):

- **Transferring mass media campaign costs to the tobacco industry or other entities that promote tobacco use.** In India, the Cigarettes and Other Tobacco Products Act requires that public service announcements and disclaimers about the harms of tobacco use be shown at specified periods in film or television programming whenever tobacco consumption is depicted.
- **Dedicating tobacco tax revenues to mass media campaigns.** In Viet Nam, 1% of tobacco taxes are dedicated to a health promotion foundation (the Tobacco Control Fund) that runs population-level educational campaigns on the harms of tobacco use.
- **Require broadcasters to provide free airtime.** Turkey's national tobacco control law includes a requirement that all broadcasters air at least 90 minutes of anti-tobacco content per month, including 30 minutes during prime-time hours.
- **Multi-year funding commitments.** In 2008, the Australian government signed a multi-year agreement to fund states to run anti-tobacco campaigns during 2016.

most countries that execute campaigns do not repeat the effort every 2 years. Only six countries (Australia, Malaysia, Singapore, Turkey, United Kingdom and Viet Nam) ran a best-practice campaign in each of the four periods assessed (2009–2010, 2011–2012, 2013–2014 and 2015–2016).

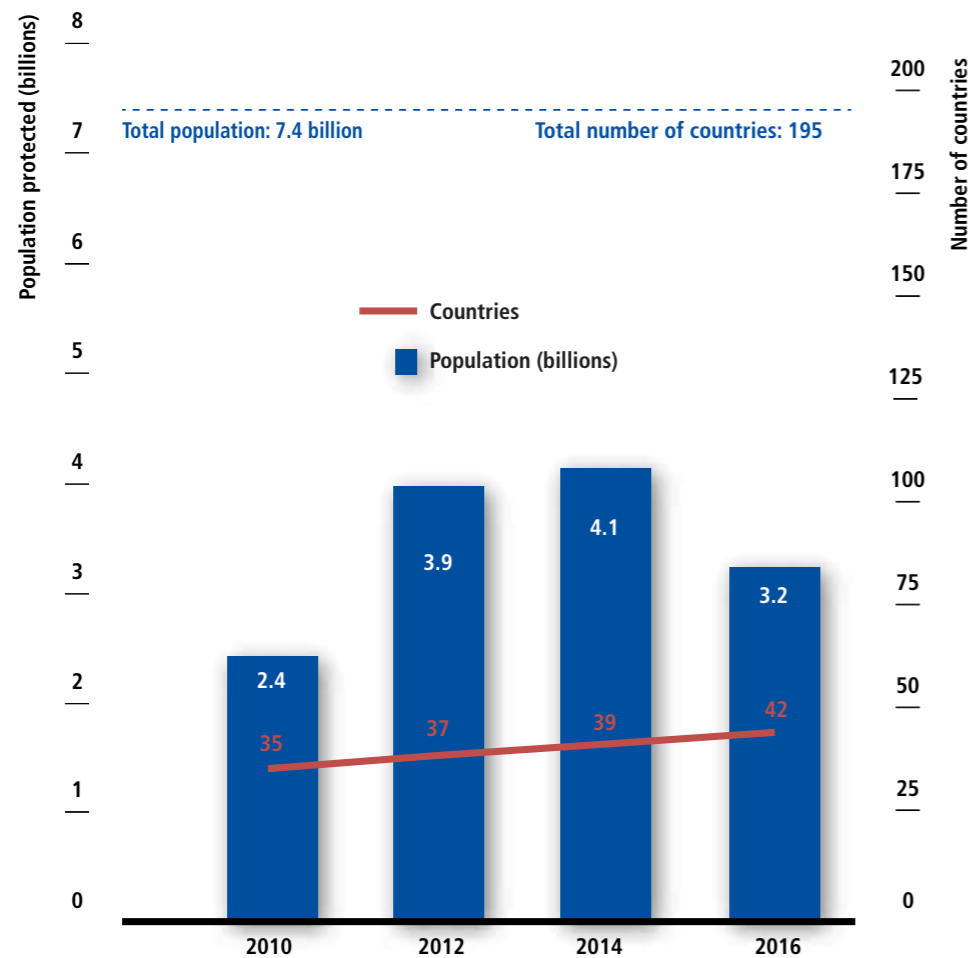
Countries have fallen behind in sustaining mass-media efforts

There was a significant reduction in the number of people (from 4.1 billion, 56% of the world's population, in 2014 to 3.2 billion, 44% of the world's population, in 2016) protected by effective anti-tobacco media campaigns over the past 2 years.

This is despite the fact that the number of countries airing such campaigns was almost the same as for the previous report (39 in 2014 and 43 in 2016). Very few countries that ran a best-practice campaign in 2013–2014 sustained that effort in 2015–2016. There were 21 countries that sustained campaigns through both periods; however, 18 countries that previously ran a campaign did not sustain that effort.

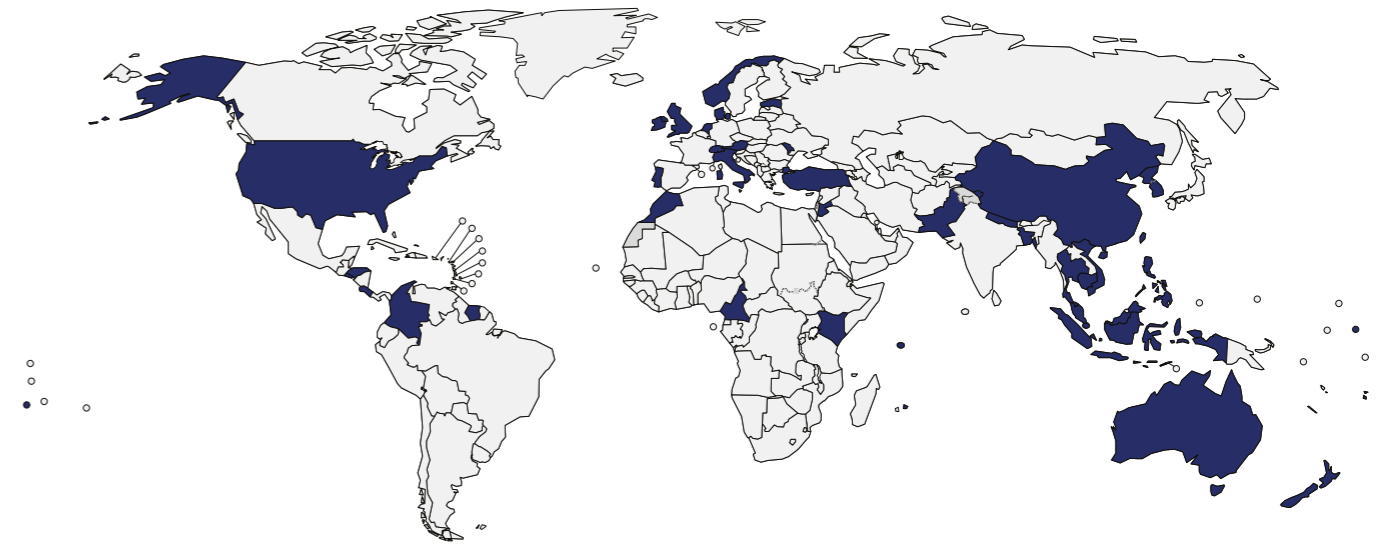
3.2 billion people live in a country that aired a recent national anti-tobacco mass media campaign.

PROGRESS IN ANTI-TOBACCO MASS MEDIA CAMPAIGNS (2010–2016)



Note: Data reporting for anti-tobacco mass media campaigns started in 2010.

ANTI-TOBACCO MASS MEDIA CAMPAIGNS – BEST PRACTICE COUNTRIES, 2016



Countries with the highest level of achievement: Australia, Austria,* Bangladesh, Cambodia,* Cameroon, China, Colombia, Costa Rica,* Democratic People's Republic of Korea,* Denmark,* El Salvador, Estonia,* Fiji,* Honduras,* Indonesia,* Ireland, Italy,* Jordan,* Kenya,* Kiribati,* Malaysia, Mauritius,* Morocco,* Nepal, Netherlands, New Zealand,* Norway, Pakistan,* Philippines,* Portugal, Republic of Korea, Republic of Moldova, Seychelles,* Singapore, Suriname, Switzerland,* Thailand, Tonga,* Turkey, United Kingdom, United States of America, and Viet Nam.

* Country newly at the highest level since 31 December 2014.



Bangladesh, Indonesia and Pakistan show how strong anti-tobacco

mass media campaigns can support tobacco control policy measures

Pictorial health warnings covering 50% of tobacco packaging have been compulsory in **Bangladesh** since March 2016. To warn people about the dangers of tobacco and increase public support for the warnings, the government launched a mass media campaign. In this campaign, anti-tobacco advertisements containing the graphic health warnings were published in Bangla and English national daily newspapers in late 2015, and May and November 2016.

A survey of adults in urban areas (conducted by the National Institute of Preventive and Social Medicine with technical support from WHO in December 2016) estimated that 12.5% of respondents noticed the anti-tobacco newspaper advertisement, 95% of whom said that it clearly conveyed the underlying message. More than 80% stated that they were an effective tobacco control tool. Respondents also reported that after seeing the advertisements they discussed the health effects of tobacco use with others and advised tobacco users to quit. This study also found that of the tobacco users who saw the advertisements, 83% considered quitting.



Anti-tobacco mass media campaign on the front page of a Bangladeshi national daily newspaper in late 2015.



A "Voices without Cigarettes" advertisement, featuring the message "I am suffering from cancer of the vocal cords because I was often exposed to second-hand cigarette smoke and although I never smoked."

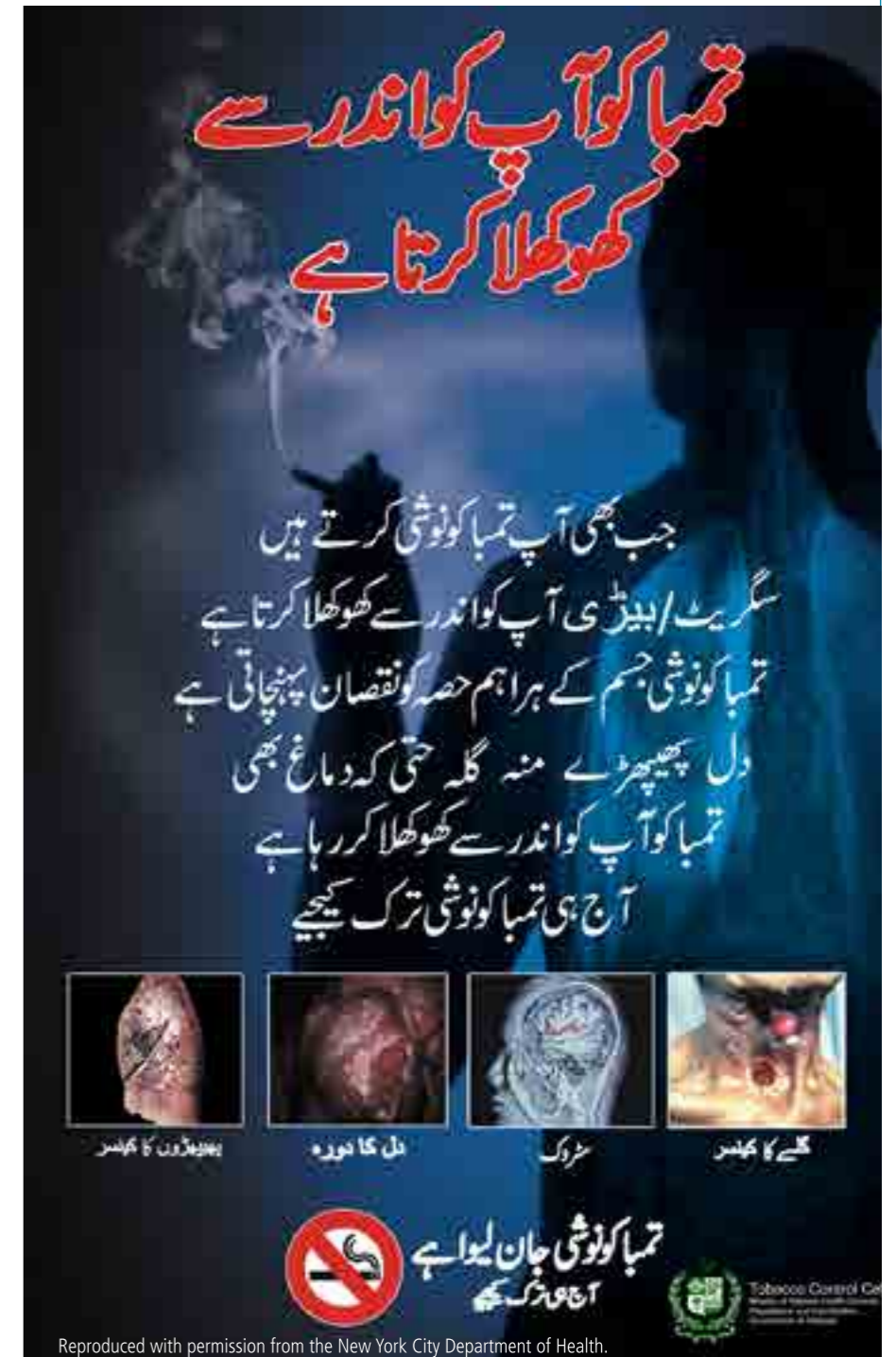
Following its first anti-tobacco mass media campaign in October 2014, the Government of **Indonesia** ran a second national anti-tobacco mass media campaign in May 2015, featuring "Ike", a woman who had never been a smoker, but who developed throat cancer and subsequently lost her voice as a result of exposure to second-hand smoke in the workplace. The advertisements aired on TV, radio and social media. The advertisement resonated with viewers not only in Indonesia but also throughout the region. It tested highly in a message-testing study of tobacco control advertisements in Viet Nam, even though it was made apparent that the woman was Indonesian and Muslim. This finding shows how a compelling personal narrative can cut across cultural contexts and impact tobacco-related knowledge, attitudes and behaviour.

A social media effort called Suara Tanpa Rokok (Voices without Cigarettes) was mounted as part of the campaign, including a Facebook page, Twitter and YouTube accounts, and a website providing online resources and an outlet for the public to share stories about the impacts of smoking and second-hand smoke.

The Government of **Pakistan** ran two national anti-tobacco mass media campaigns in 2015 and 2016, using messaging adapted from public service announcements that were rated highly in a 10-country evaluation in 2010 (192). Message testing enabled the adaptation of these global "best-practice" advertisements, which had been successfully implemented in countries of all income levels.

One of the campaigns used messaging from a New York City Department of Health and Mental Hygiene campaign ("Cigarettes Are Eating You Alive"). The Pakistani version of the campaign used an evidence-based approach to implement a media plan to run the advertisement on 14 national TV stations over a 4-week period.

Of the smokers and smokeless tobacco users who were aware of the campaign, around 56% said that they occasionally considered quitting or reducing tobacco use. Additionally, 53% of the smokers that were aware of the campaign and 46% of smokeless tobacco users aware of the campaign made a quit attempt (compared with 38% of smokers and 33% of smokeless tobacco users who were unaware of the campaign).



Reproduced with permission from the New York City Department of Health.

An image from the "Cigarettes are Eating you Alive" campaign, Pakistan.

Enforce bans on tobacco advertising, promotion and sponsorship

Article 13 of the WHO FCTC states: "... [A] comprehensive ban on advertising, promotion and sponsorship would reduce the consumption of tobacco products. Each Party shall ... undertake a comprehensive ban of all tobacco advertising, promotion and sponsorship. ... [W]ithin the period of 5 years after entry into force of this Convention for that Party, each Party shall undertake appropriate legislative, executive, administrative and/or other measures and report accordingly in conformity with Article 21" (8). WHO FCTC Article 13 guidelines are intended to assist Parties in meeting their obligations under Article 13 of the WHO-FCTC (38).

Bans on tobacco advertising, promotion and sponsorship must be comprehensive

Problem

Bans on tobacco advertising, promotion and sponsorship (TAPS) can significantly hinder the industry's ability to promote its products, which protects people who have not yet started to use tobacco as well as current tobacco users who want to quit.

However, to be as effective as possible these bans need to be comprehensive and well enforced. Partial TAPS bans or bans that are not vigorously enforced have less effect on tobacco use prevalence, since incomplete bans prompt the tobacco industry to focus its efforts and financial resources on marketing and promotion activities that are permitted, or for which prohibitions are not well enforced. Data on compliance compiled for this report show that of the 37 countries that have adopted comprehensive TAPS bans, only 22 (59%) have high compliance rates. Data also reveal that there are particular challenges for enforcing bans on advertising at point of sale (only 30% of countries with a ban have high compliance) and appearance of tobacco products on TV and in films (only 31% of countries with a ban have high compliance).

Solution

Effective legislation must be monitored and enforced. Simple measures to ensure strong and well-enforced TAPS bans include (33, 193):

- legislation that contains clearly defined terms and simple language;
- legislation that provides for strong monitoring and enforcement mechanisms;
- large financial penalties to be levied on individuals or companies violating TAPS bans;
- regularly conducted compliance studies;
- compliance results that are reported to policy-makers, enforcement agencies and the public.

Comprehensive bans are necessary

Tobacco companies spend tens of billions of US dollars worldwide each year on tobacco advertising, promotion and sponsorship (TAPS) activities (194), the primary purpose of which is to increase tobacco sales and industry profits (177).

TAPS activities are effective in encouraging non-users of tobacco to start (particularly youth and women in low- and middle-income countries) (195), and current tobacco users to continue (177).

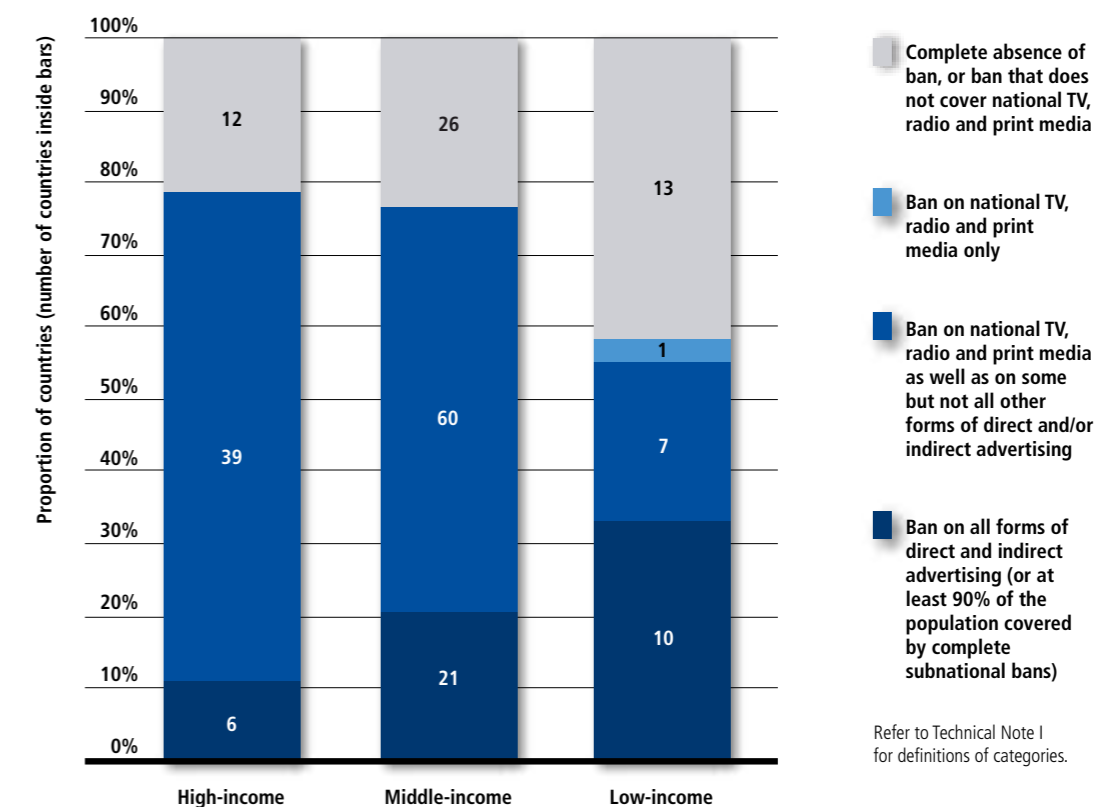
TAPS activities also undermine tobacco control efforts by "normalizing" tobacco use and influencing media and other businesses that benefit, directly or indirectly, from TAPS. To counteract this, complete bans on all TAPS activities are a key tobacco control strategy. Partial bans and voluntary restrictions have minimal effect in reducing tobacco use (177, 196, 197).

Bans are effective at reducing tobacco use

Comprehensive TAPS bans interfere with the industry's ability to promote and sell its products, and reduce tobacco consumption in all countries regardless of their income level (196). In particular, TAPS bans reduce youth tobacco use initiation and prevalence rates, which may lead to lower levels of adult tobacco use in future years (198).

Comprehensive TAPS bans interfere with the industry's ability to promote and sell its products.

BANS ON ADVERTISING, PROMOTION AND SPONSORSHIP



Bans must be complete and well enforced

To be effective, bans must be comprehensive and cover all types of TAPS activities, including direct advertising in all types of media (including broadcast, print and online), as well as all forms of indirect advertising including promotion and sponsorship (123, 196, 199). It is also important to ban point-of-sale advertising in retail stores as this can reduce tobacco product purchases (200, 201). Many retailers are becoming more ambivalent about continuing to sell tobacco products and increasingly favour licensing of retailers and other tobacco control measures (202).

So-called “corporate social responsibility” activities should also be prohibited, as

they are intended to convince government officials to delay or refrain completely from implementing strong tobacco control programmes (203).

The tobacco industry strongly opposes TAPS bans because they are highly effective in reducing tobacco use and initiation, and is increasingly aggressive in circumventing any restrictions (177). Legislation banning TAPS should be written in clear and uncomplicated language, with unambiguous definitions, strong monitoring and enforcement mechanisms, and high financial penalties for violations (38). As with enforcement related to other tobacco control policies, mobile technology can support timely, accurate data collection and help monitor data quality (204).

More countries are closing loopholes in TAPS regulations

Banning tobacco advertising, promotion and sponsorship (TAPS) remains an under-adopted measure, with only 15% of the world’s population covered by a comprehensive ban. There are 51 countries (12 high-income, 26 middle-income and 13 low-income countries) that have no TAPS bans, or have a ban that does not cover national TV, radio and print media.

More low-income countries have adopted a complete TAPS ban than any other MPOWER measure at the highest level, with 10 low-income countries (Afghanistan, Chad, Eritrea, Guinea, Madagascar, Nepal, Niger, Senegal, Togo

and Uganda) – one-third of low-income countries – having a comprehensive TAPS ban in place.

In 2007, bans on TAPS activities were the most poorly adopted of all MPOWER measures. Only seven countries, with 182 million people, had a best-practice TAPS ban in place at that time. Since then, an average of seven countries per 2-year reporting period introduced a best-practice law banning all TAPS activities.

Just 12% of the global population was covered by best-practice TAPS bans in 2014. Another seven countries (Afghanistan, Kuwait, Nigeria, Qatar, Republic of Moldova, Senegal and Uganda) joined this group by introducing new comprehensive laws against tobacco advertising, promotion and sponsorship

since 2014, raising the total with best-practice TAPS bans to 37 countries.

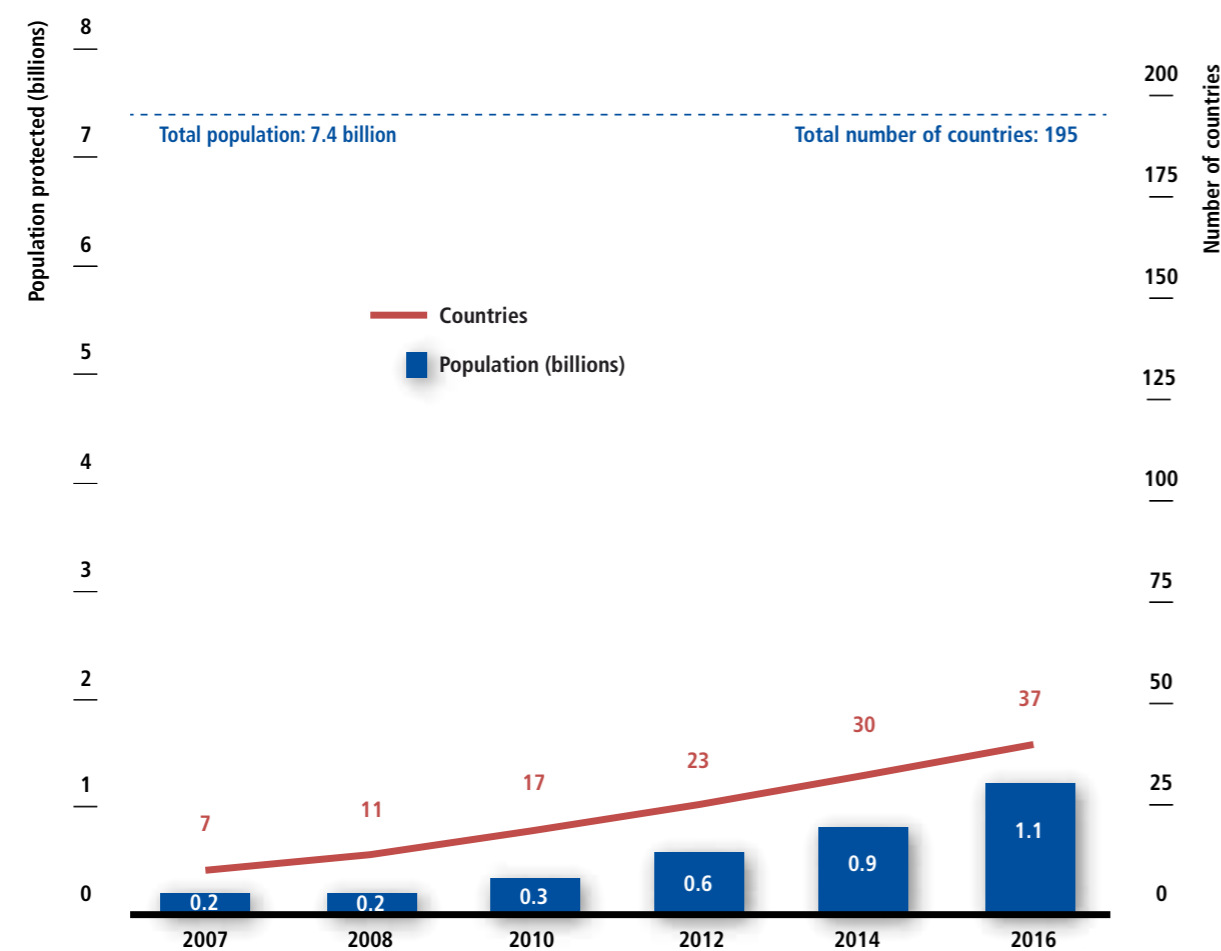
While 144 countries in total have made efforts to completely ban TAPS, three quarters of them (107 countries) have not been able to close the final gaps to attain full coverage. Out of this group, 23 countries (with 1.8 billion people) are only one provision away from implementing a complete TAPS ban, with the most frequently missing provision being either the prohibition of point-of-sale advertising (six countries) or sponsorship activities (six countries).

In terms of specific provisions in place globally, 144 countries have banned tobacco advertising on national TV, radio, and in magazines and newspapers, but other forms of direct and indirect

advertising have proven harder to include in legislation. The least-adopted aspect of a complete TAPS ban is brand sharing (brand names of non-tobacco products used for tobacco products), followed by advertising at point-of-sale, sponsorship and brand stretching (non-tobacco goods and services identified with tobacco brand names).

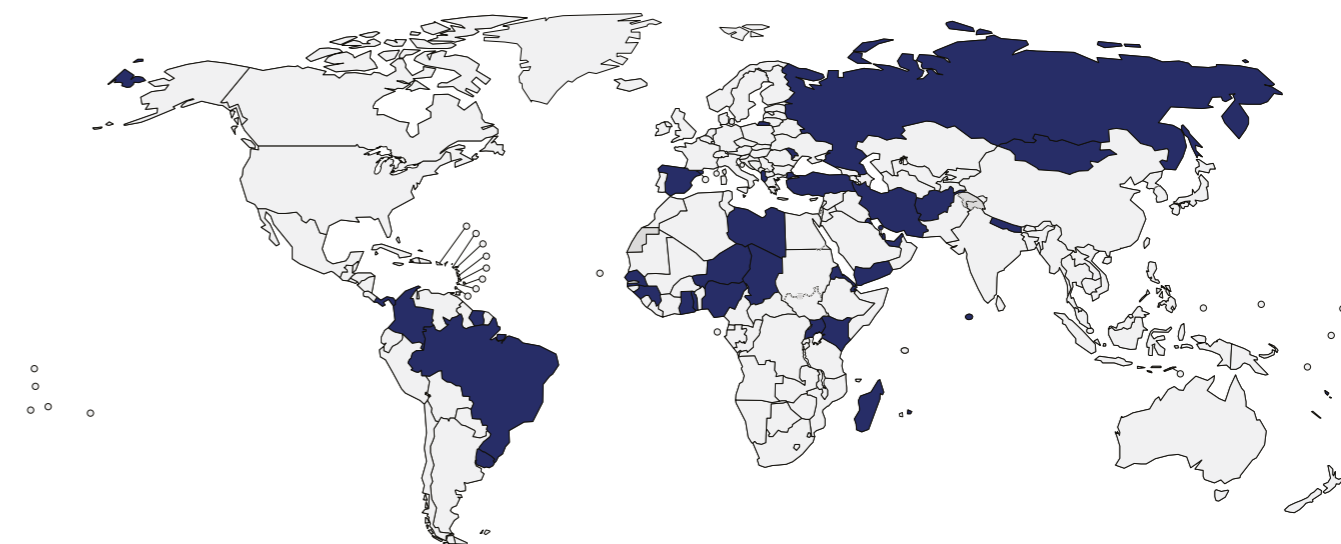
Of the 492 million people (6.7% of the world’s population) who live in one of the world’s 100 largest cities, 122 million (in 26 cities) are completely protected from exposure to TAPS by national legislation. Three of the 100 largest cities – Montréal, Toronto and Vancouver (all in Canada) – are covered by provincial-level subnational legislation that completely bans TAPS in the absence of national legislation.

PROGRESS IN BANS ON TOBACCO ADVERTISING, PROMOTION AND SPONSORSHIP (2007–2016)



Only 15% of the world’s population is covered by a comprehensive TAPS ban.

ENFORCE BANS ON TOBACCO ADVERTISING – HIGHEST ACHIEVING COUNTRIES, 2016



Countries with the highest level of achievement: Afghanistan,* Albania, Bahrain, Brazil, Chad, Colombia, Djibouti, Eritrea, Ghana, Guinea, Iran (Islamic Republic of), Kenya, Kiribati, Kuwait,* Libya, Madagascar, Maldives, Mauritius, Mongolia, Nepal, Niger, Nigeria,* Panama, Qatar,* Republic of Moldova,* Russian Federation, Senegal,* Spain, Suriname, Togo, Turkey, Tuvalu, Uganda,* United Arab Emirates, Uruguay, Vanuatu, and Yemen.

* Country newly at the highest level since 31 December 2014.

Comprehensive ban on tobacco advertising, promotion and sponsorship, with strong enforcement mechanisms in the Republic of Moldova

In May 2015, the Moldovan Parliament approved a National Tobacco Control Law banning all tobacco advertisement, promotion and sponsorship, including a ban on tobacco product displays at the point of sale. The new law also requires pictorial health warnings to cover 65% of both sides of tobacco packaging and prohibits the use of tobacco additives that impart a characteristic smell, taste and/or colour, including a ban on menthol cigarettes. Smokeless tobacco products have been completely banned, as have misleading and erroneous product descriptions (e.g., light, ultra, extra). Partnerships between the government and the tobacco industry are now illegal.

Moldova's Tobacco Control Law supersedes the country's much weaker 2007 legislation. The country's National Plan on Tobacco Control for 2012–2016, approved in February

2012, set in motion the development and adoption of tobacco control legislation fully compliant with the WHO FCTC. The new law includes mechanisms for designation of authorities responsible for implementation and enforcement; establishes a coordination mechanism for inter-ministerial and inter-agency coordination; and imposes fines and other sanctions for non-compliance.

Despite massive tobacco industry opposition – including requests to delay the legislative review – the Tobacco Control Law was passed with the support of government agencies and tobacco control experts within NGOs and international organizations. Additionally, an intensive public and media campaign targeted members of parliament during the debate on the legislation, informing them about the need for a stronger law.



The Republic of Moldova's parliament voted in May 2015 to amend several laws in order to strengthen tobacco control.

Afghanistan passes comprehensive ban on tobacco advertising, promotion and sponsorship (TAPS)



The Tobacco Control Law is adopted in the Afghan Parliament, February 2015.

Afghanistan adopted a new Tobacco Control Law in 2015, strengthening formerly weak provisions on tobacco advertising, promotion and sponsorship by aiming to “reduce and prevent advertisements, promotions and donations aimed at encouraging and promoting the use of cigarettes, water-pipe, hookah, snuff and other tobacco products” (205). The law includes a complete ban on tobacco advertising, promotion and sponsorship (TAPS) activities – a ban that generated little organized opposition. In addition to completely banning TAPS, the Tobacco Control Law prohibits internet purchases and sales to minors. Penalties for violation of the TAPS ban or the ban on sales to minors are stiff, starting at 50 000 Afghani (approximately US\$ 730).

Experts asked to assess compliance with the ban (for this report) estimate that the level of compliance during the first year of implementation is high for promotional discounts, billboards and outdoor advertising. However, compliance with bans on sponsorship, free distribution of tobacco products, advertising in magazines/newspapers and at points of sale is rated only as moderate. Compliance has been low for the ban on product placement and brand-stretching (where non-tobacco products bear a tobacco logo). A Tobacco Control Commission, established under the directorship of the Deputy Minister of Public Health with representatives from all relevant government agencies and civil society, will ensure coordination among ministries and their relevant agencies to monitor and strengthen compliance with the law.

Article 6 of the WHO Framework Convention on Tobacco Control states: "... [P]rice and tax measures are an effective and important means of reducing tobacco consumption... [Parties should adopt] ... measures which may include: ... tax policies and ... price policies on tobacco products so as to contribute to the health objectives aimed at reducing tobacco consumption" (8).

Raising taxes is the most effective way to reduce tobacco use

Raising taxes to increase the price of tobacco products is the most effective and cost-effective means to reduce tobacco use and encourage tobacco users to quit (15, 206, 207). Of the different types of taxes countries levy on tobacco – which include excise taxes (both specific and ad valorem), value added taxes (including sales taxes) and customs duties – excise taxes typically comprise the largest share and are also the most effective at raising prices (208, 209).

Higher taxes are especially effective in reducing tobacco use among lower-

income groups and preventing youth from starting to use tobacco (210). Higher taxes also provide a greater net benefit to low-income households as compared with high-income households when the economic benefits of quitting are considered (211).

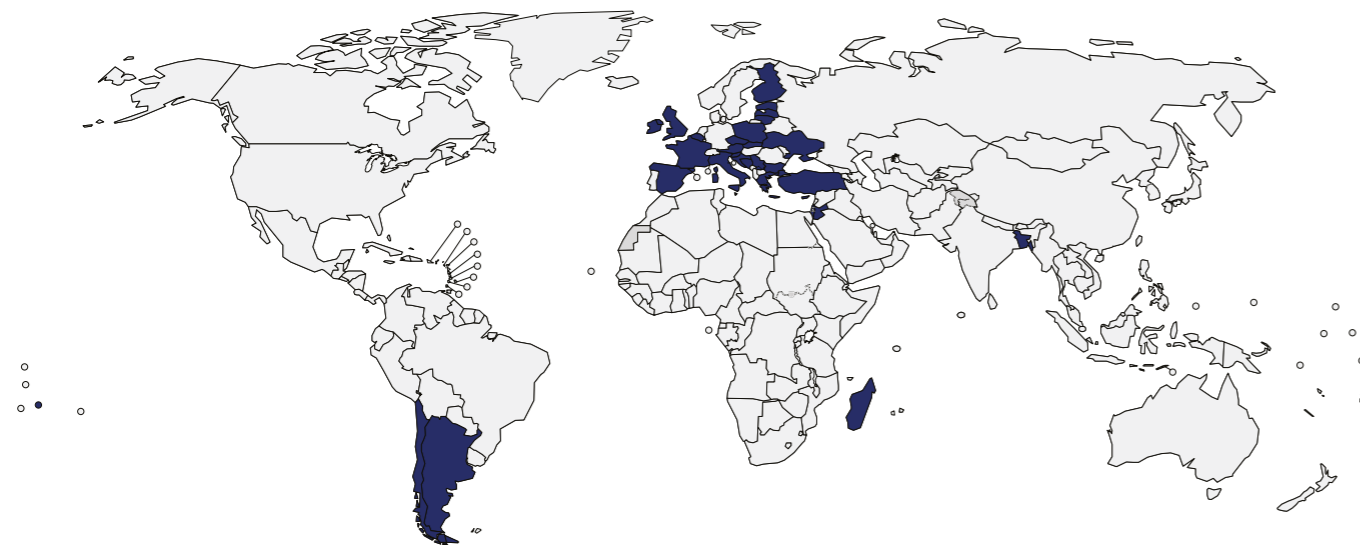
An increase in the retail price of cigarettes by 10% will reduce consumption in high-income countries by about 4% and in low- and middle-income countries by about 5% (and up to 8% based on several estimates); tobacco use prevalence is usually reduced by about half of the percentage declines in consumption (210).

Higher taxes improve health and increase government revenues

Tobacco taxes are generally well accepted by the public, including tobacco users, because most people understand that tobacco use is harmful even when they may be unaware of specific health harms (212). Higher tax rates will improve health by reducing tobacco use and increase government revenues even with reduced consumption (30, 209).

Additional funding from tax revenues can be used for tobacco control programmes as well as other important health and social initiatives (30, 208), and using tax revenues in this way further

RAISE TAXES ON TOBACCO – HIGHEST ACHIEVING COUNTRIES AND TERRITORIES, 2016



Countries, territories and areas with the highest level of achievement: Argentina,* Austria,* Bangladesh, Belgium, Bosnia and Herzegovina, Bulgaria, Chile, Croatia, Cyprus, Czechia, Estonia, Finland, France, Greece, Ireland, Israel, Italy, Jordan, Latvia, Lithuania, Madagascar, Malta,* Niue, Poland, Serbia, Slovakia, Slovenia, Spain, Turkey, Ukraine, United Kingdom, and West Bank and Gaza Strip.

* Country newly at the highest level since 31 December 2014.

Tobacco excise taxes: simple and effective

Problem

Although raising taxes on tobacco is the most effective way to reduce tobacco use (30), it is also the measure least adopted by Member States. Tobacco excise taxes are either specific (typically levied per stick or pack, or by weight), ad valorem (as a percentage of a base, whether retail price, wholesale price or another value), or mixed (a combination of these).

Tobacco excise tax structures in many countries are quite complex, with different (tiered) taxes that are applied to the same product based on sometimes minor differences in product characteristics. Tobacco companies take whatever actions they can to keep taxes low (213).

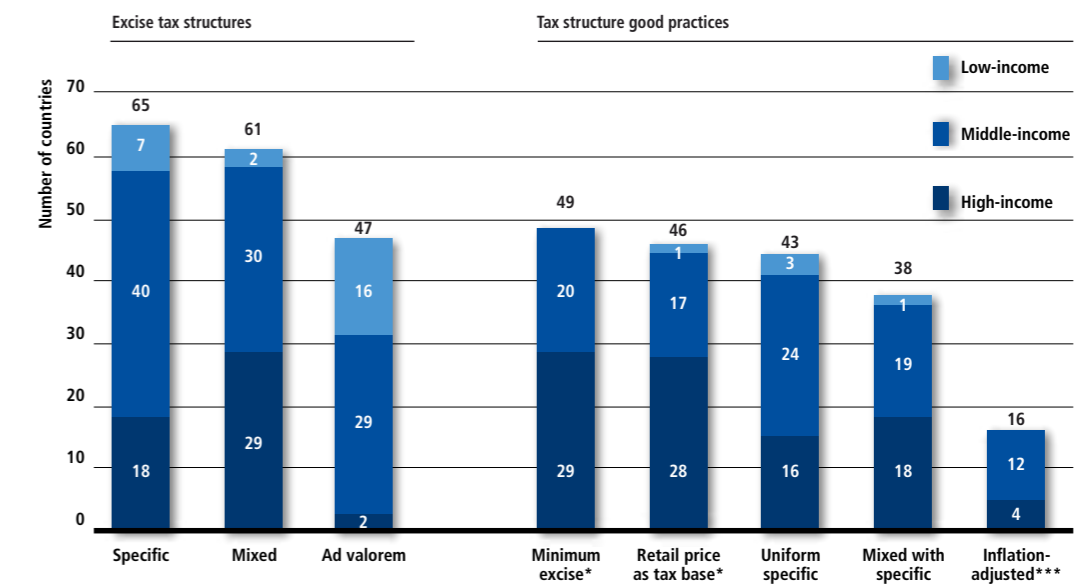
Solution

Effective tobacco tax reforms close loopholes that the tobacco industry exploits. There are several ways in which a government can achieve this.

- **Simple taxes:** A single, high tax that is the same for all tobacco products helps simplify tax administration.
- **Specific taxes:** High specific excise taxes prevent the tobacco industry from effectively marketing lower-priced tobacco products. Uniformly high taxes tend to equalize prices at the retail level. Countries with mixed taxes should increase their reliance on specific taxes.
- **Transparent tax bases:** A high ad valorem tax levied as a percentage of a small tax base is ineffective. Taxes levied on the retail price as base are easier to administer. If a wholesale price is used, tobacco companies will take advantage of this opportunity to undervalue or under-report tobacco production, thus reducing tax revenues.
- **Frequent increases and inflation adjustments:** Taxes need to be frequently adjusted upwards. When specific taxes are left unchanged, inflation erodes their value and tobacco products become relatively cheaper over time.

In 2016, 65 countries had a specific tax system, 61 had a mixed tax system and 47 had a purely ad valorem system. 139 countries imposed a uniform excise tax system; 43 of these levied a uniform specific tax; 38 of the 61 countries with mixed tax systems relied more on specific taxes than on ad valorem taxes; 46 countries (three with purely ad valorem systems and the rest with mixed taxes) used the retail price as the basis of their ad valorem tax. Only 16 countries reported a specific excise tax that is automatically adjusted to inflation. Countries have made progress in simplifying their tax structures and relying more on specific taxes. But in 2016, there were 35 countries that still had complex tiered taxes that levied lower taxes on some categories of tobacco products.

TOBACCO TAX REFORMS MUST EMBRACE BEST PRACTICES



Note: based on 173 countries levying an excise tax in 2016. Excludes countries with no excise, with no data reported in 2016, or where tobacco sales are banned. *108 countries with either ad valorem or mixed tax structures, **61 countries with mixed tax structures and ***126 countries with either specific or mixed tax structures.

increases public support for higher taxes (210). Many countries that have not raised taxes in many years stand to benefit from large tax increases. In other instances, sustained annual tax increases allow governments the opportunity to gather data, understand public reaction to higher taxes and assess the likely effect of future tax hikes (209).

Strong tax administration improves compliance

Higher taxes do not necessarily lead to increases in smuggling and other tax evasion activities; strong enforcement is more important for preventing smuggling than opting not to raise tax rates (30).

Countries should strengthen their tax administration and customs enforcement capacity to prevent smuggling and/or tax evasion (208, 210). Experiences from many countries demonstrate that smuggling and other tax evasion activities can be

successfully addressed, even when tobacco taxes and prices are raised, resulting in reduced tobacco use and increased tax revenues.

High tobacco taxes reduce consumption but are underused

Raising the price of tobacco through increases in tobacco taxes, the most effective way to reduce tobacco use, is the least-achieved MPOWER measure in terms of population protected, with only 10% of the world's population living in countries with sufficiently high taxes in 2016.

There is still only a very small portion of low- and middle-income countries (11 countries, or 8% of low- and middle-income countries) that levy taxes on tobacco at best-practice rates.

Globally, tobacco taxes have remained very low

Since 2008 (the year of the earliest available data), there has been almost no change in the number of countries or population protected by sufficiently high taxes. In 2008, 22 countries had taxes comprising more than 75% of total retail prices, which made taxing tobacco the most adopted MPOWER policy (in terms of number of countries). However, over the following 8 years, this best-practice group grew by only 10 countries, and the population covered increased only slightly, from just under 500 million to 760 million.

There has been no improvement since 2014 in total global population coverage of this measure, which has remained at 10%. The total number of countries with best-practice taxation declined by two (from 34 in 2014 to 32 in 2016).

Since 2014, only one low- or middle-income country (Argentina) joined the

group of countries levying taxes at the highest rates, along with two high-income countries (Austria and Malta). Two low- and middle-income countries (Montenegro and Romania) dropped from the highest taxation group, as did three high-income countries (Hungary, New Zealand and the Seychelles). In the past 2 years, there was very little change in the number of countries in any of the classifications in this measure.

Taxation data from four out of 29 low-income countries (Afghanistan, Democratic People's Republic of Korea, Sierra Leone and Somalia) show they levy no excise

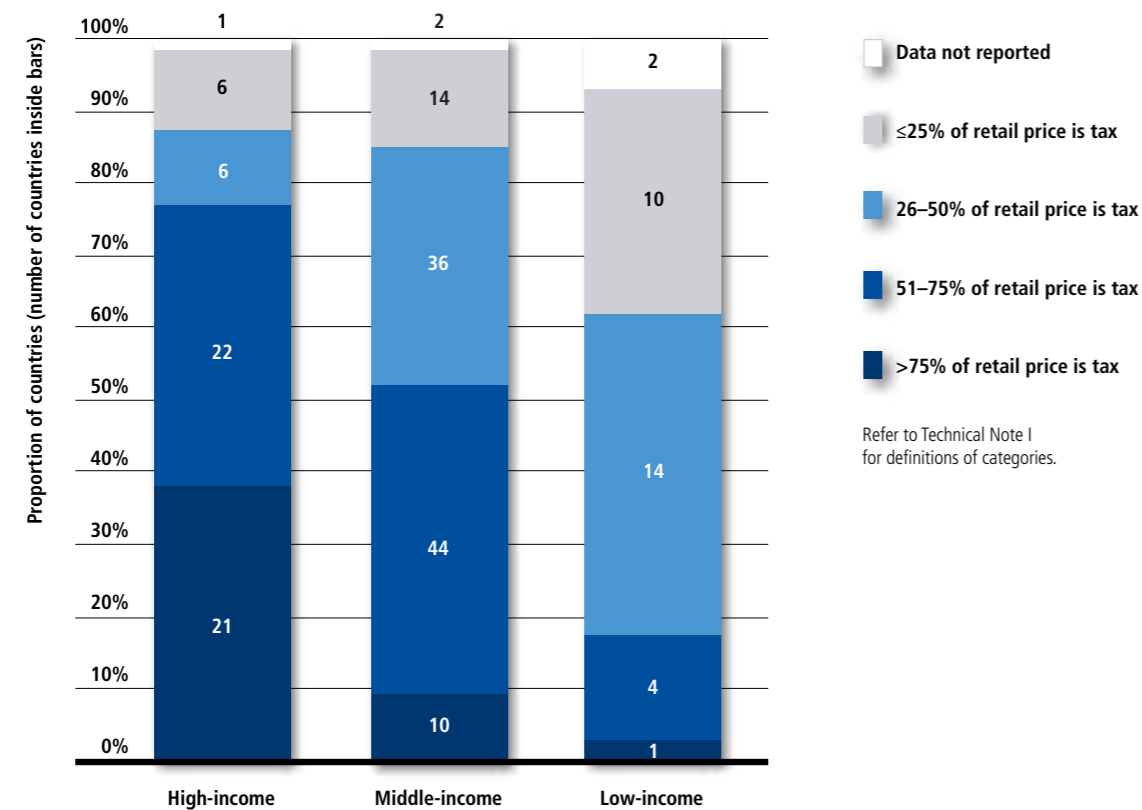
tax (either specific or ad valorem) on cigarettes. Five out of 104 middle-income countries reporting taxation data levy no tobacco excise tax (Libya, Maldives, Marshall Islands, Federated States of Micronesia and Niue), including one in a conflict situation. Six out of 55 high-income countries reporting data (Antigua and Barbuda, Kuwait, Nauru, Oman, Qatar and United Arab Emirates) also levy no tobacco excise tax as at July 2016.

Of the 492 million people (6.7% of the world's population) who live in the world's 100 largest cities, fewer than 90 million (in 18 cities) are covered by sufficiently

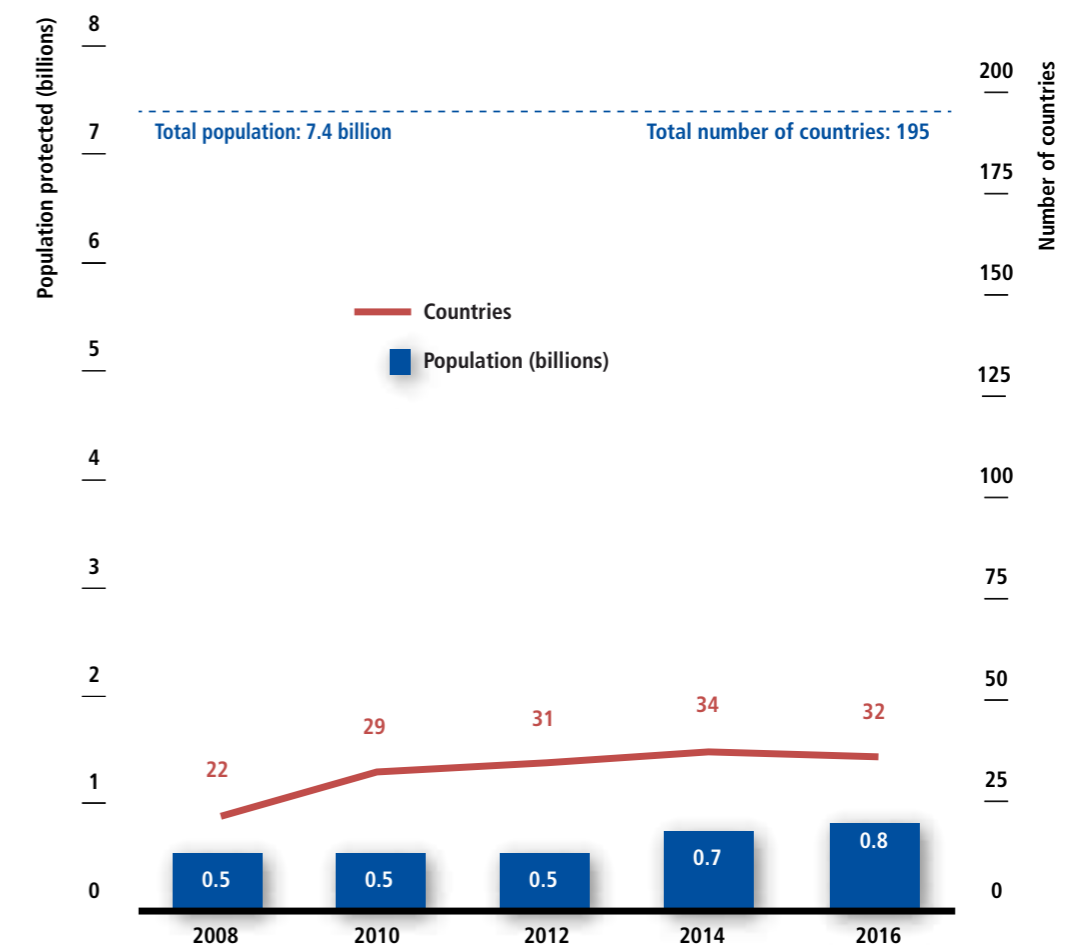
high taxes on cigarette products. In all 18 cities, the same high tax rates operate at a national level. No city has yet independently introduced taxes on tobacco products that have resulted in raising the share of total taxes to over 75% of the retail price of cigarettes.

Raising taxes to increase the price of tobacco products is the most effective and cost-effective means to reduce tobacco use and encourage tobacco users to quit.

TOTAL TAX ON CIGARETTES



PROGRESS IN TOTAL TAX ON CIGARETTES > 75% OF RETAIL PRICE (2008-2016)



Low taxes keep cigarettes cheap in many countries

Price and tax levels continue to be highest in high-income countries, even when adjusting for differences in purchasing power. Cigarette pack prices, total taxes and the tobacco excise component as a share of pack prices are all lower in low- and middle-income countries, with total tax as a proportion of price varying between 31% and 55%.

This proportion reaches over 65% in high-income countries, even though the non-tax portion of cigarette prices is fairly

similar throughout the world. There is a strong case for all countries, and low- and middle-income countries in particular, to increase their excise taxes further, which will have the effect of making cigarettes more expensive (30).

It has been suggested that most low- and middle-income countries should consider tripling their tobacco excise taxes, which would roughly double retail prices and reduce tobacco consumption by about 40%. This may also be the most plausible way to reduce smoking prevalence by the 30% target set by WHO to prevent and control noncommunicable

diseases and achieve the 2030 UN Sustainable Development Goal of reducing noncommunicable disease deaths by 30% (214).

Cigarettes are still too affordable in much of the world

Tobacco products become more affordable if price increases do not keep pace with increases in per capita income and consumer purchasing power over time (30, 208). In any given year, the affordability of cigarettes varies across countries. Changes

in trends in the affordability of cigarettes over a reference period help policy-makers understand the direction in which cigarette prices have moved relative to the population's ability to purchase cigarettes.

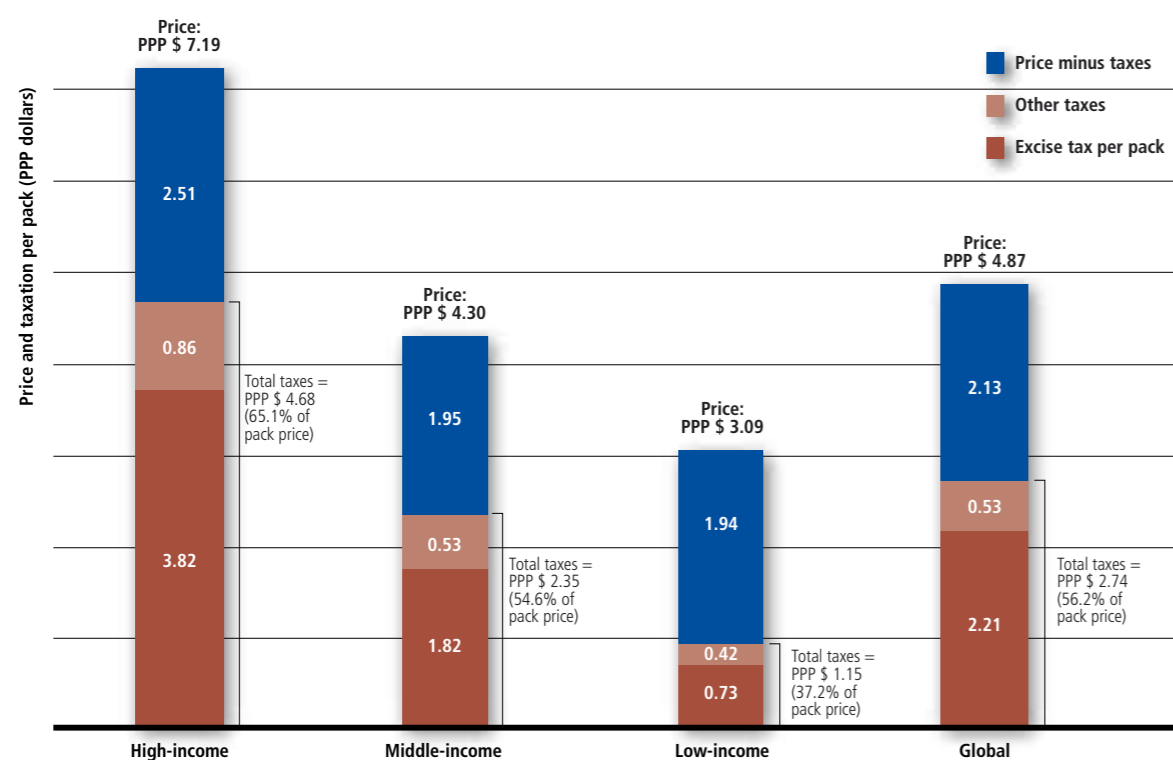
For each year and country for which data was available between 2008 and 2016, WHO calculated the percentage of per capita GDP required to purchase 2000 cigarettes of the most sold brand, and computed the average change in affordability. Using this measure, cigarette price increases outpaced per capita GDP growth in 80 countries and did not significantly differ from per capita GDP

growth in 73 countries, but fell short in 23 countries. Of the 23 countries where cigarettes became more affordable over this period, all were low- and middle-income countries.

Affordability changes over shorter time periods also give countries an indication of where tobacco taxes might need further attention, and illustrate the need for automatic adjustments in taxes to account for changes in national economies. In 35 countries where cigarettes had become less affordable between 2012 and 2014, cigarettes became more affordable between 2014 and 2016. This group

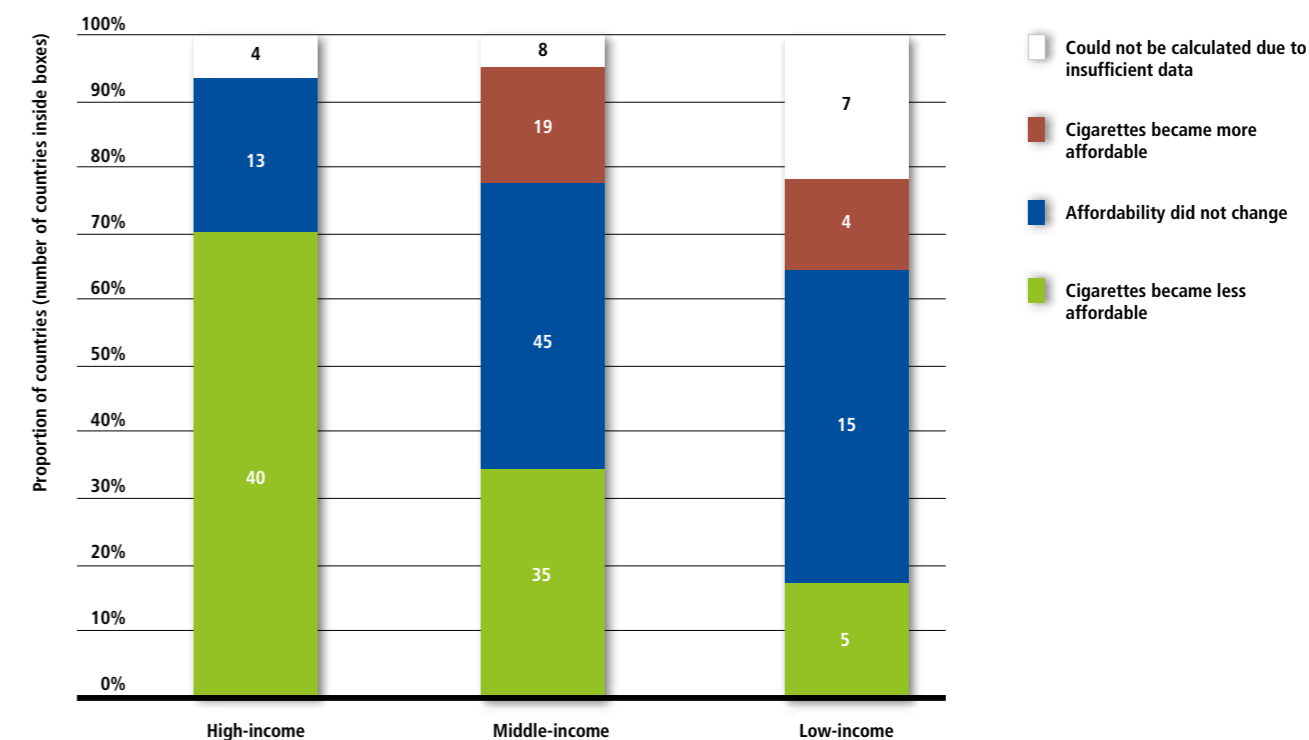
included seven low-income countries (Burundi, Ethiopia, Mozambique, Niger, Senegal, Sierra Leone and United Republic of Tanzania), 13 middle-income countries (Costa Rica, Georgia, Guatemala, India, Lao People's Democratic Republic, Lebanon, Libya, Mauritius, Mexico, Morocco, Tajikistan, Tunisia and Viet Nam) and 15 high-income countries (Antigua and Barbuda, Austria, Croatia, Denmark, France, Iceland, Japan, Latvia, Luxembourg, Poland, Portugal, Singapore, Slovenia, Spain and Sweden).

WEIGHTED AVERAGE RETAIL PRICE AND TAXATION (EXCISE AND TOTAL) OF MOST SOLD BRAND OF CIGARETTES, 2016



Note: Averages are weighted by WHO estimates of the number of current cigarette smokers aged over 15 years in each country in 2016. Prices are expressed in Purchasing Power Parity (PPP) adjusted dollars or international dollars to account for differences in purchasing power across countries. Based on 53 high-income, 100 middle-income and 26 low-income countries with data on prices of the most sold brand, excise and other taxes, and PPP conversion factors. Numbers may not add up due to rounding.

TRENDS IN AFFORDABILITY OF CIGARETTES, 2008–2016



Note: Change in affordability computed as the least squares rate of change in the per capita GDP required to purchase 2000 cigarettes of the most sold brand in local currency in any given year. Please refer to Technical Note III for details of computation.

Argentina and Gambia are successful in raising taxes on tobacco

In 2012, when the share of total taxes of cigarettes was just 40% of the retail price (down from 50% in 2008), **Gambia** had prices among the lowest in both the WHO African Region and globally. But in 2013 Gambia changed its cigarette tax structure, moving from overall weight to number of sticks as the base for the tax, and adopted a plan for annual tax increases, raising the tax to 15 Gambia Dalasi (GMD) per pack in 2016. The tax increases were designed to raise the average price of cigarettes in Gambia to be close to the regional average for Africa (US\$ 1.24/pack, equivalent to GMD 38.86 in 2012 prices) over a 3-year period (215).

The actual increase in prices and revenues exceeded predictions in every year after the tax increase. The share of excise tax also climbed in successive years, to reach 54% of retail price in 2016. Imports of cigarettes declined immediately after the 2014 tax increase, reflecting reduced consumption.

In addition to a specific excise tax and other levies, Gambia also imposes an environmental tax on cigarettes and tobacco products. This tax was raised more than 10-fold between 2013 and 2014 (from 0.2 GMD to 2.10 GMD per pack), resulting in a 15-fold increase in environmental tax revenues.

Gambia implemented a new and more ambitious taxation plan in 2016, which will raise tax per pack by 5 GMD each year until it reaches 30 GMD per pack in 2019. Modelling suggests that the tax share will reach an estimated 63% of the average retail price (and 66% of the most popular brand) by 2019. The country's success in raising taxes was recognized with the WHO Director General's Special Award to the Ministry of Finance and Economic Affairs of the Republic of the Gambia on World No Tobacco Day 2017.

In May 2016, **Argentina** raised its excise tax to join 32 other countries in implementing the MPOWER "best practice" of reaching total taxes of over 75% of the retail price of cigarettes.

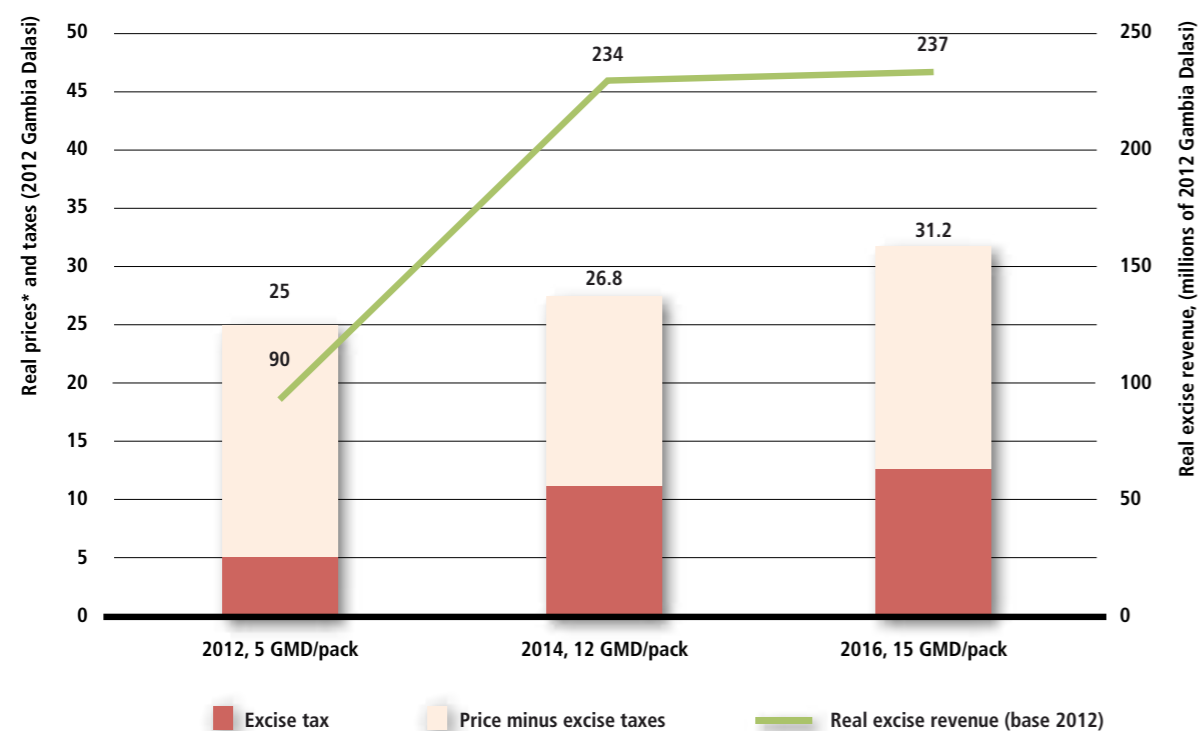
Argentina levies three different consumption taxes on cigarettes: an ad valorem excise tax; a special emergency tobacco tax; and a special tobacco fund tax. The ad valorem excise tax alone accounted for 47% of the retail price of cigarettes in 2014. In that year, the three consumption taxes accounted for 70% of the price of the most sold brand.

Analysis suggested that Argentina had considerable room to further increase its taxes to reduce consumption and raise revenues, with a 10% increase in real prices predicted to reduce cigarette consumption by 2.78% in every quarter (216).

In May 2016, Argentina raised its ad valorem excise tax from 60% to 75% of the price before VAT and other taxes. As a result, the share of the ad valorem component rose from 47% of total retail price in 2014 to 59% in 2016. Retail prices increased 60% during this same period.

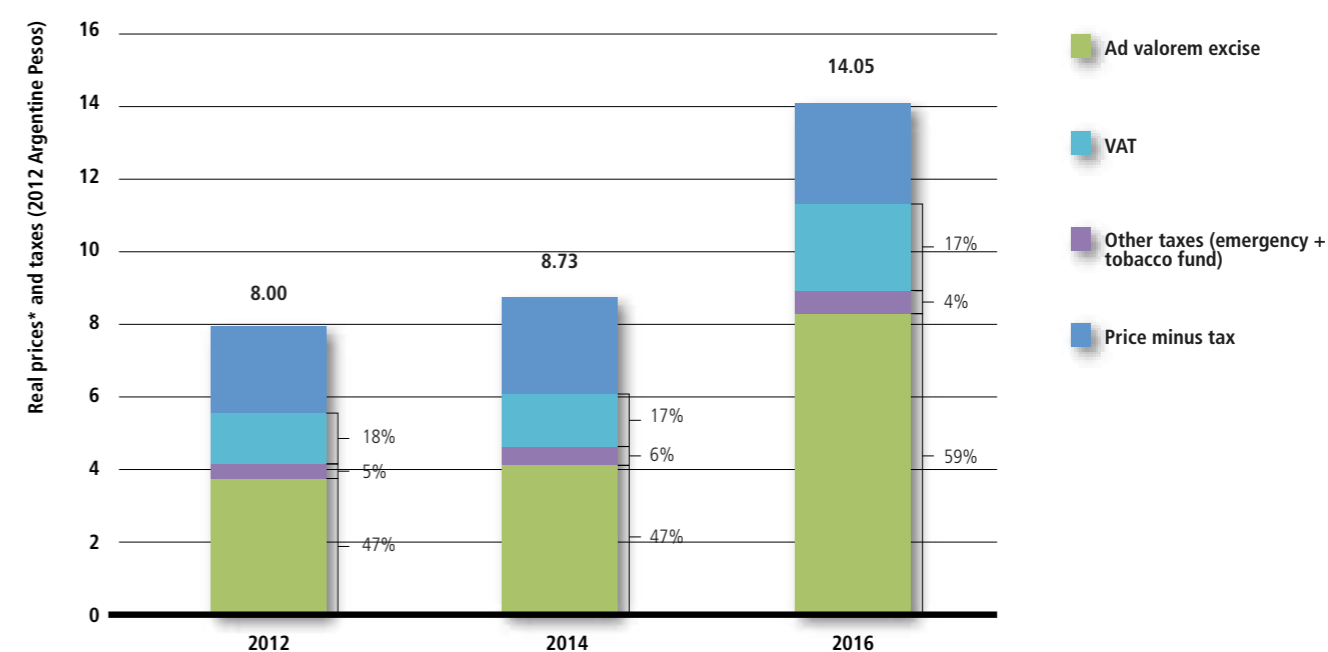
Argentina now levies taxes that represent 80% of the retail price of the most sold cigarette brand, and is now one of two countries (along with Chile) in the WHO Region of the Americas where total taxes make up over 75% of retail price. Countries like Argentina which have made progress on raising tax rates have the opportunity to take additional steps to make cigarettes less affordable and reduce the gap between high and low price brands, by levying higher specific excise taxes.

PRICE AND REVENUE GAINS FOLLOWING EXCISE TAX INCREASES IN GAMBIA



* Note: real prices computed using year-specific July Consumer Price Index obtained from the Gambia Bureau of Statistics.

HIGHER EXCISE TAXES RAISE CIGARETTE PRICES IN ARGENTINA



* Note: real prices computed by deflating 2014 and 2016 prices by a consumer price index obtained from http://www.inflacionverdadera.com/Argentina_inflation.csv. Prices as reported by the country in the 2013, 2015 and 2017 editions of this report.

National action is critical to combat the epidemic of tobacco use

Article 5 of the WHO Framework Convention on Tobacco Control states: "Each Party shall develop, implement, periodically update and review comprehensive multisectoral national tobacco control strategies, plans and programmes ... [and] establish or reinforce and finance a national coordinating mechanism or focal points for tobacco control" (8). In addition, WHO FCTC Article 26.2 indicates that "Each Party shall provide financial support in respect of its national activities intended to achieve the objective of the Convention" (8).

Each country needs a national tobacco control programme to lead tobacco control efforts

The WHO FCTC strongly suggests that every Party should establish and adequately finance a national tobacco control programme (NTCP) or coordination mechanism capable of building the capacity to implement effective and sustainable policies to reverse the tobacco epidemic (8). Despite numerous country-

level successes since entry into force of the WHO FCTC, tobacco use remains a leading global risk factor for illness and death (2); intensified efforts and sustained focus on developing and implementing comprehensive tobacco control policies are critically important (217).

The ministry of health or equivalent government agency should take the lead on strategic tobacco control planning and policy setting, with other ministries or agencies reporting to this centralized

authority (123). Tobacco control programmes should also be integrated into broader health and development agendas (218).

Subnational tobacco control implementation is important

In larger countries or those with federal political systems that divide governing powers between a centralized national authority and constituent regional or

local political units, decentralizing NTCP authority to these subnational levels will allow more flexibility in policy development and programme implementation, and potentially be more effective in reaching all regions and population groups in the country (123).

Since many tobacco control interventions are carried out at regional and community levels even when planning occurs nationally, public health and government leaders at the appropriate subnational levels need adequate resources to build implementation capacity that can be sustained over time (219). NTCPs should also ensure that population subgroups with disproportionately high rates of tobacco use can be effectively reached

by policies and programmes designed to eliminate these social inequities (220).

Civil society must be actively involved in tobacco control

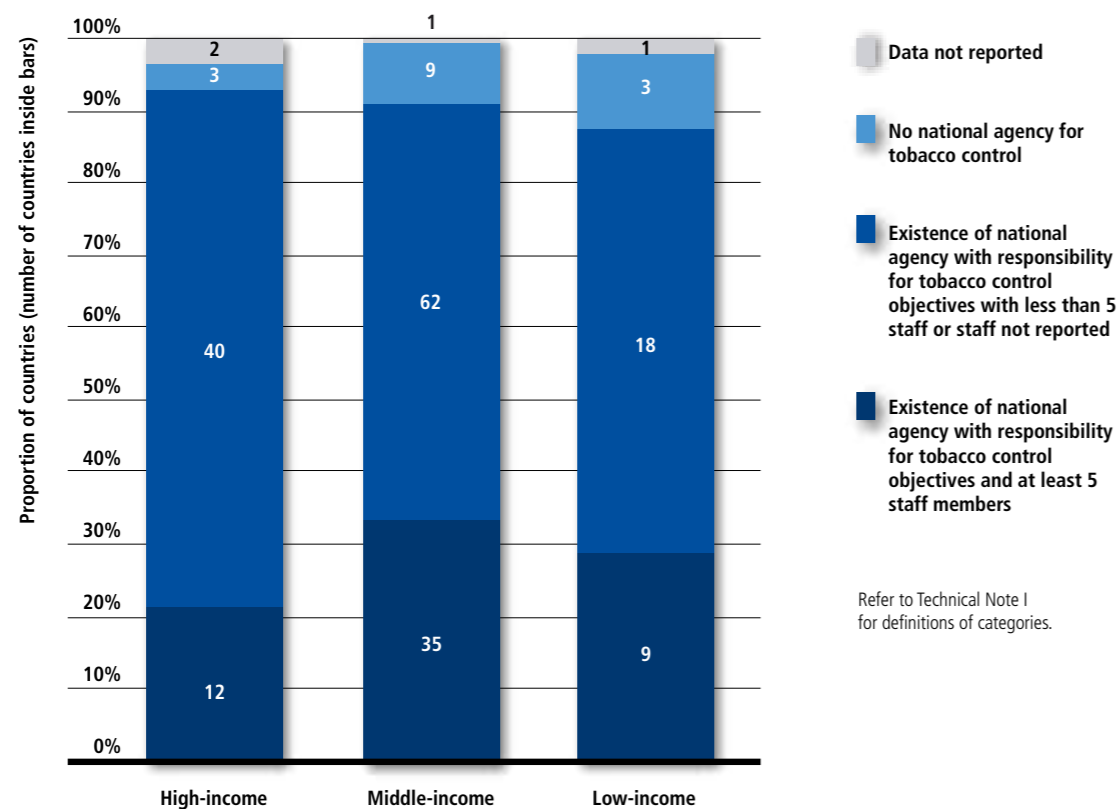
NTCPs require ongoing support from partners within government as well as from all segments of civil society; this specifically excludes the tobacco industry and its allies, which cannot be legitimate stakeholders in tobacco control efforts (219). Continued involvement by legitimate nongovernmental organizations and other civil society groups is essential to maintaining continued progress on national as well as global tobacco control efforts (123).

More countries need a national agency for tobacco control

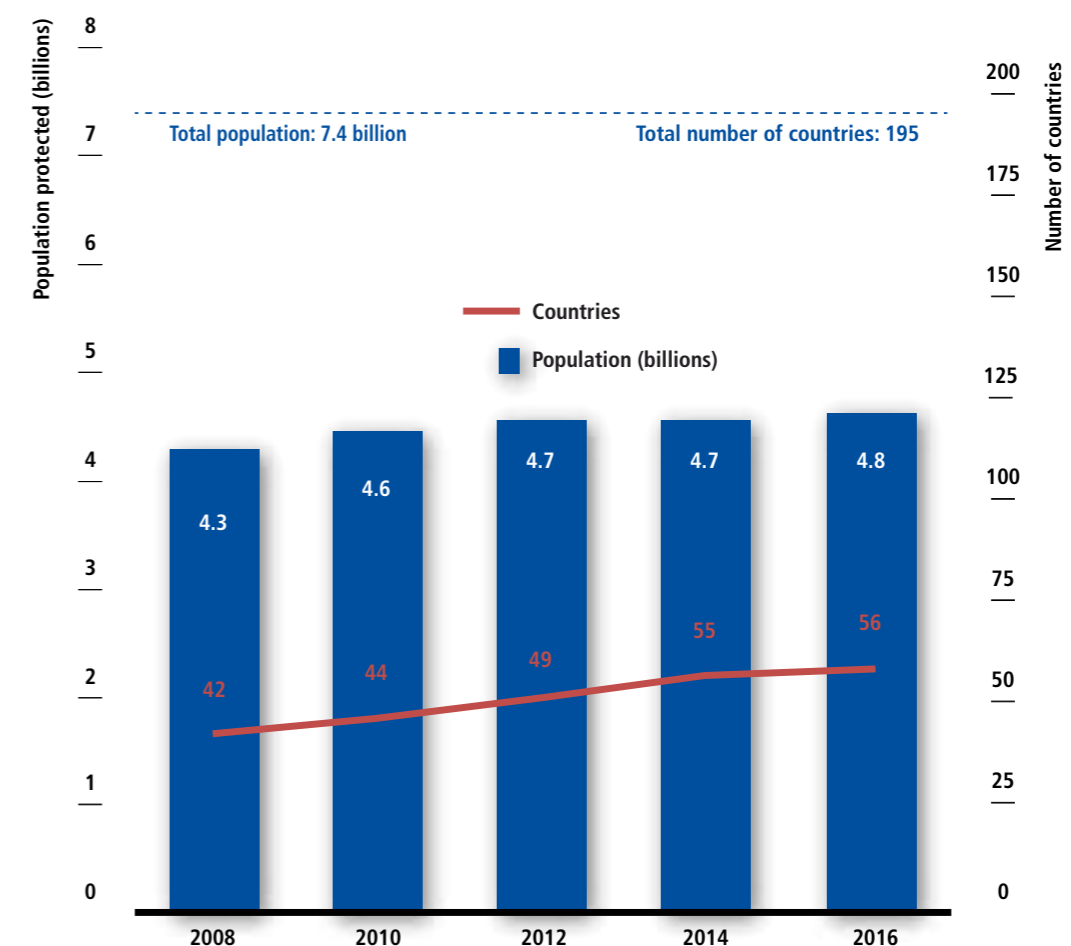
One in every four countries globally has a national agency with responsibility for tobacco control objectives that has at least five full-time equivalent staff members. Because many of these countries have large populations, the result is that almost two thirds of the world's population benefits from such an agency.

An additional 120 countries (with 34% of the world's population) have an official agency working on tobacco control objectives, but with fewer staff or an unknown number of staff. Only 15 countries do not have a national agency

NATIONAL TOBACCO CONTROL PROGRAMMES



PROGRESS IN NATIONAL TOBACCO CONTROL PROGRAMMES (2008–2016)



with national objectives for tobacco control, 12 of which are low- and middle-income countries.

Since 2007, the number of countries with a national agency with responsibility for tobacco control objectives and that has at least five full-time equivalent staff members grew only slightly, from 42 to 56. Note that this measure may underestimate the true extent of NTCPs in countries, because information on tobacco control

programme staffing at the national level is incomplete, with no formal mechanism for collecting this information from countries.

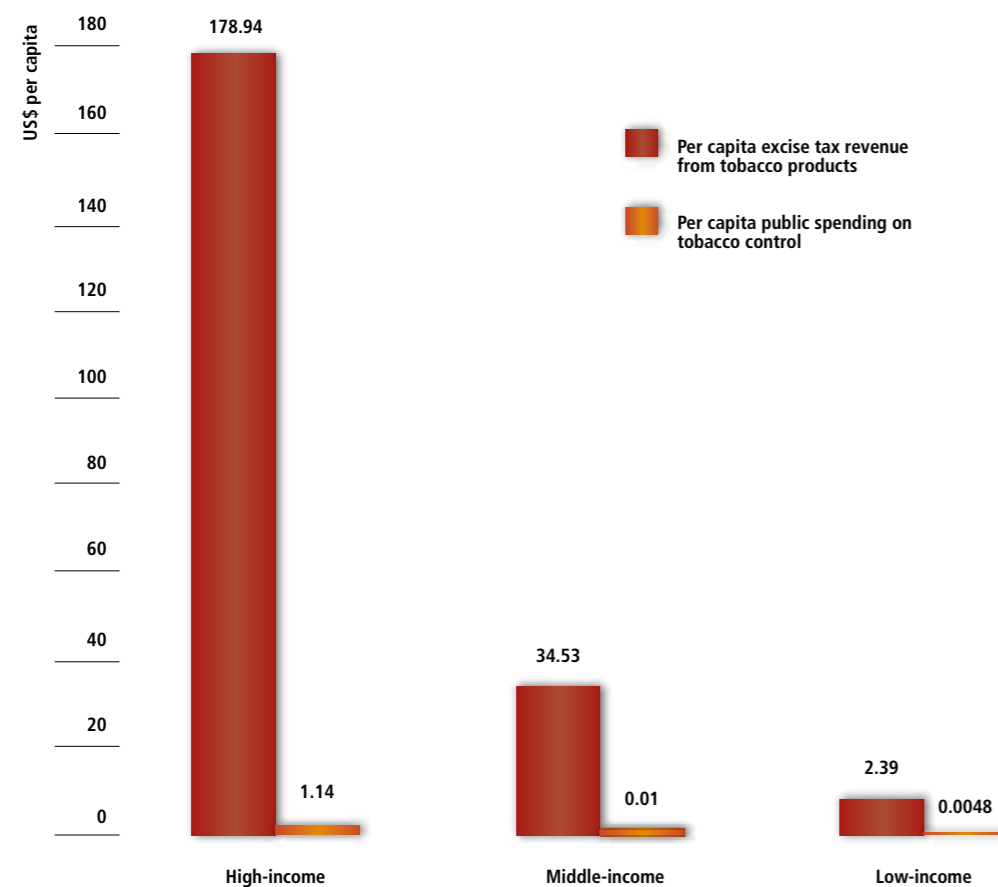
Countries can harness tobacco tax revenues for tobacco control efforts

Governments collect more than US\$ 250 billion in total tobacco excise tax revenues each year worldwide, but spend only

around US 1 billion combined on tobacco control efforts – with 95% of this spent by high-income countries. Low- and middle-income countries could substantially strengthen their national tobacco control efforts by spending even a slightly larger proportion of tax revenues on effective tobacco control programmes.

Tobacco control programmes should be integrated into broader health and development agendas.

TOBACCO CONTROL IS UNDERFUNDED



Note: Based on 87 countries with available data on public spending on tobacco control and tobacco excise revenue data. Expenditure on tobacco control for several of these countries was estimated from figures between 2004 and 2016, adjusting for inflation (average consumer prices, IMF World Economic Outlook 2016). Tax revenues are tobacco product (or cigarette) excise revenue for 2016 and 2015 (or where unavailable, 2014 or 2013 converted to 2016 values for the countries covered). Per capita value is calculated by using 2016 UN forecasted population age 15 years and above.

Uganda's multi-partner approach enables comprehensive tobacco control law

In 2012, Uganda's Ministry of Health called for all tobacco control partners in the country to work together under a single coordinating mechanism – thereby reducing both duplication of efforts and tobacco industry interference. Since then, coordination meetings led by the Ministry of Health, with support from the Centre for Tobacco Control in Africa (CTCA) and participation from other partners (including WHO, Campaign for Tobacco-Free Kids (CTFK) and other International and local NGOs) have been held at least once a year.

The Uganda Tobacco Control Act 2015 (221), which became effective in May 2016, fulfils the country's obligations under the WHO FCTC, which it ratified in 2007. This comprehensive and groundbreaking law secures some of the toughest restrictions on the distribution, sale and use of tobacco products currently in place, and positions Uganda as one of the leaders in tobacco control in the African Region.

Key provisions of the Act require:

- all indoor public places and workplaces (as well as other indoor spaces within 50 metres of these places), and all means of public transport to be completely smoke-free;
- establishment of a Tobacco Control Committee chaired by the Office of the Prime Minister, with the Secretariat at the Ministry of Health;
- a total ban on tobacco advertising, promotion and sponsorship by manufacturers, distributors and sellers, including at point-of-sale;

- a total ban of some tobacco products including shisha (waterpipe tobacco) and smokeless tobacco products such as kuber (flavoured tobacco products that are chewed);
- pictorial warnings covering not less than 65% of each principal tobacco package display area (with regulations to be issued by the Ministry of Health);
- bans on the sale of tobacco products to, and use of tobacco products by, minors under the age of 21 years, as well as bans on tobacco production, supply and distribution by minors;
- a ban on the import, manufacture and sale of tobacco products that do not conform to government standards as stipulated in the regulations;
- prohibitions on unnecessary government interactions with the tobacco industry to protect public health policies from tobacco industry interference.

The process of setting up a strong law in a country where the capacities, both within and outside government, are relatively weak provides an important lesson to similarly situated countries. Uganda's joint effort has ensured a functional coordination mechanism, one common plan and one monitoring and evaluation framework that all partners have agreed upon. The group meets regularly to identify current and future activities needed to advance the tobacco control agenda, including areas where none of the partners is currently providing adequate support.

Governments collect more than US\$ 250 billion in total tobacco excise tax revenues each year worldwide, but spend only around US\$ 1 billion combined on tobacco control – with 95% of this spent by high-income countries.

Conclusion

Substantial progress has been made in implementing the WHO FCTC since its adoption in 2003. Some of these successes are demonstrated by the many countries adopting MPOWER measures at best-practice level, showing that it is possible to effectively address the tobacco epidemic and save lives, regardless of population size or income.

In the decade since MPOWER was introduced and the monitoring of its progress began, there have been substantial advances in the adoption of strong tobacco control policies in all regions of the world and among countries of all income levels. Such achievements in a relatively short time have been impressive – nearly two thirds of the world's people (4.7 billion) are now protected by at least one best-practice

tobacco control measure, 3.6 billion more people than were similarly covered just a decade ago. However, 2.7 billion people still have no protection from the illness, disability and death caused by tobacco use and second-hand smoke exposure, or from associated economic, environmental and social harms.

The progress that has been made so far is encouraging. Successful adoption of the MPOWER measures at best-practice levels has already resulted in decreases in tobacco use that have saved millions of lives and hundreds of billions of dollars, and there is tremendous potential for even larger gains. But while progress in implementing comprehensive tobacco control policies has been steady, it has also not been enough to end the tobacco epidemic. Even though tobacco use has

declined in some countries and regions, population growth means the absolute number of tobacco users is not yet decreasing.

Every country has the capacity to improve tobacco control policy development and enforcement. Even in countries that have some best-practice policies in place, compliance is often insufficient. These countries can better protect their populations by learning from countries that have successfully implemented best-practice tobacco control policies and enforcement mechanisms. Tobacco control is not a quick or easy process, with interference by the tobacco industry presenting barriers to be overcome. While setbacks can be expected, successes by countries that have overcome obstacles show how focusing on factors that prevent

progress can help forge a better path forward and produce real gains.

The focus of this report, Monitoring tobacco use and prevention policies, is the "M" of MPOWER. Tobacco control monitoring systems are critical to understanding and combatting the tobacco epidemic, and serve as the foundation of all other tobacco control policy development, implementation and evaluation. Although the basics of monitoring are within every country's reach, not enough countries have implemented monitoring programmes at best-practice level.

Effective monitoring of tobacco use and prevention policies continues to be insufficiently prioritized, especially by low- and middle-income countries. Although

the resource needs for comprehensive monitoring programmes may be beyond the capacity of some countries, many types of financial, technical and staffing assistance are available from international as well as in-country partners that countries can access to help them strengthen their monitoring efforts.

However, as important and fundamental as monitoring is, it is only a means to an end. Monitoring activities must generate actionable data that can be used by governments and other stakeholders to inform, advocate for and develop effective tobacco control measures. Countries that are able to rapidly collect, analyse and disseminate findings have generally been successful in adopting and enforcing policies that reduce tobacco use and save lives.

All Parties to the WHO FCTC have made specific commitments to implement strong tobacco control policies – including effective monitoring programmes – as an important means of fulfilling their obligation to protect the health of their people. Substantial progress in all MPOWER policy areas over the past decade has achieved real and measurable gains that provide a solid foundation for future progress, but much work remains to be done. More than a billion people worldwide continue to use tobacco products, and the toll of illness, death and other harms will continue to be staggering unless we accelerate the trajectory of progress demonstrated in this report.



References

1. Protocol to eliminate illicit trade in tobacco products. Geneva: World Health Organization; 2013 (http://www.who.int/fctc/protocol/illicit_trade/protocol-publication/en, accessed 25 June 2017).
2. GBD 2015 Risk Factors Collaborators. Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015. *Lancet*. 2016;388:1659–1724. doi: 10.1016/S0140-6736(16)31679-8.
3. Resolution adopted by the General Assembly: political declaration of the High-level Meeting of the General Assembly on the prevention and control of non-communicable diseases. New York: United Nations General Assembly, Sixty-Sixth Session; 2012 (A/RES/66/2; http://www.who.int/nmh/events/un_ncd_summit2011/political_declaration_en.pdf, accessed 25 June 2017).
4. NCD global monitoring framework: ensuring progress on noncommunicable diseases in countries. In: Noncommunicable diseases and mental health [website]. World Health Organization; 2013 (http://www.who.int/nmh/global_monitoring_framework/en, accessed 25 June 2017).
5. WHO Framework Convention on Tobacco Control: note by the Secretariat. Fifty-Sixth World Health Assembly. Geneva: World Health Organization; 2003 (A56/8 Rev. 1; http://apps.who.int/gb/archive/pdf_files/WHA56/ea568r1.pdf, accessed 25 June 2017).
6. Sustainable Development Goal 3: ensure healthy lives and promote well-being for all at all ages. In: Sustainable development knowledge platform [website]. New York: United Nations; 2017 (<https://sustainabledevelopment.un.org/sdg3>, accessed 25 June 2017).
7. Decision: contribution of the Conference of the Parties to achieving the noncommunicable disease global target on the reduction of tobacco use. Geneva: Conference of the Parties to the WHO Framework Convention on Tobacco Control, Seventh Session; 2016 (FCTC/COP7(27); [http://www.who.int/fctc/cop/cop7/FCTC_COP7\(27\)_EN.pdf](http://www.who.int/fctc/cop/cop7/FCTC_COP7(27)_EN.pdf), accessed 25 June 2017).
8. WHO Framework Convention on Tobacco Control. Geneva: World Health Organization; 2003; updated 2004, 2005 (http://www.who.int/tobacco/framework/WHO_FCTC_english.pdf, accessed 25 June 2017).
9. WHO FCTC indicator compendium. Geneva: World Health Organization; 2013 (http://www.who.int/fctc/reporting/who_fctc_indicator_compendium_first_edition.pdf, accessed 25 June 2017).
10. Knowledge hubs and tobacco industry monitoring centres (observatories). In: WHO Framework Convention on Tobacco Control [website]. Geneva: World Health Organization; 2017 (<http://www.who.int/fctc/implementation/knowledge-management/en>, accessed 25 June 2017).
11. Giovino GA, Schooley MW, Zhu BP, Chrismon JH, Tomar SL, Peddicord JP, et al. Surveillance for selected tobacco-use behaviors — United States, 1990–1994. *Morbidity and Mortality Weekly Report*. CDC Surveillance Summary. 1994;43:1–43.
12. Giovino GA, Biener L, Hartman AM, Marcus SE, Schooley MW, Pechacek TF, et al. Monitoring the tobacco use epidemic I. Overview: optimizing measurement to facilitate change. *Preventive Medicine*. 2009;48(1 Suppl):S4–S10. doi: 10.1016/j.ypmed.2008.08.007.
13. Lam TH, Ho SY. Tobacco. In: Detels R, Gulliford M, Karim QA, Tan CC, editors. *Oxford textbook of global public health*, sixth edition. Oxford: Oxford University Press; 2015:1217–1231.
14. Best practices for comprehensive tobacco control programs. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2014 (https://www.cdc.gov/tobacco/stateandcommunity/best_practices/pdfs/2014/comprehensive.pdf, accessed 25 June 2017).
15. The health consequences of smoking — 50 years of progress. A report of the Surgeon General. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2014 (<https://www.surgeongeneral.gov/library/reports/50-years-of-progress/full-report.pdf>, accessed 25 June 2017).
16. Wallace RB. Special populations with higher rates of cigarette smoking: identification and implications for tobacco control. In: Bonnie RJ, Stratton K, Wallace RB, editors. *Ending the tobacco problem: a blueprint for the nation*. Institute of Medicine, Committee on Reducing Tobacco Use. Washington: National Academies Press; 2007:704–716 (<https://www.nap.edu/read/11795/chapter/27>, accessed 25 June 2017).
17. Brownson RC, Chiqui JF, Stamatakis KA. Understanding evidence-based public health policy. *American Journal of Public Health*. 2009;99:1576–1583. doi: 10.2105/AJPH.2008.156224.
18. Collin J. Tobacco control, global health policy and development: towards policy coherence in global governance. *Tobacco Control*. 2012;21:274–280. doi: 10.1136/tobaccocontrol-2011-050418.
19. Institute of Medicine, Committee on Assuring the Health of the Public in the 21st Century. *The governmental public health infrastructure*. In: *The future of the public's health in the 21st century*. Washington: National Academies Press; 2003:96-177 (https://www.ncbi.nlm.nih.gov/books/NBK221239/pdf/Bookshelf_NBK221239.pdf, accessed 25 June 2017).
20. Kickbusch I. Health in all policies: the evolution of the concept of horizontal health governance. In: Kickbusch I, Buckett K, editors. *Implementing health in all policies: Adelaide 2010*. Adelaide: Government of South Australia, Department of Health; 2010:11–23 (<http://www.who.int/sdhconference/resources/implementinghiapadel-sahealth-100622.pdf>, accessed 25 June 2017).
21. Global Tobacco Surveillance System Collaborating Group. *Global Tobacco Surveillance System (GTSS): purpose, production, and potential*. *Journal of School Health*. 2005;75:15–24.
22. Global Adult Tobacco Survey (GATS). In: *Tobacco Free Initiative* [website]. Geneva: World Health Organization; 2017 (<http://www.who.int/tobacco/surveillance/survey/gats/en>, accessed 25 June 2017).
23. Tobacco questions for surveys: a subset of key questions from the Global Adult Tobacco Survey (GATS), second edition. Atlanta: Centers for Disease Control and Prevention; and Geneva: World Health Organization; 2011 (<http://www.who.int/tobacco/publications/surveillance/tqs/en>, accessed 25 June 2017).
24. Peto R, Lopez AD, Boreham J, Thun M, Heath C Jr. Mortality from tobacco in developed countries: indirect estimation from national vital statistics. *Lancet*. 1992;339:1268–1278.
25. Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013–2020. Geneva: World Health Organization; 2013 (http://www.who.int/nmh/events/ncd_action_plan/en, accessed 25 June 2017).
26. Bollyky TJ. Beyond ratification: The future for U.S. engagement on international tobacco control. Washington: Center for Strategic and International Studies; 2010 (https://csis-prod.s3.amazonaws.com/s3fs-public/legacy_files/files/publication/111210_Bollyky_ByndRatifica_WEB.pdf, accessed 25 June 2017).
27. Farrelly MC. Monitoring the tobacco use epidemic V. The environment: factors that influence tobacco use. *Preventive Medicine*. 2009;48(1 Suppl):S35–S43. doi: 10.1016/j.ypmed.2008.10.012.
28. German RR, Lee LM, Horan JM, Milstein RL, Pertowski CA, Waller MN. Guidelines Working Group, Centers for Disease Control and Prevention (CDC). Updated guidelines for evaluating public health surveillance systems: recommendations from the Guidelines Working Group. *Morbidity and Mortality Weekly Review*. Recommendation and Reports. 2001;50(RR-13):1–35.
29. The scientific basis of tobacco product regulation: report of a WHO study group. Geneva: World Health Organization; 2007 (WHO Technical Report Series, no. 945; http://www.who.int/tobacco/global_interaction/tobreg/who_tsr.pdf, accessed 25 June 2017).
30. WHO technical manual on tobacco tax administration. Geneva: World Health Organization; 2010, reprinted 2011 (http://www.who.int/tobacco/publications/tax_administration/en, accessed 25 June 2017).
31. Statement of principles guiding the evaluation of new or modified tobacco products. Geneva: World Health Organization; 2003 (http://www.who.int/tobacco/sactob/recommendations/en/modified_en.pdf, accessed 25 June 2017).
32. Assessing compliance with smoke-free laws: a “how-to” guide for conducting compliance studies, second edition. Baltimore: Johns Hopkins Bloomberg School of Public Health, Institute for Global Tobacco Control; and Washington: Campaign for Tobacco-Free Kids; and Edinburgh: International Union Against Tuberculosis and Lung Disease, Tobacco Control Department; 2013 (http://globaltobaccocontrol.org/sites/default/files/TAPS_Compliance_1_0.pdf, accessed 25 June 2017).
33. Assessing compliance with tobacco advertising, promotion, and sponsorship (TAPS) bans: a “how-to” guide for conducting compliance studies of point of sale advertising and product display; outdoor advertising; and product packaging. Baltimore: Johns Hopkins Bloomberg School of Public Health, Institute for Global Tobacco Control; 2014 (http://globaltobaccocontrol.org/sites/default/files/compliance-guide_v4smallerfile.pdf, accessed 25 June 2017).
34. Eriksen M, Mackay J, Schluger N, Islami F, Drope J. *The tobacco atlas*, fifth edition. Atlanta: American Cancer Society; 2015 (<http://www.tobaccoatlas.org>, accessed 25 June 2017).
35. Novotny TE, Bialous SA, Burt L, Curtis C, da Costa VL, Iqtidar SU, et al. The environmental and health impacts of tobacco agriculture, cigarette manufacture and consumption. *Bulletin of the World Health Organization*. 2015;93:877–880. doi: 10.2471/BLT.15.152744
36. Moreland-Russell S, Combs T, Schroth K, Luke D. Success in the city: the road to implementation of Tobacco 21 and sensible tobacco enforcement in New York City. *Tobacco Control*. 2016;25(Suppl 1):i6–i9. doi: 10.1136/tobaccocontrol-2016-053089.
37. Zwane AP, Zinman J, Van Dusen E, Pariente W, Null C, Miguel E, et al. Being surveyed can change later behavior and related parameter estimates. *Proceedings of the National Academy of Sciences of the United States of America*. 2011;108:1821–1826. doi: 10.1073/pnas.1000776108.
38. WHO Framework Convention on Tobacco Control: guidelines for implementation: Article 5.3, Article 8, Articles 9 and 10, Article 11, Article 12, Article 13, Article 14. Geneva: World Health Organization; 2013 (http://www.who.int/fctc/guidelines/adopted/guidel_2011/en, accessed 25 June 2017).
39. Novotny TE. Irreconcilable conflict: the tobacco industry and the public health challenge of tobacco use. *PLoS Medicine*. 2013;10:e1001457. doi: 10.1371/journal.pmed.1001457.
40. Tobacco industry interference: a global brief. Geneva: World Health Organization; 2012 (http://apps.who.int/iris/bitstream/10665/70894/1/WHO_NMH_TFI_12.1_eng.pdf, accessed 25 June 2017).
41. Technical resource for country implementation of WHO Framework Convention on Tobacco Control Article 5.3 on the protection of public health policies with respect to tobacco control from commercial and other vested interests of the tobacco industry. Geneva: World Health Organization; 2012 (http://www.who.int/tobacco/publications/industry/technical_resource_article_5_3/en, accessed 25 June 2017).
42. Nsubuga P, White ME, Thacker SB, Anderson MA, Blount SB, Broome CV, et al. Public health surveillance: a tool for targeting and monitoring interventions. In: Jamison DT, Breman JG, Measham AR, Alleyne G, Claeson M, Evans DB, et al., editors. *Disease control priorities in developing countries*, second edition. Washington: The World Bank; 2006:997–1015 (<https://openknowledge.worldbank.org/handle/10986/7242>, accessed 25 June 2017).
43. Orton L, Lloyd-Williams F, Taylor-Robinson D, O’Flaherty M, Capewell S. The use of research evidence in public health decision making processes: systematic review. *PLoS One*. 2011;6:e21704. doi: 10.1371/journal.pone.0021704.
44. Samet JM, Yach D, Taylor C, Becker K. Research for effective global tobacco control in the 21st century: report of a working group convened during the 10th World Conference on Tobacco or Health. *Tobacco Control*. 1998;7:72–77.
45. Assessing the national capacity to implement effective tobacco control policies: operational manual on planning, conduct and follow-up of joint national capacity assessments. Geneva: World Health Organization; 2013 (http://www.who.int/tobacco/publications/building_capacity/manual/en, accessed 25 June 2017).
46. Delnevo CD, Bauer UE. Monitoring the tobacco use epidemic III. The host: data sources and methodological challenges. *Preventive Medicine*. 2009;48(1 Suppl):S16–23. doi: 10.1016/j.ypmed.2008.09.008.
47. Carmichael GA. Basic sources, concepts, definitions, and types of measures. In: *Fundamentals of demographic analysis: concepts, measures and methods*. Cham, Switzerland: Springer International Publishing; 2016:1–48.
48. Coggon D, Barker D, Rose G. Longitudinal studies. In: *Epidemiology for the uninitiated*, fifth edition. London: BMJ Publishing Group; 2003:42–45.
49. Doll R, Peto R, Boreham J, Sutherland I. Mortality in relation to smoking: 50 years’ observations on male British doctors. *British Medical Journal*. 2004;328:1519–1527. doi: 10.1136/bmj.38142.554479.AE.
50. What is the ITC Project? In: *International Tobacco Control Policy Evaluation Project* [website]. Waterloo, Ontario: University of Waterloo; 2017 (<http://www.itcproject.org>, accessed 25 June 2017).
51. Fong GT, Cummings KM, Borland R, Hastings G, Hyland A, Giovino GA, et al. The conceptual framework of the International Tobacco Control (ITC) Policy Evaluation Project. *Tobacco Control*. 2006;15 Suppl 3:iii3–iii11. doi: 10.1136/tc.2005.015438.
52. Global youth tobacco survey (GYTS). In: *Tobacco Free Initiative* [website]. Geneva: World Health Organization; 2017 (<http://www.who.int/tobacco/surveillance/gyts/en>, accessed 25 June 2017).
53. Global Youth Tobacco Survey Collaborative Group. Tobacco use among youth: a cross country comparison. *Tobacco Control*. 2002;11:252–270.
54. Palipudi KM, Morton J, Hsia J, Andes L, Asma S, Talley B, et al. The GATS Collaborative Group. Methodology of the Global Adult Tobacco Survey — 2008–2010. *Global Health Promotion*. 2016;23(2 Suppl):3–23. doi: 10.1177/1757975913499800.
55. STEPwise approach to surveillance (STEPS). In: *Chronic diseases and health promotion* [website]. Geneva: World Health Organization; 2017 (<http://www.who.int/chp/steps/en>, accessed 25 June 2017).
56. Riley L, Guthold R, Cowan M, Savin S, Bhatti L, Armstrong T, et al. The World Health Organization STEPwise approach to noncommunicable disease risk-factor surveillance: methods, challenges, and opportunities. *American Journal of Public Health*. 2016;106:74–78. doi: 10.2105/AJPH.2015.302962.
57. Serbia and Montenegro: Living Standards Measurement Survey 2002 (General Population, Wave 1 Panel) and Family Income Support Survey 2002. In: *Central microdata catalog* [website]. Washington: The World Bank; 2011 (<http://microdata.worldbank.org/index.php/catalog/80>, accessed 25 June 2017).

58. Gadalla YM, Adil AM, Mustafa BM, Abdo H. Prevalence of smoking among school adolescents in Khartoum State. *Sudanese Journal of Paediatrics*. 2012;12:44–48.
59. Institute of Medicine. Existing surveillance data sources and systems. In: A nationwide framework for surveillance of cardiovascular and chronic lung diseases. Washington: National Academies Press; 2011:65–89 (https://www.ncbi.nlm.nih.gov/books/NBK83166/pdf/Bookshelf_NBK83166.pdf, accessed 25 June 2017).
60. Data sources for monitoring tobacco control policies. In: IARC handbooks of cancer prevention: tobacco control. Volume 12: Methods for evaluating tobacco control policies. Lyon, France: International Agency for Research on Cancer; 2008:137–151 (http://www.iarc.fr/en/publications/pdfs-online/prev/handbook12/Tobacco_vol12.pdf, accessed 25 June 2017).
61. Glynn MK, Backer LC. Collecting public health surveillance data: creating a surveillance system. In: Lee LM, Teutsch DM, Thacker SB, St Louis ME, editors. Principles and practice of public health surveillance, third edition. New York: Oxford University Press; 2010:44–64.
62. Evaluating a national surveillance system. Geneva: UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance; 2013 (<http://www.who.int/hiv/pub/surveillance/2013package/module7/en>, accessed 25 June 2017).
63. About GTSS. In: Smoking & tobacco use [website]. Atlanta: Centers for Disease Control and Prevention; 2016 (<https://www.cdc.gov/tobacco/global/gtss>, accessed 25 June 2017).
64. GTSS Collaborative Group. The global tobacco surveillance system. *Tobacco Control*. 2006;15 Suppl 2:i1–3. doi: 10.1136/tc.2006.015719.
65. Warren CW, Lee J, Lea V, Goding A, O'Hara B, Carlberg M, et al. Evolution of the Global Tobacco Surveillance System (GTSS) 1998–2008. *Global Health Promotion*. 2009;16(2 Suppl):4–37. doi: 10.1177/1757975909342181.
66. WHO STEPS instrument (core and expanded). Version 3.1. Geneva: World Health Organization; 2014 (http://www.who.int/chp/steps/instrument/STEPS_Instrument_V3.1.pdf, accessed 25 June 2017).
67. Kabwama SN, Kadobera D, Ndyabangi S, Nyamurungi KN, Gravely S, Robertson L, et al. Practices related to tobacco sale, promotion and protection from tobacco smoke exposure in restaurants and bars in Kampala before implementation of the Uganda Tobacco Control Act 2015. *Tobacco Induced Diseases*. 2017;15:24. doi: 10.1186/s12971-017-0129-8.
68. Parikh RM. Come April, expect 85% of your cigarette pack to be covered with graphic warnings. *CNN News* 18; 29 March 2016 (<http://www.news18.com/news/buzz/warning-signs-1222469.html>, accessed 25 June 2017).
69. Press Trust of India. Smoking burns Rs 1.04-trillion hole in economy; WHO for large warnings. *Gurgaon, India: The Economic Times*; 24 March 2016 (<http://economictimes.indiatimes.com/industry/cons-products/tobacco/smoking-burns-rs-1-04-trillion-hole-in-economy-who-for-large-warnings/articleshow/51539159.cms>, accessed 25 June 2017).
70. Knowledge platform. In: Sustainable development [website]. New York: United Nations; 2017 (<https://sustainabledevelopment.un.org>, accessed 25 June 2017).
71. Sachs JD. From Millennium Development Goals to Sustainable Development Goals. *Lancet*. 2012;379:2206–2211. doi: 10.1016/S0140-6736(12)60685-0.
72. Non communicable diseases risk factors: STEPS survey Nepal 2013. Kathmandu: Government of Nepal, Ministry of Health and Population; 2014 (http://www.searo.who.int/nepal/mediacentre/non_communicable_diseases_risk_factors_steps_survey_nepal_2013..pdf, accessed 25 June 2017).
73. 90% graphic health warnings now required on tobacco packs in Nepal. In: News centre [website]. Paris: International Union Against Tuberculosis and Lung Disease; 8 Nov 2014 (<http://www.theunion.org/news-centre/news/90-graphic-health-warnings-now-required-on-tobacco-packs-in-nepal-2>, accessed 25 June 2017).
74. Global Adult Tobacco Survey: India 2009–2010. New Delhi: Government of India, Ministry of Health and Family Welfare; 2010 (<http://www.searo.who.int/tobacco/documents/2010-pub2.pdf>, accessed 25 June 2017).
75. Dutt A. Government's tollfree 'quitline' helped 40% smokers quit tobacco use. *New Delhi: Hindustan Times*, 6 Jan 2017 (<http://www.hindustantimes.com/health-and-fitness/government-s-tollfree-quitline-helped-40-callers-quit-tobacco-use/story-W9hx0LMgzOM5Gw2dld7DaL.html>, accessed 25 June 2017).
76. Global Adult Tobacco Survey. GATS-2 India 2016–17: highlights. New Delhi: World Health Organization Regional Office for South-East Asia; 2017 (http://www.searo.who.int/india/mediacentre/events/2017/gats2_india.pdf, accessed 25 June 2017).
77. Tobacco tax success story: Philippines. Washington: Campaign for Tobacco-Free Kids; 2014 (http://global.tobaccofreekids.org/files/pdfs/en/success_Philippines_en.pdf, accessed 25 June 2017).
78. Kaiser K, Bredenkamp C, Iglesias R. Sin Tax reform in the Philippines: transforming public finance, health, and governance for more inclusive development. Washington: The World Bank; 2016 (<http://documents.worldbank.org/curated/en/638391468480878595/pdf/106777-PUB-PUBLIC-PUDDATE-7-26-2016.pdf>, accessed 25 June 2017).
79. Global Adult Tobacco Survey. Fact sheet: Philippines 2015. Manila: World Health Organization Regional Office for the Western Pacific; 2017 (<http://www.who.int/tobacco/surveillance/survey/gats/fact-sheet-2015.pdf>, accessed 25 June 2017).
80. Birat J-P. Scientific research takes place in silos. *Matériaux & techniques (Materials & techniques)*. 2014;102:501–502 (http://cordis.europa.eu/pub/estep/docs/mt140076-silos--1_en.pdf, accessed 25 June 2017).
81. Who we are. In: About [website]. Washington: Campaign for Tobacco-Free Kids; 2016 (http://www.tobaccofreekids.org/who_we_are, accessed 25 June 2017).
82. What is ACTA. In: About us [website]. Lome, Togo: African Tobacco Control Alliance; 2017 (<http://atca-africa.org/en/about-us/what-is-atca>, accessed 25 June 2017).
83. Sethi N, Laurie GT. Delivering proportionate governance in the era of eHealth: making linkage and privacy work together. *Medical Law International*. 2013;13:168–204.
84. Cappella JN, Maloney E, Ophir Y, Brennan E. Interventions to correct misinformation about tobacco products. *Tobacco Regulatory Science*. 2015;1:186–197.
85. Wallack L, Dorfman L, Jernigan DH, Thembu-Nixon M. The media connection. In: Media advocacy and public health: power for prevention. Newbury Park, CA: Sage Publications; 1993:52–85.
86. Schmidt AM, Ranney LM, Pepper JK, Goldstein AO. Source credibility in tobacco control messaging. *Tobacco Regulatory Science*. 2016;2:31–37.
87. Goldie J, Morrison J. Evaluation. In: Walsh K, editor. *Oxford Textbook of Medical Education*. Oxford: Oxford University Press; 2013:577–588.
88. 2016 global progress report on implementation of the WHO Framework Convention on Tobacco Control. Geneva: World Health Organization; 2016 (http://www.who.int/fctc/reporting/2016_global_progress_report.pdf, accessed 25 June 2017).
89. Tobacco industry interference with tobacco control. Geneva: World Health Organization; 2008 (<http://www.who.int/tobacco/publications/industry/interference/en>, accessed 25 June 2017).
90. The Anti-Tobacco Trade Litigation Fund. In: About us [website]. Washington: Campaign for Tobacco-Free Kids; 2015 (http://global.tobaccofreekids.org/en/about_us/trade_litigation_fund, accessed 25 June 2017).
91. McNeill A, Gravely S, Hitchman SC, Bauld L, Hammond D, Hartmann-Boyce J. Tobacco packaging design for reducing tobacco use. *Cochrane Database Systematic Review*. 2017;4:CD011244. doi: 10.1002/14651858.CD011244.pub2.
92. United Nations Inter-Agency Task Force on the Prevention and Control of Non-communicable Diseases. Russian Federation: draft resolution. New York: United Nations Economic and Social Council; 2017 (E/2017/L.21; http://iogt.org/wp-content/uploads/2017/06/NCDs-Resolution_russia-2017.pdf, accessed 25 June 2017).
93. Transparency in tobacco control process. In: The Fifty-fourth World Health Assembly, Second report of Committee B (Draft). Geneva: World Health Organization; 2001:13 (WHA54.18; http://www.who.int/tobacco/framework/wha_eb/ea5452%5b1%5d.pdf, accessed 25 June 2017).
94. Gilmore AB, Fooks G, Drope J, Bialous SA, Jackson RR. Exposing and addressing tobacco industry conduct in low-income and middle-income countries. *Lancet*. 2015;385:1029–1043. doi: 10.1016/S0140-6736(15)60312-9.
95. Implementation of Article 5.3 of the WHO FCTC: Report by the Convention Secretariat. Geneva: Conference of the Parties to the WHO Framework Convention on Tobacco Control; 2016 (FCTC/COP/7/7; http://www.who.int/fctc/cop/cop7/FCTC_COP_7_7_EN.pdf, accessed 25 June 2017).
96. Fooks GJ, Smith J, Lee K, Holden C. Controlling corporate influence in health policy making? An assessment of the implementation of article 5.3 of the World Health Organization Framework Convention on Tobacco Control. *Global Health*. 2017;13:12. doi: 10.1186/s12992-017-0234-8.
97. Assunta M, Dorotheo EU. SEATCA Tobacco Industry Interference Index: a tool for measuring implementation of WHO Framework Convention on Tobacco Control Article 5.3. *Tobacco Control*. 2016;25: 313–318. doi: 10.1136/tobaccocontrol-2014-051934.
98. Lee S. What hinders implementation of the WHO FCTC Article 5.3? The case of South Korea. *Global Public Health*. 2016;11:1109–1120. doi: 10.1080/17441692.2015.1122074.
99. British American Tobacco Kenya Ltd. v. Ministry of Health. Petition No. 143 of 2015, High Court of Kenya (2016), High Court of Kenya at Nairobi, Constitutional and Human Rights Division, 24 March 2016 (<https://www.tobaccocontrol.org/litigation/decisions/ke-00000000-british-american-tobacco-kenya>, accessed 25 June 2017).
100. British American Tobacco Ltd. v. Ministry of Health. Civil Appeal No. 112 of 2016 (2017), Court of Appeal at Nairobi, 17 February 2017 (<https://www.tobaccocontrol.org/litigation/decisions/ke-20170217-british-american-tobacco-ltd-v>, accessed 25 June 2017).
101. SDG Indicators: Revised list of global Sustainable Development Goal indicators. New York: United Nations; 2017 (<https://unstats.un.org/sdgs/indicators/indicators-list>, accessed 25 June 2017).
102. Patterns of tobacco use, exposure, and health consequences. In: The economics of tobacco and tobacco control. National Cancer Institute Tobacco Control Monograph 21. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; and Geneva: World Health Organization; 2016:23–70 (NIH Publication No. 16-CA-8029A; https://cancercontrol.cancer.gov/brp/tcrb/monographs/21/docs/m21_complete.pdf, accessed 25 June 2017).
103. WHO global report on trends in prevalence of tobacco smoking 2015. Geneva: World Health Organization; 2015 (<http://www.who.int/tobacco/publications/surveillance/reportontrendstobaccosmoking/en>, accessed 25 June 2017).
104. Protection from exposure to second-hand tobacco smoke. Policy recommendations. Geneva: World Health Organization; 2007 (http://www.who.int/tobacco/resources/publications/wntd/2007/pol_recommendations/en, accessed 25 June 2017).
105. Protect people from tobacco smoke: smoke-free environments. Building capacity for tobacco control: training package. Geneva: World Health Organization; and Paris: International Union against Tuberculosis and Lung Disease; 2011 (http://www.who.int/tobacco/publications/building_capacity/training_package/smoke_free/en, accessed 25 June 2017).
106. The health consequences of involuntary exposure to tobacco smoke: a report of the Surgeon General. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2006 (<http://www.surgeongeneral.gov/library/reports/secondhandsmoke/fullreport.pdf>, accessed 25 June 2017).
107. Summary of data reported and evaluation. In: IARC monographs on the evaluation of carcinogenic risks to humans. Volume 83: Tobacco smoke and involuntary smoking. Lyon, France: International Agency for Research on Cancer; 2004:1409–1413 (<http://monographs.iarc.fr/ENG/Monographs/vol83/mono83.pdf>, accessed 25 June 2017).
108. Secondhand smoke: review of evidence since 1998. Update of evidence on health effects of secondhand smoke. London: Department of Health, Scientific Committee on Tobacco and Health; 2004 (http://www.smokefreeengland.co.uk/files/scoth_secondhandsmoke.pdf, accessed 25 June 2017).
109. Fantuzzi G, Aggazzotti G, Righi E, Facchinetti F, Bertucci E, Kanitz S, et al. Preterm delivery and exposure to active and passive smoking during pregnancy: a case-control study from Italy. *Paediatric and Perinatal Epidemiology*. 2007;21:194–200.
110. Fantuzzi G, Vaccaro V, Aggazzotti G, Righi E, Kanitz S, Barbone F, et al. Exposure to active and passive smoking during pregnancy and severe small-for-gestational-age at term. *Journal of Maternal, Fetal and Neonatal Medicine*. 2008;21:643–647. doi: 10.1080/14767050802203744.
111. Anderson HR, Cook DG. Passive smoking and sudden infant death syndrome: review of the epidemiological evidence. *Thorax*. 1997;52:1003–1009.
112. Law MR, Hackshaw AK. Environmental tobacco smoke. *British Medical Bulletin*. 1996;52:22–34.
113. Gilbert SG, Miller E, Martin J, Abulafia L. Scientific and policy statements on environmental agents associated with neurodevelopmental disorders. *Journal of Intellectual & Developmental Disability*. 2010;35:121–128. doi: 10.3109/13668251003717563.
114. Herrmann M, King K, Weitzman M. Prenatal tobacco smoke and postnatal secondhand smoke exposure and child neurodevelopment. *Current Opinion in Pediatrics*. 2008;20:184–190. doi: 10.1097/MOP.0b013e3282f56165.
115. Conference of the Parties to the WHO Framework Convention on Tobacco Control. Second session: first report of committee A (draft). Geneva: World Health Organization; 2007 (A/FCTC/COP/2/17; http://apps.who.int/gb/fctc/PDF/cop2/FCTC_COP2_17P-en.pdf, accessed 25 June 2017).
116. Frazer K, Callinan JE, McHugh J, van Baarsel S, Clarke A, Doherty K, et al. Legislative smoking bans for reducing harms from secondhand smoke exposure, smoking prevalence and tobacco consumption. *Cochrane Database of Systematic Reviews*. 2016;2:CD005992. doi: 10.1002/14651858.CD005992.pub3.
117. Gan Q, Hammond SK, Jiang Y, Yang Y, Hu TW. Effectiveness of a smoke-free policy in lowering secondhand smoke concentrations in offices in China. *Journal of Occupational Environmental Medicine*. 2008;50:570–575. doi: 10.1097/JOM.0b013e3181638640.
118. Cains T, Cannata S, Poulos R, Ferson MJ, Stewart BW. Designated “no smoking” areas provide from partial to no protection from environmental tobacco smoke. *Tobacco Control*. 2004;13:17–22.
119. Ventilation for acceptable indoor air quality. ANSI/ASHRAE Standard 62.1-2016. Atlanta: American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.; 2016.

120. ASHRAE position document on environmental tobacco smoke. Approved by ASHRAE Board of Directors, 22 October 2010. Reaffirmed by ASHRAE Technology Council, 29 June 2016. Atlanta: American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.; 2010 (https://www.ashrae.org/File%20Library/docLib/About%20Us/PositionDocuments/ASHRAE_PD_Environmental_Tobacco_Smoke_2016.pdf, accessed 25 June 2017).
121. Health effects of exposure to environmental tobacco smoke. Final report. Sacramento, CA: California Environmental Protection Agency, Office of Environmental Health Hazard Assessment; 1997 (http://oehha.ca.gov/air/environmental_tobacco/finalets.html, accessed 25 June 2017).
122. Institute for Health and Consumer Protection: activity report 2003. Ispra, Italy: European Commission Joint Research Centre; 2004 (<http://publications.jrc.ec.europa.eu/repository/bitstream/JRC28175/EUR%2021198%20EN.pdf>, accessed 25 June 2017).
123. Building blocks for tobacco control: a handbook. Geneva: World Health Organization, WHO Tobacco Free Initiative; 2004 (http://www.who.int/tobacco/resources/publications/tobaccocontrol_handbook/en, accessed 25 June 2017).
124. Smoke-free policies receive public support. In: Smoking & tobacco use [website]. Atlanta: Centers for Disease Control and Prevention; 2016 (http://www.cdc.gov/tobacco/data_statistics/fact_sheets/secondhand_smoke/protection/public_support, accessed 25 June 2017).
125. IARC handbooks of cancer prevention: tobacco control. Volume 13: Evaluating the effectiveness of smoke-free policies. Lyon, France: International Agency for Research on Cancer; 2009 (<http://www.iarc.fr/en/publications/pdfs-online/prev/handbook13/handbook13.pdf>, accessed 25 June 2017).
126. Smoke-free policies improve health. In: Smoking & tobacco use [website]. Atlanta: Centers for Disease Control and Prevention; 2016 (http://www.cdc.gov/tobacco/data_statistics/fact_sheets/secondhand_smoke/protection/improve_health, accessed 25 June 2017).
127. Knox B. Smoke-free laws do not harm business at restaurants and bars. Washington: Campaign for Tobacco-Free Kids; 2017 (<https://www.tobaccofreekids.org/research/factsheets/pdf/0144.pdf>, accessed 25 June 2017).
128. Smoke-free policies reduce smoking. In: Smoking & tobacco use [website]. Atlanta: Centers for Disease Control and Prevention; 2016 (http://www.cdc.gov/tobacco/data_statistics/fact_sheets/secondhand_smoke/protection/reduce_smoking, accessed 25 June 2017).
129. Smoke-free laws encourage smokers to quit and discourage youth from starting. Washington: Campaign for Tobacco-Free Kids; 2017 (<https://www.tobaccofreekids.org/research/factsheets/pdf/0198.pdf>, accessed 25 June 2017).
130. Cheng KW, Glantz SA, Lightwood JM. Association between smokefree laws and voluntary smokefree-home rules. *American Journal of Preventive Medicine*. 2011;41:566–572. doi: 10.1016/j.amepre.2011.08.014.
131. Borland R, Yong HH, Cummings KM, Hyland A, Anderson S, Fong GT. Determinants and consequences of smoke-free homes: findings from the International Tobacco Control (ITC) Four Country Survey. *Tobacco Control*. 2006;15 Suppl 3:iii42–iii50.
132. Wipfli H, Avila-Tang E, Navas-Acien A, Kim S, Onicescu G, Yuan J, et al.; Famri Homes Study Investigators. Secondhand smoke exposure among women and children: evidence from 31 countries. *American Journal of Public Health*. 2008;98:672–679. doi: 10.2105/AJPH.2007.126631.
133. Borland R, Mullins R, Trotter L, White V. Trends in environmental tobacco smoke restrictions in the home in Victoria, Australia. *Tobacco Control*. 1999;8:266–271.
134. Edwards R, Thomson G, Wilson N, Waa A, Bullen C, O’Dea D, et al. After the smoke has cleared: evaluation of the impact of a new smoke-free law in New Zealand. *Tobacco Control*. 2008;17:e2. doi: 10.1136/tc.2007.020347.
135. Evans DS, Byrne C, Mulcahy M. Smoking in the home: attitudes and perceptions and the impact of the 2004 Irish smoking ban. Castlebar, Ireland: Health Promotion Services; and Department of Public Health, Health Service Executive West; 2006 (<http://ienuc.ie/hse/bitstream/10147/44864/1/6524.pdf>, accessed 25 June 2017).
136. Albers AB, Biener L, Siegel M, Cheng DM, Rigotti N. Household smoking bans and adolescent antismoking attitudes and smoking initiation: findings from a longitudinal study of a Massachusetts youth cohort. *American Journal of Public Health*. 2008;98:1886–1893. doi: 10.2105/AJPH.2007.129320.
137. Strengthening health systems for treating tobacco dependence in primary care. Building capacity for tobacco control: training package. Geneva: World Health Organization; 2013 (http://www.who.int/tobacco/publications/building_capacity/training_package/treating_tobaccodependence/en, accessed 25 June 2017).
138. Beckjord E. mHealth research: current methods, alternative approaches, and issues for discussion. mHealth Monitor. Washington: US Department of Health and Human Services; National Institutes of Health, National Cancer Institute; 13 April 2016 (<https://smokefree.gov/mhealthmonitor/mhealth-research-current-methods-alternative-approaches-and-issues-discussion>, accessed 25 June 2017).
139. mCessation Programme: quit tobacco for life, New Delhi: Government of India, Ministry of Health and Family Welfare; 2015 (https://www.nhp.gov.in/quit-tobacco-about-programme_mtl, accessed 25 June 2017).
140. Electronic nicotine delivery systems and electronic non-nicotine delivery systems (ENDS/ENNS). Geneva: Conference of the Parties to the WHO Framework Convention on Tobacco Control; 2016 (FCTC/COP7/11; http://www.who.int/fctc/cop/cop7/FCTC_COP_7_11_EN.pdf, accessed 25 June 2017).
141. Decision: Electronic nicotine delivery systems and electronic non-nicotine delivery systems. Geneva: Conference of the Parties to the WHO Framework Convention on Tobacco Control; 2016 (FCTC/COP7(9); http://www.who.int/fctc/cop/cop7/FCTC_COP_7_9_EN.pdf, accessed 25 June 2017).
142. Centers for Disease Control and Prevention. Quitting smoking among adults — United States, 2001–2010. *Morbidity and Mortality Weekly Report*. 2011;60:1513–1519.
143. Nayak P, Pechacek TF, Slovic P, Eriksen MP. Regretting ever starting to smoke: results from a 2014 national survey. *International Journal of Environmental Research and Public Health*. 2017;14:E390. doi: 10.3390/ijerph14040390.
144. Institute of Medicine, Committee on Preventing Nicotine Addiction in Children and Youths. The nature of nicotine addiction. In: Lynch BS, Bonnie RJ, editors. Growing up tobacco free: preventing nicotine addiction in children and youths. Washington: National Academy Press; 1994:29–70.
145. Treating tobacco use and dependence: 2008 update. Clinical practice guideline. Rockville, MD: US Department of Health and Human Services, Public Health Service; 2008 (https://www.ahrq.gov/sites/default/files/wysiwyg/professionals/clinicians-providers/guidelines-recommendations/tobacco/clinicians/update/treating_tobacco_use08.pdf, accessed 25 June 2017).
146. The health benefits of smoking cessation: a report of the Surgeon General. Rockville, MD: US Department of Health and Human Services, Public Health Service, Centers for Disease Control, Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 1990 (<https://profiles.nlm.nih.gov/ps/access/NNBBCT.pdf>, accessed 25 June 2017).
147. Cromwell J, Bartosch WJ, Fiore MC, Hasselblad V, Baker T. Cost-effectiveness of the clinical practice recommendations in the AHCPR guideline for smoking cessation. Agency for Health Care Policy and Research. *Journal of the American Medical Association*. 1997;278:1759–1766.
148. Helgason AR, Tomson T, Lund KE, Galanti R, Ahnve S, Gilljam H. Factors related to abstinence in a telephone helpline for smoking cessation. *European Journal of Public Health*. 2004;14:306–310.
149. Stead LF, Perera R, Bullen C, Mant D, Hartmann-Boyce J, Cahill K, et al. Nicotine replacement therapy for smoking cessation. *Cochrane Database of Systematic Reviews*. 2012;11:CD000146. doi: 10.1002/14651858.CD000146.pub4.
150. WHO model list of essential medicines. 20th list. Geneva: World Health Organization; 2017 (http://www.who.int/medicines/publications/essentialmedicines/20th_EML2017.pdf, accessed 25 June 2017).
151. Warn about the dangers of tobacco: packaging and labelling of tobacco products. Building capacity for tobacco control: training package. Geneva: World Health Organization; and Paris: International Union against Tuberculosis and Lung Disease; 2011 (http://www.who.int/tobacco/publications/building_capacity/training_package/warn_dangers_tobacco/en, accessed 25 June 2017).
152. Crosbie E, Sosa P, Glantz SA. Defending strong tobacco packaging and labelling regulations in Uruguay: transnational tobacco control network versus Philip Morris International. *Tobacco Control*. 2017 Mar 23 [Epub ahead of print]. doi: 10.1136/tobaccocontrol-2017-053690.
153. Committee on Economic, Social and Cultural Rights. Report on the twenty-second, twenty-third and twenty-fourth sessions. Economic and social council official records, 2001. Supplement no. 2. New York and Geneva: United Nations; 2001 (E/2001/22, E/C.12/2000/21; <http://www.un.org/documents/ecosoc/docs/2001/e2001-22.pdf>, accessed 25 June 2017).
154. Kozlowski LT, Edwards BQ. “Not safe” is not enough: smokers have a right to know more than there is no safe tobacco product. *Tobacco Control*. 2005;14 Suppl 2:ii3–ii7.
155. Chapman S, Liberman J. Ensuring smokers are adequately informed: reflections on consumer rights, manufacturer responsibilities, and policy implications. *Tobacco Control*. 2005;14 Suppl 2:ii8–ii13.
156. Hammond D, Fong GT, McNeill A, Borland R, Cummings KM. Effectiveness of cigarette warning labels in informing smokers about the risks of smoking: findings from the International Tobacco Control (ITC) Four Country Survey. *Tobacco Control*. 2006;15 Suppl 3:iii19–iii25.
157. Borland R, Hill D. Initial impact of the new Australian tobacco health warnings on knowledge and beliefs. *Tobacco Control*. 1997;6:317–325.
158. Borland R. Tobacco health warnings and smoking related cognitions and behaviours. *Addiction*. 1997;92:1427–1435.
159. Fathelrahman AI, Omar M, Awang R, Borland R, Fong GT, Hammond D, et al. Smokers’ responses toward cigarette pack warning labels in predicting quit intention, stage of change and self-efficacy. *Nicotine & Tobacco Research*. 2009;11:248–253. doi: 10.1093/ntr/ntn029.
160. Hammond D, Fong GT, Zanna MP, Thrasher JF, Borland R. Tobacco denormalization and industry beliefs among smokers from four countries. *American Journal of Preventive Medicine*. 2006;31:225–232.
161. Li Z, Elton-Marshall T, Fong GT, ACK, Feng G, Jiang Y, et al. Noticing cigarette health warnings and support for new health warnings among non-smokers in China: findings from the International Tobacco Control project (ITC) China survey. *BMC Public Health*. 2017;17:476. doi: 10.1186/s12889-017-4397-2.
162. Borland R, Wilson N, Fong GT, Hammond D, Cummings KM, Yong HH, et al. Impact of graphic and text warnings on cigarette packs: findings from four countries over five years. *Tobacco Control*. 2009;18:358–364. doi: 10.1136/tc.2008.028043.
163. Hammond D, Fong GT, Borland R, Cummings KM, McNeill A, Driezen P. Text and graphic warnings on cigarette packages: findings from the International Tobacco Control Four Country Study. *American Journal of Preventive Medicine*. 2007;32:202–209.
164. Kowitz SD, Noar SM, Ranney LM, Goldstein AO. Public attitudes toward larger cigarette pack warnings: results from a nationally representative U.S. sample. *PLoS One*. 2017;12:e0171496. doi: 10.1371/journal.pone.0171496.
165. FCTC Article 11: tobacco warning labels. Evidence and recommendations from the ITC project. Waterloo, Ontario: International Tobacco Control Policy Evaluation Project; 2009 (http://www.itcproject.org/files/ITC_Tobacco_Labels_Bro_V3.pdf, accessed 25 June 2017).
166. Kamyab K, Nonnemaker JM, Farrelly MC. Public support for graphic health warning labels in the U.S. *American Journal of Preventive Medicine*. 2015;48:89–92. doi: 10.1016/j.amepre.2014.07.032.
167. Falcone M, Bansal-Travers M, Sanborn PM, Tang KZ, Strasser AA. Awareness of FDA-mandated cigarette packaging changes among smokers of ‘light’ cigarettes. *Health Education Research*. 2015;30:81–86. doi: 10.1093/her/cyu070.
168. Yong HH, Borland R, Cummings KM, Lindblom EM, Li L, Bansal-Travers M, et al. US smokers’ beliefs, experiences and perceptions of different cigarette variants before and after the FSPTCA ban on misleading descriptors such as “light,” “mild,” or “low”. *Nicotine & Tobacco Research*. 2016;18:2115–2123. doi: 10.1093/ntr/ntw107.
169. Maynard OM, Leonards U, Attwood AS, Bauld L, Hogarth L, Munafò MR. Effects of first exposure to plain cigarette packaging on smoking behaviour and attitudes: a randomised controlled study. *Biomed Central Public Health*. 2015;15:240. doi: 10.1186/s12889-015-1586-8.
170. Yong HH, Borland R, Hammond D, Thrasher JF, Cummings KM, Fong GT. Smokers’ reactions to the new larger health warning labels on plain cigarette packs in Australia: findings from the ITC Australia project. *Tobacco Control*. 2016;25:181–187. doi: 10.1136/tobaccocontrol-2014-051979.
171. Dunlop S, Perez D, Dossaix A, Currow D. Australia’s plain tobacco packs: anticipated and actual responses among adolescents and young adults 2010–2013. *Tobacco Control*. 2016 Nov 15 [Epub ahead of print]. doi: 10.1136/tobaccocontrol-2016-053166.
172. Lempert LK, Glantz S. Packaging colour research by tobacco companies: the pack as a product characteristic. *Tobacco Control*. 2017;26:307–315. doi: 10.1136/tobaccocontrol-2015-052656.
173. Stead M, Moodie C, Angus K, Bauld L, McNeill A, Thomas J, et al. Is consumer response to plain/standardised tobacco packaging consistent with framework convention on tobacco control guidelines? A systematic review of quantitative studies. *PLoS One*. 2013;8:e75919. doi: 10.1371/journal.pone.0075919.
174. Hughes N, Arora M, Grills N. Perceptions and impact of plain packaging of tobacco products in low- and middle-income countries, middle- to upper-income countries and low-income settings in high-income countries: a systematic review of the literature. *BMJ Open*. 2016;6:e010391. doi: 10.1136/bmjopen-2015-010391.
175. Cigarette package health warnings: international status report, fifth edition. Toronto: Canadian Cancer Society; 2016 (<http://www.cancer.ca/~media/cancer.ca/CW/for%20media/Media%20releases/2016/CCS-international-cigarette-packaging-report-2016-English.pdf>, accessed 25 June 2017).

176. Reducing tobacco use: a report of the Surgeon General. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2000 (https://www.cdc.gov/tobacco/data_statistics/sgr/2000/complete_report/pdfs/fullreport.pdf, accessed 25 June 2017).
177. Davis RM, Gilpin EA, Loken B, Viswanath K, Wakefield MA, editors. The role of the media in promoting and reducing tobacco use. Tobacco Control Monograph No. 19. Bethesda, MD: US Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2008 (NIH Pub. No. 07-6242; http://cancercontrol.cancer.gov/brp/tcrb/monographs/19/m19_complete.pdf, accessed 25 June 2017).
178. Siegel M. Mass media antismoking campaigns: a powerful tool for health promotion. *Annals of Internal Medicine*. 1998;129:128–132.
179. McAfee T, Davis KC, Alexander RL Jr, Pechacek TF, Bunnell R. Effect of the first federally funded US antismoking national media campaign. *Lancet*. 2013;382:2003–2011. doi: 10.1016/S0140-6736(13)61686-4.
180. Haghpanahan H, Mackay DF, Pell JP, Bell D, Langley T, Haw S. The impact of TV mass media campaigns on calls to a national quitline and the use of prescribed nicotine replacement therapy: a structural vector autoregression analysis. *Addiction*. 2017;112:1229–1237. doi: 10.1111/add.13793.
181. Murukutla N, Bayly M, Mullin S, Cotter T, Wakefield M; International Anti-SHS Advertisement Rating Study Team. Male smoker and non-smoker responses to television advertisements on the harms of secondhand smoke in China, India and Russia. *Health Education Research*. 2015;30:24–34. doi: 10.1093/her/cyu044.
182. Turk T, Chaturvedi P, Murukutla N, Mallik V, Sinha P, Mullin S. Raw and real: an innovative communication approach to smokeless tobacco control messaging in low- and middle-income countries. *Tobacco Control*. 2016 Jul 18 [Epub ahead of print]. doi: 10.1136/tobaccocontrol-2016-052968.
183. Davis KC, Patel D, Shafer P, Duke J, Glover-Kudon R, Ridgeway W, et al. Association between media doses of the Tips From Former Smokers campaign and cessation behaviors and intentions to quit among cigarette smokers, 2012–2015. *Health Education & Behavior*. 2017 May 1 [Epub ahead of print]. doi: 10.1177/1090198117709316.
184. Bala MM, Strzeszynski L, Topor-Madry R, Cahill K. Mass media interventions for smoking cessation in adults. *Cochrane Database Systematic Review*. 2013;6:CD004704. doi: 10.1002/14651858.CD004704.pub3.
185. Durkin S, Brennan E, Wakefield M. Mass media campaigns to promote smoking cessation among adults: an integrative review. *Tobacco Control*. 2012;21:127–138. doi: 10.1136/tobaccocontrol-2011-050345.
186. Schar E, Gutierrez K, Murphy-Hoefer R, Nelson DE. Tobacco use prevention media campaigns: lessons learned from youth in nine countries. Atlanta: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2006 (<https://stacks.cdc.gov/view/cdc/11400>, accessed 25 June 2017).
187. Dunlop SM, Wakefield M, Kashima Y. The contribution of antismoking advertising to quitting: intra- and interpersonal processes. *Journal of Health Communication*. 2008;13:250–266. doi: 10.1080/10810730801985301.
188. Leshner G, Bollis P, Thomas E. Scare 'em or disgust 'em: the effects of graphic health promotion messages. *Health Communication*. 2009;24:447–458. doi: 10.1080/10410230903023493.
189. Davis KC, Nonnemaker JM, Farrelly MC, Niederdeppe J. Exploring differences in smokers' perceptions of the effectiveness of cessation media messages. *Tobacco Control*. 2011;20:26–33. doi: 10.1136/tc.2009.035568.
190. Nonnemaker JM, Allen JA, Davis KC, Kamyab K, Duke JC, Farrelly MC. The influence of antismoking television advertisements on cessation by race/ethnicity, socioeconomic status, and mental health status. *PLoS One*. 2014;9:e102943. doi: 10.1371/journal.pone.0102943.
191. Sustainable funding mechanisms for population-level tobacco control communication programs. New York: Vital Strategies; 2016 (https://vitalstrategies.org/wp-content/uploads/2017/02/VS_Sustainpaper_Final_light.pdf, accessed 25 June 2017).
192. Wakefield M, Bayly M, Durkin S, Cotter T, Mullin S, Warne C; International Anti-Tobacco Advertisement Rating Study Team. Smokers' responses to television advertisements about the serious harms of tobacco use: pre-testing results from 10 low- to middle-income countries. *Tobacco Control*. 2013;22:24–31. doi: 10.1136/tobaccocontrol-2011-050171.
193. Tobacco advertising, promotion and sponsorship: enforcing comprehensive bans. Building capacity for tobacco control: training package. Geneva: World Health Organization; and Paris: International Union against Tuberculosis and Lung Disease; 2011 (http://www.who.int/tobacco/publications/building_capacity/training_package/adv_promotion_sponsorship/en, accessed 25 June 2017).
194. Cigarette report for 2003. Washington: Federal Trade Commission; 2005 (<https://www.ftc.gov/sites/default/files/documents/reports/annual-report-congress-regarding-operation-hart-scott-rodino-premerger-notification-program-federal/050809cigrpt.pdf>, accessed 25 June 2017).
195. Lee S, Ling PM, Glantz SA. The vector of the tobacco epidemic: tobacco industry practices in low- and middle-income countries. *Cancer Causes and Control*. 2012;23 Suppl 1:117–129. doi: 10.1007/s10552-012-9914-0.
196. Saffer H, Chaloupka F. The effect of tobacco advertising bans on tobacco consumption. *Journal of Health Economics*. 2000;19:1117–1137.
197. Select Committee on Health. Second report. The tobacco industry and the health risks of smoking. London: Government of the United Kingdom; 2000 (<https://www.parliament.uk/pa/cm199900/cmselect/cm-health/272702.htm>, accessed 25 June 2017).
198. Centers for Disease Control and Prevention. Decline in smoking prevalence — New York City, 2002–2006. *Morbidity and Mortality Weekly Report*. 2007;56:604–608.
199. Saffer H. Tobacco advertising and promotion. In: Jha P, Chaloupka FJ, editors. Tobacco control in developing countries. Oxford: Oxford University Press; 2000:215–236 (<http://sitere-sources.worldbank.org/INTETC/Resources/375990-1089904539172/215T0236.PDF>, accessed 25 June 2017).
200. Cohen JE, Planinac L, Lavack A, Robinson D, O'Connor S, DiNardo J. Changes in retail tobacco promotions in a cohort of stores before, during, and after a tobacco product display ban. *American Journal of Public Health*. 2011;101:1879–1881. doi: 10.2105/AJPH.2011.300172.
201. Carter OB, Phan T, Mills BW. Impact of a point-of-sale tobacco display ban on smokers' spontaneous purchases: comparisons from post-purchase interviews before and after the ban in Western Australia. *Tobacco Control*. 2015;24:e81–86. doi: 10.1136/tobaccocontrol-2013-050991.
202. Jaïne R, Russell M, Edwards R, Thomson G. New Zealand tobacco retailers' attitudes to selling tobacco, point-of-sale display bans and other tobacco control measures: a qualitative analysis. *New Zealand Medical Journal*. 2014;127:53–66.
203. Fooks GJ, Gilmore AB, Smith KE, Collin J, Holden C, Lee K. Corporate social responsibility and access to policy élites: an analysis of tobacco industry documents. *PLoS Medicine*. 2011;8:e1001076. doi: 10.1371/journal.pmed.1001076.
204. Grant AS, Kennedy RD, Spires MH, Cohen JE. The development and piloting of a mobile data collection protocol to assess compliance with a national tobacco advertising, promotion, and product display ban at retail venues in the Russian Federation. *Journal of Medical Internet Research*. 2016;5:e120. doi: 10.2196/resprot.5302.
205. Official Gazette: Law on Control of Tobacco. Kabul: Islamic Republic of Afghanistan, Ministry of Justice; 2015 (<https://www.tobaccocontrol.org/files/live/Afghanistan/Afghanistan%20-%202017%20Law.pdf>, accessed 25 June 2017).
206. Savedoff W, Alwang A. The single best health policy in the world: tobacco taxes. Washington: Center for Global Development; 2015 (CGD Policy Paper 062; <https://www.cgdev.org/sites/default/files/CGD-Policy-Paper-62-Savedoff-Alwang-Best-Health-Policy-Tobacco-Tax.pdf>, accessed 25 June 2017).
207. The impact of tax and price on the demand for tobacco products. In: The economics of tobacco and tobacco control. National Cancer Institute Tobacco Control Monograph 21. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; and Geneva: World Health Organization; 2016:110–162 (NIH Publication No. 16-CA-8029A; https://cancercontrol.cancer.gov/brp/tcrb/monographs/21/docs/m21_complete.pdf, accessed 25 June 2017).
208. Marquez, PV. Expanding the global tax base. Taxing to promote public goods: tobacco taxes. Panel session held as part of Winning the Tax Wars: Global Solutions for Developing Countries. Summary report. Washington: World Bank Group Conference; 24 May 2016 (<http://documents.worldbank.org/curated/en/820951485943150390/pdf/112347-WP-web-copy-PUBLIC.pdf>, accessed 25 June 2017).
209. Petit P, Nagy J. Fiscal policy: how to design and enforce tobacco excises? Washington: International Monetary Fund, Fiscal Affairs Department; 2016 (<https://www.imf.org/external/pubs/ft/howtonotes/2016/howtonote1603.pdf>, accessed 25 June 2017).
210. IARC handbooks of cancer prevention: tobacco control. Volume 14: Effectiveness of tax and price policies for tobacco control. Lyon, France: International Agency for Research on Cancer; 2011 (<http://www.iarc.fr/en/publications/pdfs-online/prev/handbook14/handbook14.pdf>, accessed 25 June 2017).
211. Furman J. Six lessons from the U.S. experience with tobacco taxes. Presentation at: Winning the Tax Wars: Global Solutions for Developing Countries. Washington: World Bank Group Conference; 24 May 2016 (<http://pubdocs.worldbank.org/en/252081464893995639/6-VI-Jason-Furman-ppt.pdf>, accessed 25 June 2017).
212. Gallus S, Lugo A, LaVecchia C, Boffetta P, Chaloupka FJ, Colombo P, et al. Pricing Policies and Control of Tobacco in Europe (PPACTE) project: cross-national comparison of smoking prevalence in 18 European countries. *European Journal of Cancer Prevention*. 2014;23:177–185. doi: 10.1097/CEJ.000000000000009.
213. Worldwide news and comment. Philip Morris' 'smoke free world' smokescreen. *Tobacco Control*. 2016;25:612–615. doi: 10.1136/tobaccocontrol-2016-053480.
214. Jha P, Marquez PV, Dutta S. Tripling tobacco taxes: key for achieving the UN Sustainable Development Goals by 2030. Washington: World Bank Group; 24 January 2017 (<http://blogs.worldbank.org/health/role-excise-tax-meeting-sdg>, accessed 25 June 2017).
215. Nargis N, Manneh Y, Krubally B, Jobe B, Ouma AE, Tcha-Kondor N, et al. How effective has tobacco tax increase been in the Gambia? A case study of tobacco control. *BMJ Open*. 2016;6:e010413. doi: 10.1136/bmjopen-2015-010413.
216. Rodríguez-Iglesias G, Schoj V, Chaloupka FJ, Champagne B, González-Rozada M. Analysis of cigarette demand in Argentina: the impact of price changes on consumption and government revenues. *Salud Pública de México*. 2017;59:95–101. doi: 10.21149/7861.
217. GBD 2015 Tobacco Collaborators. Smoking prevalence and attributable disease burden in 195 countries and territories, 1990–2015: a systematic analysis from the Global Burden of Disease Study 2015. *Lancet*. 2017;389:1885–1906. doi: 10.1016/S0140-6736(17)30819-X.
218. Reddy KS, Yadav A, Arora M, Nazar GP. Integrating tobacco control into health and development agendas. *Tobacco Control*. 2012;21:281–286. doi: 10.1136/tobaccocontrol-2011-050419.
219. MPOWER: a policy package to reverse the tobacco epidemic. Geneva: World Health Organization; 2008 (http://www.who.int/tobacco/mpower/mpower_english.pdf, accessed 25 June 2017).
220. David A, Esson K, Perucic A-M, Fitzpatrick C. Tobacco use: equity and social determinants. In: Blas E, Sivasankara Kurup A, editors. Equity, social determinants and public health programmes. Geneva: World Health Organization; 2010:199–217 (http://apps.who.int/iris/bitstream/10665/44289/1/9789241563970_eng.pdf, accessed 25 June 2017).
221. The Tobacco Control Act, 2015. Kampala: Parliament of the Republic of Uganda; 2015 ([http://www.parliament.go.ug/images/stories/acts/2015/Tobacco%20Control%20Act%202015\(2\).pdf](http://www.parliament.go.ug/images/stories/acts/2015/Tobacco%20Control%20Act%202015(2).pdf), accessed 25 June 2017).



TECHNICAL NOTES

- TECHNICAL NOTE I Evaluation of existing policies and compliance
- TECHNICAL NOTE II Smoking prevalence in WHO Member States
- TECHNICAL NOTE III Tobacco taxes in WHO Member States

APPENDICES

- APPENDIX I Regional summary of MPOWER measures
- APPENDIX II Tobacco use prevalence
- APPENDIX III Year of highest level of achievement in selected tobacco control measures
- APPENDIX IV Highest level of achievement in selected tobacco control measures in the 100 biggest cities in the world
- APPENDIX V Status of the WHO Framework Convention on Tobacco Control

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Appendices VI to XII are available online at http://www.who.int/tobacco/global_report/en/

Evaluation of existing policies and compliance

This report provides summary indicators of country achievements for each of the MPOWER measures, and the methodology used to calculate each indicator is described in this Technical Note. To ensure consistency and comparability, the data collection and analysis methodology used in this report are largely based on previous editions of the report. Some details of the methodology employed in earlier reports, however, have been revised and strengthened for the present report. Where revisions have been made, data from previous reports have been re-analysed so that results are comparable across years.

Data sources

Data were collected using the following sources:

- For all areas: official reports from WHO FCTC Parties to the Conference of the Parties (COP) and their accompanying documentation.¹
- For M (monitoring): tobacco prevalence surveys not reported under the COP reporting mechanism were collected mainly through WHO Regional and WHO Country Offices. Technical Note II provides further details.
- For P (protect), W (warn about the dangers of tobacco) and E (enforce bans on tobacco advertising, promotion and sponsorship): original tobacco control legislation (including regulations) adopted in all Member States that relate to smoke-free environments, packaging and labelling measures and tobacco advertising, promotion and sponsorship. In cases where a law had been adopted by 31 December 2016 but had not yet entered into force, the respective law

was assessed and data were reported with an asterisk denoting “provision adopted but not implemented by 31 December 2016”.

- For W (mass media): data on anti-tobacco mass media campaigns were obtained from Member States. In order to avoid unnecessary data collection, WHO conducted a screening for anti-tobacco mass media campaigns in all WHO Country Offices. In countries where potentially eligible mass media campaigns were identified, focal points in each country were contacted for further information on these campaigns, and data on eligible campaigns were gathered and systematically recorded.
- For R (raise taxes on tobacco): the prices of the most sold brand of cigarettes, the cheapest brand and the brand Marlboro were collected through regional data collectors. Information on the taxation of cigarettes (and when possible, most commonly used other smoked and smokeless tobacco products) and revenues from tobacco taxation was collected from ministries of finance. Technical Note III provides the detailed methodology used.

Based on these sources of information, WHO assessed each indicator as of 31 December 2016. Exceptions to this cut-off date were tobacco product prices and taxes (cut-off date 31 July 2016) and anti-tobacco mass media campaigns (cut-off date 30 June 2016).

Data validation

For each country, every data point for which legislation was the source was assessed independently by two different expert staff from two different WHO offices, generally one from WHO

headquarters and the other from the respective WHO Regional Office. Any inconsistencies were reviewed by the two WHO expert staff involved and a third expert staff member not yet involved in the appraisal of the legislation. These were resolved by: (i) checking the original text of the legislation; (ii) trying to obtain consensus from the two expert staff involved in the data collection; and (iii) the decision of the third expert in cases where differences remained. Data were also checked for completeness and logical consistency across variables.

Data sign-off

Final, validated data for each country were sent to the respective government for review and sign-off. To facilitate review by governments, a summary sheet was generated for each country and was sent for review prior to the close of the report database. In cases where national authorities requested data changes, the requests were assessed by WHO expert staff according to both the legislation and the clarification shared by the national authorities, and data were updated or left unchanged. In cases where national authorities explicitly did not agree with the data assessment, this is specifically noted in the appendix tables. Further details about the data processing procedure are available from WHO.

Data analysis

The report provides summary measures or indicators of country achievements for each of the MPOWER measures. It is important to note that data for the report

are based on existing legislation and reflect the status of adopted but not necessarily implemented legislation, as long as the law clearly indicates a date of entry into force and is not undergoing a legal challenge. The summary measures developed for the *WHO report on the global tobacco epidemic, 2017* are the same as those used for the 2015 report.

The report provides analysis of progress made between 2014 and 2016, and between 2007 and 2016 using the latest assessment of the status of measures in 2007 so that the results are comparable across years. For R, the earliest comparable data are 2008 and for mass media, data are available only from 2010. To calculate the change in the percentage of the population covered by each policy or measure over time, population estimates for the year 2016² were used. Using a static year eliminates the effect of population growth when measuring change over time. Indicators from previous years have been recalculated, according to legislation/materials received after the assessment period of the respective report or according to changes in the indicator methodology. All income groups used for this report derive from the World Bank income-group classification published on 1 July 2016 by the World Bank.³ Upper-middle and lower-middle income groups are combined into one group for this report.

When country or population totals for MPOWER measures are referred to collectively in the analysis section of this report, only the implementation of tobacco control policies (smoke-free legislation, cessation services, warning labels, advertising and promotion bans, and tobacco taxes) is included in these totals.

Monitoring of tobacco use and anti-tobacco mass media campaigns are reported separately. When changes in population coverage since 2014 or 2007 are presented, again only implementation of policies is included.

Correction to previously published data

The 2014 data published in the last report were reviewed, and about 3% of data points were corrected. In most cases, review was conducted because legislation or policies were in place at the time of the last report but details were not available to WHO in time for publication.

Monitoring of tobacco use and prevention policies

The strength of a national tobacco surveillance system is assessed by the frequency and periodicity of nationally representative youth and adult surveys in countries. Countries are grouped in the top Monitoring category when all criteria listed below are met for both youth and adult surveys:

- whether a survey was carried out recently;
- whether the survey was representative of the country's population;
- whether a similar survey was repeated within 5 years (periodic); and
- whether the youth and adult populations were surveyed through school-based or household population-based surveys respectively.

Surveys were considered recent if conducted in the past 5 years. For this

report, this means 2011 or later. Surveys were considered representative only if a scientific random sampling method was used to ensure nationally representative results. (Although they provide useful information, subnational surveys or national surveys of specific population groups provide insufficient information to enable tobacco control action for the total population.) Surveys were considered periodic if the same survey or a similar survey was repeated at least once every 5 years. The following definitions were applied for youth and adult surveys:

Youth surveys: school-based surveys of students in grades for boys and girls aged 13–15 years. The questions asked in the surveys should provide indicators that are consistent with those specified in the Global Youth Tobacco Survey questionnaires and manuals.

Adult surveys: household surveys that can provide indicators for adults aged 15 years and over, consistent with those specified in the Global Adult Tobacco Survey questionnaires and manuals.

The groupings for the Monitoring indicator are listed below.

No known data or no recent* data or data that are not both recent* and representative**
Recent* and representative** data for either adults or youth
Recent* and representative** data for both adults and youth
Recent*, representative** and periodic*** data for both adults and youth

* Data from 2011 or later.
 ** Survey sample representative of the national population.
 *** Collected at least every 5 years.

Smoke-free legislation

There is a wide range of places and institutions that can be made smoke-free by law. Smoke-free legislation can take place at the national or subnational level. The report includes data on national legislation as well as legislation in subnational jurisdictions. The assessment of subnational smoke-free legislation includes first-level administrative boundaries (first administrative subdivisions of a country), as determined by the United Nations Geographical Information Working Group. Subnational data reported in Appendix IV only reflect the status of subnational legislation, while provisions covered by national legislation are indicated by an informative note next to the subnational data. In cases where the status of smoke-free legislation is not reported for some or all subnational jurisdictions, we assume the existing national law applies. Legislation was assessed to determine whether smoke-free laws provided for a complete⁴ indoor smoke-free environment at all times, in all the facilities of each of the following eight places:

- health care facilities;
- educational facilities other than universities;
- universities;
- government facilities;
- indoor offices and workplaces not considered in any other category;
- restaurants or facilities that serve mostly food;
- cafés, pubs and bars or facilities that serve mostly beverages;
- public transport.

Groupings for the smoke-free legislation indicator are based on the number of places where indoor smoking is completely prohibited. In addition, countries where at least 90% of the population was covered by complete subnational indoor smoke-free legislation are grouped in the top category.

In a few countries, in order to significantly expand the creation of smoke-free places, including restaurants and bars, it was politically necessary to include exceptions to the law that allowed for the provision of designated smoking rooms (DSRs) with requirements so technically complex and strict that, for practical purposes, few or no establishments are expected to implement them. In order to meet the criteria for “very strict technical requirements”, the legislation had to include at least three out of the six following characteristics (and must include at least criteria 5 or 6).

The designated smoking room must:

1. be a closed indoor environment;
2. be furnished with automatic doors, generally kept closed;
3. be non-transit premises for non-smokers;
4. be furnished with appropriate forced-ventilation mechanical devices;
5. have appropriate installations and functional openings installed, and air must be expelled from the premises;

6. be maintained, with reference to surrounding areas, in a depression not lower than 5 Pascal.

The few countries whose laws provide for DSRs with very strict technical requirements for five or more of the assessed public places have not been categorized in the analyses for this section because their smoke-free legislation substantially departs from the recommendations of WHO FCTC Article 8 guidelines, and it has been difficult to obtain evidence indicating that the law resulted in the intended very low number of DSRs in these countries. The countries whose laws provide for DSRs with very strict technical requirements for fewer than five of the assessed public places have been grouped according to the number of completely smoke-free public places. The groupings for the smoke-free legislation indicator are listed below.

Data not reported/not categorized
Complete absence of ban, or up to two public places completely smoke-free
Three to five public places completely smoke-free
Six to seven public places completely smoke-free
All public places completely smoke-free (or at least 90% of the population covered by complete subnational smoke-free legislation)

In addition to the data used for the above groupings of the smoke-free legislation indicator, other related data such as information on fines and enforcement were collected and are reported in Appendix VI.

Tobacco dependence treatment

The indicator of achievement in treatment for tobacco dependence is based on whether the country has available:

- nicotine replacement therapy (NRT);
- non-NRT tobacco dependence treatment;
- reimbursement for any of the above; and
- a national toll-free quit line.

Despite the low cost of quit lines, few low- or middle-income countries have implemented such programmes. Thus, national toll-free quit lines are included as a qualification only for the highest category. Reimbursement for tobacco dependence treatment is considered only for the top two categories to take restricted national budgets of many lower-income countries into consideration.

The top three categories reflect varying levels of government commitment to the provision of nicotine replacement therapy and cessation support.

The groupings for the Tobacco dependence treatment indicator are listed below.

Data not reported
None
NRT* and/or some cessation services** (neither cost-covered)
NRT* and/or some cessation services** (at least one of which is cost-covered)
National quit line, and both NRT* and some cessation services** (cost-covered)

* Nicotine replacement therapy.
 ** Smoking cessation support available in any of the following places: health clinics or other primary care facilities, hospitals, office of a health professional, the community, or other facilities.

In addition to data used for the grouping of the Tobacco dependence treatment indicator, other related data such as information on countries’ essential medicines lists, etc. were collected and are reported in Appendix IV.

Warning labels on tobacco packaging

The section of the report that assesses each country’s legislation on health warnings includes the following information about cigarette package warnings:

- whether specific health warnings are mandated;
- the mandated size of the warnings, as a percentage of the front and back of the cigarette package;
- whether the warnings appear on individual packages as well as on any outside packaging and labelling used in retail sale;
- whether the warnings describe specific harmful effects of tobacco use on health;
- whether the warnings are large, clear, visible and legible (e.g. specific colours and font styles and sizes are mandated);
- whether the warnings rotate;
- whether the warnings are written in (all) the principal language(s) of the country;
- whether the warnings include pictures or pictograms.

The size of the warnings on both the front and back of the cigarette pack were averaged to calculate the percentage of the total pack surface area covered by warnings. This information was combined with the warning characteristics to construct the groupings for the health warnings indicator.

The groupings for the health warnings indicator are listed below.

Data not reported
No warnings or small warnings ¹
Medium size warnings ² missing some ³ appropriate characteristics ⁴ OR large warnings ⁵ missing many ⁶ appropriate characteristics ⁴
Medium size warnings ² with all appropriate characteristics ⁴ OR large warnings ⁵ missing some ³ appropriate characteristics ⁴
Large warnings ⁵ with all appropriate characteristics ⁴

¹ Average of front and back of package is less than 30%.
² Average of front and back of package is between 30 and 49%.
³ One to three.
⁴ Appropriate characteristics:
 • specific health warnings mandated;
 • appearing on individual packages as well as on any outside packaging and labelling used in retail sale;
 • describing specific harmful effects of tobacco use on health;
 • are large, clear, visible and legible (e.g. specific colours and font style and sizes are mandated);
 • rotate;
 • include pictures or pictograms;
 • written in (all) the principal language(s) of the country.
⁵ Average of front and back of the package is at least 50%.
⁶ Four or more.

In addition to the data used for the grouping of the health warnings indicator, other related data such as the appearance of the quit line number, etc. were collected and are reported in Appendix VI.

Anti-tobacco mass media campaigns

Countries undertake communication activities for many reasons, including improving public relations, creating attention for an issue, building support for public policies, and prompting behaviour change. Anti-tobacco communication campaigns, which are a core tobacco control intervention, must have specified

features in order to be minimally effective: they must be of sufficient duration and must be designed to effectively support tobacco control priorities, including increasing knowledge, changing social norms, promoting cessation, preventing tobacco uptake, and increasing support for good tobacco control policies.

With this in mind, and consistent with the definition of “anti-tobacco mass media campaigns” in the last report, only mass media campaigns that were: (i) designed to support tobacco control; (ii) at least 3 weeks in duration and (iii) implemented between 1 July 2014 and 30 June 2016 were considered eligible for analysis. For the sake of logistical feasibility and cross-country comparability, only national-level campaigns were considered eligible. Consistent with the last report and to enable greater accuracy, materials from campaigns had to be submitted and verified based on the eligibility criteria for all countries.

Eligible campaigns were assessed according to the following characteristics, which signify the use of a comprehensive communication approach:

1. The campaign was part of a comprehensive tobacco control programme.
2. Before the campaign, research was undertaken or reviewed to gain a thorough understanding of the target audience.
3. Campaign communication materials were pre-tested with the target audience and refined in line with campaign objectives.
4. Air time (radio, television) and/or placement (billboards, print advertising, etc.) were obtained by purchasing or securing it using either the organization’s own internal resources or an external media planner or agency (this information indicates whether the campaign adopted a thorough media

planning and buying process to effectively and efficiently reach its target audience).

5. The implementing agency worked with journalists to gain publicity or news coverage for the campaign.
6. Process evaluation was undertaken to assess how effectively the campaign had been implemented.
7. An outcome evaluation process was implemented to assess campaign impact.
8. The campaign was aired on television and/or radio.

The groupings for the Mass media campaigns indicator are listed below.

	Data not reported
	No national campaign conducted between July 2014 and June 2016 with a duration of at least 3 weeks
	Campaign conducted with one to four appropriate characteristics
	Campaign conducted with five to six appropriate characteristics
	Campaign conducted with at least seven appropriate characteristics including airing on television and/or radio

Bans on advertising, promotion and sponsorship

The report includes data on legislation in national as well as subnational jurisdictions. The assessment of subnational legislation on advertising, promotion and sponsorship bans includes first-level administrative boundaries (first administrative subdivisions of a country), as determined by the United Nations Geographical Information Working Group. Subnational data reported in Appendix VI only reflect the status of subnational legislation, while provisions covered by national legislation are indicated by an informative note next to the subnational data. In cases where the status of advertising, promotion and sponsorship

legislation is not reported for some or all subnational jurisdictions, we assume the existing national law applies.

Country-level achievements in banning tobacco advertising, promotion and sponsorship were assessed based on whether the bans covered the following types of advertising:

- national television and radio;
- local magazines and newspapers;
- billboards and outdoor advertising;
- point of sale (indoor);
- free distribution of tobacco products in the mail or through other means;
- promotional discounts;
- non-tobacco products identified with tobacco brand names (brand stretching);⁵
- brand names of non-tobacco products used for tobacco products (brand-sharing);⁶
- appearance of tobacco brands (product placement) or tobacco products in television and/or films;
- sponsorship (contributions and/or publicity of contributions).

The first four types of advertising listed are considered “direct” advertising, and the remaining six are considered “indirect” advertising. Complete bans on tobacco advertising, promotion and sponsorship usually start with bans on direct advertising in national media and progress to bans on indirect advertising as well as promotion and sponsorship.

Bans that cover national television, radio and print media were used as the basic criteria for the two lowest groups, and the remaining groups were constructed based on how comprehensively the law covers bans of other forms of direct and indirect advertising included in the questionnaire. In cases where the law did not explicitly address cross-border advertising, it was

interpreted that advertising at both domestic and international levels was covered by the ban only if advertising was totally banned at national level.

The groupings for the bans on advertising, promotion and sponsorship indicator are listed in the next column. In addition, countries where at least 90% of the population was covered by subnational legislation completely banning tobacco advertising, promotion and sponsorship are grouped in the top category.

	Data not reported
	Complete absence of ban, or ban that does not cover national television (TV), radio and print media
	Ban on national TV, radio and print media only
	Ban on national TV, radio and print media as well as on some (but not all) other forms of direct* and/or indirect** advertising
	Ban on all forms of direct* and indirect** advertising (or at least 90% of the population covered by subnational legislation completely banning tobacco advertising, promotion and sponsorship)

- * Direct advertising bans:
- national television and radio;
 - local magazines and newspapers;
 - billboards and outdoor advertising;
 - point of sale (indoor).
- ** Indirect advertising bans:
- free distribution of tobacco products in the mail or through other means;
 - promotional discounts;
 - non-tobacco products identified with tobacco brand names (brand stretching);
 - brand names of non-tobacco products used for tobacco products (brand sharing);
 - appearance of tobacco brands (product placement) or tobacco products in television and/or films;
 - sponsorship (contributions and/or publicity of contributions).

In addition to the data used for the grouping of the bans on advertising, promotion and sponsorship indicator, other related data, such as bans on internet sales or on display of tobacco products at points

of sale were collected and are reported in Appendix VI.

Tobacco taxes

Countries are grouped according to the percentage contribution of all tobacco taxes to the retail price of a pack of 20 of the most popular brand of cigarettes. Taxes assessed include excise tax, value added tax (sometimes called “VAT”), import duty (when the cigarettes were imported) and any other taxes levied. In the case of countries where different levels of taxes applied to cigarettes are based on length, quantity produced, or type (e.g. filter vs. non-filter), only the rate that applied to the most popular brand is used in the calculation.

Given the lack of information on country and brand-specific profit margins of retailers and wholesalers, their profits were assumed to be zero (unless provided by the national data collector).

The groupings for the Tobacco tax indicator are listed below. Please refer to Technical Note III for more details.

	Data not reported
	≤ 25% of retail price is tax
	26–50% of retail price is tax
	51–75% of retail price is tax
	>75% of retail price is tax

Trend in affordability of the most sold brand of cigarettes

The affordability of cigarettes was computed as the percentage of per capita GDP required to purchase 2000 cigarettes of the most popular brand recorded in all past editions of this report (2008 to

present). The least-squares annual growth rate of affordability was computed by fitting a linear regression trend line to the logarithmic values of the affordability measure.

The groupings for the affordability indicator are listed below. Please refer to Technical Note III for more details.

YES	Cigarettes less affordable – per capita GDP needed to buy 2000 cigarettes of the most sold brand increased on average between 2008 and 2016
NO	Cigarettes more affordable – per capita GDP needed to buy 2000 cigarettes of the most sold brand declined on average between 2008 and 2016
↔	No trend change in affordability of cigarettes since 2008

National tobacco control programmes

Classification of countries’ national tobacco control programmes is based on the existence of a national agency with responsibility for tobacco control objectives. Countries with at least five full-time equivalent staff members working at the national agency with responsibility for tobacco control meet the criteria for the highest group.

The groupings for the National tobacco control programme indicator are listed below.

Data not reported
No national agency for tobacco control
Existence of national agency with responsibility for tobacco control objectives with no or fewer than five full-time equivalent staff members
Existence of national agency with responsibility for tobacco control objectives and at least five full-time equivalent staff members

Compliance assessment

Compliance with national and comprehensive subnational smoke-free legislation as well as with advertising, promotion and sponsorship bans was assessed by up to five national experts, who assessed the compliance in these two areas as “minimal”, “moderate” or “high”. These five experts were selected according to the following criteria:

- person in charge of tobacco prevention in the country’s ministry of health, or the most senior government official in charge of tobacco control or tobacco-related conditions;
- the head of a prominent nongovernmental organization dedicated to tobacco control;
- a health professional (e.g. physician, nurse, pharmacist or dentist) specializing in tobacco-related conditions;
- a staff member of a public health university department;
- the tobacco control focal point of the WHO Country Office.

The experts performed their assessments independently. Average scores were calculated by WHO from the five individual assessments by assigning two points for

highly enforced policies, one point for moderately enforced policies and no points for minimally enforced policies, with a potential minimum of 0 and maximum of 10 points in total from these five experts.

The compliance assessment was obtained for legislation adopted by 1 April 2016. For countries with more recent legislation, compliance data are reported as “not applicable”. Compliance with smoke-free legislation was not assessed in case the law provides for DSRs with very strict technical requirements.

The country-reported answers are listed in Appendix VI. Appendix I summarizes this information. Compliance scores are represented separately from the grouping (i.e. compliance is not included in the calculation of the grouping categories).

- 1 Parties report on the implementation of the WHO Framework Convention on Tobacco Control according to Article 21. The objective of reporting is to enable Parties to learn from each other’s experience in implementing the WHO FCTC. Parties’ reports are also the basis for review by the COP of the implementation of the WHO FCTC. Parties submit their initial report 2 years after entry into force of the WHO FCTC for that Party, and then every subsequent 3 years, through the reporting instrument adopted by COP. Since 2012, all Parties report at the same time, once every 2 years. For more information please refer to <http://www.who.int/fctc/reporting/en>
- 2 United Nations Department of Economic and Social Affairs, Population Division in *World population prospects: the 2015 revision* (median fertility projection for the year 2016). For more information please refer to <http://esa.un.org/wpp>.
- 3 The World Bank: World development indicators 2016. For more information please refer to <https://blogs.worldbank.org/opendata/new-country-classifications-2016>
- 4 “Complete” is used in this report to mean that smoking is not permitted, with no exemptions allowed, except in residences and indoor places that serve as equivalents to long-term residential facilities, such as prisons and long-term health and social care facilities such as psychiatric units and nursing homes. Ventilation and any form of designated smoking rooms and/or areas do not protect from the harms of second-hand tobacco smoke, and the only laws that provide protection are those that result in the complete absence of smoking in all public places.
- 5 When legislation did not explicitly ban the identification of non-tobacco products with tobacco brand names (brand stretching) and did not provide a definition of tobacco advertising and promotion, it was interpreted that brand stretching was covered by the existing ban of all forms of advertising and promotion when the country was a Party to the WHO FCTC, assuming that the WHO FCTC definitions apply.
- 6 When legislation did not explicitly ban the use of brand names of non-tobacco products for tobacco products (brand sharing) and did not provide a definition of tobacco advertising and promotion, it was interpreted that brand sharing was covered by the existing ban of all forms of advertising and promotion when the country was a Party to the WHO FCTC, assuming that the WHO FCTC definitions apply.

TECHNICAL NOTE II

Smoking prevalence in WHO Member States

Monitoring the prevalence of tobacco use is central to efforts to control the global tobacco epidemic. Reliable prevalence data on the magnitude of the tobacco epidemic and its influencing factors provide the information needed to plan, adopt and evaluate the impact of tobacco control interventions. This report contains survey data for both smoking¹ and smokeless tobacco use among young people and adults (Appendix II). It also presents WHO-modelled, age-standardized prevalence estimates for smoking for people aged 15 years and over (Appendix II). This technical note provides information on the method used to generate the WHO smoking prevalence estimates.

Sources of information

For the analysis, the following sources of information were explored (where official survey reports explaining the sampling, methodology and detailed results were not publicly available, Member States were asked to provide them):

- information on surveys provided by Parties to the WHO FCTC Secretariat;
- information collected through WHO tobacco-focussed surveys conducted under the aegis of the Global Tobacco Surveillance System – in particular, the Global Adult Tobacco Survey (GATS);
- tobacco information collected through other WHO surveys including WHO STEPwise surveys and World Health Surveys;
- other systems-based surveys undertaken by other organizations, including surveys such as the Demographic and Health Surveys (DHS) and the Multiple Indicator Cluster Survey (MICS); and

- an extensive search through WHO regional offices and WHO country offices to identify country-specific surveys not part of international surveillance systems – such as the Survey of Lifestyles, Attitudes and Nutrition in the Republic of Ireland, or the Mauritius Non Communicable Diseases Survey.

For the analysis, information from surveys conducted since 1990 was used if it:

- was officially recognized by the national health authority;
- included randomly selected participants who were representative of the general population;
- provided country survey summary data for one or more of six tobacco use definitions: daily tobacco user, current tobacco user, daily tobacco smoker, current tobacco smoker, daily cigarette smoker or current cigarette smoker; and
- presented prevalence values by age and sex.

The above indicators provide for the most complete representation of tobacco smoking across countries and at the same time help minimize attrition of countries from further analysis because of lack of adequate data. Although differences exist in the types of tobacco products used in different countries and grown or manufactured in different regions of the world, data on tobacco smoking are the most widely reported and are common to all countries, thereby permitting statistical analyses.²

The information identified above is stored in the WHO Tobacco Control Global DataBank and, along with the source code used for generating the WHO smoking prevalence estimates, is available at <http://www.who.int/tobacco/surveillance/globaldatabank/>.

Analysis and presentation of smoking prevalence indicators

Estimation method

A statistical model based on a Bayesian negative binomial meta-regression was used to model crude and age-specific estimates for countries for four indicators of tobacco smoking (current and daily tobacco smoking and current and daily cigarette smoking) separately for men and women. A trend was considered to be statistically significant if the posterior probability of the increase or decrease was greater than 0.75. A full description of the method is available as a peer-reviewed article in *The Lancet*, volume 385, No. 9972, p966–976 (2015).

Once the prevalence rates from national surveys were compiled into a dataset, the model was fit to calculate trend estimates for the indicators specified above. The model has two main components: (a) adjusting for missing indicators and age groups, and (b) running the regression model to generate an estimate of trends over time as well as the 95% credible interval around the estimate.

Depending on the completeness of survey data from a particular country, the model at times makes use of data from other countries to fill information gaps. Countries with less data or broadly inadequate data “borrow information” from neighbouring countries³ in the calculation of their estimates.

Differences in age groups covered by each survey

Survey results for any one country were sometimes reported for a variety of different age groups. Where data were

missing for any age group in the range of 15 years and above, the model uses available data from a country's other surveys to estimate the age pattern of tobacco use. For ages that the country has never surveyed, the average age pattern seen in countries in the same geographical region is applied to the country's data.

Differences in the indicators of tobacco use measured

Similarly, countries may report different indicators across surveys (e.g. current smoking in one survey and daily smoking in another, or tobacco smoking in one and cigarette smoking in another). Where data were missing for any indicator, the model uses available data from a country's other surveys to estimate the missing information. For indicators on which the country has never reported, the average relationships seen in countries in the same geographical region are applied to the country's data.

Modelled results

The model was run for all countries with surveys that met the inclusion criteria. Results for countries with insufficient survey data (i.e. only one survey with a detailed age breakdown for prevalence for either sex) were not reported.

The output of the model is a set of trend lines for each country that summarize its prevalence history from 2000 to 2015, as revealed by available survey data. Countries with few surveys reporting smoking will have more borrowed information blended into their trend line than countries with many surveys.

For this report, country-level trends have been summarized into average trends for high-income countries, middle-income countries, low-income countries and a global average. Trends from 2000 to 2015 are presented, with projections of the same

lines to 2030. The projection assumes that the pace and level of adoption of new policies during the period 1990 to 2015 will continue unchanged. In future, when countries adopt stronger tobacco control policies and complete new surveys, recalculated trend lines will reflect the changes.

In this report comparable estimates of current tobacco smoking among people aged 15 years and over are presented for all countries in one year (2015). These rates are taken from the trend line for each country for the year 2015. The rates are comparable because the model has standardized the survey results as described above, and then age-standardized as described below.

When calculating global and World Bank income group average prevalence rates, countries without estimates were included in the averages by assuming their prevalence rates are the average rates seen in the UN subregion to which they belong.³

Age-standardized prevalence rates

Comparison of crude rates between two or more countries at one point in time, or of one country at different points in time, can be misleading if the two populations being compared have significantly different age distributions or differences in tobacco use by sex. The method of age-standardization is commonly used to overcome this problem and allows for meaningful comparison of prevalence between countries, once all other comparison issues described have been addressed. The method involves applying the age-specific rates by sex in each population to one standard population (this report uses the WHO Standard Population, a fictitious population whose age distribution is largely reflective of the population age structure of low- and middle-income countries).

The resulting age-standardized rates refer to the number of smokers per 100 WHO Standard Population. As a result, the rates generated using this process are only hypothetical numbers with no inherent meaning. They are only meaningful when comparing rates obtained from one country with those obtained in another country.

Comparison with smoking estimates in earlier editions of this report

The estimates in this report are consistent with each other but not with estimates produced for earlier editions of this report. While the method of estimation is the same, the updated data set for the period 1990–2016 is much more complete.

For example, since the *WHO report on the global tobacco epidemic, 2015*, 189 national surveys from 100 countries have been added to the data set, and 48 existing surveys have been updated with additional data points. Each round of WHO smoking prevalence trend estimates is calculated using all available survey data back to 1990. The more data points available to the model, the more robust the trend estimates are. Each estimation round therefore improves upon earlier published estimates, and only the latest round should be used. While country-level estimates in this report pertain only to 2015, the entire trend series from 2000 to 2025 is published in the biennial *WHO global report on trends in tobacco smoking 2000–2025*.

Trends in tobacco use among young people aged 13–15 years

Tobacco use prevalence among school children aged 13–15 years has been measured at national level at two or more

points in time in 108 countries using the Global Youth Tobacco Survey. Since the method, sample, questions and indicators reported are consistent across time, these surveys could be used to calculate trends in current tobacco use among school children aged 13–15. The set of data points with metadata is available at <http://www.who.int/tobacco/surveillance/globaldatabank/>.

Trends in boys' and girls' tobacco use prevalence were assessed separately for each of the 108 countries. For this report, countries with 3 or more years of data were classified as having registered an increase (or decrease) in prevalence if the coefficient from a simple linear regression of the point estimate of prevalence on survey year was positive (or negative) and significantly different from zero at the 5% level, and as having registered no change if the coefficient was not significantly different from zero at the 5% level. In the case of countries with only two data points, a test of difference of proportions was conducted with the simplifying assumption of equal sample sizes of 1000 boys and 1000 girls in the start and final year of the survey in each country, with no assumptions made about the hierarchical structure of survey data. Countries were classified as having registered an increase (or decrease) according to whether the change in prevalence from the first to the latest survey was positive (or negative) and significantly different from zero at the 5% level.

- 1 Tobacco smoking includes cigarette, cigar, pipe, hookah, shisha, water-pipe and any other form of smoked tobacco.
- 2 For countries where prevalence of smokeless tobacco use is reported, we have published these data.
- 3 For a complete listing of countries by UN region, please refer to pages ix to xiii of *World Population Prospects: The 2015 Revision*, published by the UN Department of Economic and Social Affairs in 2015 at https://esa.un.org/unpd/wpp/Publications/Files/WPP2015_Volume-I_Comprehensive-Tables.pdf (accessed May 25, 2017). Please note that, for the purposes of smoking analysis, the following adjustments were made: (i) Eastern Africa subregion was divided into two regions: Eastern Africa Islands and Remainder of Eastern Africa; (ii) Armenia, Azerbaijan, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Tajikistan, Uzbekistan and Turkmenistan were classified with Eastern Europe, (iii); Cyprus, Israel and Turkey were classified with Southern Europe, and (iv) Melanesia, Micronesia and Polynesia subregions were combined into one subregion. When summarising the results, Middle Africa and Southern Africa were combined because only one country in Middle Africa had sufficient data to calculate a trend.

Tobacco taxes in WHO Member States

This report includes appendices containing information on the share of total and excise taxes in the price of the most widely sold brand of cigarettes, based on tax policy information collected from each country. This note contains information on the methodology used by WHO to estimate the share of total and tobacco excise taxes in the price of a pack of 20 cigarettes using country-reported data. It also provides information on additional data collected for this report in relation to tobacco taxation.

1. Data collection

All data were collected between June 2016 and January 2017 by WHO regional

data collectors. The two main inputs into calculating the share of total and excise taxes were (1) prices and (2) tax rates and structure. Prices were collected for the most widely sold brand of cigarettes, two other popular brands, the least-expensive brand and the brand Marlboro for July 2016.

Data on tax structure were collected through contacts with ministries of finance. The validity of this information was checked against other sources. These sources, including tax law documents, decrees and official schedules of tax rates and structures and trade information, when available, were either provided by data collectors or were downloaded from ministerial websites or from other United Nations databases

such as Comtrade (<http://comtrade.un.org/db/>). Other secondary data sources were also purchased for data validation.

The tax data collected focus on indirect taxes levied on tobacco products (e.g. excise taxes of various types, import duties, value added taxes, see table below), which usually have the most significant impact on the price of tobacco products. Within indirect taxes, excise taxes are the most important because they are applied exclusively to tobacco, and contribute the most to increasing the price of tobacco products and subsequently reducing consumption. Thus, rates, amounts and point of application of excise taxes are central components of the data collected.

1. Amount-specific excise taxes	An amount-specific excise tax is a tax on a selected good produced for sale within a country, or imported and sold in that country. In general, the tax is collected from the manufacturer/wholesaler or at the point of entry into the country by the importer, in addition to import duties. These taxes come in the form of an amount per stick, pack, per 1000 sticks, or per kilogram. Example: US\$ 1.50 per pack of 20 cigarettes.
2. Ad valorem excise taxes	An ad valorem excise tax is a tax on a selected good produced for sale within a country, or imported and sold in that country. In general, the tax is collected from the manufacturer/wholesaler or at the point of entry into the country by the importer, in addition to import duties. These taxes come in the form of a percentage of the value of a transaction between two independent entities at some point of the production/distribution chain; ad valorem taxes are generally applied to the value of the transactions between the manufacturer and the retailer/wholesaler. Example: 60% of the manufacturer's price.
3. Import duties	An import duty is a tax on a selected good imported into a country to be consumed in that country (i.e. the goods are not in transit to another country). In general, import duties are collected from the importer at the point of entry into the country. These taxes can be either amount-specific or ad valorem. Amount-specific import duties are applied in the same way as amount-specific excise taxes. Ad valorem import duties are generally applied to the CIF (cost, insurance, freight) value, i.e. the value of the unloaded consignment that includes the cost of the product itself, insurance and transport and unloading. Example: 50% import duty levied on CIF.
4. Value added taxes and sales taxes	The value added tax (VAT) is a "multi-stage" tax on all consumer goods and services applied proportionally to the price the consumer pays for a product. Although manufacturers and wholesalers also participate in the administration and payment of the tax all along the manufacturing/distribution chain, they are all reimbursed through a tax credit system, so that the only entity who pays in the end is the final consumer. Most countries that impose a VAT do so on a base that includes any excise tax and customs duty. Example: VAT representing 10% of the retail price. Some countries, however, impose sales taxes instead. Unlike VAT, sales taxes are levied at the point of retail on the total value of goods and services purchased. For the purposes of the report, care was taken to ensure the VAT and/or sales tax shares were computed in accordance with country-specific rules.
5. Other taxes	Information was also collected on any other tax that is not called an excise tax, import duty, VAT or sales tax, but that applies to either the quantity of tobacco or to the value of a transaction of a tobacco product, with as much detail as possible regarding what is taxed and how the base is defined.

Certain other taxes, in particular direct taxes such as corporate taxes, can potentially impact tobacco prices to the extent that producers pass them on to final consumers. However, because of the practical difficulty of obtaining information on these taxes and the complexity in estimating their potential impact on price in a consistent manner across countries, they are not considered.

2. Data analysis

The price of the most popular brand of cigarettes was considered in the calculation of the tax as a share of the retail price reported in Appendix Table 1.1 and Table 9.1 in online Appendix IX. In the case of countries where different levels of taxes are applied on cigarettes based on length of cigarette, quantity produced, or type (e.g. filter vs. non-filter), only the relevant rate that applied to the most sold brand was used in the calculation.

In the case of Canada and the United States of America, national average estimates calculated for prices and taxes reflect the fact that different rates are applied by each province/state over and above the applicable federal tax. In the case of Brazil, where state VATs vary, an average VAT rate was applied. In India, which also has varying VAT rates across states, the VAT rate applicable to the state where price data was collected (Delhi) was used. Similarly, VAT rates vary in the Federated States of Micronesia and the rate of Pohnpei was used.

The import duty was only used in the calculation of tax shares if the most sold brand of cigarettes was imported into the country. Import duty was not applied in total tax calculation for countries reporting that the most sold brand, even if an international brand, was produced locally.

	COUNTRY A (US\$)	COUNTRY B (US\$)
[A] Manufacturer's price (same in both countries)	2.00	2.00
[B] Country A: ad valorem tax on manufacturer's price (20%) = 20% x [A]	0.40	-
[C] Countries A and B: specific excise	2.00	2.00
[D] Retailer's and wholesaler's profit margin (same in both countries)	0.20	0.20
[E] Country B: ad valorem tax on retailer's price (20%) = 20% x ([A]+[C]+[D])	-	0.84
[F] Final price = P = [A]+[C]+[D]+([B]or[E])	4.60	5.04

In cases where the imported cigarettes originated from a country with which a bilateral or multilateral trade agreement waived the duty, care was taken to ensure that the import duty was not taken into account in calculating taxes levied.

"Other taxes" are all other indirect taxes not reported as excise taxes or VAT. These taxes were, however, treated as excises if they had a special rate applied to tobacco products. For example, Thailand reported the tax earmarked from tobacco and alcohol for the ThaiHealth Promotion Foundation as "other tax". However, since this tax is applied only on tobacco and alcohol products, it acts like an excise tax and so was considered an excise in the calculations.

The next step of the exercise was to convert all taxes to the same base – in our case, the tax-inclusive retail sale price (hereafter referred to as P). Standardizing bases is important in calculating tax share correctly, as the example in the table above shows. Country B apparently applies the same ad valorem tax rate (20%) as Country A, but in fact ends up with a higher tax rate and a higher final price because the tax is applied later in the distribution chain.

Comparing reported statutory ad valorem tax rates without taking into account the stage at which the tax is applied could therefore lead to biased results.

A similar methodology was used to calculate the price and tax share of the most common type of smoked (other than cigarettes) and smokeless tobacco products, as reported by each country. The calculation was made for the price of a product for 20 grams for any smoked or smokeless tobacco product except for cigars and cigarillos, for which the price and tax was reported per piece. Price and tax for smoked tobacco products (including bidis, cheroots, cigarillos, cigars, e-cigarettes, pipe tobacco, roll-your-own or waterpipe tobacco) was calculated for 63 countries, while the calculation for smokeless tobacco products (chewing tobacco, dry snuff, moist snuff, nose tobacco or snus) was made for 27 countries (see Table 9.3 in online Appendix IX).

3. Calculation

Denote S_{ts} as the share of taxes on the price of a widely consumed brand of cigarettes (20-cigarette pack or equivalent). Then

$$S_{ts} = S_{as} + S_{av} + S_{id} + S_{vat} \quad ①$$

Where:

S_{ts} = Total share of taxes in the price of a pack of cigarettes;

S_{as} = Share of amount-specific excise taxes (or equivalent) in the price of a pack of cigarettes;

S_{av} = Share of ad valorem excise taxes (or equivalent) in the price of a pack of cigarettes;

S_{id} = Share of import duties in the price of a pack of cigarettes (if the most popular brand is imported);

S_{vat} = Share of the value added tax in the price of a pack of cigarettes.

Calculating S_{as} is fairly straightforward and involves dividing the specific tax amount for a 20-cigarette pack by the total price. Unlike S_{as} , the share of ad valorem taxes, S_{av} is much more difficult to calculate and involves making some assumptions described below. Import duties are sometimes amount-specific, sometimes value-based. S_{id} is therefore calculated the same way as S_{as} if it is amount-specific and the same way as S_{av} if it is value-based. VAT rates reported for countries are usually applied on the VAT-exclusive retail sale price but are also sometimes reported on VAT-inclusive prices. S_{vat} is calculated to consistently reflect the share of the VAT in VAT-inclusive retail sale price.

The price of a pack of cigarettes can be expressed as the following:¹

$$P = [(M + M \times ID) + (M + M \times ID) \times T_{av}\% + T_{as} + \pi] \times (1 + VAT\%)$$

or

$$P = [M \times (1 + ID) \times (1 + T_{av}\%) + T_{as} + \pi] \times (1 + VAT\%) \quad ②$$

Where:

P = Price per pack of 20 cigarettes of the most popular brand consumed locally;

M = Manufacturer's/distributor's price, or import price if the brand is imported;

ID = Import duty rate (where applicable) on a pack of 20 cigarettes;²

T_{av} = Statutory rate of ad valorem tax;

T_{as} = Amount-specific excise tax on a pack of 20 cigarettes;

π = Retailer's, wholesaler's and importer's profit per pack of 20 cigarettes (sometimes expressed as a mark-up);

VAT = Statutory rate of value added tax on VAT-exclusive price.

Changes to this formula were made based on country-specific considerations such as the base for the ad valorem tax and excise tax, the existence – or not – of ad valorem and specific excise taxes, and whether the most popular brand was locally produced or imported. In many cases (particularly in low- and middle-income countries) the base for ad valorem excise tax was the manufacturer's/distributor's price.

Given knowledge of price (P) and amount-specific excise tax (T_{as}), the share S_{as} is easy to recover ($=T_{as}/P$). The case of ad valorem taxes (and, where applicable, S_{id}) is fairly straightforward when, by law, the base is retail price (as is the case in several European Union countries). The calculation is more complicated when the base is the retail price, because the base (M) needs to be recovered in order to calculate the amount of ad valorem tax. In most of the cases M was not known (unless specifically reported by the country), and therefore had to be estimated.

Using equation (2), it is possible to recover M :

$$M = \frac{\frac{P}{1 + VAT\%} - \pi - T_{as}}{(1 + T_{av}\%) \times (1 + ID)} \quad ③$$

π , or wholesalers' and retailers' profit margins, are rarely publicly disclosed and will vary from country to country. For domestically produced most popular brands, we considered π to be nil (i.e. =0) in the calculation of M because the retailer's and wholesaler's margins are assumed to be small. Setting the margin to 0, however, would result in an overestimation of M and therefore of the base for the ad valorem tax. This will in turn result in an overestimation of the amount of ad valorem tax. Since the goal of this exercise is to measure how high the share of tobacco taxes is in the price of a typical pack of cigarettes, assuming that the retailer's/wholesaler's profit (π) is nil, therefore, does not penalize countries by underestimating their ad valorem taxes. In light of this it was decided that unless and until country-specific information was made available to WHO, the retailer's or wholesaler's margin would be assumed to be nil for domestically produced brands.

For countries where the most popular brand is imported, the import duty is applied on CIF values, and the consequent excise taxes are typically applied on a base that includes the CIF value and the import duty, but not the importer's profit. For domestically produced cigarettes, the producer's price includes its own profit so it is automatically included in M . In practice, however, the importer's profit can be relatively significant and setting it to zero (as in the case of domestically manufactured cigarettes) would substantially overestimate M , and thereby overestimate the share of ad valorem tax in final price. For this reason, M had to be estimated differently for imported products: M^* (or the CIF value)

was calculated either based on information reported by countries or using secondary sources (data from the United Nations Comtrade database). M^* was normally calculated as the import price of cigarettes in a country (value of cigarette imports divided by the quantity of cigarette imports for the importing country). In cases where import data was unavailable or implied a very small CIF value (Equatorial Guinea, Iraq, Libya, Niue and Turkmenistan), the value of cigarette exports, FOB³ from the rest of the world to the country divided by the volume of those exports was used.

In all instances, the estimate was compared to corresponding calculations made for the 2015 edition of this report to check for large deviations from the 2014 estimate. Import (or partners' export) values used in this way were typically obtained as US\$ values for 2015; the CIF value so estimated was converted to 2016 domestic prices using the 2016 exchange rate. In some countries where the 2014 CIF value had been more reliably estimated, but the 2015 data were not available, the 2014 estimate was either used as such (when final price was unchanged), or was extrapolated when final product prices had risen (a proportionate increase of the 2014 CIF estimate in the case of the Democratic Republic of Congo, and a linear estimate based on data from 2008 through 2014 in the case of Afghanistan).

The ad valorem and other taxes were then calculated in the same way as for local cigarettes, using M^* rather than M as the base, where applicable.

In the case of VAT, in most of the cases the base was P excluding the VAT (or, similarly, the manufacturer's/distributor's price plus all excise taxes). In other words:

$$S_{vat} = VAT\% \times (1 - S_{vat}), \text{ equivalent to } ④$$

$$S_{vat} = VAT\% \div (1 + VAT\%)$$

So in sum, the tax rates are calculated this way:

$$S_{ts} = S_{id} + S_{as} + S_{av} + S_{vat} \quad ⑤$$

$$S_{as} = T_{as} \div P$$

$$S_{av} = (T_{av}\% \times M) \div P$$

or

$$(T_{av}\% \times M^* \times (1 + S_{id})) \div P$$

if the most popular brand was imported⁴

$$S_{id} = (T_{id}\% \times M^*) \div P$$

(if the import duty is value-based)

or

$$ID \div P$$

(if import duty is a specific amount per pack)

$$S_{vat} = VAT\% \div (1 + VAT\%)$$

4. Prices

Primary collection of price data in this and previous reports involved surveying retail outlets. In order to improve the quality of the prices collected this year, similar to 2014, price data was collected in the following manner:

- In addition to the most sold brand reported in previous years, prices of two additional popular brands were requested.⁵
- For each brand, prices were required from three different types of retail outlets.

Questionnaires sent to data collectors were pre-populated with the names of the three highest selling brands in each country. The three popular brands were identified using data collected from the 2014 questionnaires, from secondary data (Euromonitor⁶) and through WHO's close collaboration with ministries of finance. For the countries where such data were not available, data collectors were asked to indicate the names of the popular brands and provide their prices.

The three types of retail outlets were defined as follows:

1. Supermarket/hypermarket: chain or independent retail outlets with a selling space of over 2500 square metres and a primary focus on selling food/beverages/tobacco and other groceries. Hypermarkets also sell a range of non-grocery merchandise.
2. Kiosk/newsagent/tobacconist/independent food store: small convenience stores, retail outlets selling predominantly food, beverages and tobacco or a combination of these (e.g. kiosk, newsagent or tobacconist) or a wide range of predominantly grocery products (independent food stores or independent small grocers).
3. Street vendors: sell goods in small amounts to consumers but not from a fixed location (not applicable to all countries).

Most sold brands have been used consistently over time to gain a better reflection of the change in prices. However, in some cases where the market share of the brand initially used was considered to have changed substantially, a change was made to the new, more prevalent brand. In 2016, changes in the brand were made for Bolivia (Plurinational State of), China, Cook Islands, Czechia, Gambia, Hungary, Kyrgyzstan, Libya, Micronesia (Federated States of), Montenegro, Rwanda, Swaziland, Turkey, Turkmenistan, Tuvalu and Viet Nam. In all these countries the price of the new brand was higher, except in Libya and Rwanda (lower prices) and China (different brand, identical price as 2014). In 11 other countries (Belize, Cameroon, Chad, Democratic Republic of the Congo, Kiribati, Namibia, Panama, Philippines, Portugal, Slovenia, United Kingdom), the brand reported in 2016 was determined to be either a variant or a parent brand of the brand reported in 2014, and these were treated as identical in both years for purposes of price comparisons.

As in 2012 and 2014, the price used for each of the 28 countries of the European union (EU) was the most sold brand price collected by WHO. Prior to 2012, price and tax information were taken entirely from the EU's Taxation and Customs union website for the current report.⁷ The price used by the EU in the past to calculate tax rates was the most popular price category (MPPC), which was assumed to be similar to the most sold brand price category collected in this report. However, since 2011, the EU calculates and reports tax rates based on the Weighted Average Price (WAP) and therefore information on the MPPC is no longer readily available for EU countries. Consequently, in order to be consistent with past years' estimates and to ensure

comparability with other countries, WHO decided in 2012 to collect first-hand the prices of the most sold brand (the brand was determined based on brand market shares reported from secondary sources) to calculate tax rates. Excise and VAT rates are still collected from the EU published tables. This means, however, that tax shares as computed and reported in this report will not necessarily be similar to the rates published by the EU. This is mainly due to the calculation of the specific excise tax rates as a percentage of the retail price, which will vary depending on the price used. See details of the difference in price and tax share for the EU countries in the table below.

Comparisons of prices and total tax shares computed from WHO's most sold brand (MSB) survey and EU weighted average price (WAP), July 2016

Country	Total tax share (% of retail price)		Retail price (20 cigarettes)		Currency
	WHO estimates	EU reported rates	WHO reported MSB	EU reported WAP	
Austria	75.67%	77.79%	5.00	4.48	EUR
Belgium	75.71%	77.53%	6.32	5.51	EUR
Bulgaria	83.24%	84.20%	2.51	2.42	BGN
Croatia	77.17%	78.09%	3.14	3.00	HRK
Cyprus	77.55%	76.09%	4.20	4.21	EUR
Czechia	77.46%	79.05%	3.09	2.95	CZK
Denmark	74.75%	78.90%	5.90	5.47	DKK
Estonia	77.20%	84.45%	3.80	3.07	EUR
Finland	84.91%	85.98%	6.12	5.68	EUR
France	80.30%	80.82%	7.00	6.75	EUR
Germany	70.39%	74.44%	6.00	5.34	EUR
Greece	80.60%	83.85%	4.00	3.71	EUR
Hungary	73.52%	75.93%	3.68	3.38	HUF
Ireland	78.26%	84.09%	10.80	9.68	EUR
Italy	75.94%	76.73%	5.20	4.66	EUR
Latvia	79.83%	81.26%	3.00	2.89	EUR
Lithuania	75.06%	78.95%	3.10	2.77	EUR
Luxembourg	70.72%	69.61%	5.20	4.50	EUR
Malta	77.99%	80.92%	5.30	4.92	EUR
Netherlands	72.20%	78.51%	6.63	6.05	EUR
Poland	78.24%	81.21%	3.46	3.13	PLN
Portugal	73.55%	78.05%	4.80	4.29	EUR
Romania	71.83%	76.13%	3.62	3.28	RON
Slovakia	78.06%	79.30%	3.10	3.06	EUR
Slovenia	78.54%	78.43%	3.50	3.51	EUR
Spain	78.29%	78.82%	4.85	4.44	EUR
Sweden	68.50%	78.22%	6.74	5.59	SEK
United Kingdom	80.50%	83.99%	11.27	10.49	GBP

Note: WHO estimates pertain to most sold brand prices collected in July 2016. EU reported rates and weighted average prices pertain to data collected by the EU, and are also reported for July 2016.

5. Considerations in interpreting tax share changes

Changes in tax as a share of price are not only dependent on tax changes but also on price changes. Therefore, despite an increase in tax, the tax share could remain the same or go down; similarly, sometimes a tax share can increase even if there is no change or an increase in the tax.

In the current database, there are cases where taxes increased between 2014 and 2016 but the share of tax as a percentage of the price went down. This is mainly due to the fact that, in absolute terms, the price increase was larger than the tax increase (particularly in the case of specific excise tax increases). For example, in Seychelles, the specific excise tax increased from 500 SCR per 200 cigarettes in 2014 to 606 SCR per 200 cigarettes in 2016 (a 21% increase) while the price of the most sold brand increased from 75 to 105 SCR per pack (a 40% increase). In terms of tax share, the excise represented 67% of the price in 2014 while it represented 58% of the price in 2016. This is because prices rose more than taxes.

Similarly, there are cases where increases (decreases) in tax as a share of price were mitigated by factors not directly related to tax rates. In the current database, this was attributable to one or more of the following reasons:

- In some instances, the price increased without a tax change, leading to a decrease in the tax share for a specific or mixed excise structure (e.g. Bahamas, Barbados, Japan, Kiribati, Mauritius, Mexico, Slovakia, Spain, Switzerland, Timor-Leste, and Yemen)
- In other cases, prices increased above tax increases, leading to a decrease in tax share (e.g. Belgium, Botswana, Canada,

Costa Rica, Democratic Republic of the Congo, Estonia, Fiji, Germany, Honduras, Hungary, Iceland, Jordan, Malaysia, Montenegro, Nepal, Netherlands, New Zealand, Norway, Pakistan, Philippines, Poland, Portugal, Romania, Samoa, Serbia, Seychelles, Slovenia, Sri Lanka, Sweden, The former Yugoslav Republic of Macedonia, Ukraine, United Kingdom, Uruguay and Zimbabwe)

- In other cases, a newly introduced tax was accompanied by a larger price increase, so that the total share of taxes in price fell (Algeria and Myanmar)
- In the case of imported products, the CIF value is an external variable that also influences the calculation of tax share. This has implications in countries where ad valorem tax is based on the CIF value, when import duties are applicable on the CIF value or when the VAT is calculated on the base of CIF value + excise rather than VAT exclusive retail price. For example, if the CIF value increases, the base for the application of the tax is higher, leading to a higher tax percentage if nothing else changes.
- Additionally, as indicated above, for some countries, CIF values had to be estimated using secondary data. Those values are provided in US\$ and converted to the local currency, making the exchange rate an additional factor indirectly influencing tax shares. Some examples of countries where these factors influence tax share include: Benin (decrease in reported CIF value combined with no change in retail price, leading to a reduction in overall tax share); Antigua and Barbuda, Cameroon (higher CIF value reported in 2016, resulting in an increase in share of CIF value and tax without rates changing), Equatorial Guinea (local currency appreciated relative to US\$, but CIF value increased more, so that overall CIF value and share in price was higher) and Liberia (CIF value reported fell in US\$ terms but local currency depreciated more, so that CIF value rose in local currency).

Care should also be taken in relation to countries where the most sold brand changed between 2014 and 2016. This has also had an impact on the tax proportion of the affected countries. When taxes are increased, and the new brand reported is more expensive, the two possibilities are: total tax share increases (Cook Islands, Czechia, Kyrgyzstan, Turkey and Viet Nam), or the total tax share decreases (Hungary). In the case of Bolivia (Plurinational State of), the tax proportion decreased despite no tax change, because of the apparent increase in prices due to the new, more expensive brand reported as the most sold brand.

Finally, when new, improved information was provided in terms of taxation and prices for some countries, corrections were made in the calculations of tax rates for 2008, 2010, 2012 and 2014 estimates, as needed.

6. Supplementary tax information (see Table 9.5, online Appendix XII)

An important consideration highlighted in this report is that many aspects of tobacco taxation need to be taken into account in order to assess if a tax policy is well designed. Tax as a proportion of price does not tell the whole story about the effectiveness of a tax policy. To explore other dimensions of tax policy, the current report collected additional information in relation to tobacco taxation and compiled it into data that can inform researchers and policy-makers further on tax policy in different countries.

The information was compiled and classified according to three main themes: tax structure/level; affordability and price dispersion; and tax administration. Information was also collected in relation to countries that earmark tobacco taxes to

fund health programmes and/or tobacco control activities.

I. Tax structure/level

- Excise tax proportion of price: higher tax rates and greater reliance on excise is better, particularly when the excise tax is $\geq 70\%$ of retail price.
- Uniform vs. tiered excise tax system: a uniform excise is easier to administer than a tiered system where variable rates apply based on selected criteria within one tobacco product (not applicable in countries where no excise tax is implemented).
- Whether a country applies a specific excise or a mixed system relying more on the specific tax component ($>50\%$ of total excise is specific): specific excises typically lead to higher prices and a smaller price gap between different brands, so is preferred (not applicable in countries where only ad valorem excise is applicable or where no excise tax is implemented).
- Base of the ad valorem tax in countries that apply an ad valorem or a mixed excise system. Ad valorem taxes applied to the retail price or the retail price excluding VAT are administratively simpler. The retail price is easier to determine than producer price or CIF value, and therefore there is less risk of undervaluation (not applicable in countries where only specific excise is applicable, or where no excise tax is implemented).
- If the excise applied is ad valorem or if it is mixed, and whether there is a minimum specific tax. A minimum tax provides protection against products being undervalued. It also forces prices up since the price will not be lower than the tax paid (this category does not apply to countries where only specific excise tax is applicable or where no excise tax is implemented).

II. Affordability and price dispersion

- a. Affordability index (% of GDP per capita to buy 100 packs of cigarettes of the most sold brand): across countries, a higher value indicates cigarettes are relatively more expensive in relation to income.
- b. Whether cigarettes have become relatively more affordable between 2008 and 2016 (change in the affordability index as measured above, between 2008 and 2016): as affordability decreases, consumption is discouraged.
- c. If the excise tax applied is specific or if it is mixed, and whether the specific tax component is automatically adjusted for inflation. If the specific tax is not adjusted for inflation over time, its impact will be eroded. It is good to have it adjusted automatically (this category does not apply to countries where only ad valorem excise tax is applicable or where no excise tax is implemented).
- d. Price dispersion: share of cheapest brand price in premium brand price (cheapest brand price ÷ premium brand price × 100). The higher the proportion, the smaller the gap and the fewer are the opportunities for substitution to cheaper brands.

III. Tax administration

- a. Requirement of tax stamps on tobacco products: tax stamps help administrators ensure that producers and importers comply with tax payment requirements, and help detect illicit tobacco products. A note was made of countries requiring tax stamps to bear special features beyond those found on traditional paper stamps. Specifically, these are encrypted tax stamps that include unique, machine-readable identification markings and can be used to track production in the country through monitoring devices installed in manufacturing facilities that scan the digital stamp, and are also used to detect the presence of illicit products. The devices register a wealth

of information that is automatically sent to tax administrators and is useful for tracking and tracing and enforcement work. Similar stamps are also applied on imported products. This is considered best practice for monitoring the market.

- b. Duty free imports: banning duty-free imports for personal consumption reduces the chance that these products end up in the illicit market. Additionally, there is no justification for selling a deadly product duty-free; those foregone taxes are a revenue loss for the government. While a few countries ban duty free imports outright, many countries permit them, but limit the quantity that travellers are allowed to bring in. These restrictions can vary by tobacco products; the data reported only refers to limits on cigarette quantities.

IV. Earmarking (portion of taxes or revenues from taxes dedicated to health and/or tobacco control). Taxes can generate substantial revenues. One way of correcting for the negative externality of tobacco use would be to increase taxes to reduce consumption and fund health care, which is often underfunded and put under additional strain because of tobacco use (see Table 9.4 in online Appendix IX).

7. Estimates of the affordability of cigarettes (see Table 9.6, online Appendix IX)

The affordability of cigarettes for each of the years 2008, 2010, 2012, 2014 and 2016 was measured by the per capita GDP required to purchase 2000 cigarettes of the most sold brand reported in that year.

Estimates of GDP per capita in local currency units were sourced from the IMF's World Economic Outlook (WEO) database which provides a complete series of estimates

for most of the 195 countries reported on. Where GDP per capita data were not available in the WEO database, (Andorra, Cuba, Liberia, Somalia, Timor-Leste and West Bank and Gaza Strip), the World Bank's GDP per capita data series was used. In the case of the Cook Islands, UN data was sourced and converted into the local currency. For each country-year pair, the currency reported for the most sold brand was tallied with the corresponding currency for the GDP series, and exchange rate conversions and adjustments were performed as needed (Cambodia, Estonia, Latvia, Lithuania, Turkmenistan and Zambia) to align the two data series.

To assess whether affordability changed on average since 2008, the average annual percentage change in affordability was calculated as the least squares growth rate for all countries with three or more years of data, including data for 2016. This criterion automatically excluded countries where World Bank GDP per capita estimates were used, given that the series ended with the year 2015 at the time the analysis was performed.

The affordability of cigarettes was judged to have been unchanged if the least squares trend in the per capita GDP required to purchase 2000 cigarettes (that is, 100 packs of 20 cigarettes) was not significant at the 5% level. Cigarettes were judged to have become less (more) affordable on average if the least squares trend in the per capita GDP required to purchase 2000 cigarettes was positive (negative) and significantly different from zero at the 5% level.

¹ This formula applies when the ad valorem tax is applied on the manufacturer's/distributor's price, the import duty is applied on the manufacturer's/distributor's price of the CIF value and the VAT is applied on the VAT-exclusive retail price. Other scenarios exist (e.g. ad valorem rate applies on the retail price) but they are not described here because they are usually more straightforward to calculate.

² Import duties may vary depending on the country of origin in cases of preferential trade agreements. WHO tried to determine the origin of the pack and relevance of using such rates where possible.

³ "Free On Board" or "Freight On Board": value of a product at export.

⁴ Or $(T_{av} \% \times M^*) \div P$, if the ad valorem tax was applied only on the CIF value, not the CIF value + the import duty.

⁵ The brands are used for internal purposes for data validation and are not published in the report.

⁶ Euromonitor International's Passport, 2016.

⁷ See http://ec.europa.eu/taxation_customs/taxation/excise_duties/tobacco_products/rates/index_en.htm.



APPENDIX I: REGIONAL SUMMARY OF MPOWER MEASURES

Appendix I provides an overview of selected tobacco control policies. For each WHO region an overview table is presented that includes information on monitoring and prevalence, smoke-free environments, treatment of tobacco dependence, health warnings and packaging, anti-tobacco mass media campaigns, advertising, promotion and sponsorship bans, taxation levels, and affordability of tobacco products, based on the methodology outlined in Technical Note I.

Country-level data were generally but not always provided with supporting documents such as laws, regulations, policy documents, etc. Available documents were assessed by WHO and this appendix provides summary measures or indicators of country achievements for each of the MPOWER measures. Detailed information, including detailed footnotes, on each of the indicators is available in Appendix II for monitoring and prevalence, in Appendix VI for smoke-free environments, treatment of tobacco dependence, health warnings and packaging, anti-tobacco mass media campaigns, advertising, promotion and sponsorship bans, and in Appendix IX for tobacco taxation and affordability. It is important to note that data for the report are based on existing legislation and reflect the status of adopted but not necessarily implemented legislation, as long as the law clearly indicates a date of entry into force and is not undergoing a legal challenge.

The summary measures developed for the *WHO report on the global tobacco epidemic, 2017* are the same as those used for the 2015 report.

The methodology used to calculate each indicator is described in Technical Note I. This review, however, does not constitute a thorough and complete legal analysis of each country's legislation. Except for smoke-free environments and bans on tobacco advertising, promotion and sponsorship, data were collected at the national/federal level only and therefore provide incomplete policy coverage for Member States where subnational governments play an active role in tobacco control.

Daily smoking prevalence for the population aged 15 years and over in 2015 is an indicator modelled by WHO from tobacco use surveys published by Member States. Tobacco smoking is one of the most widely reported indicators in country surveys. The calculation of WHO estimates to allow international comparison is described in Technical Note II.

2016 INDICATOR AND COMPLIANCE

Table 1.3
Summary of
MPOWER measures

... Data not reported/not available.
— Data not required/not applicable.

COUNTRY	ADULT DAILY SMOKING PREVALENCE (2015)	M MONITORING	P SMOKE-FREE POLICIES LINES REPRESENT LEVEL OF COMPLIANCE	O CESSATION	W WARNINGS		E ADVERTISING BANS LINES REPRESENT LEVEL OF COMPLIANCE	R	
					HEALTH WARNINGS	MASS MEDIA		TAXATION	CIGARETTES LESS AFFORDABLE SINCE 2008
Bangladesh	20%		|||||				|||||	77%	YES
Bhutan	...		|||||				|||||	—	—
Democratic People's Republic of Korea	...		|||||				—	0%	...
India	10%		||||| ☆				|||||	43%	YES
Indonesia	34%		|				|	57%	NO
Maldives	22%		|				|||||	53%	YES
Myanmar	16%		|||||				|||||	35%	NO
Nepal	18%		...				...	26%	↔
Sri Lanka	10%		|||||				|||||	62%	↔
Thailand	17%		...				...	73%	↔
Timor-Leste	33%		|||||				—	28%	...

CHANGE SINCE 2014

P SMOKE-FREE POLICIES	O CESSATION PROGRAMMES	W HEALTH WARNINGS	E ADVERTISING BANS	R TAXATION
CHANGE IN POWER INDICATOR GROUP, UP OR DOWN, SINCE 2014				
▲		▲		
	▲	▲		
		▲		
	▲			
		▲		
▲		▲	▲	

ADULT DAILY SMOKING PREVALENCE*: AGE-STANDARDIZED PREVALENCE RATES FOR ADULT DAILY SMOKERS OF TOBACCO (BOTH SEXES COMBINED), 2015

...	Estimates not available
▲	30% or more
■	From 20% to 29.9%
■	From 15% to 19.9%
■	Less than 15%

* The figures should be used strictly for the purpose of drawing comparisons across countries and must not be used to estimate absolute number of daily tobacco smokers in a country.

MONITORING: PREVALENCE DATA

■	No known data or no recent data or data that are not both recent and representative
■	Recent and representative data for either adults or youth
■	Recent and representative data for both adults and youth
■	Recent, representative and periodic data for both adults and youth

SMOKE-FREE POLICIES: POLICIES ON SMOKE-FREE ENVIRONMENTS

■	Data not reported/not categorized
■	Complete absence of ban, or up to two public places completely smoke-free
■	Three to five public places completely smoke-free
■	Six to seven public places completely smoke-free
■	All public places completely smoke-free (or at least 90% of the population covered by complete subnational smoke-free legislation)

CESSATION PROGRAMMES: TREATMENT OF TOBACCO DEPENDENCE

■	Data not reported
■	None
■	NRT and/or some cessation services (neither cost-covered)
■	NRT and/or some cessation services (at least one of which is cost-covered)
■	National quit line, and both NRT and some cessation services cost-covered

HEALTH WARNINGS: HEALTH WARNINGS ON CIGARETTE PACKAGES

■	Data not reported
■	No warnings or small warnings
■	Medium size warnings missing some appropriate characteristics OR large warnings missing many appropriate characteristics
■	Medium size warnings with all appropriate characteristics OR large warnings missing some appropriate characteristics
■	Large warnings with all appropriate characteristics

MASS MEDIA: ANTI-TOBACCO CAMPAIGNS

■	Data not reported
■	No national campaign conducted between July 2014 and June 2016 with duration of at least 3 weeks
■	National campaign conducted with one to four appropriate characteristics
■	National campaign conducted with five to six appropriate characteristics, or with seven characteristics excluding airing on television and/or radio
■	National campaign conducted with at least seven appropriate characteristics including airing on television and/or radio

ADVERTISING BANS: BANS ON ADVERTISING, PROMOTION AND SPONSORSHIP

■	Data not reported
■	Complete absence of ban, or ban that does not cover national television, radio and print media
■	Ban on national television, radio and print media only
■	Ban on national television, radio and print media as well as on some but not all other forms of direct and/or indirect advertising
■	Ban on all forms of direct and indirect advertising (or at least 90% of the population covered by subnational legislation completely banning tobacco advertising, promotion and sponsorship)

TAXATION: SHARE OF TOTAL TAXES IN THE RETAIL PRICE OF THE MOST WIDELY SOLD BRAND OF CIGARETTES

■	Data not reported
■	≤ 25% of retail price is tax
■	26–50% of retail price is tax
■	51–75% of retail price is tax
■	>75% of retail price is tax

AFFORDABILITY OF CIGARETTES

YES	Cigarettes less affordable – per capita GDP needed to buy 2000 cigarettes of the most sold brand increased on average between 2008 and 2016.
NO	Cigarettes more affordable – per capita GDP needed to buy 2000 cigarettes of the most sold brand declined on average between 2008 and 2016.
↔	No trend change in affordability of cigarettes since 2008.

COMPLIANCE: COMPLIANCE WITH BANS ON ADVERTISING, PROMOTION AND SPONSORSHIP, AND ADHERENCE TO SMOKE-FREE POLICY

|||||	High compliance (8/10 to 10/10)
||||	Moderate compliance (3/10 to 7/10)
||	Minimal compliance (0/10 to 2/10)

SYMBOLS LEGEND

☆ Country has one or more public places where designated smoking rooms (DSRs) are allowed. Separate, completely enclosed smoking rooms are allowed if they are separately ventilated to the outside and/or kept under negative air pressure in relation to the surrounding areas. Given the difficulty of meeting the very strict requirements delineated for such rooms, they appear to be a practical impossibility but no reliable empirical evidence is presently available to ascertain whether they have been constructed.

▲▼ Change in POWER indicator group, up or down, between 2014 and 2016. Some 2014 data were revised in 2016.

Refer to Technical Note I for definitions of categories

2016 INDICATOR AND COMPLIANCE

Table 1.5
Summary of
MPOWER measures

... Data not reported/not available.
— Data not required/not applicable.
< Refers to a territory.

COUNTRY	ADULT DAILY SMOKING PREVALENCE (2015)	M MONITORING	P SMOKE-FREE POLICIES LINES REPRESENT LEVEL OF COMPLIANCE	O CESSATION	W WARNINGS		E ADVERTISING BANS LINES REPRESENT LEVEL OF COMPLIANCE	R	
					HEALTH WARNINGS	MASS MEDIA		TAXATION	CIGARETTES LESS AFFORDABLE SINCE 2008
Afghanistan	...		||||				|||||||	2%	YES
Bahrain	22%		—☆				|||||||	27%	YES
Djibouti	10%		...				...	29%	NO
Egypt	22%						|||||||	74%	YES
Iran (Islamic Republic of)	10%		|||||||				|||||||	20%	↔
Iraq	...		||||				||||	52%	↔
Jordan	...		||				||||	81%	↔
Kuwait	19%		...				...	25%	YES
Lebanon	25%		||||				||||	41%	↔
Libya	...						|||||||	12%	YES
Morocco	19%		||||				|||	71%	↔
Oman	9%		—				|||||||	20%	YES
Pakistan	16%		||				|||||||	60%	YES
Qatar	16%		—				|||||||	20%	YES
Saudi Arabia	13%		I				|||||||	33%	YES
Somalia	...		—				—	4%	...
Sudan	...		—				...	74%	↔
Syrian Arab Republic	...		||||				|||||||	60%	...
Tunisia	28%		—				...	75%	↔
United Arab Emirates	23%		...☆				...	18%	YES
West Bank and Gaza Strip <	...		||				||||	82%	...
Yemen	14%		|||				|||||||	53%	YES

CHANGE SINCE 2014

P SMOKE-FREE POLICIES	O CESSATION PROGRAMMES	W HEALTH WARNINGS	E ADVERTISING BANS	R TAXATION
CHANGE IN POWER INDICATOR GROUP UP OR DOWN SINCE 2014				
▲		▲	▲	▲
	▲			
			▲	
				▲
▼			▲	
			▲	▲
▼			▲	▲

ADULT DAILY SMOKING PREVALENCE*: AGE-STANDARDIZED PREVALENCE RATES FOR ADULT DAILY SMOKERS OF TOBACCO (BOTH SEXES COMBINED), 2015

...	Estimates not available
30% or more	
From 20% to 29.9%	
From 15% to 19.9%	
Less than 15%	

* The figures should be used strictly for the purpose of drawing comparisons across countries and must not be used to estimate absolute number of daily tobacco smokers in a country.

MONITORING: PREVALENCE DATA

No known data or no recent data or data that are not both recent and representative
Recent and representative data for either adults or youth
Recent and representative data for both adults and youth
Recent, representative and periodic data for both adults and youth

SMOKE-FREE POLICIES: POLICIES ON SMOKE-FREE ENVIRONMENTS

Data not reported/not categorized
Complete absence of ban, or up to two public places completely smoke-free
Three to five public places completely smoke-free
Six to seven public places completely smoke-free
All public places completely smoke-free (or at least 90% of the population covered by complete subnational smoke-free legislation)

CESSATION PROGRAMMES: TREATMENT OF TOBACCO DEPENDENCE

Data not reported
None
NRT and/or some cessation services (neither cost-covered)
NRT and/or some cessation services (at least one of which is cost-covered)
National quit line, and both NRT and some cessation services cost-covered

HEALTH WARNINGS: HEALTH WARNINGS ON CIGARETTE PACKAGES

Data not reported
No warnings or small warnings
Medium size warnings missing some appropriate characteristics OR large warnings missing many appropriate characteristics
Medium size warnings with all appropriate characteristics OR large warnings missing some appropriate characteristics
Large warnings with all appropriate characteristics

MASS MEDIA: ANTI-TOBACCO CAMPAIGNS

Data not reported
No national campaign conducted between July 2014 and June 2016 with duration of at least 3 weeks
National campaign conducted with one to four appropriate characteristics
National campaign conducted with five to six appropriate characteristics, or with seven characteristics excluding airing on television and/or radio
National campaign conducted with at least seven appropriate characteristics including airing on television and/or radio

ADVERTISING BANS: BANS ON ADVERTISING, PROMOTION AND SPONSORSHIP

Data not reported
Complete absence of ban, or ban that does not cover national television, radio and print media
Ban on national television, radio and print media only
Ban on national television, radio and print media as well as on some but not all other forms of direct and/or indirect advertising
Ban on all forms of direct and indirect advertising (or at least 90% of the population covered by subnational legislation completely banning tobacco advertising, promotion and sponsorship)

TAXATION: SHARE OF TOTAL TAXES IN THE RETAIL PRICE OF THE MOST WIDELY SOLD BRAND OF CIGARETTES

Data not reported
≤ 25% of retail price is tax
26–50% of retail price is tax
51–75% of retail price is tax
>75% of retail price is tax

AFFORDABILITY OF CIGARETTES

YES	Cigarettes less affordable – per capita GDP needed to buy 2000 cigarettes of the most sold brand increased on average between 2008 and 2016.
NO	Cigarettes more affordable – per capita GDP needed to buy 2000 cigarettes of the most sold brand declined on average between 2008 and 2016.
↔	No trend change in affordability of cigarettes since 2008.

COMPLIANCE: COMPLIANCE WITH BANS ON ADVERTISING, PROMOTION AND SPONSORSHIP, AND ADHERENCE TO SMOKE-FREE POLICY

|||||||	High compliance (8/10 to 10/10)
|||||	Moderate compliance (3/10 to 7/10)
||	Minimal compliance (0/10 to 2/10)

SYMBOLS LEGEND

☆ Country has one or more public places where designated smoking rooms (DSRs) are allowed. Separate, completely enclosed smoking rooms are allowed if they are separately ventilated to the outside and/or kept under negative air pressure in relation to the surrounding areas. Given the difficulty of meeting the very strict requirements delineated for such rooms, they appear to be a practical impossibility but no reliable empirical evidence is presently available to ascertain whether they have been constructed.

▲▼ Change in POWER indicator group, up or down, between 2014 and 2016. Some 2014 data were revised in 2016.

Refer to Technical Note I for definitions of categories





APPENDIX II: TOBACCO USE PREVALENCE

Tables 2.1 to 2.4 show country-reported data on tobacco use prevalence among adults and youth, as well as country-reported data on smokeless tobacco use prevalence among adults and youth.

Age-standardized comparable estimates of daily tobacco smoking prevalence for 2015 are included in Table 2.5. In addition, the types of tobacco included by countries in their most recent surveys are reported in Tables 2.6 and 2.7.

The following definitions are used in Table 2.1 and Table 2.3:

Current tobacco use: "Current" means using tobacco at the time of the survey, including daily and non-daily use. "Tobacco use" means using tobacco in any form, including all types of smoked and smokeless tobacco.

Daily tobacco use: "Daily" means using tobacco every day at the time of the survey. "Tobacco use" means using tobacco in any form, including all types of smoked and smokeless tobacco.

Current tobacco smoking: "Current" means smoking at the time of the survey, including daily and non-daily smoking. "Tobacco smoking" means smoking any form of tobacco, including cigarettes, cigars, a pipe, hookah, shisha, water-pipe etc., and excludes smokeless tobacco.

Daily tobacco smoking: "Daily" means smoking every day at the time of the survey. "Tobacco smoking" means smoking any form of tobacco, including cigarettes, cigars, a pipe, hookah, shisha, water-pipe etc., and excludes smokeless tobacco.

Current cigarette smoking: "Current" means smoking at the time of the survey, including daily and non-daily smoking. "Cigarette smoking" means smoking any form of cigarette, including manufactured and roll-your-own.

Daily cigarette smoking: "Daily" means smoking every day at the time of the survey. "Cigarette smoking" means smoking any form of cigarette, including manufactured and roll-your-own.

The following definitions are used in Table 2.2 and Table 2.4:

Current smokeless tobacco use: "Current" means using smokeless tobacco products at the time of the survey, including daily and non-daily use. "Smokeless tobacco use" means using any form of smokeless tobacco, including chewing, sniffing, or placing the product inside the cheek.

Table 2.5:

WHO-modelled, age-standardized prevalence estimates for daily tobacco smoking among people aged 15 years and over in 2015 were calculated using national surveys conducted up to and including 2015. Additional sets of prevalence estimates for current tobacco smoking, current cigarette smoking and daily cigarette smoking are provided in Appendix X.

Please refer to Technical Note II for a detailed description of the methodology used by WHO to produce the comparable prevalence estimates in this appendix.

Table 2.1.1
Most recent survey
of adult cigarette
and tobacco
smoking in Africa

... Data not reported/not available.

¹ All tobacco use reported in lieu of tobacco smoking.

COUNTRY	TITLE OF SURVEY	CURRENT TOBACCO SMOKING %			DAILY TOBACCO SMOKING %			CURRENT CIGARETTE SMOKING %			DAILY CIGARETTE SMOKING %		
		MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
Algeria	Algeria Adult Tobacco Survey												
Angola	...												
Benin	STEPS Survey												
Botswana	STEPS Survey												
Burkina Faso	STEPS Survey												
Burundi	Demographic and Health Survey												
Cabo Verde	National Survey on Drug Use in the General Population												
Cameroon	Global Adult Tobacco Survey												
Central African Republic	...												
Chad	World Health Survey												
Comoros	Demographic and Health Survey												
Congo	Multiple Indicator Cluster Survey												
Côte d'Ivoire	Demographic and Health Survey												
Democratic Republic of the Congo	Demographic and Health Survey												
Equatorial Guinea	...												
Eritrea	STEPS Survey												
Ethiopia	STEPS Survey												
Gabon	Demographic and Health Survey												
Gambia	Demographic and Health Survey												
Ghana	Demographic and Health Survey												
Guinea	Demographic and Health Survey												
Guinea-Bissau	...												
Kenya	STEPS Survey												
Lesotho	STEPS Survey												
Liberia	Demographic and Health Survey												
Madagascar	Demographic and Health Survey												
Malawi	Demographic and Health Survey												
Mali	STEPS Survey												
Mauritania	World Health Survey												
Mauritius	Mauritius Non Communicable Disease Survey												
Mozambique	Demographic and Health Survey												
Namibia	Demographic and Health Survey												
Niger	Demographic and Health Survey and Multiple Indicator Cluster Survey												
Nigeria	Global Adult Tobacco Survey												
Rwanda	Demographic and Health Survey												
Sao Tome and Principe	STEPS Survey												
Senegal	Global Adult Tobacco Survey												
Seychelles	The Seychelles Heart Study IV												
Sierra Leone	Demographic and Health Survey												
South Africa	National Health and Nutrition Examination Survey												
South Sudan	...												
Swaziland	STEPS Survey												
Togo	Demographic and Health Survey												
Uganda	Uganda NCD Risk Factors Survey												
United Republic of Tanzania	STEPS Survey												
Zambia	Demographic and Health Survey												
Zimbabwe	Demographic and Health Survey												

YEAR	REPRESENTATIVENESS	AGE GROUP (YEARS)	CURRENT TOBACCO SMOKING %			DAILY TOBACCO SMOKING %			CURRENT CIGARETTE SMOKING %			DAILY CIGARETTE SMOKING %		
			MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
2010	National	15+	27.1	1.7	15.3	17.6	0.9	10.5	...	...	...	...	...	...
...
2015	National	18-69	10.8	0.6	5.2	8.5	0.5	4.1	...	...	...	...	...	...
2014	National	15-69	31.4	4.9	18.3	25.4	3.5	14.6	...	...	...	...	...	...
2013	National	25-64	24.5	0.1	11.3	20.8	0.1	9.6	24.2	0.1	11.1	20.5	0.1	9.4
2010	National	15-59	21.2 ¹	10.2 ¹	...	...	...	...	12.0	0.7	...	...	...	...
2012	National	15-64	5.4	2.5	...	...	...	...	...	...	...	...	...	...
2013	National	15+	11.8	0.6	6.0	9.1	0.5	4.6	11.7	0.5	5.9	2.2	3.8	3.0
...
2003	National	18+	17.4	2.9	10.0	13.2	2.1	7.5	...	...	...	10.2	0.8	5.4
2012	National	15-49	23.9 ¹	4.8 ¹	...	...	...	...	18.8	1.6	...	...	...	...
2014-15	National	15-49	18.7 ¹	2.7 ¹	...	...	...	...	...	...	...	...	...	...
2011-12	National	15-49	26.2	1.7	...	...	...	...	24.9	0.4	...	...	...	...
2013-14	National	15-49	26.5 ¹	4.1 ¹	...	...	...	...	19.3	1.0	...	...	...	...
...
2010	National	25-64	11.3	0.2	2.2	9.2	0.2	1.8	...	...	...	...	...	...
2015	National	15-69	7.3	0.4	4.2	6.2	0.2	3.5	6.9	0.2	3.9	6	0.1	3.3
2012	National	15-59	22.4 ¹	3.4 ¹	...	...	...	...	22.3	2.9	...	21.5	...	...
2013	National	15-59	23.0 ¹	0 ¹	...	...	...	...	20.5	0	...	...	...	...
2014	National	15-49	6.3 ¹	0.4 ¹	...	...	...	...	4.8	0.1	...	...	...	...
2005	National	15-59	...	1.4 ¹	...	...	...	...	...	0.8	...	...	0.8	...
...
2015	National	18-69	19.7	0.9	10.1	16.6	0.4	8.3	...	...	...	...	...	...
2012	National	25-64	48.7	0.7	24.5	40.6	0.5	20.4	...	...	...	...	...	...
2013	National	15-49	10.2 ¹	0.8 ¹	...	...	...	...	9.6	0.3	...	...	...	...
2008-09	National	15-49	48.9 ¹	21.1 ¹	...	...	...	...	27.7	1.5	...	27.5	...	...
2010	National	15-59	18.0 ¹	1.2 ¹	...	...	...	...	17.6	0.4	...	16.8	0.1	...
2013	National	15-64	...	...	11.3 ¹	...	...	...	24.5	2.7	10.8	21.6	1.7	9.1
2003	National	18+	27.4	4.2	15.4	23.2	3.2	12.8	...	...	...	11.7	2.2	6.7
2015	National	18-74	38.5	4.1	19.7	...	...	...	38.5	4.1	19.7	...	...	...
2011	National	15-64	21.9 ¹	2.9 ¹	...	...	...	...	19.9	1.4	...	18.7	...	...
2013	National	15-49	20.1 ¹	5.1 ¹	...	...	1.3	...	18.6	4.2	...	17.6	...	...
2012	National	15-59	17.7 ¹	2.4 ¹	...	...	...	...	14.0	...	...	13.9	...	...
2012	National	15+	10.0	1.1	5.6	5.6	0.3	2.9	7.2	0.3	3.7	...	...	...
2014-15	National	15-49	10.2 ¹	2.2 ¹	...	...	...	...	9.1	0.4	...	...	...	...
2008	National	25-64	...	...	...	6.5	0.8	3.5	...	...	...	6.3	0.8	3.4
2015	National	15+	10.7	0.4	5.4	9.7	0.3	4.9	9.7	0.3	4.9	8.5	0.3	4.3
2013	National	25-64	34.2	7.8	...	28.4	5.2	...	34.1	7.7	20.9	28.3	5.1	16.7
2013	National	15-49	28.6 ¹	8.2 ¹	...	...	...	...	28.0	4.4	...	...	...	...
2012	National	15+	...	...	18.2	...	...	16.2	29.4	8.2	16.8	26.5	6.9	15.1
...
2014	National	15-69	11.7	1.2	6.0	9.5	0.8	4.8	...	...	...	...	...	...
2013-14	National	15-49	11.9 ¹	0.7 ¹	...	...	...	...	9.0	0.1	...	...	...	...
2014	National	18-69	16.8	2.9	9.6	14.5	2.6	8.3	15.9	2.1	8.7	13.6	2.0	7.6
2012	National	25-64	26.0	2.9	14.1	22.2	2.0	11.8	...	...	...	18.0	1.3	9.4
2013-14	National	15-49	20.2 ¹	1.6 ¹	...	...	...	...	20	1	...	...	...	...
2011	National	15-54	22.9 ¹	0.5 ¹	...	...	...	...	21.2	0.2	...	20.2	...	...



Table 2.1.2
Most recent survey
of adult cigarette
and tobacco
smoking in the
Americas

... Data not reported/not available.

¹ All tobacco use reported in lieu of tobacco smoking.

² Bolivia (Plurinational State of) reports the following rates of tobacco smoking in the previous year from the same survey: men 35.2%, women 16.9% and total 25.0%.

³ Defined as the proportion of ever smokers who are current smokers.

⁴ Defined as the proportion of current smokers who are daily smokers.

COUNTRY	TITLE OF SURVEY	CURRENT TOBACCO SMOKING %			DAILY TOBACCO SMOKING %			CURRENT CIGARETTE SMOKING %			DAILY CIGARETTE SMOKING %		
		MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
Antigua and Barbuda	...	...	...	...	...	...	...	...	...	...	...	...	...
Argentina	National Survey of Risk Factors for Noncommunicable Diseases	...	...	...	...	...	...	...	...	...	...	...	...
Bahamas	STEPS Survey	...	...	...	...	...	...	...	...	...	...	...	...
Barbados	Health of the Nation	...	...	...	...	...	...	...	...	...	...	...	...
Belize	Multiple Indicator Cluster Survey	...	...	...	...	...	...	...	...	...	...	...	...
Bolivia (Plurinational State of) ²	National Household Survey of Prevalence and Characteristics of Drug Use in Bolivia	...	...	...	...	...	...	...	...	...	...	...	...
Brazil	National Health Survey	...	...	...	...	...	...	...	...	...	...	...	...
Canada	Canadian Tobacco, Alcohol and Drugs Survey (CTADS)	...	...	...	...	...	...	...	...	...	...	...	...
Chile	National Survey of Drugs in the General Population of Chile	...	...	...	...	...	...	...	...	...	...	...	...
Colombia	National Survey on the Consumption of Psychoactive Substances in Colombia	...	...	...	...	...	...	...	...	...	...	...	...
Costa Rica	Global Adult Tobacco Survey	...	...	...	...	...	...	...	...	...	...	...	...
Cuba	Multiple Indicator Cluster Survey	...	...	...	...	...	...	...	...	...	...	...	...
Dominica	STEPS Survey	...	...	...	...	...	...	...	...	...	...	...	...
Dominican Republic	Demographic and Health Survey	...	...	...	...	...	...	...	...	...	...	...	...
Ecuador	National Health and Nutrition Survey (ENSANUT)	...	...	...	...	...	...	...	...	...	...	...	...
El Salvador	National Alcohol and Tobacco Survey	...	...	...	...	...	...	...	...	...	...	...	...
Grenada	STEPS Survey	...	...	...	...	...	...	...	...	...	...	...	...
Guatemala	World Health Survey	...	...	...	...	...	...	...	...	...	...	...	...
Guyana	STEPS Survey	...	...	...	...	...	...	...	...	...	...	...	...
Haiti	Mortality, Morbidity and Utilization of Services Survey in Haiti	...	...	...	...	...	...	...	...	...	...	...	...
Honduras	Demographic and Health Survey	...	...	...	...	...	...	...	...	...	...	...	...
Jamaica	Health and Lifestyle Survey II	...	...	...	...	...	...	...	...	...	...	...	...
Mexico	Global Adult Tobacco Survey	...	...	...	...	...	...	...	...	...	...	...	...
Nicaragua	Demographic and Health Survey	...	...	...	...	...	...	...	...	...	...	...	...
Panama	Global Adult Tobacco Survey	...	...	...	...	...	...	...	...	...	...	...	...
Paraguay	STEPS Survey	...	...	...	...	...	...	...	...	...	...	...	...
Peru	Demographic and Health Survey	...	...	...	...	...	...	...	...	...	...	...	...
Saint Kitts and Nevis	STEPS Survey	...	...	...	...	...	...	...	...	...	...	...	...
Saint Lucia	STEPS Survey	...	...	...	...	...	...	...	...	...	...	...	...
Saint Vincent and the Grenadines	National Health and Nutrition Survey	...	...	...	...	...	...	...	...	...	...	...	...
Suriname	STEPS Survey	...	...	...	...	...	...	...	...	...	...	...	...
Trinidad and Tobago	STEPS Survey	...	...	...	...	...	...	...	...	...	...	...	...
United States of America	National Health Interview Survey (NHIS)	...	...	...	...	...	...	...	...	...	...	...	...
Uruguay	National Survey of Risk Factors for Noncommunicable Diseases	...	...	...	...	...	...	...	...	...	...	...	...
Venezuela (Bolivarian Republic of)	National Survey of Drugs in the General Population	...	...	...	...	...	...	...	...	...	...	...	...

YEAR	REPRESENTATIVENESS	AGE GROUP (YEARS)	CURRENT TOBACCO SMOKING %			DAILY TOBACCO SMOKING %			CURRENT CIGARETTE SMOKING %			DAILY CIGARETTE SMOKING %		
			MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
...	
2013	National	18+	...	...	...	...	...	...	29.9	20.9	25.1	...	...	...
2012	National	25-64	26.9	6.4	16.7	17.0	4.0	10.6	...	...	...	11.2	2.7	7.0
2011-12	National	25+	15.5	3.7	9.2	11.0	2.3	6.4	...	...	...	...	...	...
2015	National	15-49	16.4 ¹	2.1 ¹	...	...	...	...	...	...	...	...	...	...
2014	National	12-65	21.9	9.1	14.8	...	...	...	...	...	...	...	...	...
2013	National	18+	18.9	11.0	14.7	16.2	9.7	12.7	18.7	10.8	14.5	13.7	8.2	10.8
2015	National	15+	...	...	...	...	...	...	15.6	10.4	13.0	10.9	7.9	9.4
2012	National	12-64	37	31	34	23.8	20.1	21.9	...	...	...	...	...	...
2013	National	12-65	18.8	7.4	13.0	...	...	...	...	...	...	...	...	...
2015	National	15+	13.4	4.4	8.9	8.7	2.9	5.8	13.0	4.3	8.7	8.4	2.9	5.7
2014	National	15-49	27.2 ¹	11.1 ¹	...	...	...	...	26.8	10.9	...	...	...	...
2007-08	National	15-64	16.6	3.2	10.2	9.7	0.9	5.5	17.0	3.2	10.4	8.9	0.9	5.1
2007	National	15-49	13.0 ¹	16.7 ¹	...	...	...	...	11.3	6.3	...	10.5	5.9	...
2011-13	National	20-59	38.2 ³	15 ³	31.5 ³	26.3 ⁴	23.4 ⁴	25.9 ⁴	...	...	...	...	...	...
2014	National	18+	...	...	...	...	...	...	16.9	2.2	8.8	10.1	1.2	5.2
2010-11	National	25-64	30.7	6.5	18.7	19.4	2.8	11.2	...	...	...	...	...	11.1
2003	National	18+	23.9	3.4	11.2	8.3	0.9	3.7	...	...	...	...	...	...
2016	National	18-69	26.6	3.3	15.4	18.8	2.2	10.8	25.4	2.8	14.5	18.0	2.1	10.3
2012	National	15-59	13.6 ¹	5.0 ¹	...	...	...	...	11.2	2.0	...	9.8	...	...
2011-12	National	15-59	24.6 ¹	...	...	...	...	...	24.1	1.7	...	19.9	...	...
2007-08	National	15-74	...	...	...	...	...	...	22.1	7.2	14.5	...	...	...
2015	National	15+	25.2	8.2	16.4	11.9	3.6	7.6	25.2	8.2	16.3	11.8	3.6	7.5
2001	National	15-49	...	...	...	...	...	...	...	5.2	...	...	...	...
2013	National	15+	9.4	2.8	6.1	4.4	1.2	2.8	8.9	2.7	5.8	3.6	1.2	2.4
2011	National	15-74	22.8	6.1	14.5	17.4	4.2	10.9	...	...	...	17.2	3.7	10.6
2015	National	15-49	...	...	...	...	...	...	...	4.2	...	...	1.8	...
2007-08	National	25-64	16.2	1.1	8.7	11.4	0.7	6.1	...	...	...	7.4	0.6	4.0
2012	National	25-64	25.3	4.0	14.5	16.2	2.5	9.3	...	...	...	...	...	...
2013-14	National	20+	21.9	2.5	12.2	12.7	1.3	6.9	...	...	...	...	...	...
2013	National	25-64	34.0	6.5	20.1	25.5	4.4	14.9	...	...	...	...	...	...
2011	National	15-64	33.5	9.4	21.1	29.1	7.7	18.0	...	...	...	27.8	7.4	17.2
2015	National	18+	22.1	15.2	18.5	13.5	11.5	12.4	16.7	13.6	15.1	12.2	10.7	11.4
2014	National	15+	27.0	17.9	22.2	22.8	14.8	18.5	18.4	8.9	14.4	...	...	...
2011	National	18-65	28.9 ¹	14.4 ¹	21.5 ¹	18.8 ¹	9.3 ¹	14.0 ¹	25.2	13.9	19.4	17	9.4	13.1

South-East Asia

Table 2.1.3
Most recent survey
of adult cigarette
and tobacco
smoking in South-
East Asia

... Data not reported/not available.

¹ All tobacco use reported in lieu of tobacco smoking.

COUNTRY	TITLE OF SURVEY
Bangladesh	Non-Communicable Disease Risk Factor Survey
Bhutan	STEPS Survey
Democratic People's Republic of Korea	KAP Survey on Cessation of Smoking
India	Global Adult Tobacco Survey
Indonesia	Basic Health Research (RISKESDAS)
Maldives	Demographic and Health Survey
Myanmar	STEPS Survey
Nepal	STEPS Survey
Sri Lanka	STEPS Survey
Thailand	The Smoking and Drinking Behaviour Survey
Timor-Leste	National Survey for Noncommunicable Disease Risk Factors and Injuries

YEAR	REPRESENTATIVENESS	AGE GROUP (YEARS)	CURRENT TOBACCO SMOKING %			DAILY TOBACCO SMOKING %			CURRENT CIGARETTE SMOKING %			DAILY CIGARETTE SMOKING %		
			MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
2009-10	National	25+	54.8	1.3	26.2	53.3	1.1	25.4	...	...	...	36.8	0.1	17.2
2014	National	18-69	10.8	3.1	7.4	6.0	2.1	4.3	8.3	1.9	5.5	5.4	0	3.6
2016	National	17+	...	...	...	37.3	0	...	...	...	...	...	...	...
2009-10	National	15+	24.3	2.9	14.0	18.3	2.4	10.7	10.3	0.8	5.7	6.3	0.6	3.6
2013	National	15+	64.9	2.1	...	...	...	...	64.9	2.1	...	...	...	...
2009	National	15-64	53.5 ¹	8.9 ¹	...	...	...	...	47.0	2.3	...	...	2.1	...
2014	National	25-64	43.8	8.4	26.1	34.0	7.4	20.7	...	...	...	...	...	...
2012-13	National	15-69	27.0	10.3	18.5	22.2	9.6	15.8	26.9	10.1	18.3	22.2	9.4	15.7
2014	National	18-69	29.4	0.1	15.0	19.9	0.1	10.2	...	...	...	...	...	...
2014	National	15+	40.5	2.2	20.7	35.8	1.8	18.2	...	...	...	...	...	...
2014	National	18-69	69.5	9.6	48.6	49.6	7.8	35.0	66.2	8.6	46.1	46.9	7.3	33.1



Table 2.1.4
Most recent survey
of adult cigarette
and tobacco
smoking in Europe

... Data not reported/not available.

¹ All tobacco use reported in lieu of tobacco smoking.

² Recently released 2017 data from the same survey show current cigarette smoking among men 47%, women 15%, total 29%, and daily cigarette smoking total 27%.

³ Data representative of Great Britain only.

COUNTRY	TITLE OF SURVEY	CURRENT TOBACCO SMOKING %			DAILY TOBACCO SMOKING %			CURRENT CIGARETTE SMOKING %			DAILY CIGARETTE SMOKING %		
		MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
Albania	Demographic and Health Survey												
Andorra	National Health Survey												
Armenia	STEPS Survey												
Austria	Representative Survey on Substance Abuse												
Azerbaijan	Household Budget Survey												
Belarus	Social Conditions and Standard Of Living Survey												
Belgium	Health Interview Survey, Belgium												
Bosnia and Herzegovina	Multiple Indicator Cluster Survey												
Bulgaria	European Health Interview Survey												
Croatia	European Health Interview Survey with TQS												
Cyprus	Eurobarometer												
Czechia	The Use of Tobacco in the Czech Republic												
Denmark	Monitoring Smoking Habits in the Danish Population												
Estonia	Health Behaviour among Estonian Adult Population												
Finland	Health Behaviour and Health among the Finnish Adult Population												
France	Health Barometer												
Georgia	STEPS Survey												
Germany	Microcensus												
Greece	Hellenic Statistical Authority Health Survey												
Hungary	European Health Interview Survey												
Iceland	May–December Household Surveys done by Gallup												
Ireland	Healthy Ireland Survey												
Israel	National Health Interview Survey												
Italy	ISTAT: Multiscope Survey "Aspects of Daily Life"												
Kazakhstan	Global Adult Tobacco Survey												
Kyrgyzstan	STEPS Survey												
Latvia	Health Behaviour among Latvian Adult Population												
Lithuania	European Health Interview Survey												
Luxembourg	Tobacco Habits in Luxembourg												
Malta	Eurobarometer												
Monaco	...												
Montenegro	Living Standards Measurement Survey												
Netherlands	The Dutch Continuous Survey of Smoking Habits												
Norway	Statistics Norway Smoking Habits Survey												
Poland	Nationwide Survey on Attitudes towards Tobacco Smoking												
Portugal	National Health Survey												
Republic of Moldova	STEPS Survey												
Romania	Global Adult Tobacco Survey												
Russian Federation ²	Russian Public Opinion Research Centre Survey												
San Marino	...												
Serbia	National Survey on Lifestyles of Citizens in Serbia												
Slovakia	Tobacco and Health Education Survey												
Slovenia	Survey on the Use of Tobacco, Alcohol and Other Drugs												
Spain	European Health Interview Survey												
Sweden	National Survey of Public Health												
Switzerland	Addiction Monitoring survey												
Tajikistan	Demographic and Health Survey												
The former Yugoslav Republic of Macedonia	Multiple Indicator Cluster Survey												
Turkey	Global Adult Tobacco Survey												
Turkmenistan	STEPS Survey												
Ukraine	Kyiv International Institute of Sociology Face-to-Face Survey												
United Kingdom of Great Britain and Northern Ireland ³	Integrated Household Survey												
Uzbekistan	STEPS Survey												

YEAR	REPRESENTATIVENESS	AGE GROUP (YEARS)	CURRENT TOBACCO SMOKING %			DAILY TOBACCO SMOKING %			CURRENT CIGARETTE SMOKING %			DAILY CIGARETTE SMOKING %		
			MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
2008-09	National	15–49	44.7	4.2	...	...	...	...	42.5	4.2	...	42.3	4.1	...
2011	National	15+	37.4	27.7	...	35.3	25.5	...	...	...	...	...	...	...
2016	National	18–69	51.5	1.8	27.9	49.9	1.6	26.9	...	...	...	...	...	...
2015	National	15+	30.2	23.8	26.9	18.9	15.8	17.3	...	...	...	...	...	...
2015	National	15+	...	...	...	...	...	...	35.5	0	17.0	...	...	...
2016	National	16+	46.6	8.6	24.0	...	...	...	...	...	...	...	...	...
2013	National	15+	26.2	19.9	23.0	21.6	16.4	18.9	...	...	...	...	...	...
2011-12	National	15–49	39.9 ¹	27.3 ¹	33.6 ¹	...	...	...	39.3	27.1	33.2	...	...	...
2014-15	National	15+	...	...	...	...	...	...	43.3	26.8	34.8	36.4	20.7	28.2
2014-15	National	15+	35.3	27.1	31.1	31.8	23.4	27.5	...	...	...	...	...	...
2014	National	15+	44	19	31	...	...	...	...	...	...	...	...	...
2015	National	15+	27.3	21.1	24.1	21.8	14.8	18.2	26.5	20.8	23.6	...	...	...
2015	National	15+	22.8	22.2	22.5	16.0	17.3	16.7	19.3	22.2	20.5	13.9	17.8	15.5
2014	National	16–64	39.4	22.7	29.4	31.4	15.8	22.1	...	...	...	...	...	...
2014	National	15–64	24.8	18.7	21.4	17.2	14.0	15.4	...	...	...	...	...	...
2014	National	15–75	...	...	34.1	32.3	24.3	28.2	...	...	...	...	...	...
2016	National	18–69	57.0	7.0	31.0	51.5	6.2	28.0	...	...	...	...	...	...
2013	National	15+	29.0	20.3	24.5	25.1	17.1	20.9	...	...	...	...	...	...
2014	National	15+	39.0	26.5	32.5	33.5	21.6	27.3	...	...	...	...	...	...
2014	National	15+	33.4	22.2	27.5	31.5	20.8	25.8	...	...	...	...	...	...
2015	National	18–69	15.3	15.0	15.2	11.1	11.9	11.5	...	...	...	...	...	...
2014-15	National	15+	24	21	23	19.9	17.3	18.5	24	21	23	19.9	17.3	18.5
2013	National	21+	27.3	12.6	19.8	...	...	...	...	...	...	...	...	...
2015	National	15+	24.8	15.1	19.8	22.8	14.9	19.7	...	...	...	...	...	...
2014	National	15+	42.4	4.5	22.4	36.9	3.2	19.1	42.2	4.2	22.2	36.3	3.0	18.7
2013	National	25–64	48.2	2.7	25.7	41.7	2.4	22.2	48.2	2.7	25.7	41.7	2.4	22.2
2014	National	15–64	53.6	22.3	37.6	51.8	21.0	36.1	...	...	...	...	...	...
2014	National	15+	40.3	12.3	24.9	33.9	9.2	20.4	39.6	12.2	24.6	33.6	9.2	20.2
2015	National	15+	...	...	...	...	...	...	23	18	21	16	14	15
2014	National	15+	23	17	20	...	...	...	...	...	...	...	...	...
...
2012	National	20+	35	27	31	...	...	...	...	...	...	...	...	...
2014	National	15+	24	23	23	17	17	17	...	...	...	...	...	...
2015	National	16–74	23	21	22	13	13	13	...	...	...	...	...	...
2014-15	National	15+	32	19	25	31	18	24	...	...	...	...	...	...
2014	National	15+	27.8	13.2	20.0	23.5	10.9	16.8	...	...	...	22.8	10.8	16.4
2013	National	25–69	43.6	5.6	25.3	40.6	4.6	23.3	43.1	5.6	25.0	40.1	4.6	23.0
2011	National	15+	37.4	16.7	26.7	34.9	14.5	24.3	37.4	16.7	26.7	...	...	...
2016	National	18+	...	...	...	...	...	...	45	17	31	...	...	29
...
2014	National	18–64	44.3	36.2	40.2	40.9	32.0	36.4	...	...	...	...	...	...
2014	National	18+	40.4	31.7	36.0	33.7	24.4	29.1	37.5	27.4	32.4	...	...	...
2014	National	15–64	26.8	21.1	24.0	...	...	...	...	...	...	...	...	...
2014	National	15+	30.4	20.5	25.4	27.6	18.6	23.0	...	...	...	...	...	...
2015	National	16–84	20	19	20	9	11	10	...	...	...	...	...	...
2014	National	15+	28.8	21.1	24.9	19.6	15.1	17.3	...	...	...	...	...	...
2012	National	15–49	...	0.3 ¹	...	...	...	...	...	0.3	...	...	0.2	...
2011	National	15–49	...	30 ¹	...	...	...	...	...	29.9	...	...	...	...
2016	National	15+	43.7	18.2	30.9	41.4	16.3	28.8	...	...	...	...	...	...
2013-14	National	18–64	15.5	0.6	8.3	11.5	0.5	6.3	13.3	0.5	7.1	10.3	0.5	5.6
2015	National	18+	45.0	10.6	...	42.4	9.0	...	...	...	...	...	...	...
2014	National	18+	...	...	...	...	...	...	20.7	15.9	18.3	20.1	15.4	17.8
2014	National	18–64	26.8	1.4	14.4	16.6	0.9	9.0	...	...	...	14.9	0.9	8.1



Eastern Mediterranean

Table 2.1.5
Most recent survey of adult cigarette and tobacco smoking in the Eastern Mediterranean

... Data not reported/not available.
< Refers to a territory
¹ All tobacco use reported in lieu of tobacco smoking.
² Rates refer to the Kuwaiti population only.
³ Only Omanis were surveyed.

COUNTRY	TITLE OF SURVEY	CURRENT TOBACCO SMOKING %			DAILY TOBACCO SMOKING %			CURRENT CIGARETTE SMOKING %			DAILY CIGARETTE SMOKING %		
		MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
Afghanistan	Study of Smoking Prevalence among Men in Kabul City	...	...	...	...	...	...	...	...	...	...	...	...
Bahrain	National Non-Communicable Diseases Risk Factor Survey	...	...	...	...	...	...	...	...	...	...	...	...
Djibouti	Djibouti Family Health Survey (PAPFAM)	...	...	...	...	...	...	...	...	...	...	...	...
Egypt	Demographic and Health Survey	...	...	...	...	...	...	...	...	...	...	...	...
Iran (Islamic Republic of)	Sixth national survey of NCD Risk Factors Surveillance	...	...	...	...	...	...	...	...	...	...	...	...
Iraq	STEPS Survey	...	...	...	...	...	...	...	...	...	...	...	...
Jordan	Demographic and Health Survey	...	...	...	...	...	...	...	...	...	...	...	...
Kuwait ²	STEPS Survey	...	...	...	...	...	...	...	...	...	...	...	...
Lebanon	Lebanese National Tobacco Control Program survey	...	...	...	...	...	...	...	...	...	...	...	...
Libya	STEPS Survey	...	...	...	...	...	...	...	...	...	...	...	...
Morocco	MARTA	...	...	...	...	...	...	...	...	...	...	...	...
Oman ³	World Health Survey	...	...	...	...	...	...	...	...	...	...	...	...
Pakistan	Global Adult Tobacco Survey	...	...	...	...	...	...	...	...	...	...	...	...
Qatar	Global Adult Tobacco Survey	...	...	...	...	...	...	...	...	...	...	...	...
Saudi Arabia	Saudi Health Information Survey	...	...	...	...	...	...	...	...	...	...	...	...
Somalia	...	...	...	...	...	...	...	...	...	...	...	...	...
Sudan	...	...	...	...	...	...	...	...	...	...	...	...	...
Syrian Arab Republic	National Survey on Non-communicable Diseases and Factors affecting their Development	...	...	...	...	...	...	...	...	...	...	...	...
Tunisia	National Survey of Morbidity and Access to Care (TAHINA)	...	...	...	...	...	...	...	...	...	...	...	...
United Arab Emirates	World Health Survey	...	...	...	...	...	...	...	...	...	...	...	...
West Bank and Gaza Strip <	STEPS Survey	...	...	...	...	...	...	...	...	...	...	...	...
Yemen	National Health and Demographic Survey	...	...	...	...	...	...	...	...	...	...	...	...

YEAR	REPRESENTATIVENESS	AGE GROUP (YEARS)	CURRENT TOBACCO SMOKING %			DAILY TOBACCO SMOKING %			CURRENT CIGARETTE SMOKING %			DAILY CIGARETTE SMOKING %		
			MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
2010	Subnational	15+	...	...	...	...	...	...	35.2	...	...	...	...	...
2007	National	20-64	33.4	7.0	19.9	30.6	5.7	17.9	27.0	1.2	13.8	26.0	1.2	13.3
2012	National	10+	18.0 ¹	2.0 ¹	...	...	...	...	...	...	...	...	...	...
2015	National	15-59	46.4	0.2	20.9	44.5	0.1	20.0	...	...	...	...	...	...
2011	National	15-64	20.8	0.9	11.0	19.2	0.6	10.0	...	...	...	...	...	...
2015	National	18+	38.0	1.9	20.7	36.1	1.8	19.6	...	...	...	...	...	...
2012	National	15-49	...	18.0 ¹	...	...	...	...	...	10.8	...	...	...	...
2014	National	18-69	39.2	3.3	20.5	35.4	2.0	18.0	...	...	...	31.8	1.3	15.9
2013	National	18+	43	34	...	...	...	...	32	21	...	...	...	...
2009	National	25-64	49.6	0.7	...	47.6	0.1	...	...	...	...	42.2	...	...
2006	National	15-74	31.5	3.3	18.0	30.3	0.2	15.1	...	...	...	27.4	0.2	13.6
2008	National	18+	14.7	0.2	7.0	12.3	0.1	5.8	...	...	...	...	...	...
2014	National	15+	22.2	2.1	12.4	20.6	2.0	11.5	19.4	1.0	10.5	17.9	1.0	9.6
2013	National	15+	21.3	0.6	10.5	18.2	0.1	8.8	18.5	0.3	9.0	...	...	...
2014	National	15+	23.7	1.5	12.2	...	...	...	...	...	...	...	...	...
...
...
2002-03	National	15-65	...	...	...	48.0	8.9	24.7	...	...	...	...	...	...
2005-06	National	35-70	48.4	8.2	24.9	48.3	7.7	23.7	...	...	...	...	...	...
2009	National	18+	28.0	0.9	...	25.4	0.8	...	...	...	...	...	...	...
2011	National	15-64	37.6	2.6	20.2	36.2	2.2	19.3	...	...	...	...	...	...
2013	National	10+	20.7	6.0	13.3	...	...	...	...	...	...	...	...	...



Western Pacific

Table 2.1.6
Most recent survey
of adult cigarette
and tobacco
smoking in the
Western Pacific

... Data not reported/not available.

¹ All tobacco use reported in lieu of tobacco smoking.

COUNTRY	TITLE OF SURVEY	CURRENT TOBACCO SMOKING %			DAILY TOBACCO SMOKING %			CURRENT CIGARETTE SMOKING %			DAILY CIGARETTE SMOKING %		
		MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
Australia	National Health Survey, Australian Bureau of Statistics: First Results												
Brunei Darussalam	Knowledge, Attitudes and Practices Survey on Noncommunicable Diseases												
Cambodia	National Adult Tobacco Survey of Cambodia												
China	Global Adult Tobacco Survey												
Cook Islands	Census												
Fiji	STEPS Survey												
Japan	National Health and Nutrition Survey												
Kiribati	STEPS Survey												
Lao People's Democratic Republic	National Adult Tobacco Survey												
Malaysia	National Health And Morbidity Survey												
Marshall Islands	STEPS Survey												
Micronesia (Federated States of)	National Outcome Measures Survey												
Mongolia	STEPS Survey												
Nauru	STEPS Survey												
New Zealand	New Zealand Health Survey												
Niue	STEPS Survey												
Palau	STEPS Survey												
Papua New Guinea	Household Income and Expenditure Survey (HIES)												
Philippines	Global Adult Tobacco Survey												
Republic of Korea	Korea National Health and Nutrition Examination Survey (KNHANES)												
Samoa	STEPS Survey												
Singapore	National Health Surveillance Survey (NHSS)												
Solomon Islands	STEPS Survey												
Tonga	STEPS Survey												
Tuvalu	Population and Housing Census												
Vanuatu	STEPS Survey												
Viet Nam	Global Adult Tobacco Survey												

YEAR	REPRESENTATIVENESS	AGE GROUP (YEARS)	CURRENT TOBACCO SMOKING %			DAILY TOBACCO SMOKING %			CURRENT CIGARETTE SMOKING %			DAILY CIGARETTE SMOKING %		
			MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
2014-15	National	18+	18.9	13.3	16.0	16.9	12.1	14.5	...	...	...	...	...	...
2014-15	National	15+	32.6	2.3	18.0	22.6	1.8	12.5	32.4	2.3	17.8	22.5	1.6	12.4
2014	National	15+	33.6 ¹	11.0 ¹	21.8 ¹	32.1 ¹	2.4 ¹	16.5 ¹	32.3	2.4	16.6	32.1	2.4	16.5
2015	National	15+	52.1	2.7	27.7	44.8	2.0	23.7	51.4	2.7	27.3	...	...	...
2011	National	15+	36.6	27.6	32.0	24.3	16.4	20.3	...	...	...	...	...	...
2011	National	25-64	47.0	14.3	30.7	27.1	6.0	16.6	...	...	...	...	...	...
2015	National	20+	30.1	7.9	18.2	...	...	...	30.1	7.9	18.2	...	...	...
2015-16	National	18-69	64.7	33.4	47.7	61.6	30.9	45.0	...	...	...	...	...	...
2015	National	15+	50.8	7.1	27.9	46.9	6.6	25.7	48.6	4.9	25.6	...	...	...
2015	National	15-75	43.0	1.4	22.8	38.8	1.1	20.5	42.4	1.2	22.5	...	...	...
2002	National	15-64	39.5	6.0	23.1	34.7	4.2	19.8	...	...	...	...	...	...
2012	National	12-98	...	...	...	...	...	...	69.1	46.9	62.4	39.8	25.4	35.4
2013	National	15-64	49.1	5.3	27.1	45.5	4.5	24.8	...	...	...	...	...	...
2004	National	15-64	49.7	56.0	52.9	45.5	50.8	48.2	...	...	...	...	...	...
2015-16	National	15+	18.1	14.6	16.3	15.6	12.9	14.2	...	...	...	...	...	...
2011	National	15+	22.6	13.0	17.7	15.8	7.6	11.6	...	...	...	...	...	...
2011-13	National	25-64	24.0	8.4	16.6	20.2	5.8	13.3	...	...	...	...	...	...
2009-10	National	0+	37.3	14.5	26.3	...	...	...	...	...	...	...	...	...
2015	National	15+	40.3	5.1	22.7	33.9	3.6	18.7	40.1	4.9	22.5	...	...	...
2015	National	19+	...	...	...	...	...	...	39.3	5.5	22.6	33.6	3.5	18.7
2013	National	18-64	36.5	13.7	25.6	33.4	12.2	23.3	...	...	25.6	...	...	23.3
2012-13	National	18-69	...	...	...	...	...	...	25.4	4.8	15.0	23.1	3.8	13.3
2005-06	National	15-64	56.1	26.1	41.4	43.4	15.3	29.7	...	...	...	40.7	13.4	27.4
2011	National	25-64	46.4	13.4	29.3	42.1	12.4	26.7	...	...	...	34.4	11.9	...
2002	National	15+	...	...	...	...	...	...	54.6	22.7	37.9	...	...	...
2011	National	25-v64	45.8	4.0	23.7	24.6	1.6	12.4	...	...	...	...	...	...
2015	National	15+	45.3	1.1	22.5	38.7	0.9	19.2	36.7	0.8	18.2	30.7	0.6	15.2



Table 2.2.1
Most recent survey
of adult smokeless
tobacco use in
Africa

... Data not reported/not available.

COUNTRY	TITLE OF SURVEY
Algeria	Algeria Adult Tobacco Survey
Angola	...
Benin	STEPS Survey
Botswana	STEPS Survey
Burkina Faso	STEPS Survey
Burundi	...
Cabo Verde	STEPS Survey
Cameroon	Global Adult Tobacco Survey
Central African Republic	...
Chad	...
Comoros	STEPS Survey
Congo	...
Côte d'Ivoire	...
Democratic Republic of the Congo	...
Equatorial Guinea	...
Eritrea	STEPS Survey
Ethiopia	STEPS Survey
Gabon	...
Gambia	STEPS Survey
Ghana	Demographic and Health Survey
Guinea	...
Guinea-Bissau	...
Kenya	STEPS Survey
Lesotho	STEPS Survey
Liberia	STEPS Survey
Madagascar	Demographic and Health Survey
Malawi	STEPS Survey
Mali	...
Mauritania	...
Mauritius	...
Mozambique	STEPS Survey
Namibia	Demographic and Health Survey
Niger	Demographic and Health Survey and Multiple Indicator Cluster Survey
Nigeria	Global Adult Tobacco Survey
Rwanda	STEPS Survey
Sao Tome and Principe	STEPS Survey
Senegal	Global Adult Tobacco Survey
Seychelles	The Seychelles Heart Study IV
Sierra Leone	Prevalence of Common Risk Factors of Non-Communicable Diseases in Sierra Leone
South Africa	South African Social Attitude Survey
South Sudan	...
Swaziland	STEPS Survey
Togo	STEPS Survey
Uganda	Uganda NCD Risk Factors Survey
United Republic of Tanzania	STEPS Survey
Zambia	Demographic and Health Survey
Zimbabwe	Demographic and Health Survey

YEAR	REPRESENTATIVENESS	AGE GROUP (YEARS)	CURRENT SMOKELESS TOBACCO USE PREVALENCE %		
			MALE	FEMALE	TOTAL
2010	National	15+	10.0	0.8	5.7
...
2015	National	18-69	9.0	3.0	5.0
2014	National	15-69	1.5	6.5	3.9
2013	National	25-64	5.6	11.7	8.9
...
2007	National	25-64	3.5	5.8	4.7
2013	National	15+	2.2	3.8	3.0
...
...
2011	National	25-64	19.5	17.4	18.4
...
...
...
2010	National	25-64	11.6	0.1	2.2
2015	National	15-69	1.1	0.4	0.8
...
2010	National	25-64	0.8	1.4	1.1
2008	National	15-49	1.7	0.2	...
...
...
2015	National	18-69	4.0	3.3	3.6
2012	National	25-64	3.8	17.1	10.5
2011	National	25-64	1.1	3.1	2.1
2008-09	National	15-49	22.6	19.6	...
2009	National	25-64	1.9	5.0	3.5
...
...
...
2005	National	25-64	2.5	7.9	5.6
2006-07	National	15-49	1.8	2.3	...
2012	National	15-59	4.7	2.3	...
2012	National	15+	2.9	0.9	1.9
2012	National	15-64	0.6	3.3	2.0
2008	National	25-64	3.8	1.9	2.8
2015	National	15+	0.3	1.0	0.7
2013	National	25-64	0.3	0.4	0.3
2009	National	25-64	2.9	12.1	7.8
2007	National	16+	1.4	8.4	5.0
...
2014	National	15-69	2.7	1.8	2.2
2010-11	National	15-64	5.1	2.2	3.6
2014	National	18-69	4.6	2.9	3.7
2012	National	25-64	2.9	2.2	2.5
2007	National	15-49	0.2	1.2	...
2011	National	15-54	1.6	0.4	...

The Americas

Table 2.2.2
Most recent survey
of adult smokeless
tobacco use in The
Americas

... Data not reported/not available.

¹ High sampling variability, interpret with caution.

COUNTRY	TITLE OF SURVEY
Antigua and Barbuda	...
Argentina	Global Adult Tobacco Survey
Bahamas	STEPS Survey
Barbados	STEPS Survey
Belize	...
Bolivia (Plurinational State of)	...
Brazil	National Health Survey
Canada	Canadian Tobacco, Alcohol and Drugs Survey (CTADS)
Chile	...
Colombia	...
Costa Rica	Global Adult Tobacco Survey
Cuba	...
Dominica	STEPS Survey
Dominican Republic	Demographic and Health Survey
Ecuador	...
El Salvador	...
Grenada	STEPS Survey
Guatemala	...
Guyana	...
Haiti	Demographic and Health Survey
Honduras	...
Jamaica	...
Mexico	Global Adult Tobacco Survey
Nicaragua	...
Panama	Global Adult Tobacco Survey
Paraguay	STEPS Survey
Peru	...
Saint Kitts and Nevis	STEPS Survey
Saint Lucia	STEPS Survey
Saint Vincent and the Grenadines	...
Suriname	...
Trinidad and Tobago	STEPS Survey
United States of America	National Health Interview Survey (NHIS)
Uruguay	Global Adult Tobacco Survey
Venezuela (Bolivarian Republic of)	National Survey of Drugs in the General Population

YEAR	REPRESENTATIVENESS	AGE GROUP (YEARS)	CURRENT SMOKELESS TOBACCO USE PREVALENCE %		
			MALE	FEMALE	TOTAL
...
2011-12	National	15+	0.1	0.2	0.2
2012	National	25-64	0.9	0.1	0.5
2007	National	25+	0	0.6	0.3
...
...
2013	National	18+	0.5	0.2	0.3
2015	National	15+	0.8	0 ¹	0.4
...
...
2015	National	15+	0.1	0	0.1
...
2007-08	National	15-64	1.6	0	0.8
2007	National	15-49	1.9	0.3	...
...
...
2010-11	National	25-64	2.2	0.3	1.2
...
...
2005-06	National	15-49	...	2.5	...
...
...
2015	National	15+	0.4	0	0.2
...
2013	National	15+	1.0	0.5	0.8
2011	National	15-74	3.0	1.6	2.3
...
2007-08	National	25-64	0.3	0.1	0.2
2012	National	25-64	1.3	0.2	0.8
...
...
2011	National	15-64	0.5	0.3	0.4
2015	National	18+	4.3	0.2	2.2
2009	National	15+	0	...	...
2011	National	18-65	6.2	0.9	3.5



South-East Asia

Table 2.2.3
Most recent survey
of adult smokeless
tobacco use in
South-East Asia

... Data not reported/not available.

COUNTRY	TITLE OF SURVEY
Bangladesh	Non-Communicable Disease Risk Factor Survey
Bhutan	STEPS Survey
Democratic People's Republic of Korea	...
India	Global Adult Tobacco Survey
Indonesia	Basic Health Research (RISKESDAS)
Maldives	Demographic and Health Survey
Myanmar	STEPS Survey
Nepal	STEPS Survey
Sri Lanka	STEPS Survey
Thailand	The Smoking and Drinking Behaviour Survey
Timor-Leste	National Survey for Noncommunicable Disease Risk Factors and Injuries

YEAR	REPRESENTATIVENESS	AGE GROUP (YEARS)	CURRENT SMOKELESS TOBACCO USE PREVALENCE %		
			MALE	FEMALE	TOTAL
2009-10	National	25+	29.4	33.6	31.7
2014	National	18-69	26.5	11.0	19.7
...
2009-10	National	15+	32.9	18.4	25.9
2013	National	15+	3.9	4.8	...
2009	National	15-64	8.5	4.2	...
2014	National	25-64	62.2	24.1	43.2
2012-13	National	15-69	31.1	4.8	17.8
2014	National	18-69	26.0	5.3	15.8
2014	National	15+	2.5	3.9	3.3
2014	National	18-69	16.1	26.8	19.8



Table 2.2.4
Most recent survey
of adult smokeless
tobacco use in
Europe

... Data not reported/not available.

COUNTRY	TITLE OF SURVEY
Albania	...
Andorra	...
Armenia	Demographic and Health Survey
Austria	Representative Survey on Substance Abuse
Azerbaijan	National Study of Risk Factors for Noncommunicable Diseases in Azerbaijan
Belarus	...
Belgium	...
Bosnia and Herzegovina	...
Bulgaria	...
Croatia	European Health Interview Survey with TQS
Cyprus	...
Czechia	The Use of Tobacco in the Czech Republic
Denmark	Monitoring Smoking Habits in the Danish Population
Estonia	Health Behaviour among Estonian Adult Population
Finland	Health Behaviour and Health among the Finnish Adult Population
France	...
Georgia	Survey of Risk Factors of Non-Communicable Diseases
Germany	Eurobarometer – Attitudes of Europeans Towards Tobacco
Greece	Global Adult Tobacco Survey
Hungary	European Health Interview Survey
Iceland	May – December Household Surveys done by Gallup
Ireland	...
Israel	...
Italy	...
Kazakhstan	Global Adult Tobacco Survey
Kyrgyzstan	STEPS Survey
Latvia	Health Behaviour among Latvian Adult Population
Lithuania	...
Luxembourg	...
Malta	...
Monaco	...
Montenegro	...
Netherlands	The Dutch Continuous Survey of Smoking Habits
Norway	Statistics Norway Smoking Habits Survey
Poland	Nationwide Survey on Attitudes towards Tobacco Smoking
Portugal	...
Republic of Moldova	STEPS Survey
Romania	Global Adult Tobacco Survey
Russian Federation	Global Adult Tobacco Survey
San Marino	...
Serbia	...
Slovakia	Tobacco and Health Education Survey
Slovenia	...
Spain	...
Sweden	National Survey of Public Health
Switzerland	Addiction Monitoring Survey
Tajikistan	...
The former Yugoslav Republic of Macedonia	...
Turkey	...
Turkmenistan	STEPS Survey
Ukraine	Global Adult Tobacco Survey
United Kingdom of Great Britain and Northern Ireland	...
Uzbekistan	STEPS Survey

YEAR	REPRESENTATIVENESS	AGE GROUP (YEARS)	CURRENT SMOKELESS TOBACCO USE PREVALENCE %		
			MALE	FEMALE	TOTAL
...
...
2005	National	15–49	1.8	0	...
2015	National	15+	2.8	0.5	1.6
2011	National	18+	0.2	0	0.2
...
...
...
2014-15	National	15+	0.8	0.4	0.6
...
2015	National	15+	2.2	1.2	1.7
2015	National	15+	2.3	0.9	1.6
2014	National	16–64	5.7	0.8	2.8
2014	National	15–64	5.6	0.4	2.6
...
2010	National	18–64	1.0	0.2	0.6
2012	National	15+	...	...	2
2013	National	15+	0.2	0.2	0.2
2014	National	15+	0.1	0.1	0.1
2015	National	18–69	13.0	3.0	5.1
...
...
...
2014	National	15+	2.8	0	1.3
2013	National	25–64	10.1	0.1	5.2
2014	National	15–64	0.1	0	0
...
...
...
...
2011	National	15+	0.3	0.1	0.2
2015	National	16–74	21	6	14
2014-15	National	15+	2	1	1
...
2013	National	25–69	0.1	0	0
2011	National	15+	...	...	0
2009	National	15+	1.0	0.2	0.6
...
...
2014	National	18+	1.9	0.8	1.3
...
...
2015	National	16–84	25	7	16
2013	National	15+	4.2	1.2	2.7
...
...
...
2013-14	National	18–64	2.7	0	1.4
2010	National	15+	0.5	0	0.2
...
2014	National	18–64	23.2	0.2	12.0

Eastern Mediterranean

Table 2.2.5
Most recent survey of adult smokeless tobacco use in the Eastern Mediterranean

< Refers to a territory

COUNTRY	TITLE OF SURVEY
Afghanistan	...
Bahrain	...
Djibouti	...
Egypt	Egypt NCD Stepwise Survey
Iran (Islamic Republic of)	...
Iraq	Non-Communicable Diseases Risk Factors Survey
Jordan	...
Kuwait	STEPS Survey
Lebanon	...
Libya	STEPS Survey
Morocco	...
Oman	...
Pakistan	Global Adult Tobacco Survey
Qatar	Global Adult Tobacco Survey
Saudi Arabia	Saudi Health Information Survey
Somalia	...
Sudan	...
Syrian Arab Republic	National Survey on Tobacco Use
Tunisia	National Survey of Morbidity and Access to Care (TAHINA)
United Arab Emirates	...
West Bank and Gaza Strip <	...
Yemen	National Health and Demographic Survey

YEAR	REPRESENTATIVENESS	AGE GROUP (YEARS)	CURRENT SMOKELESS TOBACCO USE PREVALENCE %		
			MALE	FEMALE	TOTAL
...
...
...
2011-12	National	15-65	0.4	0	0.7
...
2006	National	25-65	1.6	0.3	0.9
...
2014	National	18-69	0.5	0	0.2
...
2009	National	25-64	2.2	0.1	1.2
...
...
2014	National	15+	11.4	3.7	7.7
2013	National	15+	1.5	0	0.7
2014	National	15+	1.5	0.3	0.9
...
...
1999	National	15+	0	0	0
2005-06	National	35-70	8.6	2.2	5.4
...
...
2013	National	10+	13.7	4.8	9.2



Western Pacific

Table 2.2.6
Most recent survey
of adult smokeless
tobacco use in the
Western Pacific

... Data not reported/not available.

COUNTRY	TITLE OF SURVEY
Australia	National Drug Strategy Household Survey
Brunei Darussalam	Knowledge, Attitudes and Practices Survey on Noncommunicable Diseases
Cambodia	National Adult Tobacco Survey of Cambodia
China	...
Cook Islands	...
Fiji	...
Japan	...
Kiribati	...
Lao People's Democratic Republic	National Adult Tobacco Survey
Malaysia	National Health And Morbidity Survey
Marshall Islands	STEPS Survey
Micronesia (Federated States of)	...
Mongolia	STEPS Survey
Nauru	...
New Zealand	...
Niue	STEPS Survey
Palau	STEPS Survey
Papua New Guinea	...
Philippines	Global Adult Tobacco Survey
Republic of Korea	...
Samoa	...
Singapore	...
Solomon Islands	...
Tonga	...
Tuvalu	...
Vanuatu	...
Viet Nam	...

YEAR	REPRESENTATIVENESS	AGE GROUP (YEARS)	CURRENT SMOKELESS TOBACCO USE PREVALENCE %		
			MALE	FEMALE	TOTAL
2013	National	14+	0.6	0.3	0.4
2014-15	National	15+	1.3	2.7	1.8
2014	National	15+	0.8	8.6	4.9
...
...
...
...
2015	National	15+	0.5	8.6	4.3
2015	National	15-75	20.4	0.8	10.9
2002	National	15-64	13.7	4.0	8.9
...
2013	National	15-64	0.8	0.2	0.5
...
...
2011	National	15+	0.3	0.2	0.2
2011-13	National	25-64	60.4	65.9	63.0
...
2015	National	15+	2.7	0.7	1.7
...
2013	National	...	1.3	0.5	0.9
...
...
...
...
2010	National	...	0.3	2.3	1.3



Table 2.3.1
Most recent survey
of youth tobacco
use in Africa

... Data not reported/not available.

COUNTRY	TITLE OF SURVEY
Algeria	Global Youth Tobacco Survey
Angola	Global Youth Tobacco Survey (Huambo)
Benin	Global School-Based Student Health Survey
Botswana	Global Youth Tobacco Survey
Burkina Faso	Global Youth Tobacco Survey (Ouagadougou)
Burundi	Global Youth Tobacco Survey
Cameroon	Consumption of Psychoactive Substances among Secondary School Students
Cabo Verde	Global Youth Tobacco Survey
Central African Republic	Global Youth Tobacco Survey (Bangui)
Chad	Global Youth Tobacco Survey
Comoros	Global Youth Tobacco Survey
Congo	Global Youth Tobacco Survey
Côte d'Ivoire	Global Youth Tobacco Survey
Democratic Republic of the Congo	Global Youth Tobacco Survey (Kinshasa)
Equatorial Guinea	Global Youth Tobacco Survey
Eritrea	Global Youth Tobacco Survey
Ethiopia	Global Youth Tobacco Survey (Addis Ababa)
Gabon	Global Youth Tobacco Survey
Gambia	Global Youth Tobacco Survey (Banjul)
Ghana	Global School-Based Student Health Survey
Guinea	Global Youth Tobacco Survey
Guinea-Bissau	Global Youth Tobacco Survey (Bissau)
Kenya	Global Youth Tobacco Survey
Lesotho	Global Youth Tobacco Survey
Liberia	Global Youth Tobacco Survey (Monrovia)
Madagascar	Global Youth Tobacco Survey
Malawi	Global Youth Tobacco Survey
Mali	Global Youth Tobacco Survey
Mauritania	Global School-Based Student Health Survey
Mauritius	Global Youth Tobacco Survey
Mozambique	Global Youth Tobacco Survey
Namibia	Global Youth Tobacco Survey
Niger	Global Youth Tobacco Survey
Nigeria	Global Youth Tobacco Survey (Abuja)
Rwanda	Global Youth Tobacco Survey
Sao Tome and Principe	Global Youth Tobacco Survey
Senegal	Global Youth Tobacco Survey
Seychelles	Global Youth Tobacco Survey
Sierra Leone	Global Youth Tobacco Survey (Western Area)
South Africa	Global Youth Tobacco Survey
South Sudan	...
Swaziland	Global Youth Tobacco Survey
Togo	Global Youth Tobacco Survey
Uganda	Global Youth Tobacco Survey
United Republic of Tanzania	Global Youth Tobacco Survey (Arusha)
Zambia	Global Youth Tobacco Survey
Zimbabwe	Global Youth Tobacco Survey

YEAR	REPRESENTATIVE-NESS	AGE GROUP (YEARS)	INDICATOR NO. 1			INDICATOR NO. 2				
			DESCRIPTION	PREVALENCE %			DESCRIPTION	PREVALENCE %		
				MALE	FEMALE	TOTAL		MALE	FEMALE	TOTAL
2013	National	13-15	Current tobacco use	17.4	2.6	9.0	Current cigarette smoking	12.2	0.8	5.7
2010	Subnational	13-15	Current tobacco use	20.2	18.6	19.8	Current cigarette smoking	3.2	0.3	2.3
2009	National	13-15	Current tobacco use	4.7	2.2	4.0	Current cigarette smoking	3.3	1.6	2.8
2008	National	13-15	Current tobacco use	27.0	20.5	23.6	Current cigarette smoking	18.1	10.9	14.3
2009	Subnational	13-15	Current tobacco use	22.6	11.5	16.8	Current cigarette smoking	11.9	2.0	6.5
2008	National	13-15	Current tobacco use	20.7	16.8	19.3	Current cigarette smoking	5.8	3.2	4.6
2014	National	13-15	Current tobacco use	13.8	5.7	10.1	Current cigarette smoking	8.3	2.5	5.7
2012	National	12-18	Current tobacco smoking	2.8	0.8	1.7	...	...	...	...
2008	Subnational	13-15	Current tobacco use	29.5	34.5	32.4	Current cigarette smoking	10.4	4.3	8.1
2008	National	13-15	Current tobacco use	20.9	13.9	18.9	Current cigarette smoking	8.4	4.3	7.5
2015	National	13-15	Current tobacco use	15.9	7.7	11.5	Current cigarette smoking	10.5	3.2	6.5
2009	National	13-15	Current tobacco use	27.6	20.4	24.3	Current cigarette smoking	11.3	5.0	8.2
2009	National	13-15	Current tobacco use	26.3	10.9	19.1	Current cigarette smoking	20.9	5.7	13.7
2008	Subnational	13-15	Current tobacco use	36.2	29.5	33.6	Current cigarette smoking	11.5	3.7	8.1
2008	National	13-15	Current tobacco use	25.1	17.3	22.1	Current cigarette smoking	9.9	3.4	7.0
2006	National	13-15	Current tobacco use	7.8	4.6	6.6	Current cigarette smoking	2.0	0.6	1.6
2003	Subnational	15-19	Current tobacco use	11.5	5.8	8.9	Current cigarette smoking	4.4	1.0	2.9
2014	National	13-15	Current tobacco use	9.2	8.8	9.2	Current cigarette smoking	6.1	4.0	5.2
2008	Subnational	13-15	Current tobacco use	34.0	36.6	36.1	Current cigarette smoking	12.7	8.6	10.8
2012	National	13-15	Current cigarette smoking	9.2	7.1	8.3	...	...	...	...
2008	National	13-15	Current tobacco use	30.8	20.0	26.1	Current cigarette smoking	11.6	1.6	7.1
2008	Subnational	13-15	Current tobacco use	11.5	10.3	10.9	Current cigarette smoking	7.2	3.0	5.1
2013	National	13-15	Current tobacco use	12.8	6.7	9.9	Current cigarette smoking	7.4	2.6	4.9
2008	National	13-15	Current tobacco use	26.4	21.7	24.8	Current cigarette smoking	11.8	7.5	10.1
2008	Subnational	13-15	Current tobacco use	14.2	11.8	13.6	Current cigarette smoking	2.0	1.2	2.1
2008	National	13-15	Current tobacco use	33.2	14.3	22.8	Current cigarette smoking	30.7	10.2	19.3
2009	National	13-15	Current tobacco use	16.7	11.4	14.2	Current cigarette smoking	5.8	1.0	3.5
2008	National	13-15	Current tobacco use	23.1	8.8	16.6	Current cigarette smoking	17.4	2.5	10.4
2010	National	13-15	Current tobacco use	22.1	20.5	21.5	Current cigarette smoking	17.2	16.8	17.3
2016	National	13-15	Current tobacco use	28.2	10.3	18.9	Current cigarette smoking	21.2	6.6	13.6
2013	National	13-15	Current tobacco use	15.1	14.6	14.9	Current cigarette smoking	2.1	2.3	2.3
2008	National	13-15	Current tobacco use	31.9	29.9	31.1	Current cigarette smoking	12.3	11.3	11.9
2009	National	13-15	Current tobacco use	11.8	5.6	8.6	Current cigarette smoking	6.8	0.6	3.5
2008	Subnational	13-15	Current tobacco use	19.2	11.1	15.4	Current cigarette smoking	5.6	1.3	3.5
2008	National	13-15	Current tobacco use	13.3	9.5	11.5	Current cigarette smoking	3.0	0.9	1.8
2010	National	13-15	Current tobacco use	30.7	22.7	26.2	Current cigarette smoking	6.1	3.0	4.4
2013	National	13-15	Current tobacco use	14.9	6.2	11.2	Current cigarette smoking	4.7	3.1	4.5
2015	National	13-15	Current tobacco use	27.2	15.9	21.4	Current cigarette smoking	19.6	10.3	14.7
2008	Subnational	13-15	Current tobacco use	20.3	24.1	23.5	Current cigarette smoking	6.6	5.0	5.8
2011	National	13-15	Current tobacco use	24.3	19.0	21.5	Current cigarette smoking	15.0	10.8	12.7
...
2009	National	13-15	Current tobacco use	15.8	8.6	11.5	Current cigarette smoking	9.2	4.5	6.4
2013	National	13-15	Current tobacco use	11.3	4.3	8.4	Current cigarette smoking	7.4	1.2	4.8
2011	National	13-15	Current tobacco use	19.3	15.8	17.3	Current cigarette smoking	5.0	4.7	4.8
2008	Subnational	13-15	Current tobacco use	12.4	8.8	10.6	Current cigarette smoking	2.2	1.1	1.7
2011	National	13-15	Current tobacco use	24.9	25.8	25.6	Current cigarette smoking	6.2	5.7	6.2
2014	National	13-15	Current tobacco use	22.0	15.8	20.0	Current cigarette smoking	11.3	8.9	11.2

The Americas

Table 2.3.2
Most recent survey
of youth tobacco
use in the Americas

... Data not reported/not available.

¹ Moderate sampling variability for male rates, high sampling variability for female and total rates, interpret with caution.

² The country has collected national data, but the tobacco indicators reported from this survey are not aligned with commonly used indicators of current and daily smoking among youth.

COUNTRY	TITLE OF SURVEY
Antigua and Barbuda	Global Youth Tobacco Survey
Argentina	Global Youth Tobacco Survey
Bahamas	Global Youth Tobacco Survey
Barbados	Global Youth Tobacco Survey
Belize	Global Youth Tobacco Survey
Bolivia (Plurinational State of)	Global Youth Tobacco Survey
Brazil	National School Health Survey (PENSE)
Canada ¹	Canadian Student Tobacco, Alcohol and Drugs Survey (CSTADS)
Chile	Global School-Based Student Health Survey
Colombia	National Survey of Psychoactive Substance Use in the School Population
Costa Rica	Global Youth Tobacco Survey
Cuba	Global Youth Tobacco Survey
Dominica	Global Youth Tobacco Survey
Dominican Republic	Global Youth Tobacco Survey
Ecuador ²	National Survey on Drug Use Among Students Aged 12 to 17
El Salvador	Global Youth Tobacco Survey
Grenada	Global Youth Tobacco Survey
Guatemala	Global Youth Tobacco Survey
Guyana	Global Youth Tobacco Survey
Haiti	Global Youth Tobacco Survey
Honduras	Global Youth Tobacco Survey
Jamaica	Global Youth Tobacco Survey
Mexico	Global Youth Tobacco Survey
Nicaragua	Global Youth Tobacco Survey
Panama	Global Youth Tobacco Survey
Paraguay	Global Youth Tobacco Survey
Peru	Global Youth Tobacco Survey
Saint Kitts and Nevis	Global Youth Tobacco Survey
Saint Lucia	Global Youth Tobacco Survey
Saint Vincent and the Grenadines	Global Youth Tobacco Survey
Suriname	Global Youth Tobacco Survey
Trinidad and Tobago	Global Youth Tobacco Survey
United States of America	National Youth Tobacco Survey
Uruguay	Global Youth Tobacco Survey
Venezuela (Bolivarian Republic of)	Global Youth Tobacco Survey

YEAR	REPRESENTATIVE-NESS	AGE GROUP (YEARS)	INDICATOR NO. 1			INDICATOR NO. 2				
			DESCRIPTION	PREVALENCE %			DESCRIPTION	PREVALENCE %		
				MALE	FEMALE	TOTAL		MALE	FEMALE	TOTAL
2009	National	13-15	Current tobacco use	24.3	15.9	20.1	Current cigarette smoking	5.2	4.3	5.2
2012	National	13-15	Current tobacco use	22.7	25.4	24.1	Current cigarette smoking	17.4	21.5	19.6
2013	National	13-15	Current tobacco use	16.1	8.4	12.6	Current cigarette smoking	4.6	2.6	3.8
2013	National	13-15	Current tobacco use	17.4	11.4	14.5	Current cigarette smoking	8.8	5.0	7.0
2014	National	13-15	Current tobacco use	16.6	8.2	12.3	Current cigarette smoking	10.4	5.4	7.8
2012	National	13-15	Current tobacco use	20.9	16.4	18.7	Current cigarette smoking	15.3	9.9	11.3
2015	National	13-15	Current cigarette smoking	5.3	5.6	5.4	...	...	...	...
2014-15	National	Grades 6-9	Current cigarette smoking	0.9	<1	<1	Daily cigarette smoking	0.4	<1	<1
2013	National	13-15	Current tobacco use	19.8	27.8	24.5	Current cigarette smoking	19.1	26.4	23.3
2011	National	13-15	Current cigarette smoking	11.9	9	10.4	...	...	...	...
2013	National	13-15	Current tobacco use	9.7	8.1	8.9	Current cigarette smoking	5.7	4.3	5.0
2010	National	13-15	Current tobacco use	19.8	15	17.1	Current cigarette smoking	13.1	8.7	10.6
2009	National	13-15	Current tobacco use	30.4	19.8	25.3	Current cigarette smoking	13.8	8.9	11.6
2011	National	13-15	Current tobacco use	24.3	14	18.6	Current cigarette smoking	5.2	4.3	4.7
2012	National	14-15	...	...	...	...	...	...	...	...
2015	National	13-15	Current tobacco use	15.3	10.7	13.1	Current cigarette smoking	11.4	8.2	9.9
2016	National	13-15	Current tobacco use	12.5	7.1	9.7	Current cigarette smoking	6.7	4.1	5.4
2015	National	13-15	Current tobacco use	19.5	14.4	17.1	Current cigarette smoking	14.7	11.1	12.9
2015	National	13-15	Current tobacco use	19.0	10.4	14.8	Current cigarette smoking	13.3	3.8	8.6
2005	National	13-15	Current tobacco use	20.3	19.2	19.7	Current cigarette smoking	14.1	13.8	14.0
2016	National	13-15	Current tobacco use	9.6	6.4	7.9	Current cigarette smoking	6.1	4.4	5.2
2010	National	13-15	Current tobacco use	31.3	24.6	28.7	Current cigarette smoking	21.5	14.3	17.8
2011	National	13-15	Current tobacco use	21.6	17.7	19.8	Current cigarette smoking	15.8	12.9	14.6
2014	National	13-15	Current tobacco use	20.6	14.5	17.6	Current cigarette smoking	13.8	10.3	12.2
2012	National	13-15	Current tobacco use	15.1	10.2	12.7	Current cigarette smoking	7.0	3.2	5.0
2014	National	13-15	Current tobacco use	7.4	6.6	7.0	Current cigarette smoking	3.9	3.8	3.9
2014	National	13-15	Current tobacco use	10.9	8.4	9.7	Current cigarette smoking	9.2	6.2	7.7
2010	National	13-15	Current tobacco use	10.4	7.8	9.2	Current cigarette smoking	4.8	3.2	4.0
2011	National	13-15	Current tobacco use	24.5	17.3	20.7	Current cigarette smoking	13.3	8.5	10.7
2011	National	13-15	Current tobacco use	23.6	14.6	19.4	Current cigarette smoking	16.6	8.5	12.8
2016	National	13-15	Current tobacco use	17.1	7.3	11.7	Current cigarette smoking	12.8	5.3	8.7
2011	National	13-15	Current tobacco use	20.0	16.3	18.4	Current cigarette smoking	10.9	7.0	9.3
2015	National	13-15	Current tobacco use	14.6	12.2	13.4	Current cigarette smoking	4.2	4.1	4.1
2014	National	13-15	Current tobacco use	12.7	12.5	12.8	Current cigarette smoking	7.2	8.7	8.2
2010	National	13-15	Current tobacco use	11.0	7.2	9.4	Current cigarette smoking	5.8	5.4	5.6



South-East Asia

Table 2.3.3
Most recent survey
of youth tobacco
use in South-East
Asia

... Data not reported/not available.

COUNTRY	TITLE OF SURVEY
Bangladesh	Global School-Based Student Health Survey
Bhutan	Global Youth Tobacco Survey
Democratic People's Republic of Korea	...
India	Global Youth Tobacco Survey
Indonesia	Global School-Based Student Health Survey
Maldives	Global School-Based Student Health Survey
Myanmar	Global Youth Tobacco Survey
Nepal	Global School-Based Student Health Survey
Sri Lanka	Global Youth Tobacco Survey
Thailand	Global Youth Tobacco Survey
Timor-Leste	Global School-Based Student Health Survey

YEAR	REPRESENTATIVE-NESS	AGE GROUP (YEARS)	INDICATOR NO. 1			INDICATOR NO. 2				
			DESCRIPTION	PREVALENCE %			DESCRIPTION	PREVALENCE %		
				MALE	FEMALE	TOTAL		MALE	FEMALE	TOTAL
2014	National	13–15	Current tobacco use	13.2	2.1	9.2	Current cigarette smoking	10.1	1.5	7.0
2013	National	13–15	Current tobacco use	39.0	23.2	30.3	Current cigarette smoking	23.1	6.6	14.0
...
2009	National	13–15	Current tobacco use	19.0	8.3	14.6	Current cigarette smoking	5.8	2.4	4.4
2015	National	13–15	Current tobacco use	23.0	2.4	12.7	Current cigarette smoking	21.4	1.5	11.5
2014	National	13–15	Current tobacco use	15.8	6.8	11.2	Current cigarette smoking	12.3	5.4	8.7
2016	National	13–15	Current tobacco use	26.3	3.7	13.6	Current cigarette smoking	17.0	1.5	8.3
2015	National	13–15	Current tobacco use	9.5	4.8	7.2	Current cigarette smoking	6.8	3.0	5.0
2015	National	13–15	Current tobacco use	6.7	0.7	3.7	Current cigarette smoking	2.9	0.0	1.5
2015	National	13–15	Current tobacco use	21.8	8.1	15.0	Current cigarette smoking	17.2	5.2	11.3
2015	National	13–15	Current tobacco use	31.8	14.1	23.4	Current cigarette smoking	25.9	5.8	15.7



Table 2.3.4
Most recent survey
of youth tobacco
use in Europe

... Data not reported/not available.

< Refers to a territory

¹ "Current" smoking means smoking at least once in the past week.

² Belgium completed the Health Behaviour in School-aged Children survey in all regions of the country, however data are not aggregated at national level.

³ Data representative of England only.

COUNTRY	TITLE OF SURVEY
Albania	Global Youth Tobacco Survey
Andorra	...
Armenia	Health Behaviour in School-aged Children
Austria	Health Behaviour in School-aged Children
Azerbaijan	Global Youth Tobacco Survey
Belarus	Global Youth Tobacco Survey
Belgium ²	Health Behaviour in School-aged Children (Flemish Region)
Bosnia and Herzegovina	Global Youth Tobacco Survey
Bulgaria	Global Youth Tobacco Survey
Croatia	Global Youth Tobacco Survey
Cyprus	Global Youth Tobacco Survey
Czechia	Global Youth Tobacco Survey
Denmark	Health Behaviour in School-aged Children
Estonia	Health Behaviour in School-aged Children
Finland	Adolescent Health and Lifestyle Survey
France	Health Behaviour in School-aged Children
Georgia	The European School Survey Project on Alcohol and Other Drugs
Germany	The Drug Affinity of Young People in the Federal Republic of Germany
Greece	Health Behaviour in School-aged Children
Hungary	Global Youth Tobacco Survey
Iceland	Health Behaviour in School-aged Children
Ireland	Health Behaviour in School-aged Children
Israel	Health Behaviour in School-aged Children
Italy	Global Youth Tobacco Survey
Kazakhstan	Global Youth Tobacco Survey
Kyrgyzstan	Global Youth Tobacco Survey
Latvia	Global Youth Tobacco Survey
Lithuania	Global Youth Tobacco Survey
Luxembourg	Health Behaviour in School-aged Children
Malta	Health Behaviour in School-aged Children
Monaco	The European School Survey Project on Alcohol and Other Drugs
Montenegro	Global Youth Tobacco Survey
Netherlands	Health Behaviour in School-aged Children
Norway	Health Behaviour in School-aged Children
Poland	Global Youth Tobacco Survey
Portugal	Global Youth Tobacco Survey
Republic of Moldova	Health Behaviour in School-aged Children
Romania	Health Behaviour in School-aged Children
Russian Federation	Global Youth Tobacco Survey
San Marino	Global Youth Tobacco Survey
Serbia	Global Youth Tobacco Survey
Slovakia	Global Youth Tobacco Survey
Slovenia	Health Behaviour in School-aged Children
Spain	Health Behaviour in School-aged Children
Sweden	Alcohol and Drug Use among Students
Switzerland	Health Behaviour in School-aged Children
Tajikistan	Global Youth Tobacco Survey
The former Yugoslav Republic of Macedonia	Global Youth Tobacco Survey
Turkey	Global Youth Tobacco Survey
Turkmenistan	Global Youth Tobacco Survey
Ukraine	The European School Survey Project on Alcohol and Other Drugs
United Kingdom of Great Britain and Northern Ireland ³	Health Behaviour in School-aged Children (England)
Uzbekistan	Global Youth Tobacco Survey

YEAR	REPRESENTATIVE-NESS	AGE GROUP (YEARS)	INDICATOR NO. 1				INDICATOR NO. 2			
			DESCRIPTION	PREVALENCE %			DESCRIPTION	PREVALENCE %		
				MALE	FEMALE	TOTAL		MALE	FEMALE	TOTAL
2015	National	13-15	Current tobacco use	14.5	6.7	10.7	Current cigarette smoking	8.3	3.6	6.0
...	
2013-14	National	15-15	Current tobacco smoking ¹	5	1	3	Daily tobacco smoking	4	1	...
2014	National	15-15	Current tobacco smoking ¹	14.2	15.5	15.1	Daily tobacco smoking	9.6	9.6	9.7
2016	National	13-15	Current tobacco smoking	11.6	2.3	7.3	Daily tobacco smoking	1.6	0.3	1.0
2015	National	13-15	Current tobacco use	9.5	10.1	9.8	Current cigarette smoking	7.2	7.8	7.5
2013-14	Subnational	15-15	Current tobacco smoking ¹	10	10	...	Daily tobacco smoking	7	7	...
2013	National	13-15	Current tobacco use	18.1	12.6	15.5	Current cigarette smoking	13.4	8.8	11.2
2015	National	13-15	Current tobacco use	27.4	30.1	28.8	Current cigarette smoking	17.2	23.7	20.4
2016	National	13-15	Current cigarette smoking	4.3	2.3	3.3	Current tobacco smoking	16.7	15.1	15.9
2011	National	13-15	Current tobacco use	28.7	10.8	19.5	Current cigarette smoking	20.7	7.5	13.9
2016	National	13-15	...	...	...	...	...	...	...
2014	National	15-15	Current tobacco smoking	18	18	...	Daily tobacco smoking	6	4	...
2014	National	15-15	Current tobacco smoking ¹	13	11	...	Daily tobacco smoking	9	7	...
2015	National	14-14	Current tobacco smoking	2	3	2	...	...	...
2013-14	National	15-15	Current tobacco smoking ¹	18	20	...	Daily tobacco smoking	11	12	...
2015	National	Grade 10 (age around 16)	Current cigarette smoking	26	9	18	Daily cigarette smoking	4	12	19
2015	National	12-17	Current tobacco smoking	9.3	10.0	9.6	Daily tobacco smoking	3.4	3.5	3.5
2013-14	National	15-15	Current tobacco smoking ¹	16	13	...	Daily tobacco smoking	13	10	...
2016	National	13-15	Current tobacco use	25	25	25	Current cigarette smoking	16	20	18
2013-14	National	15-15	Current tobacco smoking ¹	3	3	...	Daily tobacco smoking	2	2	...
2013-14	National	15-15	Current tobacco smoking ¹	8	8	...	Daily tobacco smoking	7	6	...
2013-14	National	15-15	Current tobacco smoking ¹	17	6	...	Daily tobacco smoking	12	4	...
2014	National	13-15	Current cigarette smoking	20.6	26.3	23.4	...	...	...
2014	National	13-15	Current tobacco use	3.9	2.3	3.2	Current cigarette smoking	2.0	1.3	1.7
2014	National	13-15	Current tobacco use	12.3	4.5	8.2	Current cigarette smoking	4.0	0.9	2.4
2014	National	13-15	Current tobacco smoking	25.3	23.9	24.7	...	...	...
2014	National	13-15	Current tobacco use	30.1	25.1	27.6	Current cigarette smoking	20.0	19.0	19.4
2013-14	National	15-15	Current tobacco smoking ¹	13	18	...	Daily tobacco smoking	10	13	...
2013-14	National	15-15	Current tobacco smoking ¹	11	12	...	Daily tobacco smoking	7	6	...
2011	National	15-16	Current cigarette smoking	29	47	38	...	...	...
2014	National	13-15	Current tobacco smoking	15.0	4.8	9.7	...	...	...
2013-14	National	15-15	Current tobacco smoking ¹	11	11	...	Daily tobacco smoking	8	7	...
2013-14	National	15-15	Current tobacco smoking ¹	5	3	...	Daily tobacco smoking	2	1	...
2016	National	13-15	...	...	...	...	...	...	...
2013	National	13-15	Current tobacco use	15.7	17.4	16.6	Current cigarette smoking	9.6	13.3	11.4
2014	National	15-15	Current tobacco smoking ¹	13	2	9	...	...	...
2013-14	National	15-15	Current tobacco smoking ¹	20	17	...	Daily tobacco smoking	14	13	...
2015	National	13-15	Current tobacco use	17.0	13.3	15.1	Current cigarette smoking	10.6	8.0	9.3
2014	National	13-15	Current tobacco use	14.5	15.1	14.8	Current cigarette smoking	11.7	14.1	12.9
2013	National	13-15	Current cigarette smoking	12.7	13.3	13.0	Current tobacco smoking	18.2	17.4	17.8
2016	National	13-15	...	...	...	...	...	...	...
2013-14	National	15-15	Current tobacco smoking ¹	14.7	11.8	13.1	Daily tobacco smoking	9.0	8.0	...
2013-14	National	15-15	Current tobacco smoking ¹	8	10	...	Daily tobacco smoking	4	5	...
2015	National	15-16	Current cigarette smoking	10	14	...	...	...	...
2013-14	National	15-15	Current tobacco smoking ¹	11	9	...	Daily tobacco smoking	6	6	...
2014	National	13-15	Current tobacco use	4.8	2.7	4.1	Current cigarette smoking	1.0	0.5	0.8
2016	National	13-15	Current tobacco use	14.6	9.8	12.4	...	...	...
2012	National	13-15	Current tobacco use	20.3	12.8	16.8	Current cigarette smoking	12.1	8.3	10.4
2015	National	13-15	Current tobacco use	0.2	0.4	0.3	Current cigarette smoking	0.1	...	...
2015	National	16-16	Current cigarette smoking	25.7	13.2	19.2	Daily cigarette smoking	18.4	6.4	12.1
2014	Subnational	15-15	Current tobacco smoking ¹	6	8	7	Daily tobacco smoking	4	5	4
2013	National	13-15	Current tobacco use	14.2	13.9	14.0	Current cigarette smoking	1.0	0.4	0.7



Eastern Mediterranean

Table 2.3.5
Most recent survey of youth tobacco use in the Eastern Mediterranean

... Data not reported/not available.
< Refers to a territory
¹ Current smoking rates not available.

COUNTRY	TITLE OF SURVEY
Afghanistan	Global Youth Tobacco Survey (Kabul)
Bahrain	Global Youth Tobacco Survey
Djibouti	Global Youth Tobacco Survey
Egypt	Global Youth Tobacco Survey
Iran (Islamic Republic of)	CASPIAN study
Iraq	Global Youth Tobacco Survey
Jordan	Global Youth Tobacco Survey
Kuwait	Global Youth Tobacco Survey
Lebanon	Global Youth Tobacco Survey
Libya	Global Youth Tobacco Survey
Morocco	Global Youth Tobacco Survey
Oman	Global Youth Tobacco Survey
Pakistan	Global Youth Tobacco Survey
Qatar	Global Youth Tobacco Survey
Saudi Arabia	Global Youth Tobacco Survey
Somalia	Global Youth Tobacco Survey (Somaliland)
Sudan	Global Youth Tobacco Survey
Syrian Arab Republic	Global Youth Tobacco Survey
Tunisia	Global Youth Tobacco Survey
United Arab Emirates	Global Youth Tobacco Survey
West Bank and Gaza Strip <	Global Youth Tobacco Survey (Gaza Strip)
Yemen	Global Youth Tobacco Survey

YEAR	REPRESENTATIVE-NESS	AGE GROUP (YEARS)	INDICATOR NO. 1			INDICATOR NO. 2				
			DESCRIPTION	PREVALENCE %			DESCRIPTION	PREVALENCE %		
				MALE	FEMALE	TOTAL		MALE	FEMALE	TOTAL
2010	Subnational	13–15	Current tobacco use	8.7	8.1	8.6	Current cigarette smoking	3.7	0.8	2.5
2015	National	13–15	Current tobacco use	25.0	10.1	17.7	Current cigarette smoking	15.3	4.1	9.7
2013	National	13–15	Current tobacco use	17.8	11.1	15.2	Current cigarette smoking	8.0	4.2	6.6
2014	National	13–15	Current tobacco use	18.1	8.2	13.6	Current cigarette smoking	8.3	0.8	4.8
2011-12	National	6–18	Ever use of smoked tobacco ¹	7.5	4.2	5.9	...	...	...	...
2014	National	13–15	Current tobacco use	19.4	8.6	14.1	Current cigarette smoking	7.8	3.6	5.7
2014	National	13–15	Current tobacco use	33.9	13.8	24.0	Current cigarette smoking	17.3	5.4	11.4
2016	National	13–15	Current cigarette smoking	19.4	4.6	11.6	Current tobacco smoking	23.2	8.3	15.4
2013	National	13–15	Current cigarette smoking	18.8	5.1	11.3	...	...	...	...
2010	National	13–15	Current tobacco use	11.0	5	8.1	Current cigarette smoking	6.1	2.0	4.3
2016	National	13–15	Current tobacco use	7.3	4.4	6.0	Current cigarette smoking	2.7	0.8	1.9
2010	National	13–15	Current tobacco use	4.9	1.7	3.3	Current cigarette smoking	3.1	0.6	1.8
2013	National	13–15	Current tobacco use	13.3	6.6	10.7	Current cigarette smoking	4.8	0.9	3.3
2013	National	13–15	Current tobacco use	22.8	8.8	15.7	Current cigarette smoking	14.9	4.7	9.8
2010	National	13–15	Current tobacco use	21.2	9.1	14.9	Current cigarette smoking	13.0	5.0	8.9
2007	Subnational	13–15	Current tobacco use	15.5	12.3	15.6	Current cigarette smoking	4.9	4.5	5.8
2014	National	13–15	Current tobacco use	14.5	7.3	11.7	Current cigarette smoking	6.2	2.2	4.5
2010	National	13–15	Current tobacco use	31.6	17.4	24.5	Current cigarette smoking	10.7	3.1	6.8
2010	National	13–15	Current tobacco use	20.1	3.8	11.4	Current cigarette smoking	12.4	1.6	6.6
2013	National	13–15	Current tobacco use	16.0	8.2	12.2	Current cigarette smoking	9.7	2.7	6.2
2014	Subnational	13–15	Current tobacco use	23.6	11	17.3	Current cigarette smoking	9.7	3.5	6.5
2014	National	13–15	Current tobacco use	23.9	9.9	18.7	Current cigarette smoking	9.2	2.5	6.8



Table 2.3.6
Most recent survey of youth tobacco use in the Western Pacific

... Data not reported/not available.

¹ "Current" cigarette smoking means smoking at least one cigarette in the past 7 days.

COUNTRY	TITLE OF SURVEY
Australia	Australian Secondary School Students Alcohol and Drug Survey (ASSAD)
Brunei Darussalam	Global School-Based Student Health Survey
Cambodia	Global Youth Tobacco Survey
China	Global Youth Tobacco Survey
Cook Islands	Global Youth Tobacco Survey
Fiji	Global Youth Tobacco Survey
Japan	National Survey on Underage Smoking and Drinking
Kiribati	Global School-Based Student Health Survey
Lao People's Democratic Republic	Global Youth Tobacco Survey
Malaysia	Tobacco and E-Cigarette Survey Among Malaysian Adolescents (TECMA)
Marshall Islands	Global Youth Tobacco Survey
Micronesia (Federated States of)	Global Youth Tobacco Survey
Mongolia	Global Youth Tobacco Survey
Nauru	Global School-Based Student Health Survey
New Zealand	ASH Year 10 Survey
Niue	Global School-Based Student Health Survey
Palau	Global Youth Tobacco Survey
Papua New Guinea	Global Youth Tobacco Survey
Philippines	Global Youth Tobacco Survey
Republic of Korea	Korea Youth Risk Behavior Web-based Survey
Samoa	Global School-Based Student Health Survey
Singapore	Student Health Survey
Solomon Islands	Global School-Based Student Health Survey
Tonga	Global Youth Tobacco Survey
Tuvalu	Global School-Based Student Health Survey
Vanuatu	Global School-Based Student Health Survey
Viet Nam	Global Youth Tobacco Survey

YEAR	REPRESENTATIVE-NESS	AGE GROUP (YEARS)	INDICATOR NO. 1			INDICATOR NO. 2				
			DESCRIPTION	PREVALENCE %			DESCRIPTION	PREVALENCE %		
				MALE	FEMALE	TOTAL		MALE	FEMALE	TOTAL
2014	National	12–17	Current cigarette smoking ¹	5.4	4.9	5.1	...	...	...	...
2014	National	13–15	Current tobacco use	15.2	4.8	9.8	Current cigarette smoking	13.9	4.3	8.9
2016	National	13–15	Current tobacco use	2.9	1.9	2.4	Current cigarette smoking	0.9	0.3	0.6
2014	National	13–15	Current tobacco use	11.2	2.2	6.9	Current cigarette smoking	9.9	1.6	5.9
2016	National	13–15	Current tobacco use	29.7	13.9	21.5	Current cigarette smoking	23.5	11.9	17.5
2016	National	13–15	Current tobacco use	11.8	6.5	9.1	Current cigarette smoking	6.8	3.4	5.1
2014	National	Junior-High	Current cigarette smoking	1.3	0.5	0.9	Daily cigarette smoking	0.3	0.1	...
2011	National	13–15	Current tobacco use	37.7	22.3	29.2	Current cigarette smoking	34.3	19.5	26.1
2011	National	13–15	Current tobacco use	18.7	6.0	12.7	Current cigarette smoking	14.3	1.1	8.0
2016	National	13–15	Current tobacco use	29.5	3.9	17.4	Current cigarette smoking	26.1	2.4	14.8
2009	National	13–15	Current tobacco use	29.4	21.6	25.9	Current cigarette smoking	17.0	10.6	13.3
2013	National	13–15	Current tobacco use	52.1	35.7	43.3	Current cigarette smoking	37.6	18.6	27.2
2014	National	13–15	Current tobacco use	20.3	8.3	14.3	Current cigarette smoking	5.9	1.9	3.9
2011	National	13–15	Current tobacco use	25.6	27.0	26.2	Current cigarette smoking	19.5	24.5	22.1
2015	National	14–15	Current tobacco smoking	4.4	6.4	5.4	Daily tobacco smoking	2.0	2.9	2.4
2010	National	13–15	Current tobacco use	26.3	...	17.9	Current cigarette smoking	23.3	...	16.1
2013	National	13–15	Current tobacco use	54.1	36.7	45.4	Current cigarette smoking	42.7	22.1	32.3
2007	National	13–15	Current tobacco use	55.4	40.3	47.7	Current cigarette smoking	52.1	35.8	43.8
2015	National	13–15	Current cigarette smoking	17.6	7.0	12.0	Current tobacco smoking	20.5	9.1	14.5
2016	National	13–18	Current cigarette smoking	9.6	2.7	6.3	Daily cigarette smoking	4.9	1.0	3.1
2011	National	13–15	Current tobacco use	52.2	30.2	41.0	Current cigarette smoking	42.2	25.3	33.8
2012	National	13–16	Current tobacco smoking	8.8	3.5	6.2	...	...	...	...
2011	National	13–15	Current cigarette smoking	28.3	18.4	24.0	...	...	...	...
2010	National	13–15	Current tobacco use	44.9	28.0	35.7	Current cigarette smoking	37.5	18.9	27.1
2013	National	13–15	Current tobacco smoking	32.4	11.1	21.1	...	...	...	...
2011	National	13–15	Current cigarette smoking	19.4	8.2	13.6	...	...	...	...
2014	National	13–15	Current tobacco use	6.9	1.3	4.0	Current cigarette smoking	4.9	0.2	2.5

Table 2.4.1
Most recent survey
of youth smokeless
tobacco use in
Africa

... Data not reported/not available.

COUNTRY	TITLE OF SURVEY
Algeria	Global Youth Tobacco Survey
Angola	Global Youth Tobacco Survey (Huambo)
Benin	Global School-Based Student Health Survey
Botswana	Global Youth Tobacco Survey
Burkina Faso	Global Youth Tobacco Survey (Ouagadougou)
Burundi	...
Cabo Verde	...
Cameroon	Global Youth Tobacco Survey
Central African Republic	Global Youth Tobacco Survey (Bangui)
Chad	...
Comoros	Global Youth Tobacco Survey
Congo	Global Youth Tobacco Survey
Côte d'Ivoire	Global Youth Tobacco Survey
Democratic Republic of the Congo	Global Youth Tobacco Survey (Kinshasa)
Equatorial Guinea	...
Eritrea	...
Ethiopia	...
Gabon	Global Youth Tobacco Survey
Gambia	Global Youth Tobacco Survey (Banjul)
Ghana	...
Guinea	...
Guinea-Bissau	...
Kenya	Global Youth Tobacco Survey
Lesotho	Global Youth Tobacco Survey
Liberia	Global Youth Tobacco Survey (Monrovia)
Madagascar	Global Youth Tobacco Survey
Malawi	Global Youth Tobacco Survey
Mali	...
Mauritania	...
Mauritius	Global Youth Tobacco Survey
Mozambique	Global Youth Tobacco Survey
Namibia	Global Youth Tobacco Survey
Niger	...
Nigeria	Global Youth Tobacco Survey (Abuja)
Rwanda	Global Youth Tobacco Survey
Sao Tome and Principe	...
Senegal	Global Youth Tobacco Survey
Seychelles	Global Youth Tobacco Survey
Sierra Leone	Global Youth Tobacco Survey (Western Area)
South Africa	South African National Youth Risk Behaviour Survey
South Sudan	...
Swaziland	Global Youth Tobacco Survey
Togo	Global Youth Tobacco Survey
Uganda	Global Youth Tobacco Survey
United Republic of Tanzania	Global Youth Tobacco Survey (Arusha)
Zambia	...
Zimbabwe	Global Youth Tobacco Survey

YEAR	REPRESENTATIVENESS	AGE GROUP (YEARS)	CURRENT SMOKELESS TOBACCO USE PREVALENCE %		
			MALE	FEMALE	TOTAL
2013	National	13–15	6.9	0.8	3.5
2010	Subnational	13–15	18.0	19.0	18.7
2009	National	13–15	5.1	1.9	4.1
2008	National	13–15	11.3	11.4	11.3
2009	Subnational	13–15	11.2	9.2	10.2
...
...
2014	National	13–15	5.0	2.3	3.7
2008	Subnational	13–15	21.9	8.0	15.4
...
2015	National	13–15	3.6	2.0	2.7
2009	National	13–15	18.3	14.1	16.4
2009	National	13–15	6.2	4.9	5.6
2008	Subnational	13–15	20.6	20.1	20.8
...
...
...
2014	National	13–15	1.9	2.9	2.4
2008	Subnational	13–15	20.1	23.3	21.9
...
...
...
2013	National	13–15	4.3	3.3	3.9
2008	National	13–15	14.7	13.6	14.4
2008	Subnational	13–15	9.0	6.6	8.3
2008	National	13–15	6.2	5.4	5.7
2009	National	13–15	11.2	7.4	9.2
...
...
2016	National	13–15	2.1	2.4	2.3
2013	National	13–15	8.3	6.5	7.5
2008	National	13–15	15.6	15.8	16.0
...
2008	Subnational	13–15	10.6	6.8	8.8
2008	National	13–15	8.3	6.0	7.4
...
2013	National	13–15	6.6	1.8	4.3
2015	National	13–15	2.8	0.6	1.7
2008	Subnational	13–15	14.1	19.1	17.7
2011	National	14–14	9.1	6.9	7.9
...
2009	National	13–15	6.0	5.0	5.4
2013	National	13–15	2.4	1.8	2.1
2011	National	13–15	11.5	9.0	10.0
2008	Subnational	13–15	6.9	5.5	6.2
...
2014	National	13–15	6.5	4.6	5.6

The Americas

Table 2.4.2
Most recent survey of youth smokeless tobacco use in the Americas

... Data not reported/not available.
¹ Moderate sampling variability for male and female rates, interpret with caution.

COUNTRY	TITLE OF SURVEY
Antigua and Barbuda	Global Youth Tobacco Survey
Argentina	Global Youth Tobacco Survey
Bahamas	Global Youth Tobacco Survey
Barbados	Global Youth Tobacco Survey
Belize	Global Youth Tobacco Survey
Bolivia (Plurinational State of)	Global Youth Tobacco Survey
Brazil	Global Youth Tobacco Survey (São Paulo)
Canada ¹	Canadian Student Tobacco, Alcohol and Drugs Survey (CSTADS)
Chile	...
Colombia	...
Costa Rica	Global Youth Tobacco Survey
Cuba	...
Dominica	Global Youth Tobacco Survey
Dominican Republic	Global Youth Tobacco Survey
Ecuador	...
El Salvador	Global Youth Tobacco Survey
Grenada	Global Youth Tobacco Survey
Guatemala	Global Youth Tobacco Survey
Guyana	Global Youth Tobacco Survey
Haiti	...
Honduras	Global Youth Tobacco Survey
Jamaica	Global Youth Tobacco Survey
Mexico	Global Youth Tobacco Survey
Nicaragua	Global Youth Tobacco Survey
Panama	Global Youth Tobacco Survey
Paraguay	Global Youth Tobacco Survey
Peru	Global Youth Tobacco Survey
Saint Kitts and Nevis	...
Saint Lucia	...
Saint Vincent and the Grenadines	...
Suriname	Global Youth Tobacco Survey
Trinidad and Tobago	...
United States of America	National Youth Tobacco Survey
Uruguay	Global Youth Tobacco Survey
Venezuela (Bolivarian Republic of)	Global Youth Tobacco Survey

YEAR	REPRESENTATIVENESS	AGE GROUP (YEARS)	CURRENT SMOKELESS TOBACCO USE PREVALENCE %		
			MALE	FEMALE	TOTAL
2009	National	13–15	8.4	5.8	6.8
2012	National	13–15	4.4	3.0	3.7
2013	National	13–15	4.0	1.6	2.8
2013	National	13–15	2.9	3.0	2.9
2014	National	13–15	2.9	1.7	2.3
2012	National	13–15	4.5	4.2	3.6
2009	Subnational	13–15	6.3	4.6	5.5
2014-15	National	Grades 6–9	0.8	0.3	0.6
...
...
2013	National	13–15	1.7	1.6	1.6
...
2009	National	13–15	10.2	6.4	8.4
2011	National	13–15	19.0	6.4	12.6
...
2015	National	13–15	2.1	2.0	2.0
2016	National	13–15	2.0	1.6	1.8
2015	National	13–15	3.0	1.8	2.4
2015	National	13–15	4.6	3.0	4.1
...
2016	National	13–15	2.7	1.9	2.2
2010	National	13–15	8.5	8.5	8.5
2011	National	13–15	5.9	3.9	4.9
2014	National	13–15	5.1	3.3	4.3
2012	National	13–15	4.8	4.2	4.6
2014	National	13–15	2.3	1.4	1.9
2014	National	13–15	1.3	1.9	1.6
...
...
...
2016	National	13–15	1.7	0.6	1.1
...
2015	National	13–15	4.0	1.3	2.7
2014	National	13–15	4.0	3.1	3.5
2010	National	13–15	6.9	2.6	5.1



South-East Asia

Table 2.4.3
Most recent survey
of youth smokeless
tobacco use in
South-East Asia

... Data not reported/not available.

COUNTRY	TITLE OF SURVEY
Bangladesh	Global Youth Tobacco Survey
Bhutan	Global Youth Tobacco Survey
Democratic People's Republic of Korea	...
India	Global Youth Tobacco Survey
Indonesia	Global Youth Tobacco Survey
Maldives	Global Youth Tobacco Survey
Myanmar	Global Youth Tobacco Survey
Nepal	Global Youth Tobacco Survey
Sri Lanka	Global Youth Tobacco Survey
Thailand	Global Youth Tobacco Survey
Timor-Leste	Global Youth Tobacco Survey

YEAR	REPRESENTATIVENESS	AGE GROUP (YEARS)	CURRENT SMOKELESS TOBACCO USE PREVALENCE %		
			MALE	FEMALE	TOTAL
2013	National	13–15	5.9	2.0	4.5
2013	National	13–15	25.0	18.9	21.6
...
2009	National	13–15	11.1	6.0	9.0
2014	National	13–15	3.0	1.1	2.1
2011	National	13–15	9.2	2.9	6.2
2016	National	13–15	11.0	1.5	5.7
2011	National	13–15	19.7	12.9	16.2
2015	National	13–15	4.2	0.5	2.4
2015	National	13–15	4.1	1.3	2.7
2010	National	13–15	7.7	9.3	8.4



Table 2.4.4
Most recent survey
of youth smokeless
tobacco use in
Europe

... Data not reported/not available.

COUNTRY	TITLE OF SURVEY
Albania	Global Youth Tobacco Survey
Andorra	...
Armenia	Global Youth Tobacco Survey
Austria	...
Azerbaijan	Global Youth Tobacco Survey
Belarus	Global Youth Tobacco Survey
Belgium	...
Bosnia and Herzegovina	Global Youth Tobacco Survey
Bulgaria	Global Youth Tobacco Survey
Croatia	Global Youth Tobacco Survey
Cyprus	...
Czechia	Global Youth Tobacco Survey
Denmark	...
Estonia	Global Youth Tobacco Survey
Finland	Global Youth Tobacco Survey
France	...
Georgia	Global Youth Tobacco Survey
Germany	...
Greece	Global Youth Tobacco Survey
Hungary	Global Youth Tobacco Survey
Iceland	...
Ireland	...
Israel	...
Italy	...
Kazakhstan	Global Youth Tobacco Survey
Kyrgyzstan	Global Youth Tobacco Survey
Latvia	Global Youth Tobacco Survey
Lithuania	Global Youth Tobacco Survey
Luxembourg	...
Malta	...
Monaco	...
Montenegro	Global Youth Tobacco Survey
Netherlands	...
Norway	Health Behaviour in School-aged Children
Poland	Global Youth Tobacco Survey
Portugal	Global Youth Tobacco Survey
Republic of Moldova	Global Youth Tobacco Survey
Romania	...
Russian Federation	Global Youth Tobacco Survey
San Marino	Global Youth Tobacco Survey
Serbia	Global Youth Tobacco Survey
Slovakia	Global Youth Tobacco Survey
Slovenia	...
Spain	...
Sweden	...
Switzerland	...
Tajikistan	Global Youth Tobacco Survey
The former Yugoslav Republic of Macedonia	Global Youth Tobacco Survey
Turkey	...
Turkmenistan	Global Youth Tobacco Survey
Ukraine	...
United Kingdom of Great Britain and Northern Ireland	...
Uzbekistan	Global Youth Tobacco Survey

YEAR	REPRESENTATIVENESS	AGE GROUP (YEARS)	CURRENT SMOKELESS TOBACCO USE PREVALENCE %		
			MALE	FEMALE	TOTAL
2015	National	13–15	2.4	1.4	2.0
...
2009	National	13–15	6.0	3.0	4.4
...
2016	National	13–15	2.4	1.1	1.8
2015	National	13–15	0.9	0.2	0.6
...
2013	National	13–15	2.4	1.5	2.0
2015	National	13–15	3.4	1.5	2.6
2016	National	13–15	2.8	1.1	1.9
...
2016	National	13–15	...	...	...
...
2007	National	13–15	9.4	4.5	6.9
2012	National	13–15	12.7	1.6	7.3
...
2014	National	13–15	4.0	2.8	3.4
...
2013	National	13–15	2.5	1.3	1.9
2016	National	13–15	1.0	1.0	1.0
...
...
...
2014	National	13–15	0.8	0.4	0.6
2014	National	13–15	7.6	2.9	5.1
2014	National	13–15	4.2	2.0	3.1
2014	National	13–15	3.1	1.2	2.2
...
...
...
2014	National	13–15	2.0	1.0	1.4
...
2014	National	15–15	12	6	9
2016	National	13–15	...	...	...
2013	National	13–15	3.9	3.1	3.5
2013	National	13–15	2.2	2.4	2.0
...
2015	National	13–15	3.8	1.6	2.7
2014	National	13–15	0.4	0.4	0.4
2013	National	13–15	3.3	2.1	2.7
2016	National	13–15	...	...	...
...
...
...
...
2014	National	13–15	2.0	1.4	1.8
2016	National	13–15	2.4	1.8	2.1
...
2015	National	13–15	0.2	0.2	0.2
...
...
2013	National	13–15	5.8	6.3	6.0

Eastern Mediterranean

Table 2.4.5
Most recent survey of youth smokeless tobacco use in the Eastern Mediterranean

... Data not reported/not available.
< Refers to a territory

COUNTRY	TITLE OF SURVEY
Afghanistan	...
Bahrain	Global Youth Tobacco Survey
Djibouti	Global Youth Tobacco Survey
Egypt	Global Youth Tobacco Survey
Iran (Islamic Republic of)	Global Youth Tobacco Survey
Iraq	Global Youth Tobacco Survey
Jordan	Global Youth Tobacco Survey
Kuwait	Global Youth Tobacco Survey
Lebanon	...
Libya	Global Youth Tobacco Survey
Morocco	Global Youth Tobacco Survey
Oman	Global Youth Tobacco Survey
Pakistan	Global Youth Tobacco Survey
Qatar	Global Youth Tobacco Survey
Saudi Arabia	Global Youth Tobacco Survey
Somalia	...
Sudan	Global Youth Tobacco Survey
Syrian Arab Republic	...
Tunisia	Global Youth Tobacco Survey
United Arab Emirates	Global Youth Tobacco Survey
West Bank and Gaza Strip <	Global Youth Tobacco Survey (Gaza Strip)
Yemen	Global Youth Tobacco Survey

YEAR	REPRESENTATIVENESS	AGE GROUP (YEARS)	CURRENT SMOKELESS TOBACCO USE PREVALENCE %		
			MALE	FEMALE	TOTAL
...
2015	National	13–15	5.2	2.2	3.7
2013	National	13–15	8.1	4.0	6.2
2014	National	13–15	2.7	5.4	4.1
2007	National	13–15	5.4	4.8	5.1
2014	National	13–15	4.3	2.9	3.7
2014	National	13–15	3.9	1.1	2.5
2016	National	13–15	3.1	2.3	2.7
...
2010	National	13–15	2.0	2.3	2.3
2016	National	13–15	3.8	2.4	3.1
2010	National	13–15	2.5	0.9	1.6
2013	National	13–15	6.4	3.7	5.3
2013	National	13–15	9.4	3.2	6.1
2010	National	13–15	4.8	1.8	3.4
...
2014	National	13–15	6.1	3.2	4.9
...
2010	National	13–15	3.9	0.9	2.3
2013	National	13–15	4.1	2.6	3.4
2014	Subnational	13–15	7.9	3.2	5.6
2014	National	13–15	6.7	2.6	5.1



Western Pacific

Table 2.4.6
Most recent survey
of youth smokeless
tobacco use in the
Western Pacific

... Data not reported/not available.

COUNTRY	TITLE OF SURVEY
Australia	...
Brunei Darussalam	Global Youth Tobacco Survey
Cambodia	Global Youth Tobacco Survey
China	Global Youth Tobacco Survey
Cook Islands	Global Youth Tobacco Survey
Fiji	Global Youth Tobacco Survey
Japan	...
Kiribati	...
Lao People's Democratic Republic	...
Malaysia	Tobacco and E-Cigarette Survey Among Malaysian Adolescents (TECMA)
Marshall Islands	Youth Risk Behavior Survey
Micronesia (Federated States of)	Global Youth Tobacco Survey
Mongolia	Global Youth Tobacco Survey
Nauru	...
New Zealand	...
Niue	Global Youth Tobacco Survey
Palau	Global Youth Tobacco Survey
Papua New Guinea	...
Philippines	Global Youth Tobacco Survey
Republic of Korea	Global Youth Tobacco Survey
Samoa	...
Singapore	...
Solomon Islands	...
Tonga	...
Tuvalu	...
Vanuatu	...
Viet Nam	Global Youth Tobacco Survey

YEAR	REPRESENTATIVENESS	AGE GROUP (YEARS)	CURRENT SMOKELESS TOBACCO USE PREVALENCE %		
			MALE	FEMALE	TOTAL
...
2013	National	13–15	1.2	0.7	0.9
2016	National	13–15	1.3	0.8	1.0
2014	National	13–15	1.3	0.6	1.0
2016	National	13–15	3.8	2.4	3.0
2016	National	13–15	2.6	1.5	2.1
...
...
...
2016	National	13–15	19.6	5.3	12.9
2007	National	9th-grade	33.5	21.5	27.5
2013	National	13–15	26.4	21.7	23.8
2014	National	13–15	13.6	5.7	9.5
...
...
2009	National	13–15	9.0	7.9	8.6
2013	National	13–15	21.7	17.0	19.5
...
2015	National	13–15	2.9	2.1	2.5
2013	National	13–15	0.9	0.9	0.9
...
...
...
...
...
...
2014	National	13–15	1.0	0.4	0.7



Table 2.5.1
Age-standardized prevalence estimates for daily tobacco smoking among persons aged 15 years and above, 2015

... Data not reported/not available.

* LCI: lower credible interval.
UCI: upper credible interval.
Please see Technical Note II for further information.

COUNTRY
Algeria
Angola
Benin
Botswana
Burkina Faso
Burundi
Cabo Verde
Cameroon
Central African Republic
Chad
Comoros
Congo
Côte d'Ivoire
Democratic Republic of the Congo
Equatorial Guinea
Eritrea
Ethiopia
Gabon
Gambia
Ghana
Guinea
Guinea-Bissau
Kenya
Lesotho
Liberia
Madagascar
Malawi
Mali
Mauritania
Mauritius
Mozambique
Namibia
Niger
Nigeria
Rwanda
Sao Tome and Principe
Senegal
Seychelles
Sierra Leone
South Africa
South Sudan
Swaziland
Togo
Uganda
United Republic of Tanzania
Zambia
Zimbabwe

DAILY TOBACCO SMOKING PREVALENCE %								
MALES			FEMALES			TOTAL		
95% LCI *	ESTIMATE	95% UCI *	95% LCI *	ESTIMATE	95% UCI *	95% LCI *	ESTIMATE	95% UCI *
12.3	23.8	35.8	0.2	0.5	1.0	6.3	12.2	18.4
...
7.0	10.4	13.4	0.3	0.5	0.8	3.6	5.4	7.0
19.7	27.8	36.4	3.2	4.7	6.3	11.4	16.2	21.3
13.6	20.2	28.4	0.8	1.6	2.5	7.1	10.7	15.1
...
7.1	12.9	19.6	1.0	1.8	2.9	4.0	7.2	11.1
...
...
...
13.5	20.0	26.8	2.0	3.7	5.4	7.7	11.9	16.1
20.5	33.8	49.9	0.4	1.1	1.9	10.4	17.4	25.8
...
...
6.2	9.4	13.0	0.1	0.2	0.3	3.1	4.7	6.5
3.5	6.1	8.9	0.1	0.2	0.4	1.8	3.2	4.6
...
16.6	25.5	34.1	0.3	0.5	0.9	8.2	12.7	17.1
3.3	6.1	8.8	0.1	0.2	0.3	1.7	3.1	4.5
...
...
12.1	16.4	20.9	0.4	0.7	0.9	6.2	8.5	10.9
25.0	41.6	58.0	0.1	0.3	0.5	12.3	20.6	28.7
6.8	14.7	23.0	0.5	1.2	2.0	3.7	7.9	12.5
...
13.6	19.2	25.6	1.6	3.0	4.6	7.6	11.0	15.0
11.5	18.3	25.9	0.6	1.3	2.1	6.1	9.8	14.0
...
20.6	31.2	44.0	0.9	1.5	2.2	10.5	16.0	22.7
15.0	23.5	34.0	1.8	3.7	5.9	8.1	13.2	19.3
18.3	27.6	36.7	4.4	7.7	10.6	11.0	17.2	23.1
5.8	10.2	14.2	0.0	0.1	0.2	2.9	5.1	7.1
3.6	8.6	14.0	0.2	0.5	1.1	1.9	4.6	7.6
11.4	17.0	22.9	2.2	3.7	5.7	6.4	9.9	13.7
...
9.2	14.1	18.4	0.2	0.3	0.5	4.5	6.9	9.1
20.0	28.3	36.4	3.2	4.6	6.3	11.7	16.6	21.5
22.2	33.1	45.0	3.4	6.2	9.9	12.6	19.4	27.1
21.4	27.8	34.7	5.0	6.7	8.5	13.0	17.0	21.2
...
8.1	11.6	15.5	0.7	1.3	1.9	4.3	6.3	8.6
7.0	11.2	15.9	0.3	0.7	1.2	3.6	5.8	8.4
6.5	11.3	16.1	1.2	2.1	3.4	3.8	6.7	9.7
13.7	20.7	28.0	1.1	2.2	3.6	7.3	11.3	15.6
10.8	17.2	24.4	1.2	2.2	3.4	6.0	9.6	13.8
14.2	22.9	31.9	0.6	1.2	2.0	7.2	11.8	16.5

The Americas

Table 2.5.2
Age-standardized prevalence estimates for daily tobacco smoking among persons aged 15 years and above, 2015

... Data not reported/not available.

* LCI: lower credible interval.

UCI: upper credible interval.

Please see Technical Note II for further information.

COUNTRY
Antigua and Barbuda
Argentina
Bahamas
Barbados
Belize
Bolivia (Plurinational State of)
Brazil
Canada
Chile
Colombia
Costa Rica
Cuba
Dominica
Dominican Republic
Ecuador
El Salvador
Grenada
Guatemala
Guyana
Haiti
Honduras
Jamaica
Mexico
Nicaragua
Panama
Paraguay
Peru
Saint Kitts and Nevis
Saint Lucia
Saint Vincent and the Grenadines
Suriname
Trinidad and Tobago
United States of America
Uruguay
Venezuela (Bolivarian Republic of)

DAILY TOBACCO SMOKING PREVALENCE %								
MALES			FEMALES			TOTAL		
95% LCI *	ESTIMATE	95% UCI *	95% LCI *	ESTIMATE	95% UCI *	95% LCI *	ESTIMATE	95% UCI *
...
15.6	20.6	26.4	9.1	12.3	15.1	12.2	16.3	20.6
7.4	14.2	22.4	1.1	2.4	3.8	4.2	8.1	12.8
6.2	9.9	14.2	0.7	1.3	2.0	3.3	5.4	7.8
...
...
10.6	14.8	19.2	6.0	8.1	10.6	8.2	11.3	14.8
10.2	12.4	14.4	7.4	9.0	10.7	8.8	10.7	12.5
15.8	29.4	45.4	11.4	23.4	38.3	13.6	26.3	41.8
3.6	9.8	18.6	1.2	3.4	6.6	2.4	6.5	12.4
6.4	11.1	16.3	2.2	3.9	5.9	4.3	7.5	11.1
14.0	36.8	65.3	3.7	12.4	22.3	8.9	24.6	43.8
...
7.8	14.5	21.7	3.6	6.8	10.2	5.7	10.6	15.8
3.4	6.4	9.6	0.5	1.1	1.8	1.9	3.7	5.7
3.2	11.6	23.3	0.5	1.5	2.9	1.7	6.1	12.2
...
...
7.2	16.1	27.2	0.7	2.1	3.6	3.9	8.9	15.1
...
9.5	20.2	35.1	1.6	3.8	6.6	5.5	11.9	20.7
9.8	12.8	15.8	3.2	4.0	5.0	6.4	8.3	10.3
...
...
2.9	5.6	8.7	0.7	1.4	2.1	1.8	3.5	5.4
10.4	14.8	19.8	2.2	3.2	4.5	6.3	9.1	12.2
...
...
...
...
10.8	31.2	54.2	1.9	5.3	10.0	6.4	18.2	32.0
...
10.1	18.0	25.7	7.7	14.0	20.1	8.9	15.9	22.9
10.3	14.2	18.4	6.4	9.6	12.8	8.3	11.8	15.4
...



South-East Asia

Table 2.5.3
Age-standardized prevalence estimates for daily tobacco smoking among persons aged 15 years and above, 2015

... Data not reported/not available.
 * LCI: lower credible interval.
 UCI: upper credible interval.
 Please see Technical Note II for further information.

COUNTRY
Bangladesh
Bhutan
Democratic People's Republic of Korea
India
Indonesia
Maldives
Myanmar
Nepal
Sri Lanka
Thailand
Timor-Leste

DAILY TOBACCO SMOKING PREVALENCE %								
MALES			FEMALES			TOTAL		
95% LCI *	ESTIMATE	95% UCI *	95% LCI *	ESTIMATE	95% UCI *	95% LCI *	ESTIMATE	95% UCI *
31.3	39.8	50.6	0.5	0.9	1.2	16.0	20.4	26.0
...
...
14.0	18.7	23.2	1.3	1.8	2.2	7.8	10.5	13.0
46.8	65.4	84.7	1.2	1.8	2.5	24.0	33.6	43.6
18.1	43.6	77.4	0.6	1.7	3.0	9.3	22.5	39.9
19.7	28.2	36.6	2.5	5.1	7.5	10.8	16.2	21.6
20.5	28.1	35.1	6.0	8.3	11.0	12.8	17.6	22.3
15.7	20.6	27.1	0.1	0.2	0.3	7.5	9.9	13.0
25.4	33.0	40.0	1.1	1.4	1.8	13.0	16.9	20.4
37.8	60.9	84.8	2.5	5.1	7.5	20.4	33.3	46.6



Table 2.5.4
Age-standardized prevalence estimates for daily tobacco smoking among persons aged 15 years and above, 2015

... Data not reported/not available.

* LCI: lower credible interval.

UCI: upper credible interval.

Please see Technical Note II for further information.

COUNTRY
Albania
Andorra
Armenia
Austria
Azerbaijan
Belarus
Belgium
Bosnia and Herzegovina
Bulgaria
Croatia
Cyprus
Czechia
Denmark
Estonia
Finland
France
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Kazakhstan
Kyrgyzstan
Latvia
Lithuania
Luxembourg
Malta
Monaco
Montenegro
Netherlands
Norway
Poland
Portugal
Republic of Moldova
Romania
Russian Federation
San Marino
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Tajikistan
The former Yugoslav Republic of Macedonia
Turkey
Turkmenistan
Ukraine
United Kingdom of Great Britain and Northern Ireland
Uzbekistan

DAILY TOBACCO SMOKING PREVALENCE %								
MALES			FEMALES			TOTAL		
95% LCI *	ESTIMATE	95% UCI *	95% LCI *	ESTIMATE	95% UCI *	95% LCI *	ESTIMATE	95% UCI *
25.3	41.0	58.2	2.9	5.6	8.4	13.9	23.0	32.9
20.9	32.3	44.2	14.7	23.8	34.8	17.9	28.2	39.6
34.0	46.4	58.4	0.8	1.2	1.6	15.8	21.6	27.3
19.3	24.3	29.7	18.0	22.9	27.6	18.6	23.5	28.6
13.6	33.2	54.8	0.1	0.2	0.5	6.7	16.3	27.0
28.4	40.0	51.0	5.3	7.4	9.9	15.8	22.2	28.6
16.9	25.9	35.1	13.5	20.5	29.0	15.2	23.1	32.0
24.5	40.2	58.0	15.3	23.9	34.5	19.9	32.0	46.1
25.7	35.8	47.6	15.6	21.3	28.6	20.4	28.3	37.7
27.2	35.4	44.0	22.5	28.8	36.0	24.7	31.9	39.8
24.2	41.6	61.9	7.3	15.1	23.6	15.9	28.5	43.1
23.5	30.1	37.7	16.5	21.4	26.7	19.9	25.6	32.1
12.4	15.4	18.4	12.8	15.9	19.3	12.6	15.7	18.8
26.1	32.6	39.4	13.6	17.1	20.9	19.4	24.2	29.4
14.4	18.1	21.6	11.5	14.0	17.0	12.9	16.0	19.3
24.2	30.0	37.1	20.1	25.0	30.5	22.0	27.4	33.7
34.3	45.8	59.8	2.5	3.6	4.8	17.3	23.3	30.5
23.6	28.1	33.4	17.2	20.8	24.7	20.3	24.4	28.9
31.4	45.0	60.8	14.0	24.9	38.3	22.4	34.6	49.2
21.9	29.9	38.3	15.8	21.6	28.0	18.6	25.5	32.9
7.2	11.6	16.1	8.1	11.9	16.2	7.7	11.8	16.1
13.1	20.4	28.0	12.0	18.2	24.6	12.5	19.3	26.3
18.6	28.9	37.6	7.7	12.7	17.1	13.1	20.6	27.1
17.0	23.7	30.5	11.1	16.2	20.5	13.9	19.8	25.3
22.4	30.7	38.6	3.0	4.4	5.7	12.1	16.8	21.2
25.9	39.5	53.4	1.2	2.7	3.9	13.3	20.6	28.1
35.1	45.1	54.3	15.3	19.1	23.4	24.2	30.8	37.3
25.9	32.6	39.9	10.9	13.9	17.1	17.7	22.3	27.4
12.8	20.1	28.4	10.2	16.6	22.5	11.5	18.4	25.4
18.1	24.9	32.0	11.2	15.9	21.1	14.6	20.4	26.5
...
12.0	39.6	100.0	9.4	35.6	100.0	10.7	37.6	100.0
16.6	22.6	29.7	14.9	20.2	25.5	15.7	21.4	27.6
12.3	14.9	17.3	12.2	14.7	17.2	12.2	14.8	17.3
23.4	28.7	35.0	15.3	19.6	23.7	19.2	23.9	29.1
18.4	25.4	32.7	8.0	11.9	16.9	12.8	18.2	24.3
28.0	38.0	47.0	3.4	4.7	6.2	15.0	20.5	25.6
25.4	32.5	42.1	13.6	18.2	23.6	19.3	25.1	32.5
37.7	50.8	66.1	13.6	18.4	22.9	24.5	33.1	42.6
...
28.2	35.1	43.7	23.2	30.3	36.9	25.6	32.6	40.2
21.3	29.6	39.7	10.3	16.3	22.3	15.6	22.7	30.6
15.8	21.7	28.2	11.4	17.0	21.9	13.6	19.3	25.0
22.5	27.4	33.1	17.9	23.0	27.4	20.1	25.1	30.2
8.2	10.1	12.1	9.7	11.9	14.3	9.0	11.1	13.2
19.5	22.9	26.9	16.3	19.3	22.4	17.9	21.1	24.6
...
...
29.2	36.2	43.2	8.7	10.6	12.8	18.7	23.0	27.5
...
34.9	43.0	51.7	7.7	10.2	12.5	20.0	25.1	30.3
13.3	20.1	26.6	10.4	16.0	22.0	11.8	18.0	24.3
12.6	18.9	27.5	0.6	1.0	1.4	6.4	9.7	14.1

Eastern Mediterranean

Table 2.5.5
Age-standardized prevalence estimates for daily tobacco smoking among persons aged 15 years and above, 2015

... Data not reported/not available.

* LCI: lower credible interval.
UCI: upper credible interval.
Please see Technical Note II for further information.

< Refers to a territory

COUNTRY
Afghanistan
Bahrain
Djibouti
Egypt
Iran (Islamic Republic of)
Iraq
Jordan
Kuwait
Lebanon
Libya
Morocco
Oman
Pakistan
Qatar
Saudi Arabia
Somalia
Sudan
Syrian Arab Republic
Tunisia
United Arab Emirates
West Bank and Gaza Strip <
Yemen

DAILY TOBACCO SMOKING PREVALENCE %								
MALES			FEMALES			TOTAL		
95% LCI *	ESTIMATE	95% UCI *	95% LCI *	ESTIMATE	95% UCI *	95% LCI *	ESTIMATE	95% UCI *
...
17.6	31.5	45.8	2.2	4.2	6.7	12.2	21.9	32.1
5.5	18.6	35.9	0.4	1.1	2.0	2.9	9.9	19.0
32.7	44.2	53.7	0.1	0.2	0.3	16.4	22.2	27.0
14.0	19.3	25.0	0.5	0.7	1.0	7.3	10.0	13.0
...
...
23.3	31.0	39.4	1.1	1.6	2.2	13.9	18.5	23.6
19.2	32.6	47.0	8.2	17.6	27.3	13.8	25.1	37.2
...
22.3	37.7	54.6	0.3	0.5	0.9	11.0	18.6	27.0
8.7	12.8	18.1	0.1	0.3	0.6	6.2	9.1	12.9
19.5	29.5	38.6	1.5	2.3	3.3	10.7	16.2	21.4
15.7	21.4	29.1	0.3	0.6	0.9	12.0	16.4	22.4
14.8	21.5	29.3	0.4	0.9	1.4	8.9	13.0	17.8
...
...
...
33.5	56.9	86.7	0.4	0.9	1.5	16.6	28.3	43.2
14.7	29.6	47.2	0.2	0.7	1.3	11.4	22.9	36.6
...
11.9	23.6	38.5	2.2	5.0	8.5	7.0	14.3	23.5



Western Pacific

Table 2.5.6
Age-standardized prevalence estimates for daily tobacco smoking among persons aged 15 years and above, 2015

... Data not reported/not available.

* LCI: lower credible interval.
UCI: upper credible interval.
Please see Technical Note II for further information.

COUNTRY
Australia
Brunei Darussalam
Cambodia
China
Cook Islands
Fiji
Japan
Kiribati
Lao People's Democratic Republic
Malaysia
Marshall Islands
Micronesia (Federated States of)
Mongolia
Nauru
New Zealand
Niue
Palau
Papua New Guinea
Philippines
Republic of Korea
Samoa
Singapore
Solomon Islands
Tonga
Tuvalu
Vanuatu
Viet Nam

DAILY TOBACCO SMOKING PREVALENCE %								
MALES			FEMALES			TOTAL		
95% LCI *	ESTIMATE	95% UCI *	95% LCI *	ESTIMATE	95% UCI *	95% LCI *	ESTIMATE	95% UCI *
12.2	14.8	18.0	9.4	12.0	14.0	10.8	13.4	16.0
10.3	24.1	38.7	0.6	1.5	2.5	5.6	13.2	21.2
23.7	30.4	37.3	1.4	1.9	2.3	12.1	15.5	19.0
33.4	42.3	50.9	1.3	1.7	2.1	17.7	22.4	27.0
16.5	22.8	28.7	10.7	14.7	19.2	13.7	18.9	24.1
13.9	23.8	34.1	3.2	5.7	8.6	8.6	14.9	21.5
22.3	29.6	37.2	7.2	9.4	11.8	14.5	19.1	24.0
29.4	51.4	74.0	18.4	30.3	42.6	23.7	40.5	57.8
31.0	44.7	58.4	4.2	6.2	8.3	17.4	25.1	32.9
23.4	34.4	45.6	0.4	0.7	1.1	11.8	17.4	23.1
...
...
30.2	40.6	51.9	3.0	4.4	5.6	16.3	22.2	28.3
16.2	30.5	46.2	18.2	34.7	50.8	17.3	32.7	48.6
12.9	15.6	18.5	11.3	13.6	15.8	12.1	14.6	17.1
8.7	13.9	19.9	4.2	7.0	10.2	6.4	10.3	14.9
12.8	19.6	26.3	3.7	6.2	8.9	8.5	13.3	18.0
26.4	42.2	59.6	12.3	19.8	27.5	19.4	31.1	43.7
24.0	31.9	41.9	4.1	5.8	7.4	14.0	18.9	24.7
31.7	39.3	47.4	3.6	5.3	6.8	17.4	22.1	26.9
21.4	31.0	43.4	7.7	12.2	17.3	14.7	21.9	30.8
16.9	23.4	30.0	2.6	3.7	4.9	9.6	13.3	17.2
...
29.5	38.8	48.9	7.2	9.9	12.5	18.2	24.1	30.4
...
14.2	23.0	31.9	1.0	1.7	2.7	7.6	12.3	17.3
30.0	37.6	46.4	0.6	0.8	1.1	14.9	18.7	23.1



Table 2.6.1
Types of tobacco reported in most recent surveys among adults in Africa

... Data not reported/not available.

* Not reported from the same survey as the other indicators.

COUNTRY	TITLE OF SURVEY
Algeria	Algeria Adult Tobacco Survey
Angola	...
Benin	STEPS Survey
Botswana	STEPS Survey
Burkina Faso	STEPS Survey
Burundi	Demographic and Health Survey
Cabo Verde	National Survey on Drug Use in the General Population
Cameroon	Global Adult Tobacco Survey
Central African Republic	...
Chad	World Health Survey
Comoros	Demographic and Health Survey
Congo	Multiple Indicator Cluster Survey
Côte d'Ivoire	Demographic and Health Survey
Democratic Republic of the Congo	Demographic and Health Survey
Equatorial Guinea	...
Eritrea	STEPS Survey
Ethiopia	STEPS Survey
Gabon	Demographic and Health Survey
Gambia	Demographic and Health Survey
Ghana	Demographic and Health Survey
Guinea	Demographic and Health Survey
Guinea-Bissau	...
Kenya	STEPS Survey
Lesotho	STEPS Survey
Liberia	Demographic and Health Survey
Madagascar	Demographic and Health Survey
Malawi	Demographic and Health Survey
Mali	STEPS Survey
Mauritania	World Health Survey
Mauritius	Mauritius Non Communicable Disease Survey
Mozambique	Demographic and Health Survey
Namibia	Demographic and Health Survey
Niger	Demographic and Health Survey and Multiple Indicator Cluster Survey
Nigeria	Global Adult Tobacco Survey
Rwanda	Demographic and Health Survey
Sao Tome and Principe	STEPS Survey
Senegal	Global Adult Tobacco Survey
Seychelles	The Seychelles Heart Study IV
Sierra Leone	Demographic and Health Survey
South Africa	National Health and Nutrition Examination Survey
South Sudan	...
Swaziland	STEPS Survey
Togo	Demographic and Health Survey
Uganda	Uganda NCD Risk Factors Survey
United Republic of Tanzania	STEPS Survey
Zambia	Demographic and Health Survey
Zimbabwe	Demographic and Health Survey

YEAR OF SURVEY	INDICATOR REPORTED			
	ALL TOBACCO USE	SMOKED TOBACCO USE	CIGARETTE USE	SMOKELESS USE
2010	No	Yes	No	Yes
...
2015	No	Yes	No	Yes
2014	Yes	Yes	No	Yes
2013	Yes	Yes	Yes	Yes
2010	Yes	No	Yes	No
2012	No	Yes	No	Yes*
2013	Yes	Yes	Yes	Yes
...
2003	No	Yes	Yes	No
2012	Yes	No	Yes	Yes*
2014-15	Yes	No	No	No
2011-12	No	Yes	Yes	No
2013-14	Yes	No	Yes	No
...
2010	No	Yes	No	Yes
2015	Yes	Yes	Yes	Yes
2012	Yes	No	Yes	No
2013	Yes	No	Yes	Yes*
2014	Yes	No	Yes	Yes
2005	Yes	No	Yes	No
...
2015	Yes	Yes	No	Yes
2012	Yes	Yes	No	Yes
2013	Yes	No	Yes	Yes*
2008-09	Yes	No	Yes	Yes
2010	Yes	No	Yes	Yes*
2013	Yes	No	Yes	No
2003	No	Yes	Yes	No
2015	No	Yes	Yes	No
2011	Yes	No	Yes	Yes*
2013	Yes	No	Yes	Yes
2012	Yes	No	Yes	Yes
2012	Yes	Yes	Yes	Yes
2014-15	Yes	No	Yes	Yes*
2008	No	Yes	Yes	Yes
2015	Yes	Yes	Yes	Yes
2013	No	Yes	Yes	Yes
2013	Yes	No	Yes	Yes*
2012	No	Yes	Yes	Yes*
...
2014	Yes	Yes	No	Yes
2013-14	Yes	No	Yes	Yes*
2014	Yes	Yes	Yes	Yes
2012	Yes	Yes	Yes	Yes
2013-14	Yes	No	Yes	Yes
2011	Yes	No	Yes	Yes

The Americas

Table 2.6.2
Types of tobacco reported in most recent surveys among adults in the Americas

... Data not reported/not available.

* Not reported from the same survey as the other indicators.

COUNTRY	TITLE OF SURVEY
Antigua and Barbuda	...
Argentina	National Survey of Risk Factors for Noncommunicable Diseases
Bahamas	STEPS Survey
Barbados	Health of the Nation
Belize	Multiple Indicator Cluster Survey
Bolivia (Plurinational State of)	National Household Survey of Prevalence and Characteristics of Drug Use in Bolivia
Brazil	National Health Survey
Canada	Canadian Tobacco, Alcohol and Drugs Survey (CTADS)
Chile	National Survey of Drugs in the General Population of Chile
Colombia	National Survey on the Consumption of Psychoactive Substances in Colombia
Costa Rica	Global Adult Tobacco Survey
Cuba	Multiple Indicator Cluster Survey
Dominica	STEPS Survey
Dominican Republic	Demographic and Health Survey
Ecuador	National Health and Nutrition Survey (ENSANUT)
El Salvador	National Alcohol and Tobacco Survey
Grenada	STEPS Survey
Guatemala	World Health Survey
Guyana	STEPS Survey
Haiti	Mortality, Morbidity and Utilization of Services Survey in Haiti
Honduras	Demographic and Health Survey
Jamaica	Health and Lifestyle Survey II
Mexico	Global Adult Tobacco Survey
Nicaragua	Demographic and Health Survey
Panama	Global Adult Tobacco Survey
Paraguay	STEPS Survey
Peru	Demographic and Health Survey
Saint Kitts and Nevis	STEPS Survey
Saint Lucia	STEPS Survey
Saint Vincent and the Grenadines	National Health and Nutrition Survey
Suriname	STEPS Survey
Trinidad and Tobago	STEPS Survey
United States of America	National Health Interview Survey (NHIS)
Uruguay	National Survey of Risk Factors for Noncommunicable Diseases
Venezuela (Bolivarian Republic of)	National Survey of Drugs in the General Population

YEAR OF SURVEY	INDICATOR REPORTED			
	ALL TOBACCO USE	SMOKED TOBACCO USE	CIGARETTE USE	SMOKELESS USE
...
2013	No	No	Yes	Yes*
2012	No	Yes	Yes	Yes
2011-12	No	Yes	No	Yes*
2015	Yes	No	No	No
2014	No	Yes	No	No
2013	Yes	Yes	Yes	Yes
2015	No	No	Yes	Yes
2012	No	Yes	No	No
2013	No	Yes	No	No
2015	Yes	Yes	Yes	Yes
2014	Yes	No	Yes	No
2007-08	Yes	Yes	Yes	Yes
2007	Yes	No	Yes	Yes
2011-13	No	Yes	No	No
2014	No	No	Yes	No
2010-11	No	Yes	Yes	Yes
2003	No	Yes	No	No
2016	No	Yes	Yes	No
2012	Yes	No	Yes	Yes*
2011-12	Yes	No	Yes	No
2007-08	No	No	Yes	No
2015	Yes	Yes	Yes	Yes
2001	No	No	Yes	No
2013	Yes	Yes	Yes	Yes
2011	No	Yes	Yes	Yes
2015	No	No	Yes	No
2007-08	No	Yes	Yes	Yes
2012	Yes	Yes	No	Yes
2013-14	No	Yes	No	No
2013	No	Yes	No	No
2011	Yes	Yes	Yes	Yes
2015	Yes	Yes	Yes	Yes
2014	No	Yes	Yes	Yes*
2011	Yes	No	Yes	Yes



South-East Asia

Table 2.6.3
Types of tobacco reported in most recent surveys among adults in South-East Asia

COUNTRY	TITLE OF SURVEY
Bangladesh	Non-Communicable Disease Risk Factor Survey
Bhutan	STEPS Survey
Democratic People's Republic of Korea	KAP Survey on Cessation of Smoking
India	Global Adult Tobacco Survey
Indonesia	Basic Health Research (RISKESDAS)
Maldives	Demographic and Health Survey
Myanmar	STEPS Survey
Nepal	STEPS Survey
Sri Lanka	STEPS Survey
Thailand	The Smoking and Drinking Behaviour Survey
Timor-Leste	National Survey for Noncommunicable Disease Risk Factors and Injuries

... Data not reported/not available.

* Not reported from the same survey as the other indicators.

YEAR OF SURVEY	INDICATOR REPORTED			
	ALL TOBACCO USE	SMOKED TOBACCO USE	CIGARETTE USE	SMOKELESS USE
2009-10	Yes	Yes	Yes	Yes
2014	Yes	Yes	Yes	Yes
2016	No	Yes	No	No
2009-10	Yes	Yes	Yes	Yes
2013	No	Yes	Yes	Yes
2009	Yes	No	Yes	Yes
2014	Yes	Yes	No	Yes
2012-13	Yes	Yes	Yes	Yes
2014	Yes	Yes	No	Yes
2014	No	Yes	No	Yes
2014	Yes	Yes	Yes	Yes



Table 2.6.4
Types of tobacco reported in most recent surveys among adults in Europe

... Data not reported/not available.

* Not reported from the same survey as the other indicators.

COUNTRY	TITLE OF SURVEY
Albania	Demographic and Health Survey
Andorra	National Health Survey
Armenia	STEPS Survey
Austria	Representative Survey on Substance Abuse
Azerbaijan	Household Budget Survey
Belarus	Social Conditions and Standard of Living Survey
Belgium	Health Interview Survey, Belgium
Bosnia and Herzegovina	Multiple Indicator Cluster Survey
Bulgaria	European Health Interview Survey
Croatia	European Health Interview Survey with TQS
Cyprus	Eurobarometer
Czechia	The Use of Tobacco in the Czech Republic
Denmark	Monitoring Smoking Habits in the Danish Population
Estonia	Health Behaviour among Estonian Adult Population
Finland	Health Behaviour and Health among the Finnish Adult Population
France	Health Barometer
Georgia	STEPS Survey
Germany	Microcensus
Greece	Hellenic Statistical Authority Health Survey
Hungary	European Health Interview Survey
Iceland	May – December Household Surveys done by Gallup
Ireland	Healthy Ireland Survey
Israel	National Health Interview Survey
Italy	ISTAT: Multiscope Survey "Aspects of Daily Life"
Kazakhstan	Global Adult Tobacco Survey
Kyrgyzstan	STEPS Survey
Latvia	Health Behaviour among Latvian Adult Population
Lithuania	European Health Interview Survey
Luxembourg	Tobacco Habits in Luxembourg
Malta	Eurobarometer
Monaco	...
Montenegro	Living Standards Measurement Survey
Netherlands	The Dutch Continuous Survey of Smoking Habits
Norway	Statistics Norway Smoking Habits Survey
Poland	Nationwide Survey on Attitudes towards Tobacco Smoking
Portugal	National Health Survey
Republic of Moldova	STEPS Survey
Romania	Global Adult Tobacco Survey
Russian Federation	Russian Public Opinion Research Centre Survey
San Marino	...
Serbia	National Survey on Lifestyles of Citizens in Serbia
Slovakia	Tobacco and Health Education Survey
Slovenia	Survey on the Use of Tobacco, Alcohol and Other Drugs
Spain	European Health Interview Survey
Sweden	National Survey of Public Health
Switzerland	Addiction Monitoring survey
Tajikistan	Demographic and Health Survey
The former Yugoslav Republic of Macedonia	Multiple Indicator Cluster Survey
Turkey	Global Adult Tobacco Survey
Turkmenistan	STEPS Survey
Ukraine	Kyiv International Institute of Sociology face-to-face Survey
United Kingdom of Great Britain and Northern Ireland	Integrated Household Survey
Uzbekistan	STEPS Survey

YEAR OF SURVEY	INDICATOR REPORTED			
	ALL TOBACCO USE	SMOKED TOBACCO USE	CIGARETTE USE	SMOKELESS USE
2008-09	No	Yes	Yes	No
2011	No	Yes	No	No
2016	No	Yes	No	Yes*
2015	Yes	Yes	No	Yes
2015	No	No	Yes	Yes*
2016	No	Yes	No	No
2013	No	Yes	No	No
2011-12	Yes	No	Yes	No
2014-15	No	No	Yes	No
2014-15	No	Yes	No	Yes
2014	No	Yes	No	No
2015	No	Yes	Yes	Yes
2015	No	Yes	Yes	Yes
2014	No	Yes	No	Yes
2014	No	Yes	No	No
2016	No	Yes	No	Yes*
2013	No	Yes	No	Yes*
2014	No	Yes	No	Yes*
2014	No	Yes	No	Yes
2015	No	Yes	No	Yes
2014-15	No	Yes	Yes	No
2013	No	Yes	No	No
2015	No	Yes	No	No
2014	Yes	Yes	Yes	Yes
2013	Yes	Yes	Yes	Yes
2014	No	Yes	No	Yes
2014	No	Yes	Yes	No
2015	No	No	Yes	No
2014	No	Yes	No	No
...
2012	No	Yes	No	No
2014	No	Yes	No	Yes
2015	No	Yes	No	Yes
2014-15	No	Yes	No	Yes
2014	No	Yes	Yes	No
2013	Yes	Yes	Yes	Yes
2011	No	Yes	Yes	Yes
2016	No	No	Yes	Yes*
...
2014	No	Yes	No	No
2014	No	Yes	Yes	Yes
2014	No	Yes	No	No
2014	No	Yes	No	No
2015	Yes	Yes	No	Yes
2014	No	Yes	No	Yes
2012	Yes	No	Yes	No
2011	Yes	No	Yes	No
2016	No	Yes	No	No
2013-14	Yes	Yes	Yes	Yes
2015	No	Yes	No	Yes*
2014	No	No	Yes	No
2014	Yes	Yes	Yes	Yes

Eastern Mediterranean

Table 2.6.5
Types of tobacco reported in most recent surveys among adults in the Eastern Mediterranean

... Data not reported/not available.

< Refers to a territory

* Not reported from the same survey as the other indicators.

¹ Refers to the Kuwaiti population only.

² Only Omanis were surveyed.

COUNTRY	TITLE OF SURVEY
Afghanistan	Study of Smoking Prevalence among Men in Kabul City
Bahrain	National Non-Communicable Diseases Risk Factor Survey
Djibouti	Djibouti Family Health Survey (PAPFAM)
Egypt	Demographic and Health Survey
Iran (Islamic Republic of)	Sixth National Survey of NCD Risk Factors Surveillance
Iraq	STEPS Survey
Jordan	Demographic and Health Survey
Kuwait ¹	STEPS Survey
Lebanon	Lebanese National Tobacco Control Program Survey
Libya	STEPS Survey
Morocco	MARTA
Oman ²	World Health Survey
Pakistan	Global Adult Tobacco Survey
Qatar	Global Adult Tobacco Survey
Saudi Arabia	Saudi Health Information Survey
Somalia	...
Sudan	...
Syrian Arab Republic	National Survey on Non-communicable Diseases and Factors Affecting their Development
Tunisia	National Survey of Morbidity and Access to Care (TAHINA)
United Arab Emirates	World Health Survey
West Bank and Gaza Strip <	STEPS Survey
Yemen	Demographic and Health Survey

YEAR OF SURVEY	INDICATOR REPORTED			
	ALL TOBACCO USE	SMOKED TOBACCO USE	CIGARETTE USE	SMOKELESS USE
2010	No	No	Yes	No
2007	No	Yes	Yes	No
2012	Yes	No	No	No
2015	No	Yes	No	Yes*
2011	Yes	Yes	No	No
2015	No	Yes	No	Yes*
2012	Yes	No	Yes	No
2014	No	Yes	Yes	Yes
2013	No	Yes	Yes	No
2009	No	Yes	Yes	Yes
2006	No	Yes	Yes	No
2008	No	Yes	No	No
2014	Yes	Yes	Yes	Yes
2013	Yes	Yes	Yes	Yes
2014	No	Yes	No	Yes
...
...
2002-03	No	Yes	No	Yes
2005-06	No	Yes	No	Yes
2009	No	Yes	No	No
2011	No	Yes	No	No
2013	No	Yes	No	Yes

Western Pacific

Table 2.6.6
Types of tobacco reported in most recent surveys among adults in the Western Pacific

... Data not reported/not available.

* Not reported from the same survey as the other indicators.

COUNTRY	TITLE OF SURVEY
Australia	National Health Survey, Australian Bureau of Statistics: First Results
Brunei Darussalam	Knowledge, Attitudes and Practices Survey on Noncommunicable Diseases
Cambodia	National Adult Tobacco Survey of Cambodia
China	Global Adult Tobacco Survey
Cook Islands	Census
Fiji	STEPS Survey
Japan	National Health and Nutrition Survey
Kiribati	STEPS Survey
Lao People's Democratic Republic	National Adult Tobacco Survey
Malaysia	National Health And Morbidity Survey
Marshall Islands	STEPS Survey
Micronesia (Federated States of)	National Outcome Measures Survey
Mongolia	STEPS Survey
Nauru	STEPS Survey
New Zealand	New Zealand Health Survey
Niue	STEPS Survey
Palau	STEPS Survey
Papua New Guinea	Household Income and Expenditure Survey (HIES)
Philippines	Global Adult Tobacco Survey
Republic of Korea	Korea National Health and Nutrition Examination Survey (KNHANES)
Samoa	STEPS Survey
Singapore	National Health Surveillance Survey (NHSS)
Solomon Islands	STEPS Survey
Tonga	STEPS Survey
Tuvalu	Population and Housing Census
Vanuatu	STEPS Survey
Viet Nam	Global Adult Tobacco Survey

YEAR OF SURVEY	INDICATOR REPORTED			
	ALL TOBACCO USE	SMOKED TOBACCO USE	CIGARETTE USE	SMOKELESS USE
2014-15	No	Yes	No	Yes*
2014-15	No	Yes	Yes	Yes
2014	Yes	Yes	Yes	Yes
2015	No	Yes	Yes	No
2011	No	Yes	No	No
2011	No	Yes	No	No
2015	No	Yes	Yes	No
2015-16	No	Yes	No	No
2015	Yes	Yes	Yes	Yes
2015	No	Yes	Yes	Yes
2002	No	Yes	No	Yes
2012	No	No	Yes	No
2013	Yes	Yes	No	Yes
2004	No	Yes	No	No
2015-16	No	Yes	No	No
2011	Yes	Yes	No	Yes
2011-13	No	Yes	No	Yes
2009-10	No	Yes	No	No
2015	No	Yes	Yes	Yes
2015	No	No	Yes	No
2013	No	Yes	Yes	Yes
2012-13	No	No	Yes	No
2005-06	No	Yes	Yes	No
2011	No	Yes	Yes	No
2002	No	No	Yes	No
2011	No	Yes	No	No
2015	Yes	Yes	Yes	Yes

Table 2.7.1
Types of tobacco reported in most recent surveys among youth in Africa

... Data not reported/not available.

* Not reported from the same survey as the other indicators.

COUNTRY	TITLE OF SURVEY
Algeria	Global Youth Tobacco Survey
Angola	Global Youth Tobacco Survey (Huambo)
Benin	Global School-Based Student Health Survey
Botswana	Global Youth Tobacco Survey
Burkina Faso	Global Youth Tobacco Survey (Ouagadougou)
Burundi	Global Youth Tobacco Survey
Cabo Verde	Consumption of Psychoactive Substances among Secondary School Students
Cameroon	Global Youth Tobacco Survey
Central African Republic	Global Youth Tobacco Survey (Bangui)
Chad	Global Youth Tobacco Survey
Comoros	Global Youth Tobacco Survey
Congo	Global Youth Tobacco Survey
Côte d'Ivoire	Global Youth Tobacco Survey
Democratic Republic of the Congo	Global Youth Tobacco Survey (Kinshasa)
Equatorial Guinea	Global Youth Tobacco Survey
Eritrea	Global Youth Tobacco Survey
Ethiopia	Global Youth Tobacco Survey (Addis Ababa)
Gabon	Global Youth Tobacco Survey
Gambia	Global Youth Tobacco Survey (Banjul)
Ghana	Global School-Based Student Health Survey
Guinea	Global Youth Tobacco Survey
Guinea-Bissau	Global Youth Tobacco Survey (Bissau)
Kenya	Global Youth Tobacco Survey
Lesotho	Global Youth Tobacco Survey
Liberia	Global Youth Tobacco Survey (Monrovia)
Madagascar	Global Youth Tobacco Survey
Malawi	Global Youth Tobacco Survey
Mali	Global Youth Tobacco Survey
Mauritania	Global School-Based Student Health Survey
Mauritius	Global Youth Tobacco Survey
Mozambique	Global Youth Tobacco Survey
Namibia	Global Youth Tobacco Survey
Niger	Global Youth Tobacco Survey
Nigeria	Global Youth Tobacco Survey (Abuja)
Rwanda	Global Youth Tobacco Survey
Sao Tome and Principe	Global Youth Tobacco Survey
Senegal	Global Youth Tobacco Survey
Seychelles	Global Youth Tobacco Survey
Sierra Leone	Global Youth Tobacco Survey (Western Area)
South Africa	Global Youth Tobacco Survey
South Sudan	...
Swaziland	Global Youth Tobacco Survey
Togo	Global Youth Tobacco Survey
Uganda	Global Youth Tobacco Survey
United Republic of Tanzania	Global Youth Tobacco Survey (Arusha)
Zambia	Global Youth Tobacco Survey
Zimbabwe	Global Youth Tobacco Survey

YEAR OF SURVEY	INDICATOR REPORTED			
	ALL TOBACCO USE	SMOKED TOBACCO USE	CIGARETTE USE	SMOKELESS USE
2013	Yes	Yes	Yes	Yes
2010	Yes	No	Yes	Yes
2009	Yes	No	Yes	Yes
2008	Yes	No	Yes	Yes
2009	Yes	No	Yes	Yes
2008	Yes	No	Yes	No
2012	No	Yes	No	No
2014	Yes	Yes	Yes	Yes
2008	Yes	No	Yes	Yes
2008	Yes	No	Yes	No
2015	Yes	Yes	Yes	Yes
2009	Yes	No	Yes	Yes
2009	Yes	No	Yes	Yes
2008	Yes	No	Yes	Yes
2008	Yes	No	Yes	No
2006	Yes	No	Yes	No
2003	Yes	No	Yes	No
2014	Yes	Yes	Yes	Yes
2008	Yes	No	Yes	Yes
2012	No	No	Yes	No
2008	Yes	No	Yes	No
2008	Yes	No	Yes	No
2013	Yes	Yes	Yes	Yes
2008	Yes	No	Yes	Yes
2008	Yes	No	Yes	Yes
2009	Yes	No	Yes	Yes
2008	Yes	No	Yes	No
2010	Yes	No	Yes	No
2016	Yes	Yes	Yes	Yes
2013	Yes	Yes	Yes	Yes
2008	Yes	No	Yes	Yes
2009	Yes	No	Yes	No
2008	Yes	No	Yes	Yes
2008	Yes	No	Yes	Yes
2010	Yes	No	Yes	No
2013	Yes	Yes	Yes	Yes
2015	Yes	Yes	Yes	Yes
2008	Yes	No	Yes	Yes
2011	Yes	No	Yes	Yes*
...
2009	Yes	No	Yes	Yes
2013	Yes	Yes	Yes	Yes
2011	Yes	No	Yes	Yes
2008	Yes	No	Yes	Yes
2011	Yes	No	Yes	No
2014	Yes	Yes	Yes	Yes

The Americas

Table 2.7.2
Types of tobacco reported in most recent surveys among youth in the Americas

... Data not reported/not available.
* Not reported from the same survey as the other indicators.

COUNTRY	TITLE OF SURVEY
Antigua and Barbuda	Global Youth Tobacco Survey
Argentina	Global Youth Tobacco Survey
Bahamas	Global Youth Tobacco Survey
Barbados	Global Youth Tobacco Survey
Belize	Global Youth Tobacco Survey
Bolivia (Plurinational State of)	Global Youth Tobacco Survey
Brazil	National School Health Survey (PENSE)
Canada	Canadian Student Tobacco, Alcohol and Drugs Survey (CSTADS)
Chile	Global School-Based Student Health Survey
Colombia	National Survey of Psychoactive Substance Use in the School Population
Costa Rica	Global Youth Tobacco Survey
Cuba	Global Youth Tobacco Survey
Dominica	Global Youth Tobacco Survey
Dominican Republic	Global Youth Tobacco Survey
Ecuador	National Survey on Drug Use Among Students Aged 12 to 17
El Salvador	Global Youth Tobacco Survey
Grenada	Global Youth Tobacco Survey
Guatemala	Global Youth Tobacco Survey
Guyana	Global Youth Tobacco Survey
Haiti	Global Youth Tobacco Survey
Honduras	Global Youth Tobacco Survey
Jamaica	Global Youth Tobacco Survey
Mexico	Global Youth Tobacco Survey
Nicaragua	Global Youth Tobacco Survey
Panama	Global Youth Tobacco Survey
Paraguay	Global Youth Tobacco Survey
Peru	Global Youth Tobacco Survey
Saint Kitts and Nevis	Global Youth Tobacco Survey
Saint Lucia	Global Youth Tobacco Survey
Saint Vincent and the Grenadines	Global Youth Tobacco Survey
Suriname	Global Youth Tobacco Survey
Trinidad and Tobago	Global Youth Tobacco Survey
United States of America	National Youth Tobacco Survey
Uruguay	Global Youth Tobacco Survey
Venezuela (Bolivarian Republic of)	Global Youth Tobacco Survey

YEAR OF SURVEY	INDICATOR REPORTED			
	ALL TOBACCO USE	SMOKED TOBACCO USE	CIGARETTE USE	SMOKELESS USE
2009	Yes	No	Yes	Yes
2012	Yes	Yes	Yes	Yes
2013	No	Yes	Yes	Yes
2013	Yes	No	Yes	Yes
2014	Yes	Yes	Yes	Yes
2012	Yes	No	Yes	Yes
2015	No	No	Yes	Yes*
2014-15	No	No	Yes	Yes
2013	Yes	No	Yes	No
2011	No	No	Yes	No
2013	Yes	No	Yes	Yes
2010	Yes	No	Yes	No
2009	Yes	No	Yes	Yes
2011	Yes	No	Yes	Yes
2012	No	No	Yes	No
2015	Yes	Yes	Yes	Yes
2016	Yes	Yes	Yes	Yes
2015	Yes	Yes	Yes	Yes
2015	Yes	Yes	Yes	Yes
2005	Yes	No	Yes	No
2016	Yes	Yes	Yes	Yes
2010	Yes	No	Yes	Yes
2011	Yes	No	Yes	Yes
2014	Yes	Yes	Yes	Yes
2012	Yes	Yes	Yes	Yes
2014	Yes	Yes	Yes	Yes
2014	Yes	Yes	Yes	Yes
2010	Yes	No	Yes	No
2011	Yes	No	Yes	No
2011	Yes	No	Yes	No
2016	Yes	Yes	Yes	Yes
2011	Yes	No	Yes	No
2015	Yes	Yes	Yes	Yes
2014	Yes	Yes	Yes	Yes
2010	Yes	No	Yes	Yes



South-East Asia

Table 2.7.3
Types of tobacco reported in most recent surveys among youth in South-East Asia

COUNTRY	TITLE OF SURVEY
Bangladesh	Global School-Based Student Health Survey
Bhutan	Global Youth Tobacco Survey
Democratic People's Republic of Korea	...
India	Global Youth Tobacco Survey
Indonesia	Global School-Based Student Health Survey
Maldives	Global School-Based Student Health Survey
Myanmar	Global Youth Tobacco Survey
Nepal	Global School-Based Student Health Survey
Sri Lanka	Global Youth Tobacco Survey
Thailand	Global Youth Tobacco Survey
Timor-Leste	Global School-Based Student Health Survey

... Data not reported/not available.

* Not reported from the same survey as the other indicators.

YEAR OF SURVEY	INDICATOR REPORTED			
	ALL TOBACCO USE	SMOKED TOBACCO USE	CIGARETTE USE	SMOKELESS USE
2014	Yes	No	Yes	Yes*
2013	Yes	Yes	Yes	Yes
...
2009	Yes	Yes	Yes	Yes
2015	Yes	No	Yes	Yes*
2014	Yes	No	Yes	Yes*
2016	Yes	No	Yes	Yes
2015	Yes	No	Yes	Yes*
2015	Yes	Yes	Yes	Yes
2015	Yes	Yes	Yes	Yes
2015	Yes	Yes	Yes	Yes*



Table 2.7.4
Types of tobacco reported in most recent surveys among youth in Europe

... Data not reported/not available.

* Not reported from the same survey as the other indicators.

COUNTRY	TITLE OF SURVEY
Albania	Global Youth Tobacco Survey
Andorra	...
Armenia	Health Behaviour in School-aged Children
Austria	Health Behaviour in School-aged Children
Azerbaijan	Global Youth Tobacco Survey
Belarus	Global Youth Tobacco Survey
Belgium	Health Behaviour in School-aged Children (Flemish Region)
Bosnia and Herzegovina	Global Youth Tobacco Survey
Bulgaria	Global Youth Tobacco Survey
Croatia	Global Youth Tobacco Survey
Cyprus	Global Youth Tobacco Survey
Czechia	Global Youth Tobacco Survey
Denmark	Health Behaviour in School-aged Children
Estonia	Health Behaviour in School-aged Children
Finland	Adolescent Health and Lifestyle Survey
France	Health Behaviour in School-aged Children
Georgia	The European School Survey Project on Alcohol and Other Drugs (ESPAD)
Germany	The Drug Affinity of Young People in the Federal Republic of Germany
Greece	Health Behaviour in School-aged Children
Hungary	Global Youth Tobacco Survey
Iceland	Health Behaviour in School-aged Children
Ireland	Health Behaviour in School-aged Children
Israel	Health Behaviour in School-aged Children
Italy	Global Youth Tobacco Survey
Kazakhstan	Global Youth Tobacco Survey
Kyrgyzstan	Global Youth Tobacco Survey
Latvia	Global Youth Tobacco Survey
Lithuania	Global Youth Tobacco Survey
Luxembourg	Health Behaviour in School-aged Children
Malta	Health Behaviour in School-aged Children
Monaco	The European School Survey Project on Alcohol and Other Drugs (ESPAD)
Montenegro	Global Youth Tobacco Survey
Netherlands	Health Behaviour in School-aged Children
Norway	Health Behaviour in School-aged Children
Poland	Global Youth Tobacco Survey
Portugal	Global Youth Tobacco Survey
Republic of Moldova	Health Behaviour in School-aged Children
Romania	Health Behaviour in School-aged Children
Russian Federation	Global Youth Tobacco Survey
San Marino	Global Youth Tobacco Survey
Serbia	Global Youth Tobacco Survey
Slovakia	Global Youth Tobacco Survey
Slovenia	Health Behaviour in School-aged Children
Spain	Health Behaviour in School-aged Children
Sweden	Alcohol and Drug Use among Students (Skolelevers Droivanor)
Switzerland	Health Behaviour in School-aged Children
Tajikistan	Global Youth Tobacco Survey
The former Yugoslav Republic of Macedonia	Global Youth Tobacco Survey
Turkey	Global Youth Tobacco Survey
Turkmenistan	Global Youth Tobacco Survey
Ukraine	The European School Survey Project on Alcohol and Other Drugs
United Kingdom of Great Britain and Northern Ireland	Health Behaviour in School-aged Children (England)
Uzbekistan	Global Youth Tobacco Survey

YEAR OF SURVEY	INDICATOR REPORTED			
	ALL TOBACCO USE	SMOKED TOBACCO USE	CIGARETTE USE	SMOKELESS USE
2015	Yes	Yes	Yes	Yes
...
2013-14	No	Yes	No	Yes*
2014	No	Yes	No	No
2016	No	Yes	No	Yes
2015	Yes	Yes	Yes	Yes
2013-14	No	Yes	No	No
2013	Yes	Yes	Yes	Yes
2015	Yes	Yes	Yes	Yes
2016	No	Yes	Yes	Yes
2011	Yes	No	Yes	No
2016	No	No	No	Yes
2014	No	Yes	No	No
2014	No	Yes	No	Yes*
2015	No	Yes	No	Yes*
2013-14	No	Yes	No	No
2015	No	No	Yes	Yes*
2015	No	Yes	No	No
2013-14	No	Yes	No	Yes*
2016	Yes	No	Yes	Yes
2013-14	No	Yes	No	No
2013-14	No	Yes	No	No
2013-14	No	Yes	No	No
2014	No	No	Yes	No
2014	Yes	Yes	Yes	Yes
2014	Yes	Yes	Yes	Yes
2014	No	Yes	No	Yes
2014	Yes	Yes	Yes	Yes
2013-14	No	Yes	No	No
2013-14	No	Yes	No	No
2011	No	No	Yes	No
2014	No	Yes	No	Yes
2013-14	No	Yes	No	No
2013-14	No	Yes	No	Yes
2016	No	No	No	Yes
2013	Yes	Yes	Yes	Yes
2014	No	Yes	No	Yes*
2013-14	No	Yes	No	No
2015	Yes	No	Yes	Yes
2014	Yes	Yes	Yes	Yes
2013	No	Yes	Yes	Yes
2016	No	No	No	Yes
2013-14	No	Yes	No	No
2013-14	No	Yes	No	No
2015	No	No	Yes	No
2013-14	No	Yes	No	No
2014	Yes	Yes	Yes	Yes
2016	Yes	No	No	Yes
2012	Yes	No	Yes	No
2015	Yes	Yes	Yes	Yes
2015	No	No	Yes	No
2014	No	Yes	No	No
2013	Yes	Yes	Yes	Yes

Eastern Mediterranean

Table 2.7.5
Types of tobacco reported in most recent surveys among youth in the Eastern Mediterranean

... Data not reported/not available.
< Refers to a territory
* Not reported from the same survey as the other indicators.

COUNTRY	TITLE OF SURVEY
Afghanistan	Global Youth Tobacco Survey (Kabul)
Bahrain	Global Youth Tobacco Survey
Djibouti	Global Youth Tobacco Survey
Egypt	Global Youth Tobacco Survey
Iran (Islamic Republic of)	CASPIAN study
Iraq	Global Youth Tobacco Survey
Jordan	Global Youth Tobacco Survey
Kuwait	Global Youth Tobacco Survey
Lebanon	Global Youth Tobacco Survey
Libya	Global Youth Tobacco Survey
Morocco	Global Youth Tobacco Survey
Oman	Global Youth Tobacco Survey
Pakistan	Global Youth Tobacco Survey
Qatar	Global Youth Tobacco Survey
Saudi Arabia	Global Youth Tobacco Survey
Somalia	Global Youth Tobacco Survey (Somaliland)
Sudan	Global Youth Tobacco Survey
Syrian Arab Republic	Global Youth Tobacco Survey
Tunisia	Global Youth Tobacco Survey
United Arab Emirates	Global Youth Tobacco Survey
West Bank and Gaza Strip <	Global Youth Tobacco Survey (Gaza Strip)
Yemen	Global Youth Tobacco Survey

YEAR OF SURVEY	INDICATOR REPORTED			
	ALL TOBACCO USE	SMOKED TOBACCO USE	CIGARETTE USE	SMOKELESS USE
2010	Yes	No	Yes	No
2015	Yes	Yes	Yes	Yes
2013	Yes	Yes	Yes	Yes
2014	Yes	Yes	Yes	Yes
2011-12	No	Yes	No	Yes*
2014	Yes	Yes	Yes	Yes
2014	Yes	Yes	Yes	Yes
2016	No	Yes	Yes	Yes
2013	No	No	Yes	No
2010	Yes	No	Yes	Yes
2016	Yes	Yes	Yes	Yes
2010	Yes	No	Yes	Yes
2013	Yes	Yes	Yes	Yes
2013	Yes	Yes	Yes	Yes
2010	Yes	No	Yes	Yes
2007	Yes	No	Yes	No
2014	Yes	Yes	Yes	Yes
2010	Yes	No	Yes	Yes
2010	Yes	No	Yes	Yes
2013	Yes	Yes	Yes	Yes
2014	Yes	Yes	Yes	Yes
2014	Yes	Yes	Yes	Yes



Western Pacific

Table 2.7.6
Types of tobacco reported in most recent surveys among youth in the Western Pacific

... Data not reported/not available.
* Not reported from the same survey as the other indicators.

COUNTRY	TITLE OF SURVEY
Australia	Australian Secondary School Students Alcohol and Drug Survey (ASSAD)
Brunei Darussalam	Global School-Based Student Health Survey
Cambodia	Global Youth Tobacco Survey
China	Global Youth Tobacco Survey
Cook Islands	Global Youth Tobacco Survey
Fiji	Global Youth Tobacco Survey
Japan	National Survey on Underage Smoking and Drinking
Kiribati	Global School-Based Student Health Survey
Lao People's Democratic Republic	Global Youth Tobacco Survey
Malaysia	Tobacco and E-Cigarette Survey Among Malaysian Adolescents (TECMA)
Marshall Islands	Global Youth Tobacco Survey
Micronesia (Federated States of)	Global Youth Tobacco Survey
Mongolia	Global Youth Tobacco Survey
Nauru	Global School-Based Student Health Survey
New Zealand	ASH Year 10 Survey
Niue	Global School-Based Student Health Survey
Palau	Global Youth Tobacco Survey
Papua New Guinea	Global Youth Tobacco Survey
Philippines	Global Youth Tobacco Survey
Republic of Korea	Korea Youth Risk Behavior Web-based Survey
Samoa	Global School-Based Student Health Survey
Singapore	Student Health Survey
Solomon Islands	Global School-Based Student Health Survey
Tonga	Global Youth Tobacco Survey
Tuvalu	Global School-Based Student Health Survey
Vanuatu	Global School-Based Student Health Survey
Viet Nam	Global Youth Tobacco Survey

YEAR OF SURVEY	INDICATOR REPORTED			
	ALL TOBACCO USE	SMOKED TOBACCO USE	CIGARETTE USE	SMOKELESS USE
2014	No	No	Yes	No
2014	Yes	No	Yes	Yes*
2016	Yes	Yes	Yes	Yes
2014	Yes	Yes	Yes	Yes
2016	Yes	Yes	Yes	Yes
2016	Yes	Yes	Yes	Yes
2014	No	No	Yes	No
2011	Yes	No	Yes	No
2011	Yes	No	Yes	No
2016	Yes	No	Yes	Yes
2009	Yes	No	Yes	Yes*
2013	Yes	Yes	Yes	Yes
2014	Yes	Yes	Yes	Yes
2011	Yes	No	Yes	No
2015	No	Yes	No	No
2010	Yes	No	Yes	Yes*
2013	Yes	Yes	Yes	Yes
2007	Yes	No	Yes	No
2015	No	Yes	Yes	Yes
2016	No	No	Yes	Yes*
2011	Yes	No	Yes	No
2012	No	Yes	No	No
2011	No	No	Yes	No
2010	Yes	No	Yes	No
2013	No	Yes	No	No
2011	No	No	Yes	No
2014	Yes	Yes	Yes	Yes





APPENDIX III: YEAR OF HIGHEST LEVEL OF ACHIEVEMENT IN SELECTED TOBACCO CONTROL MEASURES

Appendix III provides information on the year in which respective countries attained the highest level of achievement for five of the MPOWER measures. Data are shown separately for each WHO region.

For Monitoring tobacco use the earliest year assessed is 2007. However, it is possible that while 2007 is reported as the year of highest achievement for some countries, they actually may have reached this level earlier.

Years of highest level achievement of the MPOWER measure Raise taxes on tobacco are not included in this appendix. The share of taxes in product price depends both on tax policy and on demand and supply factors that affect manufacturing and retail prices. Countries with tax increases might have seen the share of tax remain unchanged or even decline if the non-tax share of price rose at the same, or a higher rate, complicating the interpretation of the year of highest level of achievement. See Technical Note III for details on the calculation of tax shares.

Africa

Table 3.1
Year of highest level of achievement
in selected tobacco control measures
in Africa

Note: Refer to Technical Note 1 for definitions of highest level of achievement. An empty cell indicates that the population is not covered by the measure at the highest level of achievement.

⊖ Policy adopted but not implemented by 31 December 2016.

COUNTRY
Algeria
Angola
Benin
Botswana
Burkina Faso
Burundi
Cabo Verde
Cameroon
Central African Republic
Chad
Comoros
Congo
Côte d'Ivoire
Democratic Republic of the Congo
Equatorial Guinea
Eritrea
Ethiopia
Gabon
Gambia
Ghana
Guinea
Guinea-Bissau
Kenya
Lesotho
Liberia
Madagascar
Malawi
Mali
Mauritania
Mauritius
Mozambique
Namibia
Niger
Nigeria
Rwanda
Sao Tome and Principe
Senegal
Seychelles
Sierra Leone
South Africa
South Sudan
Swaziland
Togo
Uganda
United Republic of Tanzania
Zambia
Zimbabwe

MONITOR TOBACCO USE	YEAR THE HIGHEST LEVEL OF ACHIEVEMENT WAS ATTAINED			
	PROTECT PEOPLE FROM TOBACCO SMOKE	OFFER HELP TO QUIT TOBACCO USE	WARN ABOUT THE DANGERS OF TOBACCO	ENFORCE BANS ON TOBACCO ADVERTISING, PROMOTION AND SPONSORSHIP
	2010		2015	
2012				
	2010		2015	2010
	2012			
				2004
				2012
				2012
				2007
	2013		2012	2003
			2008	2008
	2010		2013	
			2012	2006
				2015
		2016	2016 ⊖	2016 ⊖
	2009		2012	
2012				
				2012
2014	2015			2015

The Americas

Table 3.2
Year of highest level of achievement
in selected tobacco control measures
in the Americas

Note: Refer to Technical Note I for definitions of highest level of achievement. An empty cell indicates that the population is not covered by the measure at the highest level of achievement.

* Or earlier year.

⊖ Policy adopted but not implemented by 31 December 2016.

COUNTRY
Antigua and Barbuda
Argentina
Bahamas
Barbados
Belize
Bolivia (Plurinational State of)
Brazil
Canada
Chile
Colombia
Costa Rica
Cuba
Dominica
Dominican Republic
Ecuador
El Salvador
Grenada
Guatemala
Guyana
Haiti
Honduras
Jamaica
Mexico
Nicaragua
Panama
Paraguay
Peru
Saint Kitts and Nevis
Saint Lucia
Saint Vincent and the Grenadines
Suriname
Trinidad and Tobago
United States of America
Uruguay
Venezuela (Bolivarian Republic of)

MONITOR TOBACCO USE	YEAR THE HIGHEST LEVEL OF ACHIEVEMENT WAS ATTAINED			
	PROTECT PEOPLE FROM TOBACCO SMOKE	OFFER HELP TO QUIT TOBACCO USE	WARN ABOUT THE DANGERS OF TOBACCO	ENFORCE BANS ON TOBACCO ADVERTISING, PROMOTION AND SPONSORSHIP
2010	2011		2012	
2012	2010			
			2009	
2016	2011	2002	2003	2011
2007*	2007	2008	2011	
2007*	2013		2006	
2012	2008			2009
2010	2012		2013	
	2011		2012	
	2015	2016	2011	
	2008			
	2010			
	2013	2016	2013	
		2013	2009	
2012	2008	2009	2005	2008
	2010		2011	
	2013		2016 ⊖	2013
	2009		2013	
2007*		2008		
2007*	2005		2005	2014
	2011		2004	

South-East Asia

Table 3.3
Year of highest level of achievement in selected tobacco control measures in South-East Asia

Note: Refer to Technical Note 1 for definitions of highest level of achievement. An empty cell indicates that the population is not covered by the measure at the highest level of achievement.

COUNTRY
Bangladesh
Bhutan
Democratic People's Republic of Korea
India
Indonesia
Maldives
Myanmar
Nepal
Sri Lanka
Thailand
Timor-Leste

MONITOR TOBACCO USE	YEAR THE HIGHEST LEVEL OF ACHIEVEMENT WAS ATTAINED			
	PROTECT PEOPLE FROM TOBACCO SMOKE	OFFER HELP TO QUIT TOBACCO USE	WARN ABOUT THE DANGERS OF TOBACCO	ENFORCE BANS ON TOBACCO ADVERTISING, PROMOTION AND SPONSORSHIP
			2015	
2014				
		2016	2016	
2016				2010
2014				
	2011		2011	2014
			2012	
2008	2010		2005	

Table 3.4
Year of highest level of achievement
in selected tobacco control measures
in Europe

Note: Refer to Technical Note I for definitions of highest level of achievement. An empty cell indicates that the population is not covered by the measure at the highest level of achievement.

* Or earlier year.

⊙ Policy adopted but not implemented by 31 December 2016.

COUNTRY
Albania
Andorra
Armenia
Austria
Azerbaijan
Belarus
Belgium
Bosnia and Herzegovina
Bulgaria
Croatia
Cyprus
Czechia
Denmark
Estonia
Finland
France
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Kazakhstan
Kyrgyzstan
Latvia
Lithuania
Luxembourg
Malta
Monaco
Montenegro
Netherlands
Norway
Poland
Portugal
Republic of Moldova
Romania
Russian Federation
San Marino
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Tajikistan
The former Yugoslav Republic of Macedonia
Turkey
Turkmenistan
Ukraine
United Kingdom of Great Britain and Northern Ireland
Uzbekistan

MONITOR TOBACCO USE	YEAR THE HIGHEST LEVEL OF ACHIEVEMENT WAS ATTAINED			
	PROTECT PEOPLE FROM TOBACCO SMOKE	OFFER HELP TO QUIT TOBACCO USE	WARN ABOUT THE DANGERS OF TOBACCO	ENFORCE BANS ON TOBACCO ADVERTISING, PROMOTION AND SPONSORSHIP
	2006			2006
2010			2016 ⊙	
2007*			2016	
2016				
			2016	
2007*			2016	
2008	2012		2016	
2012				
2007*			2016	
2007*			2016	
2007*		2011	2016	
2007*		2015	2016	
2007*			2016	
2007*			2016	
2014				
2007*			2016	
2007*	2010		2016	
2012			2016 ⊙	
2007*				
2007*	2004	2003	2016	
		2008		
2007*			2016	
2010			2014 ⊙	
			2014	
2007*			2016	
2007*			2016	
2010		2016		
2010	2010	2014	2016	
2007*		2014	2016	
2007*	2013			
2010			2016	
2007*			2015	
2014			2016 ⊙	2016
2007*	2015		2016 ⊙	
2010	2013		2014 ⊙	2013
2010				
2007*			2016	
2007*				
2007*	2010			2010
2007*			2016	
2007*				
	2008			
2007*	2008	2010	2012	2012
	2000		2014	
2007*			2009	
2007*	2006	2001	2016	

Eastern Mediterranean

Table 3.5
Year of highest level of achievement
in selected tobacco control measures
in the Eastern Mediterranean

Note: Refer to Technical Note 1 for definitions of highest level of achievement. An empty cell indicates that the population is not covered by the measure at the highest level of achievement.

* Or earlier year.

< Refers to a territory.

COUNTRY
Afghanistan
Bahrain
Djibouti
Egypt
Iran (Islamic Republic of)
Iraq
Jordan
Kuwait
Lebanon
Libya
Morocco
Oman
Pakistan
Qatar
Saudi Arabia
Somalia
Sudan
Syrian Arab Republic
Tunisia
United Arab Emirates
West Bank and Gaza Strip <
Yemen

MONITOR TOBACCO USE	YEAR THE HIGHEST LEVEL OF ACHIEVEMENT WAS ATTAINED			
	PROTECT PEOPLE FROM TOBACCO SMOKE	OFFER HELP TO QUIT TOBACCO USE	WARN ABOUT THE DANGERS OF TOBACCO	ENFORCE BANS ON TOBACCO ADVERTISING, PROMOTION AND SPONSORSHIP
	2015			2015
				2011
			2008	2007
2010			2008	
2007*	2007	2008	2008	2007
2010		2012		2016
2014	2011			
	2009			2009
2014	2009			
2014				2016
		2008		2013
	2011			
				2013

Western Pacific

Table 3.6
Year of highest level of achievement
in selected tobacco control measures
in the Western Pacific

Note: Refer to Technical Note I for definitions of highest level of achievement. An empty cell indicates that the population is not covered by the measure at the highest level of achievement.

* Or earlier year.

⊙ Policy adopted but not implemented by 31 December 2016.

COUNTRY
Australia
Brunei Darussalam
Cambodia
China
Cook Islands
Fiji
Japan
Kiribati
Lao People's Democratic Republic
Malaysia
Marshall Islands
Micronesia (Federated States of)
Mongolia
Nauru
New Zealand
Niue
Palau
Papua New Guinea
Philippines
Republic of Korea
Samoa
Singapore
Solomon Islands
Tonga
Tuvalu
Vanuatu
Viet Nam

MONITOR TOBACCO USE	YEAR THE HIGHEST LEVEL OF ACHIEVEMENT WAS ATTAINED			
	PROTECT PEOPLE FROM TOBACCO SMOKE	OFFER HELP TO QUIT TOBACCO USE	WARN ABOUT THE DANGERS OF TOBACCO	ENFORCE BANS ON TOBACCO ADVERTISING, PROMOTION AND SPONSORSHIP
2007*	2005	2011	2004	
2016	2012	2014	2007	
2014	2016		2016	
2008				
			2013	
2007*				2013
	2016		2016 ⊙	
2012			2008	
	2006			
2010	2012		2012	2012
	2009			
2007*	2003	2000	2007	
2012				
	2012			
2007*			2014	
2007*		2006		
			2013	
2010		1999	2012	
			2013	
				2008
			2013	2008
2014			2013	



APPENDIX IV: HIGHEST LEVEL OF ACHIEVEMENT IN SELECTED TOBACCO CONTROL MEASURES IN THE 100 BIGGEST CITIES IN THE WORLD

Appendix IV provides information on whether the populations of the world's 100 biggest cities are covered by selected tobacco control measures at the highest level of achievement.

Cities are listed by population size in descending order. There are many ways to define geographically and measure the size of "a city". For the purposes of this report, we focused on the jurisdictional boundaries of cities, since subnational laws will apply to populations within jurisdictions. Where a large "city" includes several jurisdictions or parts of jurisdictions, it is possible that not everyone in the entire "city" is covered by the same laws. We therefore use the list of cities and their populations published in the *United Nations Statistics Division Demographic Yearbook*, since these are defined jurisdictionally. Please refer to Table 8 at <https://unstats.un.org/unsd/demographic/products/dyb/dyb2014.htm> for the source data.

A number of countries do not appear in Table 8 of the *Demographic Yearbook* because they did not report data.

Countries not reporting data but which are large enough to potentially qualify for the 100 biggest cities list are: Angola, Côte d'Ivoire, Democratic Republic of the Congo, Iraq, Libya, Nigeria, Sudan, United Republic of Tanzania and Viet Nam. Twenty-seven Chinese cities that were listed in the 2012 edition of the *Demographic Yearbook* were not reported in the 2014 edition and have therefore been removed from this list.

Refer to Technical Note I for definitions of highest level of achievement.

Table 4.1
Highest level of achievement in selected tobacco control measures in the 100 biggest cities in the world

N	City's population covered by national legislation or policy at the highest level of achievement
S	City's population covered by state-level legislation or policy at the highest level of achievement
C	City's population covered by city-level legislation or policy at the highest level of achievement

Notes: An empty cell indicates that the population in the respective city is not covered by the measure at the highest level of achievement.

Refer to Technical Note I for definitions of highest level of achievement of the respective measure.

* Only cities which appear among the top 100 cities sorted by population size, according to the *United Nations Statistics Division Demographic Yearbook 2014* (available at: <https://unstats.un.org/unsd/demographic/products/dyb/dyb2014/Table08.xls>).

☆ Separate, completely enclosed smoking rooms are allowed if they are separately ventilated to the outside and kept under negative air pressure in relation to the surrounding areas. Given the difficulty of meeting the very strict requirements delineated for such rooms, they appear to be a practical impossibility but no reliable empirical evidence is presently available to ascertain whether they have been constructed.

CITY *	POPULATION (2014)
Beijing	19 610 000
Mumbai	16 434 386
Istanbul	14 160 467
Buenos Aires	13 339 002
Kolkata	13 205 697
Delhi	12 877 470
Moscow	11 918 057
São Paulo	11 152 968
Paris	10 460 118
Seoul	10 007 651
Lima	9 735 587
Jakarta	9 607 787
Karachi	9 339 023
Tokyo	8 945 695
Mexico City	8 874 724
New York City	8 336 697
Bangkok	8 305 218
London	8 278 251
Tehran	8 154 051
Bogotá	7 776 845
Cairo	7 248 671
Hong Kong SAR	7 241 700
Chennai	6 560 242
Rio De Janeiro	6 320 446
Toronto	6 055 724
Hyderabad	5 742 036
Bangalore	5 701 446
Singapore	5 469 724
Dhaka	5 333 571
Yangon	5 209 541
Lahore	5 143 495
Santiago	5 128 041
Ankara	5 045 083
Saint Petersburg	4 990 602
Guadalajara	4 737 096
Ahmedabad	4 525 013
Aleppo	4 450 000
Monterrey	4 414 800
Sydney	4 373 433
Alexandria	4 358 439
Melbourne	4 181 021
Riyadh	4 087 152
Izmir	4 061 074
Montréal	4 027 121
Los Angeles	3 857 799
Pune	3 760 636
Yokohama	3 688 773
Berlin	3 421 829
Busan	3 416 651
Casablanca	3 352 399
Kabul	3 289 000
Madrid	3 186 241

	COVERAGE AT THE HIGHEST LEVEL OF ACHIEVEMENT					COUNTRY
	PROTECT PEOPLE FROM TOBACCO SMOKE	OFFER HELP TO QUIT TOBACCO USE	WARN ABOUT THE DANGERS OF TOBACCO	ENFORCE BANS ON TOBACCO ADVERTISING, PROMOTION AND SPONSORSHIP	RAISE TAXES ON TOBACCO	
C						China
	N	N	N			India
N	N	N	N	N	N	Turkey
N					N	Argentina
	N	N				India
	N	N				India
N				N		Russian Federation
N	N	N	N	N		Brazil
☆			N		N	France
	N					Republic of Korea
N		N				Peru
						Indonesia
N						Pakistan
						Japan
C	N	N				Mexico
	N					United States of America
N		N				Thailand
N	N	N			N	United Kingdom of Great Britain and Northern Ireland
N	N	N	N			Iran (Islamic Republic of)
N			N			Colombia
			N			Egypt
C	C	C				China, Hong Kong SAR
	N	N				India
N	N	N	N			Brazil
S	N	N	N	S		Canada
S	N	N				India
	N	N				India
	N	N				Singapore
		N			N	Bangladesh
						Myanmar
N						Pakistan
N		N			N	Chile
N	N	N	N	N	N	Turkey
N			N	N		Russian Federation
	N	N				Mexico
	N	N				India
						Syrian Arab Republic
S	N	N				Mexico
S	N	N				Australia
		N				Egypt
S	N	N				Australia
	N					Saudi Arabia
N	N	N	N	N	N	Turkey
S	N	N	N	S		Canada
	N					United States of America
	N	N				India
						Japan
		N				Germany
	N					Republic of Korea
						Morocco
N			N			Afghanistan
N			N	N		Spain

Table 4.1
Highest level of achievement in selected tobacco control measures in the 100 biggest cities in the world (continued)

N	City's population covered by national legislation or policy at the highest level of achievement
S	City's population covered by state-level legislation or policy at the highest level of achievement
C	City's population covered by city-level legislation or policy at the highest level of achievement

Notes: An empty cell indicates that the population in the respective city is not covered by the measure at the highest level of achievement.

Refer to Technical Note I for definitions of highest level of achievement of the respective measure.

* Only cities which appear among the top 100 cities sorted by population size, according to the United Nations Statistics Division Demographic Yearbook 2014 (available at: <https://unstats.un.org/unsd/demographic/products/dyb/dyb2014/Table08.xls>).

☆ Separate, completely enclosed smoking rooms are allowed if they are separately ventilated to the outside and kept under negative air pressure in relation to the surrounding areas. Given the difficulty of meeting the very strict requirements delineated for such rooms, they appear to be a practical impossibility but no reliable empirical evidence is presently available to ascertain whether they have been constructed.

CITY *	POPULATION (2014)
Nairobi	3 133 518
Giza	3 122 041
Puebla-Tlaxcala	2 921 157
Asunción	2 887 087
Incheon	2 837 935
Surat	2 811 614
Kiev	2 803 716
Jeddah	2 801 481
Mashhad	2 766 258
Surabaya	2 765 487
Quezon City	2 761 720
Rome	2 751 082
Bursa	2 740 970
Kanpur	2 715 555
Chicago	2 714 856
Salvador	2 674 923
Osaka	2 665 314
Addis Ababa	2 646 000
Pyongyang	2 581 076
Budapest	2 548 428
Damasus Rural (Rif Dimashq)	2 529 000
Brasília	2 481 272
Vancouver	2 470 289
Daegu	2 467 158
Fortaleza	2 452 185
Medellin	2 441 123
Bandung	2 394 873
Amman	2 376 022
Belo Horizonte	2 375 151
Cali	2 344 734
Jaipur	2 322 575
Guayaquil	2 291 158
West Midlands	2 284 093
Nagoya	2 263 894
Lucknow	2 245 509
Manchester	2 244 931
Baku	2 166 355
Houston	2 160 821
Antalya	2 158 265
Toluca	2 152 552
Adana	2 149 260
Brisbane	2 143 121
Tashkent	2 137 218
Nagpur	2 129 500
Havana	2 121 871
Caracas	2 104 423
Medan	2 097 610
Konya	2 079 225

COVERAGE AT THE HIGHEST LEVEL OF ACHIEVEMENT					COUNTRY
PROTECT PEOPLE FROM TOBACCO SMOKE	OFFER HELP TO QUIT TOBACCO USE	WARN ABOUT THE DANGERS OF TOBACCO	ENFORCE BANS ON TOBACCO ADVERTISING, PROMOTION AND SPONSORSHIP	RAISE TAXES ON TOBACCO	
			N		Kenya
		N			Egypt
☆	N	N			Mexico
					Paraguay
	N				Republic of Korea
	N	N			India
		N		N	Ukraine
	N				Saudi Arabia
N	N	N	N		Iran (Islamic Republic of)
					Indonesia
		N			Philippines
☆		N		N	Italy
N	N	N	N	N	Turkey
	N	N			India
	N				United States of America
N	N	N	N		Brazil
					Japan
☆					Ethiopia
					Democratic People's Republic of Korea
		N			Hungary
					Syrian Arab Republic
N	N	N	N		Brazil
S	N	N	S		Canada
	N				Republic of Korea
N	N	N	N		Brazil
N			N		Colombia
					Indonesia
				N	Jordan
N	N	N	N		Brazil
N			N		Colombia
	N	N			India
N		N			Ecuador
N	N	N			United Kingdom of Great Britain and Northern Ireland
					Japan
	N	N			India
N	N	N		N	United Kingdom of Great Britain and Northern Ireland
					Azerbaijan
	N				United States of America
N	N	N	N	N	Turkey
S	N	N			Mexico
N	N	N	N	N	Turkey
S	N	N			Australia
					Uzbekistan
	N	N			India
					Cuba
N		N			Venezuela (Bolivarian Republic of)
					Indonesia
N	N	N	N	N	Turkey



APPENDIX V: STATUS OF THE WHO FRAMEWORK CONVENTION ON TOBACCO CONTROL

Appendix V shows the status of the WHO Framework Convention on Tobacco Control (WHO FCTC).

Ratification is the international act by which countries that have already signed a convention formally state their consent to be bound by it. Accession is the international act by which countries that have not signed a treaty/convention formally state their consent to be bound by it. Acceptance and approval are the legal equivalent of ratification. Signature of a convention indicates that a country is not legally bound by the treaty but is committed not to undermine its provisions.

The WHO FCTC entered into force on 27 February 2005. The treaty remains open for ratification, acceptance, approval, formal confirmation and accession indefinitely for States and eligible regional economic integration organizations wishing to become Parties to it.

Table 5.1
**Status of the WHO
 Framework Convention
 on Tobacco Control, as
 of 17 May 2017**

- * Ratification is the international act by which countries that have already signed a treaty or convention formally state their consent to be bound by it.
- ^a Accession is the international act by which countries that have not signed a treaty/convention formally state their consent to be bound by it.
- ^A Acceptance is the international act, similar to ratification, by which countries that have already signed a treaty/convention formally state their consent to be bound by it.
- ^{AA} Approval is the international act, similar to ratification, by which countries that have already signed a treaty/convention formally state their consent to be bound by it.
- ^c Formal confirmation is the international act corresponding to ratification by a State, whereby an international organization (in the case of the WHO FCTC, competent regional economic integration organizations) formally state their consent to be bound by a treaty/convention.
- ^d Succession is the international act, however phrased or named, by which successor States formally state their consent to be bound by treaties/conventions originally entered into by their predecessor State.

COUNTRY	DATE OF SIGNATURE	DATE OF RATIFICATION* (OR LEGAL EQUIVALENT)
Afghanistan	29 June 2004	13 August 2010
Albania	29 June 2004	26 April 2006
Algeria	20 June 2003	30 June 2006
Andorra		
Angola	29 June 2004	20 September 2007
Antigua and Barbuda	28 June 2004	5 June 2006
Argentina	25 September 2003	
Armenia		29 November 2004 ^a
Australia	5 December 2003	27 October 2004
Austria	28 August 2003	15 September 2005
Azerbaijan		1 November 2005 ^a
Bahamas	29 June 2004	3 November 2009
Bahrain		20 March 2007 ^a
Bangladesh	16 June 2003	14 June 2004
Barbados	28 June 2004	3 November 2005
Belarus	17 June 2004	8 September 2005
Belgium	22 January 2004	1 November 2005
Belize	26 September 2003	15 December 2005
Benin	18 June 2004	3 November 2005
Bhutan	9 December 2003	23 August 2004
Bolivia (Plurinational State of)	27 February 2004	15 September 2005
Bosnia and Herzegovina		10 July 2009 ^a
Botswana	16 June 2003	31 January 2005
Brazil	16 June 2003	3 November 2005
Brunei Darussalam	3 June 2004	3 June 2004
Bulgaria	22 December 2003	7 November 2005
Burkina Faso	22 December 2003	31 July 2006
Burundi	16 June 2003	22 November 2005
Cabo Verde	17 February 2004	4 October 2005
Cambodia	25 May 2004	15 November 2005
Cameroon	13 May 2004	3 February 2006
Canada	15 July 2003	26 November 2004
Central African Republic	29 December 2003	7 November 2005
Chad	22 June 2004	30 January 2006
Chile	25 September 2003	13 June 2005
China	10 November 2003	11 October 2005
Colombia		10 April 2008 ^a
Comoros	27 February 2004	24 January 2006
Congo	23 March 2004	6 February 2007
Cook Islands	14 May 2004	14 May 2004
Costa Rica	3 July 2003	21 August 2008
Côte d'Ivoire	24 July 2003	13 August 2010
Croatia	2 June 2004	14 July 2008
Cuba	29 June 2004	
Cyprus	24 May 2004	26 October 2005
Czechia	16 June 2003	1 June 2012
Democratic People's Republic of Korea	17 June 2003	27 April 2005
Democratic Republic of the Congo	28 June 2004	28 October 2005
Denmark	16 June 2003	16 December 2004
Djibouti	13 May 2004	31 July 2005
Dominica	29 June 2004	24 July 2006

COUNTRY	DATE OF SIGNATURE	DATE OF RATIFICATION* (OR LEGAL EQUIVALENT)
Dominican Republic		
Ecuador	22 March 2004	25 July 2006
Egypt	17 June 2003	25 February 2005
El Salvador	18 March 2004	21 July 2014
Equatorial Guinea		17 September 2005 ^a
Eritrea		
Estonia	8 June 2004	27 July 2005
Ethiopia	25 February 2004	25 March 2014
European Union	16 June 2003	30 June 2005 ^c
Fiji	3 October 2003	3 October 2003
Finland	16 June 2003	24 January 2005
France	16 June 2003	19 October 2004 ^{AA}
Gabon	22 August 2003	20 February 2009
Gambia	16 June 2003	18 September 2007
Georgia	20 February 2004	14 February 2006
Germany	24 October 2003	16 December 2004
Ghana	20 June 2003	29 November 2004
Greece	16 June 2003	27 January 2006
Grenada	29 June 2004	14 August 2007
Guatemala	25 September 2003	16 November 2005
Guinea	1 April 2004	7 November 2007
Guinea-Bissau		7 November 2008 ^a
Guyana		15 September 2005 ^a
Haiti	23 July 2003	
Honduras	18 June 2004	16 February 2005
Hungary	16 June 2003	7 April 2004
Iceland	16 June 2003	14 June 2004
India	10 September 2003	5 February 2004
Indonesia		
Iran (Islamic Republic of)	16 June 2003	6 November 2005
Iraq	29 June 2004	17 March 2008
Ireland	16 September 2003	7 November 2005
Israel	20 June 2003	24 August 2005
Italy	16 June 2003	2 July 2008
Jamaica	24 September 2003	7 July 2005
Japan	9 March 2004	8 June 2004 ^A
Jordan	28 May 2004	19 August 2004
Kazakhstan	21 June 2004	22 January 2007
Kenya	25 June 2004	25 June 2004
Kiribati	27 April 2004	15 September 2005
Kuwait	16 June 2003	12 May 2006
Kyrgyzstan	18 February 2004	25 May 2006
Lao People's Democratic Republic	29 June 2004	6 September 2006
Latvia	10 May 2004	10 February 2005
Lebanon	4 March 2004	7 December 2005
Lesotho	23 June 2004	14 January 2005
Liberia	25 June 2004	15 September 2009
Libya	18 June 2004	7 June 2005
Lithuania	22 September 2003	16 December 2004
Luxembourg	16 June 2003	30 June 2005
Madagascar	24 September 2003	22 September 2004

Table 5.1
**Status of the WHO
 Framework Convention
 on Tobacco Control,
 as of 17 May 2017
 (continued)**

- * Ratification is the international act by which countries that have already signed a treaty or convention formally state their consent to be bound by it.
- ^a Accession is the international act by which countries that have not signed a treaty/convention formally state their consent to be bound by it.
- ^A Acceptance is the international act, similar to ratification, by which countries that have already signed a treaty/convention formally state their consent to be bound by it.
- ^{AA} Approval is the international act, similar to ratification, by which countries that have already signed a treaty/convention formally state their consent to be bound by it.
- ^c Formal confirmation is the international act corresponding to ratification by a State, whereby an international organization (in the case of the WHO FCTC, competent regional economic integration organizations) formally state their consent to be bound by a treaty/convention.
- ^d Succession is the international act, however phrased or named, by which successor States formally state their consent to be bound by treaties/conventions originally entered into by their predecessor State.

COUNTRY	DATE OF SIGNATURE	DATE OF RATIFICATION* (OR LEGAL EQUIVALENT)
Malawi		
Malaysia	23 September 2003	16 September 2005
Maldives	17 May 2004	20 May 2004
Mali	23 September 2003	19 October 2005
Malta	16 June 2003	24 September 2003
Marshall Islands	16 June 2003	8 December 2004
Mauritania	24 June 2004	28 October 2005
Mauritius	17 June 2003	17 May 2004
Mexico	12 August 2003	28 May 2004
Micronesia (Federated States of)	28 June 2004	18 March 2005
Monaco		
Mongolia	16 June 2003	27 January 2004
Montenegro		23 October 2006 ^d
Morocco	16 April 2004	
Mozambique	18 June 2003	
Myanmar	23 October 2003	21 April 2004
Namibia	29 January 2004	7 November 2005
Nauru		29 June 2004 ^a
Nepal	3 December 2003	7 November 2006
Netherlands	16 June 2003	27 January 2005 ^A
New Zealand	16 June 2003	27 January 2004
Nicaragua	7 June 2004	9 April 2008
Niger	28 June 2004	25 August 2005
Nigeria	28 June 2004	20 October 2005
Niue	18 June 2004	3 June 2005
Norway	16 June 2003	16 June 2003 ^{AA}
Oman		9 March 2005 ^a
Pakistan	18 May 2004	3 November 2004
Palau	16 June 2003	12 February 2004
Panama	26 September 2003	16 August 2004
Papua New Guinea	22 June 2004	25 May 2006
Paraguay	16 June 2003	26 September 2006
Peru	21 April 2004	30 November 2004
Philippines	23 September 2003	6 June 2005
Poland	14 June 2004	15 September 2006
Portugal	9 January 2004	8 November 2005 ^{AA}
Qatar	17 June 2003	23 July 2004
Republic of Korea	21 July 2003	16 May 2005
Republic of Moldova	29 June 2004	3 February 2009
Romania	25 June 2004	27 January 2006
Russian Federation		3 June 2008 ^a
Rwanda	2 June 2004	19 October 2005
Saint Kitts and Nevis	29 June 2004	21 June 2011
Saint Lucia	29 June 2004	7 November 2005
Saint Vincent and the Grenadines	14 June 2004	29 October 2010
Samoa	25 September 2003	3 November 2005
San Marino	26 September 2003	7 July 2004
Sao Tome and Principe	18 June 2004	12 April 2006
Saudi Arabia	24 June 2004	9 May 2005
Senegal	19 June 2003	27 January 2005
Serbia	28 June 2004	8 February 2006

COUNTRY	DATE OF SIGNATURE	DATE OF RATIFICATION* (OR LEGAL EQUIVALENT)
Seychelles	11 September 2003	12 November 2003
Sierra Leone		22 May 2009 ^a
Singapore	29 December 2003	14 May 2004
Slovakia	19 December 2003	4 May 2004
Slovenia	25 September 2003	15 March 2005
Solomon Islands	18 June 2004	10 August 2004
Somalia		
South Africa	16 June 2003	19 April 2005
South Sudan		
Spain	16 June 2003	11 January 2005
Sri Lanka	23 September 2003	11 November 2003
Sudan	10 June 2004	31 October 2005
Suriname	24 June 2004	16 December 2008
Swaziland	29 June 2004	13 January 2006
Sweden	16 June 2003	7 July 2005
Switzerland	25 June 2004	
Syrian Arab Republic	11 July 2003	22 November 2004
Tajikistan		21 June 2013 ^a
Thailand	20 June 2003	8 November 2004
The former Yugoslav Republic of Macedonia		30 June 2006 ^a
Timor-Leste	25 May 2004	22 December 2004
Togo	12 May 2004	15 November 2005
Tonga	25 September 2003	8 April 2005
Trinidad and Tobago	27 August 2003	19 August 2004
Tunisia	22 August 2003	7 June 2010
Turkey	28 April 2004	31 December 2004
Turkmenistan		13 May 2011 ^a
Tuvalu	10 June 2004	26 September 2005
Uganda	5 March 2004	20 June 2007
Ukraine	25 June 2004	6 June 2006
United Arab Emirates	24 June 2004	7 November 2005
United Kingdom of Great Britain and Northern Ireland	16 June 2003	16 December 2004
United Republic of Tanzania	27 January 2004	30 April 2007
United States of America	10 May 2004	
Uruguay	19 June 2003	9 September 2004
Uzbekistan		15 May 2012 ^a
Vanuatu	22 April 2004	16 September 2005
Venezuela (Bolivarian Republic of)	22 September 2003	27 June 2006
Viet Nam	3 September 2003	17 December 2004
Yemen	20 June 2003	22 February 2007
Zambia		23 May 2008 ^a
Zimbabwe		4 December 2014 ^a

Source: United Nations Treaty Collection website (https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtmsg_no=IX-4&chapter=9&clang=_en, accessed 17 May 2017).

Though not a Member State of WHO, as a Member State of the United Nations, Liechtenstein is also eligible to become Party to the WHO FCTC, though it has taken no action to do so.

On submitting instruments to become Party to the WHO FCTC, some Parties have included notes and/or declarations. All notes can be viewed at https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtmsg_no=IX-4&chapter=9&lang=en



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