World Health Organization

WHO REPORT ON THE GLOBAL TOBACCO EPIDEMIC, 2021

Addressing new and emerging products

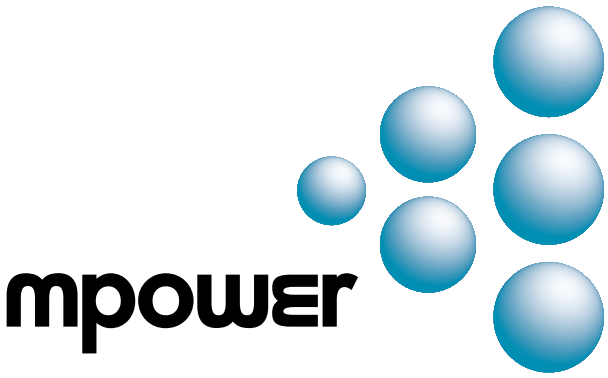
fresh and alive

mpower

Electronic Nicotine Delivery Systems (ENDS) are addictive and not without harm.

ENDS should be strictly regulated for maximum protection of public health.

Children and adolescents who use ENDS can double their risk of smoking cigarettes.



m **Monitor** tobacco use and prevention policies

p **Protect** people from tobacco smoke

o **Offer** help to quit tobacco use

w **Warn** about the dangers of tobacco

e **Enforce** bans on tobacco advertising, promotion and sponsorship

r **Raise** taxes on tobacco

Tobacco control efforts must remain focused on reducing tobacco use and avoid distractions created by tobacco and related industries.

WHO report on the global tobacco epidemic, 2021: Addressing new and emerging products is the eighth in a series of WHO reports that tracks the status of the tobacco epidemic and interventions to combat it.

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




“Despite the challenges of the COVID-19 pandemic, over the past year many countries have persisted in advancing tobacco control as a key health priority.”

Dr Tedros Adhanom Ghebreyesus, Director-General, World Health Organization

5.3 billion people are now covered by at least one MPOWER measure at the highest level of achievement

Since the last *WHO report on the global tobacco epidemic* in 2019, the world has changed immeasurably. Despite the challenges of the COVID-19 pandemic, over the past year many countries have persisted in advancing tobacco control as a key health priority. The progress presented in this report is testament to that perseverance.

Tobacco-attributable diseases include lung and heart diseases, chronic respiratory diseases, cancers, and diabetes – all of which may increase the severity of COVID-19. Protecting populations from the harms of tobacco has never been more important.

The implementation of the WHO Framework Convention on Tobacco Control is a recognized global development priority with a dedicated target in the Sustainable Development Goals. Reducing tobacco use is critical to reducing the burden of noncommunicable diseases, which account for 71% of deaths globally.

Today, 75% of countries and 5.3 billion people are protected by at least one tobacco control measure at best-practice level and 50% by at least two measures. And globally, smoking prevalence among people aged over 15 years has fallen from 22.7% to 17.5%.

This is encouraging progress. At the same time, we must remain vigilant to the challenges posed by new products such as electronic nicotine delivery systems and heated tobacco products.

The *WHO report on the global tobacco epidemic 2021: addressing new and emerging products* highlights how these products are promoted aggressively as "safer" or "smoke-free" alternatives to conventional cigarettes. Although their full risks remain unknown, the impact of nicotine delivery devices is clear.

While framing these products as a contribution to global tobacco control, the tobacco and related industries employ the same old marketing tactics to promote new tools to hook children on nicotine and circumvent tobacco legislation. At the same time, they continue to fight measures and legislation designed to protect people from the many harms of tobacco across the globe.

Tobacco is one of the world's largest preventable causes of premature death, accounting for more than 8 million deaths and costing the global economy US$ 1.4 trillion each year. This disproportionately affects people in low- and middle-income countries.

Political leaders must stand up to the powerful vested interests that profit from tobacco.

All countries have the obligation to protect the health of their people by beating back the scourge of tobacco, whatever form it takes.

Dr Tedros Adhanom Ghebreyesus
Director-General
World Health Organization

"We must remain vigilant to the challenges posed by new products such as electronic nicotine delivery systems and heated tobacco products."

“Fighting tobacco use is truly a team effort, and as far as we have come, much more progress is still needed.”

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

Despite a global pandemic, 24 countries have now adopted one or more best-practice MPOWER measures since the last report

Since the first *WHO report on the global tobacco epidemic* was published 13 years ago, it has served as a critical resource in the fight to save lives from tobacco use. The data it contains help leaders identify policies that work, and it helps the public to hold elected officials accountable for protecting people's health. And while the last year has been marked by more promising steps forward, the COVID-19 pandemic has also underlined the urgent need to do more, faster, to end the tobacco epidemic.

Evidence shows that cigarette smokers are more likely to be hospitalized or die from COVID-19, a respiratory illness that attacks the lungs. The virus poses heightened risks to people with noncommunicable diseases like heart disease, cancer, and high blood pressure – all of which are associated with smoking.

Tobacco is the single biggest cause of preventable death, killing 8.7 million people each year and leading tens of millions more to suffer from avoidable illnesses. The good news is: We know how to tackle this killer.

Since WHO launched the first report 13 years ago, cigarette sales had been steadily climbing for decades, and in most of the world, there were no measures in place to protect the public. Driven by the spread of MPOWER tobacco control measures, global cigarette sales began declining in 2012 and have continued ever since, even as the global population has grown. MPOWER measures have saved more than 37 million lives, a number that increases every day, as more smokers quit, more people decide never to start using tobacco, and more of the public is protected from the deadly effects of second-hand smoke.

Today, 75% of all countries – that together are home to more than 5.3 billion people – have at least one MPOWER measure in place. Half of all countries have two or more. Over the past 2 years, despite the challenges of the pandemic, five more countries passed national smoke-free policies and eight more countries began requiring health warnings on tobacco packaging.

But we are far from victory. More than 1 billion people around the world still smoke. And as cigarette sales have fallen, tobacco companies have been aggressively marketing new products – like e-cigarettes and heated-tobacco products – and lobbying governments to limit their regulation. Their goal is simple: to hook another generation on nicotine. We cannot let that happen.

This report brings a special focus to these new products and what we can do to protect kids from them. Around 80 countries have taken steps to address the dangers of e-cigarettes, but they still remain unregulated in much of the world.

This report is a call to action and an outline for building on the progress we have made. Fighting tobacco use is truly a team effort, and as far as we have come, much more progress is still needed. Together, we can keep pushing forward, and save many more lives.

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

"As cigarette sales have fallen, tobacco companies have been aggressively marketing new products – like e-cigarettes and heated-tobacco products – and lobby governments to limit their regulation. Their goal is simple: to hook another generation on nicotine. We cannot let that happen."

“Tobacco control is an integral part of the development agenda, contributing not only to Sustainable Development Goal 3 (target 3.a calls for strengthening implementation of the WHO FCTC in all countries) but also to the achievement of other targets, directly or indirectly impacted by tobacco growth and use.”

Dr Adriana Blanco Marquizo, Head of the WHO FCTC Secretariat

In 2020 the WHO FCTC and the Protocol both increased the number of Parties

The Secretariat of the WHO Framework Convention on Tobacco Control (WHO FCTC) and the Protocol to Eliminate Illicit Trade in Tobacco Products (Protocol) welcome the publication of the *WHO report on the global tobacco epidemic, 2021*.

The report is published during one of the worst health emergencies in history: the COVID-19 pandemic. The pandemic has not only cost millions of lives globally, but has profoundly affected economies, exposed and exacerbated inequalities among and within countries, and potentially reversed the gains made by decades-long efforts to improve human health and well-being, especially for vulnerable populations.

The data provided in this report demonstrate some good news: a growing percentage of the world's population is now covered by at least one or two fully implemented WHO FCTC measures, and in 2020 the WHO FCTC increased its number of Parties to 182 and the Protocol to 62.

Unfortunately, the endless interference of the tobacco industry has also grown. During the COVID-19 pandemic, the industry (and those who work to further its interests) have increased their "corporate social responsibility" efforts, offering to help governments save the lives of those worst-affected by COVID-19: these are often the same people that the tobacco industry helped put into danger in the first place. Smokers have worse outcomes from COVID-19, as have all people with noncommunicable diseases, for which tobacco is a common and major risk factor.

While the advances shown in the report are encouraging, there is a need to accelerate implementation of the WHO FCTC and its Protocol. Tobacco control is an integral part of the development agenda, contributing not only to Sustainable Development Goal 3 (Target 3.a calls for strengthening implementation of the WHO FCTC in all countries) but also to the achievement of other targets, directly or indirectly impacted by tobacco growth and use.

And while pandemics caused by viruses are difficult to prevent, the stealthy and ever-growing pandemic caused by tobacco is wholly and morally preventable. Unlike the COVID-19 pandemic, where scientists worked around the clock to find medicines to treat it and vaccines to prevent it, the solution for the "tobacco pandemic" is in plain sight: WHO FCTC and its Protocol.

Finally, new challenges lie ahead. Electronic nicotine delivery systems – also known as e-cigarettes – and novel tobacco products are promoted as healthier alternatives to smoking by their manufacturers (mainly the tobacco industry) and their supporters. Until independent research shows the real risk profile of these products, governments should be cautious. Science-based evidence, not marketing, should guide their actions.

I call on governments who are party to the WHO FCTC and its Protocol to pull together in their efforts to strengthen implementation, and to build a new future for their populations, where not only COVID-19 has been defeated, but also the harms caused by tobacco use. There has never been a more pressing time to support populations to quit tobacco use, and to raise taxes on tobacco products – not only to curb tobacco consumption, but also to raise much-needed revenues to fund pandemic-recovery efforts.

Dr Adriana Blanco Marquizo
Head of the WHO FCTC Secretariat

"Until independent research shows the real risk profile of [ENDS], governments should be cautious. Science-based evidence, not marketing, should guide their actions."

SUMMARY

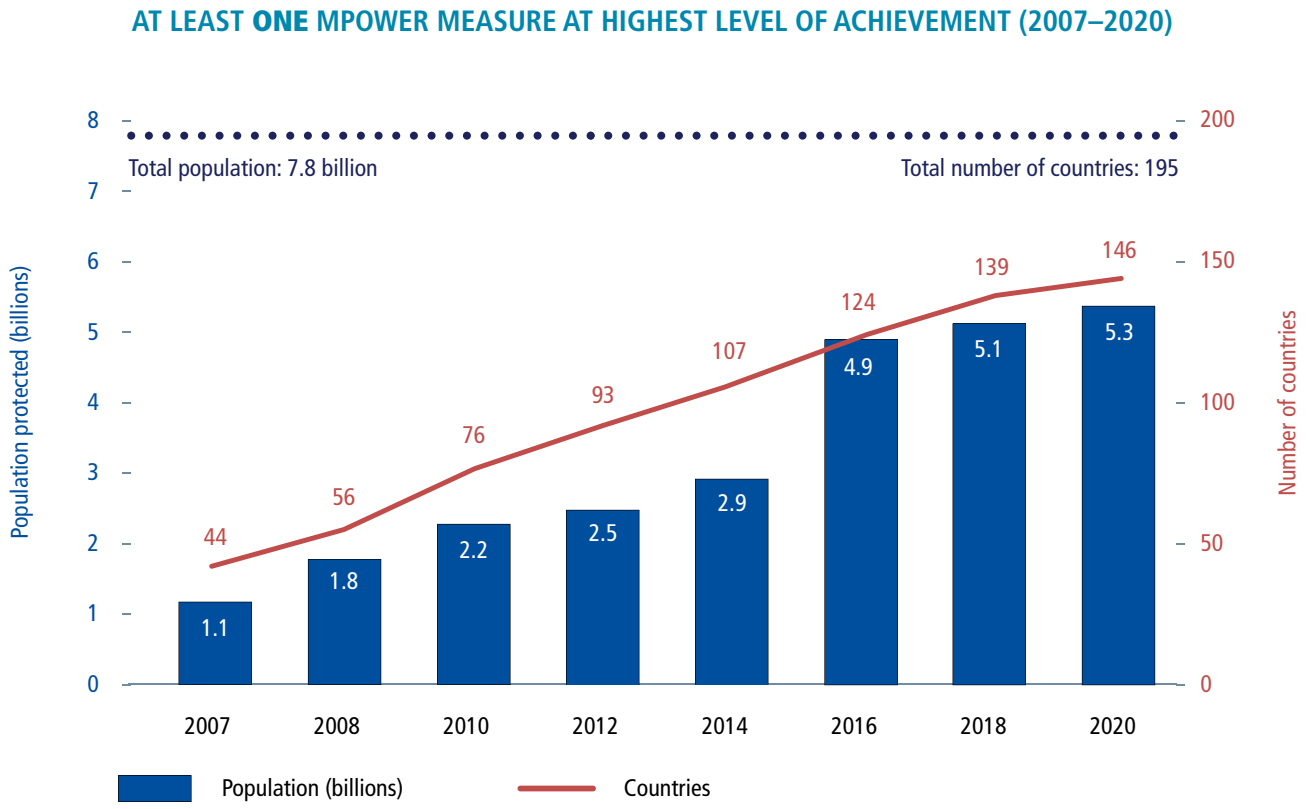
Since the publication of the first *WHO report on the global tobacco epidemic* in 2008, the steady progress made by countries on tobacco control has been demonstrated in biennial updates, of which this report is the latest. Despite the exceptional challenges brought on by the COVID-19 pandemic in 2020, that progress continues. Latest results show that, as of 2020, more than 5.3 billion people – 69% of the world's population – are covered by at least one MPOWER measure at the highest level. Inspiringly, 98 countries are now covered by at least two adopted MPOWER policies.

The number of countries adopting MPOWER measures continues to rise year-on-year. The number of countries with at least one MPOWER measure in place has tripled since 2007 – from 44 to 146 countries – and since the last *WHO report on the global tobacco epidemic*, the number of countries with at least two MPOWER policies in place at the highest level of achievement has increased from 84 to 98 (just over half of all countries). In addition, the number of people now living in countries with at least two MPOWER measures in place rose from 3.5 billion in 2018 to 4.4 billion in 2020 – up from 45% of the world's population to 56% in just 2 years.

Of the 49 countries that have not yet adopted any MPOWER measure at the highest level, 38 have provisions in place that are just one level below best-practice for one or more MPOWER measures.

Progress has been steady since the last report, with seven countries that previously had no best-practice measures in place (Cook Islands, Côte d'Ivoire, Ethiopia, Iraq, Morocco, Paraguay, and Tonga) taking action to reach the highest level on one or more measures.

Three quarters of countries and 5.3 billion people are now covered by at least one MPOWER measure at the highest level of achievement.



More than half the world is now covered by two MPOWER measures at the highest level of achievement

Of the 98 countries now covered by at least two measures, 31 have three measures at the highest level of achievement, and five countries have four measures at the highest level of achievement (Jordan, Ireland, Madagascar, New Zealand, Spain). Meanwhile, the number of countries that have adopted all MPOWER measures at best-practice level remains at two, Brazil and Turkey.

ENDS need to be regulated

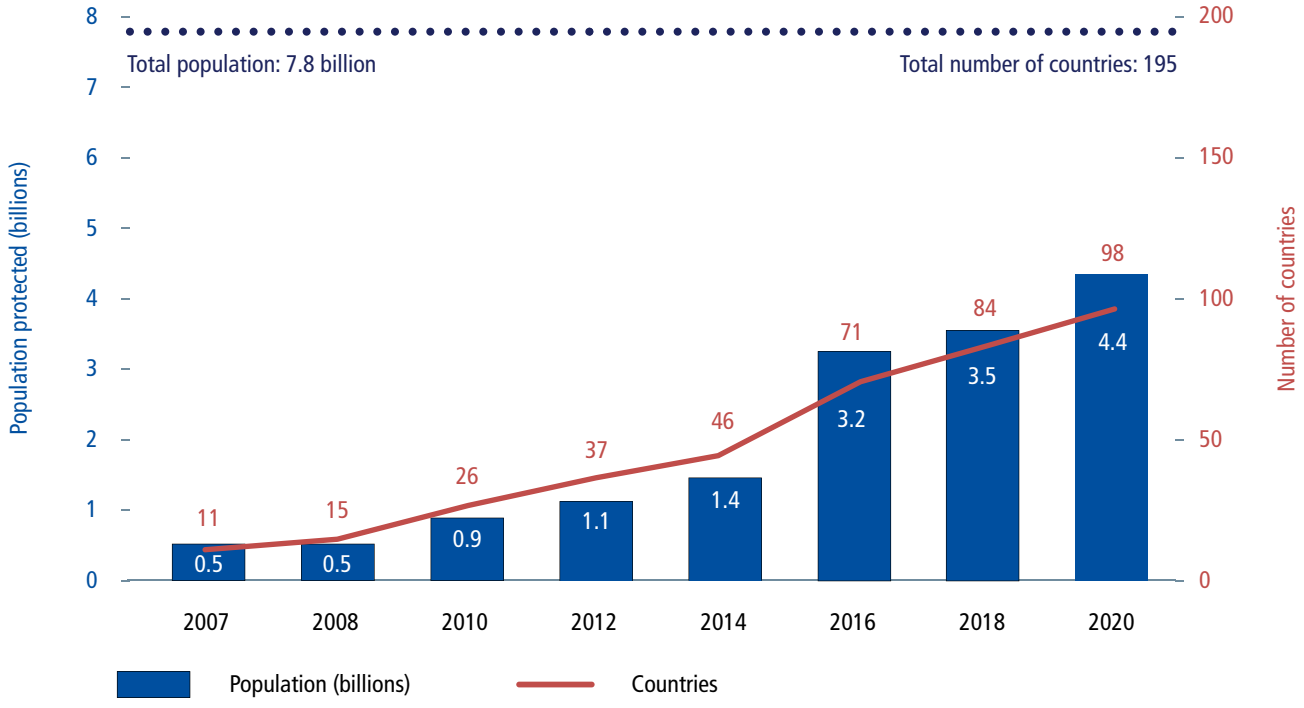
This is the first time that the *WHO report on the global tobacco epidemic* has included data on electronic nicotine delivery systems (ENDS), and it reveals that a total of 111 countries regulate ENDS in some way. Thirty two of these countries (covering 2.4 billion people) ban the sale of ENDS, and the other 79 countries have adopted one or more legislative measures to regulate ENDS, covering 3.2 billion people.

Of the countries that have banned the sale of ENDS, 18 are middle-income countries, nine are high-income countries and the remaining five are low-income countries. The current regulatory options taken by 79 countries include a wide range of measures with no common approach to address these products. Eighty-four countries still have no bans or regulations to address ENDS, leaving them particularly vulnerable to the activities of the tobacco and related industries.

Using ENDS in public places where smoking is banned may re-normalize smoking in public. However, only 30 countries completely ban the use of ENDS in all indoor public places, workplaces and public transport. Only eight countries mandate the appearance of large graphic health warnings on ENDS packaging. Twenty-two countries completely ban the advertising, promotion and sponsorship of ENDS devices, e-liquids or both (only 15 countries have adopted advertising, sponsorship and promotion bans on both).

Monitoring ENDS use among children and adolescents, as well as adults, through nationally representative surveys is increasingly conducted globally. Eighty-seven countries have now collected data on the prevalence

AT LEAST **TWO** MPOWER MEASURES AT HIGHEST LEVEL OF ACHIEVEMENT (2007–2020)



4.4 billion people, in 98 countries, are covered by at least two MPOWER measures at the highest level of achievement.

of ENDS use among adolescents and 56 countries have collected data on the prevalence of ENDS use among adults.

Of the 86 countries where data are available on ENDS taxation, more than one-third do not impose any excise tax on e-liquids. Where taxes have been applied, tax rates are generally low, with only three countries taxing ENDS e-liquids at 75% or more of the retail price.

Age restrictions to ENDS sale and purchase are applied in only 42% of countries where ENDS are not banned, and regulations applied on ENDS flavours can be found in only nine countries.

Progress in tobacco control continues despite the global COVID-19 pandemic

Countries continued to make progress despite the COVID-19 pandemic. In particular, health warning laws and regulations at the highest level of achievement have now been adopted by 101 countries. This means that 4.7 billion people (or 60% of the world's population) are now protected by large graphic pack warnings featuring all recommended characteristics, making it the MPOWER measure with both the highest population coverage and the most countries covered. It is also important to note that by the end of 2020, 17 countries had adopted legislation mandating plain packaging of tobacco products and had issued regulations with implementation deadlines. A handful of other countries have required plain packaging by law but have not yet issued the implementing rules.

While cessation measures have made progress during most years since 2007, cessation service policies remain scarce, with only 26 countries providing these services at best-practice level. Although this measure is adopted by the fewest countries, those countries nevertheless contain 2.5 billion people, or one third of the world's population, making it the second most adopted MPOWER measure in terms of population covered.

Complete smoke-free indoor public places, workplaces and public transport now cover 1.8 billion people living in 67 countries, making it the second most adopted MPOWER measure in terms of countries covered.

Although tobacco advertising, promotion and sponsorship (TAPS) bans remain an under-adopted measure, 1.6 billion people in 57 countries are protected by comprehensive bans on TAPS. Low- and middle-income countries have made particularly strong progress in TAPS bans. Twelve countries that have adopted comprehensive TAPS bans are low-income countries (41% of all low-income countries), 31 are middle-income countries (30% of middle-income countries) and 14 are high-income (23% of high-income countries).

Monitoring tobacco use, unfortunately, was significantly affected by the COVID-19 pandemic. Data collection efforts were hindered in most countries during 2020, as was the release of results for surveys completed during 2018 and 2019.

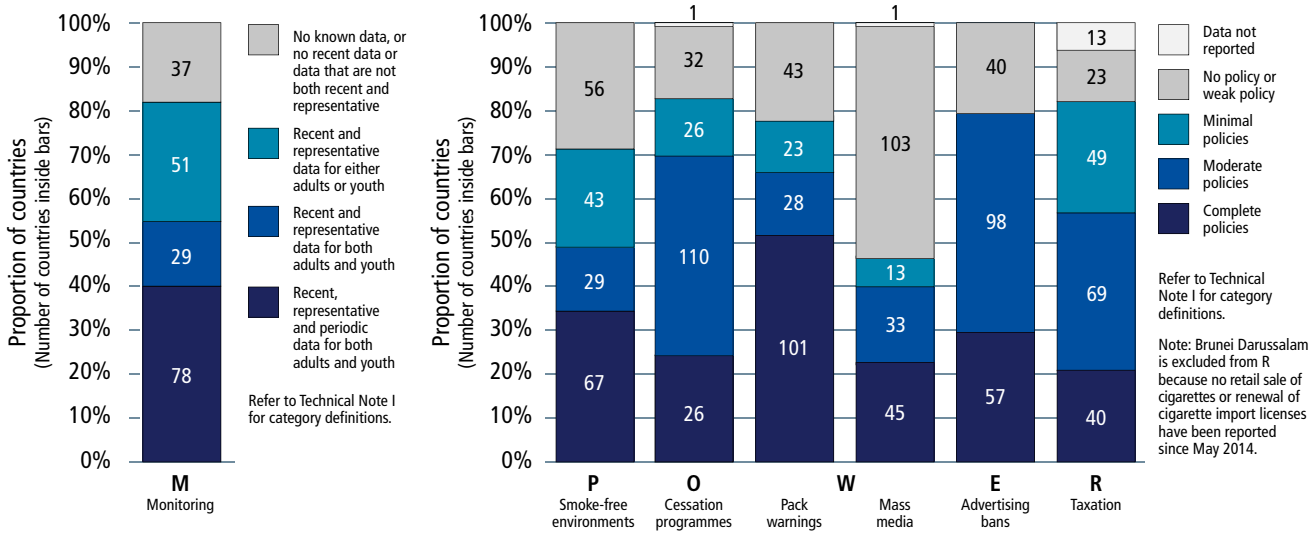
Raising prices through taxation is the most effective way to reduce tobacco use and yet it remains the policy with the lowest population coverage. While a large increase in population coverage was observed between 2016 and 2018 (from 8% in 2016 to 13% in 2018), the proportion of the world's population protected by taxes at best-practice level has since remained at 13%.

Countries in all regions are adopting MPOWER measures

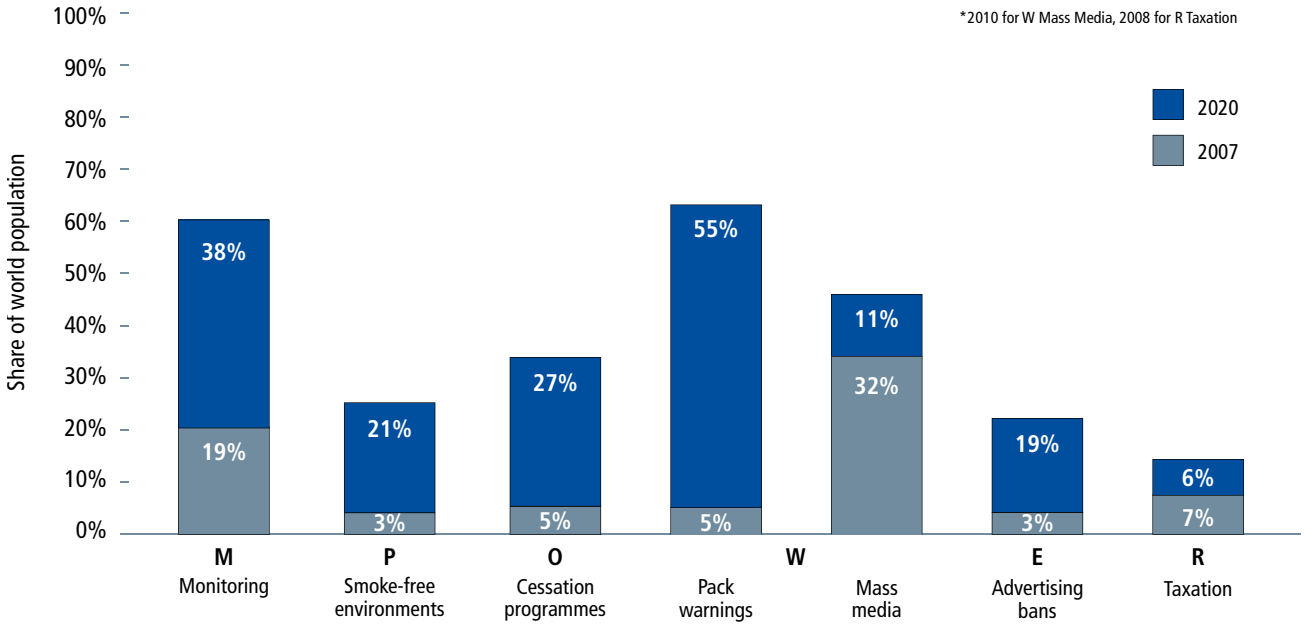
Each MPOWER measure has been adopted at best-practice level by new countries since the last report:

- Five countries (Bolivia (Plurinational State of), Ethiopia, Jordan, Paraguay, Saint Lucia) newly adopted complete smoke-free laws covering all indoor public places, workplaces and public transport.
- Five countries (Austria, Cook Islands, Jordan, Philippines, Tonga) advanced to best-practice level with their tobacco use cessation services. However, during the same period, three other countries dropped from the highest group, resulting in a net gain of only two countries.
- Eight countries (Ethiopia, Gambia, Mauritania, Montenegro, Niger, Nigeria, Qatar, United States of America) adopted large graphic pack warnings.
- Five countries (Côte d'Ivoire, Ethiopia, Iraq, Jordan, Venezuela (Bolivarian Republic of)) introduced comprehensive bans on tobacco advertising, promotion and sponsorship, including at point-of-sale.
- Six countries (Denmark, Georgia, Morocco, Netherlands, Portugal, Sri Lanka) moved to the best-practice group by levying taxes that comprise at least 75% of retail prices.

THE STATE OF SELECTED TOBACCO CONTROL POLICIES IN THE WORLD, 2020



INCREASE IN THE WORLD POPULATION COVERED BY SELECTED TOBACCO CONTROL POLICIES, 2007* TO 2020



There are 49 countries that have yet to adopt a single MPOWER measure at the highest level of achievement.

Some countries have yet to adopt a single MPOWER measure

All countries can adopt and implement comprehensive tobacco control measures to prevent the immense burden caused by tobacco use and exposure to second-hand smoke. Yet, in 2020, 49 countries had not yet adopted a single MPOWER measure at best-practice level, leaving 2.4 billion people vulnerable to the tobacco industry's tactics and marketing.

Furthermore, the pace of progress of certain MPOWER measures is slower than others. The adoption of complete TAPS bans, the adoption of comprehensive cessation services and the raising of tobacco taxes to sufficiently high levels must be accelerated.

THE WHO FRAMEWORK CONVENTION ON TOBACCO CONTROL AND THE PROTOCOL TO ELIMINATE ILLICIT TRADE IN TOBACCO PRODUCTS

Introduction to the WHO FCTC and the Protocol

The WHO Framework Convention on Tobacco Control (WHO FCTC) is an evidence-based treaty that reaffirms the right of all people to the highest standard of health. Adopted in 2003 by WHO Member States, it provides a framework for tobacco control measures to be implemented by its Parties in order to reduce continually and substantially the prevalence of tobacco use and the exposure to tobacco smoke. It is among the most widely embraced treaties in the UN's history, with 182 Parties that together comprise more than 90% of the world's population. Since its entry into force in 2005, the WHO FCTC has been an unambiguous success and remains the organizing principle for progress and cooperation on tobacco control locally, nationally, regionally, and globally.

In becoming a Party to the WHO FCTC, countries assume mutually reinforcing obligations to reduce the demand for, and supply of, tobacco products. The MPOWER technical package – developed by WHO – helps countries implement most of these demand-reduction measures by providing a measurable gold standard for their achievement and monitoring progress towards it. While the MPOWER package's cost-effectiveness justifies this focus, supply-reduction measures are also needed for a comprehensive, synergistic approach and for supporting the political economy of tobacco control.

The Convention also contains general obligations that are crucial to these demand- and supply-reduction measures (and especially those in the MPOWER package). Article 5 provides the basis for the governance of tobacco control, with Paragraph 1 and Paragraph 2 calling for a multisectoral, whole-of-government approach and the development of appropriate national legislation and strategies.

Paragraph 3 of Article 5, together with the guidelines for implementation of Article 5.3, provides the basis for protecting tobacco control public health policies from the influence of the tobacco industry and those who work to further its interest. Those measures, together with Article 19 on tobacco industry liability, make the Convention innovative in its ability to target an industry known for using deceptive means to prioritize profits over public health.

The WHO FCTC governing body, the biennial Conference of the Parties (COP), is the leading global forum for discussing and reaching consensus on Convention implementation and any emerging tobacco control issues, and is the sole body for authoritative interpretations of the Convention's provisions. In 2012, at the Fifth Session of the COP in the Republic of Korea, Parties adopted a new international treaty: the Protocol to Eliminate Illicit Trade in Tobacco Products. The Protocol builds on Article 15 of the Convention that addresses illicit trade in tobacco products, but the complexity of transboundary cooperation to prevent illicit trade required a more extensive and finely tuned set of obligations. Illicit trade in tobacco products poses a significant threat to key demand-reduction measures, in particular price measures and health warnings.

The Protocol came into force in September 2018 and currently counts 63 Parties as of 25 May 2021. It aims at the elimination of all forms of illicit trade in tobacco products and its obligations encompass tools for preventing illicit trade, and numerous mechanisms for promoting cooperation between countries. Parties to the Protocol assume substantive obligations to: control the supply chain for tobacco products; make it an offence to have any involvement with illicit trade; and cooperate with other countries in the prevention of illicit trade. The Protocol also has its own governing body, the Meeting of the Parties (MOP), which, like the COP, convenes biennially.

The WHO FCTC also mandated the COP to establish a Convention Secretariat to provide policy support to Parties in implementing the Convention, as well as to support the functioning of the COP and other subsidiary body meetings. The Protocol established that the Convention Secretariat is also its Secretariat, with similar functions. WHO cooperates with the Convention Secretariat to support Parties to the WHO FCTC and to the Protocol in their substantive and reporting requirements, and also advocates to increase the number of Parties to the WHO FCTC and the Protocol.

KEY WHO FCTC PROVISIONS

Demand-reduction measures	**Article 6:** Price and tax measures to reduce the demand for tobacco **Article 8:** Protection from exposure to tobacco smoke **Article 9:** Regulation of the contents of tobacco products **Article 10:** Regulation of tobacco product disclosures **Article 11:** Packaging and labelling of tobacco products **Article 12:** Education, communication, training and public awareness **Article 13:** Tobacco advertising, promotion and sponsorship **Article 14:** Demand-reduction measures concerning tobacco dependence and cessation
Supply-reduction measures	**Article 15:** Illicit trade in tobacco products **Article 16:** Sales to and by minors **Article 17:** Provision of support for economically viable alternative activities
General obligations	**Article 4:** Guiding principles **Article 5:** General obligations ■ **5.1:** Comprehensive multisectoral national tobacco control strategies, plans and programmes ■ **5.2:** National coordinating mechanism or tobacco control focal point ■ **5.3:** Protecting tobacco control policies from the tobacco industry's commercial and vested interests
Other measures	**Article 18:** Protection of the environment and the health of persons **Article 19:** Liability **Article 20:** Research, surveillance and exchange of information **Article 21:** Reporting and exchange of information **Article 22:** Cooperation in the scientific, technical and legal fields and provisions of related expertise

The Conference of the Parties has provided guidance on the regulation of novel and emerging tobacco products and nicotine products since 2008.

FCTC
WHO FRAMEWORK CONVENTION ON TOBACCO CONTROL

COVID-19's effect on WHO FCTC / Protocol Implementation

The devastation caused by the COVID-19 pandemic starkly illustrates the need for accelerated implementation of the WHO FCTC and the Protocol, with a particular focus on scaling up achievement using the MPOWER technical package. There is irrefutable evidence of a deadly interplay between COVID-19 and tobacco use, both past and present: those infected with the virus and who are tobacco users have suffered more severe disease progression than non-tobacco users; the vulnerability of health systems has been exacerbated; and tobacco use has increased the pandemic's human and economic costs *(1–6)*. Accordingly, global and national efforts to build back better will be incomplete unless the "tobacco pandemic", alongside other vulnerabilities underlying the crisis, are addressed.

More broadly, the COVID-19 pandemic and accompanying global economic recession have disrupted political agendas. This has, in certain cases, come at the expense of activities such as tobacco control, that may appear less pressing or uneconomical. This has challenged progress on implementation of the WHO FCTC and the Protocol. Most strikingly, the Ninth Session of the COP (COP9) and the Second Session of the MOP (MOP2), originally scheduled for November 2020, were postponed until November 2021.

But the COVID-19 pandemic has also provided opportunities for advancing tobacco control measures. For example, 17 countries in the Eastern Mediterranean Region have banned the use of waterpipes (shishas) in public places, and South Africa temporarily banned tobacco sales under a general ban on the sale of "non-essential" products during the country's pandemic response. Similarly, other countries such as South Africa and the Russian Federation have raised tobacco taxes in an effort to save lives while mobilizing revenue to fight the pandemic and its associated economic crisis.

The tobacco industry has taken advantage of the situation by muddying the science on tobacco's link with COVID-19 and positioning itself as an economic and development partner for national COVID-19 recovery efforts. Many of the major tobacco industry actors have – under the banner of so-called corporate social responsibility – used a small portion of their immense resources on heavily publicized COVID-19-related charity programmes. As the Guidelines for implementation of Article 13 of the WHO FCTC note, these activities are a form of sponsorship.

The COP9 (8–13 November 2021) and MOP2 (15–18 November 2021)

The COVID-19 pandemic means that the forthcoming sessions of the COP and MOP will be held virtually. At the sessions, delegates will note the implementation progress attained and identify challenges and possible opportunities for advancing and strengthening the comprehensive implementation of the respective treaties. Parties will adopt new decisions to guide the future direction of implementation for both treaties by, inter alia, establishing new subsidiary bodies, clarifying the interpretation of obligations and requesting the Convention Secretariat and/or inviting WHO to undertake some tasks and report on specific matters.

After nearly 2 years of pandemic-related disruption to the tobacco control agenda and despite an abridged Provisional Agenda, both COP9 and MOP2 will feature important items for consideration, such as a proposed investment fund for the WHO FCTC and the Protocol – an innovative financing mechanism that aims to provide much-needed resources for the implementation of both treaties.

A highlight of the MOP2 Provisional Agenda is the consideration of a report from a subsidiary body established by MOP1 on tracking and tracing systems for tobacco products. Under Article 8 of the Protocol, Parties agreed to establish a global tracking and tracing regime by September 2023. This global regime will comprise national and regional systems intended to ensure that Parties can secure the supply chain of tobacco products, and a global information-sharing focal point located at the Convention Secretariat that will enable Parties to exchange information in order to better tackle illicit trade. The MOP's deliberation on this matter will be crucial for guiding and promoting timely implementation of this technically complex obligation.

Novel and emerging tobacco products and nicotine products

The COP has provided guidance on the regulation of novel and emerging tobacco products and nicotine products since 2008, with a particular focus on heated tobacco products (HTPs), electronic nicotine delivery systems (ENDS) and electronic non-nicotine delivery systems (ENNDS) *(7)*. The COP has defined the landscape as follows. HTPs are tobacco products, which produce aerosols containing nicotine and other chemicals, by heating tobacco units; they are subject to the provisions of the WHO FCTC. By contrast, ENDS and ENNDS do not contain tobacco and instead vaporize a solution composed of numerous compounds, which include nicotine in the case of ENDS, or may not contain nicotine in the case of ENNDS. Regarding the latter products, COP6 invited Parties "to consider prohibiting or regulating ENDS/ENNDS, including as tobacco products, medicinal products, consumer products, or other categories, as appropriate, taking into account a high level of protection for human health" *(8)*. At COP7, Parties were also invited to apply regulatory measures to prohibit or restrict the manufacture, import, distribution, presentation,

sale and use of ENDS/ENNDS, as appropriate *(9)*. As noted in a WHO report submitted to COP8, the tobacco industry's promotion of products in each category can be considered a response to declining sales of cigarettes in high-income countries *(10)*.

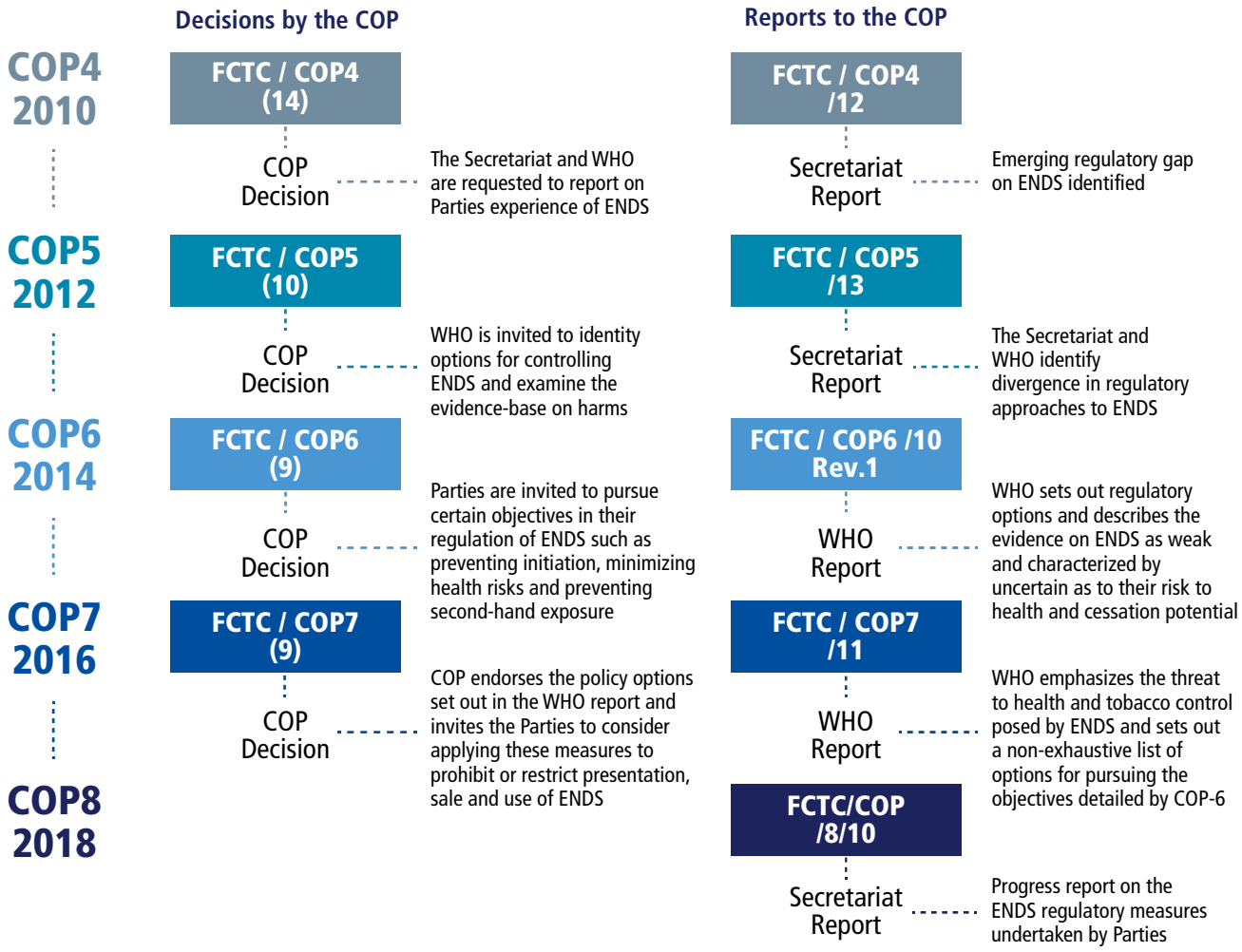
Work on addressing ENDS at the COP to date

At COP3, the Convention Secretariat was requested to invite WHO to submit a report to COP4, identifying best practices in reporting to regulators on the contents, emissions, and product characteristics, including for electronic systems. Since then, multiple reports and decisions have addressed the matter.

The most relevant decisions are from COP6, which set out basic objectives that Parties were invited to pursue when addressing ENDS/ENNDS, including: (a) preventing initiation by non-smokers and youth with special attention to vulnerable groups; (b) minimizing as far as possible potential health risks to users and protecting non-users from exposure to emissions; (c) preventing unproven health claims being made about ENDS/ENNDS; and (d) protecting tobacco-control activities from all commercial and other vested interests related to these products, including interests of the tobacco industry. Parties were also invited to consider prohibiting or regulating ENDS/ENNDS, including as tobacco products, medicinal products, consumer products, or other categories as appropriate, taking into account a high level of protection for human health *(8)*.

This was followed, in 2016, by a COP7 decision inviting Parties to consider prohibiting or restricting the manufacture, import, distribution, presentation, sale and use of ENDS/ENNDS, as appropriate to their national laws and public health objectives. Parties that have not totally banned those products were invited to follow a non-exhaustive list of regulatory options for pursuing the objectives set out in the COP6 decision – provided in a report prepared by WHO – that were endorsed for consideration by the Parties *(8)*. Such regulation entails the application of most of the WHO FCTC demand and supply reduction measures to ENDS/ENNDS, as well as the concerted application of Article 5.3 *(11)*.

TIMELINE OF ENDS-RELATED DECISIONS AT, AND REPORT TO, THE COP



Work on addressing HTPs at the COP to date

Since their emergence, HTPs have been marketed with health and cessation claims that are not supported by independent, solid evidence *(12)*. Cessation is defined in the Guidelines for implementation of Article 14 of the WHO FCTC as "the process of stopping the use of any tobacco product…" and it is, therefore, implausible to claim this may be done by switching to another tobacco product. In 2016, the COP7 requested the Convention Secretariat to invite WHO to report on specific questions related to HTPs at the subsequent session *(13)*.

Following this report, in 2018, COP8 defined HTPs as tobacco products, and "therefore subject to the provisions of the WHO FCTC". Parties were invited to prioritize certain measures in addressing the challenges posed by novel and emerging tobacco products such as HTPs, and the devices designed for consuming such products. Such measures included: (a) preventing initiation into use of novel and emerging tobacco products; (b) protecting people from exposure to their emissions and explicitly extending the scope of smoke-free legislation to these products in accordance with Article 8 of the WHO FCTC; (c) preventing health claims from being made about these products; (d) applying measures regarding the advertising, promotion and sponsorship of these products in accordance with Article 13 of the WHO FCTC; (e) regulating the contents and the disclosure of the contents of these products in accordance with Articles 9 and 10 of the WHO FCTC; (f) protecting tobacco-control policies and activities from all commercial and other vested interests related to these products, including interests of the tobacco industry, in accordance with Article 5.3 of the WHO FCTC; (g) regulating – including restriction or prohibition, as appropriate – the manufacture, import, distribution, presentation, sale and use of these products, as appropriate to their national laws, taking into account a high level of protection for human health; (h) applying, where appropriate, the above measures to the devices designed for consuming such products *(9)*.

In 2018 the Convention Secretariat, WHO, and the WHO Tobacco Laboratory Network were also invited by the COP to report on various characteristics of novel and emerging tobacco products, in particular HTPs, as well as to monitor market developments and the use of these products. Despite HTPs unambiguously being tobacco products, some of their product characteristics pose regulatory challenges for their definition and classification, as well as for the comprehensive application of the WHO FCTC. For that reason, the COP requested the Convention Secretariat and invited WHO to provide more information on novel tobacco products, in particular HTPs, to COP9 *(9)*.

Contextualizing the *WHO report on the global tobacco epidemic, 2021*

The focus of this report – addressing new and emerging products – is important at a time when the tobacco industry is using new strategies to position itself as a development partner. The foundation for the regulation of ENDS and HTPs, laid down by the COP, has been crucial for translating technical recommendations into political action at the national level.

The documents analysed in this chapter are the political decisions made by Parties to the WHO FCTC in relation to the regulation of ENDS and HTPs. Until solid and independent science present a different scenario for consideration of the Parties, these provide the regulatory options that Parties to the WHO FCTC are invited to follow.

They are markers of global sentiment capable of cutting through the commercially interested noise and tobacco industry obfuscation that surrounds these products. Such decisions are influential in national regulation and can also contain legally authoritative interpretations of the WHO FCTC's provisions.

In 2018, COP8 defined heated tobacco products as tobacco products, and are therefore subject to the provisions of the WHO FCTC.

NEW AND EMERGING PRODUCTS:
ADDRESSING ELECTRONIC NICOTINE DELIVERY SYSTEMS

Global tobacco control efforts have made significant strides in reducing tobacco use and ensuring people in many parts of the world are protected from the harms of tobacco. However, in recent years, newer and emerging nicotine and tobacco products, like electronic nicotine delivery systems (ENDS), have proliferated in many markets. While the tobacco industry implies that ENDS are safer because they do not contain tobacco, ENDS continue to grow the industry's customer base, including through attracting younger users.

Some of the nicotine and tobacco products fast emerging in different markets – including ENDS, heated tobacco products (HTPs) and nicotine pouches – pose serious health concerns. HTPs have been recognized by the eighth conference of the parties to the WHO FCTC as tobacco products and should be subject to the provisions of the WHO FCTC. They will therefore not be addressed in detail in the report. This report focuses mainly on electronic delivery systems, and the increasingly prominent role they play in the strategies of the tobacco and related industries.[1]

What are electronic delivery systems?

For the purposes of this report, there are two types of electronic delivery systems: ENDS and ENNDS. These systems heat a liquid to create aerosols that are inhaled by the user. These "e-liquids" may or may not contain nicotine (but not tobacco)[2] and other additives, flavours and chemicals that can be toxic to people's health. ENNDS are essentially the same as ENDS but the e-liquids used are marketed as nicotine-free.

The most common ENDS are "electronic cigarettes", also known as "e-cigarettes", "vapes", or "vape pens". Other categories of ENDS include "e-hookahs", "e-pipes" and "e-cigars". Some of the products resemble their conventional tobacco counterparts; others are shaped like pens, USB memory sticks, or basic cylinders.

Why electronic non-nicotine delivery systems ENNDS are included in this report

ENNDS can be almost indistinguishable from ENDS: they often have enhanced flavours that appeal to young people and are often perceived as "safer" and non-addictive. However, while ENNDS, by definition, should not contain nicotine, in practice many e-liquids marked as containing "zero-nicotine" have been found to contain nicotine when tested *(14)*. Further, depending on the device used, the user can choose e-liquids that either contain nicotine or not, and can add nicotine to an e-liquid that was formulated as nicotine-free. Therefore, it can be almost impossible to distinguish between ENDS and ENNDS.

Even where ENNDS are nicotine-free there are other concerns related to the e-liquid they use, which contains harmful and potentially harmful constituents, which when inhaled may have long-term health impacts *(15)*. In addition, as with ENDS, the act of using ENNDS mimics the use of conventional cigarettes, which is a behavioural pattern that can prevent those trying to quit tobacco from doing so successfully – and it may even contribute to non-smokers (particularly children and adolescents) taking up the use of conventional cigarettes. For policy-makers, the presence and availability of a non-nicotine electronic delivery system further complicates and confuses regulatory mechanisms that are intended to protect people from the harms of tobacco and nicotine, potentially generating loopholes that can be exploited by commercial interests.

For all the reasons above, ENNDS should be regulated and monitored in the same way as ENDS.

1 "Industries" here refers to the tobacco industry, ENDS manufacturers, and any organizational body with commercial interests in ENDS or ENNDS.

2 Most ENDS use nicotine derived from tobacco, which leads some countries, including the United States, to classify them as tobacco products.

New and emerging products should be included in a comprehensive approach to tobacco control

The rationale for addressing ENDS as part of tobacco control strategies includes the following:

- Article 5.2 of the WHO FCTC obliges Parties to implement effective measures aimed at preventing and reducing tobacco consumption, nicotine addiction and exposure to tobacco smoke, and decision FCTC/COP7(9) invites Parties to consider applying regulatory measures (such as those referred to in document FCTC/COP/7/11) to prohibit or restrict the manufacture, import, distribution, presentation, sale and use of ENDS, as appropriate to their national laws and public health objectives.
- ENDS contain nicotine, which is the highly addictive component of tobacco. Using ENDS poses the risk of nicotine addiction, including among children and adolescents. Research findings show that ENDS users are more likely to become cigarette smokers, exposing them to the harmful effects of smoking *(16)*.
- ENDS are harmful. For example, nicotine can have deleterious impacts on brain development, leading to long-term consequences for children and adolescents in particular *(15)*.
- ENDS are marketed in thousands of flavours, which can increase the palatability of the product and help them be targeted specifically at children and young adults.
- In many social contexts, smoking tobacco has been "denormalized", particularly in indoor public areas. The use of ENDS mimics the hand to mouth action associated with conventional smoked tobacco products. The use of ENDS, therefore, may risk renormalizing smoking behaviour, particularly among younger populations *(17–19)*.
- The tobacco and related industries and ENDS advocates have tried to undermine indoor smoking bans by lobbying for an exception for the use of ENDS. ENDS generate an aerosol that looks similar to tobacco smoke – an association further complicated by the difficulty in distinguishing these devices from HTPs, which, like cigarettes, contain tobacco. Therefore, it is often difficult to tell if a person is smoking a tobacco product or using an ENDS.
- ENDS are marketed and promoted by the tobacco and related industries, employing many established tactics (see "Tobacco industry interference" chapter) to target their products at young people.

ENDS were first developed by companies independent of the tobacco industry, but tobacco manufacturers have since entered the ENDS market

The early growth of the ENDS market was driven largely by companies independent of traditional tobacco companies, such as Pax Labs which developed the Juul e-cigarette. However, almost all major multinational tobacco companies, such as British American Tobacco, Philip Morris International and Altria have purchased shares in ENDS companies and/or developed their own brands *(20, 21)*. There are now more than 30 000 ENDS (devices and e-liquids) brands sold in the EU *(20)*.

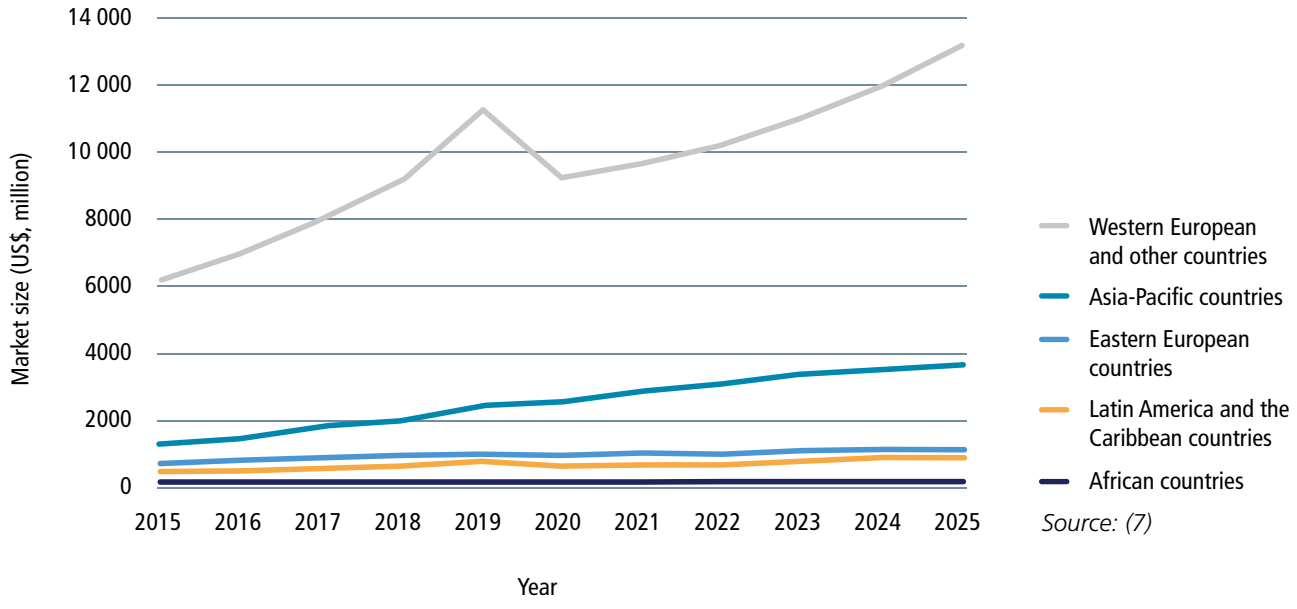
In 2014, ENDS generated US$ 2.76 billion in global sales, rising to US$ 15 billion in 2019. The total market value of ENDS and heated tobacco products sales in 2018 was less than 2.2% of the total market value, while cigarette sales alone accounted for 91% of the same total market value *(22)*. Consumers in Western European and other countries (including the United States of America (the United States) and Canada) comprise the largest portion of this market, followed by those in Asia-Pacific countries. According to 2015–2018 data and projections, ENDS use is expected to recover from a brief period of decline (2019–2020) and continue increasing globally *(20)*. Some evidence from the tobacco industry itself suggests that, given the market growth in recent years, there has been an increase in total nicotine users (new users) over recent years *(23)*.

ENDS devices vary greatly and are evolving rapidly

ENDS devices vary in shape, size and functionality. New designs are continuously being developed. There is also a variety of "generations" of ENDS that differ according to technology and how they are designed to be used.

Open systems have refillable tanks and can be modified, whereas closed systems are not meant to be modified and use pre-filled cartridges or pods, or come pre-filled, as in the case of disposable ENDS. Over time, developments have included increasing the electrical power generated. The electrical power generated in the device and the temperature to which the solution is heated can increase the amount of nicotine in the aerosol and therefore delivered to the user. Some ENDS have increased to more than 250W (earlier models were powered at about 10W), thereby increasing the risk of users' exposure to harmful and potentially harmful constituents *(24–26)*.

ENDS SALES, CURRENT AND PROJECTED, BY UNITED NATIONS REGIONS



Source: (7)

Examples of ENDS

Cig-a-likes

These are disposables that have the look and feel of conventional cigarettes. This may renormalize smoking.

Disposables

These are the latest version of ENDS, often shaped like pods, but are meant to be discarded after the e-liquid has been used. They are available in a wide variety of flavours and are also easily concealable.

Vape-pens

These enable users to vary e-liquid formulations according to their preferences. Some use pre-filled cartridges while others allow users to refill them.

Tank systems

These enable users to vary almost every element of the user experience, including e-liquid formulations and battery power.

Pods

These are a newer generation of ENDS. Because this generation often uses nicotine salts, they provide higher doses of nicotine without a harsh sensation. The devices often look like USB sticks allowing users (e.g. young people or students) to conceal them.

There is a huge diversity in e-liquids and their contents

Liquids differ greatly in their contents. In addition to variable levels of nicotine, they often contain a wide variety of flavourings, water, propylene glycol, usually glycerine and other compounds. In addition, the aerosols generated by these products after aerosolization of the liquid contain compounds, some of which are toxic. Examples include formaldehyde, which is a cancer-causing agent *(27)*. Some of the most common liquids components are as follows:

Nicotine

Nicotine is a highly addictive substance contained in all ENDS and has reportedly been found in some products marketed as ENNDS *(14)*. The nicotine contained in ENDS is often derived from tobacco, but some products use synthetic nicotine. The nicotine content of ENDS can range from 0 mg/ml to over 66 mg/ml or more (at least twice the nicotine content of a standard cigarette). Several factors other than concentration can determine the amount of nicotine to which the user will be exposed. The electrical power generated in the device, the puffing style of the user and the inclusion of ingredients in the e-liquid have the potential to increase users' nicotine uptake *(28)*.

The nicotine used in e-liquids may exist in different forms. Free-base nicotine is a modified form of nicotine present in varying concentrations in conventional cigarettes and can make cigarettes more addictive by delivering nicotine rapidly to the brain. More recently, ENDS manufacturers have developed nicotine salt formulations that deliver higher levels of nicotine to the user while masking its harshness *(29)*.

There are approximately 16 000 unique flavours available in some markets, many of them appealing to children.

Flavours

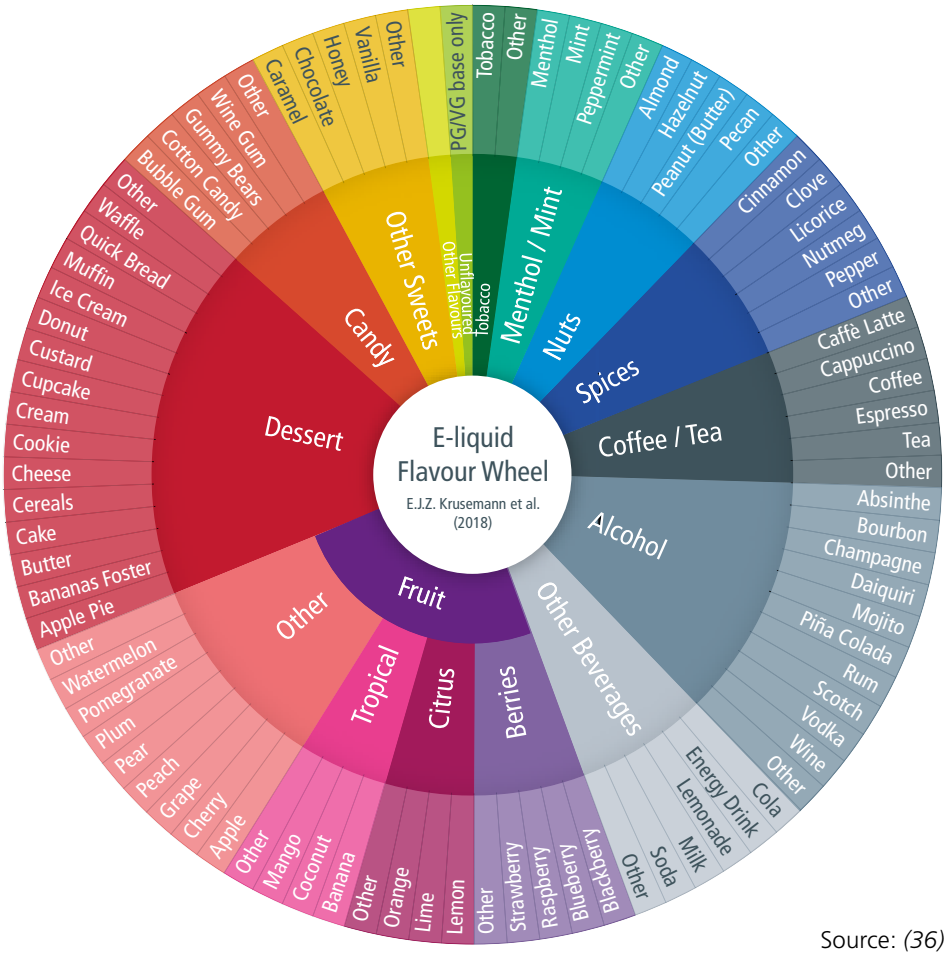
There are approximately 16 000 unique flavours available in some markets, many of them appealing to children *(17, 18, 30, 31)*. These flavours can mask the harshness of nicotine and play a role in a person's decision to try using ENDS for the first time *(32)*. Flavours can make the use of the product more pleasurable, the inhalation of aerosols easier, and change the perceived risk associated with their use *(33)*. For example, flavours such as menthol contribute to promoting and sustaining the use of tobacco products, while flavours such as cinnamon can improve the palatability of products *(34, 35)*. The figure below illustrates a flavour wheel for e-liquids in which more than half of the flavours are those that appeal to children and adolescents *(36)*, while other fruity and menthol flavours may also appeal to specific adult populations (e.g. women or certain ethnic groups) and non-smokers *(32, 37)*.

Propylene glycol (PG) and glycerol

These compounds are present in almost all ENDS as carriers of nicotine and some flavourings used in these products. The ratio of these two compounds often determines the e-cigarette experience as they can affect the smoothness, "throat hit" and the plume (cloud) generated during use. PG is frequently used as an additive in some foods and is "generally recognized as safe" when ingested orally. However, its effects when inhaled have not been well studied.

E-liquid flavour wheel

With so many flavours available on the market, researchers have proposed this tool to classify e-liquid flavours and provide a shared and comparable vocabulary.

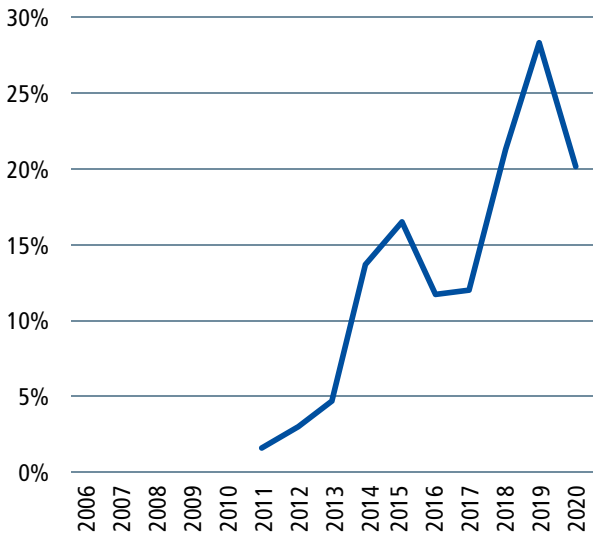


Source: *(36)*

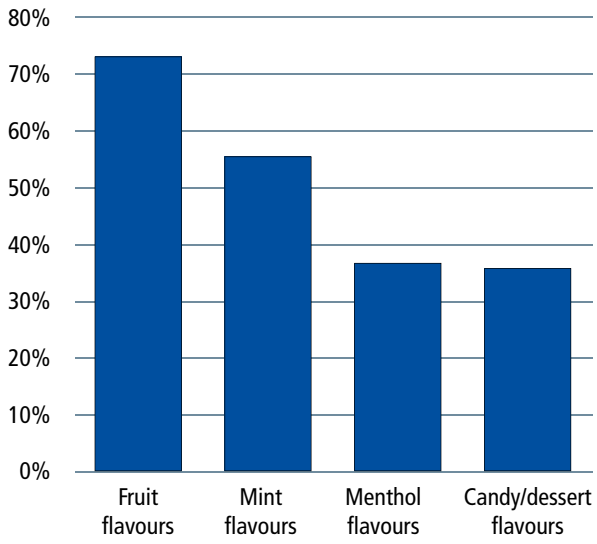
Studies in the United States of America show how flavours play a major role in e-cigarette use amongst children and adolescents:

- Since 2011 the use of e-cigarettes amongst high school students in the United States has increased from 1.5% to 19.6% in 2020 (Graph 1). While there has been a recent dip in the prevalence of users, the rates continue to be worryingly high.
- From 2014 to 2020, the proportion of current e-cigarette users using flavoured e-cigarettes increased from 65.1% to 84.7%.
- Among high school students who currently used any type of flavoured e-cigarette, the most commonly used flavour types were fruit (73%), mint (56%), menthol (37%), and candy, desserts, or other sweets (37%) (Graph 2).
- 70% of current youth (ages 12–17) e-cigarette users say they use e-cigarettes "because they come in flavours I like".

GRAPH 1:
CURRENT E-CIGARETTE USE (PAST 30 DAYS) AMONG HIGH SCHOOL STUDENTS IN THE UNITED STATES



GRAPH 2:
FLAVOURS USED BY HIGH SCHOOL STUDENTS IN THE UNITED STATES CURRENTLY USING FLAVOURED E-CIGARETTES



Source: *(38–40)*

Many of the long-term health effects of ENDS use are still unknown, there is growing evidence to demonstrate that these products are not harmless.

Diversity of ENDS presents a challenge to understanding, monitoring, and regulating them

ENDS have evolved differently depending on the regulatory environment of a given region, and demographic contexts and markets. In addition to the diversity of ENDS designs, product types and variants, interchangeable parts, and the wide variety of e-liquids and flavour types that the user can themselves mix, many ENDS are also customizable by the user post-sale, and some can even be manipulated remotely by the manufacturer *(41)*. Customizable devices mean that they can be manipulated by changing different aspects of the products, such as the battery power, the heating coil and the temperature that the heating component reaches. This can have a significant impact on the emissions to which users and bystanders are exposed.

There is growing evidence of harmful effects of ENDS

Tobacco and related industries market and promote ENDS as "safer" alternatives to conventional cigarettes and many users perceive them to be significantly "less harmful" than tobacco products, especially cigarettes *(42)*. However, even though many of the long-term health effects of ENDS use are still unknown, there is growing evidence to demonstrate that these products are not harmless *(43)*. For example, recent studies suggest that ENDS have negative acute effects on cardiovascular health, including heart rate and blood pressure *(44–46)*, and that daily ENDS use has been shown to be associated with increased risk of myocardial infarction. In addition, studies on the impact of ENDS use on respiratory health show measurable adverse effects on organ and cellular health in humans, in animals, and in vitro, and is likely to be associated with asthma and chronic obstructive pulmonary disease *(47, 48)*.

The health impacts on users of these products are also likely to depend on the many factors associated with the range of ENDS design and how they are used, as well as on other products that the user is consuming at the same time, and the quantity or pattern of that consumption. For example, ENDS are often used as complements to cigarette smoking and not as substitutes, especially in the smoke-free environments where ENDS use is not banned. This means many ENDS users use both ENDS and conventional cigarettes (dual use) *(49)* – a pattern of use that may in fact have more deleterious effects on users' health than the use of ENDS or conventional cigarettes alone. In the United States, almost 70% of adult ENDS users also currently smoke cigarettes *(50)*. Dual use of ENDS and cigarettes may also sustain nicotine dependence. Some studies suggest that dual use is associated with increased risk of respiratory and cardiovascular conditions relative to single product use *(51–53)*.

Nicotine is deleterious to adolescent brain development and poses risks during pregnancy

Nicotine is highly addictive. A non-smoker who uses ENDS may become addicted to nicotine and find it difficult to stop using ENDS and/or become addicted to conventional tobacco products. Given that many ENDS are marketed to be attractive to youth, they have been taken up by adolescents and children in large numbers in some countries. Nicotine addiction is generally established in adolescence, creating a very real risk of young users becoming nicotine dependent *(54)*. Young people who experiment with ENDS are two to three times as likely to progress to regular use of conventional cigarettes than those who do not *(55)*. If an ENDS user transitions to the use of tobacco products they will become vulnerable to the health outcomes associated with tobacco use, such as cancer, cardiovascular disease, respiratory diseases and hypertension.

Nicotine also poses health risks to children, adolescents and pregnant women. The consumption of nicotine in children and adolescents has deleterious impacts on brain development, leading to long-term consequences for brain development and potentially leading to learning and anxiety disorders *(56–58)*. Nicotine exposure in pregnant women can have similar consequences for the brain development of the fetus *(59, 60)*.

Other e-liquid components can also be harmful to health

Aside from nicotine, some of the common components of e-liquids are known to have health effects, while little is known about many more *(25, 61)*. Some of the flavours used in ENDS and ENNDS, for example, have been shown to increase the toxicity of their aerosols *(62)*. Aldehydes like vanilla and cinnamaldehyde flavouring, for example, have been shown to contribute to toxicity and the component used to bring about buttery flavours is known for causing bronchiolitis obliterans (sometimes called "popcorn lung") *(47)*.

The outbreak of electronic-cigarette or vaping product use-associated lung injury (EVALI) in the United States in 2019–2020 highlights the potential dangers associated with these products. According to the most recent data from the Centers for Disease

Children and adolescents that use ENDS are more than twice as likely to use conventional cigarettes.

Control, EVALI resulted in a total of 2807 cases and 60 deaths *(63)*. While the cause of these deaths has not been conclusively determined, vitamin E acetate (VEA), a common additive in ENDS that contains cannabis (or THC), is thought to have played a significant role in these cases of lung injury *(64)*. While VEA is safe when consumed orally in foods and when used on the skin, the impact of inhaling VEA is not fully understood. This is an example of why ENDS should be regulated and some jurisdictions, such as Canada, the United Kingdom of Great Britain and Northern Ireland (the United Kingdom), and some states in the United States, currently prohibit this additive *(41, 65)*.

Electronic delivery systems have also been linked to a number of physical injuries, including burns from explosions or malfunctions, when the products are not of the expected standard or are tampered with by users. Accidental exposure to the high nicotine concentrations in e-liquid can also be very dangerous and even cause death. Cases of accidental ingestion of the poisonous e-liquid by children are particularly concerning, with one study finding over 8000 exposures among children under the age of 6 years over a 5-year period in the United States of America. Amongst these cases, eight children suffered major health consequences and one 1-year old boy died *(65–68)*.

Second-hand emissions have the potential to harm bystanders

Studies show that ENDS use raises airborne concentrations of particulate matter above background levels when measured indoors *(69–71)*. The levels of nicotine, particulate matter and potential carcinogens in second-hand aerosols (SHA) exceed the maximum recommended levels set out in the WHO FCTC Guidelines *(72–74)*. This is of concern, as human exposure to particulate matter generated during the use of ENDS – including fine and ultrafine particles (which may penetrate the alveoli), volatile organic compounds, heavy metals and nicotine *(75)* – have been shown to be associated with increased risk of heart and lung disorders. Although the health risks associated with SHA from ENDS are not yet well understood, a systematic review concluded that ENDS "vapour" has the potential to cause harm to bystanders *(71)*. Further research is needed to fully understand the health effects of second-hand exposure to ENDS aerosols.

Prevalence of adult ENDS use is low, but varies and fluctuates greatly across countries

While reliable data are not available for all countries, current ENDS use among adults varies greatly across the countries that monitor it, from 11% in Estonia (2018) to 0.2% in Uruguay (2016-17) – see Annex II and Annex XI. ENDS use rates can also change rapidly in a population over a short period of time *(41)*: in Great Britain, the prevalence of adult ENDS use rose to 7.1% in 2017 and decreased to 6.3% in 2020 *(49)*.

Increasingly, population-level surveys include questions about the use of ENDS (as well as ENNDS) among both adults and adolescents. Questions have been incorporated into Tobacco Questions for Surveys (TQS) *(76)*. The diversity of products and nomenclature, however, pose a real challenge for monitoring and surveillance of these and other novel and emerging nicotine and tobacco products. In addition, the conflation of the ENDS product category with that of HTPs *(23)* makes it difficult to know which products people are using and how they are using them. Surveillance criteria must be particularly stringent and meticulous to capture the current and evolving nuances that exist among these products and patterns of use across countries.

ENDS use among children and adolescents must be prevented

A recent systematic review found that the prevalence of ENDS ever-use among children and adolescents across all countries and territories that had data (50 out of the total 67 countries that reported on ENDS use in some dimension) was estimated to be 19.9%. For current use of ENDS (use in the last 30 days) the pooled estimate across 60 countries was 8.8% *(77)*. And in the United States, the extent of e-cigarette use among children and adolescents led the US Surgeon General to declare the problem an epidemic in 2019 *(78)*. More recent surveys have observed a decline in the prevalence of e-cigarettes use in this population but trends must be carefully monitored *(79)*.

ENDS use among children and adolescents increases the chances they will use conventional cigarettes and other tobacco products

ENDS use among children and adolescents under the age of 20 years is of concern in many countries, not only because of the detrimental effects of nicotine in this age group but also because most young ENDS users are non-tobacco users, and ENDS use may lead to future consumption and addiction to tobacco products *(67, 80)*. In other words, ENDS may act as a "gateway" to tobacco consumption *(81)*. A global systematic review recently found that those children and adolescents that use ENDS, even when experimental in nature, are more than twice as likely to later use conventional cigarettes (both ever and current use) *(82)*.

Evidence on the potential role for ENDS in cessation is still inconclusive

To date, evidence on the use of ENDS as a cessation aid is inconclusive. A recent Cochrane Review suggests that e-cigarettes can help smokers quit *(83)*. This review compared ENDS to behavioural support and other nicotine replacement therapy (NRT) and pooling the results of four studies found a small but significant increase in quitting rates among ENDS users. The results suggested that out of 100 people using NRTs, six of them are likely to quit successfully, while 10 out of 100 people using e-cigarettes to quit are likely to be successful.

There are a number of caveats to this conclusion. Firstly, the authors note that the certainty of these findings is low (for the comparison to behavioural support) to moderate (for the comparison to NRTs). Secondly, the studies included used a single product type in a therapeutic environment, and this is not considered comparable to the current real-world context of e-cigarette use. Thirdly, and perhaps most significantly, there is the question of defining cessation. Cessation may be seen to be the quitting of smoked tobacco products, the quitting of any tobacco product or the quitting of any nicotine product. In the Cochrane Review, cessation was considered successful if people quit smoking any tobacco product. In other words, a person could move from conventional cigarettes to ongoing use of ENDS and be considered to have successfully "quit". This leaves open the question about the duration for which a person would be expected to continue using ENDS as a cessation device, especially since longer-term use may entail increased exposure to the potential health risks associated with ENDS. NRTs are designed such that nicotine content is progressively reduced throughout the treatment so as to reduce dependence on nicotine.

The US Surgeon General's Report on Cessation concluded, "The evidence is inadequate to infer that e-cigarettes, in general, increase smoking cessation" *(84)*. In addition, the European Union's Scientific Committee on Health, Environmental and Emerging Risks (SCHEER) Opinion on electronic cigarettes concluded, "There is a lack of robust longitudinal data on the effect of electronic cigarettes on smoking cessation. Until such research is available, electronic cigarettes should only be considered to support smoking cessation for a limited time and under supervision" *(85)*. Indeed, some research has suggested that, in some cases, ENDS could hinder cessation in some individuals by prolonging or increasing addiction to nicotine *(86)*.Given the diverse nature of ENDS, more evidence is needed to inform a conclusive statement on the potential of any specific ENDS product as a cessation tool. At this time, there are still a number of unknown factors which mean that ENDS cannot be recommended as cessation aids at the population level. Currently available cessation treatments such as NRTs (gums and patches), and pharmacotherapies (Bupropion and Varenicline), must be approved by each country's regulatory authority before they can be marketed and made available in that country and comply with regulatory requirements *(87)*. ENDS are not currently subject to this regulatory approach in most countries where they are sold, and consequently do not benefit from the same quality assurance and oversight guaranteed for other cessation treatments.

ENDS by prescription: the unique case of Australia

On 1 October 2021 Australia will become the first country in the world to ban the purchase or import of ENDS by consumers unless they have a valid doctor's prescription to do so. The main reason a doctor may provide a prescription is to help the user quit.

As there are currently no approved nicotine e-cigarettes on the Australian Register of Therapeutic Goods (ARTG), doctors themselves may need to apply to the Therapeutic Goods Administration (a regulatory agency of the Australian Government) for access to the unapproved product before they issue a prescription. Patient access to these products is restricted to certain pathways available for 'unapproved' prescription medicines. Further information is available at: https://www.tga.gov.au/nicotine-e-cigarettes.

The tightened ENDS regulations aim to stem the increase in the use of nicotine e-cigarettes by young people in Australia. Between 2016 and 2019, the proportion of young people aged 18–24 years who reported using e-cigarettes daily, weekly, monthly or less than monthly at the time of being surveyed nearly doubled, from 2.8% to 5.3%. The regulations also provide an opportunity for current smokers to receive appropriate advice from a medical doctor on the benefits of smoking cessation and the risks associated with ENDS.

Source: *(88)*

Potential impact of ENDS on the wider population who do not currently use tobacco or ENDS

Apart from the question of whether ENDS can help tobacco users quit, there are many other questions raised by ENDS in relation to patterns of tobacco consumption *(89)*. For example, to what extent do people, in particular adults, reduce their tobacco use (if at all) when they start using ENDS? And how does this differ between the type of ENDS or ENNDS used? At the population level, does the availability of ENDS on the market increase or decrease cessation attempts? Are ENDS attractive to former smokers and do long-term former smokers start using ENDS *(90)*? And, if indeed ENDS help people to quit smoking, how does this health benefit compare to the risks of increasing numbers of children and adolescents initiating the use of these products *(89)*? Many of these questions have no quick answer, and answers might not be generalizable to all countries, but ensuring ENDS are adequately regulated to protect population health can be achieved immediately. If they are not appropriately regulated, they may undermine current measures intended to protect people's health.

ENDS present important threats and challenges to tobacco control

Tobacco control has made significant progress over the last two to three decades. This report finds that the global prevalence of smoking has reduced in just the past 12 years from 22.7% in 2007 to 17.5% in 2019, and with the adoption of measures like smoke-free environments in many countries, at national, provincial and city levels, tobacco use has been denormalized *(91)*. Legal restrictions have protected children and adolescents from the harms of tobacco by restricting the age of purchase and ensured bans against advertising of tobacco products. Today, over 5.3 billion people are protected from the harms of tobacco by at least one MPOWER measure.

The emergence of ENDS in many countries may undermine tobacco control progress

ENDS proponents argue that the presence of "less-harmful" alternatives can help reduce the prevalence of tobacco use and improve the health of the population. But while innovation in cessation products is to be welcomed, ENDS are currently marketed to attract new users (i.e., not limited to tobacco users wanting to quit) and misinform the public about the risks associated with their use in the absence of robust evidence (or indeed in the face of growing evidence to the contrary). ENDS currently pose significant challenges to public health and could undermine some of the hard-won progress in tobacco control achieved to date.

How ENDS challenge tobacco control and effective public health implementation

Legislation and regulatory mechanisms struggle to keep pace with changing product characteristics	Because ENDS often do not have the same characteristics as conventional products and are constantly evolving, they may not be covered under existing laws and can fall between regulatory cracks. In particular, open-system (modifiable) ENDS are difficult to regulate *(92)* and regulations are often not able to keep pace with changing product characteristics.
ENDS use among children and adolescents may act as a gateway to tobacco use	ENDS are aggressively marketed towards children and adolescents, including through the use of flavouring and promotional strategies *(93, 94)* and their use could lead young people to take up more harmful forms of nicotine or tobacco consumption. The advent of high-concentration nicotine solutions and nicotine salts may increase a new user's dependence on nicotine and increase their likelihood of moving on to conventional tobacco cigarettes *(95, 96)*.
ENDS subvert tobacco control laws and thereby undermine tobacco control achievements	Many ENDS users cite the ability to get around smoke-free restrictions as a major motivation for using these products *(97)*. If ENDS are not banned in smoke-free spaces, people will not only be exposed to second-hand emissions but existing bans on tobacco products such as HTPs (which can be difficult to differentiate from ENDS) may be more difficult to implement, thus undermining the measures in place to protect by-standers.
ENDS are renormalizing smoking in society	ENDS use mimics the behaviour of smoking by the hand to mouth movement, with the aerosol generated bearing close resemblance to tobacco smoke. Where regulations do not exist to restrict it, the use of ENDS in public spaces may make people more comfortable around those using them and may increase acceptance of smoking *(98, 99)*.
ENDS may entice former smokers to take up ENDS	ENDS may remind people of smoking and result in former smokers taking up ENDS or relapsing to use tobacco products again *(100)*.
ENDS may discourage smokers from fully quitting by prolonging dual use or continuing their use of nicotine products	It is still unclear if ENDS use is likely to eventually lead to cessation. Switching from tobacco to ENDS or dual use may prolong the use of tobacco products beyond what would have been the case had users been relying on NRTs or other evidence-based interventions to quit *(86, 101, 102)*.

Regulating ENDS must not distract from work to strengthen tobacco control in general

One of the major concerns associated with ENDS is that they are a deliberate distraction from work to prevent the more than 8 million deaths each year that result from tobacco use *(103)*. The exact harm or level of risk that ENDS will have on population health in the future is not known, but currently the number of people using these products is only a fraction of the number exposed to the known harms of tobacco *(54)*. While a close eye must be maintained on these products, the main goals of tobacco control cannot be neglected. Where tobacco control laws are firmly in place, it will be possible to leverage more effective responses to ENDS and other novel and emerging nicotine and tobacco products.

"…each Party shall, in accordance with its capabilities, adopt and implement effective legislative, executive, administrative and/or other measures and cooperate, as appropriate, with other Parties in developing appropriate policies for preventing and reducing tobacco consumption, nicotine addiction and exposure to tobacco smoke."

Article 5.2 WHO FCTC

There are many regulatory mechanisms and options to protect populations against ENDS

This report finds that a total of 32 countries currently ban ENDS. Where ENDS are not banned, they should be regulated, and there are a number of different approaches that countries have taken to do so *(104)*. Given the speed at which ENDS markets are growing and its products are evolving, it is necessary to apply regulatory controls on ENDS immediately. This may mean temporarily banning these products or temporarily classifying them according to an existing category such as tobacco products, pharmaceutical products or consumer products. But in the long-term, countries should ensure that their tobacco control laws and regulations are comprehensive enough to regulate all forms of novel and emerging nicotine and tobacco products, thereby ensuring that the relevant industries do not exploit any regulatory or legal loopholes to sell and market these products (for example, classifying ENDS as smokeless tobacco may mean that they can be used in indoor public spaces).

Effective adoption and implementation of regulatory measures will depend on a number of factors including: the country's achievements to date to implement the WHO FCTC and MPOWER at the highest level; the regulatory authority over these products; the country's tobacco control policy goals; the available resources and capacity to regulate a highly complex set of products in a changing environment; and the size of the existing ENDS market in that country *(50)*. Effective policy toolkits already exist (such as MPOWER) that should be applied productively to ENDS, as well as ENNDS (see table below). Guidance provided by the WHO report to the 2014 Conference of the Parties (FCTC/COP/6/10 Rev.1) and further elaborated in WHO's 2016 report to the seventh session of the Conference of the Parties (outlined on facing page) remain relevant.

HOW MPOWER CAN BE APPLIED TO ENDS

Demand Reduction Measures

M	Governments are recommended to use their existing tobacco surveillance and monitoring systems to assess developments in ENDS and nicotine use by sex and age.
P	ENDS non-users should be protected from exposure to ENDS emissions. Indoor smoke-free places should never exempt ENDS (or ENNDS or HTPs) from a ban.
O	Evidence on the use of ENDS as a potential tobacco use cessation aid is still under debate and there is insufficient evidence to support their use at the population level, as compared to proven approaches. Countries should also use evidence-based approaches to support ENDS users who want to quit *(105)*.
W	Strong graphic health warnings should be mandated for all ENDS products, in line with overall tobacco control strategies to deter use by young people.
E	Given that the same promotional elements that make ENDS attractive to adult smokers could make them attractive to children and non-smokers, effective banning on ENDS advertising, promotion and sponsorship should be enforced. Further recommendations on the regulation of advertising, promotion and sponsorship of ENDS can be found in FCTC/COP/6/10 Rev.1 *(106)*
R	ENDS on their own carry health risks. Therefore, taxes should be applied to these products, in line with national standards, to prevent uptake, particularly among children and adolescents (see WHO's Technical Manual on Tobacco Tax Policy and Administration for more information) *(22)*.

Other policy approaches beyond MPOWER should also be applied. A ban on flavours, as has been implemented in Finland, can reduce the attractiveness of ENDS, particularly to minors. Furthermore, like tobacco, banning the sale and distribution of ENDS to minors should be adopted globally and Internet and other remote sales should be banned to avoid the potential use of this service to circumvent age restrictions and other regulations.

Recommendations

Countries should:

- Ensure continued focus on comprehensive evidence-based tobacco control measures to reduce nicotine addiction and tobacco use through all provisions of the WHO FCTC and full implementation of MPOWER. This is a priority.
- Where manufacture, sale and distribution of ENDS is not prohibited, adopt appropriate regulatory options to achieve the key objectives of protecting the population from potential health risks; preventing unproven claims being made about ENDS; and protecting tobacco control activities from commercial interests *(107)*. See box below for a summary of regulatory options.
- Consider prohibiting the sale of ENDS that the user can modify (either its features or e-liquid ingredients) *(50)*.
- Where a ban on manufacture, sale and distribution of ENDS is the preferred regulatory approach to protect the health of a country's population (in the wider context of tobacco control, and based on the specific domestic regulatory environment), countries should strictly implement the ban without any interference from the industry to ensure a high degree of protection for children and adolescents.
- Monitor the use of ENDS and ensure that data are disaggregated by age and sex. National representative surveys must capture use of all forms of novel and emerging products such as ENDS so that researchers can perform rigorous analyses, and regulatory approaches are well-informed.
- All these recommendations should also be applied to ENNDS.

Objectives and options for regulating ENDS and ENNDS (based on the COP Decision FCTC/COP6/10/rev)

OBJECTIVE:

Prevent the initiation of ENDS and ENNDS use by non-smokers and youth, with special attention to vulnerable groups

Measures may include banning the sale and distribution, as well as the possession of, ENDS and ENNDS by minors; banning or restricting advertising, promotion and sponsorship of ENDS/ENNDS; taxing ENDS/ENNDS at a level that makes the devices and e-liquids unaffordable to minors; banning or restricting the use of flavours; regulating places, density and channels of sales.

OBJECTIVE:

Minimize as far as possible potential health risks to ENDS and ENNDS users and protect non-users from exposure to their emissions

a. **To minimize health risks to users:** Testing heated and inhaled flavourings used in the e-liquids for safety and banning or restricting the amount of those found to be of serious toxicological concern; requiring the use of ingredients that are not a risk to health and are, when allowed, of the highest purity.

b. **To minimize health risks to non-users:** Prohibiting by law the use of ENDS and ENNDS in indoor spaces; requiring health warnings about potential health risks deriving from their use. Health warnings may additionally inform the public about the addictive nature of nicotine in ENDS; and reducing the risk of accidental acute nicotine intoxication.

OBJECTIVE:

Prevention of unproven health claims being made about ENDS and ENNDS

Measures may include prohibiting implicit or explicit claims about the effectiveness of ENDS/ENNDS as smoking cessation aids unless a specialized governmental agency has approved them; prohibiting implicit or explicit claims that ENDS/ENNDS are innocuous or that ENDS/ENNDS are not addictive; and prohibiting implicit or explicit claims about the comparative safety or addictiveness of ENDS with respect to any product unless these have been approved by a specialized governmental agency.

OBJECTIVE:

Protect tobacco control activities from all commercial and other vested interests related to ENDS and ENNDS, including the interests of the tobacco industry

Measures to do this are outlined in detail in the next chapter. Briefly, measures may include rejecting partnerships with the industry; raising awareness about potential industry interference with Parties' tobacco control policies; treating state-owned industry in the same way as any other industry; banning activities described as "socially responsible" by the industry and taking measures to prevent conflicts of interest for government officials and employees.

TOBACCO INDUSTRY INTERFERENCE:

STRENGTHENING RESPONSE IN THE FACE OF EVOLVING TACTICS

Despite the more than 8 million tobacco use-related deaths each year *(103)*, the tobacco industry continues to aggressively market its products worldwide and to undermine implementation of the WHO FCTC and the MPOWER package. But implementation of the WHO FCTC benefits from strong governmental commitment to eliminate this interference. Parties to the Convention are legally obliged (under Article 5.3) to "protect these policies from commercial and other vested interests of the tobacco industry in accordance with national law" *(108)*. However, the tobacco industry invests considerable resources to oppose strong tobacco control measures, both at national and international levels. Following failed attempts to prevent, delay, or derail negotiation of the WHO FCTC (as well as to weaken it), the tobacco industry now strives to subvert its comprehensive implementation by deploying a wide variety of strategies to obstruct tobacco control measures. Some of these strategies are public while others are more covert. Overall, however, the goal is to weaken effective tobacco control.

The many faces of tobacco industry interference

Tobacco industry tactics to thwart tobacco cessation are not new *(109)*. The Stopping Tobacco Organizations and Products (STOP) partnership has identified nine common tobacco and related industries' tactics *(90, 110)*:

TACTIC 1
Building alliances and front groups to represent its case – the "third party technique"

TACTIC 2
Attempting to fragment and weaken the public health community

TACTIC 3
Disputing and suppressing public health information

TACTIC 4
Producing and disseminating misleading research and information

TACTIC 5
Directly lobbying and influencing policy-making

TACTIC 6
Influencing "upstream" policies, including trade treaties, to make it harder to pass public health regulations

TACTIC 7
Litigating or threatening litigation

TACTIC 8
Facilitating and causing confusion around tobacco smuggling, using it to fight tobacco control

TACTIC 9
Seeking to manage and enhance its own reputation in order to increase its ability to influence policy

Countering tobacco industry tactics

Countering industry interference is fundamental to effective WHO FCTC implementation. In 2008, the Conference of Parties (COP) to the WHO FCTC adopted guidelines for the implementation of Article 5.3. These were based on both scientific evidence and the experiences of Parties, and aimed to assist Parties in achieving their legal obligations under the WHO FCTC.

These guidelines continue to be instrumental in combatting industry interference and should be applied in the context of both conventional and emerging nicotine and tobacco products. The tobacco industry attempts to present itself as a partner in tobacco control, while simultaneously blocking regulatory efforts. Therefore, partnerships with tobacco and related industries should be rejected, and there should be clear rules regarding conflicts of interest for government officials and government employees working on tobacco control.

Whenever tobacco companies have faced a major threat, they have introduced new products promising they would be less harmful than conventional cigarettes. Ultimately, they just undermined progress while providing the industry with a new way to make money.

Government action to counter tobacco industry interference should include the following:

- Requiring disclosure of, and clearly communicating, funding sources for research institutions, academics, and scientific studies to prevent unseen biases in science on which policy may be based, as well as to clarify the motivations of nongovernmental organizations, business and trade associations, consumer groups, think tanks, professional associations and others seeking involvement or input in tobacco control policies.
- Rejecting partnerships and non-binding or non-enforceable agreements with the tobacco industry and those working in its interests, including financial support, incentives and endorsement of tobacco industry activities related to tobacco control.
- Raising awareness about the known addictive and harmful properties of tobacco and nicotine-containing products, and about tobacco industry interference with tobacco control policies.
- Denormalizing and, to the extent possible, regulating and banning publicity around activities described as "socially responsible" by the tobacco industry.
- Prohibiting the dissemination of misleading information relevant to tobacco control policies.
- Requiring that information from the tobacco industry on marketing, lobbying and philanthropic activities is disclosed and that the information provided by them be transparent and accurate, with regular, truthful, complete and precise information on tobacco industry activities. All government interactions with the industry should be recorded and made available to the public.
- Putting in place and enforcing effective conflict of interest policies for policy-makers and officials engaged in developing, implementing and enforcing tobacco control policies.
- Treating state-owned tobacco enterprises the same as other tobacco companies. No government privileges or influence should be afforded to any tobacco and nicotine companies.
- Ensuring that non-health agencies take the same action, adhering to Article 5.3 and applying the Guidelines for Implementation.
- Blocking interaction between government and front groups that are funded by tobacco and related industries "purporting to work for a smoke-free world" (speech by Dr Tedros Ghebreyesus) *(111)*.

Governments should encourage and empower civil society to play a role in preventing and addressing tobacco industry interreference. Effective advocacy against the tobacco and nicotine industries requires skills training, capacity building and longer-term investments from donors to ensure sustainability *(112)*.

Tobacco and related industry interference and ENDS

"Whenever tobacco companies have faced a major threat, they have introduced new products promising they would be less harmful (than conventional cigarettes). They used these products to protect their sales and position themselves as part of the solution and re-connect with policymakers. Ultimately, they just undermined progress while providing the industry with a new way to make money."

STOP Initiative *(113)*

The tobacco and related nicotine industries[1] use a number of strategies to sell their products. The following outlines some of the key tactics identified regarding novel and emerging products.

Attracting new customers and sustaining existing customers

ENDS are aimed at attracting new, young users

Tobacco and ENDS companies use product design features that increase the attractiveness of the products, especially to young users. The products look like sleek new technology and are often sold in stores that are glamorous and hyper modern. Some of the designs associated with ENDS look like small USB sticks and are small enough to hide from others, making them particularly useful in the school

1 "Nicotine industry" means manufacturers, wholesale distributors and importers of nicotine and non-nicotine products, including associations or other entities, as well as industry lobbyists.

environment where students can keep them concealed from teachers and other authorities *(114)*. Furthermore, the products are promoted at youth-friendly events such as music festivals, and manufacturers use social media influencers that appeal to young audiences to promote them *(115)*. Other product characteristics that attract new users are the use of an enormous range of flavours that particularly appeal to children and adolescents.

Sustaining addiction among the customer base

E-liquid contents are also designed to keep people coming back for more. For years tobacco companies have included additives in conventional cigarettes, such as acids and ammonia, to make cigarettes more palatable, decrease the harshness of nicotine and enhance nicotine delivery to the brain *(116)*. Similarly, in some ENDS, nicotine salts (see page 33) for example not only help increase the palatability of product use, they also deliver larger amounts of nicotine to the user which is likely to increase their addictiveness.

Dissemination of misinformation and interference with scientific research

Misinformation about ENDS, as well as HTPs

HTPs, ENDS and ENNDS are often promoted by the industry as "safer" alternatives to conventional tobacco. They are also promoted or indirectly framed as cessation products that can help tobacco users quit conventional smoking. Such activities have ramifications for proven interventions to assist tobacco cessation, as they have the potential to misinform and mislead consumers. Based upon misinformation, individuals who want to quit may opt for the use of products with which they have a lower chance of success.

A significant amount of research is funded by the tobacco and nicotine industries

Despite unquestionable and inevitable conflicts of interest, a substantial amount of the available literature on novel and emerging nicotine and tobacco products is funded by product manufacturers including the tobacco industry *(117)*. This creates many challenges when interpreting the evidence, as selective and favourable results are more likely to be reported and presented to the public. For example, there are serious concerns around the scientific research conducted by Philip Morris International (PMI) on HTP aerosols and the failure of the company to make available data from longer term studies *(118)*.

Conflation of product categories

Blurring the lines between ENDS and HTPs and creating confusion over their associated risks

When expedient, such as to benefit from lighter regulation, tobacco companies pitch HTPs as electronic products "similar to ENDS". Yet, where ENDS are banned, HTPs are pitched as tobacco products that do not fall within existing categories *(119)*. This creates confusion about these product categories, both among the general public and for regulatory purposes. HTPs are tobacco products and should be regulated as such, with application of the WHO FCTC, but by blurring the difference between HTPs and ENDS the industry attempts to circumvent strict regulation *(120)*. HTPs are often promoted, especially to regulators, as smoking cessation aids. However, there is no reliable tobacco industry independent evidence on the impact of HTP use on conventional smoking cessation. HTP use is tobacco use. Indeed, more generally, there is limited evidence on the long-term health impacts of HTPs.

Tobacco and ENDS companies use product design features that increase the attractiveness of the products, especially to young users.

PMI International exploits confusion over HTP classification

HTPs and ENDS

HTPs and ENDS are sometimes conflated by companies. In its "Hold my light" campaign, Philip Morris International (PMI) has itself described HTPs as being "like e-cigarettes". This is deeply problematic because HTPs are tobacco products, which means they have different risks.

HTPs help to hook new consumers

Recent investigations have shown that PMI has sought to expand its market by aiming to attract consumers who are not current smokers. To do this they use marketing pricing strategies that establish their HTP product (IQOS) as an aspirational brand, and not a product designed to attract smokers who want to quit *(23)*. PMI's business model and tactics are representative of those being pursued by other tobacco industry actors.

PMI exploits the confusion over the FDA decision

To support their claim that HTPs are safer products, PMI submitted an application to the United States Food and Drug Administration (FDA) to classify HTPs as a "modified risk tobacco product". On 7 July 2020, the FDA granted an "exposure modification" order but denied the "risk modification" order for which PMI had applied. In other words, reducing exposure to harmful chemicals in HTPs does not render them harmless, nor does it translate to reduced risk to human health *(121)*.

Indeed, the FDA statement noted that, "Even with this action, these products are neither safe nor 'FDA approved'. The exposure modification orders also do not permit the company to make any other modified risk claims or any express or implied statements that convey or could mislead consumers into believing that the products are endorsed or approved by the FDA, or that the FDA deems the products to be safe for use by consumers."

On 27 July 2020 WHO issued a statement reminding Member States that are Parties to the WHO FCTC that HTPs are tobacco products, meaning that the WHO FCTC fully applies to these products. Specifically, Article 13.4(a) obliges Parties, to prohibit "all forms of tobacco advertising, promotion and sponsorship that promote a tobacco product by any means that are false, misleading or deceptive or likely to create an erroneous impression about its characteristics, health effects, hazards or emissions".

Manipulating public opinion to gain "respectability" while undermining public health functions and progress

Promoting ENDS in the name of public health while opposing effective tobacco control measures

The tobacco industry increasingly positions itself as a legitimate partner and stakeholder in tobacco control, but its interests are fundamentally at odds with control efforts. The tobacco industry simultaneously portrays themselves as working towards a "smoke-free" future, while at the same time promoting – and making most of their profits from – conventional smoked tobacco across the world. The British American Tobacco Annual report, 2019 *(122)* demonstrates that most of the profits generated through the sale of ENDS come not from customers who have replaced their tobacco consumption with ENDS, but rather from dual users who sustain the use of conventional tobacco while also using ENDS. The industry, therefore, continues to reap profits from all possible avenues while acting as if it is working to improve population health. Furthermore, there is emerging evidence from prospective studies to suggest that dual use may indeed be more harmful than conventional cigarette use alone *(123)*.

Controversies about "harm reduction" that divide public health communities

Harm reduction is a public health approach that aims to reduce the harm caused by substances or behaviours that are otherwise difficult to eliminate. Some have endorsed the idea that ENDS can be used as part of a harm-reduction approach, while others have warned of the importance of evidence to quantify the risk over the long-term, the risk associated with dual use of ENDS and cigarettes (a common pattern of use) and the risk of initiation among children and adolescents *(124)*.

The commercialization and marketing of ENDS currently practiced by the

tobacco and related industries is not aligned with the cause of public health. While the tobacco industry claims to be committed to harm reduction, their duplicity is demonstrated by how they simultaneously aggressively promote tobacco products where they can, and especially in low- and middle-income countries *(23)* continue to circumvent and undermine legislation to regulate conventional tobacco products *(125, 126)*, and take advantage of legislative loopholes for promotion and sale of novel products *(127)*.

Industry tactics that interfere with the public health endeavour in tobacco cessation

Guidelines for Implementation of Article 14 of the WHO FCTC define the phrase "tobacco cessation" as "the process of stopping the use of any tobacco product, with or without assistance". Nicotine replacement therapies (NRTs) are designed to help people quit tobacco, and eventually stop using NRTs as well. Switching from tobacco use to HTPs such as IQOS does not constitute cessation of tobacco use. PMI's "unsmoke" campaign (primarily focused on HTPs) encourages people "who don't quit cigarettes" to "change to a better alternative" and is in line with PMI's goal to "replace cigarettes with the smoke-free products we're developing and selling". The campaign undermines tobacco cessation initiatives by presenting a tempting and easy "alternative" to breaking a nicotine addiction, and undermining successful tobacco control initiatives (which have denormalized smoking in many countries) by portraying this form of tobacco use as socially acceptable.

Interference to undermine current tobacco control measures

ENDS have created new ways for the tobacco industry to sidestep laws governing advertisments

ENDS have been openly advertised. After decades of marketing restrictions, the tobacco industry is once again using media channels such as television, which were previously used to target youth and young adults. Without appropriate legislation in place to prevent it, advertising can then use brand names of tobacco products, hence helping to sell not only the ENDS product but also the original branded tobacco product.

Interfering in legislative processes in countries, directly and through front groups like Foundation for a Smoke Free World

Over past years the tobacco industry has interfered with tobacco control legislation at country level by attempting to slow tobacco control or by preventing outright the advancement of tobacco control measures. For example, PMI and groups funded by PMI, like the Foundation for a Smoke Free World, use promotion and other tactics to try pressure governments to allow these products into domestic markets and exempt them from tobacco control regulation (in particular TAPS bans, taxes and smoke free laws), thereby undermining tobacco control initiatives and weakening WHO FCTC implementation *(23, 128)*.

Disappearing into regulatory gaps: the battle to regulate ENDS in Israel

While the Israeli government was developing legislation to govern ENDS, a manufacturer called E-Cig Ltd applied for permission to import and market an e-cigarette. The government rejected the request on grounds that the efficacy and safety of the product were not proven, and that importing it contravened the country's laws surrounding pharmaceuticals. The company challenged the decision on the grounds that ENDS were recreational products and not pharmaceuticals, and the court agreed.

However, in December 2018, the Israeli legislature passed a new law governing both tobacco products and ENDS, and which restricted ENDS advertising and required plain packaging for ENDS products. JUUL Labs and the Tel Aviv Chamber of Commerce (Chamber) challenged these provisions on the grounds that vaping products are less harmful than cigarettes and could encourage regular smokers to switch to ENDS. They argued that therefore, prohibitions and restrictions on the advertising of vaping products violated the rights of the Members of the Chamber.

In the end, Israel successfully amended its tobacco legislation to implement plain packaging for smoking products, including e-cigarettes, but the case shows how companies want ENDS to fall within regulatory gaps.

Sources: (110, 119, 129)

Countering the tobacco industry to overturn ENDS regulation in Thailand

When Thailand banned the import and sale of all types of ENDS in 2015, pro-ENDS groups lobbied the government to lift the ban after PMI began promoting its IQOS in 2017. ENDS Cigarette Smoking Thailand (ECST), a pro-ENDS group in Thailand, worked in parallel with Philip Morris Thailand Limited (PMTL) to oppose the ban, using six tactics:

- Creating front groups
- Lobbying decision-makers
- Running public relations campaigns
- Seeking to discredit tobacco control advocates
- Funding tobacco-harm reduction research
- Pitching government sectors against each other

Despite strong opposition to the ban, the commitment of the Thai government and Thai tobacco control organizations (helped by tobacco workers union, which opposed the involvement of transnational tobacco companies in the Thai tobacco industry in order to protect the public from harmful tobacco products) has ensured that ENDS remain illegal (as of January 2021).

As the tobacco companies continue to press into more low- and middle-income countries, more attention should be given to past industry use of legal and administrative influences/measures to prevent this influence and establish science-based regulatory frameworks. Health advocates should also persuade non-health agencies to maintain policies in accordance with the WHO FCTC.

Source: (130)

TOBACCO AND THE COVID-19 PANDEMIC:

THE LINKS

The question of tobacco's role in COVID-19 cases and deaths arose early in the pandemic and many studies have attempted to better understand the relationship between tobacco and COVID-19.

While most cases of COVID-19 result in no symptoms or only mild symptoms, in some individuals COVID-19 can trigger life-threatening pneumonia *(131–134)* and other severe outcomes. People suffering from obesity *(135, 136)* and those with underlying conditions such as cardiovascular diseases, diabetes, and chronic obstructive pulmonary disease (COPD) are at higher risk of more severe COVID-19 outcomes, including admission to intensive care units, the need for a ventilator, and in some cases death *(137)*. Tobacco is a known risk factor for these diseases as well as for infectious respiratory diseases such as pneumonia and tuberculosis (TB).

Tobacco's role in infectious respiratory diseases is well established

Tobacco compromises lung function, and COVID-19 primarily affects the lungs. Smoking tobacco is also a known risk factor for severe disease from many respiratory infections *(54)*, including coronaviruses SARS (first identified in 2003) and MERS-CoV (first documented in June 2012) (138–140). Smoking also impairs the immune system and previous studies have established that tobacco use is linked with poorer outcomes for people with TB *(141)* and pneumonia *(142)*. Indeed, smoking increases pneumococcal, legionella, and mycoplasma pneumonia by three- to five-fold *(143)*.

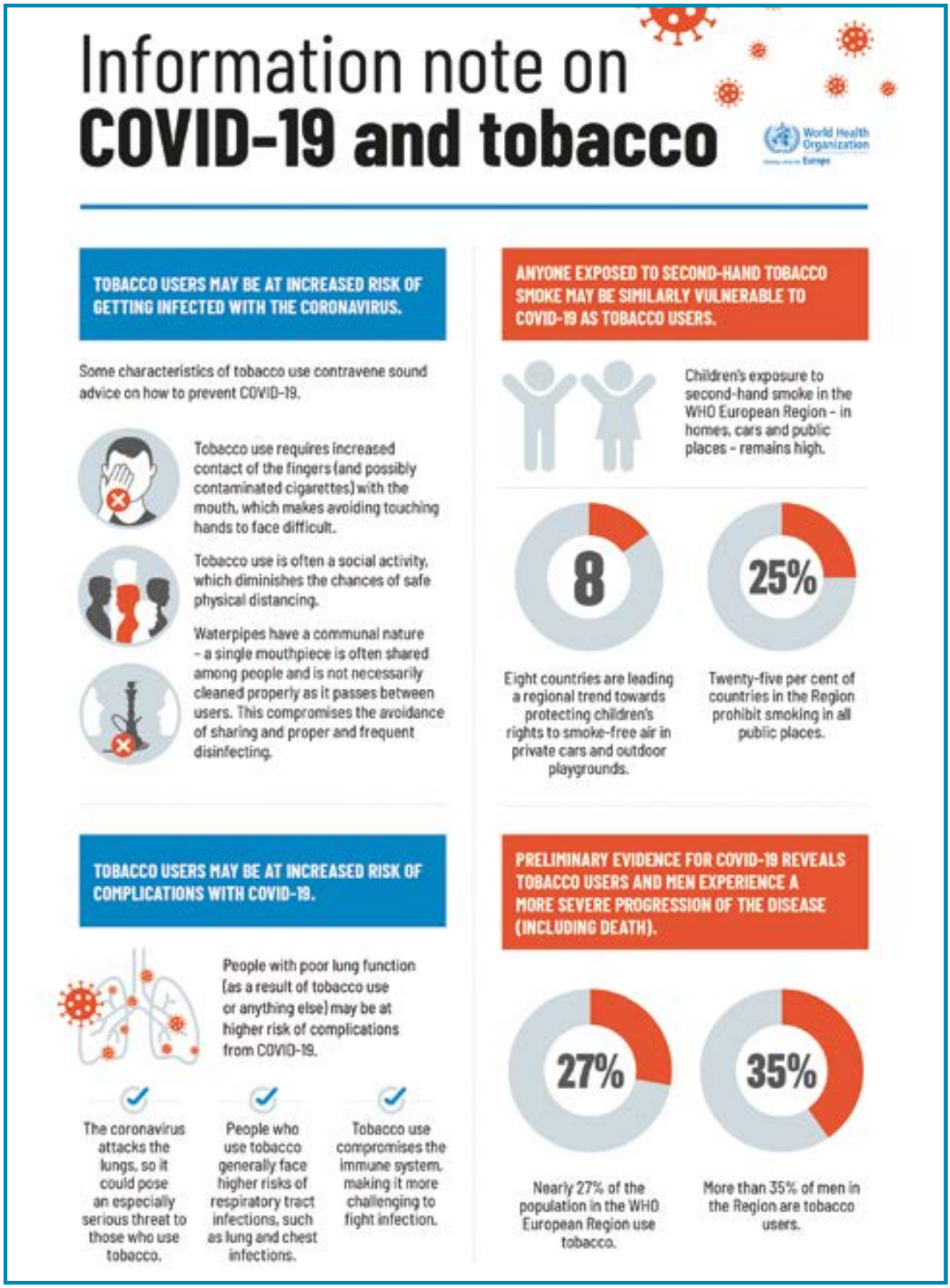
Smoking worsens COVID-19 outcomes

Current evidence indicates that smokers (current and former) are more likely to suffer more severe outcomes of COVID-19 *(144)*. Multiple systematic reviews and meta-analyses conducted on this issue provide evidence of a direct association between cigarette smoking and COVID-19 severity, with smokers having a substantially increased risk of COVID-19 progression and death *(144–147)* compared to non-smokers. Furthermore, severe forms of COVID-19 or deaths due to COVID-19 are more frequent in people with comorbidities related to tobacco use, including COPD, lung cancer, and cardiovascular diseases *(131–134)*. There is currently only limited information on COVID-19 in relation to other tobacco products (e.g. heated tobacco products, waterpipe, cigars) and electronic nicotine delivery systems (e.g. e-cigarettes), although these products are thought to play an unfavourable role in COVID-19 severity *(148, 149)*.

Evidence on the biological mechanisms linking COVID-19 and tobacco use is growing

Some evidence suggests biological mechanisms involved in the viral infection may make smokers more vulnerable to COVID-19 *(150)*. While these findings provide a plausible explanation for the observed association between smoking and COVID-19 outcomes, they are not undisputed. At the same time, some have hypothesized that nicotine might be protective against COVID-19 through anti-inflammatory effects and the inhibition of cytokine storms. A clinical trial is underway to investigate the specific role nicotine plays in COVID-19 *(151)*, but until more information is available no conclusions should be drawn.

TOBACCO INFORMATION CAMPAIGNS DURING COVID-19



▲ WHO European Regional Office media campaign launch in early 2020 to help keep people informed about the risks associated with tobacco in the context of the COVID-19 pandemic

TOBACCO INFORMATION CAMPAIGNS DURING COVID-19

▲ South-East Asia Regional Office media campaign launched in the early months of 2020 to inform people of the risks associated with tobacco, e-cigarettes, sheesha and smokeless tobacco and betel nut use during the COVID-19 pandemic

Evidence and misinformation on the risk of contracting COVID-19

At the start of the pandemic there was a great deal of confusion about the potential link between smoking and COVID-19, due in part to misinformation in the media. Some early studies claimed that the prevalence of smokers identified among hospitalized COVID-19 patients was lower than among the general population, leading some to claim that smoking, and nicotine in particular, may be acting as a protective factor against COVID-19.* The quality of the data and data analysis have been a major concern in these investigations, as well as the conflict of interest inherent in some of the researchers involved in these studies. While research is still ongoing to better quantify the risk of acquiring COVID-19 as a smoker, it is important to recognize that there are many challenges associated with interpreting these data, especially at a time of global emergency *(130, 152)*. Here are some key challenges:

Self-reported tobacco use in hospital settings

At the start of the pandemic in particular, smoking status was rarely reported in published reports from clinical settings. Self-reported tobacco use is difficult to collect, particularly in emergency settings. In the hospital setting, where people are admitted in varying states of health, the collection of smoking status is not often high on the priority list for health-care workers and if someone is unconscious upon admission, this data may never be collected. Information about past smoking status and time since quitting is often not collected and those in intensive care are often not even included in the published case-series studies.

Furthermore, depending on the context, some people would prefer not to share information about their tobacco use (young people who are hiding their consumption from adults for example, or contexts where women feel it is socially unacceptable), especially with their doctor. Furthermore, given the context of a respiratory disease outbreak, some smokers may have recently stopped smoking when they began to feel ill and reported that they no longer smoke.

Representativeness of study populations

Many of the studies informing our understanding of the link between smoking and COVID-19 were conducted on selected populations, such as health-care workers or people with co-morbidities. These populations can exhibit very different smoking prevalence trends compared to the general population. People who are admitted to hospital are also often not representative of the overall population. There are a number of factors that may make them different from the general population. For example, people admitted to hospital with COVID-19 during the first wave were more likely to be older and suffer from underlying noncommunicable diseases. It is also likely that these people have better access to the hospital, whether by virtue of geography or socioeconomic context. Importantly, the majority of studies examining the association between smoking and COVID-19 outcomes do not adjust for relevant confounders such as age, making the interpretation of results easily fallible.

Testing biases in population-based cohort studies

Some studies have suggested that of those tested for COVID-19, results among smokers show lower rates of positives and this has been taken to mean that smokers are less likely to acquire the disease. However, given smokers are more likely to present with respiratory symptoms like coughing, they are also more likely to be tested as suspected cases. If proportionately more smokers take the test than non-smokers, it will appear that smokers have a lower risk of contracting COVID-19, whether true or not.

In order to overcome these potential sources of bias, the best study design is a large prospective cohort study that follows a population that is representative of the general population over time (and for whom we have complete data on smoking history as well as confounders such as age and other underlying conditions) to see if they contract COVID-19 or not, and to what degree of severity. At the time of writing, the evidence is not conclusive with regards to the relationship between smoking and the risk of contracting COVID-19 *(153)*.

*Investigative journalists have revealed that authors of some controversial papers suggesting smokers are less likely to get COVID-19 are linked with the tobacco industry. One notable paper claiming was retracted from the *European Respiratory Journal* because of undisclosed conflicts of interest with the tobacco industry among the authors *(154)*.

COVID-19 drives bold tobacco-control measures

Since the start of the COVID-19 pandemic, most governments have attempted to restrict movement and slow the spread of the disease through actions such as curfews, quarantines, and stay-at-home orders. Under these conditions, some countries have applied "essential goods lists" to restrict the sale of some products and thus limit the movement of people in public areas. In a small number of countries these lists have also been used to restrict access to unhealthy products, like tobacco and nicotine products.

Bans and restrictions on tobacco sales and use, applied in some countries

South Africa and Botswana, for example, took the opportunity to designate tobacco and nicotine products as non-essential goods, thereby imposing a temporary ban on their sale *(155)*. Other countries restricted the use of tobacco in particular places, such as Spain, which extended smoking bans to outdoor areas *(156)*, and 15 countries in the Middle East, where the use of waterpipes in indoor areas was banned *(157)*. In India, spitting bans (an act associated with chewing tobacco) were imposed in many parts of the country *(158)*. At the same time Bhutan, a country that has maintained a tobacco ban for over a decade, lifted the ban to discourage cross-border transmission and sold tobacco through state-owned retailers *(159)*.

Some of these actions provided important lessons for tobacco control going forward. A study conducted on the South African ban, for example, suggested that without implementing other coordinated tobacco control measures, sales bans may not successfully reduce tobacco use *(160)* and the noncompliance of "vape" shops to non-essential item closure orders in the United States meant that as many e-cigarette users stockpiled these products as those that tried to reduce or quit them *(161)*.

Impact of COVID-19 on smoking behaviours is mixed

These country actions represent unprecedented steps to mitigate the impact of tobacco on the vulnerability of populations and have likely had both positive and negative impacts on tobacco control. In South Africa for example, evidence compiled on the impact of the temporary tobacco sales ban suggests that many smokers attempted to quit smoking or reduced the number of cigarettes smoked per day *(162)*. Globally, the impact of the pandemic on smoking behaviour seems to have varied greatly for different populations. Some people have reported smoking more than usual to reduce stress or loneliness at home *(163, 164)*. At the same time, some studies show that there has been a record number of smokers trying to quit as a result of the COVID-19 pandemic and awareness of the link between tobacco use and developing worse symptoms of COVID-19 *(165)*.

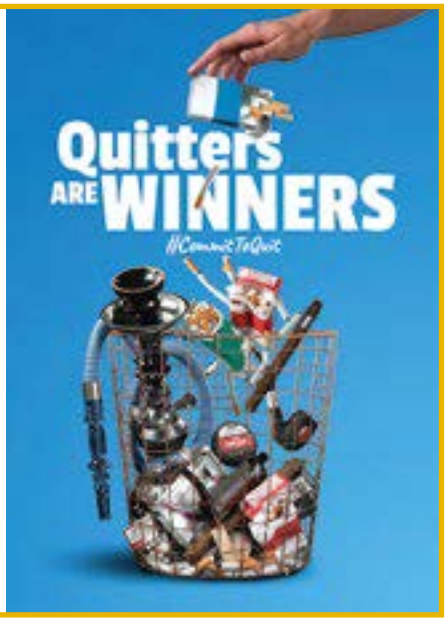
Cessation services vital as COVID-19 prompts people to quit

As a result of the COVID-19 pandemic, more people may be thinking about their health and potentially thinking about quitting tobacco. Cessation services – already insufficient or unavailable in much of the world – have been further neglected during the pandemic and are unlikely to be prioritized for funding during the COVID-19 economic recovery. For this reason, WHO and partners have aimed to focus more attention on helping people quit. In 2021, WHO launched several innovative initiatives including the World No Tobacco Day campaign "Commit to Quit" to help encourage people to give up tobacco.

While the COVID-19 pandemic highlighted the vulnerability of the world's population, the tobacco and e-cigarette industries exploited the context for their own commercial ends.

Commit to Quit!
The World No Tobacco Day Campaign

Recognizing that many smokers who want to quit do not have access to appropriate support and that the pandemic has given more people a reason to try quitting, WHO has developed a number of new initiatives to help encourage people to successfully quit tobacco. These initiatives include smoker's diaries, innovative chatbots and "Meet Florence", the first artificial intelligence quit-tobacco initiative. The World No Tobacco Day Campaign, typically a 24-hour effort to increase awareness about a particular aspect of tobacco control, was adapted into a year-long campaign in 2021 to reach out globally and help get 100 million people to try to quit tobacco.



Tobacco industry tactics during COVID-19

While the COVID-19 pandemic highlighted the vulnerability of the world's population to severe respiratory infection, the tobacco and e-cigarette industries found a number of ways to get around public health measures that restricted access to non-essential products and exploited the context for their own commercial ends. The STOP initiative at the University of Bath has systematically documented cases of industry interference since the start of the COVID-19 pandemic. Here is a list of some of the tactics they have identified:

- Donations to countries portrayed as corporate social responsibility (CSR). In Greece, for example, amid findings that smoking predisposes people to more severe outcomes of COVID-19, Philip Morris International donated several ventilators to ICUs. The industry further promoted these actions as socially responsible actions on their websites and in presentations to their shareholders, while remaining silent on the direct harms of using their products.
- Attempting to gain a voice in scientific debates. For example, involvement in research conducted on tobacco-plant vaccine development positions the tobacco industry as being "part of the solution".
- Producing promotional material that appears almost identical to official public health communications from health authorities.
- Widely distributing promotional merchandise such as masks with industry logos.
- Offering significant discounts and promotions for e-cigarette "contactless delivery" and kerbside drop-off locations.
- The use of contactless delivery, which can undermine "minimum age of purchase" restrictions, and the waiver of ID validation requirements at the point of delivery of HTPs in at least one country.
- Appropriation of the "Stay at home" social media hashtag (which was used by government and public health officials) to promote heated tobacco products and ENDS.
- Using social media posts to promote the use of ENDS and other products as ideal companions for those working from home.
- Making claims about the health benefits of ENDS. For instance, US Bidi Vapor claimed on Instagram that "A bidi stick a day keeps the pulmonologist away".
- Policy interference by challenging classifications of "essential" businesses to ensure their businesses were not negatively impacted.
- Policy interference by lobbying governments to reopen tobacco/cigarette factories early in the pandemic in countries including Bangladesh, Indonesia, Pakistan and Russian Federation. This resulted in the deaths of two workers in Indonesia from COVID-19.
- The tobacco industry has also been using the impact of the pandemic to undermine pending tobacco control measures. In Europe, for example, tobacco industry representatives have used the pandemic to postpone a ban on the sale of menthol cigarettes.

Sources: (154, 166–168)

The tobacco control community can learn a number of lessons from the COVID-19 pandemic experience

Here are just some examples of lessons learned:

- **The importance of providing reliable and evidence-based information on harms to the public:** Smoking is a known risk factor for lung and heart health and it is important to warn people of the potential harm it may cause in a new, infectious disease that affects these organs. Where the relationship between tobacco use and COVID-19 is under investigation, it is imperative that robust methodologies and analytical approaches are applied to ensure that strong and reliable evidence are used to guide appropriate action.
- **The need to "build back better":** COVID-19 has taken a huge toll on health and economic well-being and we now know that many NCDs make people more vulnerable to its most serious consequences. Tobacco control is a cost-effective way to improve population health. As countries go through economic challenges and health systems struggle to address the pandemic, tobacco control remains an important investment that can help prevent millions of deaths and much illness. Tobacco is a key risk factor for many NCDs, but stronger tobacco control measures can help to meaningfully protect people from its adverse effects in the future. In particular, higher tobacco taxes could play a central role as a potential way to generate much-needed revenue for governments during the post-pandemic economic recovery.
- **The importance of promoting responsible journalism and countering misinformation:** The media must take responsibility for ensuring that trustworthy and reliable information is made readily available to the public. Given the many unknowns, the pandemic has seen a big increase in the rapid online publication of research studies highlighting research results that have not been adequately peer-reviewed. This must be avoided. Policies and legislation should also be developed to manage information on social media platforms and counter the impact of misinformation and information overload ("infodemics").
- **The need to stay alert to tobacco industry interference:** The tobacco industry and related nicotine industries are relentlessly opportunistic. Even at a time of crisis they have found ways to market their products and get around restrictions intended to protect people's health. Countries, corporations and individuals must remain vigilant against the industries' tactics.
- **The importance of strengthening cessation services:** The COVID-19 pandemic has heightened awareness of health issues and this may encourage some people to try to quit tobacco use. Potential quitters will be more likely to succeed if they have the appropriate support. Nicotine replacement therapies, such as gum and patches, and proven cessation services such as brief advice administered by trained health-care workers, toll-free quit lines and mobile text-messaging programmes should be made available to all, and strengthened globally.

Botswana intensifies tobacco control during COVID-19 pandemic

Botswana issued landmark emergency COVID-19 regulations in 2020 to prohibit the import and sale of tobacco and tobacco-related products during the pandemic. Parliament's approval of Statutory Instrument No. 61 of 2020 made Botswana the second country in Africa (after South Africa) to prohibit the sale of tobacco and tobacco products during the COVID-19 pandemic emergency lockdown – a move that has been lauded by many as a bold step in placing the interests of public health above those of business and trade. It also affirms the commitment of the government of Botswana to make health a right for every citizen.

Through social media, Facebook and Twitter, the President of Botswana asked citizens to take care of their health during the COVID-19 emergency, saying: "Do not drink or smoke and keep at least two meters away from others and avoid handshakes." He also advised people to stay at home, wash their hands regularly with soap and water, cough or sneeze into the inner flexed elbow and keep their families safe.

Fifteen Eastern Mediterranean Region countries ban waterpipe use

Curbing waterpipe use became a major focus of tobacco-control experts and advocates in the Eastern Mediterranean Region after mounting research showed the links between tobacco use and increased vulnerability to COVID-19. The communal nature of waterpipe smoking (in which a single mouthpiece and hose are often shared between users in social gatherings) clearly counteracts the social distancing measures essential to limiting the spread of COVID-19.

In response, the WHO Office for the Eastern Mediterranean Region worked closely with Ministries of Health of countries in the Region to encourage bans on waterpipe use in all indoor and outdoor public places. By April 2021, 15 countries and territories (Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, occupied Palestinian territory, including east Jerusalem[1], Oman, Qatar, Saudi Arabia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates, and Yemen) adopted temporary bans on waterpipe use in all indoor and outdoor public places, joining two countries that had already implemented permanent waterpipe bans (Iran (Islamic Republic of) and Pakistan).

The ban represents a unique and important success for global tobacco control. It shows that tobacco control policies, in this case smoke-free laws, are feasible and effective, even with strong resistance from governments and the tobacco industry.

1 "occupied Palestinian territory" is also employed throughout the report to refer to "occupied Palestinian territory, including east Jerusalem"


mpower

EFFECTIVE TOBACCO CONTROL MEASURES

m **Monitor** tobacco use and prevention policies

p **Protect** people from tobacco smoke

o **Offer** help to quit tobacco use

w **Warn** about the dangers of tobacco

e **Enforce** bans on tobacco advertising, promotion and sponsorship

r **Raise** taxes on tobacco

MONITOR TOBACCO USE AND PREVENTION POLICIES

Article 20 of the WHO FCTC states:

"…Parties shall establish …surveillance of the magnitude, patterns, determinants and consequences of tobacco consumption and exposure to tobacco smoke… Parties should 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…" *(174)*

Monitoring strengthens tobacco control

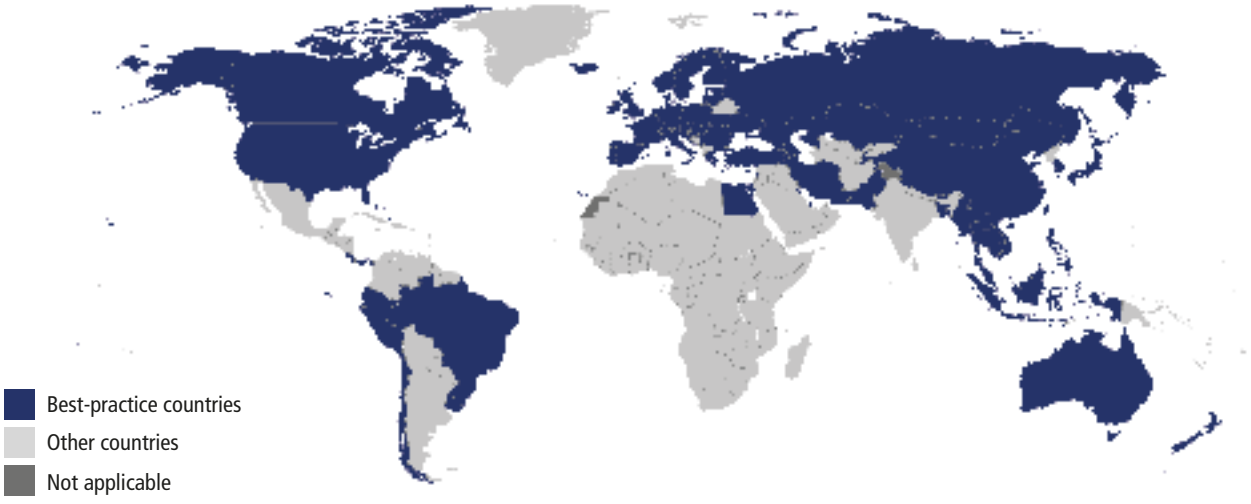
Monitoring patterns and trends in tobacco use and exposure are key to combatting the tobacco epidemic and strengthening the WHO FCTC – one of the Sustainable Development Goals (SDG 3.a). Reliable, timely data is critical to understand both the unmet need for tobacco control measures and the effects of tobacco control measures already in place. Data gives policy-makers the evidence they need to advocate for more tobacco control efforts and implementation resources.

Key products to track include:

- cigarettes and other forms of smoked tobacco (e.g. cigar, pipe, bidis, water pipe, heated tobacco products);
- smokeless tobacco products (oral or nasal tobacco);
- novel and emerging tobacco products such as tobacco vaporizers; and
- non-tobacco forms of nicotine (e.g. ENDS).

In addition to monitoring the impact of tobacco control policy interventions *(169)*, it is important that tobacco industry activities are monitored and tracked when feasible *(170, 171)*. Such data can help adjust and enhance tobacco control strategies.

MONITORING THE PREVALENCE OF TOBACCO USE – HIGHEST ACHIEVING COUNTRIES, 2020



Countries with the highest level of achievement: Armenia, Australia, Austria, Azerbaijan, Bahamas, Bangladesh, Belgium, Bhutan, Brazil, Brunei Darussalam, Bulgaria, Cambodia, Canada, Chile, *China, Cook Islands, Costa Rica, Croatia, Cyprus, Czechia, Denmark, Ecuador, 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, Montenegro, Myanmar, Netherlands, New Zealand, Norway, Pakistan, Palau, Panama, Peru, Philippines, Poland, Portugal, Qatar, Republic of Korea, Republic of Moldova, Romania, Russian Federation, Serbia, Singapore, Slovakia, Slovenia, Spain, Sweden, Switzerland, *Tajikistan, Thailand, Turkey, Ukraine, United Kingdom, United States of America, Uruguay, Viet Nam.

* Country newly at the highest level since 31 December 2018.

Increases in global coverage of MPOWER measures since 2007 has helped reduce the global rate of tobacco smoking from 22.7% to 17.5% in 2019.

Half the world is covered by strong tobacco use monitoring systems

Over half of the world's population – 4.4 billion people in 78 countries – live in countries with strong monitoring systems that include recent, representative and periodic population-based surveys and school-based surveys which ask adults and adolescents about tobacco use. Most of these countries (46 out of 78) with comprehensive monitoring are high-income countries. Despite having adequate resources, 25% of high-income countries have not completed monitoring of tobacco use within their population over the last 5 years. For the first time in this report, however, one low-income country has joined the group of countries that monitor at best-practice level (Tajikistan). No recent surveys (since 2014) were completed in a total 37 of the world's countries.

Ongoing monitoring of tobacco use is a challenge for some countries

Since 2018, the number of countries monitoring at best-practice level has increased from 76 to 78. The population living in countries who monitor at best-practice level increased from 3 billion to 4.4 billion. The two countries joining the best-practice group were China and Tajikistan.

Owing to the challenges of running national population-based surveys during the COVID-19 pandemic, many surveys planned in 2020 were delayed or cancelled. Further, the results from some surveys undertaken in 2019 were not released in time for this report. This situation led to 11 countries at best-practice level in 2018 being unable to maintain the achievement. Consequently, these 11 countries (Bahamas, Bangladesh, Bhutan, Cambodia, Costa Rica, Egypt, Kuwait, Myanmar, Pakistan, Panama, Qatar), with 577 million people, have exceptionally been retained in the best-practice group in this report.

Investing in regular surveys and other measures reduce tobacco use, Tajikistan

Since 2004, Tajikistan has conducted several national surveys to monitor progress on tobacco control, including Demographic and Health surveys in 2012 and 2017; a Global Adult Tobacco Survey in 2016; the WHO STEPwise Approach to Noncommunicable Disease Risk Factor Surveillance (STEPS) in 2016–17; a Global School-Based Student Health Survey in 2006 and Global Youth Tobacco Survey (GYTS) in 2004, 2014 and 2019.

The results of the adult surveys conducted throughout this period show that the tobacco use prevalence rate is moderate to high among men and very low in women (13.5% in total – 25.7% among men and 0.2% among women). The smokeless forms of tobacco appear to be the main area of concern requiring attention, with 10.3% of the population overall and 19.7% of men using smokeless tobacco *(172)*.

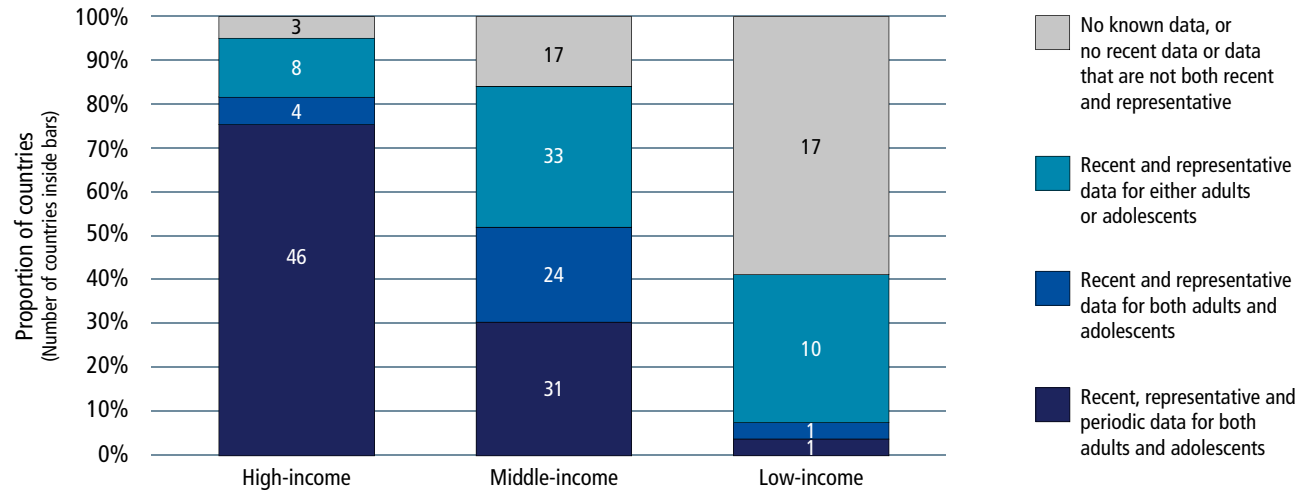
The second round of the STEPS survey is being planned and will provide an opportunity to monitor in-country trends in tobacco use among adults. Furthermore, the fourth round of GYTS is planned for 2024, demonstrating Tajikistan's strong commitment to monitor tobacco use by collecting recent, representative and periodic data for both adults and youth.

To address the issue of tobacco use, the National Strategy for Prevention and Control of Noncommunicable diseases and Injuries in the Republic of Tajikistan 2013–2023 includes the target of a 20% reduction in smoking and nasvai tobacco use (a form of smokeless tobacco) by 2023.

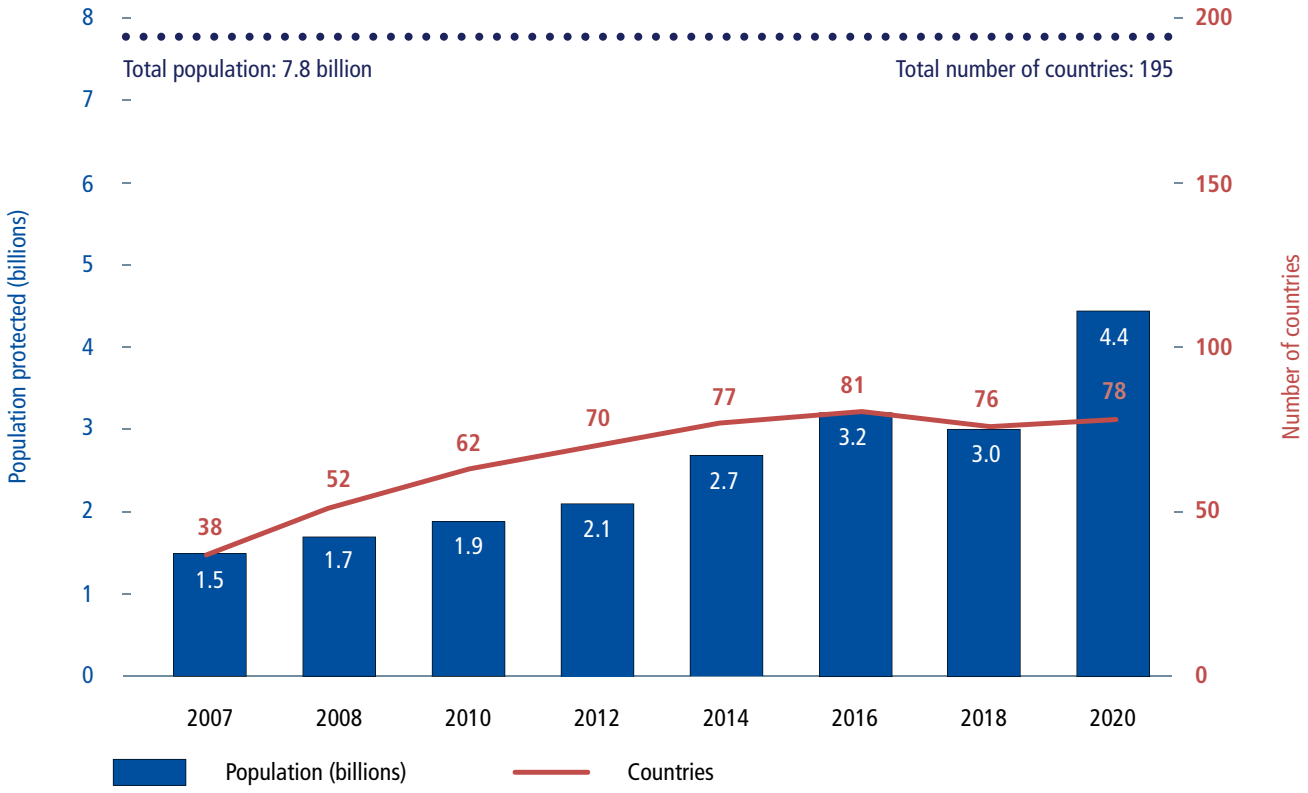
Reaffirming the country's commitment to tobacco control and benefiting from the political will generated by the evidence from prevalence surveys, Tajikistan became a Party to the WHO FCTC in 2013, and in 2018 passed a strong new tobacco control law. The new law applies to all tobacco products, including cigarettes and cigars as well as hookahs, smokeless tobacco, cigarettes and electronic cigarettes, and contains effective tobacco control measures in line with the WHO FCTC.

Students in Tajikistan fill out the Global Youth Tobacco Survey in 2019

MONITORING (2020)



PROGRESS IN MONITORING (2007–2020)



Since 2007, 2.9 billion people in 40 additional countries have become newly covered by tobacco use monitoring at best-practice level.

Ninety-five percent of high-income countries and 80% of middle-income countries have completed at least one national survey among adults or adolescents in the past 5 years. However, only 40% of low-income countries (12 countries) have done so. In 2020, there was a total of 117 countries not monitoring their tobacco epidemic at the highest level, however, 29 were just one step away from a comprehensive level of monitoring. If those 29 countries closed the gap to meet best-practice level there would be an addition 1.8 billion people (23% of the world's population) living in countries that ensure effective monitoring of the tobacco epidemic to better inform policy measures going forward.

Surveys play a strong role in informing tobacco policy development, China

China is the world's largest producer and consumer of tobacco products and is home to more than 300 million smokers (a quarter of the global total). Each year more than 1 million people in China die from diseases caused by tobacco *(91, 173)*. To monitor the tobacco epidemic, China regularly conducts nationally representative tobacco use surveys.

China undertook the Global Adult Tobacco Survey in 2010. The survey results provided important data to promote tobacco control policies in China, such as raising tobacco taxes and tobacco advertising, promotion and sponsorship bans. The results were also used to raise awareness in the general public through news stories and social media content, and to inform policy proposals highlighting the urgency for tobacco control.

To determine the seriousness of the tobacco problem among young people, China conducted the first round of a Global Youth Tobacco Survey (GYTS) in 2013–2014. At the time of the survey, China's national Advertising Law was being amended, and the results provided strong evidence for the promotion of relevant provisions to strengthen the regulation of tobacco advertising in public places. In 2019, China implemented a second round of GYTS, which showed that the use of ENDS among adolescents was increasing. The data from these surveys were used by public health organizations to advocate in the National People's Congress for provisions related to e-cigarettes in the "Minors Protection Law".

Because of its vastness and diversity, national surveillance in China is challenging: data collectors have struggled to reach households in remote areas and sometimes spend several days visiting people's homes to complete the questionnaires. However, robust research design has ensured that data are successfully gathered and are nationally representative. With China achieving the MPOWER best-practice level for monitoring tobacco use, 1.4 billion more people are now covered by nationally representative and periodically collected data that help fight the tobacco epidemic. China aims to continue to improve its tobacco surveillance system to strengthen tobacco control and reduce tobacco use.

Tobacco use survey reports from China

Over one billion people smoke, less than 100 million fewer than in 2007

In total, there are almost one billion tobacco smokers aged 15 years and above worldwide. This number has changed little since 2007 when there were just over one billion tobacco smokers. Currently, 847 million men smoke tobacco (46 million fewer than in 2007) and 153 million women (36 million fewer than in 2007).

Despite three out of four countries banning sales to minors under the age of 18 years – and another 10 countries setting an even higher age limit for tobacco purchases – an estimated 24 million children aged 13–15 around the world smoke, and 13 million use smokeless tobacco *(91)*.

Smoking rates are declining globally

Between 2007 and 2019, smoking rates decreased from a global average of 22.7% to 17.5%, showing a relative reduction of 23% over 12 years. Smoking rates in low-income countries are about half the rate of rates in high-income countries, and this ratio has changed little over the period. The relative reduction of the smoking rate between 2007 and 2019 in high-income countries was 20%, and in low-income countries 19%. In middle-income countries (in which three-quarters of the world's population lives) the relative reduction was only 12%.

While smoking rates are declining fastest on average in high-income countries, these countries collectively still have the highest average smoking rate of all income groups in 2019 (21.6%). During this same decade, smoking among men decreased from 37.5% to 29.6%, and smoking among women decreased from 8.0% to 5.3%. In 2019, smoking rates among women in high-income countries are still the highest of all country income groups (16.4%) – more than four times the average rate in low- and middle-income countries (3.5%). In contrast, the highest rates among men are seen in middle-income countries (35.3%), where it is almost double the average rate found in low-income countries (20.2%).

Currently there is no global estimate of ENDS use because the data are still scant in many regions of the world.

PROTECT PEOPLE FROM TOBACCO SMOKE

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".

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) *(174)*.

The harms of second-hand smoke

There is no safe level of exposure to second-hand smoke, and even brief exposure can cause harm *(175)*. Severe or fatal diseases, including heart disease, respiratory disease, and cancer *(41, 176, 177)* can result from exposure to second-hand smoke – and non-smokers living with smokers are at greater risk of such diseases, and premature death *(178)*. Children and infants are particularly susceptible and at increased risk for respiratory disease, middle-ear disease, and sudden infant death syndrome *(179–184)*. Pregnant women exposed to second-hand smoke are more likely to experience stillbirths, and their fetuses are more likely to have congenital malformations and lower birth weights *(184)*. The only way to adequately protect both smokers and non-smokers from second-hand smoke is to fully eliminate indoor smoking *(178)*. For example, an analysis based on data from Brazil suggested that, over a period of 16 years, up to 15 000 infant deaths may have been averted by the implementation of comprehensive smoke-free laws *(185)*.

Smoke-free must mean completely smoke-free

It is a misconception that smoke-free places that allow designated smoking rooms are indeed smoke-free and protect non-smokers from second-hand smoke. Such exceptions – designated smoking areas or rooms, ventilation systems, air exchanges, and filtration devices – are not protective, and cannot eliminate all second-hand smoke *(41, 186, 187)*. Indeed, such accommodations weaken the impact of smoke-free laws. The only way to fully protect people from second-hand smoke is to permit no exceptions *(187–189)*. This is because, when fully implemented, smoke-free laws are highly effective in decreasing exposure and enhancing indoor air quality for both smokers and non-smokers *(186, 190, 191)*.

The wider benefits of smoke-free laws are far-reaching

There is robust evidence that public spaces with smoke-free laws see reduced hospital admissions for acute coronary syndrome and reduced mortality from smoking-related illnesses *(187)*. Smoke-free laws make smoking less acceptable, less visible to children and youth, and encourage healthier behaviours such as not smoking in the home or in the car *(192–194)*. Smoke-free environments may also encourage smokers to reduce their tobacco use, make a quit attempt, and remain tobacco-free in the long-term *(191, 195)*.

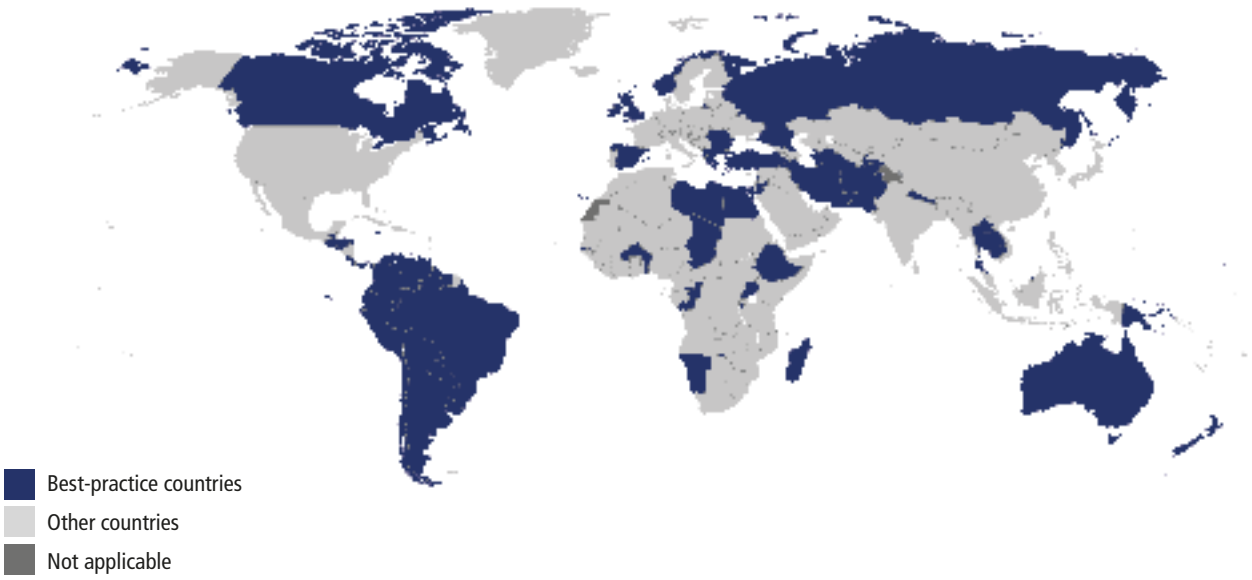
Smoke-free laws do not hurt business

In spite of tobacco industry assertions to the contrary, the best-designed studies report that smoke-free laws have no adverse economic consequences for businesses, including the hospitality industry *(196–198)*. In fact, when applied, smoke-free laws invariably receive overwhelming public support *(191, 199)* and encourage families with children to visit and consume in places previously avoided by them. Smoke-free laws are relatively easy to pass and economically and politically feasible to enforce, and an increasing number of countries continue to adopt comprehensive smoke-free legislation at national and subnational level.

Still, only 34% of countries and 24% of the world's population are protected by complete smoking bans

There has been sustained progress in the adoption of smoke-free laws since 2007, when only 10 countries in the world had a comprehensive smoking ban in place, covering just 3% of the world's population. Since then, 1.6 billion additional people in 57 additional countries are now covered by best-practice smoke-free laws. This means

SMOKE-FREE ENVIRONMENTS – HIGHEST ACHIEVING COUNTRIES, 2020



Countries and areas with the highest level of achievement: Afghanistan, Albania, Antigua and Barbuda, Argentina, Australia, Barbados, Benin, *Bolivia (Plurinational State of), Brazil, Brunei Darussalam, Bulgaria, Burkina Faso, Burundi, Cambodia, Canada, Chad, Chile, Colombia, Congo, Costa Rica, Ecuador, Egypt, El Salvador, *Ethiopia, Gambia, Greece, Guatemala, Guyana, Honduras, Iran (Islamic Republic of), Ireland, Jamaica, *Jordan, Lao People's Democratic Republic, Lebanon, Libya, Madagascar, Malta, Marshall Islands, Namibia, Nauru, Nepal, New Zealand, Niue, North Macedonia, Norway, occupied Palestinian territory, Pakistan, Panama, Papua New Guinea, *Paraguay, Peru, Romania, Russian Federation, *Saint Lucia, Seychelles, Spain, Suriname, Tajikistan, Thailand, Trinidad and Tobago, Turkey, Turkmenistan, Uganda, United Kingdom, Uruguay, Venezuela (Bolivarian Republic of).

* Country newly at the highest level since 31 December 2018.

that there are now 1.8 billion people (a quarter of the world's population) living in 67 countries where the smoking bans are at best-practice level.

While around one third of countries in each income group are covered by comprehensive smoke-free bans, more than half of these countries (39 of 67 countries) with comprehensive smoking bans in 2020 were middle-income countries. The complete absence of smoking bans, or minimal bans that are not comprehensive enough to protect people from the harms of second-hand smoke, are remarkably common in high-income countries. In fact, 18 high-income countries (30%) are leave their populations exposed to second-hand smoke in public places. The same is true for 25 middle-income countries (22%) and 13 low-income countries (45%).

In the past 2 years, five countries have joined the group of countries providing protection at best-practice level, with all public places completely smoke-free. One of these countries (Saint Lucia) went from a minimal law covering only health care and governmental facilities to a complete ban covering all public places and workplaces. Three countries (Bolivia (Plurinational State of), Ethiopia and Jordan) advanced from three to five public places covered by comprehensive smoke-free bans, and one country (Paraguay) extended the smoke-free ban to two additional places (restaurants and cafés/pubs/bars) to reach best-practice level.

37% of countries, and 38% of the world's population, have partial smoking bans that fall short of best practice

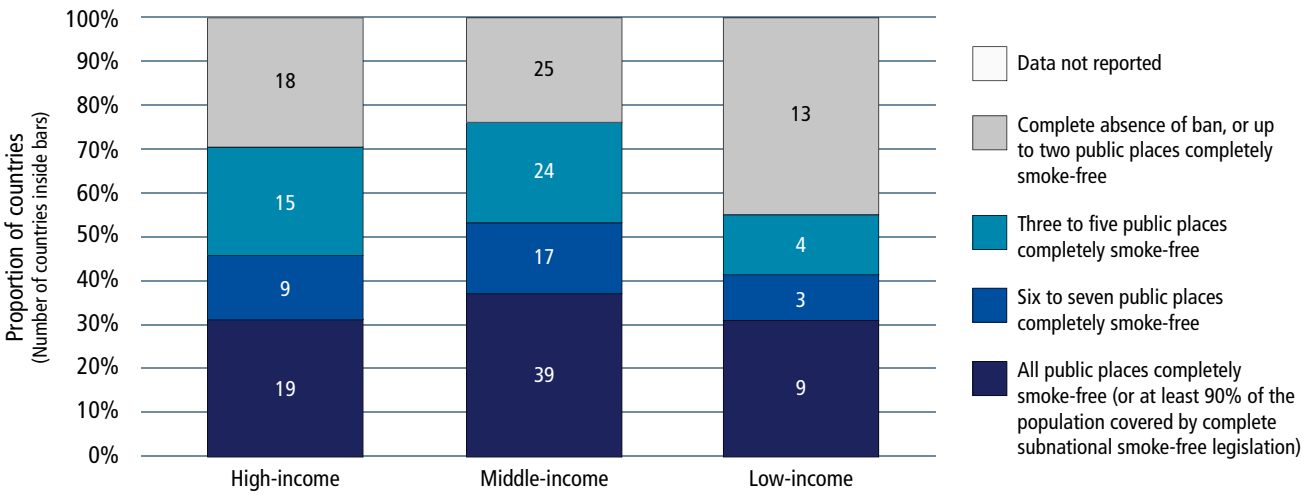
There are 12 countries, representing 124 million people, that only need to cover one more place with a smoking ban to join the 67 other countries with comprehensive smoke free laws: Tonga (universities); Democratic People's Republic of Korea (government facilities); Cook Islands, Mauritius, Ukraine and Zambia (indoor offices); Senegal (restaurants); Bhutan (cafés, pubs, bars); and Armenia, Cyprus, Georgia and Hungary (public transport). A further 17 countries with 1.6 billion people only need to cover two more places with a smoke-free ban to reach best-practice adoption.

Six countries (with 260 million people in total) improved their smoke-free law since 2018 but did not reach best-practice level in 2020. Fourteen countries (with 1.6 billion people in total) would achieve a comprehensive ban by simply removing the allowance of designated smoke rooms under the law.

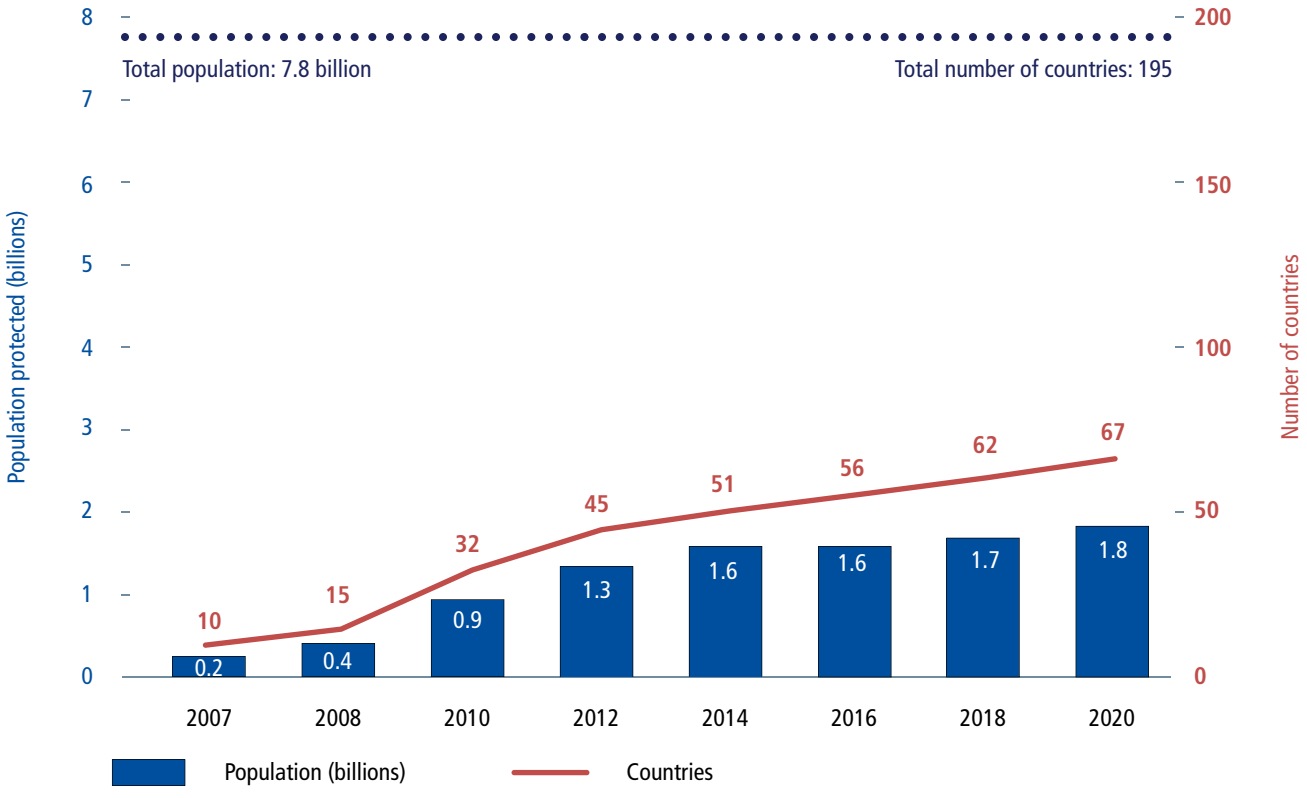
Of the 524 million people (6.7% of the world's population) who live in one of the world's 100 largest cities, only 299 million (in 47 cities) are protected by a comprehensive smoke-free law. Five of these cities (Bandung, Beijing, Hong Kong SAR, Jakarta and Medan) are covered by city-level smoke-free laws; seven are covered by state- or province-level smoke-free laws; and the remaining 35 are covered by national laws. Instead of waiting for national legislation to be adopted, the remaining 52 of the world's largest cities not currently protected by a national best-practice law could move ahead with a city, state or provincial level law to more swiftly protect their large populations.

Comprehensive smoke-free legislation is in place in one third of countries.

SMOKE-FREE LEGISLATION (2020)



PROGRESS IN SMOKE-FREE LEGISLATION (2007–2020)



Ethiopia hospitality sector goes smoke-free

In February 2019, Ethiopia passed a law requiring public buildings and workplaces (including hotels) to be 100% smoke-free (Proclamation No. 1112/2019). The law bans smoking or tobacco use in any indoor and outdoor space within 10 metres of any doorway, operable window, or air-intake mechanism of any public place or workplace.

The hospitality sector has some of the greatest levels of exposure to second-hand smoke, which means that if Ethiopia's smoke-free law enforcement and compliance is to be effective, this sector needs to be fully on board. In 2019, the Ethiopian Food and Drug Administration Authority (EFDA) – mandated to enforce and coordinate implementation of tobacco control activities in Ethiopia – undertook measures to scale up enforcement of the smoke-free regulation nationwide. EFDA raised awareness of the new law among staff nationally and locally, and introduced and promoted the new law among stakeholders, including hotels and resorts in Addis Ababa. Orientation workshops outlining the roles and responsibilities of hotel or resort owners were organized. More than 15 000 "No smoking" stickers and 3000 posters were printed and disseminated. These capacity-building activities were followed by compliance inspections. More than 16 000 inspections by regulators of a variety of public places across the country have been reported since 2019.

After the new proclamation, many hotels made huge efforts to implement the 100% smoke-free law. Customers are informed by "no smoking" signs and verbally during reservation and at check-in that that smoking is prohibited within the hotel and its premises. No designated smoking rooms or areas, or ashtrays, are available. Hotel staff have welcomed the new law because it protects both customers and staff.

No Smoking sign in hotel lobby, Addis Ababa

Paraguay bans smoking in indoor public spaces spurred by COVID-19 evidence

An estimated 5000 people died from tobacco-related diseases in 2019 in Paraguay, with almost 700 of these deaths associated with exposure to second-hand smoke *(200)*. The impact of tobacco use on the health of Paraguay's population has been further highlighted during the COVID-19 pandemic, as evidence showed that tobacco users were more likely to suffer severe consequences of the disease. In fact, the link between COVID-19 and tobacco use was part of the rationale behind strengthening tobacco control in Paraguay during 2020.

Since Paraguay ratified the WHO FCTC in 2006 the country has embarked on ensuring that its tobacco control policies align with the Convention. After several failed attempts to adopt a complete smoke-free law, the passing of Decree 4624 in December 2020 established that smoking traditional (cigars, cigarettes), heated, or electronic tobacco products would be permitted only in uncrowded open-air public spaces that are not transit areas for non-smokers. This closed the country's previously remaining gap, which allowed smoking areas in enclosed, hospitality spaces.

By making all indoor public spaces and workplaces, as well as public transport completely smoke-free, the decree brings Paraguay into compliance with a central mandate of the WHO FCTC: to protect populations from the harmful effects of tobacco. Simultaneously, the passage of this regulation made South America the first sub-region in the Americas to become entirely 100% smoke-free.

No smoking and no e-cigarette use signs in Paraguay

OFFER HELP TO QUIT TOBACCO USE

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". WHO FCTC Article 14 guidelines are intended to assist Parties in meeting their obligations under Article 14 of the WHO FCTC) *(174)*.

The desire to quit is strong, but help is too scarce

Tobacco control policies in many countries have successfully motivated people to make quit attempts. On average, across countries where the Global Adult Tobacco Survey has been conducted, over 60% of smokers indicated that they intend to quit, and over 40% had attempted to quit in the 12 months preceding the survey. While this is encouraging, support for quitting remains low *(91)*.

Quitting tobacco has instant benefits

The health benefits of quitting smoking can be felt within hours or even minutes. In just one day, quitting tobacco can help reduce a person's heart rate and blood pressure, and blood carbon monoxide levels can be expected to return to normal *(201)*. Within 3 months of quitting, circulation and lung function improves, and within 1–9 months, coughing and shortness of breath generally decrease *(201)*. The risk of death due to tobacco use also begins to decrease soon after quitting. The risk of death from lung cancer is reduced by 30–50% within 10 years of quitting smoking *(201)*, with current evidence suggesting that the risk of death from ischemic heart disease is halved within 5 years of quitting, and the risk of stroke returns to that of a never smoker within 5–15 years.

Support is vital to quitting

Nicotine is so addictive that a quarter of teenagers can become dependent upon it after smoking just three or four cigarettes, and after smoking five packs, nearly 60% are dependent *(202)*. Most people who use tobacco regularly do so because they are addicted to nicotine. This means they can therefore benefit greatly from a range of effective tobacco cessation interventions. Without cessation assistance, only around 4% of attempts to quit tobacco are successful *(203)*.

Proven cessation medications and professional support can double a tobacco user's chance of successfully quitting *(204)* and a number of different approaches have been developed to help people succeed. These can broadly be categorized as behavioural or pharmacological interventions, and differ in terms of their intensity, cost and effectiveness. Combining both behavioural and pharmacotherapy interventions is more effective and can double the chances of successfully quitting (a 70% to 100% relative increase compared to brief advice or support) *(205)*.

Behavioural interventions are efficient and present an opportunity to reach potential quitters

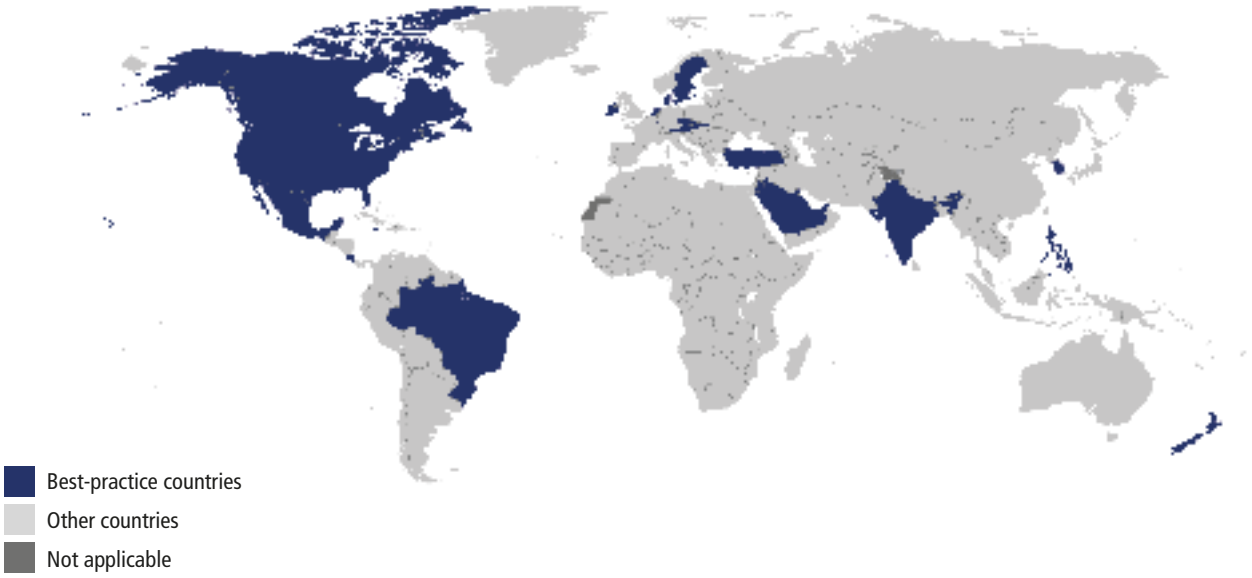
When a tobacco user visits a primary or specialized care service it presents an opportunity for the health-care worker to offer or provide them with personalized counselling. This "brief advice" from health professionals – given as part of a routine consultation or interaction – makes efficient use of the existing health-care system *(205)*.

Toll-free quit lines are another convenient way for potential tobacco quitters to access brief and potentially intensive behavioural counselling. Those that use quit lines increase their absolute quit rate by 4 percentage points, which represents a doubling of success compared to those who attempt to quit without assistance *(204)*. This rate can be further increased if the quit line is "proactive" and counsellors make follow-up calls to potential tobacco quitters. Recent app-based interventions for cessation are promising, with text message interventions increasing the absolute quit rate by 4% *(206)*.

Pharmacological interventions are diverse and can work better in combination

The effectiveness of pharmacotherapies to assist quitting tobacco is generally higher compared to people who did not use an intervention. The quit rate increase ranges from 6% for a single type of NRT to almost 15% for Varenicline. Pharmacotherapy cessation interventions include NRTs, as well as medications that do not contain nicotine but act to alleviate tobacco withdrawal symptoms. Combining more than one NRT (patches and a faster-acting form) can also increase NRT effectiveness.

TOBACCO DEPENDENCE TREATMENT – HIGHEST ACHIEVING COUNTRIES, 2020



Countries with the highest level of achievement: *Austria, Brazil, Canada, *Cook Islands, Costa Rica, Czechia, Denmark, India, Ireland, Jamaica, *Jordan, Kuwait, Luxembourg, Mexico, Netherlands, New Zealand, *Philippines, Republic of Korea, Saudi Arabia, Singapore, Slovakia, Sweden, *Tonga, Turkey, United Arab Emirates, United States of America.

* Country newly at the highest level since 31 December 2018.

Over 30% of the world's population are covered by comprehensive cessation services

As of 2020, comprehensive tobacco cessation services are in place for 2.5 billion people in 26 countries – or 32% of the world's population. The number of countries adopting comprehensive tobacco cessation measures lags behind the other MPOWER measures, with only 17 high-income countries and nine middle-income countries offering comprehensive cessation support. No low-income countries currently offer best-practice services.

Globally, almost all high-income countries (89%) offer at least partial coverage of the cost of cessation services. Most middle-income countries (72%) do the same, while 18% of low-income countries offer some cost-coverage for services. There are 32 countries that provide no cessation support at all. These numbers show that while work has begun, there is still much more to be done.

Demand for cessation services is high and this must be met

Since 2018, the number of countries offering comprehensive cessation services increased from 24 to 26, and the proportion of the world's population covered by comprehensive cessation services increased from 31% to 32%. Five countries with a combined population of 129 million (Austria, Cook Islands, Jordan, Philippines and Tonga) began offering comprehensive cessation services in the past 2 years. Disappointingly, however, the number of people protected by this has been offset by three countries (Australia, El Salvador and Senegal, representing 48 million people) dropping out of the best-practice group in the same period.

Only four high-income countries (7% of the 61 high-income countries) offer no support to help users quit, while 12 middle-income countries (11%) and 16 low-income countries (55%) offer no support to tobacco users.

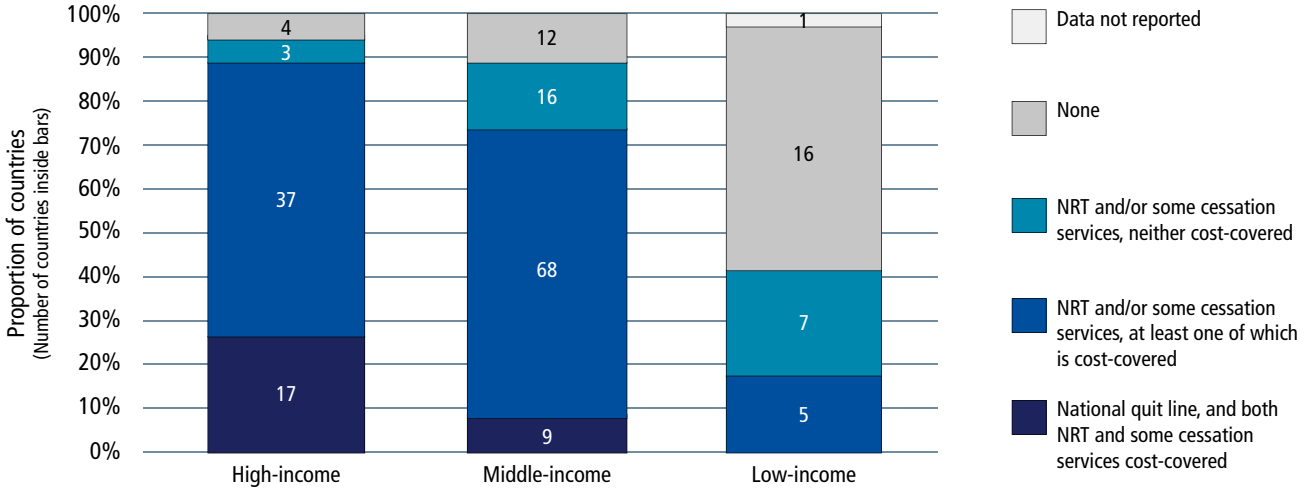
While progress has been slower in "O" than other MPOWER measures since 2007, best-practice adoption of cessation services nonetheless increased from 10 countries (5% of the world's population) in 2007 to 26 countries (32% of the world's population) in 2020 – meaning 2.1 billion additional people are now protected by this measure. The population offered best-practice cessation services in 2020 is six times what it was in 2007 (when it was only 406 million people).

Sixty-seven countries – home to 2.2 billion people – provide cessation support packages that are missing only one element to achieve best-practice implementation: (i) a national toll-free quit line; (ii) cost-coverage of NRT; or (iii) cost-coverage of cessation services in clinical settings or in the community. Of these 67 countries, 26 need to add a national toll-free quit line in order to bring comprehensive tobacco cessation support to an additional 827 million people, while 38 need to offer cost-covered NRTs to cover an additional 1.3 billion people. Three countries need to cost-cover one or more of its cessation services in clinical settings or the community so that an additional 50 million people will be covered.

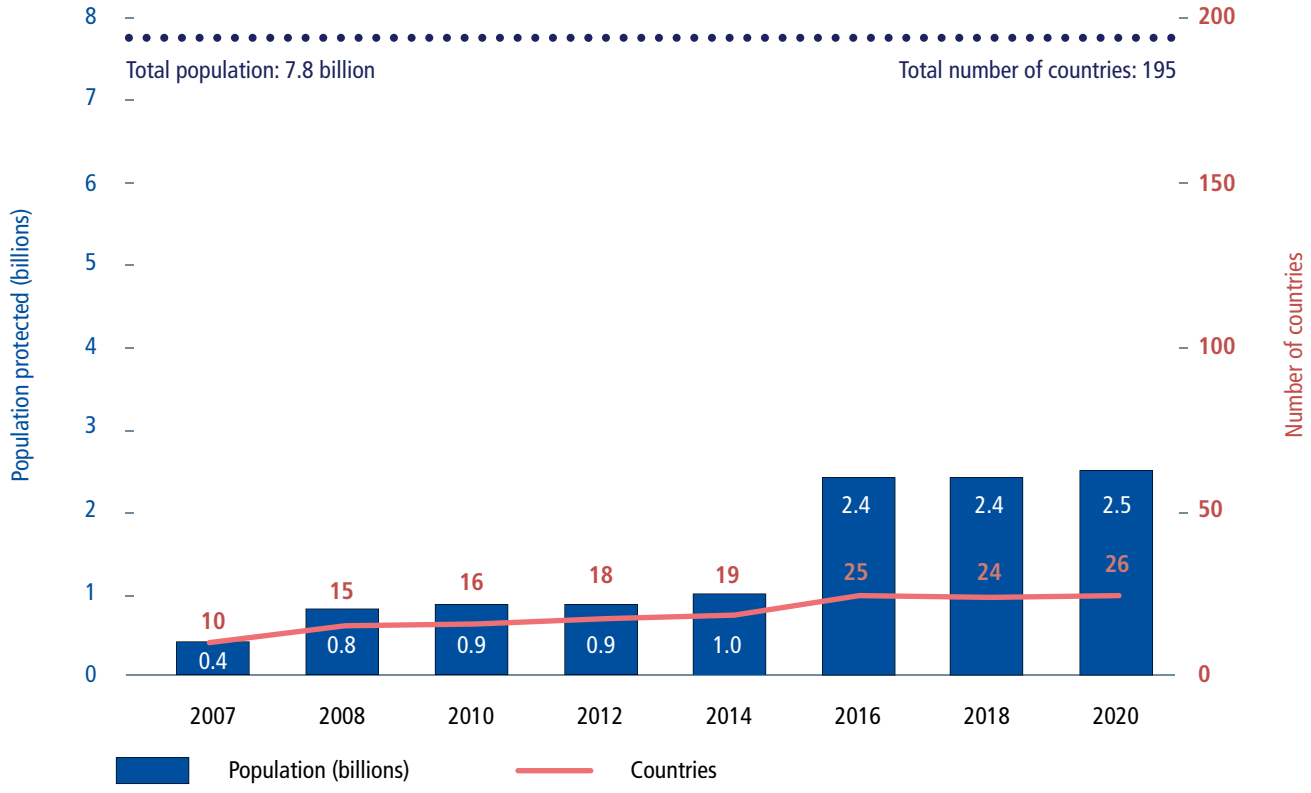
Amid significant health-care service disruptions during the COVID-19 pandemic, 120 million additional people now have access to toll-free quit line services and other quitting tools.

Of the 524 million people (6.7% of the world's population) who live in one of the world's 100 largest cities, only 252 million (in 48 cities) are protected by a comprehensive cessation service. Two of these cities are covered by city-level policies (Hong Kong SAR and London) and the remaining 46 are covered by national policies. Instead of waiting for a national policy to be put in place, the remaining 52 large cities not currently protected by a national best-practice policy could move ahead with a city, state or provincial level policy to help their large populations sooner.

TOBACCO DEPENDENCE TREATMENT (2020)



PROGRESS IN TOBACCO DEPENDENCE TREATMENT (2007–2020)



Tonga becomes first Pacific Island Country to offer comprehensive cessation support

Tonga's smoking prevalence is among the highest in the world, with 40% of males and 16% of females smoking in 2017 (aged 18 to 69) *(207)*. To address this, Tonga has implemented laws and policies to reduce the affordability of tobacco; prevent tobacco advertising, promotion and sponsorship; expand smoke-free public places; and strengthen enforcement. These actions have increased the demand for cessation services, with 53.9% of male smokers and 62.9% of women smokers trying to quit smoking at least once in the past 12 months *(207)*.

The Ministry of Health's "Quit Smoking Now"campaign, launched in 2016, and delivered through TV, radio, social media and outdoor signage, focuses on increasing motivation to quit, providing support to people who want to quit, and advocating for stronger policies to restrict the sale, distribution and use of tobacco products in Tonga.

A national toll-free quit line, the first of its kind in the South Pacific, was launched in 2016 as part of the campaign. Trained quit line advisors answer calls Monday to Friday during business hours to provide brief counselling support. One in three tobacco users supported through the quit line successfully quit for at least six months.

Also as part of the government's comprehensive programme on cessation, regular brief tobacco intervention trainings are conducted for primary health-care workers throughout Tonga, and the government has also partially covered the cost of nicotine replacement therapies.

An evaluation in 2017 revealed that 95% of Tongans between the ages of 18 and 64 were aware of the campaign and awareness of the quit line increased from 40% to 74% *(208)*. Tonga's case highlights that strong government commitment and dedicated resources are key to tobacco cessation. These efforts received international recognition when the Ministry of Health and the Tonga Health Promotion Foundation won the World No Tobacco Day Award in 2018.

Quit line advertisement in Tonga

Scaling up cessation services in Jordan

With a 41% smoking rate, tobacco is the leading risk factor for noncommunicable diseases (NCDs) in Jordan, causing nearly 17% of all deaths in 2019 *(200)*. According to the country's 2019 STEPS Survey, about 50% of adult smokers in Jordan had tried to quit smoking in the past 12 months, yet only a small percentage of them had access to support to do it *(209)*.

In response, the Jordanian Ministry of Health greatly scaled up national tobacco cessation services through its partnership with the Access Initiative for Quitting Tobacco, a joint initiative between WHO, the UN Interagency Task Force on NCD Prevention and Control, and PATH, with support from the Coalition for Access to NCD Medicines and Products. The initiative is designed to help countries deliver comprehensive tobacco cessation services during the COVID-19 pandemic. In 2020, Jordan became the fourth country in the WHO Eastern Mediterranean Region to provide comprehensive tobacco cessation services, achieving this through a newly established national toll-free quit line, strengthened tobacco cessation support in primary care, and free access to NRT.

Jordan also received donated NRT products to help 5400 frontline workers, patients with NCDs, and refugees quit smoking, greatly expanding cessation services in the country's primary health-care centres. In addition to this support, tobacco users can also freely access WHO's first virtual health worker, Florence, who helps people develop a personalized plan to quit and can refer them to cessation services such as the quit line.


Tobacco cessation consultation in Jordan

WARN ABOUT THE DANGERS OF TOBACCO

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".

WHO FCTC Article 11 guidelines are intended to help Parties meet 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) *(174)*.

Graphic health warning labels are critical

Many tobacco users still do not know, or do not fully understand, the dangers to which they expose themselves and others by consuming tobacco *(210)*. In this context, consumers have a right to be warned about the health impacts of the products they buy and use *(210–212)*. Graphic health warnings provide accurate information about the risks associated with tobacco use and can help encourage tobacco users to reduce their consumption and quit *(213, 214)*. Effective health warnings can also communicate the risks of exposing others to second-hand smoke *(215)*. There is significant evidence that accurate, prominent warnings prompt tobacco users to think about quitting, and can result in decreased tobacco use *(216, 217)*.

The power of packaging

Packaging allows companies to "sell" their product by manipulating people's perception of taste, strength, and the health impacts associated with it *(218)*. Marketing terms suggesting reduced health risks including "light", "ultra-light", and "low tar" are deceptive and should be banned *(216)*. However, this may not be sufficient to decrease the misperceptions of reduced risk associated with these cigarette types *(219, 220)*. Other requirements, such as plain packaging, may help to transform people's perceptions.

Graphic health warnings on tobacco product packaging are a reliable way of reaching users with important information *(221)* and are a relatively cheap public communication method for governments *(221)*. Graphic health warnings are well-supported by the public – more than most other tobacco control measures *(215, 222)*.

These warnings are most effective when pictorial, graphic, comprehensive, and strongly worded *(223, 224)*, and are particularly effective in deterring youth and young adults from cigarette and smokeless tobacco use *(225)*. To be effective they should be large, cover at least half of a package's surface (front and back) *(221)*, and should refer to specific health effects from tobacco use. To maintain their impact, labels should be rotated on a regular basis *(226)*. Over time, strengthening the warnings can increase knowledge about the harms of tobacco, and can increase quit attempts and reduce cigarette consumption *(227)*.

Strong graphic package warnings are in place for almost 4.7 billion people in 101 countries – covering over half of the global population (60%) and over half of all countries. More people are protected by this MPOWER measure than any other, with 52% of countries adopting graphic warning requirements at the highest level: 69% of high-income countries, 50% of middle-income countries and 24% of low-income countries. Only 43 countries (six high-income, 24 middle-income and 13 low-income) adopted warnings that cover less than 30% of the pack or have not adopted any warning labels, and 51 others have issued warnings that cover 30% but less than 50% of the principal package display areas (below the minimum required by the WHO FCTC).

HEALTH WARNING LABELS – HIGHEST ACHIEVING COUNTRIES, 2020

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

* Country newly at the highest level since 31 December 2018.

More than half of all countries are now covered by graphic health warnings on tobacco packaging at best-practice level

In the past 2 years, eight additional countries, with 9% of the world's population, have joined the 93 countries that require large graphic warning labels on tobacco products. Two are high-income countries (United States and Qatar), three are middle-income countries (Mauritania, Montenegro and Nigeria), and three are low-income countries (Ethiopia, Gambia and Niger). All eight countries strengthened existing laws to meet best-practice level.

Of all MPOWER measures, large graphic pack warnings on cigarettes have seen the most progress since 2007 both in terms of countries acting and population covered by a best-practice policy. Since 2007, when only nine countries (5% of the world's population) had large graphic pack warnings on cigarettes, an additional 92 countries (with 55% of the world's population) have acted to meet comprehensive graphic warning requirements.

More countries have adopted strong graphic health warnings than any other MPOWER measure

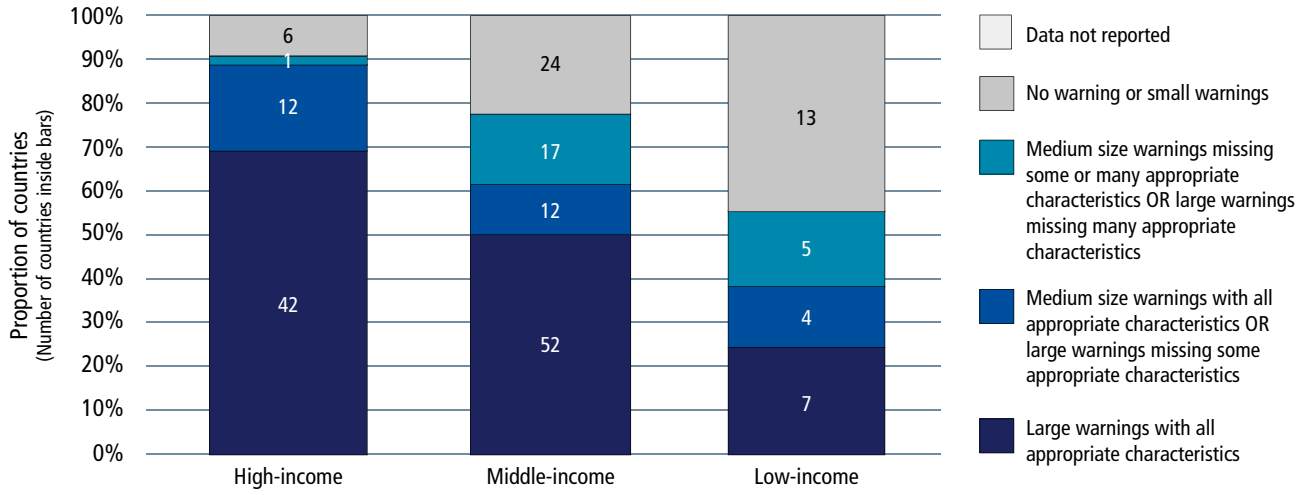
Twenty-three countries, representing 658 million people, are only one step away from best-practice graphic health warnings.

Eight countries, with a total of 435 million people, need only increase the size of the graphic health warnings to cover up to another 20% of the packages to meet all best-practice criteria for large graphic warnings. An additional six countries, with a total population of 20 million, need only add a requirement for a graphic image (instead of text only) to meet best-practice. Nine other countries, with a total population of 203 million, have mandated large graphic warnings covering at least 50% of the pack, and need only add one criterion to achieve best practice – eight of these need only mandate that the warnings appear on each package and any outside packaging used in the retail sale, and one country needs only to stipulate rotation of warnings.

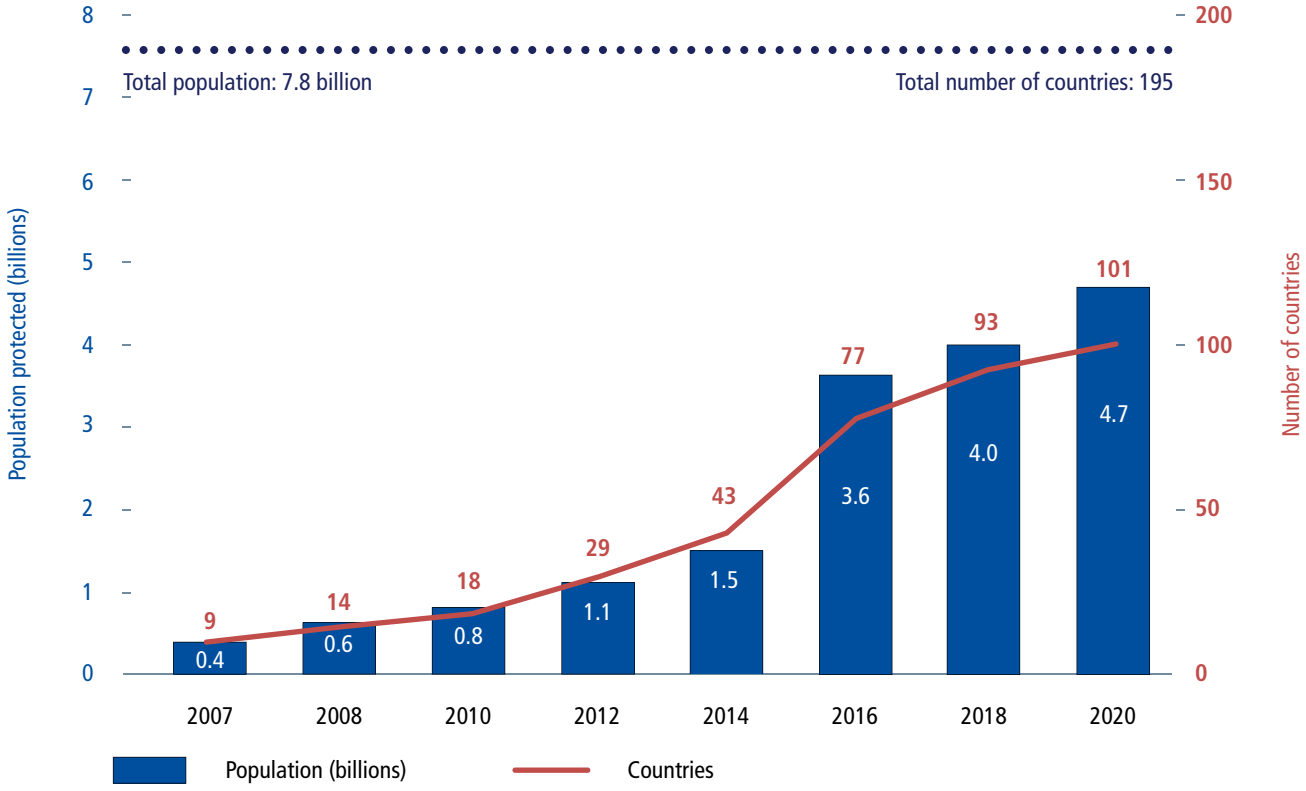
Seven countries (Iraq, Israel, Japan, Maldives, Niue, Uganda, Uzbekistan), with 255 million people, improved their legislation since 2018 but did not reach best-practice level in 2020.

Of the 524 million people (6.7% of the world's population) who live in one of the world's 100 largest cities, only 379 million (in 67 cities) are informed about the dangers of tobacco use by the display of large graphic warning labels on their cigarette packs. One of these cities is covered by city-level legislation (Hong Kong SAR) and the remaining 66 are covered by national laws.

HEALTH WARNING LABELS (2020)



PROGRESS IN HEALTH WARNING LABELS (2007–2020)



An increasing number of countries require plain packaging of tobacco products

Several countries are moving forward with plain packaging. By the end of 2020, 17 countries had adopted legislation mandating plain packaging of tobacco products and had issued regulations with implementation dates:

- Australia
- Belgium
- Canada
- France
- Hungary
- Ireland
- Israel
- Netherlands
- New Zealand
- Norway
- Saudi Arabia
- Singapore
- Slovenia
- Thailand
- Turkey
- United Kingdom
- Uruguay

Mauritania goes from no health warnings to large graphic health warnings packaging requirements

Mauritania has been Party to the WHO FCTC since 2005, and in June 2018 introduced its first tobacco control legislation – the culmination of a long-running effort that included the involvement of dedicated parliamentarians, civil society (including the Centre for Tobacco Control in Africa), and the WHO Country Office.

A 2018 law concerning the Production, Importation, Distribution, Sale, Advertising, Promotion and Consumption of Tobacco and its Products, stated that packages or cartridges, and all forms of outer packaging of tobacco products, must include a health warning covering at least 70% of the surface on both sides. These warnings must include pictures and text, and be written in Mauritania's official languages.

Since then the Minister of Health has issued a decree in February of 2020, regulating the warnings. This came into force on May 30, 2021. The decree prohibits the inclusion of descriptive terms or other signs that directly or indirectly give the impression that a particular tobacco product is less harmful than others, including terms such as "low tar", "light", "ultralight" or "soft", etc, or other terms that have a similar meaning in other languages. The requirements apply to packs and any external packaging, including cartons.

Mauritania is one of the rare examples of a country that has gone from no warning requirements to large pictorial warnings required, with all appropriate characteristics and more. The country is now one of the 14 highest achieving countries of the African Region in 2020 in terms of health warning labels (joined recently by Ethiopia and Gambia), and has already banned smoking in public places and on public transport.

Graphic health warning label, Mauritania

Graphic health warnings mark the biggest change in labelling in four decades in the United States

Cigarette smoking remains the leading cause of preventable disease, disability, and death in the United States,[1] and authorities have therefore taken steps to strengthen measures to warn the public of the risks associated with tobacco use.

After several attempts to issue and implement regulations that align with the Family Smoking Prevention and Tobacco Control Act 2009 (attempts that were met by legal challenges from the tobacco industry), a new rule issued by the FDA in March 2020 has mandated 11 new warnings on various health conditions to occupy the top 50% of the front and rear of tobacco packages and at least 20% of the top of cigarette advertisements. The warnings include a broad selection of text as well as graphic images.

This move is considered the most significant change in cigarette labelling in the United States since 1984. It reflects successive governments' commitment to protect the population from the harms caused by tobacco and to close the gaps in public awareness about the adverse effects of tobacco. It is anticipated that the proposed rule will take effect in July 2022,[1] and will place the United States as the 22nd country in the Region of the Americas to attain the highest achievement for "W" as per the MPOWER measures.

One of 13 proposed warning label featuring text statements accompanied by photo-realistic colour images depicting lesser known health risks of cigarette smoking *(228)*.

1 US Food and Drug Administration. See https://www.fda.gov/regulatory-information/search-fda-guidance-documents/required-warnings-cigarette-packages-and-advertisements-small-entity-compliance-guide-revised for more information.

ANTI-TOBACCO MASS MEDIA CAMPAIGNS

Article 12 of the WHO FCTC states:

"Each Party shall promote and strengthen public awareness of tobacco control issues, using all available communication tools, as appropriate. … each Party shall … promote … broad access to effective and comprehensive educational and public awareness programmes on the health risks including the addictive characteristics of tobacco consumption and exposure to tobacco smoke; … [Each party shall promote] public awareness about the risks of tobacco consumption and exposure to tobacco smoke, and about the benefits of the cessation of tobacco use and tobacco-free lifestyles; … [each party shall promote] public awareness of and access to information regarding the adverse health, economic, and environmental consequences of tobacco production and consumption". WHO FCTC Article 12 guidelines are intended to assist Parties in meeting their obligations under Article 12 of the WHO FCTC *(174)*.

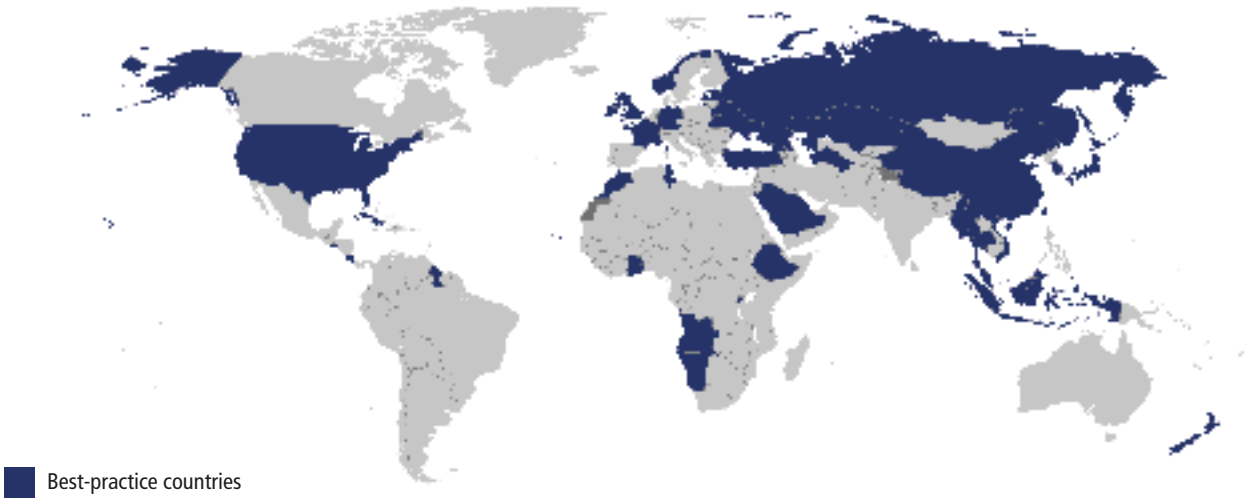
Hard-hitting mass media campaigns are effective and essential

Mass media anti-tobacco campaigns are commonly used in high-income countries but have been shown to be effective in low- and middle-income countries as well *(229)*. There is strong evidence that if well-designed and hard-hitting, they can reduce tobacco use, increase quit attempts, lower youth initiation rates and reduce second-hand smoke exposure *(230–235)*. As such it is imperative that these campaigns form an important part of all comprehensive tobacco control strategy or programmes *(236)*.

Television campaigns using graphic imagery are especially effective in motivating quit attempts *(234, 236)*. Sustained campaigns involving multiple communication channels (i.e. TV, radio and the Internet) are more likely to have a longer-term impact on tobacco use behaviour, but campaigns with a duration of as little as 3 weeks can also have a positive impact *(231, 237–239)*.

While expensive, mass media campaigns can quickly and efficiently reach large populations *(234)* with messages and information on how to quit, and can include toll-free quit line numbers on campaign products, e.g. at the bottom of posters or at the end of TV advertisements.

ANTI-TOBACCO MASS MEDIA CAMPAIGNS – HIGHEST ACHIEVING COUNTRIES, 2020



Best-practice countries
Other countries
Not applicable

Countries with the highest level of achievement: *Angola, Belarus, *Cabo Verde, *China, Costa Rica, *Cuba, El Salvador, Estonia, *Ethiopia, France, Georgia, Germany, *Ghana, *Guyana, Indonesia, Ireland, *Japan, *Kazakhstan, *Latvia, *Malaysia, *Monaco, *Morocco, Myanmar, *Namibia, New Zealand, Norway, *Palau, Qatar, Republic of Korea, *Russian Federation, *Rwanda, Saint Lucia, *Saudi Arabia, *Thailand, Timor-Leste, Togo, Tonga, *Tunisia, Turkey, Turkmenistan, *Tuvalu, *Ukraine, United Kingdom, United States of America, Viet Nam.

* Country newly at the highest level since 31 December 2018.

Mass media campaigns have been neglected for too long – more than half of countries ran no recent national campaign.

More than half of the world's population were not exposed to a best-practice mass media campaign in 2020

Almost half of the world's population (3.3 billion people) live in a country that has aired at least one national anti-tobacco mass media campaign at best-practice level in the past 2 years. Another 39% of the population lived in countries that conducted mass media campaigns of at least 3 weeks' duration, with some but not all best-practice criteria.

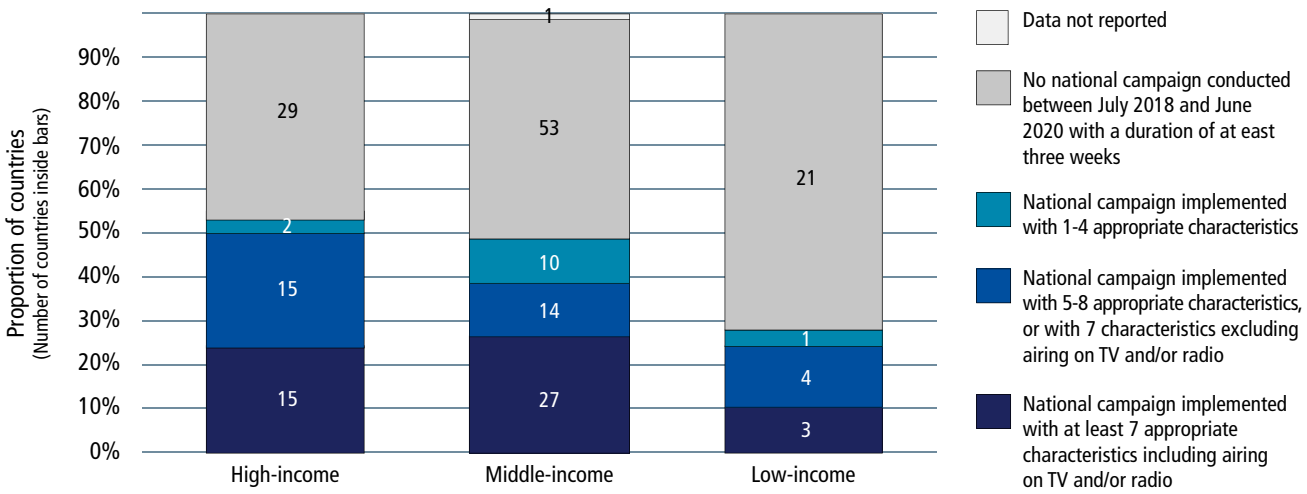
Of the 45 countries that ran a best-practice anti-tobacco campaign during that time, 15 were high-income countries (25% of high-income countries); 27 were middle-income countries (26% of middle-income countries); and three were low-income countries (10% of low-income countries). More than half of the countries in the world *(103)* have not run any kind of sustained campaign in the past 2 years, leaving about 17% of the world's population unreached by any national campaign.

National mass media efforts continue to lag

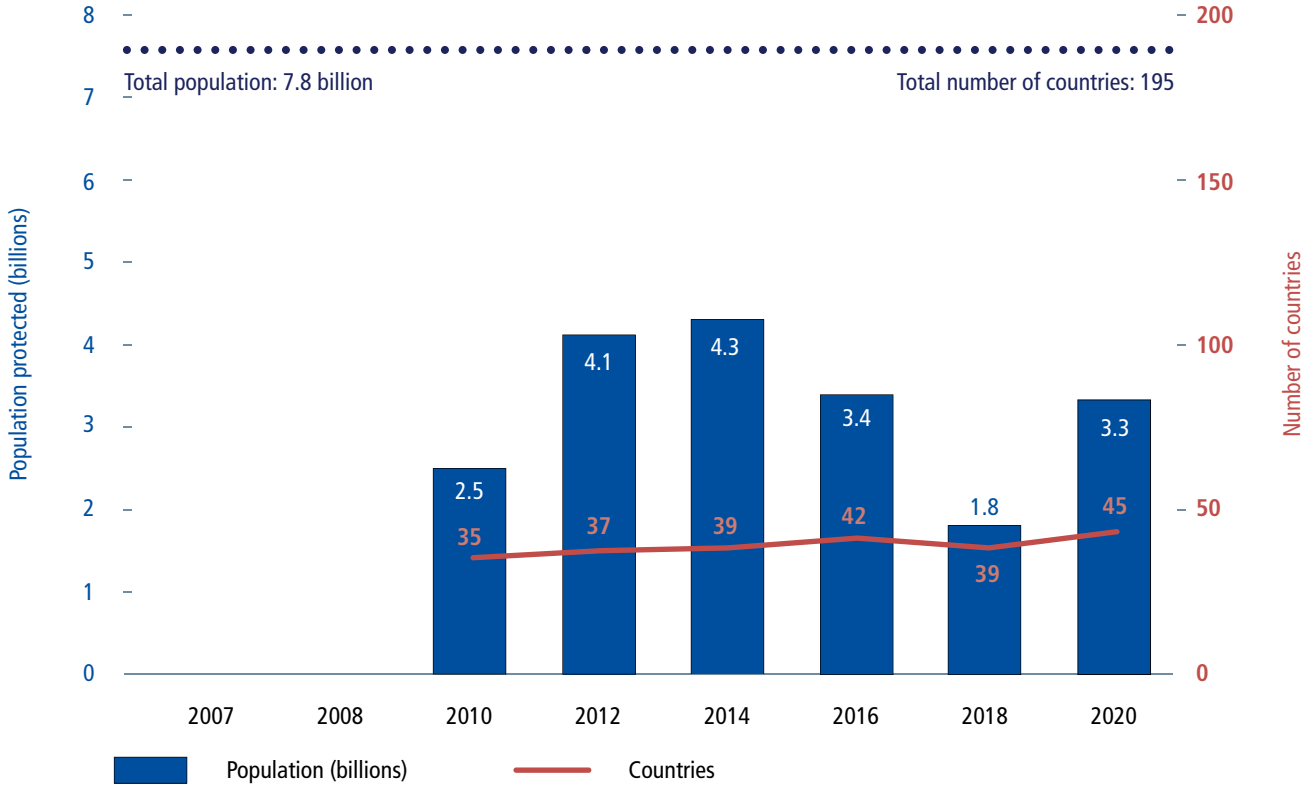
People in low-income countries are the least exposed to anti-tobacco mass media: over 64% of the population of low-income countries, living in 21 countries, have not been exposed to any kind of national campaign in the past 2 years. The first period for which mass media campaigns were monitored was 2009-10. Since then, the total number of people exposed to a best-practice mass media campaign rose until 2013-14, when 4.3 billion people lived in countries airing such campaigns. Regrettably, this number dropped to 1.8 billion people in 2018. In 2020, the campaign implemented in China brings the total population back up to 3.3 billion.

Most countries that run campaigns do not repeat the effort every 2 years. Since 2009-10, only three countries have run a best-practice campaign every 2 years (Turkey, United Kingdom and Viet Nam). Seven countries ran a best-practice campaign five times over the six 2-year periods, missing only one opportunity to sustain the series of campaigns (Australia, El Salvador, Ireland, Malaysia, Norway, Republic of Korea and United States).

MASS MEDIA CAMPAIGNS (2020)



PROGRESS IN ANTI-TOBACCO MASS MEDIA CAMPAIGNS (2007–2020)



Bringing "smoke-free" home: a mass media campaign in Thailand

Tobacco use is responsible for over 70 000 deaths annually in Thailand, and tobacco-related illness is the country's leading cause of death (including approximately 9000 from second-hand smoke *(200)*. While the Non-Smokers' Health Protection Act B.E. 2535 (1992) made all public places non-smoking areas, it was recognized that homes are the places that families, and especially children, spend most of their time, and where they are likely to be exposed to second-hand smoke. Notably, a survey by Thailand's National Statistical Office in 2017 found that as many as 17.3 million people across the country were exposed to second-hand smoke in their homes.

In 2019, partners from across sectors worked together to develop a mass media campaign to prevent young children from exposure to second-hand smoke at home, which was the theme of the established Action on Smoking and Health (ASH Thailand) "Smokefree Home" project. The campaign was strategically developed collaboratively by partners from across sectors employing the findings of focus group discussions with the target audience, and media such as television, radio, print, outdoor billboards, online advertising, and transit advertising to maximize the impact of the campaign. The main objectives of the campaign titled "Stop destroying your child's dream" were to promote social awareness of the dangers of second-hand smoke in homes and to encourage smokers to quit for the benefits of the family, especially young children. The campaign is currently being evaluated for reach and impact.

Since 2010, when mass media data was first collected for this report, Thailand has consistently run anti-tobacco mass media campaigns with at least six of the eight criteria used to assess level of achievement.

The "Stop destroying your child's dream" anti-tobacco campaign, Thailand

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"*(41)*. WHO FCTC Article 13 guidelines are intended to assist Parties in meeting their obligations under Article 13 of the WHO-FCTC *(174)*.

TAPS bans help protect the population against the tobacco industry

Despite tobacco companies' insistence that the billions of dollars they spend annually on advertising is only to increase their market share at the expense of competitors, there is indisputable evidence that TAPS activities also increase or sustain tobacco use by both the effective recruitment of new tobacco users or by discouraging tobacco users from quitting *(231, 240, 241)*.

Tobacco companies use a mix of marketing techniques tailored to different groups and target specific populations through new products that circumvent regulations and maintain social acceptability *(242)*. Youth and women are especially targeted in low- and middle-income countries *(234)*. Tobacco advertising and promotion increases the likelihood that adolescents will start to use tobacco which may lead to a higher prevalence of adult tobacco users in the future *(241, 244, 245)*.

Promotional and sponsorship activities can also influence businesses that may benefit from the billions of dollars invested in TAPS themselves.

And, wherever possible, the tobacco industry attempts to avoid regulation by adopting weak voluntary advertising codes, discrediting the evidence base for restrictions, and using both lobbyists and litigation to avoid TAPS bans *(231, 246)*.

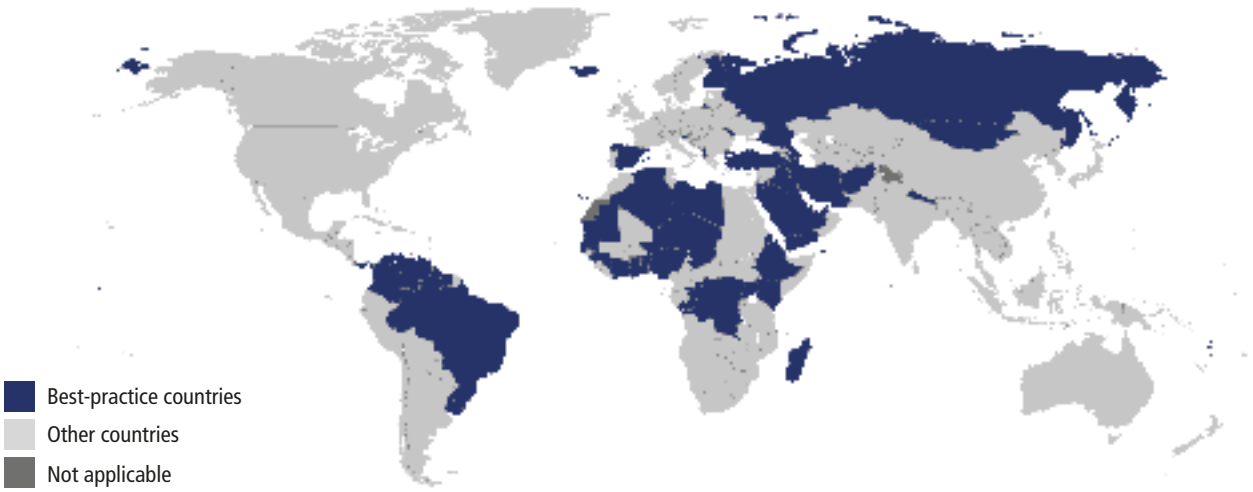
TAPS bans reduce tobacco use

TAPS bans are effective in reducing tobacco sales and tobacco consumption in all parts of the world *(246–249)* and their impact may be even more dramatic in low- and middle-income countries than in high-income countries *(249)*. Comprehensive bans on all TAPS activities are a key tobacco control strategy and policy measure *(174, 247)* and are one of only two WHO FCTC provisions with a mandatory timeframe for implementation (the other one is Article 11 of the Convention).

TAPS bans must be comprehensive and well-enforced

TAPS bans must be comprehensive because partial bans have little or no effect *(231, 247, 250)*. When bans are not comprehensive, tobacco companies exploit legal loopholes or simply shift their investments to forms of promotion that are not banned *(247, 251, 252)*. Bans must therefore cover all TAPS activities, including direct promotion (e.g. TV advertising, radio, print publications and billboards as well as advertising at points of sale); and indirect promotion (e.g. brand stretching and brand sharing, free distribution, price discounts, product placement on TV/films and sponsorships including "corporate social responsibility" programmes) *(253)*. Bans must also include point of sale product displays that "normalize" the products, prompt people to smoke, encourage impulse purchases, interfere with quitting, and increase the susceptibility of children and youth to see and try the products *(254–259)*.

ENFORCE BANS ON TOBACCO ADVERTISING, PROMOTION AND SPONSORSHIP – HIGHEST ACHIEVING COUNTRIES, 2020



Countries with the highest level of achievement: Afghanistan, Albania, Algeria, Antigua and Barbuda, Azerbaijan, Bahrain, Benin, Brazil, Chad, Colombia, Congo, *Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Eritrea, *Ethiopia, Finland, Gambia, Ghana, Guinea, Guyana, Iceland, Iran (Islamic Republic of), *Iraq, *Jordan, Kenya, Kiribati, Kuwait, Libya, Madagascar, Maldives, Mauritania, Mauritius, Mongolia, Nepal, Niger, Nigeria, Niue, Panama, Qatar, Republic of Moldova, Russian Federation, Saudi Arabia, Senegal, Seychelles, Slovenia, Spain, Suriname, Togo, Turkey, Tuvalu, Uganda, United Arab Emirates, Uruguay, Vanuatu, *Venezuela (Bolivarian Republic of), Yemen.

* Country newly at the highest level since 31 December 2018.

Bans must also encompass the financial or in-kind contributions that tobacco companies may make to another entity for deserving or socially responsible causes. These contributions fall within the definition of tobacco sponsorship in article 1(g) of the WHO FCTC and should therefore be banned *(253)*. Corporate social responsibility activities are typically employed to convince governments to delay and refrain from implementing tobacco control programmes and should also be included in TAPS bans *(259)*.

Legislation should use clear, uncomplicated language and unambiguous definitions, and avoid providing lists of prohibited activities that are, or could be understood to be, exhaustive *(249)*. Moreover, legislation must be coupled with strong enforcement and monitoring, with high financial penalties for violations *(174)*.

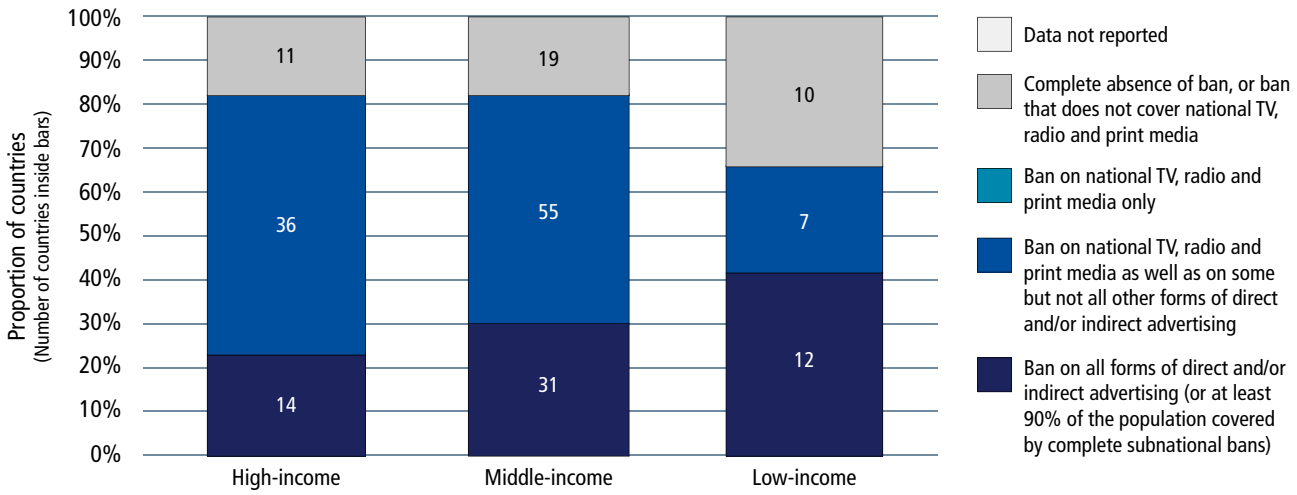
TAPS bans should apply to digital media

The growth in communications technology and the use of Internet-based mobile phones means TAPS activities can appear via multiple social media platforms – and children and adolescents are particularly exposed *(260)*, not least through social media influencers, spokespeople, and brand-sponsored contests that are used to promote tobacco products *(261, 262)*. Countries' existing legislation banning TAPS may not necessarily clearly or explicitly include a ban on advertisements on the Internet, so ensuring that bans are inclusive of Internet-based media is crucial *(263, 264)*. In some cases, enforcing TAPS bans on social media sites may require cross-border legislation, and for this reason, countries will need to cooperate and coordinate efforts *(262)*.

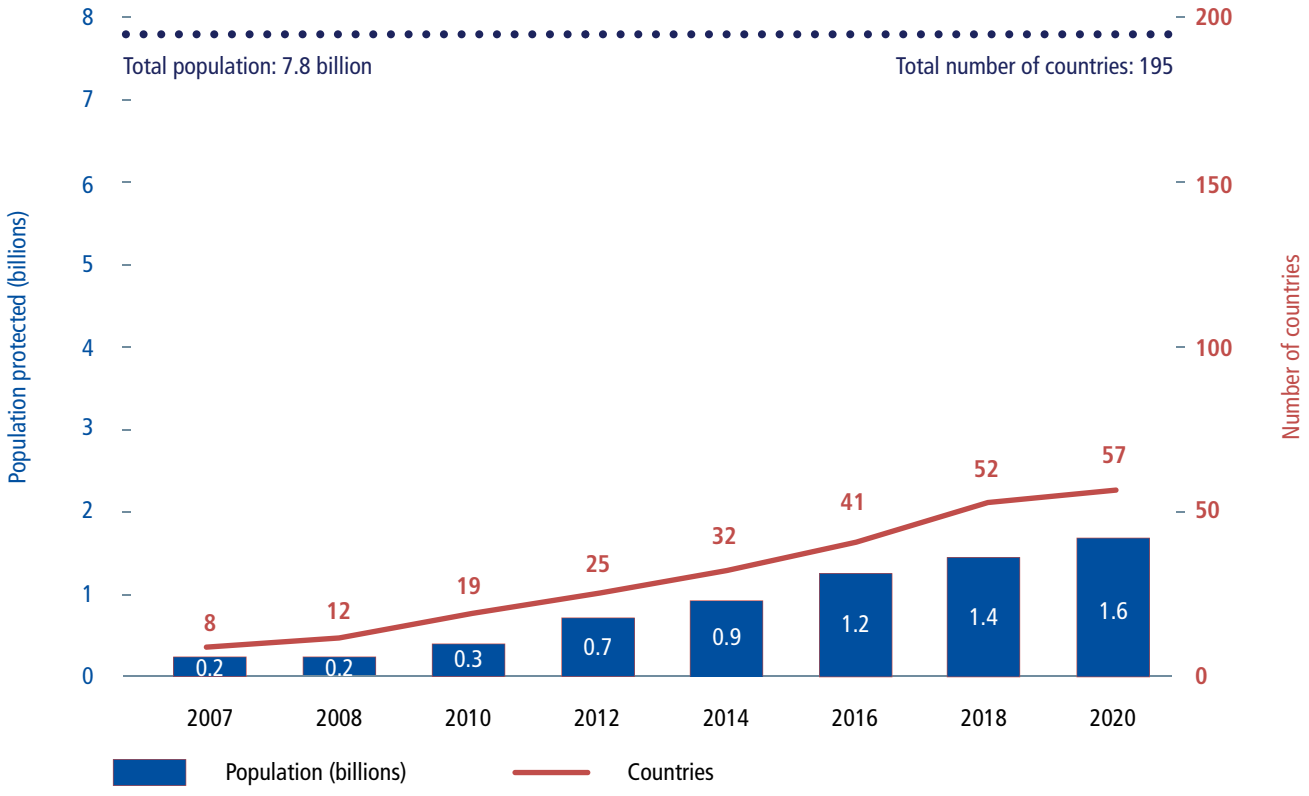
The number of countries covered by TAPS bans continues to steadily rise

Although TAPS bans remain an under-adopted measure, 57 countries (21% of the world's population) have comprehensive bans on TAPS. In 2007 there were only eight countries – 4% of the world's population – with best-practice TAPS bans in place. Since then, an additional 49 countries (including five since 2018 – Côte d'Ivoire, Ethiopia, Iraq, Jordan, and Venezuela (Bolivarian Republic of)) have introduced TAPS bans effectively, increasing global population coverage to 1.6 billion.

BANS ON ADVERTISING, PROMOTION AND SPONSORSHIP (2020)



PROGRESS IN BANS ON ADVERTISING, PROMOTION AND SPONSORSHIP (2007–2020)



More than a third of low-income countries have complete TAPS bans

In 2020, of the 57 countries with comprehensive TAPS bans, 12 are low-income countries (40%), 31 are middle-income countries (30%) and 14 are high-income (23%). In a further 10 low-income countries TAPS bans are either minimal (do not include advertising on national TV, radio and print media) or completely absent. The same is true in 19 middle-income countries and 11 high-income countries. Seven countries (Armenia, Belgium, Bolivia (Plurinational State of), Denmark, Israel, Pakistan and Samoa) – with a total 262 million people – improved their laws since 2018 but did not reach best practice in 2020.

An additional 2.1 billion people could easily be covered by TAPS bans

A best-practice TAPS ban has 10 appropriate characteristics. In 2020, 26 countries covering 2.1 billion people had mandated nine of these 10 characteristics and thus were only one provision away from achieving a best-practice TAPS ban. The most common missing provision is banning advertising at point of sale (eight countries), followed by banning brand stretching (seven countries). Forty countries, with 1.2 billion people, have a complete absence of TAPS bans, or very minimal restrictions.

Seven countries need only to ban brand-stretching (Croatia, France, Georgia, Lithuania, Sri Lanka, Thailand, Turkmenistan). Eight need only to ban advertising of tobacco products at point of sale (Argentina, Bolivia (Plurinational State of), Cook Islands, India, Mali, Montenegro, Netherlands, South Africa). Five countries and territories need only to ban industry sponsorship (Egypt, Sudan, Syrian Arab Republic, United Kingdom, Viet Nam). Three need only ban promotional discounts (Cyprus, Lebanon, Papua New Guinea). Norway need only ban brand-sharing, Tonga need only ban the appearance of tobacco products or brands in TV and/or films, and one territory - occupied Palestinian territory, including east Jerusalem - need only ban the free distribution of tobacco products.

Over a quarter of the 524 million people who live in 29 of the world's 100 largest cities are protected by a TAPS ban. All of these cities are covered by national laws. Instead of waiting for a national law to be put in place, the remaining 71 of the world's largest cities not currently protected by a national best-practice law could move ahead with city, state or provincial level legislation to protect their large populations sooner.

The Bolivarian Republic of Venezuela institutes complete ban on tobacco advertising, promotion, and sponsorship

In 2019 The Bolivarian Republic of Venezuela achieved full implementation of its third MPOWER measure with the adoption of a Ministry of Health Resolution completely banning tobacco advertising, promotion, and sponsorship, including the display of tobacco products at points of sale. The regulation also explicitly bans social corporate responsibility by tobacco industry actors.

Although some restrictions on TAPS existed before this regulation was passed, they did not cover points of sale. This was a particularly problematic gap, as the country's Global Youth Tobacco Survey in 2019 revealed that 44.3% of students noticed tobacco advertisements or promotions when visiting points of sale *(265)*. Establishing the ban required close coordination between the ministries of health and culture, as one of the strategies used by the tobacco industry in The Bolivarian Republic of Venezuela involved its promotion of cultural activities.

The Bolivarian Republic of Venezuela's TAPS ban now joins the country's two other measures at the highest level – large pictorial health warnings on packages, and smoke-free regulation. The Bolivarian Republic of Venezuela's work to implement the WHO FCTC highlights the importance of Ministry of Health leadership, and shows that adopting measures need not be a costly exercise.

Almost a third of middle and low-income countries are covered by comprehensive TAPS bans.

Effective collaboration between WHO and key government partners results in a comprehensive TAPS ban in Iraq

Bulldozer takes down a billboard advertising a cigarette brand

Following the release of the *WHO report on the global tobacco epidemic 2019*, the Tobacco Free Initiative in the WHO Eastern Mediterranean Region worked with country-level stakeholders to identify key gaps in policy implementation and how to support policy progress.

Twelve Eastern Mediterranean Region countries had not adopted a comprehensive ban in line with the WHO FCTC and thus strengthening bans on tobacco advertising, promotion and sponsorship (TAPS) was recognized as a priority. The WHO team developed needed resources to support countries in this area, including formulating a draft ministerial decree that could be adapted across countries' various legal contexts.

Country teams in ministries of health and in WHO Country Offices used these technical resources to advocate for stronger rules to ban TAPS. With commitment from senior leaders, Iraq demonstrated particular success. WHO worked with the legal and executive departments of the Iraqi Ministry of Health to support coordinated efforts for policy change through a ministerial decree. Ultimately, a decision banning all forms of TAPS was introduced by the Minister for Health and Environment in Iraq, taking the country to the highest level of achievement of this MPOWER measure.

Enforcing TAPS bans through local action: Brazil, Indonesia and the Republic of Korea

Comprehensive bans on tobacco advertising, promotion and sponsorship (TAPS) are effective in reducing tobacco sales and consumption. However, TAPS bans must be well enforced in order to deliver these benefits.

Through the Partnership for Healthy Cities, three cities have shown how local policies and activities can strengthen TAPS enforcement. In **Rio de Janeiro, Brazil**, the city has enhanced the implementation of a national TAPS ban by monitoring compliance. City authorities have assessed points of sale and provided training for inspection agents, and have also run a communications campaign to raise awareness about the ban and its restrictions.

Meanwhile in **Seoul, Republic of Korea,** a plan has been developed to support stronger enforcement of TAPS regulations across the city using the National Health Promotion Act's Article 9-4 (Prohibition of, or Restriction on, Advertisements of Tobacco). The city's approach has included a key informant survey (adapted for city-level use from a national model provided by WHO) to assess public knowledge of, and approaches to, compliance.

Finally, local authorities in **Jakarta, Indonesia,** have strengthened enforcement of a local TAPS policy banning outdoor advertisements by building capacity among local government officials and conducting regular enforcement drives. They also developed a simple, phone-based application to support enforcement of the outdoor ban. The city aims to achieve 90% compliance with both indoor and existing outdoor bans on tobacco advertising.

Inspectors training for TAPS enforcement in Rio de Janeiro

RAISE TAXES ON TOBACCO

Article 6 of the WHO FCTC 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" *(174)*.

Raising taxes to increase the price of tobacco products is the single most effective tobacco control measure

Increased taxes are highly cost-effective in reducing tobacco use *(22, 198)*. In fact, a recent report published by the Task Force on Fiscal Policy for Health estimated that tax increases that would lead to a 50% tobacco price increase worldwide could avert 27.2 million premature deaths over the next 50 years *(266)*. Tobacco taxation is also inexpensive to implement, costing low- and middle-income countries as little as US$ 0.05 per capita each year to administer *(267)*.

On average, a 10% price increase will reduce consumption by 5% in low- and middle-income countries (up to 8% in some instances), and by about 4% in high-income countries *(198)*. Approximately half of this reduction is due to tobacco users quitting, with the other half the result of existing users smoking less *(268)*. Tobacco taxation is rightly considered as a highly cost-effective "best-buy" intervention, meaning that the returns and economic benefits of this measure are several times higher than its cost *(269, 270)*.

Increased taxes can fund expanded government health programmes

Tax increases not only reduce tobacco use and improve health, they also generate more government revenues *(22, 198)*. The report of the Task Force on Fiscal Policy for Health also estimated that a 50% tobacco price increase in 2017 would raise an additional US$ 3 trillion (US$ 2016 discounted) worldwide over the next 50 years *(266)*. Additional funding generated by increased taxation at country level could be used for tobacco control programmes as well as other important health and social initiatives, which have now been successfully demonstrated in some countries *(271, 272)*. Using tax revenues in this way will further increase public support for higher taxes.

Taxes should be raised significantly and periodically

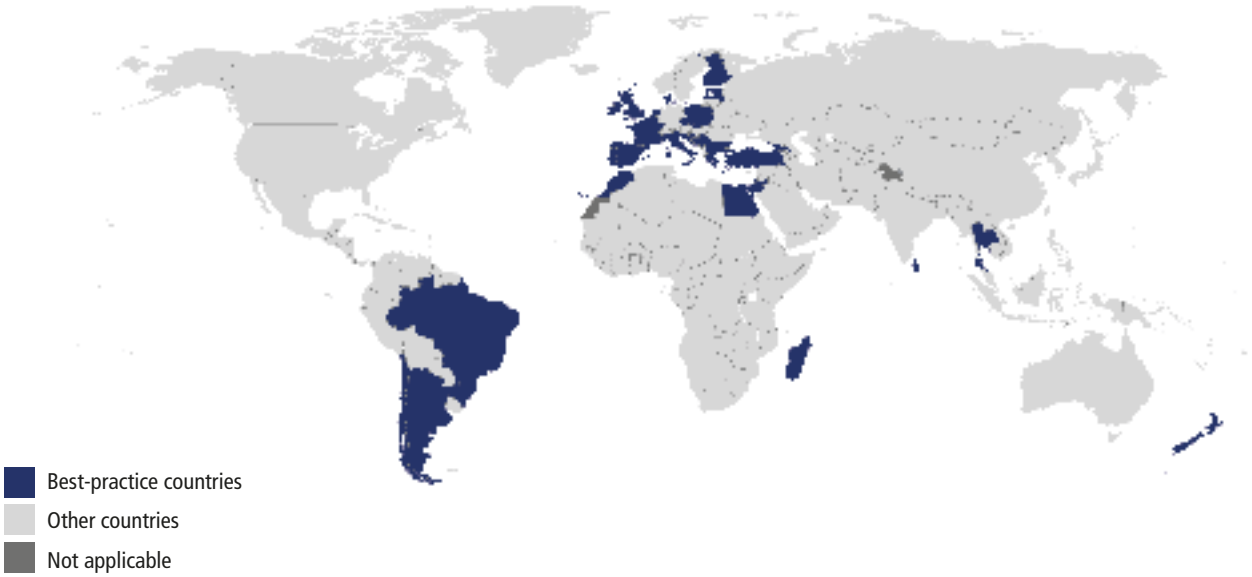
Governments must monitor tobacco tax rates and prices relative to real income and significantly raise tax rates at regular intervals to ensure that tobacco products do not become more affordable – a trend common in many countries where income and purchasing power are growing rapidly *(22)*. Despite some of these countries raising tobacco tax rates, they have not offset inflation and income growth, causing an erosion of the tax's value and effectiveness in reducing consumption *(22, 273)*. Nominal tax increases that do not make tobacco products less affordable are unlikely to reduce consumption or encourage cessation.

Tobacco tax policies need strong tax administration

Tax administration can be made easier if the right tax policies are applied. Of the different types of tax levied on tobacco products, excise taxes are the most effective at raising prices and triggering significant health impact *(22, 274)*. Simpler tax structures are likewise easier to administer – complex structures and tiered excise taxes should be avoided to diminish incentives for companies to price tobacco products in ways that can undermine the health and revenue impact of tobacco taxes *(22)*.

Strengthening tax and customs administration, as well as improving enforcement capacity, enhances the impact of raised tobacco taxes *(22)*. Key interventions to improve tax administration include ensuring compliance (through licensing, detailed tax declaration requirements and advanced information technology), ensuring control and enforcement on the supply chain (through, for example, the use of risk-based approaches for enforcement targets, tax stamps, track and trace systems, implementing anti-forestalling methods), and using clearly defined procedures to follow after detecting illicit trade of tobacco (including high penalties) *(22)*. Experiences from numerous countries show that illicit trade of tobacco products can be successfully addressed even when taxes and prices are increased, hence the threat of tax evasion should not be used as a reason to forgo tax increases *(22, 275)*.

RAISE TAXES ON TOBACCO – HIGHEST ACHIEVING COUNTRIES, 2020



Countries and areas with the highest level of achievement: Andorra, Argentina, Belgium, Bosnia and Herzegovina, Brazil, Bulgaria, Chile, Croatia, Czechia, *Denmark, Egypt, Estonia, Finland, France, *Georgia, Greece, Ireland, Israel, Italy, Jordan, Latvia, Madagascar, Malta, Mauritius, Montenegro, *Morocco, *Netherlands, New Zealand, North Macedonia, occupied Palestinian territory, Poland, *Portugal, Serbia, Slovakia, Slovenia, Spain, *Sri Lanka, Thailand, Turkey, United Kingdom.

* Country newly at the highest level since 31 December 2018.

Gaining political buy-in is key to adopting key tax reforms

The concerns around the political economy of tobacco taxation are effectively exploited by the tobacco industry to block any major tobacco tax reforms. Pre-emptively addressing those concerns can greatly help the smooth adoption of important tobacco tax reforms. Those concerns can be summarized in the SCARE tactics *(22)*:

- **S** Smuggling and illicit trade
- **C** Court and legal challenges
- **A** Anti-poor rhetoric or regressivity
- **R** Revenue reduction
- **E** Employment impact

Experience from countries around the world shows that these arguments are either unfounded or greatly exaggerated and that tax increases are in fact good for health, for equity, for revenues and for the economy overall, with very little risk of facing legal threats, especially when laws are carefully designed and enacted *(22)*.

One billion people are covered by high tobacco taxes

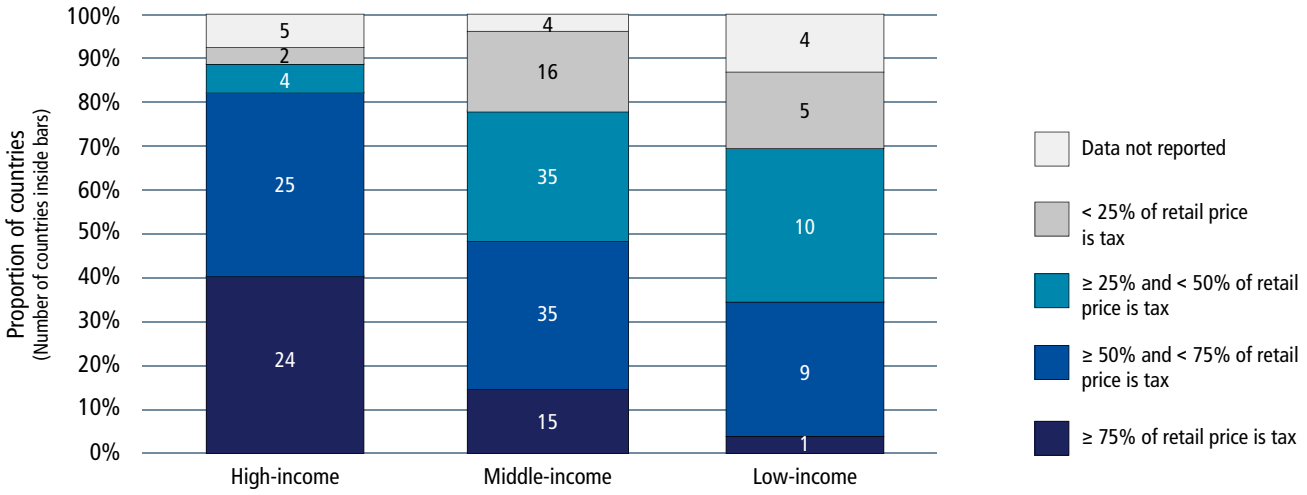
The evidence on tobacco interventions indicates that the most effective and efficient way to reduce tobacco use is to raise the price of tobacco through tobacco taxes. However, tobacco tax is the least-adopted MPOWER measure. In 2020 only 13% of the world's population living in 40 countries were protected by tax rates at 75% or more of the price of the most popular brand of cigarettes.

The total number of countries that raised tobacco taxes to a level at or above 75% of the price of the most sold brand of cigarettes increased from 38 in 2018 to 40 in 2020, but the number of people protected by this level of tax remained at 1 billion. The addition of two countries to the total number of countries at the highest level of achievement represents a net gain after six countries (Denmark, Georgia, Morocco, Netherlands, Portugal and Sri Lanka) increased their taxes to best-practice levels, while another four countries lost their position in this top group (Australia, Austria, Colombia and Niue). The most significant tax share increase seen in these six new best-practice countries was made by Sri Lanka, whose 2018 rate of 66.17% was raised to 77.02% by 2020. No low-income countries have raised taxes to 75% or above since 2018. Sixteen countries, including eight low-income countries, increased taxes enough since 2018 to move one category closer to best-practice level.

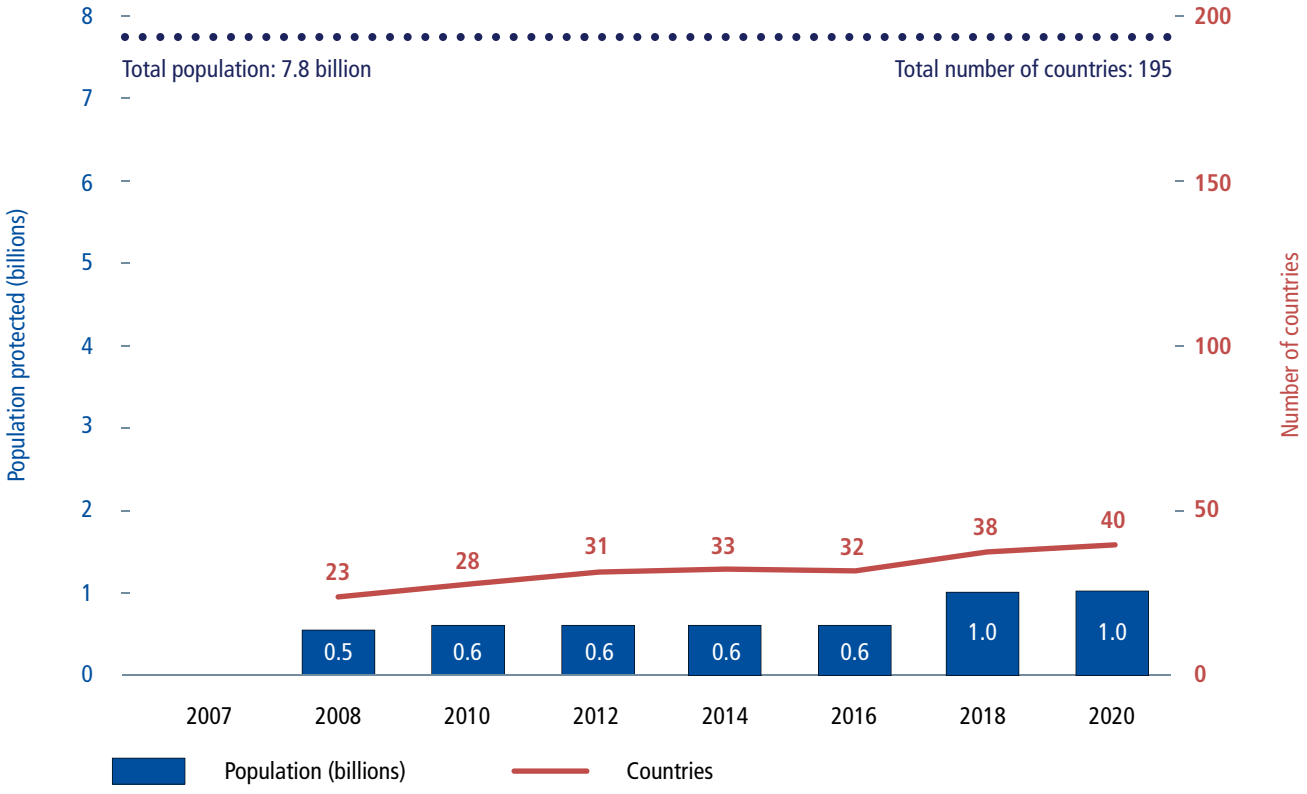
In 2008, 23 countries in the world had tax rates at 75% or more of the price, covering only half a million people or 7% of the world's population. Since then, an additional half a billion people in 17 additional countries are covered by best-practice taxation levels. While 21 countries raised taxes sufficiently to reach the highest group, four others dropped out of the group since 2008.

Today, middle-income countries constitute more than half of the population (61%) protected by the raised-taxes measure. Less than 3% of protected people live in low-income countries.

TOTAL TAX ON CIGARETTES (2020)



PROGRESS IN TOTAL TAX ON CIGARETTES ≥ 75% OF RETAIL PRICE (2007–2020)



In 2020, 24 (40%) high income countries and 15 (15%) of middle-income countries levied taxes at best-practice level. Only one low-income country – Madagascar – had taxes at the highest level. However, 15 countries (10 high-income, four middle-income and one low-income) are just five percentage points or less away from the best practice level, having tax rates between 70% and 75% of retail price. If these countries increased their tax rates to 75%, an additional 465 million people would be covered by the most effective measure to reduce tobacco use.

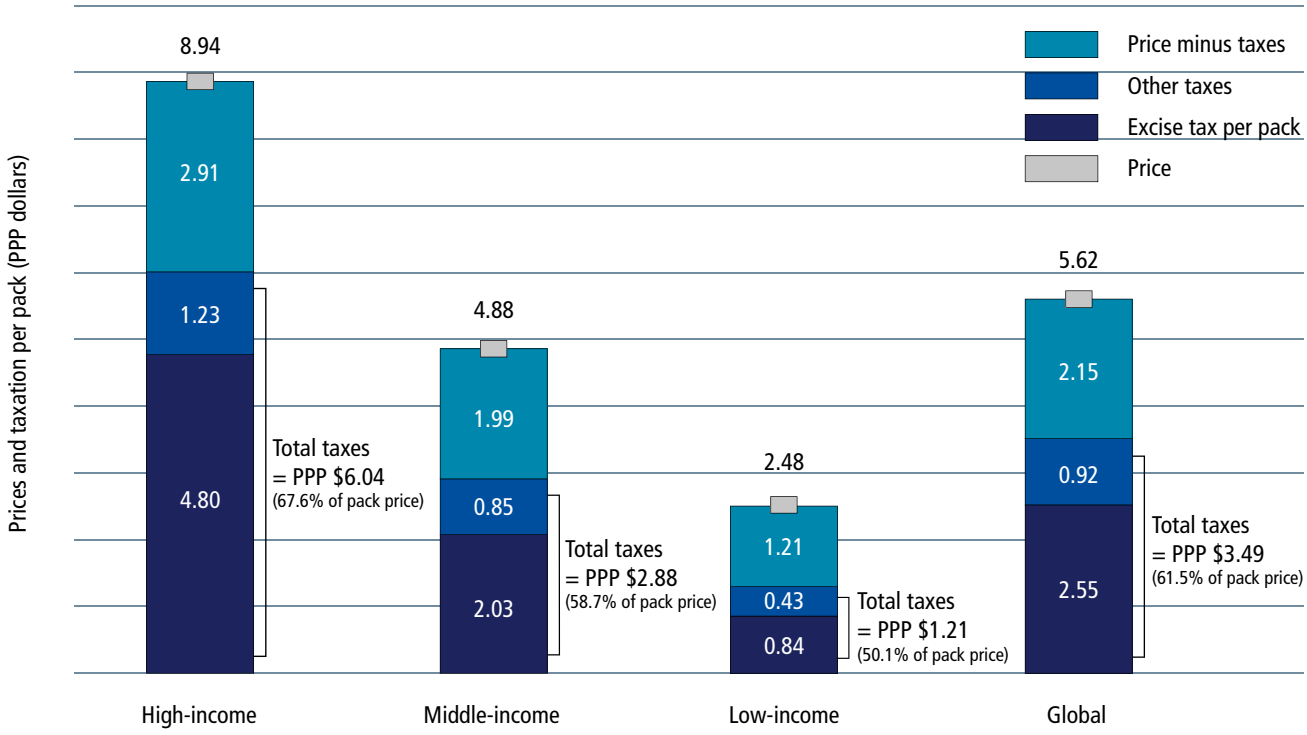
Furthermore, 4% of high-income countries, 16% of middle-income countries and 20% of low-income countries do not tax tobacco even at a minimal level (i.e. under 25% of the retail price is tax). All 23 countries are missing the opportunity to save lives by raising taxes to this basic level.

One in five countries are now protected by high tobacco taxes.

Low- and middle-income countries have much progress to make to raise taxes and prices

Price and tax levels are 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 average total tax as a proportion of price amounting to 51.2% in low-income countries and 59.1% in middle-income countries. This proportion reaches 67.4% 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, particularly low- and middle-income countries, to increase their excise taxes further, which will have the effect of making cigarettes less affordable.

WEIGHTED AVERAGE RETAIL PRICE AND TAXATION (EXCISE AND TOTALS) OF MOST SOLD BRAND OF CIGARETTES, 2020



Note: Averages are weighted by WHO estimates of number of current cigarette smokers ages 15+ in each country in 2019. Prices are expressed in Purchasing Power Parity (PPP) adjusted dollars or international dollars to account for differences in the purchasing power across countries. Based on 54 high-income, 99 middle-income and 23 low-income countries with data on prices of most sold brand, excise and other taxes, and PPP conversion factors.

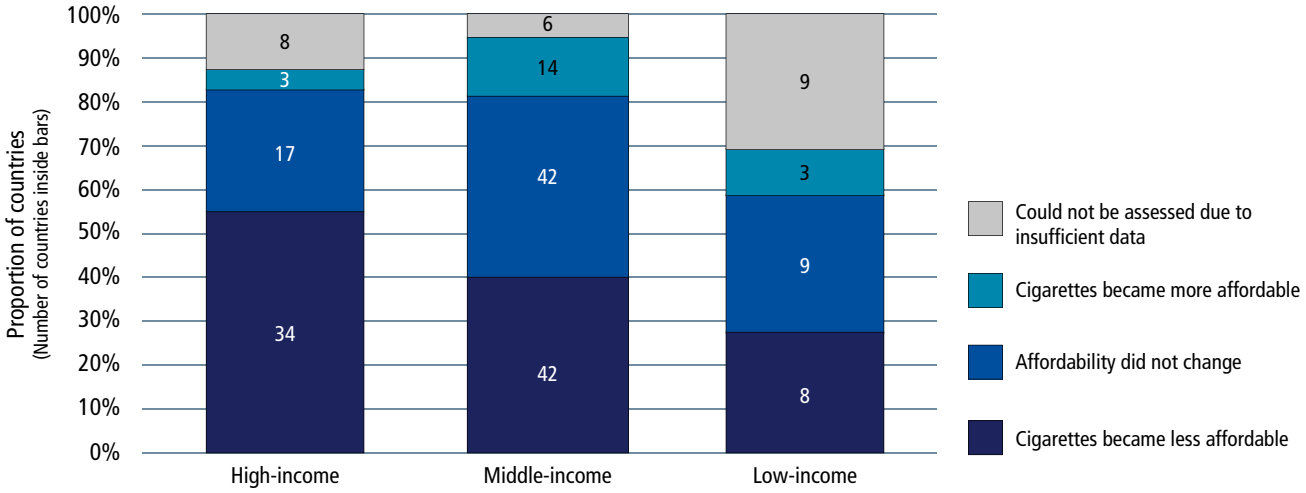
Affordability should be continuously monitored and decreased

To measure whether cigarettes have become more or less affordable over time in a given country, price data from previous editions of this report were used to compute the per capita GDP required to purchase 2000 cigarettes of the most sold brand reported in each year. The average change over the period 2010–2020 was then calculated for this current report. Using this measure, cigarettes have become less affordable in 84 countries and did not significantly change in 68 countries, while they became more affordable in 20 countries. Of those 20 countries, 17 were low- and middle-income countries.

Affordability can change rapidly and monitoring these changes can give governments an indicator of when to best apply higher tobacco taxes. Automatic adjustments in taxes can be applied, which can account for fluctuations in national economies.

Of the 524 million people (6.7% of the world's population) who live in one of the world's 100 largest cities, only 130 million (in 24 cities) are protected by tobacco taxation. No city has yet, independently of national government, introduced taxes on tobacco products that have resulted in raising the share of total taxes to 75% or more of the retail price.

CHANGE IN AFFORDABILITY OF CIGARETTES, 2010-2020



Cigarettes have become less affordable since 2010 in 84 countries globally, equally distributed between high-income and low- and middle-income countries.

Raising taxes is key to comprehensive tobacco control, Morocco

After its manufactured tobacco sector was liberalized in 2011, Morocco embarked on a 3-year journey to reform its tobacco taxation structure. Inspired by how other countries had implemented tobacco control measures, this reform aimed mainly at protecting public health and consolidating state revenue.

Morocco's previous excise tobacco tax system had comprised an ad valorem tax with a fixed minimum price on all new brands introduced to the market – a system that incentivized companies to introduce low-cost brands and encouraged consumers to buy cheap tobacco products.

To address this, in 2013 Morocco introduced, in addition to the existing ad valorem system, a specific tax, along with a minimum tax collection amount for tobacco products. A minimum tax burden was also instated, where collected taxes could not represent less than 53.6% of the retail price of cigarettes.

And in 2017, as part of efforts to further simplify Morocco's tobacco tax structure, the consumption (excise) tax rate on dark tobacco cigarettes was applied to gradually reach (over a period of 3 years) a uniform tax rate across all types of cigarettes, moving away from the two-tiered system previously in place.

Morocco further increased its minimum excise tax on cigarettes in 2019, as well as its minimum tax burden, which rose from 53.6% to 58%. Thanks to these increases, total tax now represents 76.1% of the price of the most sold brand of cigarettes, reaching the highest level of achievement of the "R" component of the MPOWER package. The tax reforms and increases in rates resulted in increases in revenues which went up from 10.4 billion Moroccan Dirham in 2013 to 12.8 billion Moroccan Dirham in 2018.

And 2021 saw another increase in the consumption tax on cigars, cigarillos and water-pipe tobacco. The country aims to continue raising tobacco taxes on a regular basis to compensate for inflation. These gradual tax increases are expected to increase prices and reduce demand for tobacco, thus decreasing their harmful consumption and burden of disease.

Georgia's comprehensive tax policy reduces tobacco consumption

Tobacco tax rates in Georgia rose significantly between 2013 and 2019. After separate rises in the specific excise tax on filter cigarettes and on non-filter cigarettes, by 2018 both rates were equalized, leading to a uniform tax on all types of cigarettes. The excise tax on one pack of filtered cigarettes increased from 0.6 Georgian Lari per pack of 20 sticks (in 2013) to 1.7 Georgian Lari (in 2017). For unfiltered cigarettes, the specific excise was increased from 0.15 Georgian Lari per pack of 20 sticks (2013) to 1.7 Georgian Lari (2017). In 2015, all cigarettes were subject to a new additional ad valorem tax of 5% on the retail price – a figure that rose to 10% in 2016 and further increased to 30% of the retail price in 2019.

To avoid substitution to other tobacco products, tax increases were also applied to roll-your own (RYO) tobacco. In 2013, the excise tax on 1 kg of imported raw tobacco was 20 Georgian Lari, and by 2018 it had risen to 35 Georgian Lari. In 2019, the excise tax on raw tobacco had almost doubled to 60 Georgian Lari per kilogram.

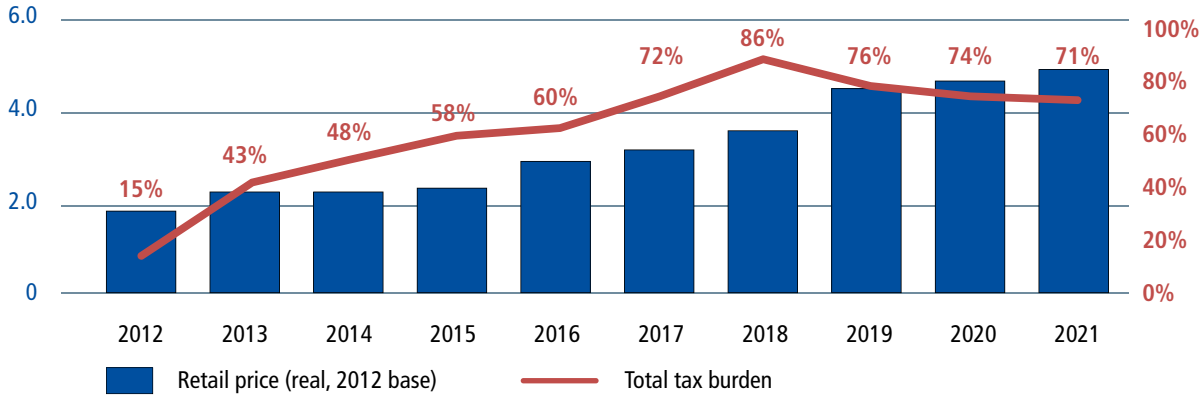
By 2019, demand for unfiltered cigarettes decreased by 96% compared to the previous year. For RYO, 2019 also seems to be a turning point – the excise tax hike from 35 to 60 Georgian Lari (an increase of 71%) reduced raw tobacco consumption by 260% in 2020.

The evolution of Georgia's total tobacco tax burden, which consists of excise, ad-valorem and VAT, can be seen in the graph 1 below. By 2021 the tax burden represented 71% of the price of the most sold brand – up from just 15% in 2012. The price also increased by 2.75 times between 2012 and 2021.

As shown in graph 2 below, there is a clear downward trend in total tobacco use thanks to sustained increases in tobacco taxation and the increase in tax across products, reducing risks for substitution.

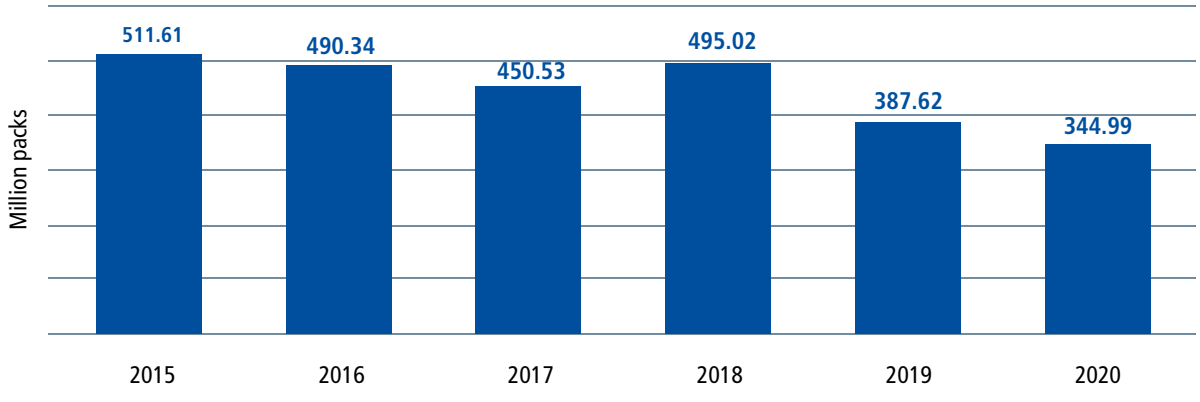
Graph 1:

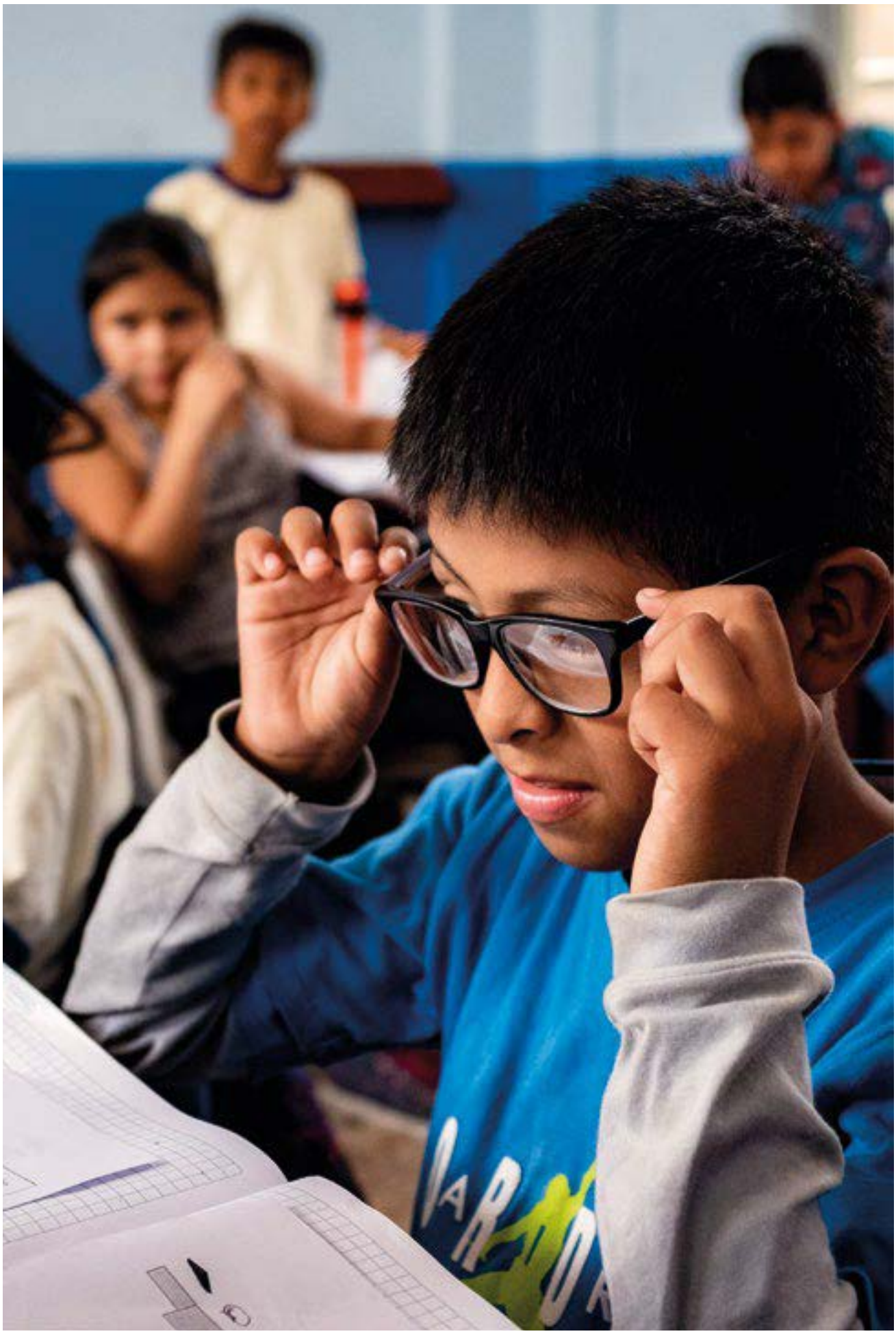
REAL PRICE AND TAX BURDEN, PACK OF MOST SOLD BRAND OF CIGARETTES, GEORGIA 2012–2021 (2012 BASE)



Graph 2:

TOTAL MARKET OF LOCALLY PRODUCED FILTERED AND UNFILTERED CIGARETTES, AND RYO TOBACCO 2015–2020





NATIONAL TOBACCO CONTROL PROGRAMMES:

The WHO Framework Convention on Tobacco Control strongly suggests that countries set up a national tobacco control programme (NTCP) to lead their tobacco control efforts. To this end, WHO FCTC Article 5 states that:

"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." In addition, WHO FCTC Article 26.2 sets out that: "Each Party shall provide financial support in respect of its national activities intended to achieve the objective of the Convention" *(174)*.

Every country should have a national tobacco control programme to lead tobacco control efforts

The WHO FCTC strongly suggests that countries set up a national, decentralized tobacco control programme (NTCP) to lead their tobacco control efforts. Adequately financed, clearly focused NTCPs or coordination mechanisms are critical for developing and maintaining the sustainable policies that can reverse the tobacco epidemic *(108)*. Ministries of health, or equivalent government agencies, should take the lead on strategic tobacco control planning and policy setting, with other ministries or agencies reporting to this centralized authority *(251)*. Tobacco control programmes should also be integrated into countries' broad health and development agendas *(276)*.

In large countries or those with federal political systems, decentralizing NTCP authority to subnational level can allow more flexibility in policy development and programme implementation. Public health and government leaders at appropriate subnational levels must be given adequate resources to build implementation capacity that can be sustained over time *(171)* and enable policies and programmes to reach as wide a population as possible *(277)*. On this note, NTCPs should ensure that population subgroups with disproportionately high rates of tobacco use are reached by policies and programmes tailored to their needs *(277)*.

Tobacco control requires an actively involved civil society

NTCPs require the involvement of appropriate nongovernmental organizations and other civil society groups to maintain progress on national as well as global tobacco control efforts *(108)*. NTCPs must specifically exclude the tobacco industry and its allies, which cannot be legitimate stakeholders in tobacco control efforts *(171)*.

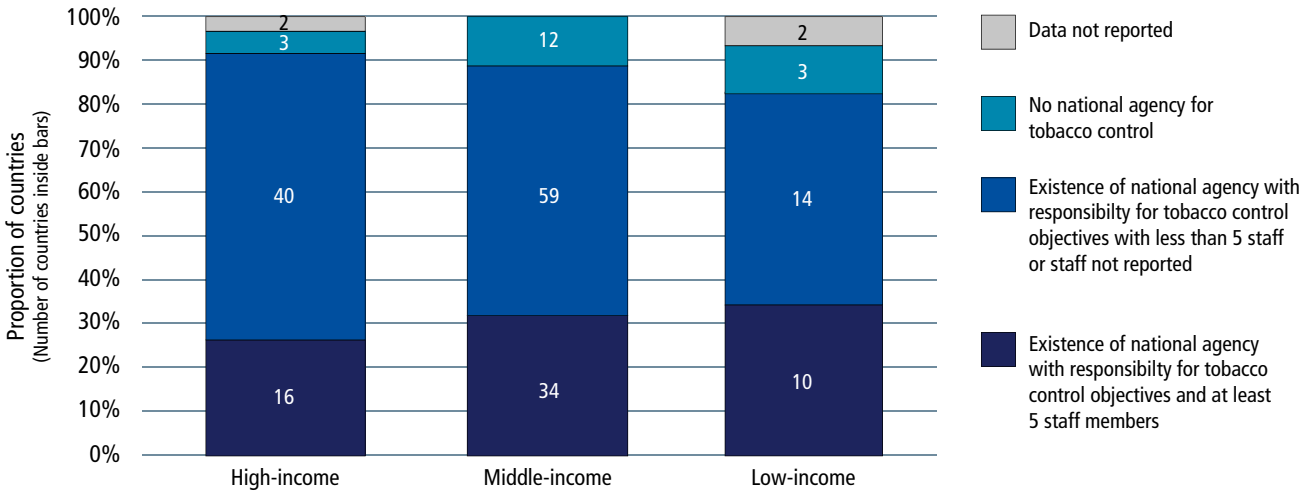
Almost a third of countries globally (60 countries) have a national agency with responsibility for tobacco control objectives staffed by at least five full-time equivalent people, meaning that 66% of the world's population are served by such an agency. An additional 113 countries (with another one third of the world's population) are working on tobacco control objectives with fewer staff (80 countries), or with an unknown number of staff (33 countries). Only 18 countries (with 152 million people) do not have a national agency for tobacco control, 13 of which are low- and middle-income countries.

In the past 2 years, four countries enhanced their national tobacco control programmes sufficiently to reach the highest level of adoption (Ghana, Hungary, Spain and Trinidad and Tobago), adding 89 million people to the population covered. At the same time, two countries dropped below best-practice level: Cuba reduced the number of staff dedicated full-time to tobacco control, and Switzerland did not report the number of staff.

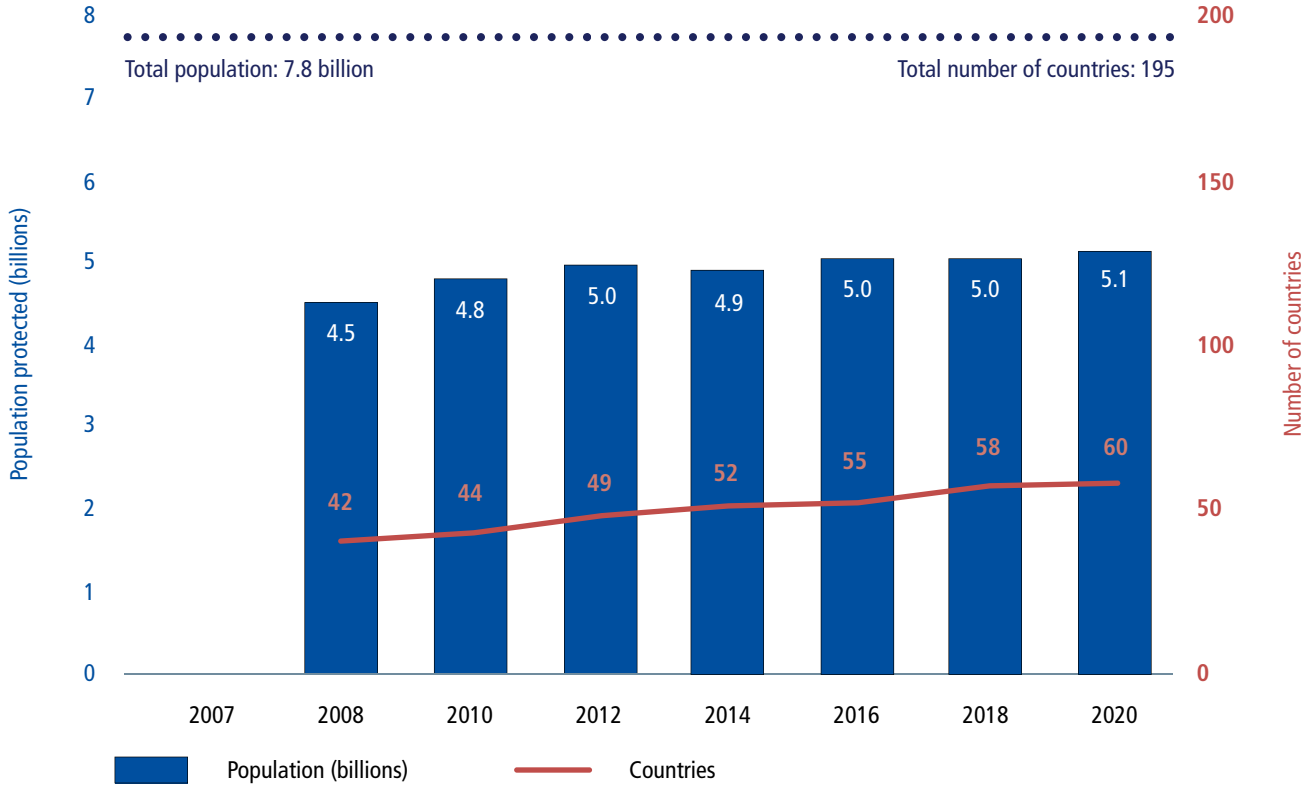
Over the more than a decade since 2008, substantial progress has been achieved with a total of 18 countries, home to 598 million people, establishing a well-staffed national team working full time on tobacco control. It is worth noting that this measure may underestimate the true extent of NTCPs in countries because information on tobacco control programme staffing at the national level is incomplete, and there is no formal mechanism for collecting this information from countries.

Almost a third of countries globally have a national agency with responsibility for tobacco control objectives staffed by at least five full-time equivalent people.

NATIONAL TOBACCO CONTROL PROGRAMMES (2020)



PROGRESS IN NTCP (2008–2020) AT HIGHEST LEVEL OF ACHIEVEMENT



National Tobacco Control Programme, India

Strong, nationally funded tobacco control programmes are the cornerstone of WHO FCTC implementation. India established one of the world's largest public-funded NTCPs in 2007 – within 2 years of the WHO FCTC coming into force. India's vast NTCP is now implemented in all 700 of the country's districts.

Key pillars of the programme (funded and staffed at national, state, and district level) include: (a) training and capacity building for stakeholders, including law enforcers; (b) education and communication activities; (c) school programmes; (d) monitoring tobacco control laws; and (e) provision of cessation support, including pharmacological treatment. Activities and interventions are adapted and designed according to local needs.

The Indian government has strategically invested in scaling up tobacco cessation through mCessation services and the toll-free National Tobacco Quitline, which has four hubs servicing different regions of the country. The Quitline is staffed by 100 trained counsellors providing services in over 15 languages to address the needs of 267 million adult tobacco users in India.

And to support tobacco product regulation, the government has established three tobacco testing laboratories – the first of their kind in the WHO South East Asia Region. To track key tobacco control indicators, robust tobacco surveillance (in the form of regular GATS and GYTS surveys) have been dovetailed with the programme, with subnational level estimates.

The three-tiered NTCP framework (consisting of national, state and district tobacco control cells) enables the government to take strong, evidence-based policy measures such as banning ENDS, implementing large pack warnings, a tobacco-free films policy, and tobacco-free educational institution guidelines.

These policies and initiatives have reduced the prevalence of adult tobacco use by 17% (relative reduction) between 2009 and 2016 – proof that that adequate commitment and public investment in comprehensive tobacco control policies results in substantial public health gains, even in high prevalence, tobacco-producing countries.

Awareness generation among school/college going youth on the harmful effects of tobacco use through street play (nukkad natak) in Uttar Pradesh, India

ELECTRONIC NICOTINE DELIVERY SYSTEMS

As discussed in the background chapter on ENDS, MPOWER measures as well as age restrictions on sales and flavour bans can be applied to ENDS. Here we assess the status of these measures as they are applied to ENDS globally.

Almost half of countries monitor adolescent e-cigarette use

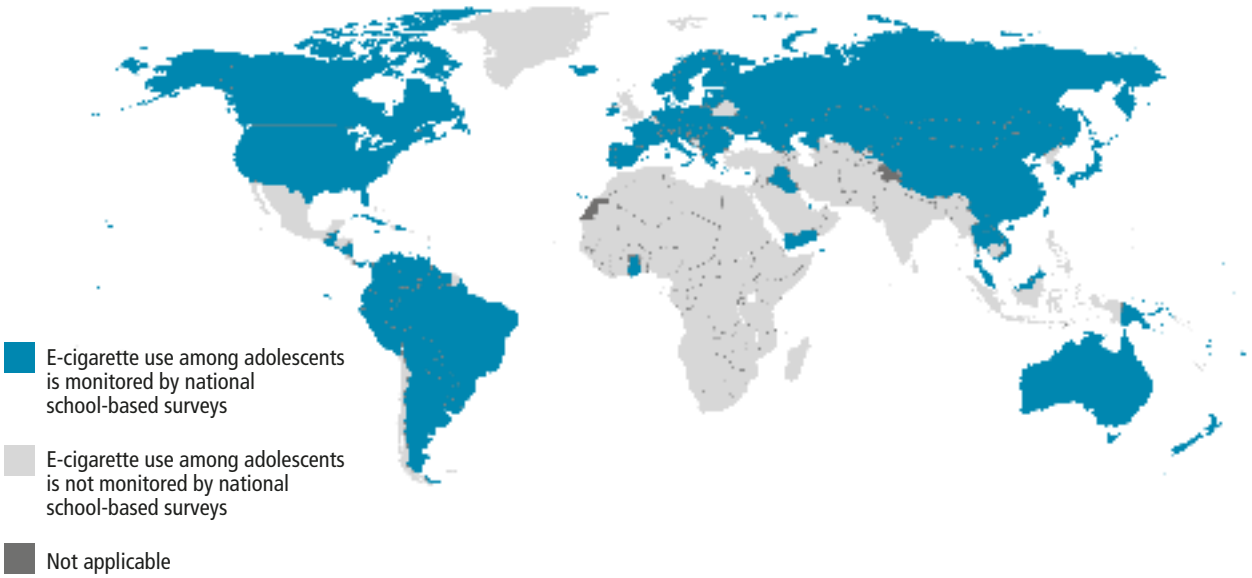
Most surveys that ask about ENDS use focus on e-cigarette use and not on broader ENDS use. Eighty-seven countries monitor e-cigarette use among adolescents through national school-based surveys. This means that 45% of countries with 3.5 billion people have data on e-cigarettes use among children and adolescents that can be used to guide local policy decisions. Not all survey a consistent age group however, making global comparisons challenging.

Forty-four of the countries that monitor adolescents' e-cigarette use are middle-income countries, while 42 are high-income countries. Only one low-income country (Yemen) currently conducts surveys on adolescents that incorporate questions about current e-cigarette use.

E-cigarette use among adults should be routinely incorporated into nationally representative surveys

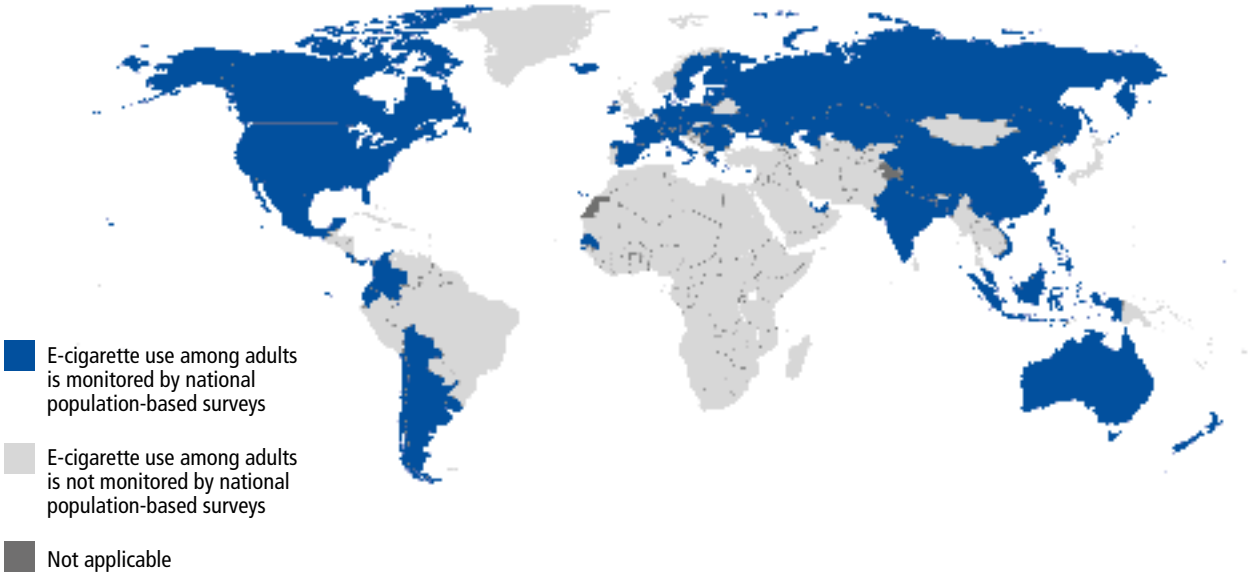
Currently, 56 countries representing a population of 4.9 billion people capture e-cigarette use among adults in nationally representative surveys that – of which are low-income countries. Meanwhile, a total of 139 countries, representing a population of 2.8 billion people (of which 4.1 billion live in 113 low- and middle-income countries) have no data on adult current e-cigarette use at all.

MONITORING E-CIGARETTE USE AMONG ADOLESCENTS USING NATIONAL SCHOOL-BASED SURVEYS COMPLETED IN 2020 OR EARLIER



Countries that monitor ENDS use among adolescents: Albania, Antigua and Barbuda, Argentina, Australia, Austria, Belize, Bolivia (Plurinational State of), Brazil, Brunei Darussalam, Bulgaria, Canada, China, Colombia, Croatia, Cuba, Cyprus, Czechia, Denmark, Dominican Republic, Ecuador, El Salvador, Estonia, Fiji, Finland, France, Germany, Ghana, Greece, Grenada, Guatemala, Guyana, Hungary, Iceland, Iraq, Ireland, Italy, Jamaica, Japan, Kazakhstan, Kiribati, Kyrgyzstan, Lao People's Democratic Republic, Latvia, Lithuania, Luxembourg, Malaysia, Malta, Marshall Islands, Mauritius, Monaco, Mongolia, Montenegro, Netherlands, New Zealand, Nicaragua, Niue, North Macedonia, Norway, Panama, Papua New Guinea, Paraguay, Peru, Poland, Portugal, Qatar, Republic of Korea, Romania, Russian Federation, Saint Lucia, Saint Vincent and the Grenadines, San Marino, Serbia, Slovakia, Slovenia, Spain, Suriname, Sweden, Switzerland, Thailand, Trinidad and Tobago, Ukraine, Unites States of America, Uruguay, Vanuatu, Venezuela, Viet Nam, Yemen.

MONITORING E-CIGARETTE USE AMONG ADULTS USING NATIONAL SCHOOL-BASED SURVEYS COMPLETED IN 2020 OR EARLIER



Countries that monitor ENDS use among adults: Argentina, Australia, Austria, Bolivia (Plurinational State of), Brunei Darussalam, Bulgaria, Canada, Chile China, Colombia, Costa Rica, Cyprus, Czechia, Denmark, Ecuador, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Indonesia, Ireland, Italy, Kazakhstan, Latvia, Lithuania, Luxembourg, Malaysia, Malta, Marshall Islands, Mexico, Nepal, Netherlands, New Zealand, Panama, Philippines, Poland, Qatar, Republic of Korea, Romania, Russian Federation, Senegal, Serbia, Slovenia, Spain, Sweden, Switzerland, Ukraine, United Arab Emirates, Unites States of America, Uruguay, Viet Nam.

ENDS should not be left unregulated.

Too many countries do not regulate ENDS

Globally, 111 countries have adopted measures addressing ENDS. Thirty-two of these countries ban the sale of ENDS. Seventy-nine countries (over 40% of all countries), allow the sale of ENDS but have adopted one or more measures either fully or partially to regulate them. These measures include bans on the use of ENDS in public indoor areas; bans on advertising, promotion and sponsorship; and the application of graphic health warnings on packaging as well as age restrictions on the sale of ENDS and flavoring bans or restrictions. The remaining 84 countries, home to 27% of the world's population, have no regulations in place addressing ENDS.

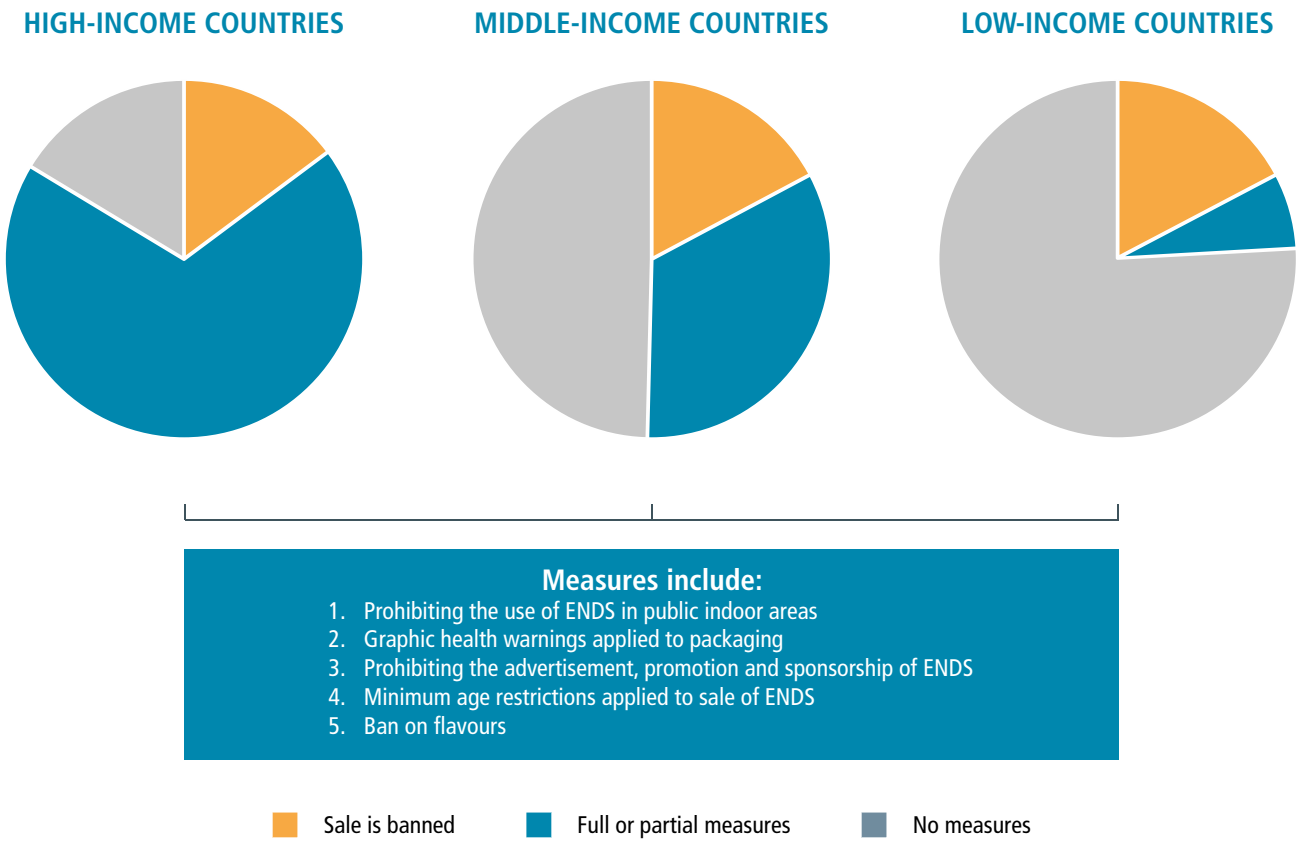
While 84% of high-income countries have either a regulation or a sales ban in effect, half of middle-income countries and three-quarters of low-income countries have taken no regulatory action concerning ENDS.

Measures that ban ENDS use in public indoor places, apply health warnings on ENDS and ban on ENDS advertising, promotion and sponsorship should all be applied

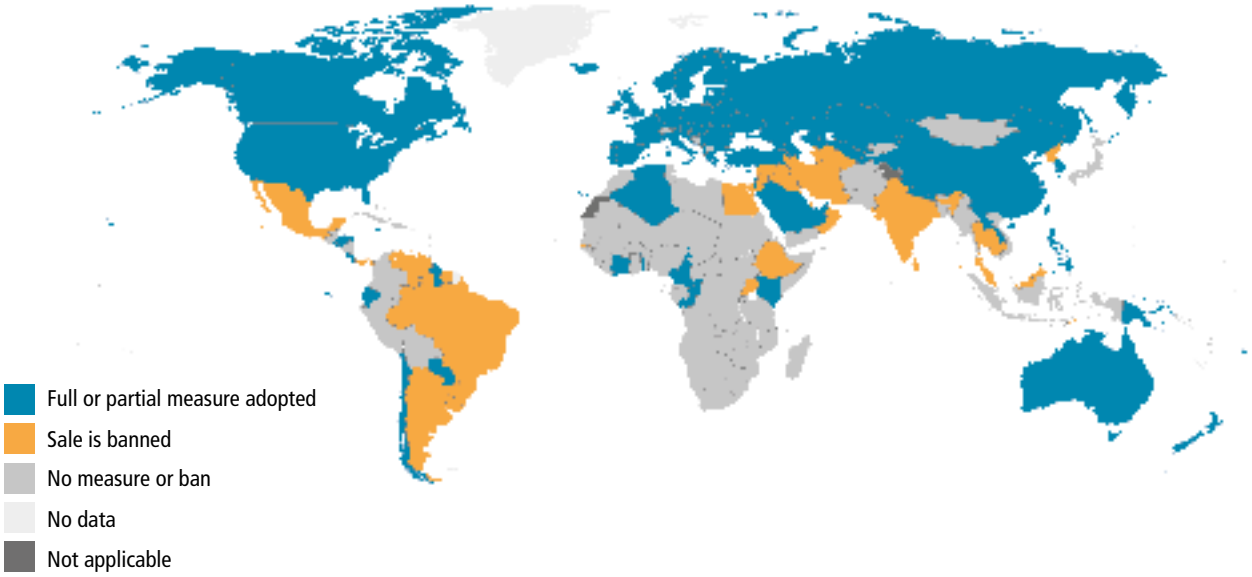
Excluding countries that ban sale of ENDS, 30 countries completely ban the use of ENDS in all public places, workplaces and public transport; an additional 45 countries partially ban their use in these places. The remaining 120 countries have either no smoke-free place measures (37 countries), or ENDS are not explicitly covered by such measures where they exist (83 countries).

Only eight countries mandate the use of large graphic health warnings on ENDS packaging meeting full criteria, two of which apply these requirements only to ENDS devices and not to e-liquids. Another 45 countries mandate some form of health warning on either ENDS devices, e-liquids or both. And 110 countries either have no graphic tobacco health warning measures in place (24 countries), or where they do exist, ENDS are not explicitly covered by them (86 countries). Thirty-two countries ban the sale of ENDS and therefore do not mandate health warnings for them.

Twenty-two countries completely ban advertising, promotion and sponsorship of ENDS devices, e-liquids or both (15 ban these activities for both devices and e-liquids; four ban them only for ENDS devices; and three ban them only for e-liquids). An additional 53 countries have partial advertising, promotion and sponsorship measures in place that cover ENDS. The remaining 120 countries either have no such measures in place (16 countries), or where they do exist, ENDS are not explicitly covered by them (104 countries).


HIGH-INCOME COUNTRIES
MIDDLE-INCOME COUNTRIES
LOW-INCOME COUNTRIES
Measures include:
1. Prohibiting the use of ENDS in public indoor areas
2. Graphic health warnings applied to packaging
3. Prohibiting the advertisement, promotion and sponsorship of ENDS
4. Minimum age restrictions applied to sale of ENDS
5. Ban on flavours
Sale is banned
Full or partial measures
No measures

MEASURES APPLIED TO ENDS, 2020

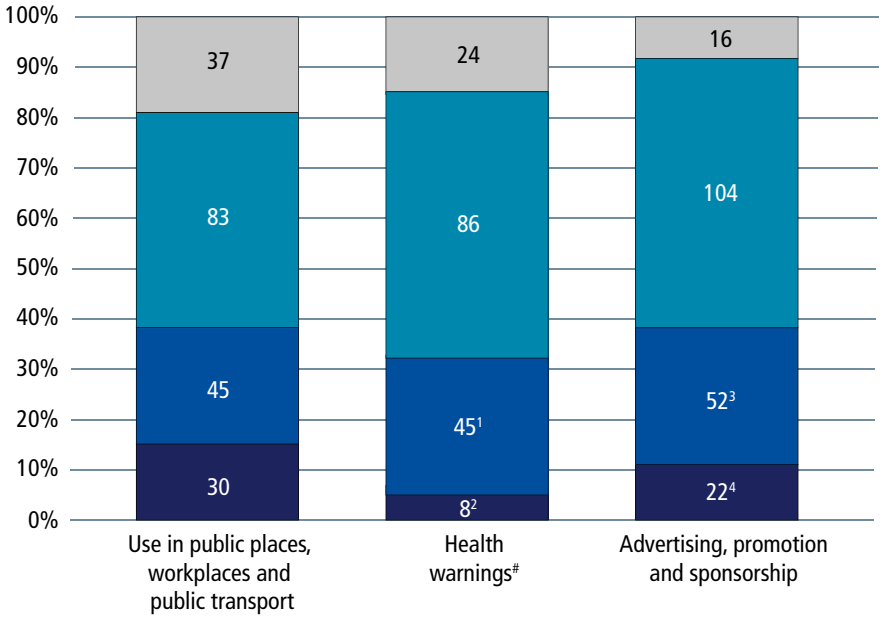


Note: 13 countries have both a sales ban and additional ENDS regulation in place, and these are classified here as sales-ban countries. Please see Annex II Table 2.1 for further details.

ENDS are regulated in the following countries: Albania, Algeria, Andorra, Armenia, Australia, Austria, Azerbaijan, Barbados, Belarus, Belgium, Bulgaria, Cameroon, Canada, Chile, China, Congo, Costa Rica, Cote d'Ivoire, Croatia, Cyprus, Czechia, Denmark, Ecuador, El Salvador, Estonia, Fiji, Finland, France, Georgia, Germany, Greece, Guyana, Honduras, Hungary, Iceland, Ireland, Israel, Italy, Jamaica, Kazakhstan, Kenya, Lao People's Democratic Republic, Latvia, Lithuania, Luxembourg, Malta, Montenegro, Nepal, Netherlands, New Zealand, Niue, Norway, Palau, Papua New Guinea, Paraguay, Philippines, Poland, Portugal, Republic of Korea, Republic of Moldova, Romania, Russian Federation, Saint Lucia, San Marino, Saudi Arabia, Serbia, Slovakia, Slovenia, Spain, Sweden, Tajikistan, Togo, Turkey, Tuvalu, Ukraine, United Arab Emirates, United Kingdom, United States of America, Uzbekistan.

Sale of ENDS is banned in the following countries and territories: Argentina, Bahrain, Brazil, Brunei Darussalam, Cambodia, Democratic People's Republic of Korea, Egypt, Ethiopia, Gambia, India, Iran (Islamic Republic of), Iraq, Jordan, Kuwait, Lebanon, Malaysia, Mauritius, Mexico, occupied Palestinian territory, Oman, Panama, Qatar, Singapore, Sri Lanka, Suriname, Syrian Arab Republic, Thailand, Timor-Leste, Turkmenistan, Uganda, Uruguay, Venezuela (Bolivarian Republic of).

SELECTED LEGISLATIVE MEASURES APPLIED TO ENDS, 2020



No measures for tobacco or ENDS

Criteria* fully or partially met for tobacco but no measures for ENDS

Criteria* partially met for ENDS

Criteria* fully met for ENDS

* for a list of the criteria, refer to Technical Note I

[#] 32 countries with a ban on sale of ENDS are excluded from this indicator

[1] In 2 countries this measure applies to ENDS devices only, and in 9 countries this measure applies to e-liquids only

[2] In 2 countries this measure applies to ENDS devices only, not e-liquids

[3] In 2 countries this measure applies to ENDS devices only, and in 1 country this measure applies to e-liquids only

[4] In 4 countries this measure applies to ENDS devices only, and in 3 countries this measure applies to e-liquids only

Finland's ban on flavours and aromas in e-cigarettes liquids

In 2016, Finland introduced pioneering e-cigarette regulations that banned use of flavourings, set minimum-age limits for buyers, provided import restrictions, banned the use of e-cigarettes in non-smoking areas and prohibited e-cigarette marketing, display and distance-selling. Following these revisions to Finland's Tobacco Act, liquids used in e-cigarettes are available exclusively in tobacco flavour in Finland. Through a combination of swift action and stringent regulation, Finland achieved further declines in smoking prevalence (from 15% in 2016 to 14% in 2018) without seeing a contingent rise in daily e-cigarette use (less than 1% in 2018). The country has set an ambitious goal of bringing both tobacco and nicotine products below a prevalence rate of 5% within the next decade.

Flavours should be banned to reduce the appeal of ENDS products to children and adolescents

Excluding countries that ban the sale of ENDS, only 3 countries have adopted a ban all flavours in ENDS, except for "tobacco" flavour (Finland, Hungary and Montenegro). Six other countries ban only selected flavours or permit specific flavours (Denmark, Estonia, Germany, New Zealand, Philippines, Saudi Arabia).

Age restrictions on the sale of ENDS has been adopted by only 69 countries

Of the 163 countries that permit the sale of ENDS, 69 countries limit their sale to a minimum age (18 years in 62 countries, 19 years in one country and 21 years in six countries), while the other 94 countries do not. This means 42% of countries restrict access to ENDS by age compared to 90% of countries which apply these restrictions to tobacco.

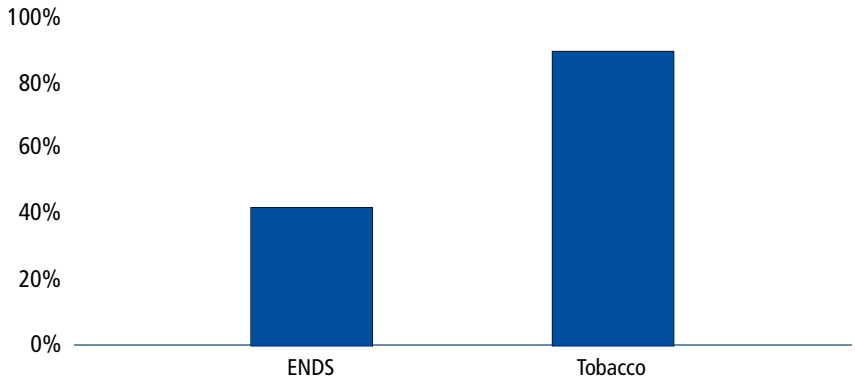
There is no consistency in taxing ENDS

As they are often priced and taxed differently, data was collected for e-liquids used in both open and closed systems. Open systems are devices that allow the user to buy e-liquids and fill their device with the mixtures they want (with no nicotine, different nicotine concentrations and/or flavours). Closed systems are products that come with a prefilled container (called a cartridge, pod or tank) and where own mixes are not possible.

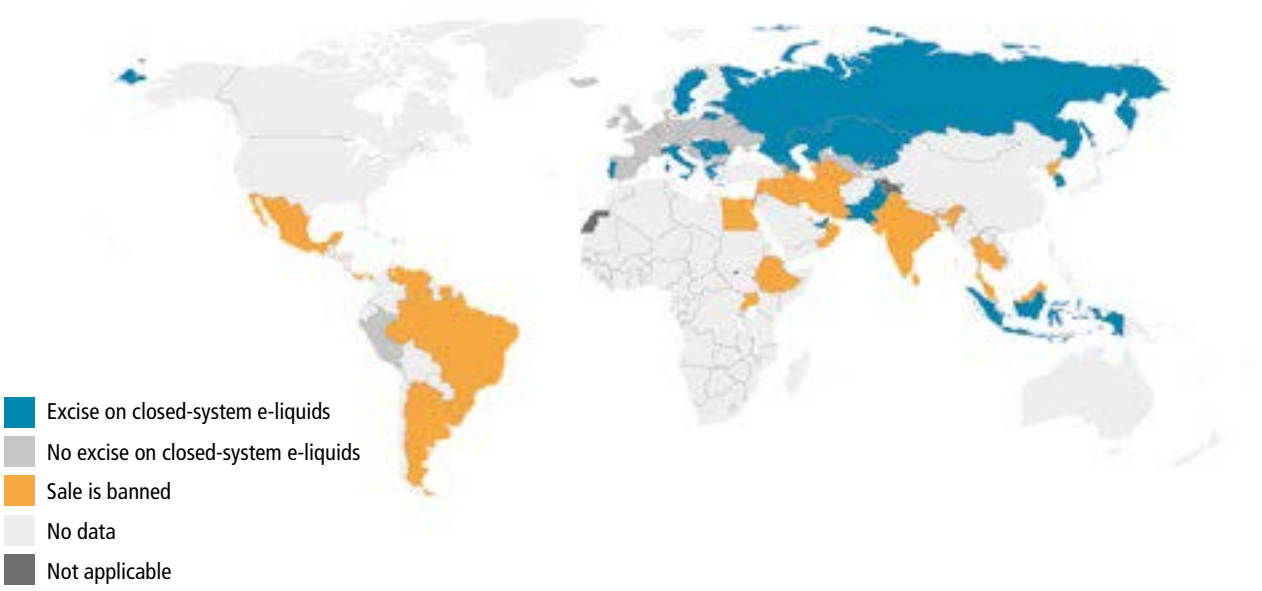
Of the 51 countries where data are available for open-systems ENDS, 28 countries (55%) impose no excise tax on open systems e-liquids. And of the 44 countries where data are available for closed systems, 57% (25 countries) impose no excise tax on closed systems e-liquids (commonly sold as pods).

In countries where an excise tax is imposed on ENDS e-liquids, the tax is generally low, with only three countries levying taxes equal to, or above, 75% of the price of the cheapest brand for open systems e-liquids (Portugal, Russian Federation and Slovenia). For closed systems e-liquids, no country applies taxes as high as 75% of the price of the cheapest brand of closed system ENDS.

COUNTRIES APPLYING MINIMUM AGE OF SALES RESTRICTIONS ON ENDS VERSUS TOBACCO, 2020

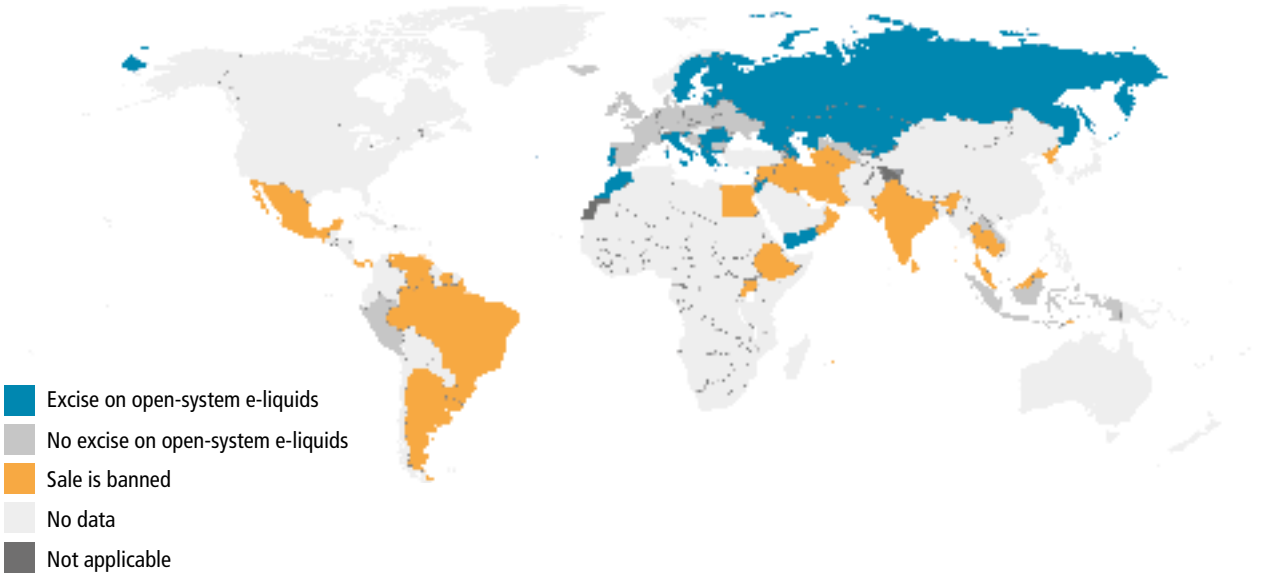


ENDS CLOSED SYSTEM E-LIQUIDS TAX POLICY, 2020



Countries with a tax on closed system e-liquids: Armenia, Austria, Azerbaijan, Bahrain, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, China, Croatia, Czechia, Denmark Estonia, France, Georgia, Germany, Greece, Hungary, Iceland, Indonesia, Ireland, Israel, Italy, Kazakhstan, Kyrgyzstan, Lithuania, Luxembourg, Malta, Netherlands, Pakistan, Peru, Poland, Portugal, Republic of Korea, Republic of Moldova, Romania, Russian Federation, Serbia, Spain, Sweden, Tonga, Ukraine, United Arab Emirates, United Kingdom, Uzbekistan.

ENDS OPEN SYSTEM E-LIQUIDS TAX POLICY, 2020



Note: Jordan also has both a ban on the sale of ENDS and an excise

Countries with a tax on open systems e-liquids: Albania, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Iceland, Indonesia, Ireland, Israel, Italy, Jordan, Kazakhstan, Kyrgyzstan, Lao People's Democratic Republic, Latvia, Lithuania, Luxembourg, Malta, Montenegro, Morocco, Netherlands, North Macedonia, Peru, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Spain, Sweden, Tonga, Ukraine, United Kingdom, Uzbekistan, Yemen.

Countries should consider including ENDS cessation in their cessation strategies

Many ENDS users wanting to quit use tools such as toll-free quit lines, text message programmes and specialized tobacco dependence treatments. Data from the largest quit line operator in the United States (serving 23 states and over 700 employers and health plans) showed that among the 74 646 quit line participants enrolled between January 2017 and June 2020, 14% were using e-cigarettes and 2% of them were exclusive e-cigarette users. Therefore, the country's national tobacco cessation services should consider providing support for ENDS users to quit *(1)*.

Tobacco control must anticipate nicotine and tobacco products will evolve rapidly and plan for their regulation

In recent years, there have been newer nicotine and tobacco products introduced to several markets. These are rapidly evolving and may have implications for regulation. Therefore, the availability, characteristics and use of these and other emerging products should be closely monitored going forward and regulations should be future-proofed as much as possible to cover these products. This report did not collect data on nicotine pouches or other novel nicotine products.

Measures applied to ENNDS are often not consistent with those applied to ENDS

Data collected on ENNDS indicate that although 14 countries regulate (or ban the sale of) ENNDS in the same way they regulate ENDS, others have differing approaches for these products, including banning the sale of one when allowing the sale of the other. Twenty-nine countries ban the sale of ENNDS and only one country explicitly bans both ENNDS and ENDS (Iraq). Apart from sale bans, 35 countries regulate ENNDS but in ways that are inconsistent with measures applied to ENDS. A total of 117 countries with 4 billion people are not covered by any measures that specifically address ENNDS. See Annex II for further details.

Note on Heated Tobacco Products

The Eighth Conference of the Parties to the WHO FCTC recognized HTPs as tobacco products and noted that they should therefore be subject to the provisions of the WHO FCTC, and monitored and regulated like other tobacco products. Data collected for this report indicate that HTPs are banned (sales ban or another type of ban that restricts their availability) in 11 countries, (Brazil, Democratic People's Republic of Korea, Ethiopia, India, Iran (Islamic Republic of), Mexico, Norway, Panama, Singapore, Syrian Arab Republic, Timor-Leste). In the remaining 184 countries, HTPs are either implicitly or explicitly regulated as tobacco products, or explicitly regulated in other categories. Further analysis will be made in the future to understand better how these products are addressed by countries.

Examples of country actions applied to ENDS

Ukraine imposes taxes on ENDS and HTPs

Ukraine has committed itself to implementation of the WHO FCTC COP-8 decision on regulating novel and emerging nicotine and tobacco products with a similar approach to that used for conventional tobacco products. Thus, in 2019 the Ukraine parliament adopted Law N° 466-IX that imposes taxes on the liquids used in ENDS, ENNDS and HTPs starting from January 1, 2021.

At the same time Ukraine worked to increase public knowledge about ENDS. From November 2020 to January 2021, an NGO called Life, together with the Public Health Center, conducted a national information campaign titled "There is no safe smoking" with the support of global health organization Vital Strategies. Social videos and public service announcements (broadcast on television, on the Internet, on subway and train stations) were aimed at raising young people's awareness of the health risks of using electronic smoking devices. Residents of Kyiv, the capital of Ukraine, also saw social advertising on the city streets. The campaign reached around 25 million people and evaluations showed that 73% of people received new information via the campaign, and that 47% of ENDS and HTP users were motivated to quit as a result of it.

Ukraine MPs, doctors, experts and activists unite to defend equal taxation rates for all tobacco products

Sri Lanka bans ENDS

Sri Lanka was one of the first countries in the South-East Asia Region to ban electronic cigarettes. As per "Prohibited Tobacco Products" regulations of 2016, no person in the country shall manufacture, import, sell or offer for sale any electronic cigarette that contains tobacco. This initiative shows the commitment of the country to effectively address the ongoing tobacco epidemic as electronic cigarettes could put people, specially youth, at risk of nicotine addiction.

Pictorial health warnings mandated on ENDS, Republic of Korea

In the Republic of Korea, ENDS have been regulated as tobacco products under the Tobacco Business Act since January 2014. Although the ENDS industry strongly opposed displaying health warnings on ENDS products, pictorial health warnings on all nicotine and tobacco products have become mandatory.

The Tobacco Pictorial Health Warning Committee, composed of representatives from the Ministry of Health and Welfare, the Ministry of Finance, the Ministry of Gender Equality and Family, academia and experts from public health, youth education, communication, and civil society organizations, reviewed the most recent available scientific evidence on tobacco products to draw up a list of topics for the warnings. In addition, the Ministry of Health and Welfare conducted focus group interviews and online public surveys to identify the most powerful text and images for health warnings, and evaluated existing health warnings from around the world.

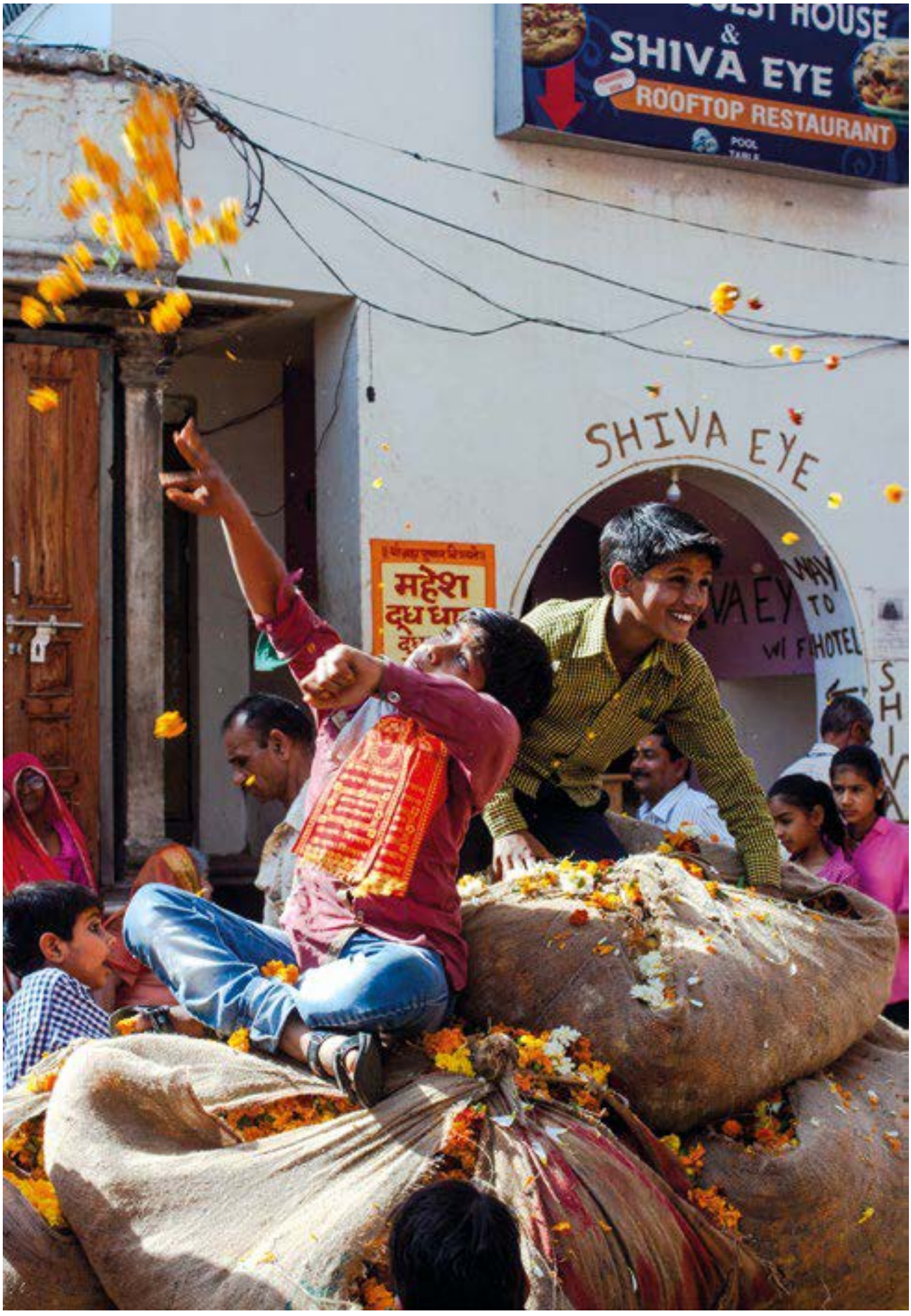
Since December 2016, three rounds of health warnings have been issued by the Ministry of Health and Welfare, and images for the warnings on ENDS have changed every 2 years to deliver the message more effectively on the harm of ENDS use. The Republic of Korea was the first country in the world to make pictorial health warnings obligatory on ENDS, and its experience of doing so provides a valuable example of how to consultatively develop and implement health warnings on emerging and novel nicotine and tobacco products based on scientific evidence.

23 December 2016 to
22 December 2018

23 December 2018 to
22 December 2020

23 December 2020 to
22 December 2022

Changes in the pictorial health warning on e-cigarettes in Republic of Korea


HOUSE
&
SHIVA EYE
ROOFTOP RESTAURANT
POOL
TABLE
SHIVA EYE
महेश

CONCLUSION

In the 13 years during which MPOWER has been monitored, there have been tremendous strides made in tobacco control. At the same time there have been countless challenges – perhaps the greatest of which was faced in 2020 in the shape of the COVID-19 pandemic.

Despite these hurdles, there are now 5.3 billion people who are protected by at least one best-practice tobacco control measure – 4.2 billion more than were covered in 2007. Conversely, 2.4 billion people remain unprotected by evidence-based tobacco control best practices, leaving them at risk from the health and economic harms caused by tobacco.

There has been inspiring progress in tobacco control since the adoption of the WHO FCTC and the introduction of MPOWER. Billions of lives are now better protected and millions of lives have been saved over the years. This has come about through the collective and coordinated efforts of a global community dedicated to tobacco control. But there is still so much work ahead of us. Only two countries in the world (Brazil and Turkey) have put all MPOWER measures in place at a comprehensive level. And although the prevalence of smoking has declined across most of the world, as the total population grows, the total number of people smoking remains high.

Every country has an obligation to protect the health of its people, and all Parties to the WHO FCTC have made a commitment to implement strong tobacco control policies as an important means of fulfilling their obligation to protect the health of their people. The SDGs have also underscored the importance of this commitment and call to "strengthen the implementation of the WHO FCTC in all countries, as appropriate", measured by the reduction of tobacco use in adults. Tobacco use reduction is also one of the 16 trace indicators to measure (and is a major contributor to) the Healthier Billion component of the WHO Triple Billion Targets, an initiative to help countries deliver on the SDGs.

The focus of this report, addressing new and emerging products, charts a new threat to tobacco control. ENDS are increasingly available in many countries along with other novel products like heated tobacco products and nicotine pouches. As they emerge and rapidly evolve, these products can be difficult to characterize and therefore bring with them many regulatory challenges. At the same time, the tobacco and related industries behind these newer products pedal misinformation campaigns, marketing them as "clean", "smoke-free" or

"safer", and claim they are effective cessation aids. By doing so, these industries attempt to appear part of the solution to the tobacco epidemic, as opposed to instigators and perpetrators of the epidemic. These industries also target children and adolescents by using marketing strategies and thousands of flavours that make ENDS and other nicotine and tobacco products appealing. When children use ENDS, or even try them, they are more than twice as likely to use conventional cigarettes. The tobacco industry gains new customers.

The evidence from this report indicates that 32 countries currently ban the sale of ENDS, taking a strong stance on preventing the potential harms they pose to their populations. A further 79 countries have adopted bans on use in public indoor areas, advertising, promotion or sponsorship bans or graphic health warnings for ENDS; however, 39 of these are only partially adopted. This leaves a total 84 countries with no legislation addressing ENDS in any of these domains.

The data also show that only a handful of countries ban flavours in ENDS, and a few more regulate them. In parallel to this, 94 countries do not limit the sale of ENDS to a minimum age, making these products freely available to minors.

And where data are available on tax rates, these rates are generally low, with only three countries taxing ENDS e-liquids at 75% or more of the retail price. Too many countries remain vulnerable to the tactics used by the tobacco and related industries to expand their markets. Countries should protect their populations, and in particular their children and adolescents, from unregulated novel and emerging tobacco and nicotine products.

There has been inspiring progress in the 13 years since MPOWER monitoring began, but still there are many challenges to overcome in order to achieve the commitments countries have made through the WHO FCTC, the SDGs and the Noncommunicable Diseases Global Action Plan to reduce tobacco use and bring a swift end the tobacco epidemic. Countries should remain vigilant and maintain focus on implementing evidence-based measures that are proven to reduce tobacco use, and avoid distractions caused by the proliferation of newer products. As the world emerges from the COVID-19 pandemic, the call to build back better should be central to tobacco control. We must all recommit to strengthening implementation of the WHO FCTC, strive to adopt MPOWER measures at the highest level of achievement, and ensure that all the people of the world are protected from the harms of tobacco and nicotine.

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TECHNICAL NOTES

ANNEXES

WEB ANNEXES

COVID-19 and the WHO report on the global tobacco epidemic, 2021

The WHO report on the global tobacco epidemic, 2021 requires the coordinated inputs of hundreds of public health specialists. It is important to note, therefore, that production of this report faced unique limitations. Many country-level focal points in tobacco control faced significant capacity challenges over the period of data collection and validation because they had to take on additional COVID-19 response functions, therefore some valuable information or refinements of our analyses may have been missed.

We also note that comparisons of the latest data to previous years will need to take into account the exceptional circumstances during 2020 that have both accelerated progress in tobacco control in some parts and slowed it down in others. For instance, a number of countries have managed to strengthen their tobacco control legislation during that time. It is beyond the scope of this report to analyse the unique context of each country.

We want to take this opportunity to thank all those who offered their valuable time and resources to ensuring this report could be published on time. Many people involved in the report have suffered from COVID-19 directly, had to care for family or friends during this difficult time, and/or have lost loved ones.

We dedicate this report to all those we lost to COVID-19.

TECHNICAL NOTE I

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.

This edition of the report includes for the first time data on ENDS and ENNDS, therefore the methodology used for the data related to these products was added throughout the Technical Notes.

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 people from tobacco smoke), 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. Tobacco control laws and regulations as well as product regulations are also the sources of data for ENDS and ENNDS. In cases where a law had been adopted by 31 December 2020 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 2020". In cases where a law had been adopted but not yet the implementing regulations, data were reported with the asterisk "Regulations are pending".
- 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 O (offer help to quit tobacco use): data not reported under the COP reporting mechanism were collected mainly through WHO Regional and WHO Country Offices.
- For R (raise taxes on tobacco): the prices of the most sold brand of cigarettes, the cheapest brand and a premium brand 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 2020. Exceptions to this cut-off date were tobacco product prices and taxes (cut-off date 31 July 2020) and anti-tobacco mass media campaigns (cut-off date 30 June 2020).

Data validation

For each country, every data point for which legislation was the source was assessed by two 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, if needed, by a third expert staff member not yet involved in the appraisal of the legislation. Disagreements in the interpretation of the legislation were resolved by: (i) checking the original texts of the legislation; (ii) trying to obtain consensus from the two expert staff involved in the data collection; (iii) trying to obtain clarification from judges or lawyers in the concerned country; and (iv) 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 governments 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/materials 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 annex tables. Further details about the data processing procedure are available from WHO.

Data analysis

It is important to note that data about laws reflect the status of legislation adopted by 31 December 2020 that has a stated date of effect and is not undergoing a legal challenge that could impact the date of implementation. Data from laws not in effect by 31 December 2020 have a footnote stating this. The summary measures developed for this report are the same as those used for the 2019 report.

The report provides analysis of progress made between 2018 and 2020, and between 2007 and 2020 using the latest assessment of the status of measures in each year 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 2019[2] 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 2020 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, promotion and sponsorship bans, and tobacco taxes) is included in these totals.

Monitoring of tobacco use and anti-tobacco mass media campaigns are reported separately.

Correction to previously published data

The 2018 data published in the last report were reviewed, and about 3% of data points were corrected. The full set of MPOWER data revised for all years back to 2007 is available in the WHO Global Health Observatory at https://www.who.int/data/gho/data/themes/theme-details/GHO/tobacco-control.

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 and household population-based surveys respectively.

Surveys were considered recent if conducted in the past 5 years. For this report, this means 2015 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 survey using the same or similar questions 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 aged 13–15 years or other age range encountered during secondary-level school. 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: population-based surveys that can provide indicators for adults aged 15 years and over (or another age range starting around 15 and including people older than 15), 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 2015 or later.
** Survey sample representative of the national population.
*** Collected at least every 5 years.

Owing to the difficulty of running population or school-based national surveys during the COVID-19 pandemic, countries who were at the highest level of achievement in the previous report have not been downgraded in this report.

Smoke-free legislation

There is a wide range of places and institutions that can be made smoke-free by law. Smoke-free legislation can be in place at the national or subnational level. The report includes data based on national legislation, and legislation in subnational jurisdictions where available and where national laws are incomplete. The assessment of subnational smoke-free legislation includes first-level administrative subdivisions of a country, as listed in ISO3166. Subnational data reported in Annex VI only reflect the content of the subnational laws. 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 complete[4] 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;
- governmental 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. Countries with no complete smoking ban at national level but where at least 90% of the population is covered by complete subnational smoke-free laws are grouped in the top category.

The groupings for the smoke-free legislation indicator are listed below.

	Not reported
	Complete absence of bans, 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 Annex VI.

A number of countries include exceptions to their smoke-free law that allow for the provision of designated smoking rooms (DSRs) in certain public places and workplaces. This is reported as a "No". For the small number of countries where DSRs are allowed under "very strict technical requirements",[5] this is reported in the Annex tables as an asterisk instead of a "Yes". If DSRs are allowed but the very strict requirements are missing or not mentioned in the legislation, this is reported as a "No". The groupings for smoke-free laws treat an asterisk the same as a "No", because a law that allows DSRs in any form does not provide complete protection.

Tobacco dependence treatment

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

- nicotine replacement therapy (NRT);
- smoking cessation support;
- 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.

	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 settings.

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 Annex VI.

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] or many[4] appropriate characteristics[5] OR large warnings[6] missing many[4] appropriate characteristics[5]
	Medium size warnings[2] with all appropriate characteristics[5] OR large warnings[6] missing some[3] appropriate characteristics[5]
	Large warnings[6] with all appropriate characteristics[5]

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 Four or more.

5 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.

6 Average of front and back of the package is at least 50%.

In addition to the data about cigarettes used for the grouping of the health warnings indicator, data about other smoked tobacco products and smokeless tobacco products, as well as other related data such as the appearance of the quit line number, the requirement for plain packaging, etc. were collected and are reported in Annex VI.

Plain packaging (also called standardized packaging) is defined by WHO FCTC Article 11 guidelines 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".

In order for a country to appear in this report as having introduced plain packaging, the following criteria (established by WHO FCTC Article 13 guidelines) are requested by a law and the implementing rules:

- black and white or two other contrasting colours, as prescribed by national authorities;
- nothing other than a brand name, a product name and/or manufacturer's name, contact details and the quantity of product in the packaging, without any logos or other features apart from health warnings, tax stamps and other government-mandated information or markings;
- prescribed font style and size for the above elements;
- standardized shape, size and materials:
- there should be no advertising or promotion inside or attached to the package or on individual cigarettes or other tobacco products.

Countries with a law requiring plain packaging but with no implementing rules or regulations yet adopted, will not be reported as having introduced plain packaging but will have the footnote "Regulations are pending" added in the report. This is also the case for countries that have required health warnings by law without having yet issued the proper texts and/or images by decree, rule, regulation, etc.

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 2018 and 30 June 2020 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 2018 and June 2020 with a 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

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 subdivisions as listed in ISO3166. Subnational data reported in Annex VI only reflect the content of subnational laws. 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);[6]
- brand names of non-tobacco products used for tobacco products (brand sharing);[7]
- 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 termed "direct" advertising, and the remaining six are termed "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.

The basic distinction for the two lowest groups is whether bans cover national television, radio and print media or not, 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 below. Countries where at least 90% of the population were 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 goods and services 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 Annex 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 (or sales taxes), 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
	≥ 25% and < 50% of retail price is tax
	≥ 50% and < 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 in each year of this report from 2010 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 2010 and 2020
NO	Cigarettes more affordable – per capita GDP needed to buy 2000 cigarettes of the most sold brand declined on average between 2010 and 2020
	No trend change in affordability of cigarettes since 2010
...	Insufficient data to conduct a trend analysis

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

Data collected and reported for ENDS and ENNDS in relation to the P, W and E measures

For the first time ever, this report includes PWE data collected about ENDS and ENNDS. For P, W and E related data, the methodology used to collect and validate the data as well as the criteria used, were identical to those described earlier in this Technical Note. However, no subnational legislation was assessed for these products (only national legislation) and no compliance data were collected.

Specifications on data about ENDS and ENNDS

In terms of product regulation, ENDS and ENNDS were categorized based on provisions in national legislation or regulations. For countries where the sale of ENDS and ENNDS is banned, we have nonetheless reported on regulations relating to their use, advertising, promotion, and sponsorship. For W and E, a distinction was made between the regulation applicable to the electronic devices and the one applicable to the e-liquids.

The questions used for the groupings of the P,W and E measures described earlier were all assessed, and other related data such as minimum sale age, or regulation of flavours, were also collected and some of these are reported in Annex II.

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 scored 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 2020. For countries with more recent legislation, compliance data are reported as "not applicable".

The compliance assessments are listed in Annex VI. Annex 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).

Background chapters

All background chapters were developed as brief summaries of the topic areas covered and are not intended to be comprehensive reviews of the existing literature. All recommendations presented are based upon pre-existing Member State agreements or published technical guidance.

COVID-19 and tobacco: the links

This chapter is intended to provide a brief overview of the impact the COVID-19 pandemic has had on tobacco users and tobacco control. The chapter is based upon literature provided by partners working in tobacco control and a narrative review of the literature on COVID-19 and tobacco. Databases searched include PubMED and Scopus and search terms used included 'tobacco', "smoking", "coronavirus", "COVID", "policies", "tobacco control", "law" and "interventions". Three main questions were explored:

- What is the link between tobacco use and COVID-19? With regard to the question of the relationship between tobacco use and COVID-19 outcomes, systematic reviews identified in the literature search were reviewed. WHO has commissioned an umbrella systematic review of this literature (see below) and the researchers leading this work reviewed this aspect closely.
- How did countries react to the emerging evidence on the link between smoking and COVID-19? This section of the chapter was informed by the literature review described above as well as the experience of the WHO supporting countries during the pandemic. This is not an exhaustive review of all country approaches and is not intended to provide policy guidance or recommendations.
- How has the tobacco industry exploited the crisis to further their commercial ends? Our partners at the University of Bath, STOP Initiative, are continuously monitoring industry interference. Again, the information provided here is not exhaustive but provides a brief overview of the more prominent activities conducted by the industry.

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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 https://www.who.int/fctc/reporting/en/.

2 United Nations Department of Economic and Social Affairs, Population Division in World population prospects: the revision (median fertility projection for the year 2020). For more information please refer to https://population.un.org/wpp/Download/Standard/Population/.

3 The World Bank: World development indicators published July 1, 2020. For more information please refer to https://datahelpdesk.worldbank.org/knowledgebase/.

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.

7 Designated smoking room exceptions in the legislation that include at least three out of the six following characteristics, and include at least criteria 5 or 6, are denoted in the annex tables with an asterisk. The designated smoking room must:

- be a closed indoor environment;
- be furnished with automatic doors, generally kept closed;
- be non-transit premises for non-smokers;
- be furnished with appropriate forced- ventilation mechanical devices;
- have appropriate installations and functional openings installed, and air must be expelled from the premises;
- be maintained, with reference to surrounding areas, in a depression not lower than 5 Pascals.

TECHNICAL NOTE II

TOBACCO USE 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 smoking[1] and smokeless tobacco use among young people and adults (Annex XI). It also presents WHO-modelled, age-standardized prevalence estimates for tobacco use for people aged 15 years and over (Annex X). This technical note provides information on the method used to generate the WHO 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-focused 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 National Survey of Risk Factors in Argentina, 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 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 use 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 at least one of these six indicators are available in most countries, thereby permitting robust 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 published alongside this report at https://www.who.int/health-topics/tobacco/.

Analysis and presentation of tobacco use prevalence indicators

Estimation method

A statistical model based on a Bayesian negative binomial meta-regression was used to model crude adjusted and age-standardized estimates for countries for each indicator (current and daily tobacco use, 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 six indicators specified above.

The model has two main components:

(a) adjusting for missing indicators and age groups, and (b) running the regression to generate an estimate of trends over time as well as the 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 data gaps "borrow information" from "priors" calculated from their data pooled with data from countries in the same UN subregion.[3]

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 UN subregion 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 UN subregion 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 (e.g. 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 the year of the most recent survey. If the most recent survey was earlier than 2019, the trend is projected to 2019. The projection assumes that the pace and level of adoption of new policies during the period covered by the countries' national surveys continued unchanged to 2019. Countries with few surveys will have more borrowed information blended into their trend line than countries with many surveys. To allow global comparability, the trend calculation is the same for all countries. No allowances are made for inflection points in the specific years when tobacco control policies were introduced or improved. Therefore, WHO estimates and projections may differ from countries' own estimates and projections.

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 2007 to 2019 are presented.

In this report, comparable estimates of current tobacco use among people aged 15 years and over are presented at country-level for the year 2019. 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 1990–2020 is much more complete.

For example, since the *WHO report on the global tobacco epidemic, 2019*, 243 national surveys from 100 countries have been added to the data set, and 40 existing surveys have been updated with additional data points. Each round of WHO estimates is calculated using all available survey data back to 1990. The more data points available, 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 2019, the trend from 2000 to 2025 is published in the biennial *WHO global report on trends in tobacco smoking 2000–2025*.

1 Tobacco smoking includes cigarette, cigar, pipe, hookah, shisha, water-pipe, heated tobacco products 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 list of countries by UN subregion, please refer to pages ix to xiii of World population prospects: the 2019 revision, published by the UN Department of Economic and Social Affairs at https://population.un.org/wpp/Download/Standard/Population/ (accessed December 17, 2020). Please note that, for the purposes of tobacco use analysis, the following adjustments were made: (i) Eastern Africa subregion was divided into two regions: Eastern African 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; (iv) Central Africa and Southern Africa were combined into one subregion; (v) Melanesia, Micronesia and Polynesia subregions were combined into one subregion; and (vi) Ireland and the United Kingdom were combined with Northern America.

TECHNICAL NOTE III

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 other data collected for this report in relation to tobacco taxation and price and tax data on heated tobacco products and nicotine and non-nicotine delivery systems.

1. Data collection

All data were collected between June 2020 and February 2021 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, the least-expensive brand and a premium brand for July 2020.

Data on tax structure were collected through contacts with ministries of finance. The validity of this information was checked against other sources. For many countries, this was done through the wealth of work and knowledge accumulated by WHO working directly with ministries of finance on tobacco taxation since 2009. Other 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.

The tax data collected focus on indirect taxes levied on tobacco products (e.g. excise taxes of various types, import duties, value added taxes), 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.

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.

The table below describes the types of tax information collected.

1. Specific excise taxes	A 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 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 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 specific or ad valorem. Specific import duties are applied in the same way as specific excise taxes (e.g. an amount per 1000 sticks). 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 taxes 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 generally 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.

2. Data analysis

The price of the most sold brand of cigarettes was considered in the calculation of the tax as a share of the retail price reported in Annex table 9.1 in online Annex 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, national average estimates calculated for prices and taxes reflect the fact that different rates are applied by state/province over and above the applicable federal tax. In the case of Brazil, where state VATs vary, the highest rate, which is applied in most States, was applied. In the Federated States of Micronesia, which also has varying VAT rates across states, the VAT rate applicable to the state where price data was collected (Pohnpei) was used. A weighted average of retail price and tax were calculated for China given the very large array of brands sold in the market: the most sold brand changing almost every year and representing a very small share of the market was not representative.

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. 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, import duties or VAT. An example of such tax is the environmental levy.

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 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 of any smoked or smokeless tobacco product, 20 sticks of cigarettes, bidis and heated tobacco products (HTPs) and one stick of cigars and cigarillos. For the e-liquid of closed electronic nicotine or non-nicotine delivery systems (ENDS/ENNDS) the price and tax was calculated for 1 ml while for open systems, it was calculated for 10 ml. Price and tax for smoked tobacco products (including bidis, cigarillos, cigars, pipe tobacco, roll-your-own or waterpipe tobacco) was calculated for 69 countries, while the calculation for smokeless tobacco products (chewing tobacco, dry snuff, moist snuff or nose tobacco) was made for 21 countries. Price and tax was also calculated for HTPs for 51 countries, for the e-liquid of closed ENDS/ENNDS for 45 countries and for the e-liquid of open ENDS/ENNDS for 52 countries (see tables 9.3 and 9.7 in online Annex IX).

	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] Retailer's and wholesaler's profit margin (same in both countries)	0.20	0.20
[D] Country B: ad valorem tax on retailer's price (20%) = 20% x [E]	-	0.55
[E] Final price = P = [A]+[B]+[C] or [A]+[C]+[D]	2.60	2.75
Total tax share (as % of P)	**0.40/2.60 = 15.4%**	**0.55/2.75 = 20%**

3. Calculation

As an example of the calculations performed, denote S_{ts} as the share of taxes in 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 in the price of a pack of cigarettes;

S_{av} = Share of ad valorem excise taxes 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 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}, depending on the base it is applied on, can be much more difficult to calculate and would involve 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:

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

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

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;[1]

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 price or CIF value. But in fact, the base of the ad valorem varies a lot around the world and can include other bases, such as retail price, retail price net of some taxes (and/or some predefined margins), retail price net of all taxes, etc.

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. The calculation is more complicated when the base is the manufacturer's price (M) and needs to be recovered 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. Considering this, it was decided that unless 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. 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 substantially 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[2]).

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).[3] However, in exceptional cases where no such data were available (Angola, Bhutan, Equatorial Guinea and Libya), the export price was considered instead. 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% × (1 - SVAT), equivalent to

S_{VAT} = VAT% ÷ (1+ VAT%)(4)

In some cases, however, we were informed that the VAT was not effectively collected at all levels of the supply chain and was mainly levied at the importing or manufacturing gate. In this case, the VAT was calculated on the basis of M (or M*) and the different taxes collected at this stage, mainly import duties and excise taxes (Angola, Benin, Cabo Verde, Equatorial Guinea, Gabon, Gambia, Guinea, Kiribati, Malaysia, Mali, Mauritania, Tonga, Uganda and Vanuatu).

In sum, tax rates are calculated using the formula:

S_{ts} = $S_{id} + S_{as} + S_{av} + S_{VAT}$ (5)

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

S_{av} = $(T_{av}\% \times M) \div P$ or
$(T_{av}\% \times M^* \times (1 + S_{id})) \div P$ [4]
if the most popular brand was imported

S_{id} = $(T_{ID}\% \times M^*) \div P$ (if the import duty is value-based) or
ID ÷ P (if import duty is a specific amount per pack)

S_{VAT} = VAT% ÷ (1+ VAT%)

4. Prices

Primary collection of price data in this and previous reports involved surveying retail outlets. Price data were collected from two different types of outlets.

Questionnaires sent to data collectors were pre-populated with the names of the highest selling brand in each country. The popular brand was identified using data collected from the 2018 questionnaires, through reports from data collectors in 2020 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 two types of retail outlets were defined as follows:

- 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.
- 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).

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 2020, changes in the brand were made for Benin, Brazil,[5] Cambodia, Japan,[6] Madagascar, Micronesia (Federated States of),[7] Venezuela (Bolivarian Republic of) (different brand but same price category), Chad, Democratic Republic of the Congo, New Zealand[8], Panama, Peru, Portugal, Saint Vincent and the Grenadines (cheaper brand category), Angola, Ecuador, Iran (Islamic Republic of), Philippines, Sierra Leone, Yemen (more expensive brand category). In four other countries (Equatorial Guinea, Hungary, Iceland and India) the brand reported in 2020 was a variant of the brand reported in 2018, with similar price levels and these were treated as identical in both years for purposes of price comparisons.

As in 2012, 2014, 2016 and 2018, the price used for each of the 27 countries of the European Union (EU) was the most sold brand collected by WHO. Prior to 2012, price and tax information were taken entirely from the EU's Taxation and Customs Union website. 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 prices of the most sold brand to calculate tax rates.[9] The most sold brand is determined based on brand market shares reported from secondary sources, which is then validated by countries. It is also worth noting that the EU tables use a WAP calculated from market data derived from the previous year (due to availability of data), which means that it would not reflect a price change that may have occurred following a tax increase in the next year. It also means that the estimated tax share may not be representative of the actual tax share since the WAP and the tax rates are from different years. Excise and VAT rates are still collected from the EU published tables. However, tax shares, as computed and presented 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. The most sold brand was used for all EU countries except for Finland, who reported to WHO its weighted average price (WAP) for 2008, 2010, 2012, 2014, 2016, 2018 and 2020.

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/increase in the tax.

In the current database, there are cases where taxes increased between 2018 and 2020 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 Kenya, the specific excise tax increased from 2500 KES per 1000 cigarettes in 2018 to 3,157 KES per 1000 cigarettes in 2020 (a 26.3% increase), while the price of the most sold brand increased from 130 to 250 KES per pack (a 92% increase). In terms of tax share the excise represented 38.5% of the price in 2018 and it went down to 25.3% of the price in 2020. This is because prices rose more than taxes.

In the same way, 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. Andorra, Austria, Belize, Brazil, Bulgaria, Burundi, Dominica, Ecuador, El Salvador, Germany, Greece, Malaysia, Mauritius, Micronesia (Federated States of), Palau, Sao Tome and Principe, Switzerland, Tunisia, Uganda, United Republic of Tanzania).
- In other cases, prices increased above tax increases, leading to a decrease in tax share for a specific or mixed excise structure (e.g. Australia, Belgium, Bolivia (Plurinational State of), Canada, Chile, Colombia, Costa Rica, Dominican Republic, Fiji, Iceland, Japan, Jordan, Kenya, Latvia, Lesotho, Luxembourg, Mongolia, Namibia, Nepal, New Zealand, North Macedonia, Norway, Papua New Guinea, Russian Federation, Samoa, Serbia, Seychelles, Slovakia, Slovenia, South Africa, Sweden, Tajikistan, Ukraine, the United Kingdom, Uruguay, Zambia, Zimbabwe).
- 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 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. Countries that have seen changes in their tax share mainly due to changes in CIF value include Gabon, Ghana, Niger, and Vanuatu.

  Care should also be taken in relation to countries where the most sold brand changed between 2018 and 2020. This also has had an impact on the tax proportion of the affected countries which had a specific or mixed excise structure. In some cases, because the new brand reported was more expensive and despite tax increases, the total tax share decreased (Angola, Yemen and the Philippines). In the case of Ecuador 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, 2014, 2016, and 2018 estimates, as needed.

6. Taxation of novel and emerging nicotine and tobacco products (see Table 9.3 for HTPs and 9.7 for ENDS/ENNDS, online Annex IX)

Heated tobacco products (HTPs)

Similar to cigarettes, the price of the most sold brand of sticks (not the devices) has been collected and where applicable, taxes applied. The same methodology used for calculating the tax of cigarettes was followed for HTPs. Only two notable differences were applied: when specific excise tax was applied on the weight of tobacco contained in the sticks, the assumption was made that each stick contained 0.3 grams of tobacco (or 6 grams per pack of 20). This assumption was made based on an average estimate published by the e-cigarettes market data provider ECigIntelligence[10]. The second assumption was made on the value of the CIF for countries that applied a tax based on the CIF value. Given the lack available data on the import value of HTPs, an extrapolation was made assuming the CIF value of HTPs would be about double the CIF value of cigarettes. This was based on the assumption that the cost of HTP production was higher than cigarettes production. Estimates of the CIF value as a proportion of retail price of the most sold brand of cigarette in 2018 and 2020 ranged from 10–15%. Based

on this, a standard CIF value of 20% of the retail price of the most sold brand of HTPs was applied for countries where a CIF value was needed to calculate the tax burden of HTPs.

Electronic nicotine and non-nicotine delivery systems (ENDS/ENNDS)

Given the heterogeneity of the ENDS/ENNDS market and the difficulty in identifying a most sold brand that is representative enough of the market in a given country, data were collected on the price of the cheapest brand available for a nicotine or non-nicotine containing e-liquid (whichever was the cheapest available). Data were also collected for two types of e-liquids, those used for open systems and those for closed systems.[11] The tax was calculated in the same manner as for cigarettes with a notable difference being the base quantity. For e-liquid, the base reported is in volume, per ml. Because of differences in prices and packaging, the price was standardized per 10 ml for open systems e-liquids and per 1 ml for closed systems e-liquids. Similar to the case of HTPs and where a CIF value was needed to calculate the tax burden on ENDS/ENNDS e-liquids, given the lack of data, assumptions were made regarding the CIF value as a proportion of the retail price of the cheapest brand reported. Assuming the CIF value was a proxy for the cost of production and, based on information from ECigIntelligence that mark-ups at the wholesale and retail levels could represent up to 100% of the cost at each level, it was assumed that the CIF value would be a bit less than a third of the price, at around 20% of the final retail price. A base of 20% of the retail price was assigned for countries where the ad valorem excise or import duty was calculated on CIF value (except for Morocco and Peru where a CIF value was reported by national authorities).

7. Supplementary tax information (see Table 9.5, online Annex IX)

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, since 2015 the report has been collecting additional information on tobacco (cigarette) taxation and compiles it into data that can inform researchers and policy-makers further on tax policy in different countries.

The information is compiled and classified in this report according to two main themes: tax structure/level and tax administration. Information was also collected in relation to countries that earmark tobacco taxes to fund health programmes and/or tobacco control activities. The different sets of data/indicators reported under each of the themes were developed and are justified based on evidence provided in past reports.

Tax structure/level

- Excise tax proportion of price: higher tax rates and greater reliance on excise is better.
- Type of excise applied: if excise tax is specific, ad valorem, a mix of the two, or if no excise is applied.
- 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, which is better (not applicable in countries where only ad valorem 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).
- 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 tax applied is specific or if it is mixed, and whether the specific tax component is automatically adjusted for inflation (or other). If the specific tax is not adjusted for inflation (or another indicator such as income) 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).
- 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.

Tax administration

Sales of duty free cigarettes: In most countries tobacco products are found to be sold without excise (and other indirect taxes such as VAT and import duties) in duty-free shops in airports, on international transport vehicles and/or other tax-free shops. Duty-free tobacco products are usually made available to travellers going out of the country, but they are now also made available for travellers entering a country. Banning the sale of duty-free cigarettes 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. Some countries have already acted and have banned the sale of duty-free tobacco products. Those products may still be found in airport and other tax-free shops, but they are sold with (excise) taxes included.

Earmarking (portion of taxes or revenues from taxes dedicated to health and/or tobacco control).

Taxes can generate substantial revenues. Earmarking all or a part of tobacco tax revenues can be a useful tool for improving the political economy of tobacco tax increases. Setting aside portions of tax revenue to fund tobacco control efforts or relevant health programmes can help convince the public, politicians and officials of the value of significant tobacco tax increases, the ultimate goal of which is to reduce tobacco use (see Table 9.4 in online Annex IX).

8. Estimates of the affordability of cigarettes (see Table 9.6, online Annex IX)

The affordability of cigarettes for each of the years 2010, 2012, 2014, 2016, 2018 and 2020 was measured by the per capita GDP required to purchase 2000 cigarettes of the most sold brand reported in that year. Analysis of affordability in this report informs the following:

- Affordability index (% of GDP per capita to buy 2000 cigarettes): across countries, a higher value indicates cigarettes are relatively more expensive in relation to income.
- Whether cigarettes have become relatively more affordable between 2010 and 2020 (change in the affordability index as measured above, between 20010 and 2020): as affordability decreases, consumption is discouraged.

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, the World Bank's GDP per capita data series was used. Countries for which no relevant data were available in the IMF WEO database or World Bank's GDP per capita series were dropped from the affordability analysis (Andorra, Cook Islands, Cuba, Democratic People's Republic of Korea, Monaco, Niue, Somalia, Syrian Arab Republic and Venezuela (Bolivarian Republic of)). 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 (Belarus, Cambodia, Estonia, Mauritania, Latvia, Liberia, Lithuania, Sao Tome and Principe, Venezuela (Bolivarian Republic of), Zambia, Zimbabwe).

To assess whether affordability changed on average since 2010, the average annual percentage change in affordability was calculated as the least squares growth rate for all countries with 4 or more years of data. This criterion automatically excluded Bhutan, Malawi and South Sudan, as less than 4 years of price data were available for analysis. Additionally, countries that did not report price data for the most sold brand in 2020 were excluded (Barbados, Brunei Darussalam, Central African Republic, Cook Islands, Cuba, Djibouti, Eritrea, Grenada, Guinea-Bissau, Haiti, Saint Kitts and Nevis, San Marino, and Solomon Islands).

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 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.

2 https://comtrade.un.org/

3 When quantity was reported in weight (kg) rather than number of sticks, the conversion was made assuming one stick contained one gram of tobacco.

4 Or Sav = (Tav % × M*) ÷ P, if the ad valorem tax was applied only on the CIF value, not the CIF value + the import duty.

5 Brand change within the same price category but price also increased compared to 2018.

6 Brand change within the same price category but price also increased compared to 2018.

7 Brand change within the same price category but price also increased compared to 2018.

8 Brand change to a cheaper price category but price also increased compared to 2018

9 Due to a lack of capacity, the price is collected for cigarettes only while calculations for other smoked or smokeless tobacco products are made using the EU tables when available, including the WAP and tax rates.

10 ECigIntelligence.com (restricted access).

11 Open systems are devices that allow the user to buy e-liquids and fill their device with the mixtures they want (with no nicotine, different nicotine concentrations and/or flavours). Closed systems are products that come with a prefilled container (called a cartridge, pod or tank).

ANNEX I

REGIONAL SUMMARY OF MPOWER MEASURES

Annex I provides an overview of selected tobacco control policies in countries. 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 cigarettes, based on the methodology outlined in Technical Notes I, II and III.

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 Annex 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 Annex II for electronic nicotine delivery systems, in Annex VI for smokefree environments, health warnings and packaging, anti-tobacco mass media campaigns, advertising, promotion and sponsorship bans, and in Annex IX for tobacco taxation and affordability. It is important to note that data about laws reflect the status of legislation adopted by 31 December 2020 which has a stated date of effect and is not undergoing a legal challenge that could impact the date of implementation.

The summary measures reported for the *WHO report on the Global Tobacco Epidemic, 2021* are the same as those in the 2019 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 information about Member States where subnational governments play an active role in tobacco control. Daily smoking prevalence for the population aged 15 years and over in 2019 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.

Table 1.1

Africa

Summary of MPOWER measures

COUNTRY	ADULT DAILY SMOKING PREVALENCE (2019)	2020 INDICATOR AND COMPLIANCE							
		M MONITORING	P SMOKING BANS	O CESSATION PROGRAMMES	W WARNINGS		E ADVERTISING BANS	R	
			LINES REPRESENT LEVEL OF COMPLIANCE		HEALTH WARNINGS	MASS MEDIA	LINES REPRESENT LEVEL OF COMPLIANCE	TAXATION	CIGARETTES LESS AFFORDABLE SINCE 2010
Algeria	14%		IIIII				IIIIIIIII	35.5%	Yes
Angola	…		IIIIIIII				IIIIIIIII	12.1%	Yes
Benin	4%		IIIII				IIIIIIII	9.5%	No
Botswana	13%		—				IIIIIIIII	52.2%	Yes
Burkina Faso	9%		IIII				IIIIIII	43.5%	↔
Burundi	7%						IIII	37.3%	Yes
Cabo Verde	6%		IIIII				IIIIIII	19.5%	↔
Cameroon	5%		…				…	43.2%	↔
Central African Republic	…		—				—	…	…
Chad	6%		IIII				IIIIIIII	51.6%	↔
Comoros	10%		IIIIII				IIIII	73.8%	↔
Congo	10%						IIIIIIII	26.9%	Yes
Côte d'Ivoire	9%		—				IIIIII	34.5%	No
Democratic Republic of the Congo	9%		III				IIIIIII	52.1%	No
Equatorial Guinea	…		—				—	24.2%	Yes
Eritrea	4%		—				…	…	…
Eswatini	6%		—				…	53.5%	No
Ethiopia	3%		IIIIIII				IIIIIII	51.2%	↔
Gabon	…		III				IIIIIIIII	21.6%	↔
Gambia	9%		IIIII		⊙		IIIIIIIII	48.7%	Yes
Ghana	2%		—				IIIIIII	31.8%	↔
Guinea	…						IIIIIIIII	37.0%	↔
Guinea-Bissau	7%		—				—	…	…
Kenya	7%		—				IIIIIII	39.0%	↔
Lesotho	18%		IIIII				—	50.6%	↔
Liberia	6%		—				—	56.8%	↔
Madagascar	13%		IIIII				IIIIIIIII	80.4%	↔
Malawi	7%		—				—	56.3%	…
Mali	6%		—				IIIIII	27.7%	No
Mauritania	7%		IIIII				IIII	5.9%	↔
Mauritius	15%		IIIIII				IIIIIIIII	81.2%	Yes
Mozambique	11%		IIIII				IIIII	28.5%	Yes
Namibia	14%		IIIII				IIIII	42.0%	↔
Niger	4%						IIIIIII	31.8%	↔
Nigeria	3%		III		⊙		IIII	35.1%	↔
Rwanda	9%		—				IIIII	64.3%	↔
Sao Tome and Principe	4%		—					33.7%	↔
Senegal	5%		IIIIIII				IIIIIIIII	38.2%	Yes
Seychelles	15%		IIIIIIIII				IIIIIIIII	69.5%	↔
Sierra Leone	12%		—				—	22.6%	Yes
South Africa	17%		—				IIIIIII	52.7%	↔
South Sudan	…		—				—	66.1%	…
Togo	4%		IIIIII				IIIIIIIII	41.4%	Yes
Uganda	5%		IIIIII				IIIIIIIII	34.6%	Yes
United Republic of Tanzania	6%		—				…	30.0%	No
Zambia	10%		IIII				—	38.8%	↔
Zimbabwe	8%		IIIII				—	29.3%	↔

CHANGE SINCE 2018

P SMOKING BANS	O CESSATION PROGRAMMES	W HEALTH WARNINGS	E ADVERTISING BANS	R TAXATION
CHANGE IN POWER INDICATOR GROUP, UP OR DOWN, SINCE 2018				
				▲
	▼			
				▲
	▼			
			▲	
	▼			▲
				▼
▲		▲	▲	▲
	▼			
		▲		
				▼
				▲
	▲	▲		
	▼	▲		
		▲		
	▼			
				▲

ADULT DAILY SMOKING PREVALENCE*: AGE-STANDARDIZED PREVALENCE RATES FOR ADULT DAILY SMOKERS OF TOBACCO (BOTH SEXES COMBINED), 2019

. . .	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 ENVIRONMENTS: SMOKING BANS

	Data not reported
	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 2018 and June 2020 with a duration of at least 3 weeks
	National campaign conducted with one to four appropriate characteristics
	National campaign conducted with five to six appropriate characteristics
	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
	≥ 25% and <50% of retail price is tax
	≥ 50% and <75% of retail price is tax
	≥ 75% of retail price is tax

AFFORDABILITY OF CIGARETTES

YES	Cigarettes less affordable - Trend in per capita GDP needed to buy cigarettes increased since 2010 at a rate over 1.45% per year
NO	Cigarettes more affordable - Trend in per capita GDP needed to buy cigarettes decreased since 2010 at a rate over 1.45% per year
↔	No significant change in affordability of cigarettes since 2010
...	Insufficient data to conduct a trend analysis

COMPLIANCE: COMPLIANCE WITH BANS ON ADVERTISING, PROMOTION AND SPONSORSHIP, AND ADHERENCE TO SMOKE-FREE LAWS

|||||||||| |||||||| |||||||	Complete compliance (8/10 to 10/10)
|||||| ||||| |||| |||	Moderate compliance (3/10 to 7/10)
|| |	Minimal compliance (0/10 to 2/10)

SYMBOLS LEGEND

☆	Plain packaging is mandated.
⊙	Law adopted but not implemented by 31 December 2020.
▼▲	Change in POWER indicator group, up or down, between 2018 and 2020. Some 2018 data were revised in 2020. 2020 grouping rules were applied to both years.
...	Data not reported/not available
–	Data not required/not applicable

Please refer to Technical Note I for definitions of categories

Table 1.2

The Americas

Summary of MPOWER measures

2020 INDICATOR AND COMPLIANCE

COUNTRY	ADULT DAILY SMOKING PREVALENCE (2019)	M MONITORING	P SMOKING BANS	O CESSATION PROGRAMMES	W WARNINGS		E ADVERTISING BANS	R	
			LINES REPRESENT LEVEL OF COMPLIANCE		HEALTH WARNINGS	MASS MEDIA	LINES REPRESENT LEVEL OF COMPLIANCE	TAXATION	CIGARETTES LESS AFFORDABLE SINCE 2010
Antigua and Barbuda	...		III				IIIIIIIII	13.1%	↔
Argentina	18%		IIIIIIII				IIIIIIIII	76.6%	Yes
Bahamas	8%		—				IIIIIII	43.2%	Yes
Barbados	5%		IIIIIIIII				—	...	...
Belize	5%		—				—	34.7%	↔
Bolivia (Plurinational State of)	...		III				II	35.7%	Yes
Brazil	11%		IIIIIIIII				IIIIII	81.5%	↔
Canada	9%		IIIIIIII		☆		IIIIIIIII	61.7%	Yes
Chile	19%		IIIIIIIII				IIIIIIIII	80.0%	Yes
Colombia	5%		IIIIIIII				IIIIIIII	73.1%	Yes
Costa Rica	5%		IIIIIIII				IIIIII	53.6%	Yes
Cuba	13%		IIII				—	...	...
Dominica	...		—				—	22.7%	↔
Dominican Republic	8%		IIIII				—	44.3%	↔
Ecuador	4%		IIIIIIII				IIIIII	66.9%	Yes
El Salvador	5%		IIIII				IIIIIIII	46.5%	Yes
Grenada	...		—				—	...	...
Guatemala	5%		IIIII				IIII	49.0%	↔
Guyana	9%		IIIIII				IIIIIIIII	27.5%	No
Haiti	5%		—				—	...	...
Honduras	...		IIIIIII				IIIIIIIII	42.6%	Yes
Jamaica	7%		IIIIII				IIIIIIIII	42.6%	Yes
Mexico	7%		IIIII				IIIII	67.6%	↔
Nicaragua	...		III				IIIII	69.4%	↔
Panama	2%		IIIIIIII				IIIIIIIII	56.5%	No
Paraguay	8%		—				IIII	18.3%	↔
Peru	6%		IIIIII				IIIIIII	67.7%	Yes
Saint Kitts and Nevis	...		—				—	...	...
Saint Lucia	...		IIIII				—	51.3%	↔
Saint Vincent and the Grenadines	...		—				—	23.1%	Yes
Suriname	...		IIIII				IIIIIIIII	26.5%	Yes
Trinidad and Tobago	...		IIIIIII				IIIIIII	25.7%	Yes
United States of America	14%		...		⊙		...	40.0%	↔
Uruguay	18%		IIIIIIIII		☆		IIIIIIIII	65.9%	↔
Venezuela (Bolivarian Republic of)	...		IIIIIIII				IIIIIIII	73.4%	...

CHANGE SINCE 2018

P SMOKING BANS	O CESSATION PROGRAMMES	W HEALTH WARNINGS	E ADVERTISING BANS	R TAXATION
CHANGE IN POWER INDICATOR GROUP, UP OR DOWN, SINCE 2018				
	▼			
▲				
				▼
				▼
	▼			
	▼			
				▲
▲				
				▲
▲				
	▼			
		▲		
			▲	

ADULT DAILY SMOKING PREVALENCE*: AGE-STANDARDIZED PREVALENCE RATES FOR ADULT DAILY SMOKERS OF TOBACCO (BOTH SEXES COMBINED), 2019

. . .	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 ENVIRONMENTS: SMOKING BANS

	Data not reported
	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 2018 and June 2020 with a duration of at least 3 weeks
	National campaign conducted with one to four appropriate characteristics
	National campaign conducted with five to six appropriate characteristics
	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
	≥ 25% and <50% of retail price is tax
	≥ 50% and <75% of retail price is tax
	≥ 75% of retail price is tax

AFFORDABILITY OF CIGARETTES

YES	Cigarettes less affordable - Trend in per capita GDP needed to buy cigarettes increased since 2010 at a rate over 1.45% per year
NO	Cigarettes more affordable - Trend in per capita GDP needed to buy cigarettes decreased since 2010 at a rate over 1.45% per year
↔	No significant change in affordability of cigarettes since 2010
...	Insufficient data to conduct a trend analysis

COMPLIANCE: COMPLIANCE WITH BANS ON ADVERTISING, PROMOTION AND SPONSORSHIP, AND ADHERENCE TO SMOKE-FREE LAWS

|||||||||| |||||||| ||||||	Complete compliance (8/10 to 10/10)
|||||| ||||| |||| |||	Moderate compliance (3/10 to 7/10)
|| |	Minimal compliance (0/10 to 2/10)

SYMBOLS LEGEND

☆	Plain packaging is mandated.
⊙	Law adopted but not implemented by 31 December 2020.
▼▲	Change in POWER indicator group, up or down, between 2018 and 2020. Some 2018 data were revised in 2020. 2020 grouping rules were applied to both years.
...	Data not reported/not available
–	Data not required/not applicable

Please refer to Technical Note I for definitions of categories

Table 1.3

South-East Asia

Summary of MPOWER measures

2020 INDICATOR AND COMPLIANCE

COUNTRY	ADULT DAILY SMOKING PREVALENCE (2019)	M MONITORING	P SMOKING BANS	O CESSATION PROGRAMMES	W WARNINGS		E ADVERTISING BANS	R	
			LINES REPRESENT LEVEL OF COMPLIANCE		HEALTH WARNINGS	MASS MEDIA	LINES REPRESENT LEVEL OF COMPLIANCE	TAXATION	CIGARETTES LESS AFFORDABLE SINCE 2010
Bangladesh	17%		IIIIII				IIIIIII	73.0%	Yes
Bhutan	. . .		IIIIIII				IIIIIIIII	8.1%	. . .
Democratic People's Republic of Korea	15%		IIIIIII				—	0.0%	. . .
India	7%		IIIIIII				IIIII	57.6%	Yes
Indonesia	33%		II				IIII	62.3%	↔
Maldives	19%		IIIII				IIIII	65.7%	Yes
Myanmar	15%		IIIII				IIIIII	49.9%	No
Nepal	13%		I				IIIIIIIII	27.0%	↔
Sri Lanka	10%		IIIIII				IIIII	77.0%	Yes
Thailand	17%		IIIIII		☆		IIIIIII	78.6%	↔
Timor-Leste	23%		IIIIII				IIIIIIII	21.8%	↔

CHANGE SINCE 2018

P SMOKING BANS	O CESSATION PROGRAMMES	W HEALTH WARNINGS	E ADVERTISING BANS	R TAXATION
CHANGE IN POWER INDICATOR GROUP, UP OR DOWN, SINCE 2018				
		▲		
	▼			
				▲

ADULT DAILY SMOKING PREVALENCE*: AGE-STANDARDIZED PREVALENCE RATES FOR ADULT DAILY SMOKERS OF TOBACCO (BOTH SEXES COMBINED), 2019

. . .	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 ENVIRONMENTS: SMOKING BANS

	Data not reported
	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 2018 and June 2020 with a duration of at least 3 weeks
	National campaign conducted with one to four appropriate characteristics
	National campaign conducted with five to six appropriate characteristics
	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
	≥ 25% and <50% of retail price is tax
	≥ 50% and <75% of retail price is tax
	≥ 75% of retail price is tax

AFFORDABILITY OF CIGARETTES

YES	Cigarettes less affordable - Trend in per capita GDP needed to buy cigarettes increased since 2010 at a rate over 1.45% per year
NO	Cigarettes more affordable - Trend in per capita GDP needed to buy cigarettes decreased since 2010 at a rate over 1.45% per year
↔	No significant change in affordability of cigarettes since 2010
...	Insufficient data to conduct a trend analysis

COMPLIANCE: COMPLIANCE WITH BANS ON ADVERTISING, PROMOTION AND SPONSORSHIP, AND ADHERENCE TO SMOKE-FREE LAWS

||||||||||	Complete compliance (8/10 to 10/10)
||||||| ||||| |||| |||	Moderate compliance (3/10 to 7/10)
|| |	Minimal compliance (0/10 to 2/10)

SYMBOLS LEGEND

☆	Plain packaging is mandated.
⊙	Law adopted but not implemented by 31 December 2020.
▼▲	Change in POWER indicator group, up or down, between 2018 and 2020. Some 2018 data were revised in 2020. 2020 grouping rules were applied to both years.
...	Data not reported/not available
–	Data not required/not applicable

Please refer to Technical Note I for definitions of categories

Table 1.4

Europe

Summary of MPOWER measures

2020 INDICATOR AND COMPLIANCE

COUNTRY	ADULT DAILY SMOKING PREVALENCE (2019)	M MONITORING	P SMOKING BANS	O CESSATION PROGRAMMES	W WARNINGS		E ADVERTISING BANS	R	
			LINES REPRESENT LEVEL OF COMPLIANCE		HEALTH WARNINGS	MASS MEDIA	LINES REPRESENT LEVEL OF COMPLIANCE	TAXATION	CIGARETTES LESS AFFORDABLE SINCE 2010
Albania	18%		...				...	66.7%	Yes
Andorra	28%		IIIIIII				—	78.4%	...
Armenia	25%		IIIIIII ⊙				IIIIIII	44.2%	No
Austria	21%		IIIIIIIII				IIIIIIIII	74.5%	Yes
Azerbaijan	18%		...				...	49.7%	↔
Belarus	23%		IIIIII				IIIIIII	55.6%	Yes
Belgium	19%		IIIIIIII		☆		IIIIIIIII	76.9%	Yes
Bosnia and Herzegovina	30%		—				IIIIIII	84.0%	Yes
Bulgaria	32%		IIIII				IIIIII	85.3%	No
Croatia	31%		...				...	83.6%	↔
Cyprus	29%		IIIIIII				IIIIIIIII	74.4%	Yes
Czechia	24%		IIIIIIII				IIIIIII	77.2%	Yes
Denmark	15%		IIIIIIII				—	78.0%	↔
Estonia	21%		IIIIIIIII				IIIIIIII	87.6%	↔
Finland	15%		IIIIIIIII				IIIIIIIII	88.2%	Yes
France	28%		IIIIIIII		☆		IIIIIIIII	83.2%	Yes
Georgia	27%		IIIIIIII				IIIIIII	81.2%	↔
Germany	18%		—				IIIIIIIII	63.5%	Yes
Greece	27%		...				...	80.8%	Yes
Hungary	28%		...		☆		...	72.7%	Yes
Iceland	10%		IIIIIIIII				IIIIIIIII	55.0%	↔
Ireland	18%		IIIIIIIII		☆		IIIIIIIII	78.9%	No
Israel	18%		...		☆		...	83.2%	Yes
Italy	20%		—				IIIIIII	76.6%	Yes
Kazakhstan	16%		—				IIIIIII	55.7%	Yes
Kyrgyzstan	22%		III				IIIII	52.9%	Yes
Latvia	30%		IIIIIIII				IIIIIIIII	79.9%	↔
Lithuania	22%		III				IIIIIIIII	74.0%	↔
Luxembourg	17%		...				...	68.3%	↔
Malta	19%		...				...	77.6%	No
Monaco	...		...				—	...	...
Montenegro	27%		...				...	77.5%	Yes
Netherlands	17%		...		☆		IIIIIIII	77.2%	Yes
North Macedonia	...		...				...	80.3%	↔
Norway	12%		IIIIIIIII		☆		IIIIIIIII	61.6%	Yes
Poland	21%		IIIIIIII				IIIIII	78.4%	↔
Portugal	20%		IIIIIIII				IIIIIII	78.6%	↔
Republic of Moldova	24%		...				...	62.4%	Yes
Romania	27%		IIIIIII				IIIIIIII	69.6%	↔
Russian Federation	27%		IIIIIIII				IIIIIIII	56.1%	Yes
San Marino	...		...				...	...	...
Serbia	33%		III				IIIIII	76.5%	Yes
Slovakia	24%		IIIIIIIII				IIIIIIIII	76.3%	Yes
Slovenia	20%		...		☆		...	78.7%	↔
Spain	25%		IIIIIIII				IIIIIIII	78.2%	↔
Sweden	9%		—				IIIIIIIII	68.1%	Yes
Switzerland	21%		—				...	59.6%	Yes
Tajikistan	...		III				IIIIIIIII	41.9%	↔
Turkey	26%		IIIIIII		☆		IIIIIIII	84.9%	↔
Turkmenistan	4%		IIIIIIIII				IIIIIIIII	42.2%	Yes
Ukraine	24%		IIIIIIII				IIIIIIII	69.3%	Yes
United Kingdom of Great Britain and Northern Ireland	13%		IIIIIIIII		☆		IIIIIIIII	79.3%	Yes
Uzbekistan	9%		...				...	56.3%	↔

CHANGE SINCE 2018

P SMOKING BANS	O CESSATION PROGRAMMES	W HEALTH WARNINGS	E ADVERTISING BANS	R TAXATION
CHANGE IN POWER INDICATOR GROUP, UP OR DOWN, SINCE 2018				
▲			▲	
▲	▲			▼
				▲
				▲
		▲		
▲				
				▲
		▲		
				▲
				▲
				▲

ADULT DAILY SMOKING PREVALENCE*: AGE-STANDARDIZED PREVALENCE RATES FOR ADULT DAILY SMOKERS OF TOBACCO (BOTH SEXES COMBINED), 2019

. . .	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 ENVIRONMENTS: SMOKING BANS

	Data not reported
	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 2018 and June 2020 with a duration of at least 3 weeks
	National campaign conducted with one to four appropriate characteristics
	National campaign conducted with five to six appropriate characteristics
	National campaign conducted with at least seven appropriate characteristics including airing on television and/or radio

Please refer to Technical Note I for definitions of categories

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
	≥ 25% and <50% of retail price is tax
	≥ 50% and <75% of retail price is tax
	≥ 75% of retail price is tax

AFFORDABILITY OF CIGARETTES

YES	Cigarettes less affordable - Trend in per capita GDP needed to buy cigarettes increased since 2010 at a rate over 1.45% per year
NO	Cigarettes more affordable - Trend in per capita GDP needed to buy cigarettes decreased since 2010 at a rate over 1.45% per year
↔	No significant change in affordability of cigarettes since 2010
...	Insufficient data to conduct a trend analysis

COMPLIANCE: COMPLIANCE WITH BANS ON ADVERTISING, PROMOTION AND SPONSORSHIP, AND ADHERENCE TO SMOKE-FREE LAWS

|||||||||| |||||||| |||||||	Complete compliance (8/10 to 10/10)
||||||| ||||| |||| |||	Moderate compliance (3/10 to 7/10)
|| |	Minimal compliance (0/10 to 2/10)

SYMBOLS LEGEND

☆	Plain packaging is mandated.
⊙	Law adopted but not implemented by 31 December 2020.
▼▲	Change in POWER indicator group, up or down, between 2018 and 2020. Some 2018 data were revised in 2020. 2020 grouping rules were applied to both years.
...	Data not reported/not available
–	Data not required/not applicable

Table 1.5

Eastern Mediterranean

Summary of MPOWER measures

< "Occupied Palestinian territory" should be understood to refer to the "occupied Palestinian territory, including east Jerusalem"

COUNTRY OR TERRITORY	ADULT DAILY SMOKING PREVALENCE (2019)	2020 INDICATOR AND COMPLIANCE							
		M MONITORING	P SMOKING BANS	O CESSATION PROGRAMMES	W WARNINGS		E ADVERTISING BANS	R	
			LINES REPRESENT LEVEL OF COMPLIANCE		HEALTH WARNINGS	MASS MEDIA	LINES REPRESENT LEVEL OF COMPLIANCE	TAXATION	CIGARETTES LESS AFFORDABLE SINCE 2010
Afghanistan	7%		I				IIIIIIIII	20.7%	Yes
Bahrain	13%		—				...	72.2%	Yes
Djibouti	...		...				...	...	...
Egypt	21%		III				IIIIIII	78.5%	↔
Iran (Islamic Republic of)	9%		IIIIIIIII				IIIIIIIII	15.5%	Yes
Iraq	17%		III				IIIIIII	7.6%	↔
Jordan	30%		—				IIIIIII	78.0%	Yes
Kuwait	17%		...				...	18.9%	Yes
Lebanon	24%		IIIIIII				IIIIIIII	9.9%	↔
Libya	...		II				IIIIIIIII	9.4%	Yes
Morocco	11%		IIIII				IIIIIIII	76.1%	↔
occupied Palestinian territory <	...						IIIIII	92.8%	Yes
Oman	7%		—				IIIIIIIII	63.6%	Yes
Pakistan	12%		IIIII				IIIIIIII	60.8%	↔
Qatar	10%		—				IIIIIIIII	68.2%	Yes
Saudi Arabia	11%		IIIII		☆		IIIIIIIII	73.8%	Yes
Somalia	...		—				—	7.1%	...
Sudan	...		—				IIIIIIII	73.4%	No
Syrian Arab Republic	...		...				...	41.8%	...
Tunisia	21%		—				IIIIIII	69.6%	↔
United Arab Emirates	9%		IIIIIIII				IIIIIIII	72.6%	Yes
Yemen	14%		III				IIIIII	50.7%	Yes

CHANGE SINCE 2018

P SMOKING BANS	O CESSATION PROGRAMMES	W HEALTH WARNINGS	E ADVERTISING BANS	R TAXATION
CHANGE IN POWER INDICATOR GROUP, UP OR DOWN, SINCE 2018				
		▲	▲	
▲	▲		▲	
				▲
	▼			▲
		▲		▲
	▲			
	▼			

ADULT DAILY SMOKING PREVALENCE*: AGE-STANDARDIZED PREVALENCE RATES FOR ADULT DAILY SMOKERS OF TOBACCO (BOTH SEXES COMBINED), 2019

. . .	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 ENVIRONMENTS: SMOKING BANS

	Data not reported
	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 2018 and June 2020 with a duration of at least 3 weeks
	National campaign conducted with one to four appropriate characteristics
	National campaign conducted with five to six appropriate characteristics
	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
	≥ 25% and <50% of retail price is tax
	≥ 50% and <75% of retail price is tax
	≥ 75% of retail price is tax

AFFORDABILITY OF CIGARETTES

YES	Cigarettes less affordable - Trend in per capita GDP needed to buy cigarettes increased since 2010 at a rate over 1.45% per year
NO	Cigarettes more affordable - Trend in per capita GDP needed to buy cigarettes decreased since 2010 at a rate over 1.45% per year
↔	No significant change in affordability of cigarettes since 2010
...	Insufficient data to conduct a trend analysis

COMPLIANCE: COMPLIANCE WITH BANS ON ADVERTISING, PROMOTION AND SPONSORSHIP, AND ADHERENCE TO SMOKE-FREE LAWS

|||||||||| |||||||| |||||||	Complete compliance (8/10 to 10/10)
||||||| ||||| ||||| |||| |||	Moderate compliance (3/10 to 7/10)
|| |	Minimal compliance (0/10 to 2/10)

SYMBOLS LEGEND

☆	Plain packaging is mandated.
⊙	Law adopted but not implemented by 31 December 2020.
▼▲	Change in POWER indicator group, up or down, between 2018 and 2020. Some 2018 data were revised in 2020. 2020 grouping rules were applied to both years.
...	Data not reported/not available
–	Data not required/not applicable

Please refer to Technical Note I for definitions of categories

Table 1.6

Western Pacific

Summary of MPOWER measures

COUNTRY	ADULT DAILY SMOKING PREVALENCE (2019)	2020 INDICATOR AND COMPLIANCE							
		M MONITORING	P SMOKING BANS	O CESSATION PROGRAMMES	W WARNINGS		E ADVERTISING BANS	R	
			LINES REPRESENT LEVEL OF COMPLIANCE		HEALTH WARNINGS	MASS MEDIA	LINES REPRESENT LEVEL OF COMPLIANCE	TAXATION	CIGARETTES LESS AFFORDABLE SINCE 2010
Australia	12%		...		☆		IIIIIIIII	73.9%	Yes
Brunei Darussalam	12%		IIIIIII				IIIIIIII	–	–
Cambodia	15%		IIIIIII				IIIIIII	26.4%	No
China	23%		IIIIIII				IIIIIII	54.5%	No
Cook Islands	17%		IIIIIII				IIIIIIIII	...	...
Fiji	15%		IIIIIII				IIIIII	36.9%	Yes
Japan	17%		—				—	61.0%	Yes
Kiribati	37%		IIIIIII				IIIIIIII	41.4%	No
Lao People's Democratic Republic	24%		IIIIII				IIIIIIIII	11.7%	No
Malaysia	17%		—				IIIIIII	51.5%	Yes
Marshall Islands	19%		IIIIIII				IIIIIII	54.1%	No
Micronesia (Federated States of)	...		IIIIIII				IIIII	46.7%	Yes
Mongolia	23%		IIIII				IIIIII	45.4%	↔
Nauru	37%		IIIIIIII				IIIIIIIII	42.2%	Yes
New Zealand	13%		IIIIIIIII		☆		IIIIIIIII	82.0%	Yes
Niue	...		...				...	57.8%	...
Palau	14%		IIIIIIIII				IIIIIIIII	71.4%	Yes
Papua New Guinea	35%		II				III	53.1%	↔
Philippines	18%		IIIII				IIIIII	55.7%	Yes
Republic of Korea	20%		IIIII				IIIII	73.9%	Yes
Samoa	20%		...				...	49.2%	Yes
Singapore	14%		IIIIIIII		☆		IIIIIIIII	67.1%	↔
Solomon Islands	29%		III				IIIIII	...	...
Tonga	26%		...				...	67.3%	Yes
Tuvalu	29%		IIIIIIII				IIIIIIII	38.7%	↔
Vanuatu	12%		–				IIIIIII	52.7%	↔
Viet Nam	20%		IIIII				IIIIII	38.8%	No

CHANGE SINCE 2018

P SMOKING BANS	O CESSATION PROGRAMMES	W HEALTH WARNINGS	E ADVERTISING BANS	R TAXATION
CHANGE IN POWER INDICATOR GROUP, UP OR DOWN, SINCE 2018				
	▼			▼
	▲			
	▲			
		▲		
	▼			
				▼
	▼			
	▲			
	▲			

ADULT DAILY SMOKING PREVALENCE*: AGE-STANDARDIZED PREVALENCE RATES FOR ADULT DAILY SMOKERS OF TOBACCO (BOTH SEXES COMBINED), 2019

. . .	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 ENVIRONMENTS: SMOKING BANS

	Data not reported
	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 2018 and June 2020 with a duration of at least 3 weeks
	National campaign conducted with one to four appropriate characteristics
	National campaign conducted with five to six appropriate characteristics
	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
	≥ 25% and <50% of retail price is tax
	≥ 50% and <75% of retail price is tax
	≥ 75% of retail price is tax

AFFORDABILITY OF CIGARETTES

YES	Cigarettes less affordable - Trend in per capita GDP needed to buy cigarettes increased since 2010 at a rate over 1.45% per year
NO	Cigarettes more affordable - Trend in per capita GDP needed to buy cigarettes decreased since 2010 at a rate over 1.45% per year
↔	No significant change in affordability of cigarettes since 2010
...	Insufficient data to conduct a trend analysis

COMPLIANCE: COMPLIANCE WITH BANS ON ADVERTISING, PROMOTION AND SPONSORSHIP, AND ADHERENCE TO SMOKE-FREE LAWS

|||||||||| |||||||| ||||||	Complete compliance (8/10 to 10/10)
|||||| ||||| |||| |||	Moderate compliance (3/10 to 7/10)
|| |	Minimal compliance (0/10 to 2/10)

SYMBOLS LEGEND

☆	Plain packaging is mandated.
⊙	Law adopted but not implemented by 31 December 2020.
▼▲	Change in POWER indicator group, up or down, between 2018 and 2020. Some 2018 data were revised in 2020. 2020 grouping rules were applied to both years.
...	Data not reported/not available
–	Data not required/not applicable

Please refer to Technical Note I for definitions of categories

ANNEX II

REGIONAL SUMMARY OF MEASURES APPLIED TO ENDS

Annex II provides an overview of selected tobacco control measures applied to ENDS.

For each WHO region an overview table is presented that includes information on monitoring and prevalence, ENDS use in public indoor areas, health warnings and packaging, advertising, promotion and sponsorship bans, taxation levels, age restrictions on sales and regulations applied to flavours, based on the methodology outlined in Technical Notes I, II and III.

Annex II provides detailed information on selected regulatory aspects of ENDS and ENNDS, for each WHO region. The following data are reported in this Annex:

Regulation of ENDS/ENNDS:

- Bans applied to ENDS/ENNDS
- P, W and E measures applied to ENDS/ENNDS
- Minimum age of sale
- How flavours are regulated.

Monitoring and taxation of ENDS/ENNDS:

- Data on prevalence of ENDS use available from national population-based surveys of adults and/or school-based surveys of adolescents
- Excise tax applied on ENDS/ENNDS e-liquids (closed systems and/or open systems)

Table 2.1.1

Africa

Regulation of ENDS/ENNDS

* ENNDS are treated the same as ENDS

— Not applicable because sale is banned

COUNTRY	BANS
Algeria	None
Angola	None
Benin	None
Botswana	None
Burkina Faso	None
Burundi	None
Cabo Verde	None
Cameroon	None
Central African Republic	None
Chad	None
Comoros	None
Congo	None
Côte d'Ivoire	None
Democratic Republic of the Congo	None
Equatorial Guinea	None
Eritrea	None
Eswatini	None
Ethiopia	Sales, manufacture, wholesale, distribution, offer for sale, import to trade
Gabon	None
Gambia	Sales, import, manufacture, distribution, possession, offer for sale*
Ghana	None
Guinea	None
Guinea-Bissau	None
Kenya	None
Lesotho	None
Liberia	None
Madagascar	None
Malawi	None
Mali	None
Mauritania	None
Mauritius	Sales, offer for sale, distribution*
Mozambique	None
Namibia	None
Niger	None
Nigeria	None
Rwanda	None
Sao Tome and Principe	None
Senegal	None
Seychelles	None
Sierra Leone	None
South Africa	None
South Sudan	None
Togo	None
Uganda	Sales, import, manufacture, distribution, process, offer for sale, bring into the country*
United Republic of Tanzania	None
Zambia	None
Zimbabwe	None

P – MEASURE	W – HEALTH WARNINGS MEASURE	E – MEASURE	MINIMUM AGE OF SALE	HOW ARE FLAVOURS REGULATED
Partial	Partial (e-liquids only)	Full (e-liquids only)	18	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
Full*	Partial (e-liquids only)*	Full*	18*	Not regulated
None	Partial (devices only)*	Full (devices only)*	18*	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	—	None	—	—
None	None	None	None	Not regulated
None	—	None	—	—
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	Partial (e-liquids only)	Full (e-liquids only)	18	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	—	None	—	—
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
Partial	Partial (e-liquids only)	Full (e-liquids only)	18	Not regulated
None	—	None	—	—
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated

Table 2.1.2

The Americas

Regulation of ENDS/ENNDS

* ENNDS are treated the same as ENDS

— Not applicable because sale is banned

COUNTRY	BANS
Antigua and Barbuda	None
Argentina	Sales, import, distribution, commercialization, advertising, promotion
Bahamas	None
Barbados	None
Belize	None
Bolivia (Plurinational State of)	None
Brazil	Sales, import*
Canada	None
Chile	None
Colombia	None
Costa Rica	None
Cuba	None
Dominica	None
Dominican Republic	None
Ecuador	None
El Salvador	None
Grenada	None
Guatemala	None
Guyana	None
Haiti	None
Honduras	None
Jamaica	None
Mexico	Sales, import, distribution, display, promotion, production*
Nicaragua	None
Panama	Sales, import*
Paraguay	None
Peru	None
Saint Kitts and Nevis	None
Saint Lucia	None
Saint Vincent and the Grenadines	None
Suriname	Sales, import, distribution*
Trinidad and Tobago	None
United States of America	None
Uruguay	Sales, commercialisation, importation, registration as a trademark or patent*
Venezuela (Bolivarian Republic of)	Sales, promotion, commercialisation*

P – MEASURE	W – HEALTH WARNINGS MEASURE	E – MEASURE	MINIMUM AGE OF SALE	HOW ARE FLAVOURS REGULATED
None	None	None	None	Not regulated
Full	—	Partial	—	—
None	None	None	None	Not regulated
Full	None	None	18	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
Full*	—	Full*	—	—
Partial*	Partial (e-liquids only)	Partial*	18	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
Full	Full	Partial	18	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
Full	Full	Partial	18	Not regulated
Full	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
Full*	None	Full*	18*	Not regulated
None	None	None	None	Not regulated
Full*	Full (devices only)*	Partial	21*	Not regulated
Full	Full	Partial	18	Not regulated
None	—	None	—	—
None	None	None	None	Not regulated
Full*	—	None	—	—
Full*	None	Partial*	18*	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
Full	Full	None	18	Not regulated
None	None	None	None	Not regulated
None	—	None	—	—
None	None	None	None	Not regulated
None	Partial (e-liquids only)	Partial	21	Not regulated
Full*	—	Full*	—	—
None	—	None	—	—

Table 2.1.3

South-East Asia

Regulation of ENDS/ENNDS

* ENNDS are treated the same as ENDS

— Not applicable because sale is banned

COUNTRY	BANS
Bangladesh	None
Bhutan	None
Democratic People's Republic of Korea	Sales, import, export*
India	Sales, production, manufacture, import, export, transport, distribution, storage*
Indonesia	None
Maldives	None
Myanmar	None
Nepal	Manufacture, import, distribute, promote (bans restricted to some places only)
Sri Lanka	Sales, manufacture, import, offer for sale
Thailand	Sales, import*
Timor-Leste	Sales, import*

P – MEASURE	W – HEALTH WARNINGS MEASURE	E – MEASURE	MINIMUM AGE OF SALE	HOW ARE FLAVOURS REGULATED
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	—	None	—	—
None	—	Partial*	—	—
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
Full*	None	Full (devices only)*	18*	Not regulated
None	—	None	—	—
None	—	None	—	—
None	—	None	—	—

Table 2.1.4

Europe

Regulation of ENDS/ENNDS

* ENNDS are treated the same as ENDS

⊙ Provision adopted but not implemented by 31 December 2020

— Not applicable because sale is banned

COUNTRY	BANS
Albania	None
Andorra	None
Armenia	None
Austria	None
Azerbaijan	None
Belarus	None
Belgium	None
Bosnia and Herzegovina	None
Bulgaria	None
Croatia	None
Cyprus	None
Czechia	None
Denmark	None
Estonia	None
Finland	None
France	None
Georgia	None
Germany	None
Greece	None
Hungary	None
Iceland	None
Ireland	None
Israel	None
Italy	None
Kazakhstan	None
Kyrgyzstan	None
Latvia	None
Lithuania	None
Luxembourg	None
Malta	None
Monaco	None
Montenegro	None
Netherlands	None
North Macedonia	None
Norway	None
Poland	None
Portugal	None
Republic of Moldova	None
Romania	None
Russian Federation	None
San Marino	None
Serbia	None
Slovakia	None
Slovenia	None
Spain	None
Sweden	None
Switzerland	None
Tajikistan	None
Turkey	Import (except for personal consumption)
Turkmenistan	Sales*
Ukraine	None
United Kingdom of Great Britain and Northern Ireland	None
Uzbekistan	None

P – MEASURE	W – HEALTH WARNINGS MEASURE	E – MEASURE	MINIMUM AGE OF SALE	HOW ARE FLAVOURS REGULATED
Full*	None	None	18*	Not regulated
Partial	None	None	18*	Not regulated
Partial	Full	Partial	18	Not regulated
Partial*	Partial	Partial*	18*	Not regulated
Partial*	None	Full (devices only)*	18*	Not regulated
Partial*	None	Partial*	18*	Not regulated
Partial*	Partial	Partial	18*	Not regulated
None	None	None	None	Not regulated
None	Partial	Partial	18	Not regulated
Partial	Partial	Partial	18	Not regulated
Partial*	Partial	Partial*	18*	Not regulated
Partial*	Partial	Partial*	18*	Not regulated
Partial*	Partial	Partial*	18*	Some specific flavours are allowed*⊙
Partial*	Partial	Partial*	18*	Some specific flavours are allowed
Partial*	Partial (e-liquids only)	Full*	18*	All flavours are banned*
Partial*	Partial	Partial*	18	Not regulated
Partial	None	Partial	18	Not regulated
None	Partial	Partial	18	Some specific flavours are banned
Full*	Partial	Partial*	18*	Not regulated
Partial*	Partial	Partial	18*	All flavours are banned*
Partial*	None	Full*	18*	Not regulated
None	Partial	Partial	None	Not regulated
Partial	Partial	Partial	18	Not regulated
Partial	Partial	Partial	18	Not regulated
Partial*	None	None	21*	Not regulated
None	None	None	None	Not regulated
Partial*	Partial	Partial*	18*	Not regulated
Partial	Partial	Partial	18	Not regulated
Partial*	Partial*	Partial*	18*	Not regulated
Full*	Partial	Partial*	18*	Not regulated
None	None	None	None	Not regulated
Partial*	Partial	Partial*	None	All flavours are banned*
Partial*	Partial*	Partial*	18*	Not regulated
None	None	None	None	Not regulated
Full*	Partial	Partial*	18*	Not regulated
Partial	Partial	Partial	18	Not regulated
Partial	Partial	Partial	18	Not regulated
Partial	Partial	Full	18	Not regulated
Partial	Partial	Partial	None	Not regulated
Full*	None	Full*	18*	Not regulated
Partial*	None	None	18*	Not regulated
None	None	Partial*	None	Not regulated
None	Partial	Partial	18	Not regulated
Partial*	Partial	Full	18*	Not regulated
Partial	Partial	Partial	18	Not regulated
None	Partial	Partial	18	Not regulated
None	None	None	None	Not regulated
Full	Full	Partial	18	Not regulated
Full*	Full (devices only)*	Full (devices only)*	18*	Not regulated
None	—	None	—	—
Partial*	None	None	None	Not regulated
None	Partial	Partial	None	Not regulated
Partial*	None	Partial (devices only)*	None	Not regulated

Table 2.1.5

Eastern Mediterranean

Regulation of ENDS/ENNDS

* ENNDS are treated the same as ENDS

— Not applicable because sale is banned

< "occupied Palestinian territory" should be understood to refer to the "occupied Palestinian territory, including east Jerusalem"

COUNTRY OR TERRITORY	BANS
Afghanistan	None
Bahrain	Sales, import, distribution*
Djibouti	None
Egypt	Sales, import, trade*
Iran (Islamic Republic of)	Sales, import, production, supply, export*
Iraq	Sales, import, trade, manufacture*
Jordan	Sales, import, distribution, manufacture*
Kuwait	Sales, trade, import*
Lebanon	Sales, import*
Libya	None
Morocco	None
occupied Palestinian territory <	Sales, import, manufacture *
Oman	Sales, import*
Pakistan	None
Qatar	Sales, import, trade, display, distribution, manufacture*
Saudi Arabia	None
Somalia	None
Sudan	None
Syrian Arab Republic	Sales, manufacture, distribution, trade*
Tunisia	None
United Arab Emirates	None
Yemen	None

P – MEASURE	W – HEALTH WARNINGS MEASURE	E – MEASURE	MINIMUM AGE OF SALE	HOW ARE FLAVOURS REGULATED
None	None	None	None	Not regulated
None	—	None	—	—
None	None	None	None	Not regulated
None	—	None	—	—
None	—	None	—	—
None	—	Full*	—	—
Full*	—	None	—	—
Partial*	—	Full*	—	—
Full*	—	Partial*	—	—
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	—	None	—	—
None	—	None	—	—
None	None	None	None	Not regulated
None	—	None	—	—
Partial*	Partial*	None	None	Flavours are restricted*
None	None	None	None	Not regulated
None	None	None	None	Not regulated
Partial*	—	None	—	—
None	None	None	None	Not regulated
None	Partial (e-liquids only)*	Full*	18*	Not regulated
None	None	None	None	Not regulated

Table 2.1.6

Western Pacific

Regulation of ENDS/ENNDS

* ENNDS are treated the same as ENDS

⊙ Provision adopted but not implemented by 31 December 2020

— Not applicable because sale is banned

COUNTRY	BANS
Australia	None
Brunei Darussalam	Sales, import*
Cambodia	Sales, import*
China	None
Cook Islands	None
Fiji	None
Japan	None
Kiribati	None
Lao People's Democratic Republic	None
Malaysia	Sales
Marshall Islands	None
Micronesia (Federated States of)	None
Mongolia	None
Nauru	None
New Zealand	None
Niue	None
Palau	None
Papua New Guinea	None
Philippines	None
Republic of Korea	None
Samoa	None
Singapore	Sales, import, distribute, offer for sale, possession*
Solomon Islands	None
Tonga	None
Tuvalu	None
Vanuatu	None
Viet Nam	None

P – MEASURE	W – HEALTH WARNINGS MEASURE	E – MEASURE	MINIMUM AGE OF SALE	HOW ARE FLAVOURS REGULATED
Partial	None	None	18	Not regulated
Full*	—	None	—	—
None	—	None	—	—
None	None	None	18*	Not regulated
None	None	None	None	Not regulated
Partial*	None	Partial*	18*	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
Full*	None	Partial*	18*	Not regulated
None	—	None	—	—
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated
Full*	None	Partial*	18*	Flavours are restricted*⊙
Full*	Partial*	Full*	21*	Not regulated
Partial	None	Partial	21	Not regulated
Full	Partial (devices only)	Partial (devices only)	18	Not regulated
Partial*	None	Full*	21*	Some specific flavours are allowed*
Partial	Partial (e-liquids only)	Partial (e-liquids only)	19*	Not regulated
None	None	None	None	Not regulated
Full*	—	Partial*	—	—
None	None	None	None	Not regulated
None	None	None	None	Not regulated
Partial*	Partial*	Full*	18*	Not regulated
None	None	None	None	Not regulated
None	None	None	None	Not regulated

Table 2.2.1

Africa

Monitoring and taxation of ENDS/ENNDS

* ENNDS are taxed the same as ENDS

... Data not available

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
Eswatini
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
Togo
Uganda
United Republic of Tanzania
Zambia
Zimbabwe

DATA ON PREVALENCE OF ENDS USE ARE AVAILABLE FROM NATIONAL SURVEYS		EXCISE TAX IS APPLIED ON ENDS/ENNDS E-LIQUIDS	
POPULATION-BASED SURVEYS OF ADULTS	SCHOOL-BASED SURVEYS OF ADOLESCENTS	CLOSED SYSTEMS	OPEN SYSTEMS
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	Sale is banned	Sale is banned
No	No	…	…
No	No	Sale is banned	Sale is banned
No	Yes	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	Yes	Sale is banned	Sale is banned
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
Yes	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	…	…
No	No	Sale is banned	Sale is banned
No	No	…	…
No	No	…	…
No	No	…	…

Table 2.2.2

The Americas

Monitoring and taxation of ENDS/ENNDS

* ENNDS are taxed the same as ENDS

... Data not available

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)

DATA ON PREVALENCE OF ENDS USE ARE AVAILABLE FROM NATIONAL SURVEYS		EXCISE TAX IS APPLIED ON ENDS/ENNDS E-LIQUIDS	
POPULATION-BASED SURVEYS OF ADULTS	SCHOOL-BASED SURVEYS OF ADOLESCENTS	CLOSED SYSTEMS	OPEN SYSTEMS
No	Yes	…	…
Yes	Yes	Sale is banned	Sale is banned
No	No	…	…
No	No	…	…
No	Yes	…	…
Yes	Yes	…	…
No	Yes	Sale is banned	Sale is banned
Yes	Yes	…	…
Yes	No	…	…
Yes	Yes	…	…
Yes	No	…	…
No	Yes	…	…
No	No	…	…
No	Yes	…	…
Yes	Yes	…	…
No	Yes	…	…
No	Yes	…	…
No	Yes	…	…
No	Yes	…	…
No	No	…	…
No	No	…	…
No	Yes	…	…
Yes	No	Sale is banned	Sale is banned
No	Yes	…	…
Yes	Yes	Sale is banned	Sale is banned
No	Yes	…	…
No	Yes	No	No
No	No	…	…
No	Yes	…	…
No	Yes	…	…
No	Yes	Sale is banned	Sale is banned
No	Yes	…	…
Yes	Yes	…	…
Yes	Yes	Sale is banned	Sale is banned
No	Yes	Sale is banned	Sale is banned

Table 2.2.3

South-East Asia

Monitoring and taxation of ENDS/ENNDS

* ENNDS are taxed the same as ENDS

... Data not available

[1] Data refer to ENNDS.

COUNTRY
Bangladesh
Bhutan
Democratic People's Republic of Korea
India
Indonesia
Maldives
Myanmar
Nepal
Sri Lanka
Thailand
Timor-Leste

DATA ON PREVALENCE OF ENDS USE ARE AVAILABLE FROM NATIONAL SURVEYS		EXCISE TAX IS APPLIED ON ENDS/ENNDS E-LIQUIDS	
POPULATION-BASED SURVEYS OF ADULTS	SCHOOL-BASED SURVEYS OF ADOLESCENTS	CLOSED SYSTEMS	OPEN SYSTEMS
No	No	…	…
No	No	…	…
No	No	Sale is banned	Sale is banned
No	No	Sale is banned	Sale is banned
Yes	No	Yes	No[1]
No	No	…	…
No	No	…	…
Yes	No	…	…
No	No	Sale is banned	Sale is banned
No	Yes	Sale is banned	Sale is banned
No	No	Sale is banned	Sale is banned

Table 2.2.4

Europe

Monitoring and taxation of ENDS/ENNDS

* ENNDS are taxed the same as ENDS

... Data not available

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
North Macedonia
Norway
Poland
Portugal
Republic of Moldova
Romania
Russian Federation
San Marino
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Tajikistan
Turkey
Turkmenistan
Ukraine
United Kingdom of Great Britain and Northern Ireland
Uzbekistan

DATA ON PREVALENCE OF ENDS USE ARE AVAILABLE FROM NATIONAL SURVEYS		EXCISE TAX IS APPLIED ON ENDS/ENNDS E-LIQUIDS	
POPULATION-BASED SURVEYS OF ADULTS	SCHOOL-BASED SURVEYS OF ADOLESCENTS	CLOSED SYSTEMS	OPEN SYSTEMS
No	Yes	…	Yes
No	No	…	…
No	No	No	No
Yes	Yes	No	No
No	No	Yes*	Yes*
No	No	No	No
No	No	No	No
No	No	No	No
Yes	Yes	No	No
No	Yes	No	No
Yes	Yes	…	Yes*
Yes	Yes	No	No
Yes	Yes	No	No
Yes	Yes	Yes*	Yes*
Yes	Yes	…	Yes*
Yes	Yes	No	No
No	Yes	Yes*	Yes*
Yes	Yes	No	No
Yes	Yes	Yes*	Yes*
Yes	Yes	Yes*	…
Yes	Yes	No	No
Yes	Yes	No	No
No	No	No	No
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
No	Yes	Yes	Yes
Yes	Yes	…	Yes*
Yes	Yes	Yes*	Yes*
Yes	No	No	No
Yes	Yes	No	No
No	Yes	…	…
No	Yes	…	Yes*
Yes	Yes	No	No
No	Yes	…	Yes*
No	Yes	…	…
Yes	Yes	No	No
No	Yes	Yes	Yes
No	No	No	No
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
No	Yes	…	…
Yes	Yes	Yes*	Yes*
No	Yes	…	No
Yes	Yes	…	Yes
Yes	Yes	No	No
Yes	Yes	Yes	Yes
Yes	Yes	…	…
No	No	…	…
No	No	…	…
No	No	Sale is banned	Sale is banned
Yes	Yes	No	No
No	No	No	No
No	No	No	No

Table 2.2.5

Eastern Mediterranean

Monitoring and taxation of ENDS/ENNDS

* ENNDS are taxed the same as ENDS

... Data not available

< "occupied Palestinian territory" should be understood to refer to the "occupied Palestinian territory, including east Jerusalem"

[1] Estimates made are for e-shisha

[2] Jordan has both a ban on sale of ENDS and an excise

[3] Data refer to ENNDS

COUNTRY OR TERRITORY
Afghanistan
Bahrain
Djibouti
Egypt
Iran (Islamic Republic of)
Iraq
Jordan
Kuwait
Lebanon
Libya
Morocco
occupied Palestinian territory <
Oman
Pakistan
Qatar
Saudi Arabia
Somalia
Sudan
Syrian Arab Republic
Tunisia
United Arab Emirates
Yemen

DATA ON PREVALENCE OF ENDS USE ARE AVAILABLE FROM NATIONAL SURVEYS		EXCISE TAX IS APPLIED ON ENDS/ENNDS E-LIQUIDS	
POPULATION-BASED SURVEYS OF ADULTS	SCHOOL-BASED SURVEYS OF ADOLESCENTS	CLOSED SYSTEMS	OPEN SYSTEMS
No	No	…	…
No	No	Yes[1]	…
No	No	…	…
No	No	Sale is banned	Sale is banned
No	No	Sale is banned	Sale is banned
No	Yes	Sale is banned	Sale is banned
No	No	…	Yes[2]
No	No	Sale is banned	Sale is banned
No	No	Sale is banned	Sale is banned
No	No	…	…
No	No	…	Yes[3]
No	No	Sale is banned	Sale is banned
No	No	Sale is banned	Sale is banned
No	No	Yes	…
Yes	Yes	Sale is banned	Sale is banned
No	No	…	…
No	No	…	…
No	No	…	…
No	No	Sale is banned	Sale is banned
No	No	…	…
Yes	No	Yes*	…
No	Yes	…	Yes

Table 2.2.6

Western Pacific

Monitoring and taxation of ENDS/ENNDS

* ENNDS are taxed the same as ENDS

... Data not available

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

DATA ON PREVALENCE OF ENDS USE ARE AVAILABLE FROM NATIONAL SURVEYS		EXCISE TAX IS APPLIED ON ENDS/ENNDS E-LIQUIDS	
POPULATION-BASED SURVEYS OF ADULTS	SCHOOL-BASED SURVEYS OF ADOLESCENTS	CLOSED SYSTEMS	OPEN SYSTEMS
Yes	Yes	…	…
Yes	Yes	Sale is banned	Sale is banned
No	No	Sale is banned	Sale is banned
Yes	Yes	…	…
No	No	…	…
No	Yes	…	…
No	Yes	…	…
No	Yes	…	…
No	Yes	…	No
Yes	Yes	Sale is banned	Sale is banned
Yes	Yes	…	…
No	No	…	…
No	Yes	…	…
No	No	…	…
Yes	Yes	…	…
No	Yes	…	…
No	No	…	…
No	Yes	…	…
Yes	No	…	…
Yes	Yes	Yes	…
No	No	…	…
No	No	Sale is banned	Sale is banned
No	No	…	…
No	No	No	No
No	No	…	…
No	Yes	…	…
Yes	Yes	…	…

ANNEX III

YEAR OF HIGHEST LEVEL OF ACHIEVEMENT IN SELECTED TOBACCO CONTROL MEASURES

Annex 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 Annex. 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.

Table 3.1.1

Africa

Year of highest level of achievement in selected tobacco control measures

Note: an empty cell indicates that the population is not covered by the measure at the highest level of achievement.

* or earlier year

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
Eswatini
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
Togo
Uganda
United Republic of Tanzania
Zambia
Zimbabwe

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
				2018
	2017			2017
	2010		2015	
	2018			
			2018	
	2010		2015	2010
	2012			2018
				2019
				2018
				2004
	2019		2019	2019
	2016		2019	2016
			2018	2012
				2012
				2007
	2013		2012	2003
			2020	2018
			2008	2008
	2010		2013	
			2019	2006
			2019	2015
			2016	2016
	2009		2012	2009
				2012
	2015			2015

Table 3.1.2

Americas

Year of highest level of achievement in selected tobacco control measures

Note: an empty cell indicates that the population is not covered by the measure at the highest level of achievement.

⊙ Provision adopted but not implemented by 31 December 2020

* or earlier year

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 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
	2018			2018
	2011		2012	
	2010		2017	
	2020		2009	
2015	2011	2002	2003	2011
2007*	2007	2008	2011	
2007*	2013		2006	
	2008			2009
	2012	2018	2013	
2016	2011		2012	
	2015		2011	
	2008			
	2017		2018	2017
	2010		2017	
	2013	2016	2013	
		2014	2009	
	2008		2005	2008
	2020			
2010	2010		2011	
	2020		2017	
	2013		2016	2013
	2009		2013	
2007*		2008	2020 ⊙	
2008	2005		2005	2014
	2011		2004	2019

Table 3.1.3

South-East Asia

Year of highest level of achievement in selected tobacco control measures

Note: an empty cell indicates that the population is not covered by the measure at the highest level of achievement.

* or earlier year

COUNTRY
Bangladesh
Bhutan
Democratic People's Republic of Korea
India
Indonesia
Maldives
Myanmar
Nepal
Sri Lanka
Thailand
Timor-Leste

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
			2015	
		2016	2016	
2015				
				2010
	2011		2011	2014
			2012	
2008	2010		2005	
			2018	

Table 3.1.4

Europe

Year of highest level of achievement in selected tobacco control measures

Note: an empty cell indicates that the population is not covered by the measure at the highest level of achievement.

* or earlier year

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
North Macedonia
Norway
Poland
Portugal
Republic of Moldova
Romania
Russian Federation
San Marino
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Tajikistan
Turkey
Turkmenistan
Ukraine
United Kingdom of Great Britain and Northern Ireland
Uzbekistan

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
	2006			2006
2007*			2016	
2007*		2020	2016	
2016				2017
			2016	
2007*			2016	
2008	2012		2016	
2012			2017	
2016			2017	
2010		2018	2016	
2007*		2011	2016	
2007*			2016	
2007*			2016	2016
2007*			2016	
2014			2018	
2007*			2016	
2007*	2010		2016	
2012			2016	
2007*				2006
2007*	2004	2003	2016	
2007*			2016	
2010			2014	
			2014	
2007*			2016	
2008			2016	
2010		2016	2017	
2008	2010		2016	
2016			2019	
2007*		2014	2016	
	2008			
2007*	2013			
2007*			2016	
2007*			2015	
2013			2015	2015
2010	2015		2016	
2012	2013		2014	2013
2012				
2008		2018	2016	
2008			2017	2017
2007*	2010		2017	2010
2007*		2018	2016	
2007*				
2020	2018		2018	
2007*	2008	2010	2012	2012
	2000		2014	
2007*			2009	
2007*	2006		2016	

Table 3.1.5

Eastern Mediterranean

Year of highest level of achievement in selected tobacco control measures

Note: an empty cell indicates that the population is not covered by the measure at the highest level of achievement.

* or earlier year
< "occupied Palestinian territory" should be understood to refer to the "occupied Palestinian territory, including east Jerusalem"

COUNTRY OR TERRITORY
Afghanistan
Bahrain
Djibouti
Egypt
Iran (Islamic Republic of)
Iraq
Jordan
Kuwait
Lebanon
Libya
Morocco
occupied Palestinian territory <
Oman
Pakistan
Qatar
Saudi Arabia
Somalia
Sudan
Syrian Arab Republic
Tunisia
United Arab Emirates
Yemen

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
	2015			2015
				2011
			2008	2007
	2010		2008	
2008	2007		2008	2007
				2020
	2020	2020		2020
		2012		2016
2013	2011			
	2009			2009
	2011			
	2009		2017	
			2019	2016
		2018	2017	2017
		2008		2013
				2013

Table 3.1.6

Western Pacific

Year of highest level of achievement in selected tobacco control measures

Note: an empty cell indicates that the population is not covered by the measure at the highest level of achievement.

* or earlier year

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 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
2007*	2005		2004	
2016	2012		2007	
	2016		2016	
2019				
2008				
			2013	
2007*				
				2013
2015	2016		2016	
2012			2008	
	2006			
2009			2012	2012
	2009			
2007*	2003	2000	2007	
	2018			2018
2012				
	2012			
2007*		2020	2014	
2007*		2006		
			2013	
2010		1999	2012	
			2013	
		2020		
				2008
			2013	2008
2014			2013	

ANNEX IV

Highest level of achievement in selected tobacco control measures in the 100 biggest cities in the world

Annex 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 alphabetically. 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-social/products/dyb/dyb_2018/ 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 missing from the list because they did not report data, but large enough to potentially qualify for the 100 biggest cities list are: Angola, Chad, Democratic Republic of the Congo, Nigeria, Sudan and Viet Nam.

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

* Only cities which appear among the top 100 cities sorted by population size, according to the United Nations Statistics Division Demographic Yearbook 2018 (available at: https://unstats.un.org/unsd/demographic/products/dyb/dyb2018/Table08.xls).

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.

⊙ Privision adopted but not implemented by 31 December 2020

… Data not available

CITY	POPULATION	COVERAGE AT THE HIGHEST LEVEL OF ACHIEVEMENT	
		PROTECT PEOPLE FROM TOBACCO SMOKE	OFFER HELP TO QUIT TOBACCO USE
Abidjan	4 395 243		
Adana	2 216 475	N	N
Addis Ababa	4 215 965	N	
Ahmedabad	5 633 927		N
Aleppo	4 450 000		
Alexandria	5 163 750	N	
Algiers	2 712 944	N	
Amman	3 728 346		N
Ankara	5 445 026	N	N
Antalya	2 364 396	N	N
Baku	2 254 175		
Bandung	2 525 220	C	
Bangalore	8 495 492		N
Bangkok	8 305 218	N	
Beijing	18 796 000	C	
Belo Horizonte	2 513 451	N	N
Berlin	3 613 495		
Bogor	5 162 044		
Bogotá	8 181 047	N	
Brasília	2 977 216	N	N
Buenos Aires	13 879 707	N	
Bursa	2 936 803	N	N
Busan	3 428 923		N
Cairo	9 539 673	N	
Cali	2 445 405	N	
Casablanca	3 352 399		
Chennai	4 646 732		N
Chicago	2 704 958		N
Chittagong	2 591 681		
Daegu	2 465 268		N
Damasus Rural (Rif Dimashq)	2 529 000		
Dar es Salaam	5 147 070		
Delhi	11 034 555		N
Dhaka	8 906 035		
Douala	2 948 464		
Faisalabad	3 203 846	N	
Fortaleza	2 609 716	N	N
Guadalajara	5 060 750		N
Guayaquil	2 581 884	N	
Havana	2 130 517	…	
Hong Kong SAR	7 451 000	C	C
Houston	2 303 482		N
Hyderabad	6 993 262	S	N
Incheon	2 923 047		N
Istanbul	15 029 231	N	N
Izmir	4 279 677	N	N
Jaipur	3 046 163		N
Jakarta	10 428 001	C	
Jiddah	3 430 697		N
Kabul	3 817 241	N	
Kanpur	2 768 057		N
Karachi	14 910 352	N	
Kiev	2 893 215		
Kolkata	4 496 694		N
Konya	2 180 149	N	N
Lahore	11 126 285	N	

COVERAGE AT THE HIGHEST LEVEL OF ACHIEVEMENT			COUNTRY
WARN ABOUT THE DANGERS OF TOBACCO	ENFORCE BANS ON TOBACCO ADVERTISING, PROMOTION AND SPONSORSHIP	RAISE TAXES ON TOBACCO	
	N		Côte d'Ivoire
N	N	N	Turkey
N	N		Ethiopia
N			India
			Syrian Arab Republic
N		N	Egypt
	N		Algeria
		N	Jordan
N	N	N	Turkey
N	N	N	Turkey
	N		Azerbaijan
			Indonesia
N			India
N		N	Thailand
			China
N	N	N	Brazil
N			Germany
			Indonesia
	N		Colombia
N	N	N	Brazil
N		N	Argentina
N	N	N	Turkey
			Republic of Korea
N		N	Egypt
	N		Colombia
		N	Morocco
N			India
N ⊙			United States of America
N			Bangladesh
			Republic of Korea
			Syrian Arab Republic
			United Republic of Tanzania
N			India
N			Bangladesh
N			Cameroon
N			Pakistan
N	N	N	Brazil
N			Mexico
N			Ecuador
. . .	. . .	. . .	Cuba
C			China, Hong Kong SAR
N ⊙			United States of America
N			India
			Republic of Korea
N	N	N	Turkey
N	N	N	Turkey
N			India
			Indonesia
N	N		Saudi Arabia
	N		Afghanistan
N			India
N			Pakistan
N			Ukraine
N			India
N	N	N	Turkey
N			Pakistan

CITY	POPULATION	COVERAGE AT THE HIGHEST LEVEL OF ACHIEVEMENT	
		PROTECT PEOPLE FROM TOBACCO SMOKE	OFFER HELP TO QUIT TOBACCO USE
Lima	10 350 721	N	
London	8 135 667	S	C
Los Angeles	3 976 322	S	N
Luanda	2 487 444		N
Lucknow	2 817 105		N
Madrid	3 203 157	N	
Mashhad	3 001 184	N	
Medan	2 269 588	C	
Medellín	2 529 403	N	
Mexico City	21 800 320	S	N
Monterrey	4 834 971	S	N
Moscow	11 918 057	N	
Mumbai	12 442 373		N
Nagoya	2 295 638		
Nagpur	2 405 665		N
Nairobi	3 109 861		
New York	8 537 673		N
Osaka	2 691 185		
Paris	2 206 488		
Puebla-Tlaxcala	3 046 766		N
Pune	3 124 458		N
Pyongyang	2 581 076		
Quezon City	2 936 116		N
Rawalpindi	2 098 231	N	
Rio De Janeiro	6 498 837	N	N
Riyadh	5 188 286		N
Rome	2 873 147		
Saint Petersburg	4 990 602	N	
Salvador	2 938 092	N	N
Santiago	5 613 962	N	
São Paulo	12 038 175	N	N
Seoul	9 776 305		N
Singapore	5 638 676		N
Surabaya	2 885 245		
Surat	4 501 610		N
Tangerang	3 050 758		
Tashkent	2 464 933		
Tehran	8 693 706	N	
Tokyo	9 272 740		
Toluca	2 386 157	S	N
Toronto	2 956 024	S	N
Yangon	5 211 431		
Yaounde	2 873 567		
Yokohama	3 724 844		

COVERAGE AT THE HIGHEST LEVEL OF ACHIEVEMENT			COUNTRY
WARN ABOUT THE DANGERS OF TOBACCO	ENFORCE BANS ON TOBACCO ADVERTISING, PROMOTION AND SPONSORSHIP	RAISE TAXES ON TOBACCO	
N			Peru
N		N	United Kingdom of Great Britain and Northern Ireland
N ⊙			United States of America
			Angola
N			India
N	N	N	Spain
N	N		Iran (Islamic Republic of)
			Indonesia
	N		Colombia
N			Mexico
N			Mexico
N	N		Russian Federation
N			India
			Japan
N			India
	N		Kenya
N ⊙			United States of America
			Japan
N		N	France
N			Mexico
N			India
			Democratic People's Republic of Korea
N			Philippines
N			Pakistan
N	N	N	Brazil
N	N		Saudi Arabia
N		N	Italy
N	N		Russian Federation
N	N	N	Brazil
N		N	Chile
N	N	N	Brazil
			Republic of Korea
N			Singapore
			Indonesia
N			India
			Indonesia
			Uzbekistan
N	N		Iran (Islamic Republic of)
			Japan
N			Mexico
N			Canada
			Myanmar
N			Cameroon
			Japan

ANNEX V

STATUS OF THE WHO FRAMEWORK CONVENTION ON TOBACCO CONTROL AND OF THE PROTOCOL TO ELIMINATE ILLICIT TRADE IN TOBACCO PRODUCTS

Annex V shows the status of the WHO Framework Convention on Tobacco Control (WHO FCTC) and of the Protocol to Eliminate Illicit Trade in Tobacco Products.

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 to 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.

The Protocol to Eliminate Illicit Trade in Tobacco Products entered into force on 25 September 2018. It is subject to ratification, acceptance, approval or accession by States and to formal confirmation or accession by regional economic integration organizations that are Party to the WHO Framework Convention on Tobacco Control.

Table 5.1

Status of the WHO Framework Convention on Tobacco Control as at 1 June 2021

***** 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.

COUNTRY	DATE OF SIGNATURE	DATE OF RATIFICATION* (OR LEGAL EQUIVALENT)
Afghanistan	29 Jun 2004	13 Aug 2010
Albania	29 Jun 2004	26 Apr 2006
Algeria	20 Jun 2003	30 Jun 2006
Andorra		11 May 2020 a
Angola	29 Jun 2004	20 Sep 2007
Antigua and Barbuda	28 Jun 2004	5 Jun 2006
Argentina	25 Sep 2003	
Armenia		29 Nov 2004 a
Australia	5 Dec 2003	27 Oct 2004
Austria	28 Aug 2003	15 Sep 2005
Azerbaijan		1 Nov 2005 a
Bahamas	29 Jun 2004	3 Nov 2009
Bahrain		20 Mar 2007 a
Bangladesh	16 Jun 2003	14 Jun 2004
Barbados	28 Jun 2004	3 Nov 2005
Belarus	17 Jun 2004	8 Sep 2005
Belgium	22 Jan 2004	1 Nov 2005
Belize	26 Sep 2003	15 Dec 2005
Benin	18 Jun 2004	3 Nov 2005
Bhutan	9 Dec 2003	23 Aug 2004
Bolivia (Plurinational State of)	27 Feb 2004	15 Sep 2005
Bosnia and Herzegovina		10 Jul 2009 a
Botswana	16 Jun 2003	31 Jan 2005
Brazil	16 Jun 2003	3 Nov 2005
Brunei Darussalam	3 Jun 2004	3 Jun 2004
Bulgaria	22 Dec 2003	7 Nov 2005
Burkina Faso	22 Dec 2003	31 Jul 2006
Burundi	16 Jun 2003	22 Nov 2005
Cabo Verde	17 Feb 2004	4 Oct 2005
Cambodia	25 May 2004	15 Nov 2005
Cameroon	13 May 2004	3 Feb 2006
Canada	15 Jul 2003	26 Nov 2004
Central African Republic	29 Dec 2003	7 Nov 2005
Chad	22 Jun 2004	30 Jan 2006
Chile	25 Sep 2003	13 Jun 2005
China	10 Nov 2003	11 Oct 2005
Colombia		10 Apr 2008 a
Comoros	27 Feb 2004	24 Jan 2006
Congo	23 Mar 2004	6 Feb 2007
Cook Islands	14 May 2004	14 May 2004
Costa Rica	3 Jul 2003	21 Aug 2008
Côte d'Ivoire	24 Jul 2003	13 Aug 2010
Croatia	2 Jun 2004	14 Jul 2008
Cuba	29 Jun 2004	
Cyprus	24 May 2004	26 Oct 2005
Czechia	16 Jun 2003	1 Jun 2012
Democratic People's Republic of Korea	17 Jun 2003	27 Apr 2005
Democratic Republic of the Congo	28 Jun 2004	28 Oct 2005
Denmark	16 Jun 2003	16 Dec 2004
Djibouti	13 May 2004	31 Jul 2005
Dominica	29 Jun 2004	24 Jul 2006
Ecuador	22 Mar 2004	25 Jul 2006
Egypt	17 Jun 2003	25 Feb 2005
El Salvador	18 Mar 2004	21 Jul 2014
Equatorial Guinea		17 Sep 2005 a
Estonia	8 Jun 2004	27 Jul 2005
Eswatini	29 Jun 2004	13 Jan 2006
Ethiopia	25 Feb 2004	25 Mar 2014
Fiji	3 Oct 2003	3 Oct 2003

COUNTRY	DATE OF SIGNATURE	DATE OF RATIFICATION* (OR LEGAL EQUIVALENT)
Finland	16 Jun 2003	24 Jan 2005
France	16 Jun 2003	19 Oct 2004 AA
Gabon	22 Aug 2003	20 Feb 2009
Gambia	16 Jun 2003	18 Sep 2007
Georgia	20 Feb 2004	14 Feb 2006
Germany	24 Oct 2003	16 Dec 2004
Ghana	20 Jun 2003	29 Nov 2004
Greece	16 Jun 2003	27 Jan 2006
Grenada	29 Jun 2004	14 Aug 2007
Guatemala	25 Sep 2003	16 Nov 2005
Guinea	1 Apr 2004	7 Nov 2007
Guinea-Bissau		7 Nov 2008 a
Guyana		15 Sep 2005 a
Haiti	23 Jul 2003	
Honduras	18 Jun 2004	16 Feb 2005
Hungary	16 Jun 2003	7 Apr 2004
Iceland	16 Jun 2003	14 Jun 2004
India	10 Sep 2003	5 Feb 2004
Iran (Islamic Republic of)	16 Jun 2003	6 Nov 2005
Iraq	29 Jun 2004	17 Mar 2008
Ireland	16 Sep 2003	7 Nov 2005
Israel	20 Jun 2003	24 Aug 2005
Italy	16 Jun 2003	2 Jul 2008
Jamaica	24 Sep 2003	7 Jul 2005
Japan	9 Mar 2004	8 Jun 2004 A
Jordan	28 May 2004	19 Aug 2004
Kazakhstan	21 Jun 2004	22 Jan 2007
Kenya	25 Jun 2004	25 Jun 2004
Kiribati	27 Apr 2004	15 Sep 2005
Kuwait	16 Jun 2003	12 May 2006
Kyrgyzstan	18 Feb 2004	25 May 2006
Lao People's Democratic Republic	29 Jun 2004	6 Sep 2006
Latvia	10 May 2004	10 Feb 2005
Lebanon	4 Mar 2004	7 Dec 2005
Lesotho	23 Jun 2004	14 Jan 2005
Liberia	25 Jun 2004	15 Sep 2009
Libya	18 Jun 2004	7 Jun 2005
Lithuania	22 Sep 2003	16 Dec 2004
Luxembourg	16 Jun 2003	30 Jun 2005
Madagascar	24 Sep 2003	22 Sep 2004
Malaysia	23 Sep 2003	16 Sep 2005
Maldives	17 May 2004	20 May 2004
Mali	23 Sep 2003	19 Oct 2005
Malta	16 Jun 2003	24 Sep 2003
Marshall Islands	16 Jun 2003	8 Dec 2004
Mauritania	24 Jun 2004	28 Oct 2005
Mauritius	17 Jun 2003	17 May 2004
Mexico	12 Aug 2003	28 May 2004
Micronesia (Federated States of)	28 Jun 2004	18 Mar 2005
Mongolia	16 Jun 2003	27 Jan 2004
Montenegro		23 Oct 2006 d
Morocco	16 Apr 2004	
Mozambique	18 Jun 2003	14 Jul 2017
Myanmar	23 Oct 2003	21 Apr 2004
Namibia	29 Jan 2004	7 Nov 2005
Nauru		29 Jun 2004 a
Nepal	3 Dec 2003	7 Nov 2006
Netherlands	16 Jun 2003	27 Jan 2005 A
New Zealand	16 Jun 2003	27 Jan 2004

Table 5.1
Status of the WHO Framework Convention on Tobacco Control as at 1 June 2021 (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.

COUNTRY	DATE OF SIGNATURE	DATE OF RATIFICATION* (OR LEGAL EQUIVALENT)
Nicaragua	7 Jun 2004	9 Apr 2008
Niger	28 Jun 2004	25 Aug 2005
Nigeria	28 Jun 2004	20 Oct 2005
Niue	18 Jun 2004	3 Jun 2005
North Macedonia		30 Jun 2006 a
Norway	16 Jun 2003	16 Jun 2003 AA
Oman		9 Mar 2005 a
Pakistan	18 May 2004	3 Nov 2004
Palau	16 Jun 2003	12 Feb 2004
Panama	26 Sep 2003	16 Aug 2004
Papua New Guinea	22 Jun 2004	25 May 2006
Paraguay	16 Jun 2003	26 Sep 2006
Peru	21 Apr 2004	30 Nov 2004
Philippines	23 Sep 2003	6 Jun 2005
Poland	14 Jun 2004	15 Sep 2006
Portugal	9 Jan 2004	8 Nov 2005 AA
Qatar	17 Jun 2003	23 Jul 2004
Republic of Korea	21 Jul 2003	16 May 2005
Republic of Moldova	29 Jun 2004	3 Feb 2009
Romania	25 Jun 2004	27 Jan 2006
Russian Federation		3 Jun 2008 a
Rwanda	2 Jun 2004	19 Oct 2005
Samoa	25 Sep 2003	3 Nov 2005
San Marino	26 Sep 2003	7 Jul 2004
Sao Tome and Principe	18 Jun 2004	12 Apr 2006
Saudi Arabia	24 Jun 2004	9 May 2005
Senegal	19 Jun 2003	27 Jan 2005
Serbia	28 Jun 2004	8 Feb 2006
Seychelles	11 Sep 2003	12 Nov 2003
Sierra Leone		22 May 2009 a
Singapore	29 Dec 2003	14 May 2004
Slovakia	19 Dec 2003	4 May 2004
Slovenia	25 Sep 2003	15 Mar 2005
Solomon Islands	18 Jun 2004	10 Aug 2004
South Africa	16 Jun 2003	19 Apr 2005
Spain	16 Jun 2003	11 Jan 2005
Sri Lanka	23 Sep 2003	11 Nov 2003
Saint Kitts and Nevis	29 Jun 2004	21 Jun 2011
Saint Lucia	29 Jun 2004	7 Nov 2005
Saint Vincent and the Grenadines	14 Jun 2004	29 Oct 2010
Sudan	10 Jun 2004	31 Oct 2005
Suriname	24 Jun 2004	16 Dec 2008
Sweden	16 Jun 2003	7 Jul 2005
Switzerland	25 Jun 2004	
Syrian Arab Republic	11 Jul 2003	22 Nov 2004
Tajikistan		21 Jun 2013 a
Thailand	20 Jun 2003	8 Nov 2004
Timor-Leste	25 May 2004	22 Dec 2004
Togo	12 May 2004	15 Nov 2005
Tonga	25 Sep 2003	8 Apr 2005
Trinidad and Tobago	27 Aug 2003	19 Aug 2004
Tunisia	22 Aug 2003	7 Jun 2010
Turkey	28 Apr 2004	31 Dec 2004
Turkmenistan		13 May 2011 a
Tuvalu	10 Jun 2004	26 Sep 2005
Uganda	5 Mar 2004	20 Jun 2007
Ukraine	25 Jun 2004	6 Jun 2006
United Arab Emirates	24 Jun 2004	7 Nov 2005

COUNTRY	DATE OF SIGNATURE	DATE OF RATIFICATION* (OR LEGAL EQUIVALENT)
United Kingdom of Great Britain and Northern Ireland	16 Jun 2003	16 Dec 2004
United Republic of Tanzania	27 Jan 2004	30 Apr 2007
United States of America	10 May 2004	
Uruguay	19 Jun 2003	9 Sep 2004
Uzbekistan		15 May 2012 a
Vanuatu	22 Apr 2004	16 Sep 2005
Venezuela (Bolivarian Republic of)	22 Sep 2003	27 Jun 2006
Viet Nam	3 Sep 2003	17 Dec 2004
Yemen	20 Jun 2003	22 Feb 2007
Zambia		23 May 2008 a
Zimbabwe		4 Dec 2014 a

Source: United Nations Treaty Collection web site https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=IX-4&chapter=9&clang=_en, accessed 11 June 2021).

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&mtdsg_no=IX-4&chapter=9&clang=_en

Table 5.2
Status of the Protocol to Eliminate Illicit Trade in Tobacco Products as at 1 June 2021

* 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.

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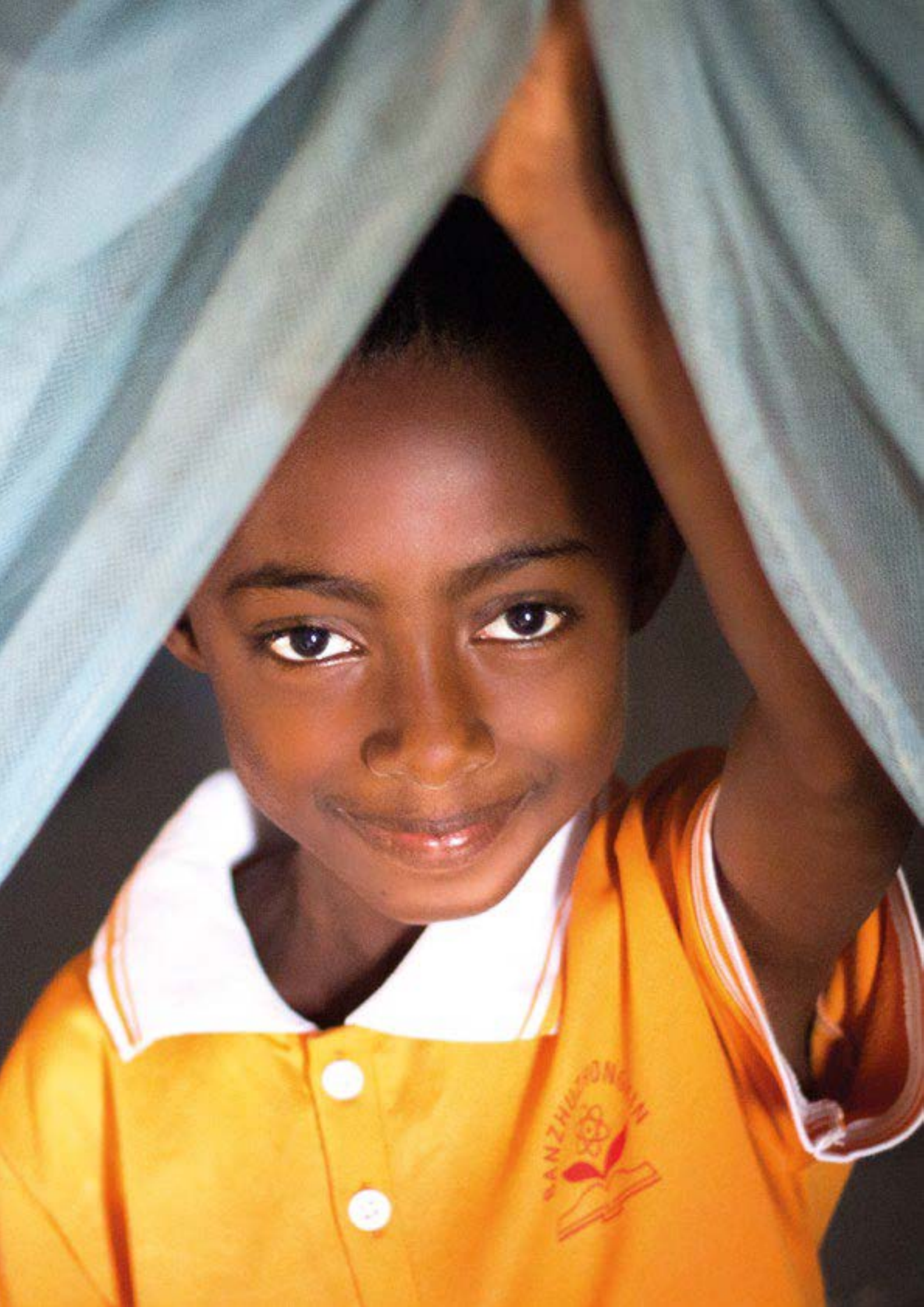
d Succession is the international act, however phrased or named, by which successor States formally state their consent to be bound by treaties/conventions originally entered.

COUNTRY	DATE OF SIGNATURE	DATE OF RATIFICATION* (OR LEGAL EQUIVALENT)
Austria	9 Jan 2014	28 Oct 2014
Belgium	17 May 2013	22 Feb 2019
Benin	24 Sep 2013	6 Jul 2018
Botswana	1 Oct 2013	
Brazil		14 Jun 2018 a
Burkina Faso	8 Mar 2013	30 Mar 2016
Cabo Verde		16 Oct 2019 a
Chad		13 Jun 2018 a
China	10 Jan 2013	
Colombia	21 Feb 2013	
Comoros		14 Oct 2016 a
Congo		14 May 2015 a
Costa Rica	21 Mar 2013	7 Mar 2017
Côte d'Ivoire	24 Sep 2013	25 May 2016
Croatia		10 Jun 2019 a
Cyprus	23 Oct 2013	29 Aug 2017
Czechia		12 Jul 2019 a
Democratic Republic of the Congo	9 Dec 2013	
Denmark	7 Jan 2014	
Ecuador	25 Sep 2013	15 Oct 2015
Egypt		10 Sep 2020 a
Eswatini		21 Sep 2016 a
Fiji	11 Jul 2013	24 Apr 2019
Finland	25 Sep 2013	
France	10 Jan 2013	30 Nov 2015
Gabon	10 Jan 2013	1 Oct 2014 A
Gambia		26 Sep 2016 a
Germany	1 Oct 2013	31 Oct 2017
Ghana	24 Sep 2013	
Greece	9 Jul 2013	24 May 2021
Guinea		9 May 2017 a
Guinea-Bissau	24 Sep 2013	
Hungary		23 Jun 2020 a
India		5 Jun 2018 a
Iran (Islamic Republic of)	7 Jan 2014	27 Aug 2018
Iraq		2 Dec 2015 a
Ireland	20 Dec 2013	
Israel	23 Dec 2013	
Kenya	29 May 2013	4 May 2020
Kuwait	11 Nov 2013	21 Feb 2019
Latvia		4 Feb 2016 a
Libya	10 Jan 2013	
Lithuania	6 Sep 2013	14 Dec 2016
Luxembourg		25 Jul 2019 a
Madagascar	25 Sep 2013	21 Sep 2017
Mali	8 Jan 2014	17 Jun 2016
Malta		2 Aug 2018 a
Mauritius		26 Jun 2018 a
Mongolia	1 Nov 2013	8 Oct 2014
Montenegro	1 Jul 2013	11 Oct 2017
Myanmar	10 Jan 2013	
Netherlands	6 Jan 2014	3 Jul 2020 A
Nicaragua	10 Jan 2013	20 Dec 2013
Niger		12 Jul 2017 a
Nigeria		8 Mar 2019 a
North Macedonia	8 Jan 2014	
Norway	16 Oct 2013	29 Jun 2018
Pakistan		29 Jun 2018 a
Panama	10 Jan 2013	23 Sep 2016

COUNTRY	DATE OF SIGNATURE	DATE OF RATIFICATION* (OR LEGAL EQUIVALENT)
Portugal	8 Jan 2014	22 Jul 2015
Qatar	18 Jun 2013	2 Jul 2018
Republic of Korea	10 Jan 2013	
Samoa		29 Jun 2018 a
Saudi Arabia		9 Oct 2015 a
Senegal		31 Aug 2016 a
Serbia		30 Jun 2017 a
Seychelles		7 Jan 2020 a
Slovakia		25 Sep 2017 a
Slovenia	6 Jan 2014	
South Africa	10 Jan 2013	
Spain		23 Dec 2014 a
Sri Lanka		8 Feb 2016 a
Sudan	30 Sep 2013	
Sweden	6 Jan 2014	9 Jul 2019
Syrian Arab Republic	10 Jan 2013	
Togo	9 Jan 2014	31 Jan 2018
Tunisia	11 Jan 2013	
Turkey	10 Jan 2013	26 Apr 2018
Turkmenistan		30 Mar 2015 a
United Kingdom of Great Britain and Northern Ireland	17 Dec 2013	27 Jun 2018
United Republic of Tanzania	24 Sep 2013	
Uruguay	10 Jan 2013	24 Sep 2014
Yemen	7 Jan 2014	

Source: United Nations Treaty Collection web site https://treaties.un.org/pages/ViewDetails.aspx?src=IND&mtdsg_no=IX-4-a&chapter=9&clang=_en, accessed 11 June 2021).

On submitting instruments to become Party to the Protocol to Eliminate Illicit Trade in Tobacco Products, some Parties have included notes and/or declarations. All notes can be viewed at https://treaties.un.org/pages/ViewDetails.aspx?src=IND&mtdsg_no=IX-4-a&chapter=9&clang=_en



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