

Tobacco Harm REDUCTION.net

Measuring progress in achieving the objectives of the Framework Convention on Tobacco Control (FCTC), as of January 2024 (Pre-COP10)



CONTENTS

EXEC	CUTIVE SUMMARY	3
RECC	OMMENDATIONS	6
IMPC	DRTANCE	7
1.	Trends in tobacco use and impact	8
2.	Commitments, resolutions, and pledges	9
3.	Implementation of resolutions	10
4.	Support for technology innovation	13
5.	New and planned investments in R&D priorities and capacity in LMICs	15
6.	Alignment of FCTC goals with UN sustainable development goals	17
7.	Stakeholder Engagement & Partnering for scaled impact	17
8.	Financing global tobacco control	19
ABOI	UT THE AUTHORS	21
REFE	RENCES	28



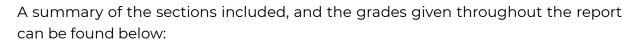
F fail

EXECUTIVE SUMMARY

This report draws upon recent World Health Organization (WHO) reports to assess progress made by Parties to the Framework Convention on Tobacco Control (FCTC) ^{1.2}. An international panel of experts contributed to this report.

Grades are assigned from

Abest





1.

Trends in tobacco use and impact.

WHO¹ and International Health Metric and Evaluation (IHME)³ reports show that 8.5 million people die prematurely from tobacco tobacco-related causes. There are 1.2 billion tobacco users in the world. In 37 countries, male smoking rates exceed 40%. In 22 countries, female smoking rates exceed 20%. In 17 countries in Europe, more women now smoke than men. The global progress report does not show that the number of people who use tobacco harm reduction (THR) products has increased to about 120-130 million. Over 50% of all cigarettes are sold by State Monopolies, with China accounting for the vast majority⁴. By contrast, the two largest multinationals, PMI and BAT, account together for about 25% of global cigarette sales.

Grade **R**+

2.

3.

Commitments, resolutions, and pledges.

Many countries have introduced new laws and taxes coherent with the FCTC. Few have been evaluated in terms of impact. Thus, many laws in the books have yet to be visible on the streets of most low- and middle-income countries (LMICs), where enforcement capacity remains weak, funding for tobacco control is lacking and competing priorities are extremely high.

Grade D-

Implementation of resolutions.

Implementation varies by country, region, and objective. Overall, implementation rates are highest in OECD countries. However, implementation rates in LMICs are low and in many cases show no progress since the last reporting cycle. This applies especially to excise taxes and illicit trade, access to cessation services within primary health care services, support for alternatives to tobacco farming and production, funding tobacco control, and building national capacity for science¹.





Support for technology innovation.

The FCTC includes harm reduction strategies (THR) in the definition of tobacco control, under Article 1(d). The importance of research is highlighted in several places. Despite this, and in the face of rapid industry-led innovation, the progress reports only refer to THR in negative terms and do not reference for example, the recent authorization of all THR categories by the US FDA as being "appropriate for the protection of public health". Evidence shows that countries, where smoking is decreasing fastest, occur where THR use is increasing and displacing cigarettes and that the quality of evidence related to reduced exposure, reduced harm and modelled long term benefits of THR has strengthened rapidly.



5.

New and planned investments in R&D priorities and capacity in LMICs.

Twenty years after the adoption of the FCTC, there is still no FCTC-supported list of priority research areas, including those needed to assess the benefits and risks of THR. Funding for research is heavily concentrated in the USA, UK and to a limited extent, the EU. This means that priorities are set outside of the LMICs, and policy implications are imposed on them. The lack of investment in research is mirrored by the weak capacity for research in LMICs, limiting the development of science-informed policymakers.

Grade F

6. Alignment of FCTC goals with UN sustainable development goals.

The COP28 United Nations Climate Change Conference (Dubai, 30 November 2023 to 10 December 2023) brought heads of state, leaders of industry, and a diverse range of nonprofits to the UAE. COP28 elicited major funding and policy decisions from governments, leading oil and gas companies, and a wide range of corporations. Against this backdrop, it is striking that COP10 reports show virtually no progress in addressing climate change by supporting tobacco farmers in LMICs' transition to food and other crops, in cutting tobacco and THR waste, and in transitioning away from using tobacco-derived nicotine and into synthetic nicotine, despite this shift being associated with a massive reduction in Greenhouse gases, water and land use.



Grade F

7.

Stakeholder Engagement & Partnering for scaled impact.

The exclusion of industry and leading harm reduction scientists, industry experts, and nicotine users from COP10, with their advanced scientific expertise and/or valid lived life experiences related to ending tobacco use, severely limits the ability of Parties to make fully informed decisions about policies capable of ending smoking in the fastest possible time. Parties draw upon reports and knowledge biased against solutions capable of accelerating declines in tobacco use.

8. Financing global tobacco control.

Public health experts estimate that \$427 billion is required to meet the gaps between FCTC requirements and their implementation^{5.6}. There is no probability that this level of funding will become available. Alternative approaches drawing upon private sector expertise and finance, are required.



RECOMMENDATIONS (PRE-COP10):



Embrace THR and stimulate improved access to approved alternative nicotine products by regulating them proportionate to the risks and benefits they bring relative to combustible cigarettes and toxic forms of smokeless tobacco products.



Assign greater efforts to prevent and end smoking in men in the Middle East, to all adults in East and Central Europe, small island states, and girls in Europe.



Improve the quality, timeliness, and use of data on tobacco prevalence and health outcomes. Include THR product use in routine data collection and add biomarkers of exposure into samples.



Invest in research, capacity development and transitional needs for LMICs.



Integrate private research, technology and patent analyses with publicly financed research into stateof-the-art reviews.



Address disinformation and misinformation surrounding nicotine and harm reduction products.



THE IMPORTANCE OF THIS REPORT

The 10th Conference of the Parties (COP10) meeting for the World Health Organization's Framework Convention on Tobacco Control (WHO FCTC) will be held in Panama in February 2024. A key objective of the meeting is to assess progress made by Parties in meeting their obligations spelled out in the FCTC's original text and subsequent guidelines.

In advance of the meeting, WHO published a Global Progress Report¹. We draw heavily upon that report to assess progress

across 8 domains: trends in tobacco use and impact, development of commitments, pledges and resolutions, implementation of resolutions, support for technology innovation, new and planned investments in R&D priorities and capacity in LMICs, alignment of FCTC goals with UN sustainable development goals, partnering for scaled impact, and financing tobacco control.

We were inspired by the recent report card published by the Economist on the eve of COP28 held in the UAE *(Figure 1)*. Our scorecard aims to help Parties and civil society decide whether they believe that the FCTC is on track to end smoking and the use of toxic smokeless tobacco products in the fastest possible time, noting that many millions of lives are at stake. We believe that our Scorecard contributes to holding WHO and Parties accountable for taking actions, that they have committed, to by adopting and ratifying the FCTC.

COP10 comes at a time when confidence in WHO's ability to lead global health is being questioned and at a time when their own report (WHO Results Framework: Delivering a measurable impact in countries) states that "the world was not on track to reach the triple billion targets and health-related SDGs before the COVID-19 pandemic impact, and we are further off track now."² This report highlights the importance of tobacco control to the attainment of many non-communicable mortality targets. Yet, it fails to propose new directions to get back on track. They prefer to stick with the status quo.

Although the process of FCTC implementation is important, more emphasis needs to be placed on actual health outcomes. We believe that this Scorecard should be a wake-up call to Member States who are committed to reducing tobacco-related diseases and premature death. In short, to improve the health of their people.





1.

Trends in tobacco use and impact.

IHME reviewed data from 3625 nationally representative samples covering 200 of 204 countries. In these countries, IHME analyses show that 55% had a significant increase in the number of smokers between 1990 and 2019. The regions with the largest increases in smokers were North Africa, the Middle East, and sub-Saharan Africa³. There are 1.2 billion tobacco users in the world. The WHO progress report¹ shows that in thirty-seven countries male smoking rates exceed 40%. These are in the Middle East, small Island States, and East and Central Europe. In twenty-two countries female smoking rates exceed 20%.

These are in Europe, but note that Chile and small Island states are also important. See *Tables 1 and 2*.

Neither the WHO global progress report, nor the International Health Metric and Evaluation (IHME) review show that the number of people who use tobacco harm reduction products has increased to about **120-130 million** with increased use being inversely related to cigarette use in several countries⁷.

Over 50 percent of all cigarettes are sold by State Monopolies, with China accounting for the vast majority. There are eighteen countries where governments own 10% or more of at least one tobacco company⁴. Ownership reaches 100% in China, many countries in the Middle East, Vietnam, and Thailand. The implications of this will be discussed later.

WHO and IHME reports show that 8.5 million people die prematurely from tobacco-related causes^{1,3}. Globally, tobacco use was the leading risk factor for death among males, accounting for 20% of male deaths³. Of the 36 health outcomes caused by smoking tobacco use, the health outcomes with the largest number of deaths attributable to smoking tobacco use for both sexes combined were ischemic heart disease (1.68 million), chronic obstructive pulmonary disease (1.59 million), tracheal, bronchus and lung cancer (1.31 million), and stroke (0.93 million)³.

Important new work on the dose-response relationship between smoking and deaths as well as on the benefits of cessation, show that 6.68 million deaths attributable to smoking occurred among current adult smokers. Only 0.47 million deaths occurred among smokers who had quit smoking at least 15 years ago³.

The consequences of increased smoking rates in females will inevitably lead to increased premature deaths from tobacco. A few years ago, it was noted that lung cancer death rates already exceeded those from breast cancer in many countries (*Table 4*). This grim reality is set to get worse and demands the urgent action called for in the FCTC text 20 years ago!



We assign an E- to trends due to continued high prevalence of smoking 20 years after the adoption of the FCTC, due to lack of efforts to address increases in smoking prevalence among women, and due to the failure of WHO to address extremely high smoking rates especially in the Middle East, small Island states and countries in eastern and central Europe.



2. Commitments, resolutions, and pledges.

Many countries have introduced new laws and taxes coherent with the FCTC. Few have been evaluated in terms of impact. Thus, many laws in the books have yet to be visible on the streets of most LMICs where enforcement capacity remains weak, funding for tobacco control is lacking and competing priorities are exceedingly high.

Some notable examples of important pronouncements:

Article 2.1 (Measures beyond those required by the Convention): several Parties reported on plans to reduce tobacco use prevalence to under 5%. These included the European Union, the United Kingdom, and New Zealand. It should be noted that the change in government in New Zealand has led to a reversal of their plans. The wording of these efforts is important. The focus is on cutting *tobacco* and not *nicotine* use.

Article 5: General Obligations.

Article 5.1: Several Parties reported having developed a comprehensive multisectoral national strategy that links to broader noncommunicable disease plans.

Article 5.3 which aims to protect public policies from commercial and vested interests of the tobacco industry: 72% of Parties adopted at least one of the measures recommended in the Guidelines for implementation of 5.3.

It should be noted that legal scholars believe that WHO FCTC secretariat did not have the legal authority to develop these guidelines. Nowhere is provision made for these in the FCTC text. According to these scholars, this renders actions taken in relation to the guidelines illegal under International Treaty Law.



The WHO report states that "there is still no breakthrough in adopting measures to protect public health policies from the commercial and other vested interests of the tobacco industry". This is made more complex when Parties include a tobacco state monopoly. This is not mentioned in any COP10 documents despite State Monopolies accounting for over half of all cigarettes sold globally.

The WHO report lists many international agencies, organizations and initiatives included in WHO FCTC strategic plans. These include UNDP, the UN Interagency Task Force on the Prevention and Control of NCDs, FAO, UNEP, and the World Customs Organization. It is unclear whether any UN agencies have allocated funds and dedicated staff to support specific provisions of the FCTC.

We assign a B+ to efforts involving commitments, resolutions, and pledges. The media and communications related to these, especially linked to World No Tobacco Days have been strong and widely disseminated. Several political leaders have been visible and vocal about the value and importance of tobacco control.

Grade D-

3. Implementation of resolutions.

Implementation varies by country, region, and objective. Overall, implementation rates are highest in OECD countries. In contrast, implementation rates in LMICs are low and in many cases show no progress since the last reporting cycle. This applies especially to excise taxes and illicit trade, access to cessation services within primary health care services, support for alternatives to tobacco farming and production, funding tobacco control, and building national capacity for science.

The report notes that half of all countries provide no information about tobacco-related mortality¹. It should be noted that the IHME (based in Seattle, USA) produces data for all countries in their burden of disease analyses. For countries without their own data, a series of assumptions are made to model probable numbers of deaths. Where countries do not invest in their own mortality data, they are less likely to act on the negative impacts of tobacco.



Article 6 (Price and tax measures): The WHO report notes that only the European Region has an average tobacco tax burden that meets the FCTC - recommended 75% tax benchmark. Price and affordability, heavily influenced by taxes, remains one of the most powerful means of slowing youth access and supporting adults to smoke less or quit. Twenty years after adoption of the FCTC and 30 years after WHO called for such tax increases, failure to act demonstrates the weakness of health authorities' ability to influence finance and tax colleagues in government.

Article 8 (Protection from exposure to tobacco smoke): Eighty-nine percent of Parties reported that their national laws require measures to regulate or ban smoking in public places. The extent of enforcement is unclear, and the WHO report states that less than half of all Parties provide universal protection in line with the Guidelines for Implementation of Article 8 of the FCTC. Note that these guidelines (unlike those developed for article 5) were developed in line with the original text of the FCTC.

Article 9: Half of all countries do not test the content of tobacco products or regulate emissions. This represents a serious capacity need. With the advent of reduced-risk tobacco products, countries able to measure emissions in cigarettes versus reduced-risk products are more likely to appreciate the benefits of the latter.

Article 12: 80% of parties report that they provide education and public awareness messages to the public. In many cases, these messages have been developed and honed for a USA audience and are exported by USAbased NGOs and philanthropies vigorously opposed to tobacco harm reduction.

The result has been the widespread dissemination of disinformation about the value and benefits of tobacco harm reduction, the benefits of nicotine-based products, and the alleged dangers of vapes for children's health. The most recent example of this comes from a survey of 15, 000 physicians in eleven countries that showed that approximately 70% of them believed, incorrectly that nicotine causes lung cancer⁸. The recent WHO Global Report on Oral Health²¹ fails to distinguish between oral nicotine products that causes oral cancer and those, like nicotine pouches, that don't. This contributes to public disinformation and undermines peoples' access to accurate and lifesaving information.

Article 14: Cessation services, including Nicotine Replacement Therapies (NRTs) remain tough to access in most LMICs. NRTs are not reimbursable in



most LMICs. Nurses, pharmacists, and dentists are poorly informed about the benefits and options for cessation. This represents decades of neglect by the WHO of the crucial role that health professionals play in countries where successful tobacco control programs exist. This also highlights the reality that most tobacco control efforts do not engage adult smokers, especially those with chronic disease and mental health for whom smoking rates often exceed 50%.

Article 15: Illicit trade. Only 68 countries are Parties to the Protocol on Illicit trade. Notably, the USA, Russia and Indonesia have yet to accede to the Protocol. Several Parties seem willing to sign yet not act on the Protocol's requirements and continue to experience and be a source of illicit trade in cigarettes and other tobacco products. Between 30% and 70% of cigarettes sold in several countries are illicit. These include France, Ukraine, the United Kingdom, Malaysia, South Africa, and Iran.

Article 16: Sales to and by minors. The data on youth and smokeless tobacco use prevalence mainly includes 13- to 15-year-olds. Only 24 Parties reported survey data conducted in 2020 or more recently, while 31 countries reported survey data from before 2015. Given the importance of addressing youth access in real-time, this represents a major weakness in the ability of Parties to evaluate whether youth access laws are having an effect. It is unclear how, or if, most Parties use survey data in real-time. 72 Parties reported a youth smoking prevalence among boys of over 15%, and 30 Parties reported a youth smoking prevalence among girls of over 15%. In 17 countries, mainly in Europe, more girls now smoke than boys (*Table 3*).

The WHO report states that "a *slight* increase was detected in almost all measures on sales to minors." Youth prevalence data suggests little progress in implementing youth access regulations despite reporting that 91% of Parties have prohibited sales of tobacco products to minors. This is one of many examples of how Parties have laws on their books that have yet to be translated into actions on the streets.

Article 17: Very few examples are cited of large-scale efforts to support poor tobacco farmers in LMICs' transition to alternative or complementary livelihoods. The best example of this, Malawi, is not cited. Its success is being underpinned by multimillion-dollar investments in local agricultural research and policy capacity, from the Foundation for a Smoke - Free World. Malawi is the latest country to accede to the FCTC. One hopes their transformation work will be used as a model for other countries.



Article 20: Only 50% of Parties have tobacco surveillance systems. Most LMICs do not have dedicated budgets for national research aimed at ending smoking but rely heavily on research done in the USA and to a lesser extent the UK. It should be noted that the multibillion-dollar budgets of the publicly financed NIH/FDA focus on ending smoking in youth, identifying dangers associated with tobacco harm reduction, addressing the needs of US-based minority groups and only scantily on the problems of LMICs and the benefits of THR. The implications of this are discussed below.

We assign a D- to efforts to implement resolutions related to demand and supply side measures. There has been incremental albeit slow progress across many articles. But these are mainly in countries that were already active in tobacco control 20 years ago. At that point in time, OECD Parties like Ireland, Canada, Norway, the UK, USA, New Zealand, and LMIC countries like Thailand and Brazil, were already involved in measures to end smoking. They continue to make progress. However, the very point of the FCTC was to accelerate progress among countries where capacity for control was weak and the prevalence of tobacco use was growing the fastest. That has yet to happen.



Support for technological innovation.

The FCTC text includes harm reduction in the definition of tobacco control, under FCTC Article 1(d). It mentions the importance of research in several places. Despite this, and in the face of rapid industry-led innovation, the WHO progress report refers to THR in negative terms and does not reference for example, the recent authorization of all THR categories by the US FDA as being "appropriate for the protection of public health."

The section addressing "Novel and Emerging Tobacco Products and Nicotine Products" provides information on a range of such products. Water-pipe tobacco and vapes are available on the market of 79 Parties, and heated tobacco products are found in 49% of Parties.



The COP report focuses on countries' progress in banning, restricting, and/ or taxing these products¹. For example, they mention that India and Mexico have legislated to ban or phase out novel and emerging tobacco and nicotine products from the market. Russia has banned snus and nicotine pouches. Pakistan banned the import of shisha. Belgium, the Netherlands, and parts of Germany have banned nicotine pouches. Iraq has banned the import of heated tobacco products. Venezuela has banned vapes.

These and related actions will limit the ability of adult smokers to switch to lower-risk and healthier alternatives. The WHO report describes bans and prohibitions as the desired policy response to a wide range of tobacco harm reduction products.

Unfortunately government actions have often led to regulations that increase smoking. Furthermore, several countries have reported rapid declines in smoking (e.g. Sweden, Japan and the United Kingdom) – where progress was made despite government intervention. The drivers of change in these countries were consumer demand, industry innovation (including small independent entrepreneurs) and the acceptance and / or promotion of THR.

Recent Tobacco Transformation Index and Global State of Tobacco Harm Reduction reports⁹ indicate that tobacco harm reduction products, including vapes, are used worldwide, and 120 million people use heated tobacco, snus, and nicotine pouches globally. Leading tobacco companies are transforming their portfolios away from a historic dependence on combustible cigarettes⁷.

The evidence showing short- and medium-term benefits has strengthened. Recent expert modeling exercises show that THR use will lead to millions of lives being saved¹⁰ in LMICs and advanced industrialized countries. The report shows that in countries where THR products are increasingly used, smoking rates drop faster, seen where traditional FCTC measures are implemented. These countries included Sweden (driven by snus and more recently, nicotine pouches), the UK and USA (driven by increased use of vapes), and Japan where heated tobacco products are displacing cigarette use.¹⁰

The FCTC text was developed over 20 years ago and at a time when most THR products, except for snus, did not exist. Despite this, WHO invited tobacco industry scientists in 1999 to indicate what they felt might be on the horizon. That meeting was premature. However, unbeknown to most Parties, leading tobacco companies subsequently invested billions of dollars in research and development of reduced-risk products.

The progress was reported first in patent filings and in time, new products were marketed and subjected to the USFDA and other regulatory bodies' oversight.



With every new generation of vapes and heated tobacco products, we are seeing higher levels of safety, lower levels of exposures from non-nicotine products, improved sustainability led by replacing tobacco-derived nicotine with synthetic nicotine, and better ways of blocking youth access. Each step depends upon research and technological innovation.

New categories of harm reduction are likely. One recent example being a shisha (waterpipe) product that excludes charcoal and replaces burning with heating. This product and several other highly innovative products address the needs of shisha users across the Middle East and beyond.

Innovation aimed at THR is mainly financed and managed by leading tobacco multinationals with smaller, entrepreneurial vape, nicotine pouch, shisha, heated tobacco, snus, and related companies leading in developing several technologies to stop youth access, promote environmental sustainability, and support a shift from plant-based to synthetic nicotine. Tobacco State Monopolies however have yet to support THR. They do not face the pressures of private investors or shareholders. For them, the status quo remains.

A substantial body of research on the products, the associated exposures they cause, and the impacts of biomarkers of early health outcomes have been reported in peer reviewed publications ^{15, 16, 17, 18, 19} (*Table 5*).

We assign an F (fail) to (lack of) support for technology innovation. Lifesaving technologies are actively opposed by WHO, leaving millions of smokers and users of toxic smokeless tobacco products unable to quit or switch to less harmful alternatives.



5.

New and planned investments in R&D priorities and capacity in LMICs.

Articles 20, 12 and 22 address the need for research, surveillance, and the exchange of information. Progress has been made in building youth and adult surveillance systems. It should be noted that the lead author (DY) of this re-



port played a key role in developing the unique WHO-CDC collaboration that underpinned global youth tobacco surveys¹¹ and, while developing the FCTC, worked with lead researchers on the development of the first and only effort to define research priorities for tobacco control research^{12, 13}.

Twenty years after the adoption of the FCTC, there is still no FCTC supported list of priority research areas, including those needed to assess the benefits and risks of THR. Funding for all aspects of publicly financed research is heavily concentrated in the USA, UK and to a limited extent, the EU. That means that priorities are set outside of the LMICs, and policy implications are imposed on them. The lack of investment in research is mirrored by weak capacity for research in LMICs, limiting development of science-informed policy makers.

The rapid increase in innovation of availability of tobacco harm reduction products demands that priorities be set for research to inform policies. This does not exist. Its absence has meant that US priorities have dominated research and led to policies that are likely to retard progress in ending smoking.

Progress in global health has always depended upon countries having their own scientists and researchers capable of carrying out essential national research programs required to drive national policy, interacting as intellectual equals with researchers from the USA and Europe, and having direct access to their policy and political leaders and media. That is how progress has been made against HIV/AIDS, vaccine preventable diseases, undernutrition and more. However, for tobacco control, and most NCD research, most LMICs lack the scientific capacity needed to adapt FCTC provisions decided in Geneva or to understand the value of THR as a means of eliminating oral cancer or ending smoking.

We assign an F (fail) to FCTC provisions related to research. Priorities for tobacco control research have not been updated since 2000. There are no research priorities for THR in LMICs. Funding for all aspects of research needed to accelerate progress on the FCTC has decreased over the last few years.



Grade **F**

6.

Alignment of FCTC goals with UN sustainable development goals.

The COP28 meeting on climate change brought heads of state, leaders of industry, and a diverse range of nonprofits to the UAE. COP28 elicited major funding and policy decisions from the governments, leading oil and gas companies and a wide range of corporations. Against this backdrop, it is striking the WHO FCTC reports show virtually no progress in supporting tobacco farmers in LMICs' transition to food and other crops, in cutting tobacco and THR waste, and in transitioning away from using tobacco - derived nicotine and into synthetic nicotine, despite this shift being associated with a massive reduction in GHGs' water and land use, while improving quality, shelf stability and traceability¹⁴.

We assign an F (fail) to progress on environmental goals given the evidence WHO has provided in COP documents and in the documents prepared for World No Tobacco Day 2023.

Grade F

7.

Stakeholder Engagement & Partnering for scaled impact.

The WHO report devotes considerable space to addressing "industry interference" and implementation of guidelines related to 5.3 (see earlier). Besides being illegal and not supported by the FCTC text, the guidelines have had a chilling effect on dialogue between the tobacco industry, entrepreneurs and small companies producing innovative vapes, heated tobacco products, nicotine pouches, shisha, and snus companies. This extends well beyond industry and includes academics carrying out harm reduction research, nonprofits representing users of new nicotine products, foundations supporting harm reduction research and advocacy, and journals that publish harm reduction research.

This has led to a schism between those vehemently opposed to THR and those who propagate its use. In this battle, smokers seeking to gain access to



better ways to quit or switch are the real losers. In every other UN treaty body, the voices of all players with a legitimate interest in the topic are invited to the major meetings. No doubt many in the industry try hard to ensure that their profit motives are not undermined, while nonprofits try equally hard to ensure that the public interest remains the focus.

Both sides would benefit from intense and respectful engagement and dialogue, aimed at finding solutions to end tobacco use faster.

While COP28 and every major UN event have opened their doors to maximize the participation of civil society, COP10 has severely limited the participation of nonprofits. The 26 accredited observers at COP10 overly represent large, US - based, and heavily financed organizations - including the American Cancer Society, the Campaign for Tobacco Free Kids, and the Bloomberg Funded Vital Strategies. The voices of LMIC-based NGOs, the views of consumers of the range of tobacco harm reduction products, and the knowledge of industry scientists are all banned or prohibited from attendance.

During COP28 (held in the UAE in December 2023), diversity was actively encouraged and several examples of real progress were reported. Clarity emerged about the primary purpose of the treaty for the first time. Parties agreed to "*move away*" from coal, oil, and natural gas. These drive the global temperature higher. While there was hope that the phrase "phase out" would be supported, the compromise reached signals the eventual end of fossil fuel use. The energy industry was actively involved in COP28 discussions, with the conference chair from UAE representing both the government and industry.

COP10 needs to review the objectives of the FCTC. A simple and clear objective, and the **phase out of combustible cigarettes**, could galvanize real action, lead to early health gains, and stimulate the tobacco industry. This would include state monopolies to step up innovation, marketing, and access to products that would help adult smokers quit or switch.

We assign an F (fail) to Parties because of active measures to exclude scientists, industry experts, and nicotine users from COP10. These groups have expertise and/or valid lived - life experiences related to ending to-bacco use. Their exclusion severely limits the ability of Parties to make fully informed decisions about policies capable of ending smoking in the fastest possible time - including the development of achi<u>evable objectives.</u>





8. Financing global tobacco control.

The WHO report notes that the most frequently mentioned gaps between available resources and implementation were: "lack of financial resources, a lack of human resources and expertise for tobacco control, and the need for training and capacity-building for tobacco control." These gaps were present 20 years ago and led to efforts by the WHO to mobilize development and philanthropic funds to address gaps. Currently, the prospects for raising needed funds are bleak. Global health continues to undervalue investments in all noncommunicable diseases and mental health - which is where tobacco funding is placed.

There has been a significant shift in recent years by OECD development aid spending towards post-pandemic spending and to a range of humanitarian needs at the cost of other areas of global health. New government players (from China to the Middle East) have yet to step up their spending. Of all major philanthropies, only Bloomberg Philanthropies and the Bill and Melinda Gates Foundations continue to fund tobacco control and oppose THR. Trends are not positive for this to change.

A recent review estimated that \$427 billion was required to meet the gaps in implementing the minimum requirements of the FCTC. A range of options to increase funding has been proposed^{5,6} by tobacco control advocates. These include increasing Development Assistance funding, earmarking domestic taxes for tobacco control (only a few countries do this), taxing leaf tobacco export earnings (major players for the export of leaf tobacco are Brazil, Zimbabwe, United States, India, and China), and tax cigarette exports (major countries are Poland, Germany, Indonesia, Lithuania, and Portugal who account for almost 50% of all cigarette exports). None of these sources are likely to yield serious funding.

As mentioned earlier, it is highly unlikely that new sources of finance for global tobacco control capable of getting close to the required \$427 billion will appear in the next decade. The proposed WHO FCTC Investment Fund will be discussed in Panama. It is unclear how or why investors would support this when the WHO Foundation has struggled to raise post-pandemic finance.

It is our view that there are only two serious ways to sustainably finance tobacco control: domestic investments from governments and greater reliance on private sector investments. Research, development, marketing, and distribution of THR products are financed by private companies. Governments should rapidly embrace THR, set regulations to assure safety, avoid youth access and promote sustainability.



In addition to the need for domestic tobacco control, the FCTC COP documents highlight the need for Parties to meet their assessed contribution obligations required to keep the FCTC processes alive. The latest data released (April 2023) shows that several countries are well behind on their contributions. Some notable countries on the list include Bahrain, Brazil, China, Japan, Norway, Saudi Arabia, South Africa, and Venezuela.

We assign an F (Fail) for financing global tobacco control knowing that there is no probability that close to the \$427 billion required to meet the gaps between FCTC requirements and their implementation will become available. Alternative approaches, drawing upon private sector expertise and finance, are required.

Lastly, an important note on mis- and disinformation in the FCTC process. The prevalence of misinformation about the health effects and social impact of harm reduction products and nicotine stands in the way of achieving the objectives set out by the FCTC. Social media posts, articles, and even reports that contribute to misinformation or exaggerated claims about the risks and dangers of harm reduced products containing nicotine have a profound and negative effect, not only on the public but on physicians as well⁸. The impact of even minimal exposure to misinformation can be seen in a 2021 study among 2400 current adult smokers in the UK and US. After exposing the participants to only 4 tweets that contained a particular perspective on e-cigarettes, the study found that "exposure to tweets that e-cigarettes are as or more harmful than smoking versus control was associated with lower post-test intention to purchase e-cigarettes and increased post-test perceived relative harm of e-cigarettes²²." The effect of misinformation can also be seen on a governmental level – and with more than just a ban on harm reduced products. In May 2023, the Ministry of Information and Broadcasting in India issued a ban on any print or digital media promoting e-cigarettes – directly or indirectly²³. This not only shows the high-level negative impact of misinformation, but also prevents any further misinformation from being countered or challenged.

In many cases, the misinformation can and should be countered with reliable statistics. For example, concerns over an increase in vaping among American youths need to take into consideration the CDC National Youth Tobacco Survey, which shows a 61% drop in US teen nicotine vaping over the past 4 years – as well as a 90% drop in teen smoking since 2011²⁴.



ABOUT THE AUTHORS

Any enquiries about the report to be directed to Dr. Derek Yach at **derek@globalhealthconsults.net** and Dr. Delon Human at **delon@me.com**



Dr. Derek Yach (Project leader) - USA, South Africa

Dr. Yach is a former employee of the World Health Organization and of PepsiCo.

He received his MBChB from the University of Cape Town in 1979 and his MPH from Johns Hopkins School of Public Health in 1985. In 2007, he received an honorary DSc from Georgetown University.

For several years Yach led major national epidemiological initiatives in South Africa. Yach then served under Director-General Gro Harlem Brundtland, as a cabinet director where he worked on the WHO Framework Convention on Tobacco Control and the Global Strategy on Diet and Physical Activity. He led global health at Yale School of Public Health and then at the Rockefeller Foundation before becoming SVP for Global Health and Agriculture Policy at PepsiCo. After 5 years developing and leading the Vitality Institute for Prevention in New York, he founded and led the Foundation for a Smoke Free World. Currently Yach is an independent global health consultant focused on ending smoking, supporting mental health and promoting healthy diets. He has served on advisory boards of the World Economic Forum, Clinton Global Initiative, and Welcome Trust.



Prof. Marewa Glover - New Zealand

Prof. Glover is one of New Zealand's leading tobacco control researchers. She has worked on reducing smoking-related harm for 30 years. She is recognized internationally for her advocacy on tobacco harm reduction; and locally was a Finalist in the New Zealander of the Year Supreme Award in 2019 recognising her contribution to reducing smoking in NZ.

Prof. Glover has chaired numerous committees and organizations including End Smoking NZ, an independent NGO that lobbied for a harm reduction approach even before electronic cigarettes were introduced. In 2018 Dr Glover established the Centre of Research Excellence: Indigenous Sovereignty & Smoking - an international programme of research aimed at reducing tobacco related harms among Indigenous peoples globally. www.coreiss.com.

Prof. Glover has not received any funding for the development of this report.



Dr. Delon Human - South Africa, France

Dr. Delon Human is a specialist family physician, global health advocate, published author, international speaker and health care consultant specialising in global health strategy, harm reduction and health communication. He is the former Secretary-General of the World Medical Association, International Food and Beverage Alliance and Co-founder of the African Harm Reduction Alliance (AHRA). He has acted as an adviser to three WHO Directors-General and to the UN Secretary-General on global public health strategies.



Dr. S. Abbas Raza - Pakistan

Dr. Raza is currently a Consultant Endocrinologist at Shaukat Khanum Hospital and Research Center in Pakistan and National Defense Hospital in Lahore, Pakistan, since 2004. He received his medical degree from Allama Iqbal Medical College, Lahore, and was Chief Medical Resident at Atlantic City Medical Center, NJ, USA. Fellowship in Diabetes, Endocrinology and Metabolism was completed at University of Wisconsin, Madison, USA. Dr Raza is American Board Certified in Internal Medicine, and in Endocrinology, Diabetes and Metabolism.

He has presented extensively on diabetes and endocrinology throughout his career and has received numerous awards in recognition of his contributions to this field. He has been Awarded Tamghae-Imtiaz by President of Pakistan for services in field of Medicine.

Dr Raza is an Executive Member (since 2004) and President of International Society of Endocrinology (2022-2024), Past-President of the Pakistan Endocrine Society (PES), South Asian Federation of Endocrine Societies (SAFES) and Pakistan Chapter of American Association of Clinical Endocrinologist. He was also previously on the Board of Directors for the American Association of Clinical Endocrinologists (AACE) (2003–2004).





Prof. Mihaela Răescu - Romania

Prof. Dr. Răescu (Dentist) teaches Oral and Dental Prevention at the Faculty of Dental Medicine of the "Titu Maiorescu" University in Bucharest, Romania since 2003 and has been a tenured professor since 2015, in addition to being an active practitioner and a Specialty Doctor, Dr. Răescu has authored and co-authored numerous studies and publications and has been a guest speaker at various professional conferences.



Dr. Gintautas-Yuozas Kentra - Kazakhstan

Dr. Kentra is a Cardiologist and Deputy Chairman of the Council and member of the Expert Council of the Densaulyk ULL, which is the Harm Reduction Association of Kazakhstan, focusing on the institutionalisation of harm reduction in non-communicable diseases.



Prof. Riccardo Polosa - Italy

Riccardo Polosa is the founder of the Center of Excellence for the Acceleration of Harm Reduction at the University of Catania. A full professor of internal medicine at the University of Catania with a specialist role as a respiratory physician, clinical immunologist, allergist and rheumatologist, Polosa is also the founder of the Center for Tobacco Research at the University of Catania, where contracted research staff conduct high-profile clinical and behavioral research.

The focus of his academic research has been historically centered upon the investigation of mechanisms of inflammation, biomarkers of disease activity, and novel drug target discovery in the area of respiratory medicine (asthma, COPD, rhinitis) and clinical immunology (allergic and autoimmune diseases). This has culminated with the participation of his research group in large EU-funded Pan-European research consortia.

Nonetheless, over the last 15 years, his main research interest has progressively shifted in the area of tobacco-related diseases, smoking prevention and cessation, tobacco harm reduction and e-vapor products. More specifically, he has been involved in the behavioral, clinical, physiological and toxicological evaluation of e-cigarettes for over 10 years. PI of the first RCT in the world about effectiveness and tolerability of e-cigarettes (the ECLAT study), he is the most prolific



author in the field of e-cigarettes, according to recent bibliometric research. He designed and conducted dozens of research studies, working with smoking cessation specialists, clinical psychologists, experienced vapers, epidemiologists, biostatisticians, chemists, toxicologists and biologists from all over the world.

He is a member of the Scientific Committee of LIAF (Italian Anti-Smoking League) and of INNCO (International Nicotine Consumer Organization). Already national coordinator for the Italian Working Group on electronic cigarettes and e-liquids, he has been elected convenor for the European Working Group on requirements and test methods for emissions of electronic cigarettes within the European Committee for Standardization (CEN/TC 437).



Dr. Anders Milton - Sweden

Dr. Milton is a physician with extensive experience in public service, a highly sought-after consultant in the healthcare sector and a former chair of the WMA. Currently the owner and CEO of Milton Consulting and current chair of the Snus Commission. He is the Chairman of the Board of three foundations that work with education for children and adolescents and several for-profit companies in the field of life science. Dr. Milton's resumé also includes stints as President and CEO of the Swedish Medical Association (SMA), and as President of the Swedish Red Cross, the People and Defence Foundation and the Swedish Confederation of Professional Associations (SACO).



Prof. Karl-Olov Fagerström - Sweden

Prof. Karl Fagerström is a psychologist and founding member of the Society for Research on Nicotine and Tobacco (SRNT). He was awarded the World Health Organization medal in 1999 for his outstanding work in tobacco control. In 2013 he was the recipient of the Award on Clinical Science from the Society for Research on Tobacco and Nicotine. He has been part of the early development of the Nicotine Replacement products and developed the first non-tobacco nicotine pouch.





Dr. Diego Verrastro - Argentina

Dr. Diego Verrastro is a general surgeon, specialising in emergency medicine, abdominal mini-invasive surgery, ultrasonography and obesity. He is also spokesperson for RELDAT, The Latin American network for the reduction of tobacco-associated harm. In this role, he has called for further discussion of the merits of harm reduction in Latin America, drawing attention to the examples provided by other countries - including the UK, New Zealand and Sweden.



Prof. Heino Stöver - Germany

Prof. Stöver is a social scientist and Professor of Social Scientific Addiction Research at the Frankfurt University of Applied Sciences in Germany, Faculty of Health and Social Work. Since 2009 he has been the director of the Institute of Addiction Research.

Heino Stöver's main fields of research and project development expertise are health promotion for vulnerable and marginalised groups, drug services, prison health care and related health issues (especially HIV/AIDS, Hepatitis C, drug dependence, and gender issues), and the potential of e-cigarettes.

His international research and consultancy expertise includes working as a consultant for the European Commission, United Nations Office on Drugs and Crime (UNODC), World Health Organization (WHO), European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), International Committee of the Red Cross (ICRC) and Open Society Institute (OSI) in various contexts.



Dr. Anoop Misra – India

Dr. Anoop Misra is an Indian endocrinologist and a former honorary physician to the Prime Minister of India. He is the chairman of Fortis Centre for Diabetes, Obesity and Cholesterol (C-DOC) and heads, National Diabetes Obesity and Cholesterol Foundation (NDOC). A former Fellow of the World Health Organization at the Royal Free Hospital, UK, Misra is a recipient of the Dr. B. C. Roy Award, the highest Indian award in the medical category. The Government of India awarded him the fourth highest civilian honour of the Padma Shri, in 2007, for his contributions to Indian medicine.





Dr. Hiroya Kumamaru - Japan

Cardiovascular surgeon. Hiroya Kumamaru is vice director of AOI International Hospital in Kawasaki, Japan, a position he has held since April 2013. A graduate from the School of Medicine at Keio University, Kumamaru studied cardiovascular surgery in Europe and the United States. His professional experience includes time spent as director of the K.I. Akihabara Clinic (July2008 to March 2013), chief surgeon of the department of cardiovascular surgery at Kawasaki Municipal Hospital, Kanagawa (July 2005 to March 2008) and senior cardiovascular medical director and group leader of clinical scientific affairs at Pfizer Japan (April 1996 to June 2005).



Scott Ballin - USA

Scott D. Ballin has spent 50 years working on issues related to tobacco, nicotine and public health. He served as the American Heart Association's Vice President and Legislative Counsel, and as a steering committee member and Chairman of the Coalition on Smoking OR Health (ACS,AHA,ALA). Ballin was instrumental in advocating for the regulation of tobacco products by the U.S. Food and Drug Administration, as well as working on other tobacco related issues including clean- indoor- air laws and taxation. He was instrumental in the formation of the Alliance for Health, Economic and Agriculture Development that brought public health interests and tobacco producers together to work on issues of mutual interest. He has served as an advisor to the University of Virginia, 'Morven' tobacco, nicotine and alternative products harm reduction dialogues and has served as an advisor to the U.S. Food and Drug Law Institute (FDLI). He has provided consultation to other groups including the Campaign for the Tobacco Free Kids (CTFK). He remains a strong advocate for the engagement of stakeholders in finding solutions to public health challenges. Mr. Ballin is a graduate of Georgetown University's School of Foreign Service, and holds a law degree from the George Mason Antonin Scalia School of Law.





Dr. Kgosi Letlape - South Africa

Dr. Kgosi Letlape is an ophthalmologist from South Africa, and is currently a founding member of the Africa Harm Reduction Alliance (AHRA), a former president of the Health Professions Council and chairman of the Medical and Dental Board of South Africa. He is the current president of the Africa Medical Association and president of the Association of Medical Councils of Africa. He is also past chairman of the board of the South African Medical Association (SAMA) and past president of the World Medical Association (WMA), the global representative body for physicians. He was admitted as a fellow of the College of Surgeons of South Africa in April 1988 and as a fellow of the Royal College of Surgeons of Edinburgh for ophthalmology in May 1988. He has the distinction of being the first black African to qualify as an ophthalmologist in Southfield, South Africa, and the first to become president of the WMA.

Internationally, Dr. Letlape has been closely involved in policy on a range of issues – from the ethics of clinical research to health care systems and the FCTC. During the last decade, he has focused on harm reduction policy and science. He brings to the table superior, world-class skills of leadership, advocacy and policy insight.



REFERENCES

- 1. WHO Framework Convention on Tobacco Control. 2023 Global Progress Report [Internet]. 2023 [cited 2024 Jan 15]. Available from: <u>https://fctc.who.int/publications/m/item/2023-global-progress-report</u>
- 2. World Health Organisation. WHO Results Framework: Delivering a measurable impact in countries [Internet]. 2023 [cited 2024 Jan 15]. Available from: <u>WHO</u> <u>Results Framework: Delivering a measurable impact in countries</u>
- GBD 2019 Tobacco Collaborators. Spatial, temporal, and demographic patterns in prevalence of smoking tobacco use and attributable disease burden in 204 countries and territories, 1990–2019: a systematic analysis from the Global Burden of Disease Study 2019. The Lancet [serial online]. 2021 May [cited 2024 Jan 15];397(10292):2337. Available from: <u>https://www.thelancet.com/article/ S0140-6736(21)01169-7/fulltext</u>
- 4. Just Managing Consulting, Foundation for a Smoke-Free World. Contradictions and Conflicts [Internet]. 2020 [cited 2024 Jan 15]. Available from: <u>Contradictions-and-Conflicts.pdf (smokefreeworld.org)</u>
- Lee K, et al. The 20th anniversary of the WHO Framework Convention on Tobacco Control: hard won progress amid evolving challenges. The Lancet [serial online]. 2023 May [cited 2024 Jan 15]; 402(10402): 592. Available from: <u>The 20th anniversary of the WHO Framework Convention on Tobacco Control:</u> <u>hard won progress amid evolving challenges (thelancet.com)</u>
- 6. Taylor SR, Forrest R. Assessing the solutions to tobacco control's funding gap problem. Tob. Control. 2022 [cited 2024 Jan 15];31:335. Available from: <u>Assessing</u> <u>the solutions to tobacco control's funding gap problem (bmj.com)</u>
- Global State of Tobacco Harm Reduction. The Right Side of History [Internet]. 2022 [cited 2024 Jan 15]. Available from: <u>THR Reports — Global State of</u> <u>Tobacco Harm Reduction (gsthr.org)</u>
- Sermo, Foundation for a Smoke-Free World. Doctor's Survey [Internet]. 2023 September [cited 2024 Jan 15]. Available from: <u>Doctors' Survey - Foundation</u> for a Smoke-Free World
- 9. Tobacco Transformation Index. 2022 Index Ranking Report [Internet]. 2022 September [cited 2024 Jan 15]. Available from: <u>2022-Index-Ranking-Report</u> <u>September-2022-1.pdf (tobaccotransformationindex.org)</u>
- 10. Smoke Free Sweden: Lives Saved [Internet].[cited 2024 Jan 15]. Available from: SmokeFreeSweden.org



- Yach D. The origins, development, effects, and future of the WHO Framework Convention on Tobacco Control: a personal perspective. The Lancet [serial online]. 2014 May [cited 2024 Jan 15];383(9930):1771. Available from: <u>The origins, development, effects, and future of the WHO Framework</u> <u>Convention on Tobacco Control: a personal perspective - PubMed (nih.gov)</u>
- 12. Yach D, et al. Research to stop tobacco deaths. Globalization and Health. 2014 May [cited 2024 Jan 15];10(39). Available from: <u>Research to stop tobacco deaths</u> <u>| Globalization and Health | Full Text (biomedcentral.com)</u>
- 13. Samet JM, et al. Research in support of tobacco control. BMJ. 1998 Jan [cited 2024 Jan 15];316(7128):321. Available from: <u>Research in support of tobacco control. PMC (nih.gov)</u>
- 14. Yach D. The Promise of Synthetic Nicotine. Tobacco Reporter [Internet]. 2023 August [cited 2024 Jan 15]. Available from: <u>https://tobaccoreporter.com/2023/08/01/the-promise-of-synthetic-nicotine/</u>
- 15. Rensch J. A Randomized, Controlled Study to Assess Changes in Biomarkers of Exposures Among Adults Who Smoke That Switch to Oral Nicotine Pouch Products Relative to Continuing Smoking or Stopping All Tobacco Use. J Clin Pharmacol. 2023 Oct [cited 2024 Jan 16];63(10):1108. Available from: <u>https:// pubmed.ncbi.nlm.nih.gov/37322571/</u>
- 16. Azzopardi D, et al. Assessment of biomarkers of exposure and potential harm, and physiological and subjective health measures in exclusive users of nicotine pouches and current, former and never smokers. Biomarkers. 2023 Feb [cited 2024 Jan 16];28(1):118. Available from: <u>https://pubmed.ncbi.nlm.nih.gov/36484137/</u>
- 17. Upadhyay S, et al. Heated Tobacco Products: Insights into Composition and Toxicity. Toxics. 2023 Aug [cited 2024 Jan 16];11(8):667. Available from: <u>https://</u> <u>pubmed.ncbi.nlm.nih.gov/37624172/#:~:text=Overall%2C%20the%20con-</u> <u>tent%20of%20toxic,aerosol%20than%20in%20cigarette%20smoke.</u>
- Meloro-Ollonarte JL, et al. Specific biomarker comparison in current smokers, e-cigarette users, and non-smokers. Addict Behav. 2023 May [cited 2024 Jan 16];140:107616. Available from: <u>https://pubmed.ncbi.nlm.nih.gov/36680837/#:~:-</u> <u>text=Conclusions%3A%20Although%20there%20was%20a,which%20may%20</u> <u>be%20a%20clue</u>
- 19. Azzopardi D, Haswell LE, Frosina J, McEwan M, Gale N, Thissen J, Meichanetzidis F, Hardie G. Assessment of biomarkers of exposure and potential harm, and physiological and subjective health measures in exclusive users of nicotine



pouches and current, former and never smokers. Biomarkers. 2023 Feb;28(1):118-129. doi: 10.1080/1354750X.2022.2148747. Epub 2022 Dec 13. PMID: 36484137. Available from: <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9585440/</u>

- 20. Solomon A. Gender, Women, And the Future of Tobacco Control. Drugs and Alcohol Today 2020 May [cited 2024 Jan 17];20(3):249. Available from: <u>https://</u> <u>drive.google.com/file/d/1RRQUnk6BkYqIn6BEO3qENilaw4Wk4oSW/view</u>
- 21. WHO. Global Oral Health Status Report [Internet]. 2022 November [cited 2024 Jan 16]. Available from: <u>https://www.who.int/team/noncommunicable-diseases/</u> <u>global-status-report-on-oral-health-2022</u>
- 22. Wright C, et al. Effects of Brief Exposure to Misinformation about E-Cigarette Harms on Twitter: A Randomized Controlled Experiment. BMJ Open 2021 Sept [cited 2024 Jan 23];11(9). Available from: <u>https://www.ncbi.nlm.nih.gov/ pmc/articles/PMC8413940/</u>
- 23. Chowdhery S. India Doubles Down on Vape Ban with Research and Media Censorship. FilterMag [Internet]. 2024 January [cited 2024 Jan 23]. Available from: <u>https://filtermag.org/india-vape-ban-research-media-censorship/</u>



Figure 1

The Economist report card on the OpenAI event in the UAE

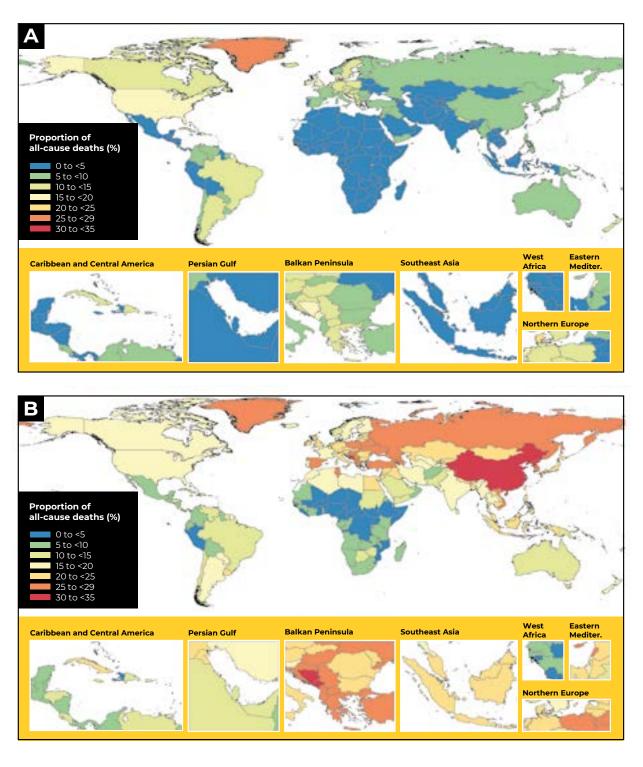




Figure 2

Proportion of all-cause deaths that were attributable to smoking tobacco use

among females (A) and males (B) of all ages in 2019.





Parties to the FCTC where over 40 percent of men smoke

Armenia	Lithuania
Bangladesh	Malaysia
Belarus	Micronesia
Bulgaria	Mongolia
China	Myanmar
Cyprus	Nauru
Korea	Papua New Guinea
Egypt	Romania
Fiji	Sierra Leone
Kiribati	Solomon Islands
Kyrgyzstan	South Africa
Laos	Syria
Latvia	Timor-Leste
Lebanon	Tonga
Lesotho	Tunisia
Libya	Türkiye



Parties to the FCTC where over 20 percent of women smoke

Andorra	Hungary
Austria	Kiribati
Belgium	Lebanon
Chile	Lithuania
Cook Islands	Marshall Islands
Croatia	Montenegro
Cyprus	Nauru
Egypt	Papua New Guinea
Finland	Serbia
Germany	Solomon Islands
Greece	



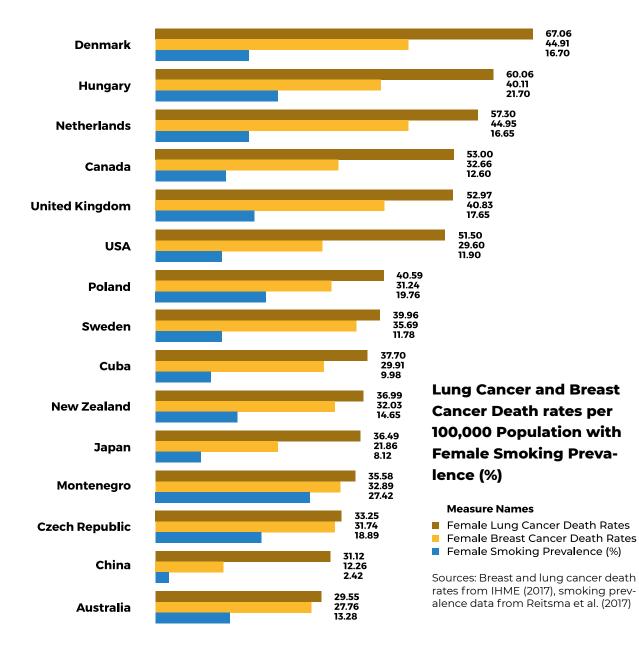


Parties to the FCTC where girls smoke more than boys

Austria	Nauru
Belarus	Romania
Chile	Serbia
Czechia	Slovenia
Hungary	Spain
Italy	Sweden
Luxembourg	Uruguay
Malta	Zambia
Netherlands	



A comparison of breast and lung cancer death rates with women's smoking prevalence. Sourced through Solomon A, Gender, women, and the future of tobacco control²⁰





A sample of the research recently conducted on harm reduction products, their exposure and the impact of biomarkers

Study Name	Date	Author
A Randomized, Controlled Study to Assess Changes in Biomarkers of Exposures Among Adults Who Smoke That Switch to Oral Nicotine Pouch Products Relative to Continuing Smoking or Stopping All Tobacco Use	July 2023	Rensch et al
Assessment of biomarkers of exposure and potential harm, and physiological and subjective health measures in exclusive users of nicotine pouches and current, former and never smokers	February 2023	Azzopardi et al
Heated Tobacco Products: Insights into Composition and Toxicity	August 2023	Upadhyay et al
Specific biomarker comparison in current smokers, e-cigarette users, and non-smokers	May 2023	Melero-Ollonarte et al
Biomarkers of Exposure and Potential Harm in Exclusive Users of Nicotine Pouches and Current, Former, and Never Smokers: Protocol for a Cross-sectional Clinical Study	October 2022	Azzopardi et al



Changes in Retail Cigarette Volume Sales since 2017

Retail Volume Ranking	Country	Retail Cigarette Volume Sales 2020 (mn sticks)	Change since 2017 (%)
1	China	2,391,202.9	0.7
2	Indonesia	276,583.4	-3.5
3	US	222562.4	-4.1
4	Russia	205,642.3	-7.4
5	Turkey	115,196.7	2.7
6	Japan	107,700.0	-12.1
7	Egypt	99,878.3	2.4
8	Vietnam	80,783.3	1.6
9	Germany	73,952.2	-1.3
10	Bangladesh	73,940.7	-4.3
11	India	73,811.5	-3.2
12	South Korea	66,178.0	-1.4
13	Italy	60,860.2	-4.2
14	Philippines	58,319.9	-6.6
15	Pakistan	55,113.2	-2.1
16	Brazil	53,268.7	1.9
17	Iraq	48,185.0	2.3