World Health Organization

REGIONAL OFFICE FOR Europe

EUROPEAN TOBACCO USE

Trends Report 2019

Abstract

Tobacco use represents an important public health issue worldwide, but particularly in the WHO European Region, where the highest levels of tobacco-use prevalence (over 29%) have been reported. Tobacco use causes a significant burden on health, imposes enormous economic costs to society, both directly from health-care needs and indirectly from loss of productivity, fire damage and environmental harm. This document, developed by the WHO Regional Office for Europe, provides the latest available data on the current situation and changes over time in tobacco-use monitoring, health impacts, prevalence of tobacco use, health systems' response to the tobacco epidemic, and the role of human rights and health policy in increasing awareness of the circumstances and effects of tobacco use. It aims not only to give insights into trends of tobacco use and prospects for its future control, but also to be an advocacy tool to encourage dialogue among policy-makers, health professionals, tobacco users and other stakeholders.

Keywords

TOBACCO USE
TOBACCO CONTROL
WHO FCTC
EUROPE
MONITORING
HEALTH IMPACT
HUMAN RIGHTS
SDGs

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Acknowledgements

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The authors are grateful to Alison Commar, Technical officer, and Benn David McGrady, Technical officer from WHO headquarters, Isabel Yordi Aguirre, Programme manager, Aasa Hanna Mari Nihlen, Technical officer, Angela Ciobanu, Technical officer and Eleanor Salter from the WHO Regional Office for Europe, Andrei Demin, Professor, Institute of leadership and health care administration, Sechenov First Moscow State Medical University, Russian Federation, Aida Ramic-Catac, Professor, Assistant director for medical affairs, Institute for Public Health of the Federation of Bosnia and Herzegovina, and Nuka Maglakelidze, Head of the Tobacco Control Group, National Center for Disease Control and Public Health, Georgia, for their helpful comments on improving the report's completeness.

The authors would also like to thank Bente Mikkelsen, Director, Division of Noncommunicable Diseases and Promoting Health through the Life-course, WHO Regional Office for Europe, and Joao Joaquim Rodrigues da Silva Breda, Head, WHO European Office for the Prevention and Control of Noncommunicable Diseases, for their overall leadership and support for the development of this report.

The publication was made possible by partial funding grant from the Government of the Russian Federation to the WHO European Office for the Prevention and Control of Noncommunicable Diseases and the Government of Germany.

Acronyms

CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CIS	Commonwealth of Independent States
CVD	cardiovascular diseases
COPD	chronic obstructive pulmonary disease
CRC	Convention on the Rights of the Child
CRPD	Convention on the Rights of Persons with Disabilities
EBM	Eurobarometer
ECHR	European Convention on Human Rights
EHIS	European Health Interview Survey
ENDS/ENNDS	electronic nicotine delivery systems and electronic non-nicotine delivery systems
EU	European Union
EU13	countries that became members of the European Union after 2004
EU15	countries that were part of the European Union prior to 2004
GAP	Global action plan on the prevention and control of noncommunicable diseases 2013–2020
GATS	Global Adult Tobacco Survey
GMF	Global Monitoring Framework on Noncommunicable Diseases
GYTS	Global Youth Tobacco Survey
HBSC	Health Behaviours in School-aged Children (study/survey)
ICESCR	International Covenant on Economic, Social and Cultural Rights
NCDs	noncommunicable diseases
PAF	population-attributable fraction (of disease)
SDGs	(United Nations) Sustainable Development Goals
SES	socioeconomic status
TAPS	tobacco advertising, promotion and sponsorship
UNGPs	United Nations Guiding Principles on Business and Human Rights
WHO FCTC	WHO Framework Convention on Tobacco Control
YLD	years lived with disability
YLL	years of life lost

Introduction

Tobacco use represents an important public health issue worldwide, but particularly in the WHO European Region, where the highest levels of tobacco-use prevalence (over 29%) have been reported *(1)*. Tobacco use causes a significant burden on health, with over 7 million estimated deaths in 2016, many of them occurring prematurely, and large losses of healthy life due to morbidity and disability. It also imposes enormous economic costs to society, both directly from health-care needs and indirectly from loss of productivity, fire damage, environmental harm from cigarette litter and destructive farming practices *(2)*. Understanding of how to reduce the economic and health costs of this deadly epidemic is now greater, but despite the availability of cost-effective tools, many countries still face a challenge in designing and implementing comprehensive and sustainable tobacco-control strategies.

To address these challenges, Members States of the WHO European Region have agreed over the past 15 years on several policy frameworks, such as the WHO Framework Convention on Tobacco Control (WHO FCTC) *(3)*, the United Nations Political Declaration on the Prevention and Control of Noncommunicable Diseases *(4)*, the WHO *Global action plan for the prevention and control of noncommunicable diseases (5)*, the WHO European Health 2020 policy framework *(6)* and the United Nations Sustainable Development Goals (SDGs) *(7)*. Member States have adopted their goals, targets and recommendations. Progress has been seen on the implementation of these frameworks in countries, but the levels achieved so far are insufficient to reach a target of tobacco-use prevalence reduction among the adult population in the WHO European Region by 30% in 2025.

As a means of improving national capacities for monitoring and surveillance to support global tracking of the tobacco epidemic, WHO Member States have continuously contributed over the past decade to the systematic collection and reporting of information about tobacco, helping policy-makers understand patterns and trends in tobacco use and exposure to tobacco smoke that are critical for designing robust, more targeted tobacco-control policies. The result of this collaboration is strengthened national monitoring and surveillance systems and the biannual publication of the WHO global reports on the tobacco epidemic *(8)*, first published in 2008. The global report provides a comprehensive assessment of progress on tobacco prevention and control based on a highly validated data set and indicators, and a robust analysis process, which are packaged in the MPOWER measures *(9)*.

This European tobacco trends report provides the latest available data on the current situation and changes over time in tobacco-use monitoring, health impacts, prevalence of tobacco use, health systems' response to the tobacco epidemic, and the role of human rights and health policy in increasing awareness of the circumstances and effects of tobacco use. It emphasizes the need for Member States to intensify preventive action in different spheres, from health, to marketing, to fiscal policy and stronger regulation. Member States have contributed data for the report to WHO for more than a decade to establish a continuous, comprehensive and comparable monitoring process, building a robust evidence base addressing global and regional information mandates for monitoring, surveillance and research needs. More recently, also within this framework, WHO published a global report on tobacco-smoking prevalence trends and projections between 2000 and 2025. Additional WHO and external data resources used for the report are the Global Mortality Database and the Global Estimates *(10,11)*.

Extracts of data for WHO European Region countries allowed progress on reducing tobacco-use prevalence in the European Region, changing patterns among population groups and tobacco products, and the prospects

for meeting the global target of tobacco-use prevalence reduction, to be determined. The report provides insights into exploring and understanding the trends of tobacco use in Europe and the prospects for its future control. It also aims to be an advocacy tool to encourage dialogue among policy-makers, health professionals, tobacco users and other stakeholders.

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CHAPTER 1

TOBACCO USE MONITORING EFFORTS IN EUROPE

Background

Monitoring and surveillance are essential tools in identifying the current situation and trends of health issues. They also orient decisions by providing evidence for development of health policy, plans, strategies, programmes and interventions, and assessment of the effectiveness of implementation.

Communicable diseases were a leading public health challenge in the 20th century, meaning monitoring and surveillance systems originally were based on disease or syndromic events, with the frequency of data collection reflecting the duration of incubation periods of the disease *(1).* The 21st century saw the rise and ultimate dominance of chronic noncommunicable diseases (NCDs) that also require continuous global, regional and national monitoring mechanisms. For diseases characterized by long periods before manifestations appear, as in the case for NCDs, risk factors and health policies become additional key elements in monitoring and surveillance.

Mechanisms for monitoring are similar across most Member States of the WHO European Region: chronic NCDs are monitored through regular health statistical systems defined through national legislation, while trends of risk factors, including smoking, are monitored through internationally standardized and periodic population surveys.

Several monitoring and surveillance processes for collecting standardized information on tobacco use have been established with WHO support. These are based on common and agreed approaches, including the definitions and content of indicators, and frequency, scope and disaggregation of data collection, among other relevant factors *(2)*. Building and reaching a consensus on tobacco-use monitoring and surveillance required several frameworks and mandates, including the WHO FCTC, which has become one of the most comprehensive and strongest tools for tobacco-use prevention and control.

Framework and mandate for monitoring and surveillance of the tobacco epidemic

Member States took an extraordinary step at the Fifty-sixth World Health Assembly in 2003 by adopting the WHO FCTC, the first legally binding instrument to provide a strong, concerted response to the global tobacco epidemic and its enormous health, social, environmental and economic costs *(3).* The WHO FCTC also gives countries and other participants in the Convention the necessary legal and technical foundation and framework to pass and implement comprehensive, effective tobacco-control measures spanning all sectors of government. It calls for monitoring and surveillance programmes, reporting, exchange of information, and scientific and technical cooperation on different aspects of tobacco use and associated determinants and indicators (Articles 20, 21 and 22), including social (such as the identification of vulnerable population groups and their location), economic (marketing, and direct and indirect health costs of smoking) and health (epidemiologic impacts, disease management and efforts to cease smoking) issues. Today, almost all (50 of 53) Member States of the European Region have ratified the WHO FCTC *(4)* and are acting accordingly on implementing the recommendations. Full implementation, however, remains rather low and varies broadly across the Region *(5).*

The United Nations General Assembly in 2011 called a global meeting at which the situation and trends of NCDs in the population and challenges to their prevention and control were analysed *(6)*. WHO consequently was tasked with preparing the *Global action plan on the prevention and control of noncommunicable diseases 2013–2020* (GAP) *(7)* and defining targets and indicators against which progress in the Global Monitoring Framework on Noncommunicable Diseases (GMF) *(8)* could be determined. WHO FCTC implementation was also recognized and included in the GAP and GMF as a key policy instrument for meeting the global voluntary target of a 30% relative reduction in prevalence of current tobacco use among people aged 15 years or older.

Member States approved the European Health 2020 policy framework, Health 2020, in 2012, giving additional impetus to public health improvement in the Region and supporting action across government and society to "significantly improve the health and well-being of populations, reduce health inequalities, strengthen public health and ensure people-centred health systems that are universal, equitable, sustainable and of high quality" *(9)*. Health 2020 involves several targets, including those on improving healthy life, reducing risk factors, decreasing health inequalities and improving health systems. Several tobacco-related indicators, such as decreasing premature mortality from main NCD groups (all of which are related to tobacco use), decreasing the prevalence of tobacco-smoking, and reducing health inequalities between and within countries and population groups, are used as part of its monitoring process.

Following a period of relatively slow progress in controlling NCDs and tobacco use, a United Nations high-level meeting was convened in 2014 to determine how to achieve the expected outcomes of the GAP. The political declaration on the prevention and control of NCDs *(6)* was adopted, committing Member States to "accelerate implementation ... of the WHO Framework Convention on Tobacco Control", including taking recommended actions to address the threats of tobacco-use exposure, regulation and marketing.

The Seventh session of the Convention of the Parties to the WHO FCTC in 2016 welcomed the United Nations 2030 Agenda for Sustainable Development *(10)*, including SDG 3 on "ensur[ing] healthy lives and promot[ing] well-being for all at all ages". Target 3a of the health goal is to "strengthen the implementation of the WHO FCTC in all countries, as appropriate" as a means of achieving SDG 3 by 2030 *(2)*. This endorsement provided additional strength to the tobacco-use prevention and control mandate.

WHO and its Member States have contributed systematically over the years to monitoring and surveillance of tobacco use and its effects, and promoting the organized response of public health. Information is analysed and synthesized in the biannual WHO global tobacco-control report, which tracks the status of the tobacco epidemic and interventions to combat it through efforts to: **m**onitor tobacco use; **p**rotect populations from exposure to tobacco smoke; **o**ffer cessation and care support services; **w**arn about the dangers of tobacco (through warning labels and anti-tobacco mass media campaigns); **e**nforce bans on tobacco advertising, promotion and sponsorship (TAPS); and **r**aise taxes on tobacco. This is the MPOWER support package, the elements of which correspond to one or more articles of the WHO FCTC *(11)*.

The global tobacco-control report focuses on monitoring tobacco-use and prevention policies and includes in-depth analyses of monitoring capacity of WHO Member States, allowing a detailed understanding of progress and future challenges in the area. Efforts to standardize information collection, calculation and, when necessary, estimation of global, regional and national indicators form part of a process to improve information availability. This analytical report includes data extracted for countries of the WHO European Region from the global collection.

Disease and risk factors surveillance

Monitoring and surveillance are essential for different stages of health policy, from setting baselines, targets and priorities, to assessing progress of implementation of strategies, programmes and activities. Several considerations must be addressed when establishing a monitoring system, however, including definition of scientifically valid methods and their simplicity, appropriateness and acceptability to the target populations, costs incurred, and continuity and sustainability of the system. In contrast to communicable diseases, for which disease symptoms of defined cases are collected, information about NCDs and tobacco tends to focus on behaviours, lifestyle, practices, knowledge and attitudes, and some physical and biochemical measurements.

It is generally considered that NCDs and tobacco use are problems of adult populations, so risk-factors information is collected and measurements carried out mostly among adults (people aged 15 years and over). Recognition of the continuum of exposures throughout the life-course means, however, that more data on tobacco use are being collected today from school-aged children (aged 11–15 years). Unlike disease status, routine systems in the health sector for monitoring "health status" are either limited or absent; monitoring NCD risk factors, including tobacco use, must therefore generally be based on surveys, which may exclusively focus on NCDs and their risk factors or be shared with other topics (such as maternal, sexual and reproductive health). Monitoring and surveillance of health policy and programmes and tobacco-specific prevention and control activity implementation are also important information sources for tobacco policy development and programme evaluation.

Countries rely on vital statistics and disease registries to monitor and assess trends in tobacco-related mortality and disease, respectively. Vital statistics tend to be more robust on specificity of cause definition and are often more complete than disease registries. In 2017, all 53 Member States had a fully or partially implemented vital registration system that facilitated regular reporting of cause of death to WHO, with coverage levels of over 90% and cause of death completeness of over 98% *(12)*. Differences in coverage of standardized mortality rates exist among Member States due to differences in the period of national censuses and the harmonization of national indicators. When countries are unable to provide recent and complete data to WHO for global and regional reporting, internationally comparable estimates are produced with the best available information *(13)*.

Monitoring instruments for NCD and tobacco use, health outcomes and risk factors are diverse. They involve two approaches, one for single risk factors in which more in-depth information may be collected from people about their knowledge, attitudes and behaviours, and one entirely dedicated to NCD risk factors or carried out in combination with other topics, either health-related or not. The most commonly used NCD-dedicated surveys are nationally representative school- or household-based surveys. Tobacco use is monitored today with a few basic instruments, including: the Global Adult Tobacco Survey (GATS), the Global Youth Tobacco Survey (GYTS) and the European School Alcohol and Drug Survey for tobacco-related information; the WHO STEPSwise approach for surveillance; and the European Health Interview Survey (EHIS), the Health Behaviours in School-aged Children study (HBSC) and the Global Children Health Survey for multiple risk factors. Some surveys, notably the STEPSwise approach and EHIS, have incorporated the Tobacco Questions for Surveys, which are a subset of core questions from the GATS instrument with additional emphasis on policy implementation that can be used as standalone modules. Other international household surveys, such as the Demographic and Health Survey and the Multiple Indicator Cluster Survey, also include modules with tobacco-use questions.

Table 1.1. **European countries with at least one national or international survey including tobacco prevalence, by year, sex, and ages**

	2013	2014	2015	2016	2017
Armenia				DHS, M, 15-49	STEPS, T, 18-69
Austria		EHIS, T, 15-100			EBM, T, 15-100
Azerbaijan					STEPS, T, 18-69
Belarus					STEPS, T, 18-69
Belgium		EHIS, T, 15-100			EBM, T, 15-100
Bulgaria		EHIS, T, 15-100			EBM, T, 15-100
Croatia			EHIS, T, 15-100		EBM, T, 15-100
Cyprus		EHIS, T, 15-100			EBM, T, 15-100
Czechia		EHIS, T, 15-100			
Denmark		EHIS, T, 15-100			
Estonia		EHIS, T, 15-100			EBM, T, 15-100
Finland		EHIS, T, 15-100			
France		EHIS, T, 15-100			EBM, T, 15-100
Georgia				STEPS, T, 18-69	
Germany		EHIS, T, 15-100			EBM, T, 15-100
Greece	GATS, T, 15-100	EHIS, T, 15-100			EBM, T, 15-100
Hungary		EHIS, T, 15-100			EBM, T, 15-100
Iceland			GAL, T, 18-69	GAL, T, 18-100	GAL, T, 18-100
Ireland					
Israel					
Italy		EHIS, T, 15-107			
Kazakhstan		GATS, T, 15-100			
Kyrgyzstan	STEPS, T, 18-64				
Latvia		EHIS, T, 15-100			EBM, T, 15-100
Lithuania		EHIS, T, 15-100			EBM, T, 15-100
Luxembourg		EHIS, T, 15-100			
Malta		EHIS, T, 15-100	EHIS, T, 15-100		EBM, T, 15-100
Montenegro					
Netherlands		EHIS, T, 15-100			EBM, T, 15-100
Norway		EHIS, T, 15-100			
Poland		EHIS, T, 15-100			
Portugal		EHIS, T, 15-100			
Republic of Moldova	STEPS, T, 18-64				
Romania		EHIS, T, 15-100			EBM, T, 15-100
Russian Federation				GATS, T, 15-100	
San Marino					
Serbia					
Slovakia		EHIS, T, 15-100			EBM, T, 15-100
Slovenia					EBM, T, 15-100
Spain		EHIS, T, 15-100			
Sweden		EHIS, T, 15-100			EBM, T, 15-100
Switzerland					
Tajikistan				GATS, T, 15-100	
Turkey		EHIS, T, 15-100		GATS, T, 15-100	STEPS, T, 15-100
Turkmenistan		STEPS, T, 18-64			
Ukraine					
United Kingdom		EHIS, T, 15-100			
Uzbekistan	STEPS, T, 18-64				

Source: WHO country reports.

International National Key: Survey, Sex, Ages T=total M=Male

A combination of costs and specific country needs means implementation of these instruments in the European Region has been diverse, with some countries having several types of surveys implemented during the 2013–2018 period (the minimum recommended frequency of once every five years) (Table 1.1). Results for adults show that a significant number of surveys with tobacco-related information have been carried out in many countries, mostly using subregional monitoring initiatives such as STEPSwise, GATS, EHIS and the Eurobarometer (EBM) and usually with a three-year interval, although some are more country- and donor-driven. The number of surveys is increasing regionally, but many countries find mobilizing resources on this schedule challenging; continuous efforts to establish regular systems is essential for ensuring the sustainability of monitoring and surveillance.

The multiplicity of data collections reflects a positive development for continuity and coverage, but also poses some challenges to maintaining comparability of indicators through different survey designs and instruments. WHO aims to work with international organizations and Member States to improve data comparability. WHO plays an important role in improving the global and regional monitoring system with the aim of achieving better coordination among United Nations agencies and international organizations involved in implementing research in Member States, particularly relating to survey standardization procedures, sampling and time frameworks. Specific data on tobacco-use trends determined by these surveys are provided in Chapter 3.

Monitoring health policies and interventions

Monitoring of NCD- and tobacco use-related data also includes health policies and interventions that determine progress on implementing the commitments adopted by United Nations Member States in 2014 *(14)*. Monitoring involves country-level information included in the WHO global tobacco-control report, which emphasizes progress in monitoring implementation of the MPOWER measures, including the "best buys" (highly effective, low-cost health policy interventions). Progress-monitoring on tobacco-use prevention and control policies and strategies, as with other NCD risk factors, involves implementation of fiscal policies (particularly to reduce tobacco affordability), increased regulation of tobacco advertisement, promotion and sponsorship, banning of tobacco use in public spaces and increasing awareness on the dangers of tobacco use to protect people from second-hand smoke exposure.

Selected results from the two latest reports show that important progress has been made between the surveys, particularly in increasing awareness of the population to reduce exposure and implementing the use of plain packaging of tobacco products, an area in which WHO Europe Member States are global tobacco-control leaders despite regulatory and legal challenges posed by the tobacco industry. Gaps in other areas of work may reflect additional complexities and forces being involved, and indicate where increased efforts are needed. More detailed information on implementation trends for specific indicators is presented in Chapter 4.

Exploring other innovative forms of monitoring population tobacco-related behaviours and practice

Combinations of some or all of the above examples of tobacco-use monitoring are essential to ensuring comprehensive assessments and increasing understanding of the tobacco-use situation and trends in Europe. Innovative approaches may nevertheless be required to complement information on tobacco use where it is more difficult to obtain. This would involve the use of new elements of technology to assess tobacco use where stigmatization on reporting is a problem, and where people are more reluctant to answer a questionnaire regarding their behaviour. More sensitive tools to monitor rapid change in behaviours and their determinants will be necessary.

Integrating information from different categories for health (such as prevalence of tobacco use, morbidity and mortality, and health-care services utilization and management) and non-health (demographic and socioeconomic status, household expenditures, and seeking and purchasing behaviours, for instance) will allow more in-depth correlation and association analyses. A list of some alternatives is presented in Table 1.2, including the types and sources of data, challenges and key stakeholders *(15)*. While some of the alternative sources for monitoring tobacco are already being used, more work to increase implementation and use and perform additional research to address key challenges is warranted.

Table 1.2. **Three data types with potential data sources, tobacco-related information, caveats and stakeholders**

Data type	Data source (list not exhaustive)	Tobacco-related information	Key flaws or challenges	Key stakeholders
Social media and patterns of use	Social media interactive platforms (such as Twitter and Facebook)	Attitudes, behaviours, risk factors	Population biases; difficulties identifying sociodemographic information; access to collected data (ownership and privacy); lack of standardization of data	Regulatory bodies and policy-makers responsible for data privacy and protection
	Search engines (such as Google and Bing)	Search behaviour	Population biases; difficulties identifying sociodemographic information; access to collected data (ownership and privacy)	Regulatory bodies and policy-makers responsible for data privacy and protection
	News commentaries	Attitudes toward health-related topics	Population biases; difficulties identifying sociodemographic information; access to collected data (ownership and privacy); lack of standardization of data	Individual users, moderators, publishing platforms
	Blogs	Attitudes, behaviours, risk factors	Population biases; difficulties identifying sociodemographic information; access to collected data (ownership and privacy); lack of standardization of data	Individual users, moderators, publishing platforms
	Website scrapping	Tobacco products, cessation medications, prices	Information on availability and prices of classical and novel tobacco products, and tobacco-cessation medication	Regulators, patients, providers

Data type	Data source (list not exhaustive)	Tobacco-related information	Key flaws or challenges	Key stakeholders
Digital trails	Mobile phone data	Movement and physical activity	Access to collected data because of ownership and privacy; population bias; difficulties in determining causal factors for data in digital trails	Phone companies, application developers, online retailers
	Mobile applications data	Physical activity, tobacco, blood pressure	Access to the data collected because of ownership and privacy; population bias; difficulties in determining causal factors for data in digital trails	Phone companies, application developers
	Supermarkets	Tobacco and related products sales	Access to collected data because of ownership; population bias; difficulties in determining factors of causation for data in digital trails; potential for misrepresentation given that purchaser and consumer may be different	Software developers, consumer and producer associations
	Tax offices	Tobacco-sales taxes	Difficulties in determining factors of causation for data in digital trails	Government tax authorities
	Online communities with user-input data	Specific risk behaviour associated with the community purpose	Difficulties in determining factors of causation for data in digital trails; population bias	–
	New digital trails Credit-card transaction data	Expenditures on health, tobacco, high-frequency data and great disaggregation	Access to data collected because of ownership and privacy constraints; population biases	Banks
Electronic health records	Health providers	Symptoms, risk factors, and diagnoses; patient health concerns and perceived risks	Difficulty in harmonizing; lack of policy- or behaviour-related data; incomplete data (some patients may not be covered by a health provider, which means their data are not captured through the health system); lack of NCD registers in primary health care or public health, lack of evidence, insufficient informatics support, differences in privacy and confidentiality procedures for patient data in print and e-records	Patients' rights nongovernmental organizations, patients
	Health insurance	Diagnoses and utilization	Population bias; limited data on risk factors	Regulators, patients, providers
	Pharmacies	Prescriptions filled; over-the-counter drugs purchased	Recording; standardizing coding	Regulators; patients; providers
	Private practices	Symptoms, risk factors and diagnoses; patient health concerns and perceived risks	Data with limited coverage; lack of NCD registers in primary health care or public health; lack of evidence; insufficient informatics support; differences in privacy and confidentiality procedures for patient data in print and e-records	Patients

Source: WHO Regional Office for Europe *(16)*.

Compiling information from these sources should be considered a complement to other traditional monitoring and surveillance resources through, for example, using diverse "big data" sources mentioned above to explore issues of interests ("hits"), preferences ("likes"), perceptions and practices around different tobacco products and identify actions to control their use over a relatively short period, with the results being used for adjusting, improving or redesigning health promotion and prevention messages.

Conclusion and outlook

Diverse, sound and comprehensive policy instruments (such as the WHO FCTC, GAP, Health 2020 and the SDGs) have been developed over the past two decades to strengthen tracking of the tobacco epidemic and address its consequences. As a result, great progress has been achieved in developing robust data sources and information systems to facilitate monitoring, surveillance and assessment of tobacco use and prevention and control measures at international and country levels. Today, data regarding tobacco-related health outcomes and their risk factors are largely available in different databases, allowing Member States to analyse situations and trends and access evidence that is essential for designing health policies and assessing the effectiveness of their implementation.

The need to bring together more disaggregated data remains, however. Disaggregated data are necessary to, for example, perform cost–benefit analysis on relations between the consequences of risk factors and prevention and health promotion interventions, identify socially determined health inequalities or the key elements of a prevention and control strategy to produce significant reductions in health or economic losses, and explore key elements for more focused targeting of specific population groups.

WHO and other international organizations will support some countries to develop or improve their information systems to generate regular, quality and comparable data and indicators to determine tobacco-use situation and trends. At the same time, more information resources for assessing and comparing such situations and trends are being developed and made publicly available, amplifying the use of tobacco-related data and information.

The future of tobacco surveillance and monitoring lies in the opportunities to identify the right sources and approaches for specific information or indicators. Ultimately, successfully reaching the goals for tobacco monitoring and surveillance will depend on the capacity to integrate different forms of data and sources in a valid and reliable way, allowing detection of changes that currently are being missed by surveillance and monitoring systems. The continuous growth in availability of data (such as "Big data", electronic health records and less traditional social media sources) and rapidly developing technological informatics tools (including enhanced connectivity, and diversity of data-collecting devices and media) may provide the platform for such data compilation, analysis and integration. Further infrastructure development and human resource capacity-building will be needed to design, manage and use such platforms.

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2

CHAPTER

IMPACT OF TOBACCO ON HEALTH

Background

Tobacco use is one of the leading causes of premature mortality[1] in the world, contributing to around 18% of all deaths *(1)*. Four main NCD groups, including cardiovascular diseases (CVD), malignant neoplasms (cancers), diabetes and respiratory diseases, are related to tobacco use and remain the leading causes of death and disability in Europe.

The European Region has the highest proportion of tobacco use in the world, with an estimated 209 million people (or 29%) smoking *(2)*. Tobacco use remains a critical problem in public health – it is estimated that half of smokers will die prematurely as a result of smoking *(3)* – and increases the overall risk and burden of disease in populations, affecting at least 20 tissues, organs and systems (including the lungs, heart, brain, colon, bladder and breast). Over 7000 toxic and 69 carcinogenic combustible tobacco products in each cigarette reach and damage the body in diverse ways, from impairing function (through low respiratory capacity, hearing loss, blindness and shortness of breath), to structural injury (cataracts, periodontal disease and tooth loss), to carcinogenesis of various types of cancer *(4)*.

Several studies have sought to identify the relative importance and frequency of health problems linked to tobacco use, including those based on the epidemiological concept of etiologic or population-attributable fraction (PAF) of disease *(5)*. Two populations exist in relation to tobacco exposure: those using tobacco, and those who do not. Assessing the frequency or risk of dying from a given disease between these two groups allows a measure of the relative probability of dying (or relative risk) for those who use tobacco relative to those who do not. This makes it possible to say that those who smoke are eight to ten times more likely to die from lung cancer than those who do not.

The PAF is a measure of disease impact in the population that takes into account the prevalence of the risk factor and the risk of dying or disease in the population. It therefore determines how much risk/disease may be eliminated (avoided) if tobacco use or exposure is reduced in the population.

A WHO assessment estimated that globally, 12% of all deaths among adults aged 30 years and above (or the PAF) could be attributed to tobacco use *(6)*. Figures for men and women were 16% and 7% respectively, meaning men had a 71% higher PAF. The estimated PAF for NCD globally was estimated at 14% (20% for men and 9% for women).

The WHO assessment provides further information on more specific causes of death across WHO regions and countries worldwide, including by age and sex disaggregation. Combining data on the risk of dying and the PAF enables identification of the extent to which prevention, control or elimination of tobacco use could have in terms of avoided deaths or non-fatal events, while also providing evidence for priority-setting.

1 In the NCD context, premature mortality is considered death occurring before the age of 70 years.

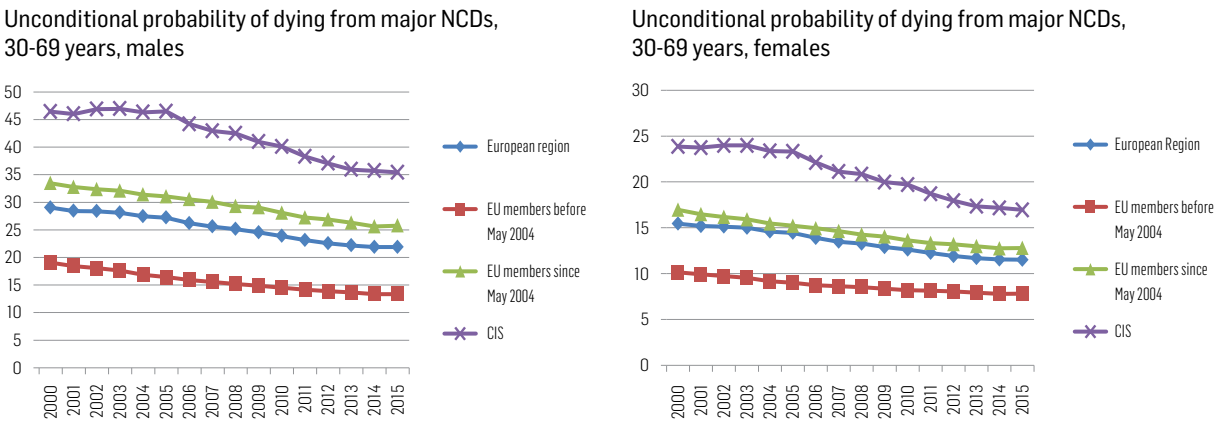
Mortality related to tobacco use: trends and distribution

WHO has suggested using a new simple indicator of premature mortality when assessing the health impacts of NCD prevention and control, including the effects on tobacco use: the probability of dying between ages 30 and 69 years (expressed as a percentage) due to the four main NCDs. This has been proposed as a means of monitoring progress on NCD prevention and control in the GMF *(7,8)*.

Overall, premature deaths caused by NCDs in European countries have been decreasing since 2005, from a probability of 21% to 17% in 2015 (a rate of 1.9% per year). Tobacco-use behaviours vary by sex. The average probability of dying from an NCD for men in 2015 was 90% higher than for women (22%, compared to 12%), exposing an important gender difference that disadvantages men.

The WHO European Region has various social, cultural and economic determinants of tobacco use. Further disparities were found by subregion in 2015[2], when the highest probability of dying (35%) was observed among men in countries of the Commonwealth of Independent States (CIS), compared to 25% in countries that became members of the European Union (EU) after 2004 (EU13) and 3% among countries that were part of the EU prior to 2004 (EU15). Women's probability of dying remained relatively proportional to men's across the subregions (Fig. 2.1).

Fig. 2.1. **Sex-specific unconditional probability of dying from main NCDs, trends by WHO European subregions, by age 30-69 years and sex, 2000-2015**



Source: WHO Regional Office for Europe *(9)*.

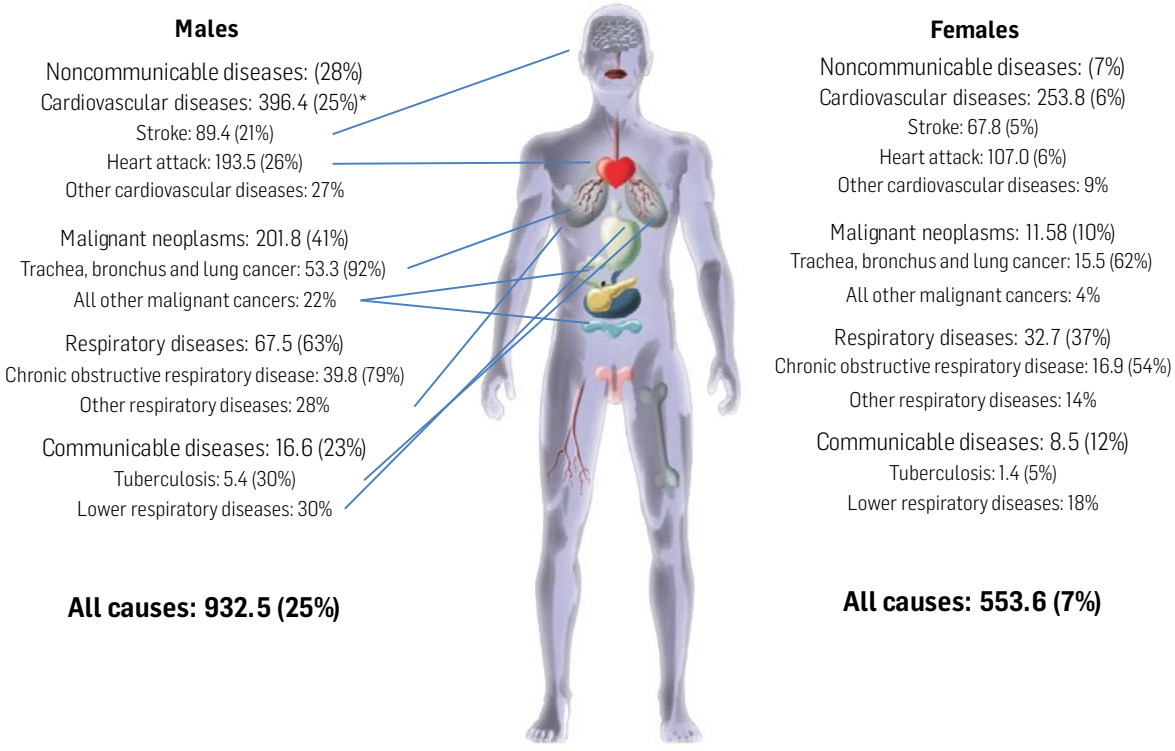
Despite the progress made on NCD mortality reduction, these results highlight the need for scaling-up of action and strategies to reduce tobacco use and other key risk factors among men, particularly in the CIS, where levels remain 40% higher or more than in the EU13 and EU15.

2 Country data were organized by subregions used routinely by the WHO Regional Office for Europe. Denominations are kept the same as in the WHO European Health for All and Mortality databases, which are the main sources of data used in this report for mortality analyses, as follows: EU15 includes countries that were part of the European Union prior to 2004 (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Ireland, Luxembourg, Netherlands, Portugal, Spain, Sweden and the United Kingdom), while EU13 represents those that became members after 2004 (Bulgaria, Croatia, Cyprus, Czechia, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia); the CIS denotes Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

WHO estimated that the proportion of NCD deaths attributable (or PAF) to tobacco use in Europe was 18%, meaning that almost one in every five premature NCD deaths could be avoided if tobacco use was eliminated altogether from the Region. Importantly, the PAF for NCD mortality due to tobacco was four times higher for men (28%) than for women (7%), a matter that should be reflected in planning of gender-sensitive prevention and control strategies.

WHO also estimated population proportions for main cause of death and key specific diseases. Fig. 2.2, which uses the latest mortality data for the Region *(9)* and the PAF estimates for Europe *(6)*, shows the two indicators by causes of death. This allows calculations to be made on how much of the specific disease could be reduced if tobacco use was eliminated. Overall, the higher the PAF, the larger the reduction for a cause of death, but overall mortality impact or reduction will also depend on the frequency (rate) of the cause. Given a similar PAF, a higher rate will mean a higher overall absolute impact.

Fig. 2.2. **Tobacco health effects targets, mortality rates and estimated attributable fraction for key diseases due to smoking in European countries**

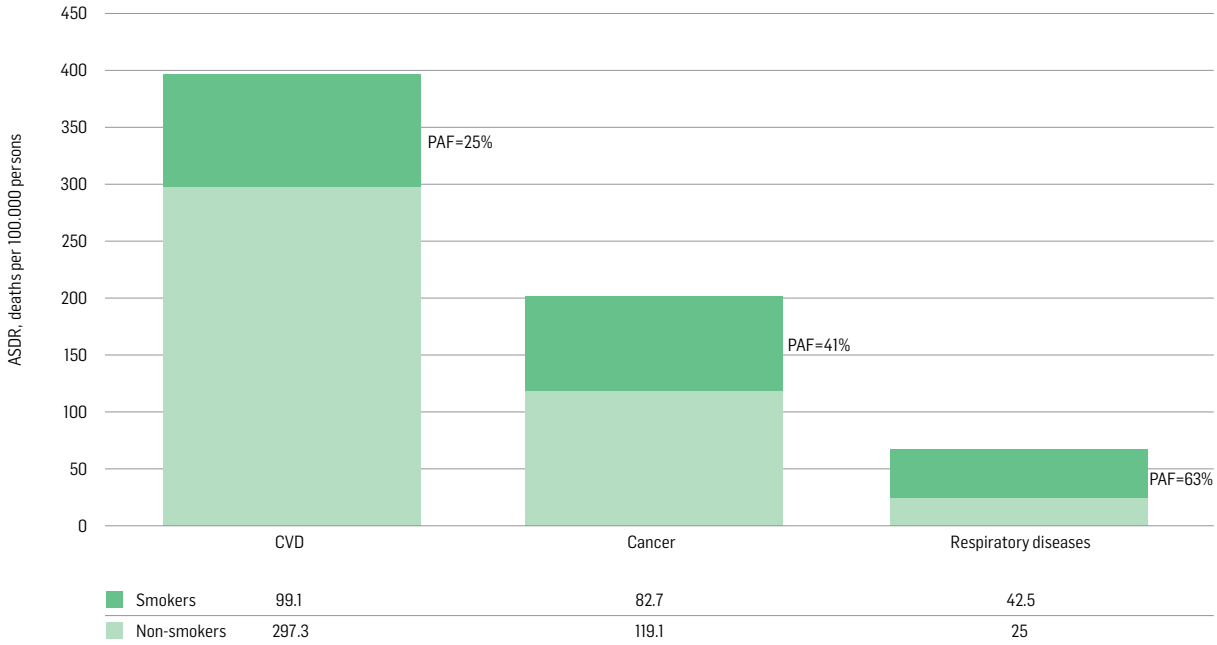


* Age-adjusted mortality rate, per 100.000 population (Attributable mortality fraction, %)
Sources: WHO *(6)*; WHO Regional office for Europe *(9)*.

Considering the situation of respiratory diseases, CVD and cancers among men according to their risk of dying and the PAF, Fig 2.3 shows the proportion of mortality reduction that would be possible in a population if tobacco use was eliminated. The highest mortality is due to CVD (nearly 400 deaths per 100 000 men), while

the largest PAF is related to respiratory diseases (62.5%). In relative terms, the biggest mortality gains for eliminating tobacco use (removing mortality from men smokers, for instance) would occur with respiratory diseases (63% of respiratory diseases deaths). In absolute terms, however, the population impact on mortality would be highest with CVD (gains of avoiding 99.1 deaths per 100 000 men),[3] despite the lower PAF. In this example, the second largest relative and absolute gains come from reduction of cancer deaths. These results provide important evidence for consideration when planning health policy targets and cost-effective interventions, and defining priorities for intervention.

Fig. 2.3. **Age - adjusted mortality from tobacco - related causes of death and their population attributable fraction (PAF) from smoking (fraction of disease risk that could be reduced by eliminating tobacco use)**



Source: WHO *(6)*; WHO Regional Office for Europe *(9)*.

Tobacco-use mortality effects may vary according to diseases. CVD and cancers account for two thirds of all deaths, so additional subregional assessments were carried out for these main NCD groups.

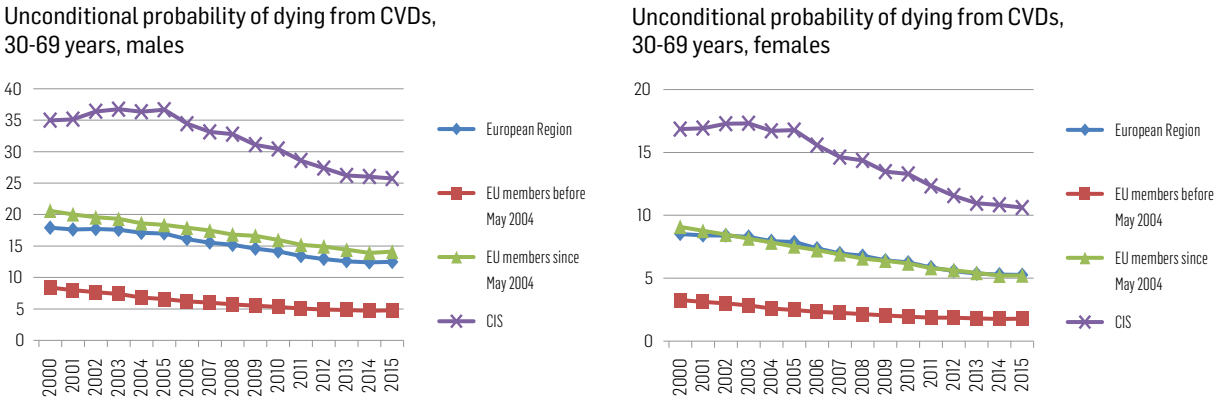
The overall probability of dying from CVD among men and women in Europe went through sustained and relatively rapid decline between 2000 and 2015, when they reached the lowest probability of 12.5% and 5.2% respectively (Fig. 2.4). The decreasing proportions represented 30.3% for men and 38.2% for women during this 15-year period. The probability of dying from CVD was also 2.4 times higher for men than for women, with similar ratios among subregions.

3 This value is derived from the product of PAF* death rate, or 0.25*396.4 per 100 000 men, shown in Fig. 2.2.

The trends of premature mortality from CVD by subregion and by sex follow the distribution patterns of all NCDs, showing rapid declining probabilities of dying. Inequalities are large, however, with the highest probability in 2015 being among men in countries of the CIS (26%) and lowest among women in EU15 Member States (2%). The PAF due to tobacco use for CVD, which includes heart diseases, stroke and others, were estimated by WHO as being 25% for men and 6% for women.

Smoking prevalence is also highest in the CIS, where trends are decreasing rapidly, especially among men (see Chapter 3). A higher relative impact would therefore be gained when considering acute and severe heart diseases and stroke, a situation that may help to explain why mortality from NCDs is decreasing faster in subregions with higher CVD rates, as is the case in the CIS. Intensification of other NCD prevention and control health policy interventions, such as early diagnosis and treatment of disease (particularly for high blood pressure, cholesterol and glucose, and obesity and diabetes) must also be taken into account when interpreting changing patterns and declining trends of CVD in the CIS and some EU13 countries.

Fig. 2.4. **Unconditional probability of dying from cardiovascular disease (CVD), trends in WHO European subregions, by age 30-69 years and sex, 2000-2015**



Source: WHO Regional Office for Europe *(10)*.

The situation with cancers was different to CVD, though premature mortality in 2015 still predominated among men (an average 71% higher probability of dying than in women, with a probability of dying of 9.6% and 5.9% respectively) (Fig. 2.5). Geographical and gender patterns and trends for premature mortality differed from those found in CVD. For example, the highest probability of dying from cancers in 2015 was found among men in the EU13 subregion (12%), followed by the CIS. The mortality decrease among women since 2009 saw relative stagnation, which persisted until 2015.

This may mean that in the EU13 subregion, where CVD mortality is significantly lower than in the CIS, tobacco may play an important role in the probability of dying from cancer, while CVD are more controlled by interventions. Tobacco-related cancers (of the mouth, larynx, trachea, bronchus and lung, colon, stomach, pancreas, bladder, and female breast, ovaries and cervix uteri, for example) are less amenable to the effects of health care than CVD once developed, particularly those of the lung, leaving the main role to preventive

measures. Around 50% of European countries have now shifted their premature mortality patterns from CVD to cancer predominance. As effects on cancer mortality are slower, prevention and control need to focus on early diagnosis and treatment with intensified population preventive measures that decrease tobacco use and exposure.

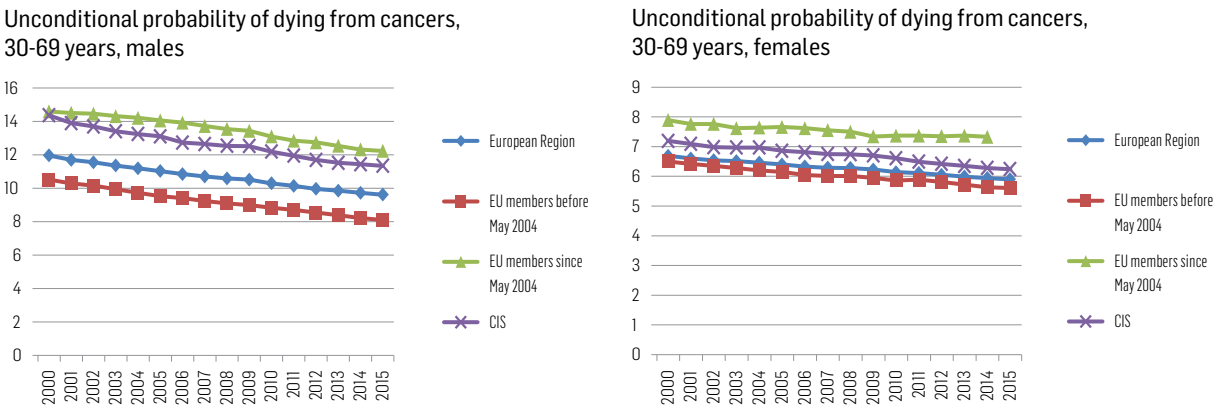
Trachea, bronchus and lung cancers are the main forms among men, while those of the breast predominate among women. The overall PAF for cancer deaths attributed to tobacco use was 27%, a fraction that increases to 85% when including premature deaths from trachea, bronchus and lung cancer, indicating that almost nine of 10 lung cancers are related to tobacco use (one of the highest PAF ever recorded). The highest premature mortality of this form of cancer among European men and its high PAF makes tobacco-use prevention and control an utmost priority for public health.

The PAF and premature mortality rate for cancers among women were 10% and 11.6 deaths per 100 000 respectively; the elimination of tobacco could mean avoiding 1.2 deaths per 100 000 women. Although mortality and PAF are lower than for men, changing patterns and increasing trends of tobacco use among women call for action to address a situation that threatens to prolong the tobacco-use epidemic in Europe.

This evidence provides a window of opportunity for many countries to act on reducing tobacco use and its effects on health in the population, particularly in relation to women, among whom the prevalence of tobacco use is still relatively low (but on the rise). The determinants are not the same for men and women (see Chapter 3), so countries will need to design gender-sensitive policies that address tobacco prevention and control by reducing high levels among men and stopping and reverting increasing trends among women.

The results also help to determine where preventive health policy and interventions would be more effective and facilitate planning. Learning from the experience of implementation and progress already made through policies and interventions in some countries can help to increase awareness and accelerate implementation of gender-responsive strategies.

Fig. 2.5. **Sex-specific unconditional probability of dying from cancer, trends by WHO European subregions, by age 30-69 years and sex, 2000-2015**



Source: WHO Regional Office for Europe *(10)*.

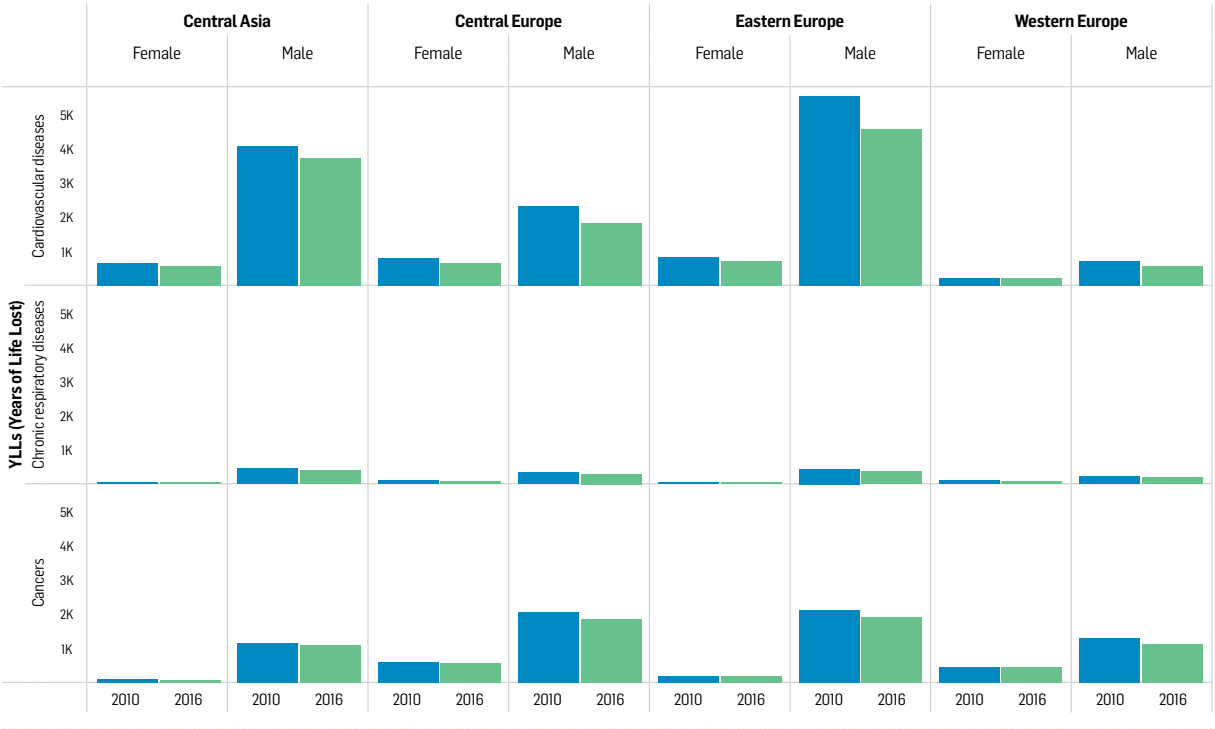
Burden of disease due to tobacco use[4]

Using the burden of disease approach and data on NCD events *(11)*, in contrast to mortality alone, makes it possible to explore additional effects of tobacco on health, particularly those that are non-fatal.

This report uses years of life lost (YLL) due to premature death as the measure of fatal events burden, and years lived with disability (YLD), including different disease severity states and their consequences, for non-fatal events.

The trends and distribution of age-standardized YLL estimated rates by tobacco-related NCD cause, sex and subregion between 2010 and 2016 are shown in Fig. 2.6.

Fig. 2.6. **Age-standardized trends of loss of life attributable to tobacco use from premature death causes in European subregions countries, by sex, 2010-2016, rate per 100.000 persons**



Source: Institute of Health Metrics and Evaluation *(11)*.

The highest burden on life lost was due to CVD for men in eastern Europe and central Asia in 2010, with YLL rates near 6000 and 4000 per 10 000 population respectively, or one year of life lost for every 16 and 25 people aged 15–69 years. The YLL rates in eastern Europe were nearly 2.5 and nine times higher than those among men of the central and western Europe subregions respectively.

4 Data on burden of disease (years of life lost and disability), coming from another source, are also grouped in a similar (but not exact) way: central Asia (Armenia, Azerbaijan Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan); eastern Europe (Belarus, Estonia, Latvia, Lithuania, Republic of Moldova, Russian Federation and Ukraine); central Europe (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czechia, Hungary, Montenegro, North Macedonia, Poland, Romania, Serbia, Slovakia and Slovenia); and western Europe (Andorra, Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Iceland, Ireland, Israel, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden and United Kingdom). The CIS represents an approximate combination of central Asia and eastern Europe, the EU13 of central Europe and EU15 of western Europe.

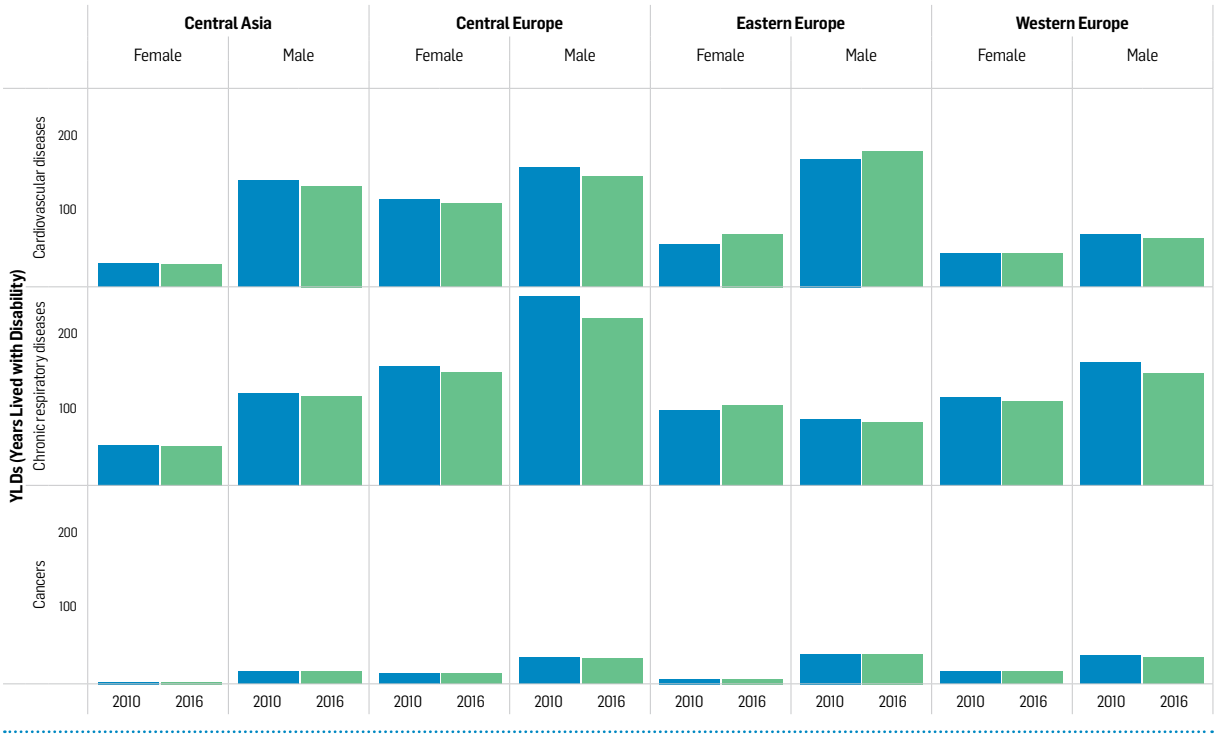
Notably, a 21% reduction in YLL rate was observed in men in eastern Europe in 2016 compared to 2010; both men and women in all other subregions also showed smaller YLL declines in that period.

CVD (particularly heart attacks and stroke) are often fatal events among men who smoke, so tobacco effects will reflect more on YLL than YLD. YLL from cancers were highest among men in the central and eastern Europe subregions at rates near 2000 per 100 000 population, or about one year of life lost for every 50 people aged 15–69 years. In contrast, women's rates in central Asia and eastern Europe were the lowest among the cancers, with levels around a fifth of those among men.

In contrast to CVD, YLL rates due to cancer showed limited or no change between 2010 and 2016. Despite recent declines in tobacco use among men, this lack of change may reflect, on the one hand, the chronicity and lag-time of cancer development and, on the other, the difficulty or limited effectiveness of treatment against some of the most aggressive forms of cancers related to tobacco use (trachea, oesophagus and lung). Respiratory diseases show much lower (less than a tenth) YLL rates than those of CVD and cancers, with the rates tending to be higher among men in central Asia and eastern Europe. The situation may also be compounded by air pollution and occupational hazards of mining in those subregions, leading to COPD.

The trends and distribution of YLD rates from tobacco-related NCD causes between 2010 and 2016, shown in Fig. 2.7, complement the YLL health effects of tobacco.

Fig. 2.7. **Age-standardized trends of disabled life burden attributable to tobacco use from main causes of NCD in European subregions countries, by sex, 2010-2016, rate per 100.000 persons**



Source: Institute of Health Metrics and Evaluation *(11)*.

In contrast to YLL, the highest YLD rates due to chronic respiratory disease (250 per 100 000) were found among males in central Europe in 2010, followed by males in western Europe. Reductions of 13% among men were seen in central Europe between 2010 and 2016, in contrast to a 6% increase among women in eastern Europe.

The highest YLD levels (175 per 100 000) in relation to CVD were seen in eastern European men in 2016, followed by central Europe and central Asia. Small reductions in YLD (near 8%) among men were seen in central Europe and central Asia between 2010 and 2016, while increases of 25% and 6% were observed among women and men, respectively, in eastern Europe.

YLD rates for cancers were lower (less than a fifth) than those seen with respiratory diseases or CVD, but the male-predominant pattern persisted in all subregions.

Chronicity of disease is suggested from the low premature mortality and longer life with disability observed with respiratory diseases. This is one of the tobacco-use effects that may not be recognized if only mortality (YLL) is analysed. High rates of YLD with CVD could also mean that diseases killing an important fraction of those exposed may leave a sufficiently large group living with disability or less than healthy lives. Lower cancer mortality compared to CVD and lower YLD may suggest later ages of cancer occurrence or diagnosis and a relatively shorter survival (as in lung cancer).

Tobacco control and meeting the GMF and SDG target for premature NCD mortality by 2025 and 2030

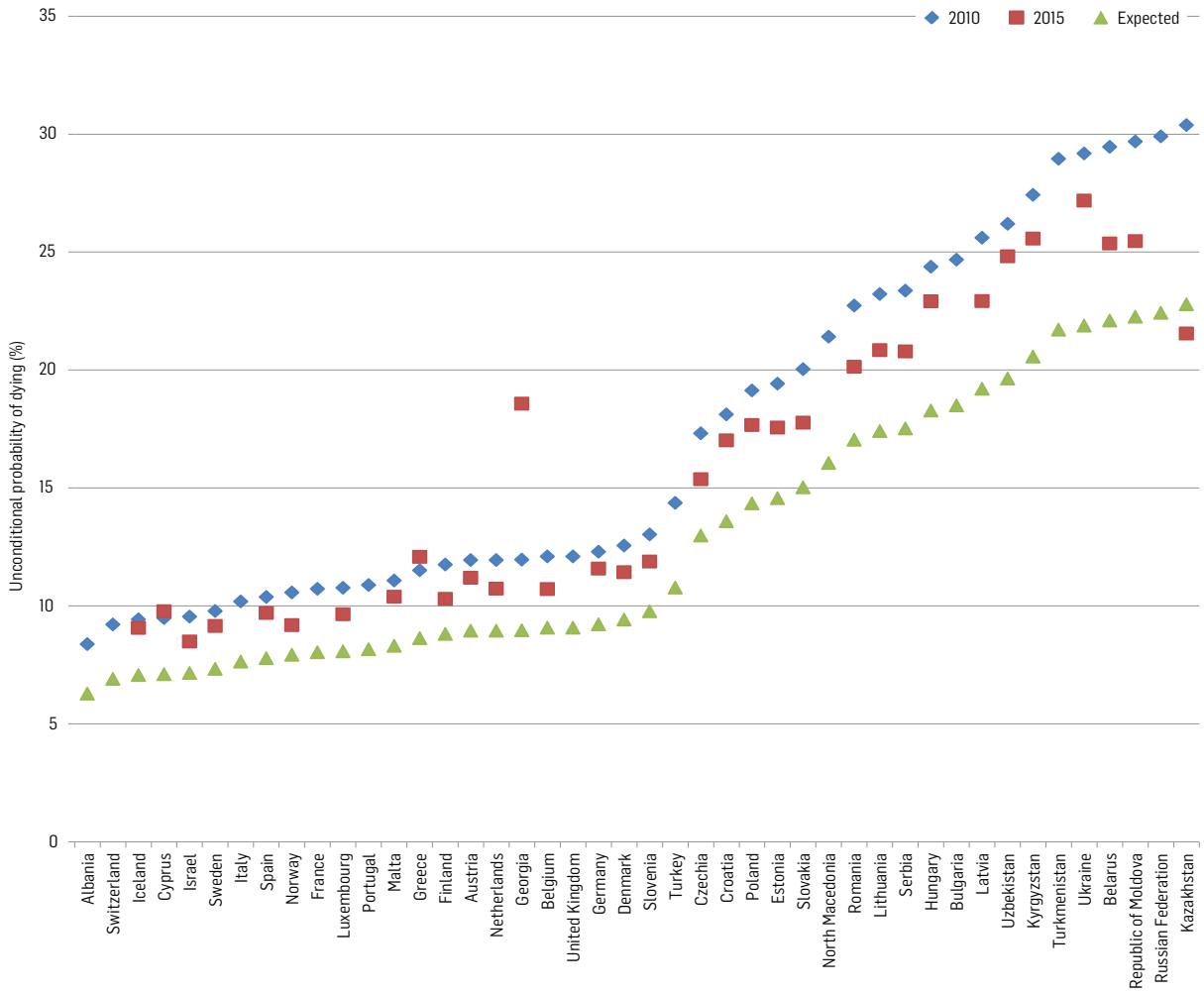
A question to be raised in the premature mortality scenario is whether, on average and individually, European countries will reach the target of 30% mortality reduction set by WHO and the SDGs by 2030[5] *(7,12)*.

Two situations are possible. One, used in this report, sees tobacco-use trends modified to an extent where 18% of the attributable mortality across diseases could be eliminated, reflected in the different proportions applicable for each disease group (for instance, 18% for CVD, 27% for cancers and 52% for respiratory diseases). The other, which was used to determine the GMF target, combines the synergistic effects of different interventions and health policies on common NCD risk factors, each to a decreasing target that would result in the 30% expected premature mortality reduction *(13)*.

As Fig. 2.8 shows, if the agreed premature mortality target is achieved regionally, most of the gains of avoiding early deaths will come from countries that were in the higher (right) end of the curve in 2010. The curve displays an inflexion above 15% probability of dying in a group of countries where mortality increases and duplicates fairly rapidly, in contrast with what happens with those below 15% probability of dying. By 2015, most countries had made some progress in reducing mortality along the 2010 baseline spectrum, with a median reduction of 9.5%, ranging from 4–14% in that period (although a few present anomalous situations, with decreases near 30% or increases over 50%).

5 The GMF calls for a 25% reduction by 2025; however, with the approval of the SDGs, the target has been extended to 30% by 2030.

Fig. 2.8. **Unconditional probability of dying at ages 30-69 years from main NCDs, trends in WHO European countries, 2010-2015 and expected target of 25% reduction by 2025**



Source: WHO Regional Office for Europe *(10)*.

If the observed situation in this five-year period remains constant until 2025, it seems that at least 18 countries will achieve the premature mortality target of 25% reduction, and eight would be close with some extra effort. Because some countries are doing better than others, and based on recent analyses of premature mortality trends and projections of main NCDs in the European Region, the GMF mortality target will be achieved, on average, by 2025 and will even surpass the SDG target in 2030, if current trends are maintained *(13)*.

In relation to the estimated PAF of tobacco use on premature mortality, at least 18% (or nearly one in every five deaths) – an important fraction of this decrease – may be achieved thanks to tobacco-use prevention and control measures. Despite this positive development, caution should be taken, as 25 countries with more limited progress would still be far from reaching the global target.

Other challenges, such as the increasing prevalence of tobacco use among women seen in Europe, the use of newer forms of tobacco delivery and newer and aggressive strategies from the tobacco industry, may also jeopardize the potential gains.

Conclusion and outlook

Tobacco use is a key public health concern in Europe, as it results in many health impacts in population groups. Evidence-based and effective health policies for the prevention and control of tobacco effects are available for implementation, but increased knowledge- and experience-sharing, political will, appropriate resources and sound strategies will be required to scale-up efforts against tobacco use.

Tobacco use significantly increases the probability of dying prematurely from several NCD causes of death, accounting for 25%, 41% and 63% of CVD, cancer and respiratory disease deaths in men, and 6%, 10% and 37% of deaths in women, respectively. It also decreases quality of life (by, for instance, accumulating YLD) among people who use it and who survive with disability, or experience the negative effects of treatment to tackle tobacco-related disease.

The frequency of the effects of tobacco on health in the population depends on the attributable fraction of tobacco in the population and on the risk of dying. It is therefore important to use both figures when planning and estimating the effects of health policies and interventions on targets.

The prospects for achieving the NCD premature mortality target of a 30% reduction by 2030 in the WHO European Region as a whole are promising, and reducing tobacco use will play an important role in securing its achievement. To increase the chances of success, however, efforts must be stepped up in countries where progress is lagging, particularly in certain segments of the population.

Projections based on current premature mortality trends in the European Region indicate that the mortality target is within reach if trends are sustained and, particularly, if cost-effective health policy interventions are implemented as planned. Using evidence from experience and achievements from other countries when selecting country strategies may increase the efficiency of planning. As shown in the next chapter, the continued and enhanced contribution of tobacco control in countries will be essential to meeting the global and regional targets by 2030.

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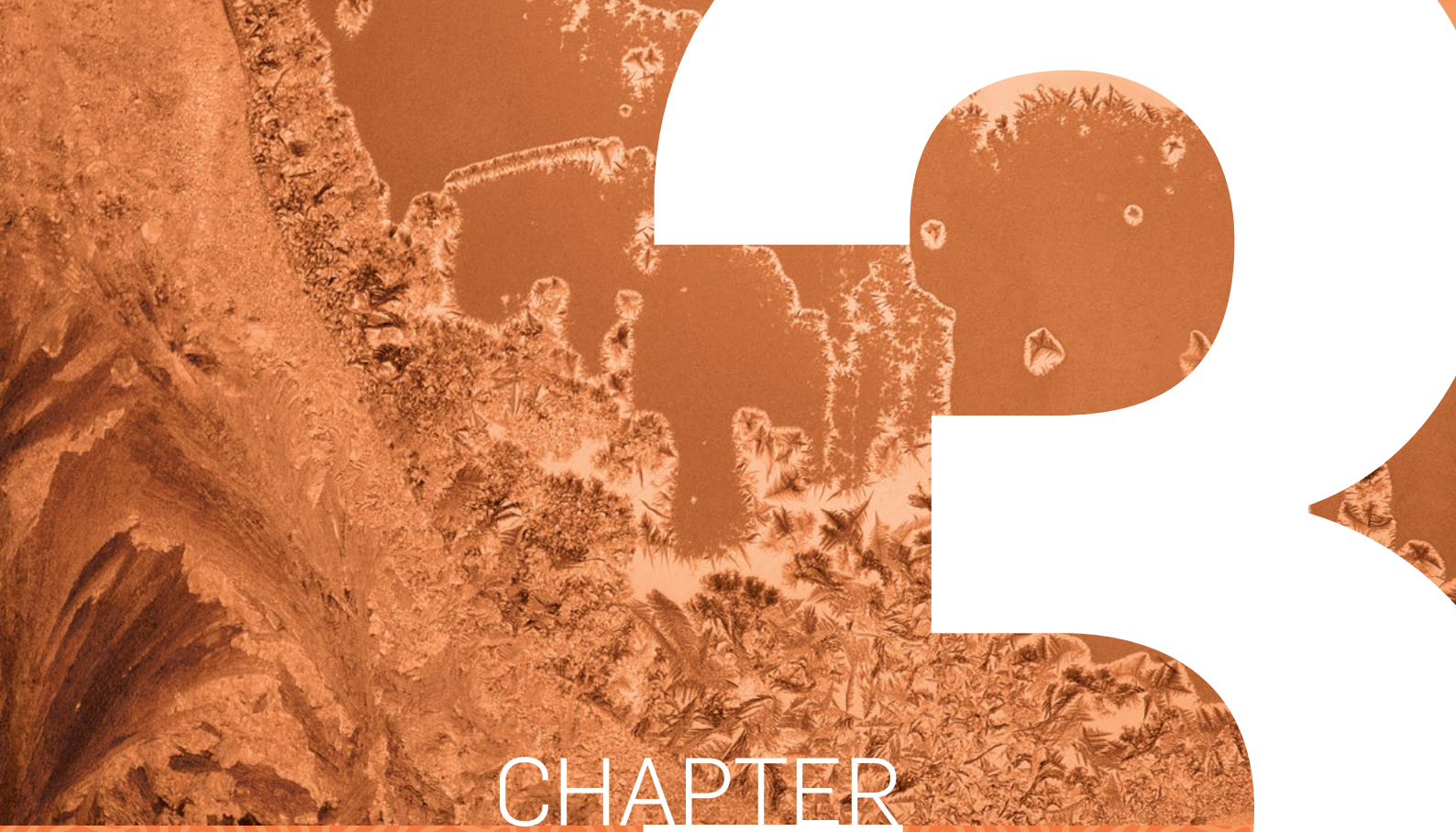


CHAPTER 3

TOBACCO USE **IN EUROPE**

Background

The tobacco epidemic is one of the biggest public health threats the world faces today, killing more than 7 million people a year *(1)*. More than 6 million (or nearly 90%) of those deaths are estimated to be the result of direct tobacco use, while around 900 000 more result from non-smokers being exposed to second-hand smoke.

Tobacco smoking is the most frequent form of tobacco use, accounting for over 90% of consumption according to national surveys *(1,2)*. The effects of tobacco use nevertheless remain important for people exposed to the less common forms of use, including adults and young people who use smokeless tobacco: prevalence of smokeless tobacco use among these groups varies from 0.0% to 14%, and from 0.6% to 9.0% respectively, according to national household- and school-based surveys. Second-hand smoke exposure at home and in enclosed public spaces, the frequencies of which reach much higher levels than generally thought *(3)*, are also important sources of tobacco consumption.

A first step to enabling effective responses to address tobacco use is to determine the situation and trends of prevalence in the population and the distribution according to specific target groups. When taken forward in conjunction with actions to identify the level of implementation of tobacco prevention and control policies and the availability of resources, it is possible to define new plans and priorities and measure their effectiveness.

Tobacco use prevalence[6]

Europe has the highest prevalence of tobacco use in the world. Regional estimates suggest that around 29% of people over the age of 15 years use tobacco products, with prevalence being higher among men than women *(4)*.

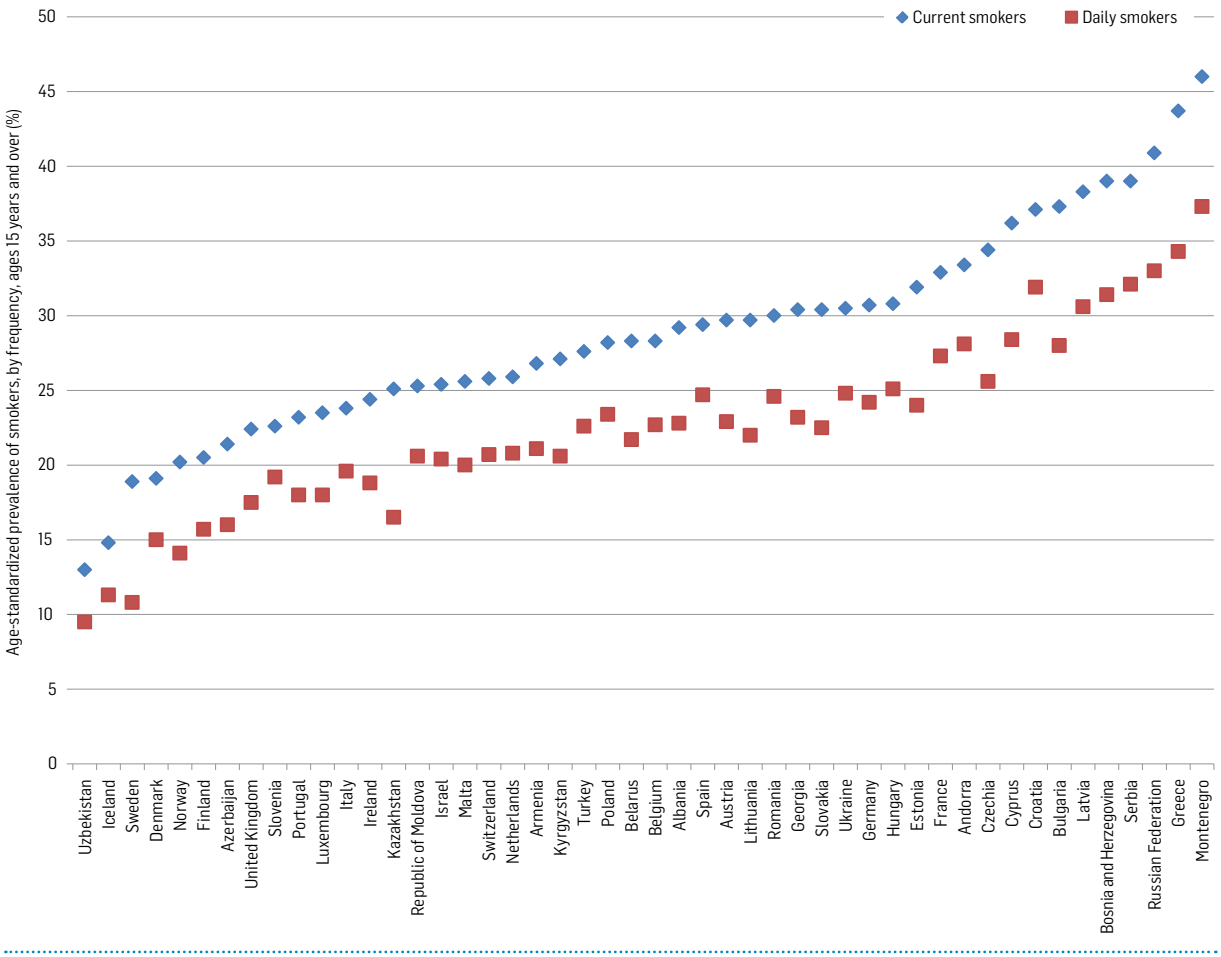
Tobacco use also varies according to the frequency of smoking, into categories of “daily”, “current”, “past but not current”, “ever smoked” and “never smoked”. Because of their relevance and data availability, however, only daily and current tobacco-smoking prevalence levels are presented by country for 2016 in Fig 3.1.

Overall, a higher prevalence was observed for current than daily smoking, with the type difference ranging from 14% to 42% across countries. The frequency distribution by country showed a curve increasing from lowest levels to 20%, followed by a slower increase to 30%, and finally another sharper increase to the highest levels of 38% for daily and 45% for current smoking. This suggests that current smoking may be a more comprehensive and sensitive indicator for tobacco-use monitoring, while daily smoking may provide a better indication of heavy and sustained engagement with tobacco use, with more important implications for health impacts and cessation efforts.

Higher smoking prevalence of over 30% was observed in central and eastern European countries, while lower than 20% levels were reported from the Nordic countries and in central Asia (Uzbekistan).

6 Data in this section are presented, when available, by country or by subregion, according to a description in the previous chapter (see footnote in page 15)

Fig. 3.1. **Overall age-standardized estimated current and daily tobacco smoking prevalence in European countries, ages 15 years and over, 2016**



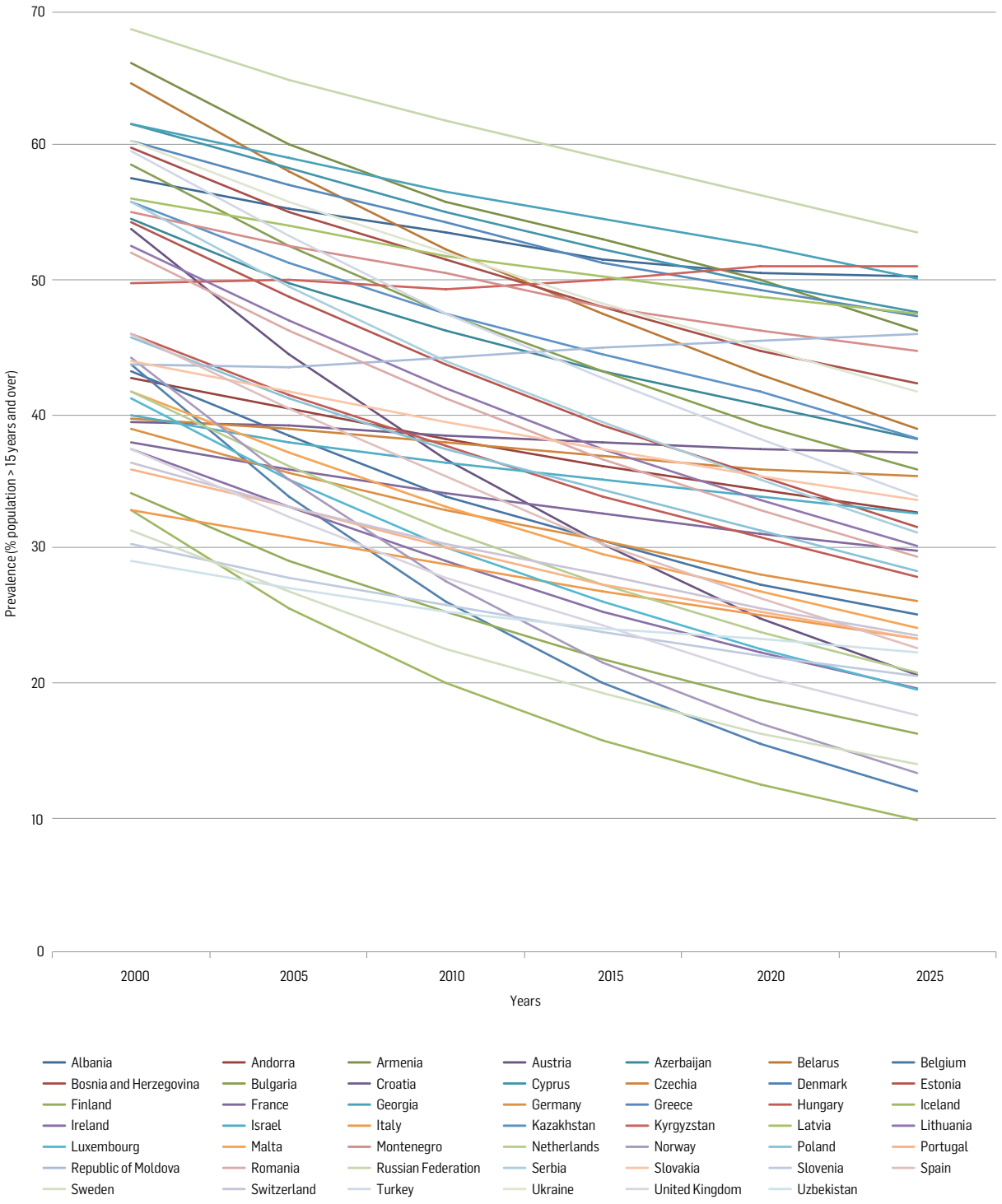
Source: WHO (*1*).

In relation to trends, estimated male-specific prevalence between 2000 and 2015 showed, in general, decreasing levels in European countries, with a median decline of about 1.5% year (or nearly 23%) in that period, but the pace of decrease was very different among countries (Fig. 3.2).

The highest prevalence of tobacco smoking was reported in countries of the CIS and lowest in the EU15. Fig. 3.2 shows a four-fold difference of tobacco-smoking prevalence among countries in 2015, varying from nearly 60% in the Russian Federation to around 16% in Iceland. Projections of tobacco prevalence from 2015 to 2025 present a picture in which decreasing trends will continue but disparities between countries will increase, with prevalence ranging from 10% to 55%.

Among countries with prevalence below 50% in 2000, the fastest declines (over 15% points) were seen in Denmark, Iceland and Norway; Austria and Belarus had the largest declines among those with prevalence over 50%. The reliability of projected estimates depends, among other things, on the quality of data from previous surveys, but these results suggest that it is possible to control tobacco use through health, social and economic tobacco-control policies. By contrast, Kyrgyzstan and the Republic of Moldova experienced increasing prevalence and are projected to continue in that direction, indicating the need for more preventive policy actions.

Fig. 3.2. **Male-specific trends and projections of tobacco smoking prevalence in European countries, ages 15 years and over, 2000-2025**



Source: WHO *(4)*.

Assessment of tobacco-smoking prevalence at subregional level (in the CIS, EU13 and EU15) shows that variation in prevalence is pronounced both geographically and in relation to gender. The highest country prevalence levels, over 50% in 2010, were found among males in Member States of the CIS and EU13, although it is projected that the trend will continue until 2025 only in countries of the CIS (Fig. 3.3).

The prominent and persistent higher prevalence difference between males and females within countries is larger in the CIS than the other subregions. In Kyrgyzstan, for example, prevalence among males in 2015 was 50.1%, but for females was 3.7%. Although differences in some CIS countries appear to be linked to religious practice, caution should be applied when interpreting the data, as they may also reflect issues of underreporting due to stigma.

Females in EU13 countries smoke more on average than those in CIS countries, meaning the difference between men and women in the EU13 is less pronounced. In Croatia, for example, 37.9% of men smoked in 2015, as opposed to 28.9% of women. The range of smoking prevalence among women in EU15 countries is wider than in the CIS and EU13 as, on average, a higher percentage of women smoke.

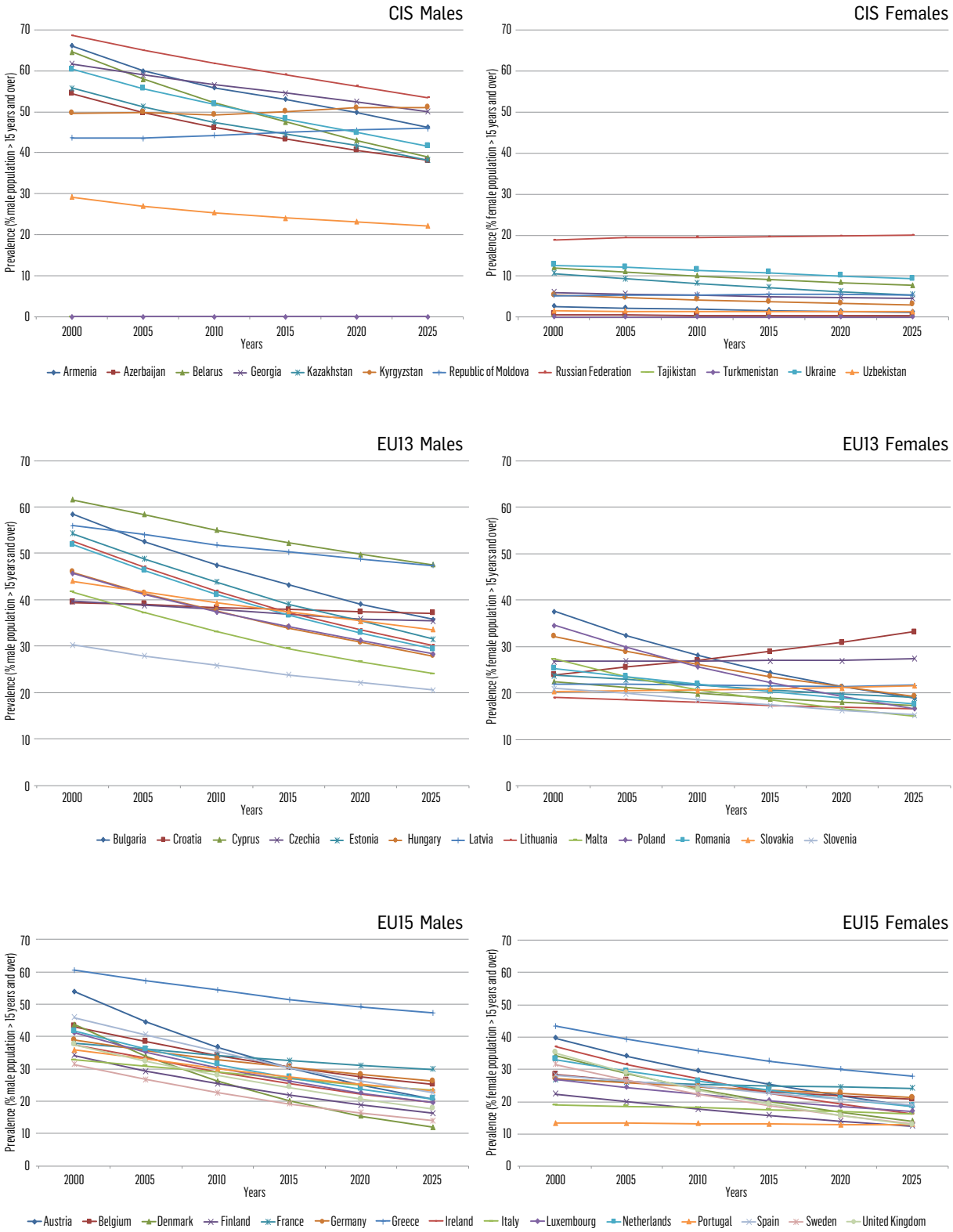
A third element that is less obvious but cannot be forgotten for its implications for the future is the changing gender tobacco-use patterns seen in some countries. In contrast to decreasing trends in male smoking prevalence, female prevalence trends in the Russian Federation, Georgia, Croatia, Czechia, France and Greece are declining much slower, or are on the rise.

These situations of higher prevalence of geographical and gender disparities among males in eastern parts of Europe may be explained by a number of key factors, including:

- increased affordability and access to cigarettes and other tobacco products *(5)*;
- less stringent regulations on advertising tobacco and banning smoking on defined premises *(6)*;
- increasing participation of women in traditionally male-led socioeconomic activities *(7)*; and
- culturally and religiously defined values and practices in some countries of eastern Europe and central Asia *(8)*.

The tobacco industry is specifically targeting women as a potentially lucrative future client group through diverse forms of marketing. The industry is using packaging and communication to reach out to women *(9)*, in addition to keeping prices low and affordable *(10)*. Increasing and strengthening actions to address these issues will be required to reverse the trends in those countries.

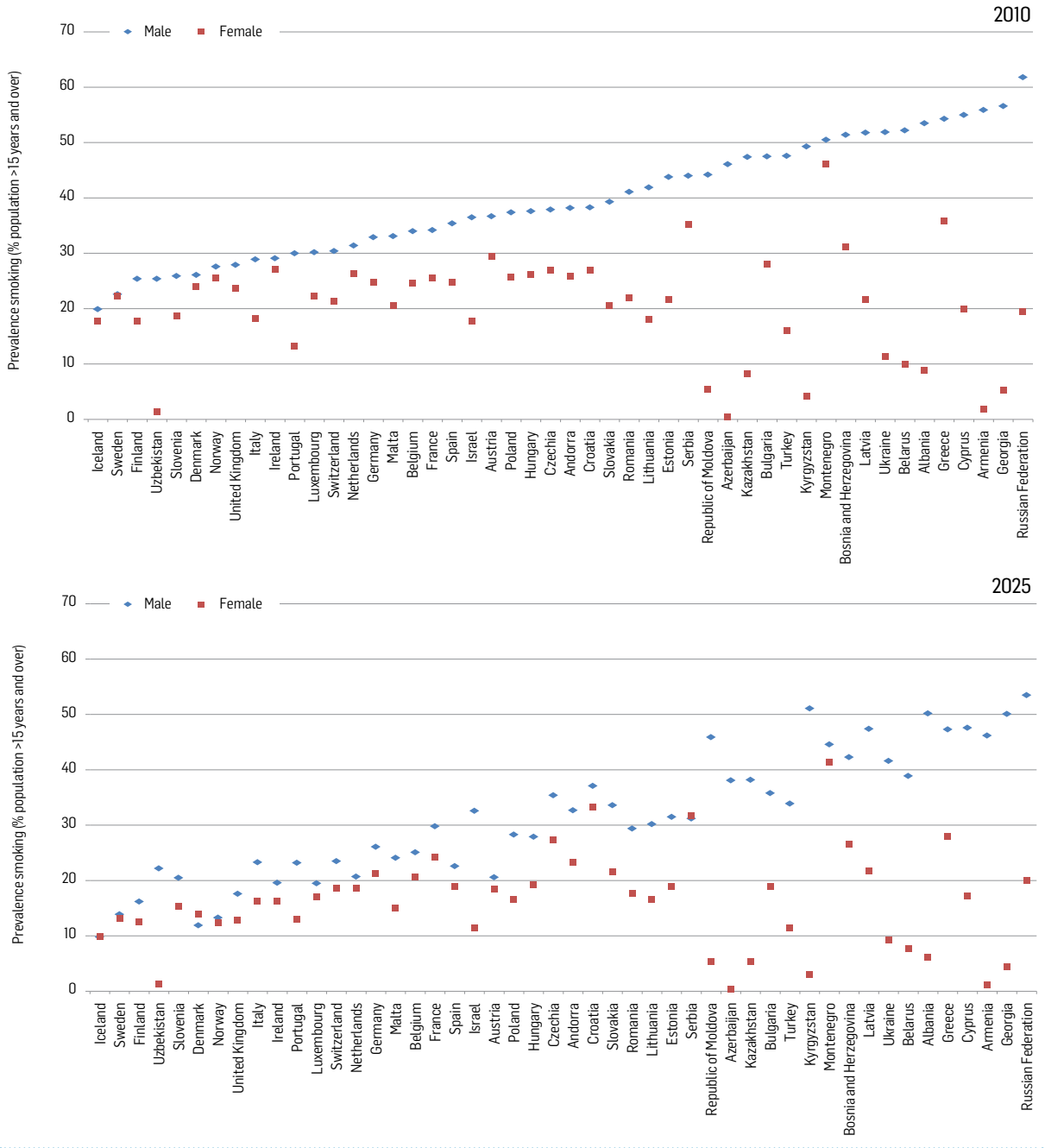
Fig. 3.3. **Sex-specific trends and projections of tobacco smoking prevalence in CIS, EU13 and EU15 countries, ages 15 years and over, 2000-2025**



Source: WHO *(4)*.

Analysis of tobacco smoking by country and year showed that prevalence among females was lower than among males in European countries in 2010, especially in Uzbekistan, Azerbaijan and Armenia, where female-specific tobacco-smoking prevalence tends to be zero (Fig. 3.4). The male tobacco-smoking prevalence trend tended to be constant up to the 40% level, when the gap with female-specific prevalence by country increased significantly. Using 2010 as a reference, it is projected that tobacco-smoking prevalence among males will decline in European countries by 2025. If projections are realized, the gap between male and female tobacco-smoking prevalence will be narrower.

Fig. 3.4. **Sex-specific tobacco smoking prevalence trends in European countries, ages 15 years and over, 2010 and 2025 projection**

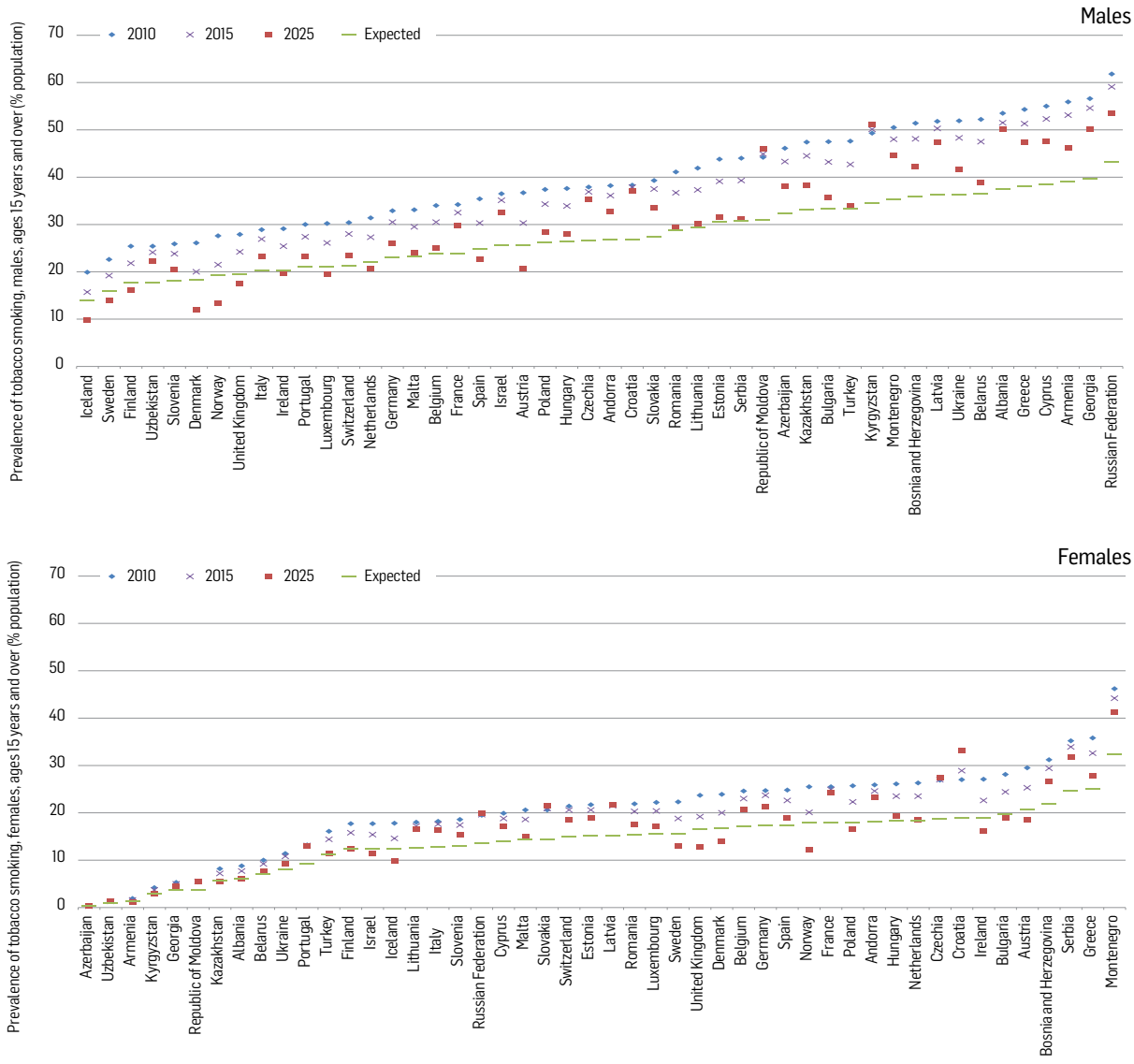


Source: WHO *(4)*.

Overall, tobacco-smoking prevalence will tend to decrease among women and men, but prevalence among women will remain high and will even increase in a few countries. Female smoking prevalence in the European Region will remain the highest globally. Changing these trends will require strengthening of tobacco-use preventive policy actions and further definition and implementation of gender-responsive strategies to target tobacco increases in women while maintaining progress among men.

The subregional scenario of continuing high prevalence among men and a changing pattern among women begs the question of whether European countries will be able to reach the global target of 30% tobacco-use prevalence reduction between 2010 and 2025. Using the sex-specific 2010 prevalence baseline to estimate 2025 projections, and calculating a 30% reduction from baseline, results show that some high- or low-prevalence countries were decreasing faster by 2015 (Fig. 3.5). Eleven countries, mostly from the EU15, would reach the target by 2025, and another 16 would be near to achieving it. While positive, this level of progress means that half of the countries of the WHO European Region will not reach the target for tobacco-use prevalence reduction.

Fig. 3.5. **Sex-specific tobacco smoking prevalence trends in European countries, ages 15 years and over, 2010, 2015, and 2025, and expected range**



Source: WHO *(4)*.

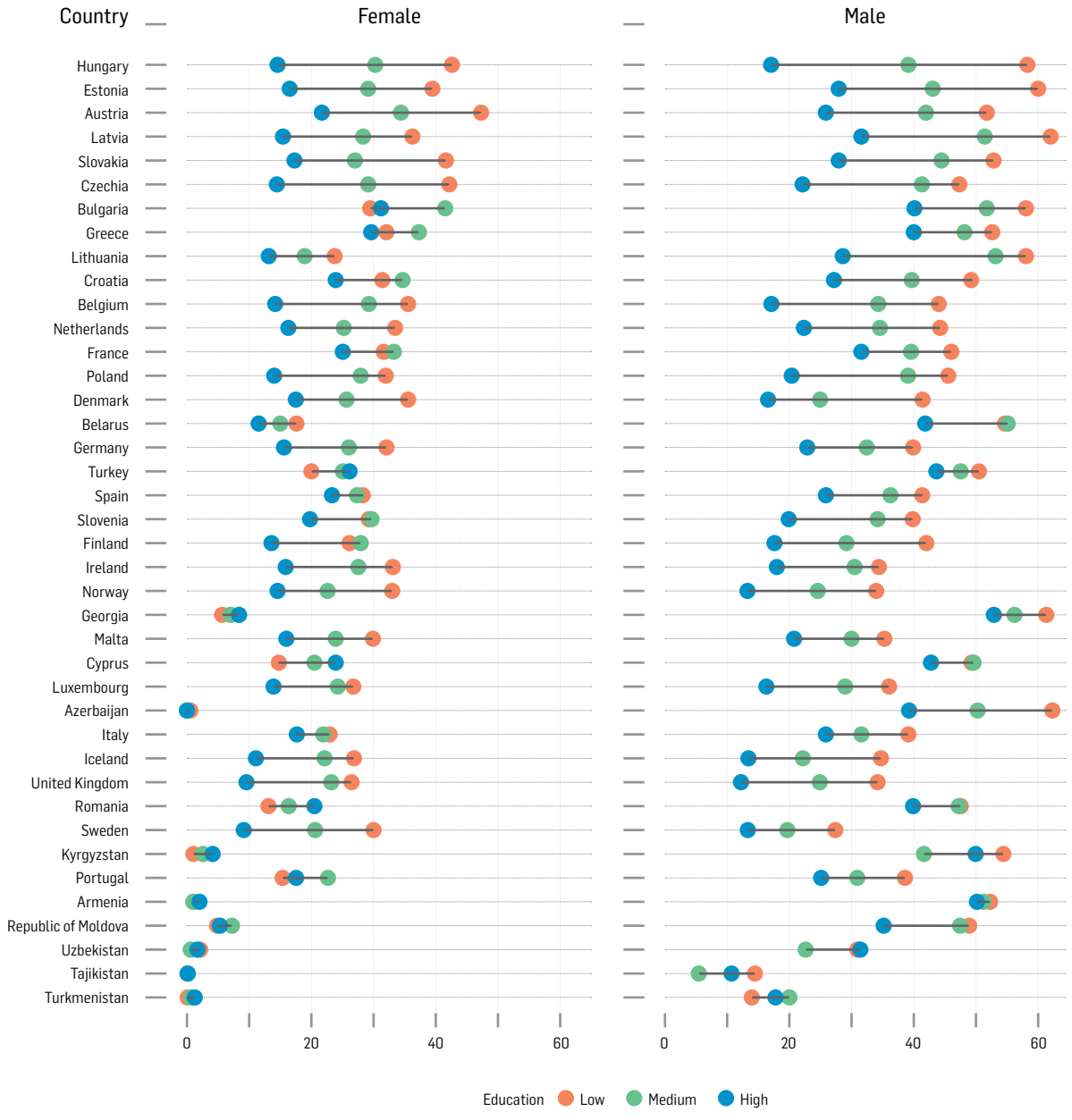
Comparison of males and females shows similar number of countries achieving the target, but a few at the medium and high ranges of the distribution have female prevalence levels that are not progressing or are even going in the opposite direction. Enhancing or changing these trends to meet the target in 2025 will require that countries increase their implementation of some of the most effective tobacco health policies of the WHO FCTC. Highly effective and relatively low-cost interventions include fiscal policies to reduce affordability and access to tobacco, comprehensive banning of smoking in all indoor public places, a comprehensive ban on TAPS, large pictorial warnings and plain packaging, increasing awareness of tobacco impacts and providing advice to those who want to quit, and protecting public health policies from tobacco industry interference.

Socially-determined health inequalities in relation to tobacco use

A joint project involving WHO and the WHO Collaborating Centre for Policy Research on Determinants of Health Equity at the University of Liverpool, United Kingdom, brought together comparable data from the EHIS (from the European Commission) and STEPSwise (promoted by WHO) surveys *(11)*. The approach required comparable individual-level data with both the health outcome of interest (tobacco-smoking prevalence) and a robust socioeconomic stratifier (educational level, as defined by the International Standard Classification of Education). Sex was also taken into account in the analyses, as there are recognized prevalence differences by gender. The main results of the analysis are shown in Fig. 3.6.

Consistently higher current smoking prevalence was reported among people with lower educational level in countries across the European Region. On average, prevalence was nearly two times higher among males than females. Except for a few cases (mostly among females), the excess prevalence among less educated people was present in countries regardless of their overall prevalence levels and their geographical/cultural characteristics. This suggests that smoking is more prevalent among people with lower education levels and socially disadvantaged population groups. These groups should be targeted with tailored policies and interventions to reduce access and exposure to tobacco use and support people who already are using tobacco through smoking cessation treatment and advice on quitting.

Fig. 3.6. **Tobacco smoking prevalence and education inequalities in European countries, ages 15 years and over, by sex, 2013-2017**

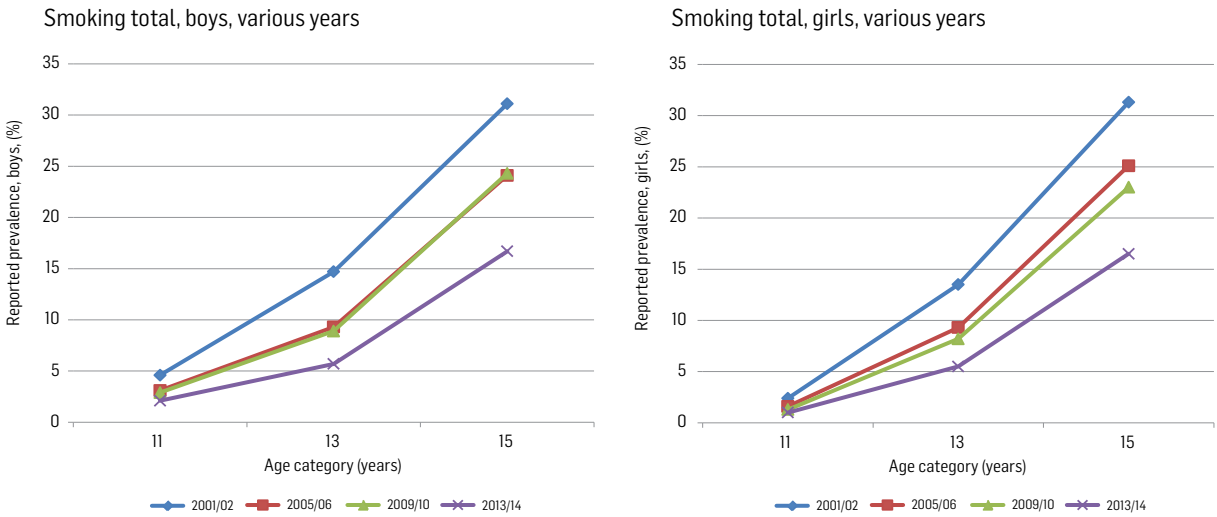


Source: WHO Regional Office for Europe, unpublished data, 2018.

Children are more sensitive to different forms of marketing (such as advertising, promotion and sponsorship, digital or otherwise), peer pressure and exposure at home, which, among other factors, can lead to early-age initiation of smoking *(3)*. Children are also more vulnerable to the health effects of exposure to tobacco.

Smoking prevalence data from the WHO collaborative cross-national survey, HBSC, conducted in 2001/2002, 2005/2006, 2009/2010 and 2013/2014, have been used in this report to assess children's tobacco-use behaviours *(12)*. Results on prevalence trends of tobacco smoking among boys and girls aged 11, 13 and 15 years showed a similarly increasing smoking pattern with age for both sexes: the older a boy or a girl, the higher the prevalence of tobacco smoking (Fig. 3.7).

Fig. 3.7. **Reported tobacco smoking prevalence trends from HBSC surveys in European countries, ages 11-15 years, by sex, 2001-2014**



Source: HBSC International Coordinating Centre *(12)*.

A larger percentage of boys smoked at age 11 compared to girls (younger initiation), particularly in the earlier survey periods, but by age 15, the percentage was almost the same for boys and girls. A downward trend of smoking prevalence over time for both boys and girls was evident, from highest levels in 2001/2002 to lowest in 2013/2014. This positive finding signifies a nearly 50% reduction by age 15; the more limited change seen between 2006/2006 and 2009/2010 could be related to increasing number of countries participating in the survey rounds.

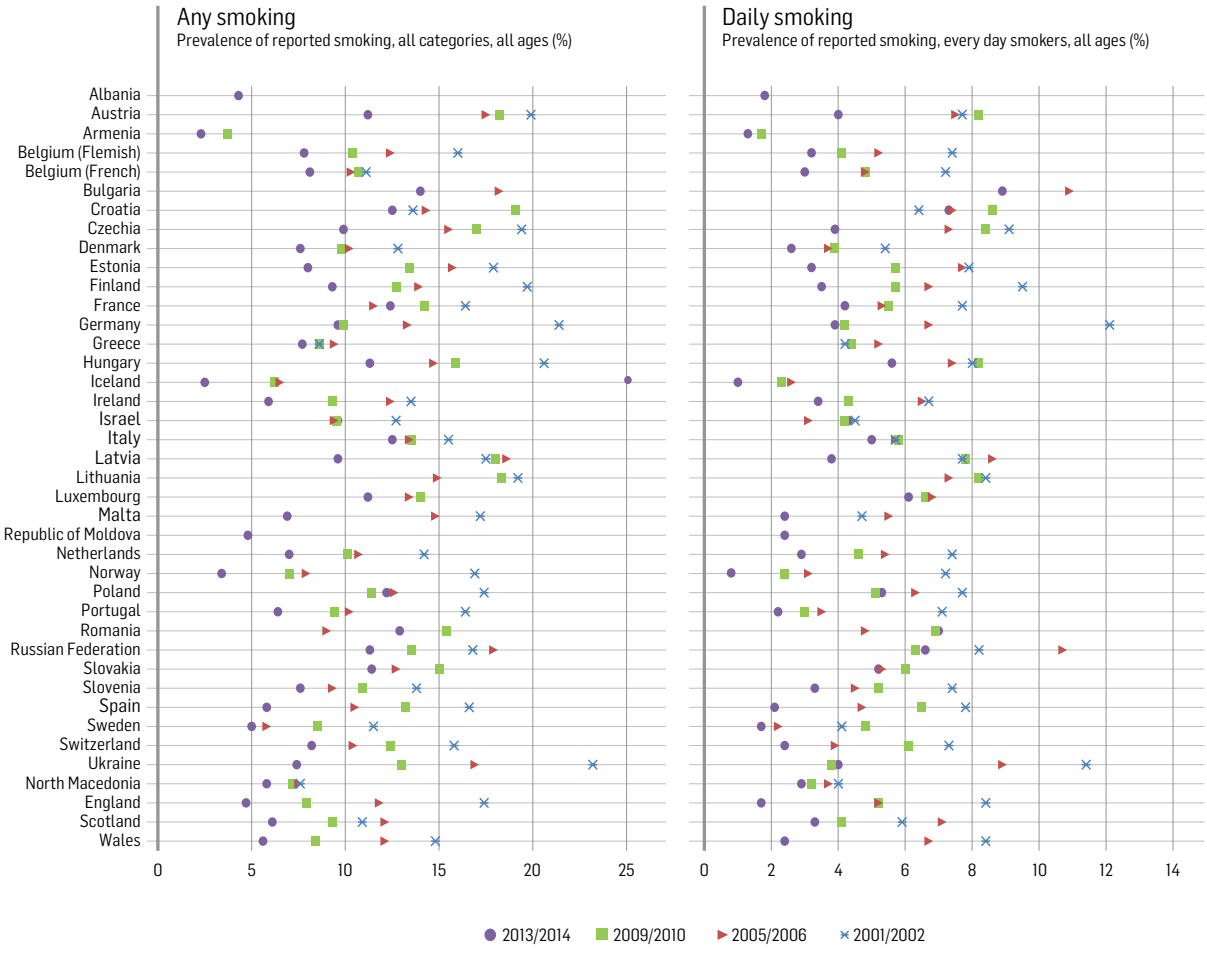
These results suggest that emphasis on prevention of smoking initiation should be placed on children before age 11 and continue thereafter, as prevalence increases rapidly, especially after age 13. Protecting children from access to tobacco near schools, strong regulation on marketing and sales, and high prices on tobacco products should complement the efforts. Further consideration should be given to the increasing use of e-cigarettes, as this is often a first step towards more regular tobacco use.

HBSC data on tobacco-use prevalence among school-aged children in European countries between 2001 and 2014 provide further evidence, and suggest areas of potential focus, for future policies and interventions. Comparisons across countries and periods included “any smoking” and “daily smoking”, the first chosen as a more sensitive indicator for tobacco use in the population that reflects issues of marketing, peer pressure and exposure at home, while the second is a better indicator of stronger involvement and the need for more urgent action.

As expected, overall prevalence of “any smoking” was more frequent (by two-fold, on average), than “daily smoking” (Fig. 3.8). A downward trend in smoking prevalence among school-aged children was observed across countries: “any smoking” prevalence was highest in 2001/2002 (over 15% in most countries), but it went down in 2005/2006 and reduced even further in 2013/2014 (to below 10%) in most countries. Reported daily tobacco-smoking prevalence declined over time from a highest prevalence of over 7% in 2001/2002. This indicator continued to decline over time, reaching its minimum of around 4% or less in 2013/2014 for most countries.

While prevalence levels among 15-year-old boys and girls remain high in some countries, the latest prevalence levels represent positive and encouraging findings for the European Region. They show that decreasing or stopping tobacco use is possible with strong enforcement of comprehensive tobacco-prevention and control measures.

Fig. 3.8. **Overall reported any and daily tobacco smoking prevalence trends from HBSC surveys in European countries, all age, 2001-2014**

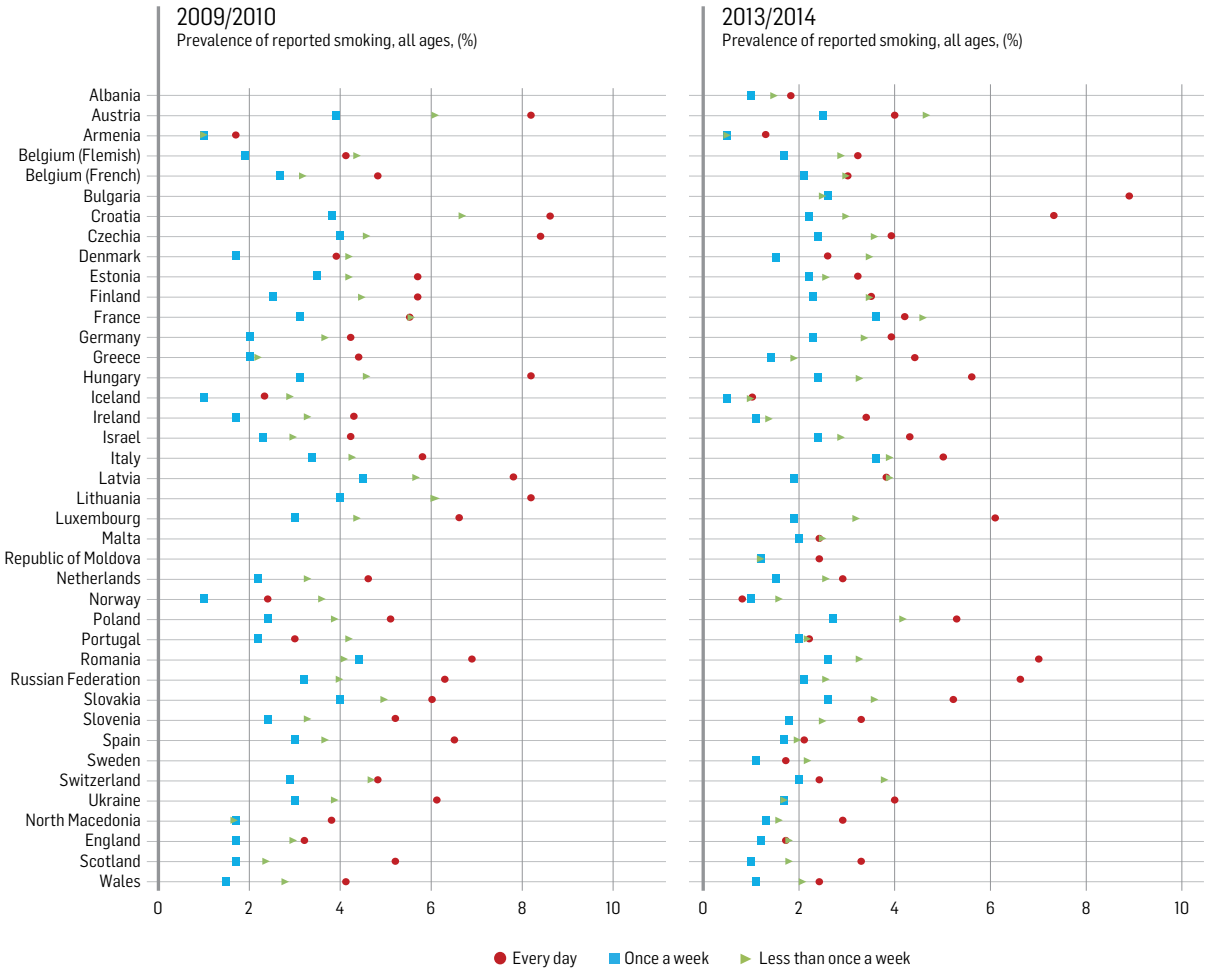


Source: HBSC International Coordinating Centre *(12)*.

HBSC also analysed the pattern of tobacco use in children according to frequency of smoking, including every day, once a week, and less than once a week, between the 2009/2010 and 2013/2014 survey periods (Fig. 3.9). It seems that among children smokers overall, those who smoke more often prevail over time, with highest smoking prevalence levels of over 4% in 2009/2010 and over 2% in 2013/2014. Although in general daily-smoking prevalence went down at country level, five countries had levels of 6% or over in 2013/2014,

compared to 12 in 2009/2010. This suggests that health policies to reduce the numbers of children who smoke are working, but that extra efforts and strategies should be considered with daily smokers. Weekly smokers should also be considered a priority.

Fig. 3.9. **Reported tobacco smoking prevalence trends from HBSC surveys in European countries, by frequency, all age, 2010-2014**



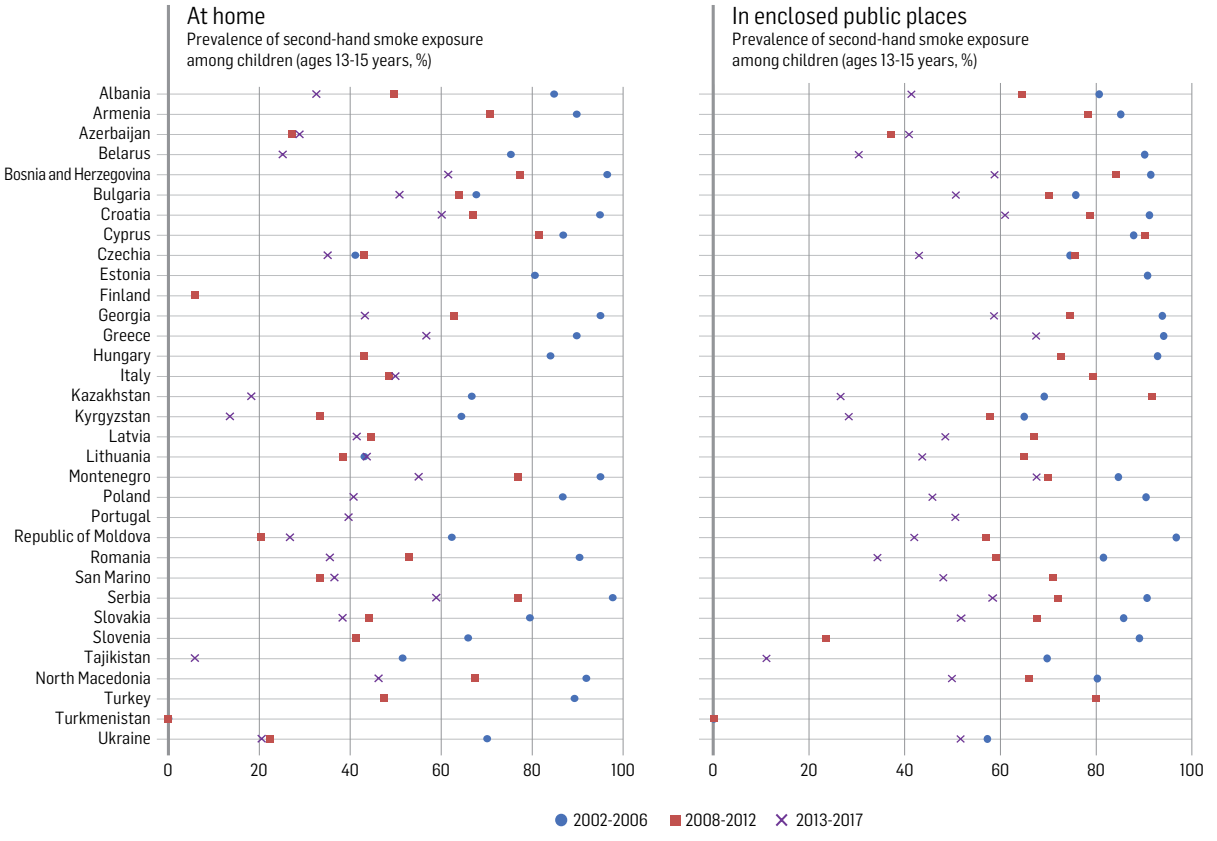
Source: HBSC International Coordinating Centre *(12)*.

Second-hand smoke exposure prevalence at home and in enclosed public spaces

Second-hand smoke exposure has two key consequences among those affected. One results in health effects from pathophysiological damage due to direct exposure to tobacco smoke, the severity of which depends on the accumulated exposure *(3)*. The other, often unrecognized, is that those exposed tend to engage more often (and sooner) in tobacco use after some period of exposure, an issue that is particularly relevant for exposure among children, some of whom start to smoke as early as 11 years.

Prevalence data on second-hand smoking from 33 countries have been reported to WHO from the GYTS over a 16-year period. The data are grouped by quinquennia to determine trends of second-hand smoke exposure at home and in enclosed public spaces (Fig. 3.10) *(13)*. High exposure levels to second-hand smoke of around 80% in both places were observed in half of the countries between 2002 and 2006. Prevalence of exposure at home changed rapidly between 2008 and 2012, however, and at a slower pace, but in a more uniform pattern, in public spaces between 2013 and 2017 (both below 60%). These results reflect parental use of tobacco (with more limited control) and more regulation/restrictions in public spaces with higher control options, respectively. Ongoing efforts to reduce exposure among children in both home and enclosed public environments in the European region are warranted to contribute to the global reduction of tobacco smoking.

Fig. 3.10. **Trends of second-hand smoke exposure prevalence among children at home and in enclosed public spaces in European countries, ages 13-15 years, 2002-2017**



Source: WHO *(13)*.

Conclusion and outlook

Tobacco-use prevalence among adults and children remains high but appears to be decreasing throughout Europe. The pace is not uniform, leaving some countries behind.

People are starting to use tobacco early in childhood and prevalence increases rapidly with age. More women are smoking in some countries, a concerning pattern that contrasts with the male trends. Decreasing trends in some countries over time and across all ages are encouraging, but are not enough to reach the overall target of a 30% reduction of tobacco-use prevalence among the adult population in the WHO European Region. Countries reaching the global target can act as sources of inspiration, encouragement and experience for those in the Region who may not achieve the target.

Enhanced and targeted efforts to protect young people, women, socially disadvantaged groups and those who do not smoke but are exposed to smoking environments may be needed to achieve further prevalence declines in European countries. Achieving the global and regional target of 30% reduction of tobacco use by 2030, and its repercussions in relation to the premature mortality target, seems feasible if countries place further attention on continuing and enhancing their efforts on tobacco prevention and control by making full use of the WHO FCTC and its guidelines.

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CHAPTER 4

PUBLIC HEALTH RESPONSE TO TOBACCO USE IN THE WHO EUROPEAN REGION

Introduction

The high human, social, environmental and economic cost of tobacco use to society drove national and international authorities to undertake actions to reduce tobacco's impact by regulating its production, marketing and consumption. An international agreement, the WHO FCTC *(1)*, developed to facilitate a coordinated global response to the tobacco epidemic, inspired national policies. Effective policies for tobacco control, as outlined in the WHO FCTC, exist and are proven to decrease the prevalence of tobacco use, but the status of their implementation across countries varies.

Detailed information on the implementation of the evidence-based measures in the 53 WHO European Region countries is reported elsewhere *(2,3)*. This chapter provides a brief summary of the current public health response to tobacco use in the Region and shares some of the success stories in implementing specific tobacco-control measures. It also highlights policies and measures implemented by European countries that go beyond those required by the WHO FCTC, and considers current gaps and challenges that countries face in their effort to control the tobacco epidemic.

A summary of WHO FCTC implementation in the WHO European Region

Table 4.1 provides a short summary of the implementation status of selected WHO FCTC articles in WHO European Region countries. It focuses on several specific tobacco-control measures, including smoke-free environments, tobacco taxation, bans on tobacco advertising, information about the dangers of tobacco products and help to quit tobacco use.

Table 4.1. **Implementation status of selected WHO FCTC articles in WHO European Region countries**

Measure	Key observations
Smoke-free public places	▸ The number of countries in the WHO European Region banning smoking in all public places increased from 4 (8%) to 13 (25%) between 2007 and 2016 *(3)*. ▸ Protection from exposure to second-hand smoke varies greatly depending on the type of public place, and remains insufficient in government facilities, indoor offices, restaurants, pubs and bars, and on public transport *(4)*. ▸ Despite the overwhelming evidence for smoke-free legislation, reducing harms from second-hand smoke and supporting the social norms of not smoking tobacco, over three quarters of countries in the WHO European Region had not implemented the recommended smoke-free policies as of 2016.
Offer help to quit tobacco use	▸ Most countries in the WHO European Region provide less than the recommended level of tobacco-cessation support. For example, in 2016, fewer than one in five countries in the Region operated a national quitline and provided cost coverage for nicotine-replacement therapy and other cessation services *(3,4)*. ▸ Slightly over half of the countries in the Region (55%) reported that they incorporated tobacco dependence treatment into the curricula of medical schools, and 60% of countries implemented media campaigns to promote cessation of tobacco use in 2018 *(2)*.

Measure	Key observations
Health warnings on packages of tobacco products	▸ The WHO European Region advanced well at global scale with the implementation of health warnings and has the highest number of countries (32, or 60%) requiring health warnings that cover 50% or more of the front and back surface of the cigarette package *(4)*. ▸ Improvements regarding the provision of warnings that include not only text messages, but also pictures, have been made over the years. The proportion of countries using pictorial health warnings increased from 40% (21) in 2014 to 72% (38) in 2018 *(2)*.
Anti-tobacco mass media campaigns	▸ Overall, there has been no apparent progress in implementation of mass-media campaigns in the WHO European Region since measurement started in 2010. The number of European countries that conducted a national campaign decreased from 14 (26%) in 2010 to 12 (23%) in 2016 *(3)*. ▸ Twenty-one countries (40%) in the Region had not conducted anti-tobacco national campaigns with a duration of at least three weeks between 1 July 2014 and 30 June 2016 *(4)*.
TAPS	▸ The WHO European Region lags behind all other WHO regions in implementing comprehensive bans on TAPS, with only five countries having a comprehensive ban on all forms of direct and indirect advertising *(4)*. ▸ The Region nevertheless scores well in relation to regulating some forms of TAPS, including direct tobacco advertising on national TV and radio, in local magazines and newspapers, and on billboards (96%, 89% and 83% of countries regulating these forms of TAPS respectively). In contrast, the least regulated forms of TAPS include tobacco point-of-sale display and indirect promotion through appearance of tobacco products in TV and/or films (regulated in 19% and 15% of countries respectively) *(4)*.
Tobacco taxation	▸ The WHO European Region has made important progress over the years and has the highest number of countries globally (25) in which tobacco taxes, as recommended by WHO, represent more than 75% of the retail price of the most popular brand of cigarettes. Additionally, nineteen European countries have taxes higher than 50% of the retail price *(4)*. ▸ The great disparity in cigarette retail prices among European countries nevertheless remains an issue of concern (prices range from 0.48 in Belarus to 12.69 in Norway in $US at the official exchange rate, and from 1.66 in Belarus to 14.06 in Turkmenistan in international dollars at purchasing power parity for a 20-cigarette pack of the highest selling brand in 2016) *(4)*. ▸ Tobacco products become more affordable if price increases do not keep pace with increases in per capita income and consumer purchasing power over time. According to 2016 data, the most popular brand of cigarettes has become more affordable since 2008 in several countries of the Region, including Armenia, Georgia and North Macedonia. There has been no change in affordability of cigarettes during this period in 19% (10) of countries *(4)*.
Sales of tobacco products to minors	▸ The vast majority of European countries prohibit sales of tobacco products to minors (36, or 68% of countries). The legal age for tobacco purchases ranges from 14 years (Tajikistan) to 20 (Uzbekistan), with most countries setting a minimum age for tobacco purchase at 18 years *(4)*. ▸ Sale of tobacco products from vending machines is banned in 31 countries (or 58%) of the Region *(4)*.

Recent success stories in implementing selected WHO FCTC measures

The most recent success stories from the Region (Table 4.2) will be highlighted in this section. It should be noted that some countries in the Region are considered global tobacco-control leaders, and their extraordinary implementation of various articles of the WHO FCTC can be cited as examples of good practice. This report aspires to share cases from countries representing different parts of the Region, and through this reconfirm the idea that effective tobacco-control measures can successfully be applied in different economic, sociocultural and political contexts.

Table 4.2. Examples of good practice in implementing selected articles of the WHO FCTC in the WHO European Region

Measure	Recent success stories
Smoke-free public places	**Georgia**: in response to high prevalence of tobacco use and its related burden, the Georgian Parliament significantly amended tobacco-control regulations. Passed in May 2017, the new legislation is considered one of the strongest tobacco-control laws in the WHO European Region. This next-generation tobacco-control law includes the implementation of prohibition on smoking (including e-cigarettes and hookah) in all enclosed public places, enclosed workplaces and public vehicles. Recently conducted surveys reported high levels of knowledge of smoke-free regulations among the population (94%), with 85% of respondents approving these provisions. Compliance rates were also high for the smoke-free regulations (95% in general, including 97% in cafes and restaurants) *(5,6,7)*.
Offer help to quit tobacco use	**Norway:** tobacco cessation is a central part of tobacco control in Norway. Support to smokers who want to quit is delivered in different formats, including through web-based and smartphone quitting services, community-based smoking-cessation courses and individual interventions. A mobile phone app, "Slutta", launched in 2013, has been downloaded nearly 600 000 times in a country with a population of about 5 million. The app is continuously updated and renewed. A scientific guideline on smoking cessation was developed and finalized in 2016 and is now used by general practitioners to assist smokers who would like to quit *(2,8,9)*.
Health warnings on packages of tobacco products	**European Union** Directive 2014/40/EU, governing the manufacture, presentation and sale of tobacco and related products, entered into force on 20 May 2014. The Directive requires that combined health warnings (picture, text and information on how to stop) appear on packages of cigarettes and roll-your-own tobacco and cover 65% of the package's front and back surface. The Directive also sets minimum dimensions for warnings and therefore prohibits small packages for certain tobacco products. It bans promotional and misleading elements on tobacco products, e-cigarettes and herbal products for smoking. Two implementing decisions on the layout, design and shape of the combined health warnings for tobacco products for smoking and the position of the general warning, and the information message on roll-your-own tobacco marketed in pouches, have been adopted *(2,10,11)*.
Anti-tobacco mass media campaigns	**The United Kingdom**: Stoptober is a health awareness campaign by Public Health England that is part of the broader One You campaign aimed at helping people quit smoking. It was launched in 2012, with the aim of offering free support and resources for those looking to stop smoking, including through medications, apps, social media groups and personal support from local health services. A comprehensive evaluation of Stoptober is conducted each year. The results of the 2017 campaign were largely positive and showed that it continues to play an important role in motivating and supporting smokers to quit, with 16% of smokers reporting making a quit attempt and 8% reporting they were still smoke-free at the end of October *(12)*.
TAPS	**The Russian Federation:** Federal Law No. 15-FZ of February 2013 introduced a comprehensive ban on advertising, promotion and sponsorship of tobacco products. The prohibition applies to tobacco, tobacco products and smoking accessories, including pipes, hookahs, cigarette paper and lighters. A total ban on the demonstration of tobacco products and the process of tobacco consumption was introduced for audiovisual materials created and intended for children. Where adult audiovisual material demonstrates tobacco products or the consumption process, the broadcaster is obliged to provide public announcements about the dangers of tobacco use immediately before or during the programme. According to evaluations conducted after the introduction of the ban, the proportion of adolescents who saw smoking on TV, in videos or other audiovisual formats had decreased by 10% since 2004. The ban on advertising of tobacco products is supported by the general public, with 80% population approval *(13,14)*.
Tobacco taxation	**Ukraine**: on 7 December 2017, the Parliament of Ukraine adopted a policy on increasing tobacco taxes for the coming seven years, until 2024. The national plan stipulates that the specific tobacco tax and minimum excise tax per 1 000 cigarettes will increase by 29.7% in 2018, and that tobacco taxes will increase by 20% annually over the next six years. The Government also retains the option of proposing an inflation adjustment annually. The aim of this policy change is to harmonize tobacco tax rates with the minimum EU level of taxation, which is €90 per 1 000 cigarettes. Ukraine's experience of increasing tobacco taxes has been positive. The average rate of excise duty on a pack of cigarettes increased by 20 times between 2008 and 2017, and state budget revenues increased from 3.5 billion hryvnias (US$ 124 million) to the projected 40 billion hryvnias (US$1 415 million) in 2017 *(15)*.

Protocol to Eliminate Illicit Trade in Tobacco Products

The first legally binding instrument adopted under the WHO FCTC – the Protocol to Eliminate Illicit Trade in Tobacco Products – came into force on 25 September 2018, paving the way to eliminate illicit trade in tobacco products. This achievement is a milestone in the history of tobacco control, as the Protocol contains a full range of measures to combat illicit trade distributed across three categories: preventing illicit trade, promoting law enforcement and providing the legal basis for international cooperation.

Twenty-six European countries have ratified the Protocol and have continued to reinforce measures to control illicit trade in their respective jurisdictions. In 2018, 55% (29) of European Region countries reported having operational legislation against illicit trade and that they promote cooperation against it *(2,16)*.

Directive 2014/40/EU, which introduced comprehensive rules on traceability and security features for tobacco products to be applied to cigarettes and roll-your-own products from 20 May 2019 and to all other tobacco products from 20 May 2024, provides an example of relevant legislation in the Region. The provisions on traceability require all unit packets of tobacco products to be marked with a unique identifier and their movements throughout the supply chain to be recorded by relevant economic operators involved in tobacco trade. Those relating to security features require all unit packets of tobacco products placed in the EU market to carry a tamper-proof security feature composed of visible and invisible elements, to facilitate their authentication by consumers and authorities *(1,10,17)*.

Policies and measures going beyond the WHO FCTC

Tobacco-control policies have contributed to the reduction of tobacco use globally, but the tobacco product landscape and patterns of tobacco use have also changed substantially over the past two decades. New policy approaches are therefore required to confront the changing environment *(18)*, prompting searches for innovative approaches to tobacco control globally and resulting in the development and implementation of new measures to reduce the tobacco-use burden.

Several such developments implemented in a number of countries of the European Region are worthy of mention. Among these are:

- implementation of plain packaging
- a tobacco-free society vision
- measures aiming to specifically protect children from second-hand smoke
- use of mobile technologies for tobacco cessation
- tobacco-control initiatives implemented by business entities
- tobacco-free portfolios.

Plain packaging

Guidelines for implementation of articles 11 and 13 of the WHO FCTC call for adoption of effective packaging and labelling measures, including the implementation of plain packaging. The objectives of plain packaging include:

- reducing the attractiveness of tobacco products;
- eliminating tobacco packaging as a form of advertising and promotion;
- eliminating misleading information by addressing package design techniques that may suggest that some products are less harmful than others; and
- increasing the noticeability and effectiveness of health warnings *(19).*

The European Region has the highest number of countries globally taking this complex measure forward. To date, 14 countries, including eight (or 15%) from the European Region (France, Georgia, Hungary, Ireland, Norway, Slovenia, Turkey and the United Kingdom) have passed enabling laws, with some countries already enforcing plain-packaging regulations.

Tobacco-free society vision

Several countries in the European Region are striving towards being tobacco-free. Examples include the following.

- The Tobacco Free Ireland initiative sets a target for Ireland to be tobacco-free by 2025. The two key themes underpinning the policy are protecting children and the denormalization of smoking *(20).*
- Finland, through its *Roadmap to a tobacco-free Finland* action plan, aims to eliminate the use of tobacco products in the country by the end of 2040. The plan includes measures both to prevent people from starting to smoke and to help smokers give up the habit *(21).*
- United Kingdom (Scotland) has set a timetable for reducing smoking to less than 5% of the population by 2034. A commitment has been made to introduce plain packaging and educational programmes to prevent young people from starting to smoke. Other key actions from the tobacco-control strategy include supporting existing smokers to quit, making all hospital grounds smoke-free by 2015, delivering a national marketing campaign on the danger of second-hand smoke, and setting a target for reducing children's exposure to second-hand smoke *(22).*
- The initiative "2035 – first tobacco-free generation" was launched in Romania in September 2016 with the aims of denormalizing smoking and promoting actions that encourage children to choose a life without tobacco. More than 350 nongovernmental organizations have already joined the initiative, including medical, academic, child rights, youth and environmental-protection organizations *(23).*
- The anti-tobacco campaign "Smoke-free generation" is gaining ground in the Netherlands. The key goals are to raise a tobacco-free generation by 2040 through preventing young people from taking up smoking, and help adults who smoke to quit. Civil society organizations in partnership with political leaders raise public awareness about the health risks of tobacco use through the campaign and lobby for stronger tobacco-control legislation *(24,25).*
- Turkmenistan, the country with the lowest smoking rate among adults in the WHO European Region

(8.3% in 2013/2014) *(26)* and which has a leading position in the fight against tobacco-smoking, has set an ambitious goal to become tobacco-free by 2025. The country plans to achieve it through activities envisaged in the national action plan on the implementation of the WHO FCTC in Turkmenistan, 2017–2021, which focuses on raising public awareness about harms of tobacco, strengthening relevant legislation and regulations, governing the sale of tobacco products to minors and strengthening cooperation with international organizations *(27).*

- United Kingdom (England) plans to reduce population smoking and create a smoke-free generation. Objectives of the tobacco-control plan (to be achieved by the end of 2022) include reducing the number of 15-year-olds who smoke regularly from 8% to 3% or less, decreasing smoking among adults from 15.5% to 12% or less, and bringing down prevalence of smoking in pregnancy from 10.5% to 6% or less. It also aims to reduce the inequality gap in smoking prevalence between those in routine and manual occupations and the general population *(28).*

Protection of children from second-hand smoke

There is a continuing trend globally to extend smoking bans to outdoor areas, and special attention seems to have been given to the rights of children to enjoy smoke-free air at outdoor playgrounds and in private cars. Several countries of the Region, including Cyprus, Finland, France, Ireland, Luxembourg, Malta, Slovenia and the United Kingdom, have prohibited smoking in cars where children are present. In Italy, smoking in cars is also forbidden in the presence of a pregnant woman *(29).*

Smoking bans have recently been extended to outdoor areas, such as parks (Luxembourg), dining areas (Sweden), childcare facilities and playgrounds (Luxembourg, Sweden and Czechia) and balconies in housing cooperatives (Finland). In Finland, for example, the current tobacco-control law prohibits smoking in private vehicles when anyone under the age of 15 is present in the vehicle, although the prohibition does not apply to living areas inside vehicles, such as camper vans. The law also regulates smoking in housing corporations, stating that a housing corporation may submit an application requesting the municipality to impose a ban that forbids smoking on the balconies of individual apartments, in the outdoor areas to which the apartments have access and inside apartments that belong to housing corporations *(30).*

Use of mobile technologies for tobacco cessation

Mobile technologies have the potential to transform health service delivery globally. The "Be He@lthy, Be Mobile" initiative, set up by WHO and the International Telecommunication Union in 2012, works with governments to scale up m-health services for NCDs and their risk factors, including helping people to quit tobacco use *(31).* This is done through expanding access to cessation interventions by using mobile technologies or so-called mTobaccoCessation tools, structured interventions tailored to cultural, gender and age needs that use mobile phones to send motivational messages and provide behaviour-change support to tobacco users willing to quit.

Several countries in the Region apply mobile technologies to support tobacco users in their attempts to quit. Among them is Ireland, which provides smokers with various support options, including live chat and free text messages *(32)*, and the United Kingdom, through use of a dedicated smartphone app, email programme and text messages to help smokers stay focused, and provide tips, advice and encouragement to quit their habit for good *(33).*

Tobacco-control initiatives implemented by business entities

Point-of-sale displays of tobacco in retail establishments provide a way for the tobacco industry to usurp tobacco advertising bans and continue to promote its products by using the packaging as an advertising tool. As of 2016, 10 countries (19%) in the WHO European Region had banned point-of-sale displays for tobacco products *(4)*, but in some countries that do not have an explicit ban on displaying tobacco products written into the law, packets of cigarettes disappear from the shelves of supermarkets and stay hidden in closed cupboards.

An example of this is a recent initiative taken by the supermarket chain owner Salling Group in Denmark. The measure was introduced in July 2018 as part of a campaign to achieve a smoke-free generation of young people in Denmark by 2030. People wanting to purchase cigarettes in the stores must now ask for them specifically. The retailer carried out studies at several stores at which young people comprise a sizeable part of the customer base and found that cigarette sales fell by between 12% and 39% at these stores *(34)*.

Tobacco-free portfolios

Tobacco-free investment is not a new phenomenon. Organizations related to health, for example, have long excluded tobacco from portfolio selection. Overall, however, tobacco industry divestment has not received much interest from the general public, until recently.

With tobacco-free investment gaining momentum and publicity, a new initiative called the Tobacco-free Finance Pledge was launched on 26 September 2018 at a high-level side event during the 2018 United Nations General Assembly *(35)*. The Pledge has two aims:

- celebrate and recognize the leading financial organizations that have moved to tobacco-free finance; and
- encourage other financial institutions, philanthropic foundations, university endowments and other organizations participating in lending, insurance and investment to reconsider their business relationships with the tobacco industry in light of the global tobacco epidemic and transit towards tobacco-free finance policies.

As of 2018, 43 out of 95 founding Tobacco-free Finance Pledge signatories originated from the WHO European Region, with most organizations coming from Estonia, Denmark, Luxembourg, the Netherlands, Norway, France, Sweden, Switzerland and the United Kingdom *(36)*. Divestment from the tobacco industry strikes at the heart of tobacco profits. The biggest pension fund in the Netherlands, ABP, which is also the largest pension fund in Europe, announced in January 2018 that it will stop investing in tobacco. This move led to a €3 billion reduction in investment from the finance sector going to tobacco companies *(25)*.

Remaining gaps and challenges

Implementation of tobacco-control measures across European countries has been uneven. Countries continue to struggle to adopt and enforce effective interventions to reduce tobacco use in their populations. Most commonly mentioned gaps include insufficient multisectoral collaboration, and limited availability of financial and human resources for the development and implementation of effective tobacco-control measures. Main barriers to tobacco control remain interference from the tobacco industry and lack of coordination between sectors and

stakeholders involved in tobacco control *(29)*. Previous chapters have showed the strong gendered nature of smoking patterns and difference in morbidity and mortality rates between men and women, reconfirming the need for gender-responsive tobacco control *(37)*.

An increasing number of countries indicated that emerging tobacco products, such as novel tobacco products (including heated tobacco) and electronic cigarettes (electronic nicotine delivery systems and electronic non-nicotine delivery systems (ENDS/ENNDS)), pose a growing challenge for decision-makers and enforcement agencies. A range of regulatory approaches are applied to ENDS/ENNDS globally, with more than 30 countries banning these products and about 80 countries regulating them either as a tobacco, therapeutic or consumer product, or a combination.

The WHO European Region leads on this, with 57% of countries in the Region having ENDS/ENNDS regulation *(4)*. Several, including Croatia, Finland, Georgia, Luxembourg, Norway, Poland, Portugal and Slovenia, have amended their smoking bans to cover new and emerging tobacco products. Tobacco advertising, promotion and sponsorship legislation has also been broadened in several countries (Czechia, Lithuania, Luxembourg, the Netherlands and Portugal) to include electronic cigarettes *(29)*.

Lawsuits initiated by tobacco companies present another challenge to countries. Companies use these to attempt to postpone or block implementation of effective tobacco-control laws, such as package warnings and plain packaging. Lawsuits were launched recently against France, Ireland, Norway and the United Kingdom. Tobacco companies argued that the grounds for these challenges relate to protection of intellectual property rights (trademarks), freedom of trade, alleged breaches of international trade agreements and alleged infringements of the human rights of tobacco companies *(19)*. In each case, the tobacco industry's claims and challenges have been dismissed or unsuccessful, and the provisions of the laws that were challenged were upheld and further implemented.

There is also evidence of tobacco companies' increasing use of social media platforms, such as Instagram, Twitter and Facebook, for marketing cigarettes, seeking out young people with large online followings and paying them to post images of cigarettes and smoking *(38)*. Social media analytics analysis suggests these deceptive social media campaigns have been viewed more than 25 billion times worldwide. Examples of social media posts using hashtags and slogans known to be part of tobacco industry social media marketing campaigns have been observed in some countries of the European Region, including Albania, Italy, Kazakhstan, Kyrgyzstan, North Macedonia and the Russian Federation *(39)*.

Conclusion and outlook

The WHO FCTC has succeeded in keeping tobacco control high on the global agenda for over 15 years, while saving lives and improving global health. Articles under the WHO FCTC emphasize the importance of a concerted approach in which tobacco demand and supply are minimized using a variety of measures. There is strong evidence from various countries that these measures work and protect equally adult and children from smoking initiation and tobacco-related harm.

Good progress has been made in the WHO European Region, with Finland, Ireland and the United Kingdom paving the way for other countries to become tobacco-free. This signifies commitment in the Region to combat tobacco use. Despite many achievements, however, progress in adoption and enforcement of tobacco-control policies remains uneven, while constant developments in the tobacco product landscape and tobacco-use patterns create new challenges for countries.

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CHAPTER 5

NEW AVENUES FOR TOBACCO CONTROL: LINKS TO SUSTAINABLE DEVELOPMENT AND HUMAN RIGHTS

Introduction

The European Region is very diverse. It features huge cultural variety, distressing economic disparities in parts and, as has been shown in other chapters of this report, unevenness in the implementation of tobacco control, both between and within countries. A number of countries are doing well – some are even perceived as tobacco-control champions – while others are lagging behind. Even the champions encounter challenges, however, especially when it comes to reducing smoking prevalence among certain parts of the population. Smoking prevalence among women and men with low socioeconomic status (SES) in the United Kingdom, for example, is double that of their high SES counterparts. In fact, people with low SES in most countries of the Region smoke to a much greater extent than those with high SES, as shown in Chapter 3.

The purpose of this chapter is to share a vision of tobacco control in Europe that is based on human rights and sustainable development. It provides approaches that help strengthen implementation and enforcement in countries of the whole WHO European Region, including those that are known for pioneering policies and those that are struggling.

When countries started to work on the WHO FCTC in the late 1990s, it was the beginning of a new era. Never before had there been a convention to tackle the consequences of a single product – tobacco – and the industry that manufactures, promotes and sells it. It was the first global public health convention and all but three countries (Andorra, Monaco and Switzerland) in the WHO European Region are parties to it *(1)*. In a huge effort, parties, with support from WHO, academics and civil society, have developed the WHO FCTC and evidence-based guidelines for many of the convention's articles over the past two decades *(2)*.

Now it is time to look beyond the WHO FCTC to build relationships that accelerate its implementation and enforcement. Embedding tobacco control in the Sustainable Development Agenda and approaching it from a human rights perspective can help open doors to new partners, expanding the tobacco-control community beyond ministries of health and public health organizations that traditionally work in this area. They provide powerful, and up to now underutilized, instruments and arguments that generate support for tobacco-control measures.

The human right to tobacco control

It is often forgotten that the drafters of the WHO FCTC based the convention on human rights, referring explicitly to the International Covenant on Economic, Social and Cultural Rights (ICESCR), the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and the Convention on the Rights of the Child (CRC) in the preamble *(3)*. This is for good reason, as these treaties include the right to the enjoyment of the highest attainable standard of health (Article 12 of the ICESCR, Article 24 of the CRC) and the right to access to health care without discrimination (Article 12 of the CEDAW). The human right to health is already recognized in the Universal Declaration of Human Rights of 1948 (Article 25).

Human rights range from civil and political, to economic, social and cultural. They place obligations on the state to respect, protect and fulfil the fundamental rights of its citizens. This means that states: have the duty to refrain from violating or interfering with human rights (respect); are required to prevent third parties from

violating human rights (protect); and have the obligation to adopt and implement all appropriate measures to ensure that every person can realize their human rights (fulfil). The two last aspects (protect and fulfil) are the most important for tobacco control. They place the duty on governments to take all necessary legislative, administrative or other measures to regulate the tobacco industry in the most effective and enforceable way to protect the right to health *(4)*.

Many countries have incorporated human rights in their constitutions, and there is no country in the world that has not ratified at least one international human rights treaty (80% have ratified four or more) *(5)*. This also applies to the WHO European Region, where human rights accords have been widely adopted and conventions like CEDAW and CRC have been ratified by all countries *(6)*. The Convention on the Rights of Persons with Disabilities (CRPD), adopted a year after the WHO FCTC came into effect, has been ratified by almost all countries in the Region and also emphasizes the human right to health (Article 25) *(6,7)*. It can be argued that because of their ratification of CEDAW, CRC and CRPD, countries like Andorra, Monaco and Switzerland that are not parties to the WHO FCTC have recognized the human right to health, and consequently are obligated to implement effective tobacco-control measures, for which the WHO FCTC and its guidelines are the international standard.

The human right to health does not mean that people have a right to be healthy, since health is also determined by factors beyond human or state control (such as genetics). It nevertheless means that states must seek the progressive realization of health for all people and implement a core minimum of measures to protect health. CESCR General Comment 3, cited by Meier *(8)*, states:

In order for a State party to be able to attribute its failure to meet at least its minimum core obligations to a lack of available resources it must demonstrate that every effort has been made to use all resources that are at its disposition in an effort to satisfy, as a matter of priority, those minimum obligations.

Many tobacco-control measures (such as a TAPS ban, plain packaging, smoke-free public places and tax increases) can be implemented with minimum resources, so it is difficult for states to argue that they are not able to implement their minimum core obligations under the right to health. Cessation services may be more costly, but citizens have the right to nondiscriminatory access to effective quit services, including, but not limited to, clinical and pharmacological treatment *(8)*.

Obligations under the fundamental right to health in some cases go beyond the WHO FCTC. While Article 8 of the WHO FCTC covers only a smoking ban in public places, states are required under Article 24 of the CRC to take measures to protect children from second-hand smoke exposure at home *(9,10)*. This is relevant for many countries in the Region, as Fig. 3.10 shows: in a number of countries, more than 50% of 13–15-year-olds are exposed to second-hand smoke at home.

Research has shown that low SES increases the risk of children's exposure to second-hand smoke *(10)*. In Germany, which generally has made progress in this area, exposure of young people with low SES is three times as high as exposure of their counterparts with high SES (26.4% compared to 8.2%) *(11)*. This is especially worrying, as children in poorer households are more often exposed to many other toxics (such as air pollution) simultaneously, accumulating their risks of irreversible damage and handing marginalization down over generations *(12)*.

Data on children's second-hand smoke exposure in the WHO European Region are fragmentary. A more regular and detailed analysis is necessary to develop tailored interventions, such as the REFRESH project in United Kingdom (Scotland). REFRESH provides advice to smoking parents that takes their specific situation (such as unsafe environment, disabilities and poor living conditions) into account *(13).*

Sufficient information is very important for the development of human rights implementation and tobacco-control policies. The CRPD, just like the WHO FCTC in Article 20, contains an article solely concerned with data and statistics (Article 31).

Apart from the human right to health, tobacco control relates to other fundamental rights, such as the right to life (Article 6 of the CRC, Article 10 of the CRPD), the right to information (Article 17 of the CRC, Article 10 of the CEDAW, Article 21 of the CRPD), the right to safe working conditions (Article 11 of the CEDAW, Article 12 of the ICESCR), or protection from hazardous child labour (Article 32 of the CRC, International Labour Organization Convention 182) *(4,7,8,14).*

The impact of tobacco on the human right to life seems obvious, but it is important to analyse the specific impact on marginalized groups. Shortly before his accidental death in 1998, Jonathan Mann, AIDS researcher and human rights advocate, wrote, "[I]nadvertent discrimination is so prevalent that all public health policies and programs should be considered discriminatory until proven otherwise" *(15)*. He wrote this with reference to the AIDS epidemic, but it also applies to tobacco. For example, estimates show that about half of deaths among people with schizophrenia, bipolar disorder and depression are caused by tobacco-related diseases.

Governments therefore have to take action that specifically reaches these groups with prevention campaigns and cessation services fitted to their needs, as well as implementing smoke-free environments in mental health institutions that are often not covered by smoke-free laws *(7).*

The human right to information requires the government to provide its citizens with information about the hazards of tobacco and the options for quitting smoking. Messages and information channels have to be tailored to get to the most vulnerable groups. Voluntary prevention activities in schools may be more common and of higher quality in schools with more resources, which are often attended by children with high SES, while those with low SES are left behind. In countries that do not have a TAPS ban, the reach of prevention programmes is much smaller than that of the industry's marketing, rendering them insufficient to fulfil the right to information of those most vulnerable to tobacco addiction. The right to information may also require governments to protect its citizens from misinformation, such as tobacco advertising that uses misleading attributes to promote smoking *(4).*

The right to safe working conditions includes protection of all people – not just non-smokers – from second-hand smoke at the workplace (such as restaurants and bars) as well as hazards during tobacco-growing (such as pesticide poisonings and green tobacco sickness, which is also in line with Article 18 of the WHO FCTC). Children have the right to be protected from hazardous child labour, which applies to all stages of tobacco-growing. The state has the duty to analyse which workplaces are involved and implement effective policies. Marginalization because of precarious working conditions or gender discrimination might hinder vulnerable groups from voicing concerns about their situation; enforcement therefore should not just be focused on groups that cry the loudest, because they may not be the most exposed.

The United Nations Guiding Principles on Business and Human Rights (UNGPs) have also been interpreted in a tobacco-control context. After conducting a human rights assessment of a multinational tobacco corporation, the Danish Institute for Human Rights concluded *(16)*:

> Where such impacts [on human rights] occur, companies should immediately cease the actions that cause or contribute to the impacts. Tobacco is deeply harmful to human health, and there can be no doubt that the production and marketing of tobacco is irreconcilable with the human right to health. For the tobacco industry, the UNGPs therefore require the cessation of the production and marketing of tobacco.

Smoking is the result of complex socioeconomic and cultural factors, boosted by the industry's marketing campaigns that target vulnerable groups and children (whose abilities for conscious and informed decision-making are not fully developed). The highly addictive nature of tobacco impedes autonomous decision-making and is the opposite of truly free choice. The tobacco industry's claim that smoking is an individual lifestyle decision is therefore victim-blaming *(8)*.

The human rights-based approach to tobacco control underlines the societal factors and the role of third parties (tobacco companies) that exacerbate the epidemic, especially among certain vulnerable groups. This changes the perception of tobacco control: these factors have to be changed at societal level through legislation and regulation according to the WHO FCTC, not merely by appealing to individuals to change their behaviour. Awareness-raising about the hazards and deadly consequences of tobacco addiction is important, but it needs to be embedded in a range of other measures, such as tax increases. Unless TAPS are prohibited, prevention programmes will always be impeded by tobacco industry campaigns. The human rights-based approach means that the individual has the right to be protected from the tobacco industry and to live in an environment that is free from exposure to second-hand smoke, prevents them from starting to smoke or helps them to quit smoking.

Human rights experts have concluded that there is a human right to tobacco control, because tobacco is the largest cause of preventable death in the world. For this reason, tobacco control is essential to achieving the human right to health *(17,18)*.

Human rights in court cases

The tobacco industry and other groups or individuals have used human rights arguments in court cases against tobacco-control measures, with mixed results. In a 2013 New Zealand case, for example, a prison inmate sued against a smoking ban and the court granted an exemption, based on the argument that prisoners would be deprived from an "otherwise lawful substance" and nicotine withdrawal was "not humane" *(19)*. Other cases against smoke-free environments in prisons, mental health institutions or restaurants and bars are regularly denied *(4,19)*. In a case in the United Kingdom, a resident of a psychiatric hospital invoked the right to privacy under Article 8(1) of the European Convention on Human Rights (ECHR). The England and Wales Court of Appeal rejected the argument, saying that Article 8(1) does not cover smoking, and even if it did, Article 8(2) would allow for limitations "for the protection of health … or for the protection of the rights and freedoms of others" *(7,19)*.

In other cases, the tobacco industry or groups with close ties to it have challenged smoke-free laws, plain packaging or TAPS bans, alleging that they violate economic freedom and the right to commerce or property rights *(4)*. For example, Japan Tobacco International, Philip Morris International and others sued the French government in 2016 over plain packaging, referring among others to the 1789 French Declaration of Human and

Civic Rights, but the Supreme Administrative Court denied the claims *(20)*. Such claims regularly are refused because of the ineligibility of the invoked rights or because they fail the proportionality test. This test looks at three requirements:

1. the limitation of a right must be based on a law;
2. it must pursue a legitimate social or democratic interest; and
3. it must be a proportionate and reasonable way of pursuing this interest, without "sacrificing the essence of the right" *(4)*.

Tobacco-control laws usually pass this test, since the health harms of smoking are well researched and the measures aim to advance the human rights to health and life. Invoking these and other fundamental rights in courts therefore is helpful in countering tobacco industry challenges. The ratification of the WHO FCTC adds an additional layer of justification, as it requires states to implement strong regulation *(4)*. Basically, human rights treaties not only place an obligation on governments, but also give them the right to regulate the tobacco industry.

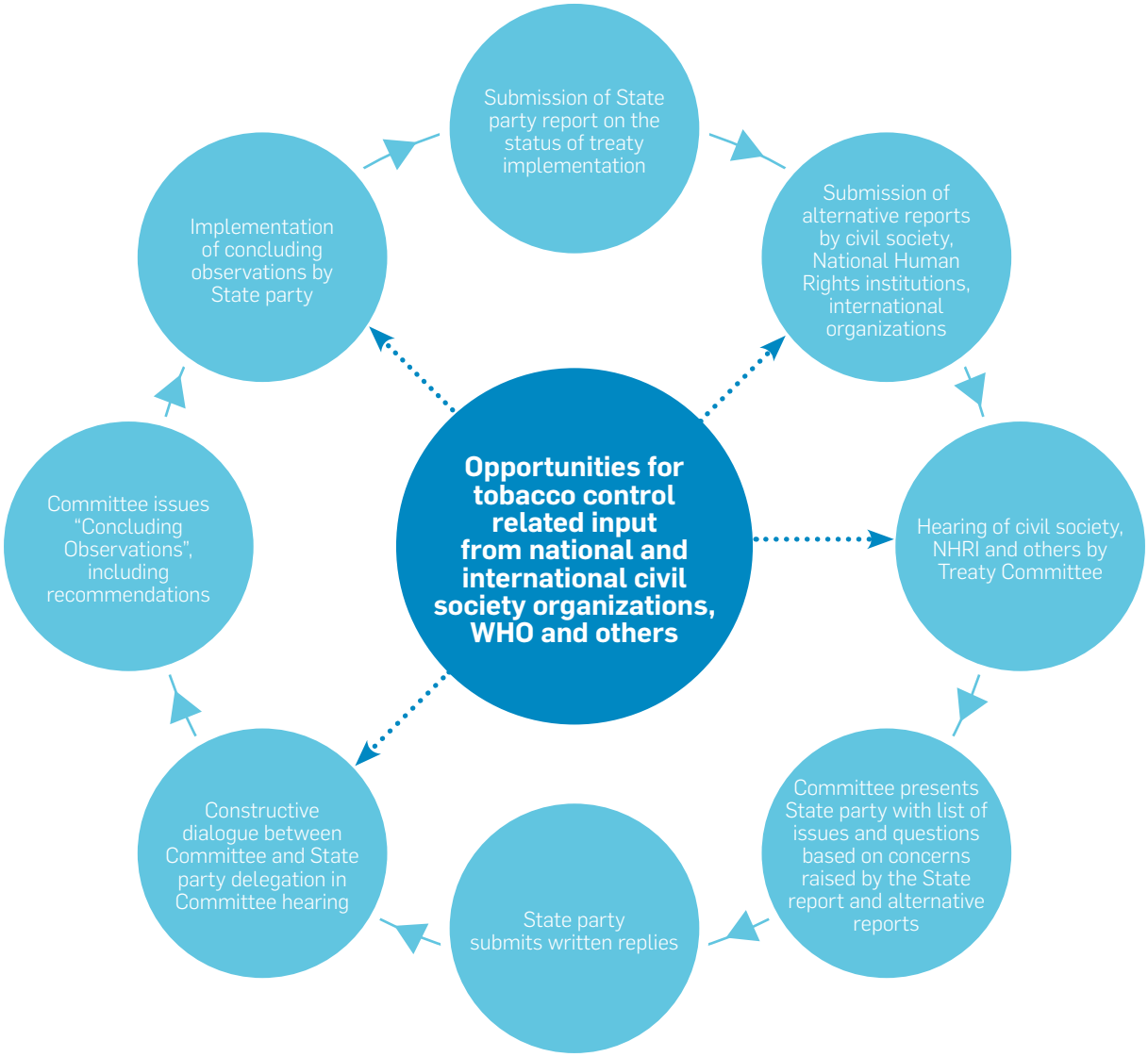
Human rights can also be invoked to advance tobacco control in court cases, giving power to affected individuals and tobacco-control advocates. In Peru, Uganda and India, for example, courts have ruled that governments have to implement strict smoke-free legislation to protect citizens from second-hand smoke, referring to the human rights to life, health and a safe environment. Courts in Canada and the United States of America have awarded damages to employees who had contracted cancer as a result of second-hand smoke at work *(4)*. In 2005, the European Court of Human Rights granted compensation to a detainee in the Russian Federation whose rights under the ECHR were violated by a situation of overcrowding, lack of ventilation and smoking in the cell *(17)*.

Human rights instruments strengthening tobacco control

Human rights treaties have an independent monitoring system with a committee of experts regularly reviewing countries' progress in implementation of a treaty, including the above-mentioned articles and aspects relevant for tobacco control *(21)*. Central elements of each reporting cycle are the state party report, a written exchange between the committee and the state party, an oral hearing of the state party and the committee's concluding observations with recommendations (Fig. 5.1) *(21,22)*. It is important for the committee to get input from civil society organizations, national human rights institutes and international organizations like the United Nations Children's Fund or WHO. This information is submitted in the form of alternative reports and/or oral hearings that highlight implementation gaps and concerns, or raise alarm about significant human rights violations *(23,24)*. Alternative reports can also praise a government's progress in a certain area.

Considering the information from state reports, alternative reports and other sources, the committee is able to get the full picture and give recommendations to the concerned state party to remedy the observed human rights violations. For example, the CEDAW Committee in 2010 asked the Government of Argentina to provide information specifically on gender-sensitive tobacco-control policies and called for the implementation of smoke-free environments and restriction of tobacco advertising. Argentina is not a party to the WHO FCTC, so the CEDAW Committee also urged the state to ratify the treaty *(4,25)*. Recommendations from human rights treaty bodies put political pressure on governments, but can also help ministries of health or other administrative entities to justify tobacco-control measures in the name of human rights and policy coherence.

Fig. 5.1. **Opportunities for tobacco control-related input in the human rights reporting cycle**



In the case of Argentina, the CEDAW Committee had received a civil society report from national and international organizations raising awareness of the lack of tobacco regulation in the country *(4,26)*. As a result of the alternative report, the Committee's concluding observations and civil society mobilization around the process, Argentina passed a TAPS ban in 2011 *(27)*.

Tobacco control embedded in sustainable development

Member States of the United Nations adopted the SDGs in September 2015. The goals urge all countries around the globe to eliminate poverty, protect the climate, promote decent work, engage in multisectoral and international collaboration, and improve public health.

The health goal, SDG 3, explicitly calls for the implementation of the WHO FCTC (SDG 3.a) in recognition of the impact tobacco-related diseases and 7 million deaths each year have on development. It also relates well to the achievement of other health aims, such as a one-third reduction of premature mortality caused by NCDs (SDG 3.4) and the ending of the tuberculosis epidemic (part of SDG 3.3.) *(28).*

Tobacco control is also important for reaching sustainable development beyond public health *(29).* Tobacco-related addiction and diseases can impact on incomes and increase poverty, and socially and economically disadvantaged groups are more likely to start smoking (which is relevant for SDG 1) *(30).* Tobacco addiction can shift household expenditures away from healthy nutrition and education (SDGs 2 and 4). The disparity between male and female smoking prevalence is especially high in most countries of the CIS (see Chapter 3). Women being exposed to second-hand smoke at home or household income being spent on tobacco instead of the needs of women and children (SDG 5) can worsen gender inequality. The tobacco industry's targeted marketing for women and girls increases their health risks and hinders their empowerment. In line with SDG 5, it is key to prevent the increase of tobacco use among women and ensure at least the same prevalence reduction as for men.

Workplace second-hand smoke exposure causes 433 000 deaths each year globally, accounting for almost 20% of deaths caused by occupational diseases and injuries *(31,32)* and hampering the achievement of decent working conditions (SDG 8). Intensive use of hazardous chemicals in tobacco-growing and smallholder farmers' lack of appropriate protective clothing increases the risk of poisonings and other occupational injuries (SDGs 8, 3.9). Farmers and workers are also at risk when handling wet tobacco leaves through an acute nicotine poisoning known as green tobacco sickness, which leads to dizziness, nausea, diarrhoea and muscle weakness. In this context, widespread child labour in tobacco-growing is particularly alarming and presents an obstacle to decent work and education (SDGs 8.7, 4). This is also relevant for tobacco-growing countries in the WHO European Region, where children have been found working on tobacco farms *(33–37).*

It is well known that tobacco consumption is associated with significant economic and budgetary costs. Tobacco-related health-care expenditures and productivity losses each year account for more than US$ 1.4 trillion globally, an enormous waste of resources given the funding gap that needs to be filled to achieve the SDGs. Smoking-attributable costs in countries of the European Region range from 1.2% to 8.9% of total health-care costs; direct and indirect costs together amount to between 0.1% and 2.5% of gross domestic product *(38).* At the same time, one of the most effective measures to reduce smoking prevalence – increasing tobacco taxes – is an important domestic resource for funding sustainable development (SDG 17.1), while saving millions of lives *(39).*

The inclusion of the tobacco-control treaty in the 2030 Development Agenda is a powerful signal that the tobacco industry recognized early. A multinational cigarette corporation started a fortunately unsuccessful lobbying campaign to stop the tobacco inclusion, calling it a "potentially alarming development" in an internal document leaked to Reuters *(40).*

Governments and civil society should be aware that all multinational tobacco companies are now engaging in the SDGs as a strategy to regain a good reputation and (re-)build relationships with political decision-makers. Statements go as far as a company claiming to contribute to the achievement of the health goal *(41).* Consequently, SDG processes need to be safeguarded against tobacco industry interference, in accordance with the guidelines of Article 5.3 of the WHO FCTC.

SDGs as a forum for multisectoral collaboration

The SDGs provide a framework of bigger societal objectives and values to which government departments concerned with tobacco addiction can refer when calling for or implementing tobacco-control measures. Increasing tobacco taxes, for example, not only decreases tobacco prevalence, but also helps to fight poverty (SDG 1) and can increase domestic resources for sustainable development (SDG 17). Enforcing smoke-free public places lowers respiratory and heart diseases and cancer, and helps to achieve decent working conditions (SDG 8) and gender equality (SDG 5) (in the hospitality sector, for example, where most staff are female).

The 2030 Agenda clearly sets out to "reach the furthest behind first" *(28).* This is a reminder for policy-makers to refocus tobacco-control policies to reach the groups that are still most affected – people with low SES, who have mental illness, and who are otherwise marginalized – and which are also the furthest behind in other areas of the development agenda.

Countries develop national implementation plans for the SDGs, conduct national reviews, engage in regional-level exchange and participate in voluntary reporting as part of the annual high-level political forum in New York, United States. As set out in the agenda, these processes should involve all levels of government as well as civil society and other stakeholders *(28,42).* National follow-up and review therefore provides a forum for multisectoral collaboration, awareness-raising and engaging with other institutions towards tobacco-control goals. This increases policy coherence for sustainable development and tobacco regulation and provides an opportunity to include concrete tobacco-control aims in national development plans, or set links to national tobacco-control plans, if they exist. Corporations may pledge to step up tobacco prevention and cessation support for employees as part of the multistakeholder exchange, or withdraw investments from the tobacco industry. The review process gives civil society an additional forum to raise awareness on tobacco-control implementation gaps, criticize government inactivity in this area or boost support for tobacco-control departments.

The regional processes mainly serve the purpose of promoting peer learning. The 2030 Agenda does not name specific organizations where the regional exchange is supposed to take place *(28).* United Nations regional economic commissions (such as the United Nations Economic Commission for Europe) and the EU seem to be obvious key fora *(43)*. The WHO Regional Office for Europe also provides support through the *Roadmap to implement the 2030 Agenda for Sustainable Development (44).*

Each year, some countries engage in voluntary national review at the high-level political forum. There are no concrete requirements regarding frequency of these reviews, but states are encouraged to conduct two before 2030. The reports are supposed to be based on the above-mentioned national reviews and include multistakeholder input *(42,43).* They provide an opportunity to highlight progress, share obstacles and emphasize the need for international exchange or national capacity-building. A country may receive praise for good practice in response to a report, which sends a message to the country's government. As of 2018, 36 of the 53 countries of the European Region had submitted voluntary review reports, but only about a third of the reports describe action on past or future tobacco-control measures *(45)*. Surprisingly, despite the ongoing severity of the tobacco epidemic in the WHO European Region, 25% of the reports do not mention tobacco, smoking or SDG target 3.a at all, missing an important opportunity.

One country's government report contains an analysis of institutional responsibilities for the SDGs. Interestingly, the map shows that many SDG targets are tackled by several ministries at the same time, but tobacco control is solely in the hands of the ministry of health *(46)*, even though it could also be linked to the ministries of finance, labour, equality or education. This is symptomatic of the isolation of tobacco-control policy-making and the perception of tobacco and the WHO FCTC as being "only health", even in the 2030 Agenda *(47)*. Other countries from the WHO European Region have not shared similar mappings in their voluntary national reviews, but may want to take this analysis as a model to scrutinize gaps and subsequently increase multisectoral collaboration on a range of sustainable development targets, including tobacco control.

Conclusion and outlook

Building new links beyond public health makes tobacco control sustainable across election periods and other developments. Strong tobacco-control policies cannot easily be taken back if they are tied to fundamental rights, national sustainable development plans and a huge variety of stakeholders.

Marginalized groups are more vulnerable to tobacco addiction, and tobacco addiction perpetuates social inequality. The human rights and sustainable development approach is therefore not a one-way street: to achieve a tobacco-free society, underlying socioeconomic disparities also need to change.

This requires a multisectoral effort with contributions from governments, international organizations, academia, the corporate sector and civil society. International organizations can provide data, give advice and help strengthen intergovernmental exchange. Academia should advance research on tobacco prevalence and marginalization, and identify effective interventions that are tailored to reach the most vulnerable groups.

Corporations can offer cessation programmes for their employees, advertising agencies should stop working for tobacco corporations, and banks and insurance companies have already started to withdraw investments from the tobacco industry *(48–50)*. Since low SES is associated with tobacco addiction, corporate actions should also address poor working conditions. Companies may help their staff more by increasing wages and decreasing stressors at work than by a cessation project that boosts reputation but reaches only a subsection of (high-level) workers.

Since civil society reports are so important to the human rights review process, capacity-building for tobacco-control advocates to develop alternative reports and participate in oral hearings before the human rights treaty bodies should be supported *(21)*. Civil society has already started to mobilize around sustainable development and human rights: more than 150 organizations around the globe endorsed the Cape Town Declaration on Human Rights and a Tobacco-free World *(51)* in 2018, announcing their support for the human rights-based approach to tobacco control.

Ireland, United Kingdom (Scotland), Finland and the Netherlands have declared their intention to achieve tobacco-free societies by 2025, 2034 and 2040, respectively *(52–55)*. This offers great encouragement to other governments in the European Region to accelerate implementation of tobacco-control measures. They have public health, sustainable development and human rights on their side.

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The WHO Regional Office for Europe

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