

Health impact of tobacco control policies in line with the WHO Framework Convention on Tobacco Control (WHO FCTC)



Based on the current level of adult smoking in Bulgaria (1), premature deaths attributable to smoking are projected to be more than 1 million of the 2.1 million smokers alive today (Table 1) and may increase in the absence of stronger policies.

TABLE 1.
Initial smoking prevalence and projected premature deaths

Smoking pr	Smokers (n)		
Male	Female	Total	
43.4	26.9	2 119 400	

Projected p	remature de	aths of curre	nt smokers (ı	1)	
Male <sup>a</sup>	Female	Total <sup>a</sup>	Male <sup>b</sup>	Female <sup>b</sup>	Total <sup>b</sup>
629 300	430 400	1 059 700	409 045	279 760	688 805

- <sup>a</sup> Premature deaths are based on relative risks from large-scale studies of high-income countries.
- <sup>b</sup> Premature deaths are based on relative risks from large-scale studies of low- and middle-income countries. *Source*: National Statistical Institute (1).

# **Key findings**

Within 15 years, the effects of individual tobacco control policies when fully implemented in line with the WHO FCTC (2) are projected to reduce smoking prevalence by:

- 11.9% by increasing excise cigarette taxes from its current level of 66% to 75% and prevent much youth smoking;
- 6.3% by increasing from a low-level to a high-level mass media campaign;
- 5.5% by banning just some forms of direct and indirect advertising to have a comprehensive ban on advertising, promotion and sponsorship that includes enforcement;
- 4.5% by requiring strong, graphic health warnings added to tobacco products;
- 4.3% by increasing from minimal provision to a well-publicized and comprehensive tobacco cessation policy; and
- 1.8% with stronger enforcement of the comprehensive smoke-free laws already in place.

With this stronger set of policies and consistent with the WHO FCTC (2), smoking prevalence can be reduced by 23% within 5 years, by 30% within 15 years and by 36% within 40 years. Almost 383 000 deaths could be averted in the long term (Table 2). The SimSmoke tobacco control model (3) incorporates synergies in implementing multiple policies (e.g., strong media campaign with smoke-free laws and tobacco cessation policies).

TABLE 2.

Effect of tobacco control policies (individual and combined) on initial smoking prevalence and smoking-attributable deaths

	Relative cha smoking pre		Reduction in smokers in 40 years (n)	Reduction in smoking-attributable deaths in 40 years (n)					
Tobacco control policy	5 years	40 years	Total	Maleª	Female	Totalª	Maleb	Female <sup>b</sup>	Total <sup>b</sup>
Protect through smoke-free laws	-1.6	-2.0	42 149	12 515	8 559	21 074	8 135	5 563	13 698
Offer tobacco cessation services	-2.5	-6.1	129 831	38 550	26 366	64 916	25 057	17 138	42 195
Mass media campaigns	-5.5	-6.6	139 880	41 534	28 406	69 940	26 997	18 464	45 461
Warnings on cigarette packages	-3.0	-6.0	127 164	37 758	25 824	63 582	24 543	16 786	41 329
Enforce marketing restrictions	-4.6	-6.0	126 740	37 632	25 738	63 370	24 461	16 730	41 191
Raise cigarette taxes	-7.9	-15.9	336 648	99 959	68 365	168 324	64 973	44 437	109 410
Combined policies	-22.7	-36.1	765 433	227 275	155 441	382 716	147 729	101 037	248 766

<sup>&</sup>lt;sup>a</sup> Smoking-attributable deaths are based on relative risks from large-scale studies of high-income countries.

### → Monitor tobacco use

The prevalence of current adult smokers (15 years and older) was 34.7% in 2014 (men: 43.4%; women: 26.9%) (1).

### → Protect people from tobacco smoke

Almost all enclosed public places in Bulgaria are completely smoke free (Table 3). Smoking violations consist of fines on the patron but not on the establishment. Funds are dedicated for enforcement and a system is in place for citizen complaints and further investigations (4).

TABLE 3. Complete smoke-free indoor public places

facilities	except universities		facilities	& workplaces		& bars	transport	public places
Health care	Education facilities	Universities	Government	Indoor offices	Restaurants	Cafés, pubs	Public	All other indoor

Source: WHO (4).

 $\bigcirc$  = completely smoke-free;  $\bigcirc$  = not completely smoke-free.

<sup>&</sup>lt;sup>b</sup> Smoking-attributable deaths are based on relative risks from large-scale studies of low- and middle-income countries.

### → Offer help to quit tobacco use

Smoking cessation services are available of which some are cost-covered, but Bulgaria only provides cessation support in some health clinics or other primary care facilities. Nicotine replacement therapy can be purchased over the counter in a pharmacy but is not cost-covered, and a toll-free quit line is available (4).

## → Warn about the dangers of tobacco

Health warnings are legally mandated to cover 30% of the front and 40% of the rear of the principal display area, whereby 16 health warnings are approved by law. They appear on each package and any outside packaging and labelling used in the retail sale and describe the harmful effects of tobacco use on health. Moreover, health warnings rotate on packages and are written in the principal language(s) of the country. The law also mandates font style, font size and colour for package warnings. However, the warnings do not include a photograph or graphics. (4).

Total tobacco control expenditures, which may include mass media campaign expenditures, amount to US\$ 25 033 in Bulgaria, which is less than US\$ 0.05 per capita and is, therefore, classified as a low level of funding (4).

# → Enforce bans on tobacco advertising, promotion and sponsorship

Bulgaria has a ban, through a law adopted in 1993 and amended many times since then (last amendment was in 2012) (5), on several forms of direct and indirect advertising (Table 4). The law requires fines for violations of these direct and indirect advertising bans (4).

TABLE 4.
Bans on direct and indirect advertising

Direct advertising		Indirect advertising	
National television and radio	<b>Ø</b>	Free distribution in mail or through other means	
International television and radio	<b>Ø</b>	Promotional discounts	•
Local magazines and newspapers	•	Non-tobacco products identified with tobacco brand names	
International magazines and newspapers		Appearance of tobacco brands in television and/or films (product placement)	•
Billboards and outdoor advertising		Appearance of tobacco products in television and/or films	•
Advertising at point of sale		Sponsored events	
Advertising on internet	<b>Ø</b>	Tobacco products display at point of sale	

### Bulgaria does not have:

- bans on tobacco companies/tobacco industry publicizing their activities;
- bans on entities other than tobacco companies/tobacco industry publicizing their activities;
- bans on tobacco companies funding or making contributions (including in-kind contributions) to smoking prevention media campaigns including those directed at youth; and
- a requirement to present prescribed anti-tobacco advertisements before, during or after the broadcasting or showing of any visual entertainment (4).

### → Raise taxes on tobacco

In Bulgaria, a pack of cigarettes costs 4.70 BGN¹ (US\$ 3.21), of which 82.65% is tax (16.67% is value added and 65.98% is excise taxes) (4).

<sup>1</sup> The currency code is according to International Organization for Standardization, ISO 4217 currency names and code elements.

### About the SimSmoke model

The abridged version of the SimSmoke tobacco control model, developed by David Levy of Georgetown University, United States of America, projects the reduction in smoking prevalence and smoking-attributable deaths as a result of implementing tobacco control policies (individually and in combination) (3). Specifically, the model projects the effects from:

- protecting from secondhand smoke through stronger smoke-free air laws
- offering greater access to smoking cessation services
- placing warnings on tobacco packages and other media/educational programmes
- enforcing bans on advertising, promotion and sponsorship
- raising cigarette prices through higher cigarette taxes (6).

For the SimSmoke model, data on smoking prevalence among adults were taken from the most recent nationally representative survey that covered a wide age range, and data on tobacco control policies were taken from the *WHO report on the global tobacco epidemic*, 2015 (4).

## **Funding**

This was made possible by funding from the Government of Turkmenistan.

#### References<sup>2</sup>

- European health interview survey, EHIS wave 2 2014: preliminary data. In: National Statistical Institute [website].
   Sofia: National Statistical Institute; 2016 (http://www.nsi.bg/en/content/13666/preliminary-data).
- WHO Framework Convention on Tobacco Control [website].
   Geneva: Convention Secretariat and World Health
   Organization; 2016 (http://www.who.int/fctc/en/).
- Levy DT, Fouad H, Levy J, Dragomir AD, El Awa F.
   Application of the Abridged SimSmoke model to four Eastern Mediterranean countries. Tob Control. 2015. doi:10.1136/ tobaccocontrol-2015-052334 [Epub ahead of print].
- 4. WHO report on the global tobacco epidemic, 2015: raising taxes on tobacco. Geneva: World Health Organization; 2015 (http://www.who.int/tobacco/global\_report/2015/en/).
- Tobacco Control Database for the WHO European Region [online database]. Copenhagen: WHO Regional Office for Europe; 2016 (http://data.euro.who.int/tobacco/).
- Tobacco Free Initiative MPOWER [website]. Geneva: World Health Organization; 2016 (http://www.who.int/tobacco/ mpower/en/).

#### Acknowledgements

**Data analysis:** David Levy and Jeffrey Levy, Georgetown University, Washington DC, United States of America **Report:** Trudy Wijnhoven and Kristina Mauer-Stender, WHO Regional Office for Europe, Copenhagen, Denmark

Editing: Nancy Gravesen, Irvine, California, United States of America

Graphic design: Carli Hyland, Hill+Knowlton Strategies, Copenhagen, Denmark

<sup>&</sup>lt;sup>2</sup> Websites accessed on 14 March 2016.