

Supplementary material

Title: Modelling the impact of increased alcohol taxation on alcohol-attributable cancers in the WHO European Region

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Supplementary Table S1. Checklist of information (GATHER) that should be included in new reports of global health estimates	2
Supplementary Table S2. Source excise duties and mean prices by country; data obtained Nov 2020	3
Supplementary Table S3. Avoidable new alcohol-attributable cancer cases and deaths by cancer site for different tax-increase scenarios for the entire WHO European Region.....	5
Supplementary Table S4. Avoidable new alcohol-attributable cancer cases and deaths for different tax-increase scenarios by countries of the WHO European Region.	6
Supplementary Table S5. Sensitivity analysis 1: Avoidable new alcohol-attributable cancer cases and deaths for applying the same tax rate as Finland, entire WHO European Region.....	11
Supplementary Table S6. Sensitivity analysis 1: Avoidable new alcohol-attributable cancer cases and deaths for applying the same tax rate as Finland, by countries of the WHO European Region.	12
Supplementary Table S7. Sensitivity analysis 2: Avoidable new alcohol-attributable cancer cases and deaths for each tax increase scenario by cancer site and for the entire WHO European Region, applying a lag time between alcohol exposure and cancer development or deaths of 20 years.	14

Supplementary Table S1. Checklist of information (GATHER) that should be included in new reports of global health estimates

Item #	Checklist item	Reported on page #
Objectives and funding		
1	Define the indicator(s), populations (including age, sex, and geographic entities), and time period(s) for which estimates were made.	M5-M6
2	List the funding sources for the work.	M7
Data Inputs		
<i>For all data inputs from multiple sources that are synthesized as part of the study:</i>		
3	Describe how the data were identified and how the data were accessed.	M4-M7
4	Specify the inclusion and exclusion criteria. Identify all ad-hoc exclusions.	M5
5	Provide information on all included data sources and their main characteristics. For each data source used, report reference information or contact name/institution, population represented, data collection method, year(s) of data collection, sex and age range, diagnostic criteria or measurement method, and sample size, as relevant.	M4-M7
6	Identify and describe any categories of input data that have potentially important biases (e.g., based on characteristics listed in item 5).	M12-M13
<i>For data inputs that contribute to the analysis but were not synthesized as part of the study:</i>		
7	Describe and give sources for any other data inputs.	Table S2
<i>For all data inputs:</i>		
8	Provide all data inputs in a file format from which data can be efficiently extracted (e.g., a spreadsheet rather than a PDF), including all relevant meta-data listed in item 5. For any data inputs that cannot be shared because of ethical or legal reasons, such as third-party ownership, provide a contact name or the name of the institution that retains the right to the data.	Table 1 (M)
Data analysis		
9	Provide a conceptual overview of the data analysis method. A diagram may be helpful.	M5-M7
10	Provide a detailed description of all steps of the analysis, including mathematical formulae. This description should cover, as relevant, data cleaning, data pre-processing, data adjustments and weighting of data sources, and mathematical or statistical model(s).	M5-M7
11	Describe how candidate models were evaluated and how the final model(s) were selected.	M6-M7
12	Provide the results of an evaluation of model performance, if done, as well as the results of any relevant sensitivity analysis.	M7, M11-M12
13	Describe methods for calculating uncertainty of the estimates. State which sources of uncertainty were, and were not, accounted for in the uncertainty analysis.	M7
14	State how analytic or statistical source code used to generate estimates can be accessed.	M15
Results and Discussion		
15	Provide published estimates in a file format from which data can be efficiently extracted.	Table 2 (M), Tables S3-S7
16	Report a quantitative measure of the uncertainty of the estimates (e.g. uncertainty intervals).	Table 2 (M), Tables S3-S7
17	Interpret results in light of existing evidence. If updating a previous set of estimates, describe the reasons for changes in estimates.	M12-15
18	Discuss limitations of the estimates. Include a discussion of any modelling assumptions or data limitations that affect interpretation of the estimates.	M12-M13

Note. M = Manuscript, S = Supplementary material.

Supplementary Table S2. Source excise duties and mean prices by country; data obtained Nov 2020

Country	Source: Excise duties	Source: Mean prices alcoholic beverages
Albania	http://www.dogana.gov.al/english/dokument/462/ndryshim-6-ligji-126-2016-1512201	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Armenia	https://www.arlis.am/DocumentView.aspx?docid=137404	https://www.armstat.am/am/?nid=82
Austria	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Azerbaijan	http://continent-online.com/Document/?doc_id=30414629#pos=2866;-52&sdoc_params=text%3D%25D0%25B2%25D0%25BE%25D0%25B4%25D0%25BA%25D0%25B0%26mode%3Dindoc%26topic_id%3D30414629%26spos%3D1%26Synonym%3D1%26tShort%3D1%26tSuffix%3D1&sdoc_pos=0	http://www.stat.gov.mk/Publikacij/SG2020/SG2020-Pdf/08-PrihodiPotrosCeni-IncomeExpPrices.pdf
Belarus	http://www.minfin.gov.by/ru/news/ba9bc2523a5047bd.html	https://www.belstat.gov.by/ofitsialnaya-statistika/realny-sector-ekonomiki/tseny/potrebitelskie-tseny/operativnyedannye/srednie-tseny-na-potrebitelskie-tovary-i-uslugi-po-respublike-belarus/
Belgium	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Bosnia and Herzegovina	https://advokat-prnjavorac.com/legislation/Law-on-excise-duties-FBiH.pdf	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Bulgaria	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Croatia	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Cyprus	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Czechia	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Denmark	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Estonia	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Finland	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
France	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Georgia	https://www.matsne.gov.ge/ka/document/view/1043717?impose=translateEn&publication=118	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Germany	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Greece	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Hungary	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Iceland	https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/pdf/iceland/key-documents/screening_report_16_is_internet_en.pdf	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Ireland	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Israel	https://www.keepeek.com/Digital-Asset-Management/oecd/taxation/consumption-tax-trends-2020_152def2d-en#page156	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Italy	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Kazakhstan	https://online.zakon.kz/document/?doc_id=36148637#pos=11003;35&sdoc_params=text%3D%25D0%25A1%25D0%25BF%25D0%25B8%25D1%2580%25D1%2582%25D0%25BE%25D1%2581%25D0%25BE%25D0%25B4%25D0%25B5%25D1%2580%25D0%25B6%25D0%25B0%25D1%2589%25D0%25B0%25D1%258F%2520%25D0%25BF%25D1%2580%25D0%25BE%25D0%25B4%25D1%2583%25D0%25BA%25D1%2586%25D0%25B8%25D1%258F%2520%25D0%25BC%25D0%25B5%25D0%25B4%25D0%25B8%25D1%2586%25D0%25B8%25D0%25BD%25D1%2581%25D0%25BA%25D0%25BE%25D0%25B3%25D0%25BE%26mode%3Dindoc%26topic_id%3D36148637%26spos%3D1%26tSynonym%3D1%26tShort%3D1%26tSuffix%3D1&sdoc_pos=0	https://3pulse.com/en/geo/kazakhstan/prices
Kosovo	https://mf.rks-gov.net/desk/inc/media/080465ED-A868-4CA0-ADE1-21E8CE9C39FF.pdf; https://mf.rks-	https://www.belstat.gov.by/ofitsialnaya-statistika/realny-sector-ekonomiki/tseny/potrebitelskie-tseny/operativnye-

	gov.net/desk/inc/media/D0893084-0E73-476E-8C43-FE8C1E059C3B.pdf?fbclid=IwAR2Pku3Mkbfem0_9a37b-m0vZUHYqynToG-0e-HpFkANhg2wIM4CM4csSIg	dannye/srednie-tseny-na-potrebitelskie-tovary-i-uslugi-po-respublike-belarus/
Kyrgyzstan	https://online.zakon.kz/document/?doc_id=30355506&doc_id2=30355506#activate_doc=2&pos=129;-98&pos2=4115;-94	http://www.stat.kg/ru/statistics/ceny-i-tarify/
Latvia	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Lithuania	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Luxembourg	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Malta	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Montenegro	https://mif.gov.me/ResourceManager/FileDownload.aspx?rid=285399&rType=2&file=Law%20on%20Excise%20Taxes%20-%20OGMN%2050-2017%20ENG.DOCX	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Netherlands	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
North Macedonia	https://customs.gov.mk/index.php/en/biznis-zaednica-mk-2/akcizi/alkohol-i-alkoholni-pijaloci	http://www.stat.gov.mk/Publikacii/SG2020/SG2020-Pdf/08-PrihodiPotrosCeni-IncomeExpPrices.pdf
Norway	https://www.skatteetaten.no/globalassets/bedrift-og-organisasjon/avgifter/saravgifter/alkoholholdige-drikkevarer/2020-alkohol-ii-juli.pdf ; https://www.drikkeglede.no/om-oss/brod-i-tall/avgifter/	https://www.vinmonopolet.no/
Poland	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Portugal	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Republic of Moldova	http://lex.md/fisc/codfiscaltxtru.htm	http://www.stat.kg/ru/statistics/ceny-i-tarify/
Romania	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Russian Federation	http://www.consultant.ru/document/cons_doc_LAW_28165/22201a65e4f59a582714243c15b655989bd57066/	https://rosstat.gov.ru/price
Serbia	https://www.carina.rs/cyr/Zakoni/%D0%A3%D1%81%D0%BA%D0%BB%D0%B0%D1%92%D0%B5%D0%BD%D0%B8%20%D0%B4%D0%B8%D0%BD%D0%B0%D1%80%D1%81%D0%BA%D0%B8%20%D0%B8%D0%B7%D0%BD%D0%BE%D1%81%D0%B8%20%D0%B0%D0%BA%D1%86%D0%B8%D0%B7%D0%B0%20%D0%BE%D0%B4%201.7.2020.pdf	https://publikacije.stat.gov.rs/G2020/Pdf/G20202053.pdf
Slovakia	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Slovenia	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Spain	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Sweden	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Switzerland	https://www.ezv.admin.ch/ezv/de/home/themen/alkohol/steuersaetze.html	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Tajikistan	https://online.zakon.kz/Document/?doc_id=34791241#pos=1;-80 [Excise tax is fixed in EUR currency in legislation]	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Turkey	https://www.gib.gov.tr/fileadmin/mevzuat/otv_oranlar/_tum/03072020_III_sayili_liste.pdf	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Turkmenistan	http://minjust.gov.tm/mcenter-single-ru/38	Information provided by the Ministry of Health, following and official request of the WHO
Ukraine	https://www.profiwins.com.ua/ru/legislation/kodeks/1355.html	https://publikacije.stat.gov.rs/G2020/Pdf/G20202053.pdf
United Kingdom	https://ec.europa.eu/taxation_customs/business/excise-duties-alcohol-tobacco-energy/excise-duties-alcohol_en	https://www.statista.com/outlook/cmo/alcoholic-drinks/worldwide
Uzbekistan	https://www.profiwins.com.ua/ru/legislation/kodeks/1355.html	https://publikacije.stat.gov.rs/G2020/Pdf/G20202053.pdf

Supplementary Table S3. Avoidable new alcohol-attributable cancer cases and deaths by cancer site for different tax-increase scenarios for the entire WHO European Region.

Taxation increase scenario†	Cancer incidence			Cancer deaths		
	Total number of avoided cancers ‡	% alcohol-attributable cancers§	% alcohol-related cancers¶	Total number of avoided cancers deaths‡	% alcohol-attributable cancers§	% alcohol-related cancers§§
Breast						
20%	735 (587-885)	1.8 (1.7-1.9)	0.1 (0.1-0.2)	218 (174-264)	1.8 (1.7-1.9)	0.1 (0.1-0.2)
50%	1,836 (1,469-2,212)	4.5 (4.2-4.7)	0.3 (0.3-0.4)	544 (434-660)	4.6 (4.3-4.8)	0.3 (0.3-0.4)
100%	3,670 (2,937-4,421)	9.0 (8.5-9.5)	0.7 (0.6-0.8)	1,086 (868-1,318)	9.2 (8.7-9.6)	0.6 (0.5-0.8)
Colorectum						
20%	696 (496-908)	1.2 (1.1-1.3)	0.1 (0.1-0.2)	345 (246-450)	1.2 (1.1-1.3)	0.1 (0.1-0.1)
50%	1,757 (1,252-2,297)	3.0 (2.8-3.2)	0.3 (0.2-0.4)	871 (620-1135)	3.0 (2.9-3.3)	0.3 (0.2-0.4)
100%	3,571 (2,542-4,675)	6.0 (5.8-6.5)	0.6 (0.4-0.8)	1,770 (1,260-2,310)	6.2 (5.9-6.7)	0.6 (0.4-0.8)
Larynx						
20%	123 (100-147)	0.9 (0.8-1.0)	0.3 (0.2-0.3)	61 (49-72)	0.9 (0.8-1.0)	0.3 (0.2-0.3)
50%	313 (255-374)	2.2 (2.0-2.5)	0.6 (0.5-0.8)	154 (125-184)	2.2 (2.0-2.6)	0.6 (0.5-0.8)
100%	643 (523-769)	4.5 (4.0-5.1)	1.3 (1.1-1.6)	318 (257-380)	4.6 (4.1-5.3)	1.3 (1.1-1.6)
Lip and oral cavity						
20%	237 (216-262)	0.8 (0.8-0.9)	0.4 (0.3-0.4)	108 (99-120)	0.8 (0.7-0.9)	0.3 (0.3-0.4)
50%	602 (549-666)	2.1 (1.9-2.3)	0.9 (0.8-1.0)	276 (251-307)	2.0 (1.9-2.3)	0.9 (0.8-1.0)
100%	1,238 (1,129-1,374)	4.2 (3.9-4.7)	1.8 (1.7-2.0)	568 (516-633)	4.2 (3.9-4.7)	1.8 (1.7-2.0)
Liver						
20%	63 (19-110)	1.1 (1.0-1.2)	0.1 (0.0-0.2)	57 (17-100)	1.1 (1.0-1.2)	0.1 (0.0-0.2)
50%	159 (49-278)	2.7 (2.6-2.9)	0.2 (0.1-0.4)	143 (44-254)	2.7 (2.6-2.9)	0.2 (0.1-0.4)
100%	324 (100-568)	5.5 (5.2-5.9)	0.5 (0.1-0.8)	290 (89-516)	5.5 (5.3-6.0)	0.5 (0.1-0.8)
Oesophagus¶						
20%	98 (90-107)	1.0 (0.9-1.0)	0.2 (0.2-0.3)	90 (83-99)	1.0 (0.9-1.1)	0.2 (0.2-0.3)
50%	249 (229-272)	2.4 (2.3-2.7)	0.6 (0.6-0.7)	229 (211-250)	2.5 (2.3-2.7)	0.6 (0.6-0.7)
100%	509 (468-558)	4.9 (4.6-5.4)	1.2 (1.1-1.4)	469 (431-513)	5.1 (4.7-5.6)	1.2 (1.2-1.4)
Pharynx						
20%	145 (132-162)	0.7 (0.6-0.8)	0.3 (0.3-0.4)	65 (59-73)	0.7 (0.6-0.8)	0.3 (0.3-0.4)
50%	369 (336-414)	1.7 (1.6-2.0)	0.9 (0.8-1.0)	167 (151-186)	1.7 (1.0-6.2)	0.9 (0.8-1.0)
100%	762 (694-858)	3.6 (3.3-4.2)	1.8 (1.7-2.0)	345 (312-386)	3.6 (3.3-4.1)	1.8 (1.6-2.0)

† Tax increase on national, beverage-specific alcohol excise duties on beer, wine, and spirits.

‡ The numbers of avoided incident cancers and avoided deaths due to cancers have been rounded up; for this reason, the sum of these columns is not exactly equal to the results found in Table 2 of the main article.

§ Alcohol-attributable cancers refer to those cancer cases or deaths estimated to have been caused by alcohol.

§§ Alcohol-related cancers refer to all new cases or deaths for cancers whose risk is increased by alcohol consumption.

¶ In oesophagus cancer, only cases of squamous cell carcinoma were considered.

Supplementary Table S4. Avoidable new alcohol-attributable cancer cases and deaths for different tax-increase scenarios by countries of the WHO European Region.

Taxation increase scenario†	Cancer incidence			Cancer deaths		
	Total number of avoided cancers‡	% alcohol-attributable cancers§	% alcohol-related cancers¶	Total number of avoided cancers‡	% alcohol-attributable cancers§	% alcohol-related cancers¶
Albania						
20%	1 (1-2)	1.0 (0.8-1.2)	0.1 (0.1-0.1)	1 (1-1)	0.9 (0.7-1.2)	0.1 (0.1-0.1)
50%	4 (3-5)	2.4 (1.9-2.9)	0.2 (0.2-0.2)	2 (2-3)	2.4 (1.8-2.9)	0.2 (0.1-0.2)
100%	8 (6-10)	4.9 (3.9-5.9)	0.4 (0.3-0.5)	4 (3-6)	4.8 (3.7-5.9)	0.4 (0.3-0.5)
Armenia						
20%	4 (3-6)	3.4 (2.4-4.3)	0.2 (0.1-0.2)	3 (2-4)	3.3 (2.4-4.2)	0.2 (0.1-0.2)
50%	11 (7-15)	8.4 (5.9-10.7)	0.4 (0.3-0.5)	7 (4-9)	8.4 (5.9-10.7)	0.4 (0.3-0.5)
100%	22 (15-30)	16.9 (11.9-21.5)	0.8 (0.5-1.1)	13 (9-18)	16.8 (11.8-21.4)	0.8 (0.5-1.1)
Austria						
20%	14 (12-17)	0.7 (0.6-0.8)	0.1 (0.1-0.1)	6 (5-7)	0.6 (0.6-0.7)	0.1 (0.1-0.1)
50%	36 (29-43)	1.7 (1.5-2.0)	0.3 (0.2-0.3)	15 (12-18)	1.6 (1.4-1.9)	0.2 (0.2-0.3)
100%	72 (59-87)	3.4 (3.0-4.0)	0.5 (0.4-0.6)	30 (25-36)	3.3 (2.8-3.8)	0.5 (0.4-0.6)
Azerbaijan						
20%	2 (1-2)	1.4 (1.0-1.8)	0.0 (0.0-0.0)	1 (1-2)	1.4 (1.0-1.8)	0.0 (0.0-0.1)
50%	5 (3-6)	3.5 (2.6-4.4)	0.1 (0.1-0.1)	3 (2-4)	3.5 (2.6-4.4)	0.1 (0.1-0.1)
100%	9 (7-12)	7.0 (5.2-8.9)	0.2 (0.1-0.2)	7 (5-9)	6.9 (5.2-8.9)	0.2 (0.1-0.3)
Belarus						
20%	23 (17-31)	1.0 (0.8-1.3)	0.2 (0.1-0.3)	11 (9-15)	0.9 (0.7-1.2)	0.2 (0.1-0.3)
50%	58 (44-79)	2.6 (2.0-3.4)	0.5 (0.4-0.6)	29 (22-39)	2.2 (1.8-3.1)	0.5 (0.4-0.7)
100%	119 (89-161)	5.2 (4.0-6.9)	1.0 (0.8-1.3)	58 (45-80)	4.6 (3.6-6.3)	1.0 (0.8-1.4)
Belgium						
20%	31 (25-38)	1.0 (0.9-1.2)	0.1 (0.1-0.2)	13 (10-15)	1.0 (0.9-1.2)	0.1 (0.1-0.2)
50%	77 (63-96)	2.6 (2.2-3.1)	0.3 (0.3-0.4)	32 (26-39)	2.6 (2.2-3.1)	0.3 (0.3-0.4)
100%	156 (128-194)	5.3 (4.5-6.3)	0.7 (0.6-0.9)	64 (53-78)	5.2 (4.4-6.2)	0.7 (0.5-0.8)
Bosnia and Herzegovina						
20%	2 (1-2)	0.5 (0.4-0.7)	0.0 (0.0-0.0)	1 (1-1)	0.5 (0.4-0.6)	0.0 (0.0-0.0)
50%	4 (3-5)	1.4 (1.1-1.6)	0.1 (0.1-0.1)	3 (2-3)	1.4 (1.1-1.6)	0.1 (0.1-0.1)
100%	8 (6-10)	2.8 (2.2-3.3)	0.2 (0.1-0.2)	5 (4-6)	2.7 (2.2-3.3)	0.2 (0.1-0.2)
Bulgaria						
20%	18 (14-23)	0.9 (0.8-1.2)	0.1 (0.1-0.2)	9 (7-11)	0.9 (0.8-1.2)	0.1 (0.1-0.2)
50%	45 (36-57)	2.4 (2.0-2.9)	0.3 (0.3-0.4)	22 (18-28)	2.4 (1.9-2.8)	0.3 (0.3-0.4)
100%	91 (73-116)	4.8 (4.0-6.0)	0.7 (0.5-0.8)	46 (37-58)	4.6 (3.8-5.7)	0.6 (0.5-0.8)
Croatia						
20%	11 (9-14)	0.8 (0.7-1.0)	0.1 (0.1-0.2)	5 (4-7)	0.8 (0.6-0.9)	0.1 (0.1-0.2)
50%	28 (23-35)	2.1 (1.7-2.5)	0.3 (0.3-0.4)	13 (11-17)	1.9 (1.6-2.4)	0.3 (0.3-0.4)
100%	56 (46-70)	4.2 (3.5-5.1)	0.6 (0.5-0.8)	27 (22-34)	3.9 (3.3-4.9)	0.6 (0.5-0.8)
Cyprus						
20%	2 (1-2)	0.7 (0.6-0.8)	0.1 (0.1-0.1)	0 (0-1)	0.7 (0.6-0.8)	0.1 (0.1-0.1)

	50%	4 (3-5)	1.8 (1.5-2.1)	0.2 (0.2-0.3)	1 (1-1)	1.7 (1.4-2.0)	0.2 (0.2-0.2)
	100%	8 (6-10)	3.6 (3.0-4.2)	0.4 (0.3-0.5)	2 (2-3)	3.3 (2.8-4.0)	0.4 (0.3-0.5)
Czechia							
	20%	32 (25-39)	1.1 (1.0-1.3)	0.2 (0.1-0.2)	15 (12-19)	1.0 (0.9-1.3)	0.2 (0.1-0.2)
	50%	80 (64-99)	2.8 (2.4-3.4)	0.5 (0.4-0.6)	38 (30-47)	2.6 (2.3-3.2)	0.4 (0.4-0.6)
	100%	162 (130-202)	5.7 (4.9-6.9)	0.9 (0.7-1.1)	77 (61-97)	5.4 (4.6-6.6)	0.9 (0.7-1.1)
Denmark							
	20%	15 (13-19)	1.0 (0.9-1.2)	0.1 (0.1-0.2)	6 (5-8)	1.0 (0.9-1.2)	0.1 (0.1-0.2)
	50%	39 (32-47)	2.6 (2.2-3.0)	0.3 (0.3-0.4)	16 (13-19)	2.6 (2.2-3.0)	0.3 (0.3-0.4)
	100%	79 (64-95)	5.2 (4.5-6.1)	0.7 (0.5-0.8)	32 (26-39)	5.2 (4.4-6.2)	0.6 (0.5-0.8)
Estonia							
	20%	5 (4-7)	1.4 (1.2-1.7)	0.2 (0.2-0.3)	2 (2-3)	1.3 (1.2-1.6)	0.2 (0.2-0.3)
	50%	14 (11-18)	3.7 (3.2-4.3)	0.6 (0.5-0.7)	6 (5-7)	3.4 (2.9-4.1)	0.6 (0.5-0.7)
	100%	29 (23-36)	7.5 (6.5-8.9)	1.2 (1.0-1.6)	12 (10-15)	7.0 (6.0-8.6)	1.2 (1.0-1.5)
Finland							
	20%	26 (21-33)	2.4 (2.0-3.0)	0.3 (0.2-0.3)	9 (7-12)	2.3 (1.9-2.9)	0.3 (0.2-0.3)
	50%	66 (52-84)	6.1 (5.1-7.5)	0.7 (0.5-0.9)	23 (18-30)	5.9 (4.9-7.5)	0.7 (0.5-0.8)
	100%	135 (105-172)	12.5 (10.3-15.2)	1.4 (1.1-1.8)	47 (37-61)	12.1 (9.9-15.2)	1.3 (1.0-1.7)
France							
	20%	156 (129-188)	0.7 (0.6-0.8)	0.1 (0.1-0.1)	64 (53-77)	0.7 (0.6-0.8)	0.1 (0.1-0.1)
	50%	391 (324-472)	1.8 (1.6-2.1)	0.3 (0.2-0.4)	162 (133-195)	1.8 (1.5-2.1)	0.3 (0.2-0.3)
	100%	790 (654-955)	3.7 (3.2-4.3)	0.6 (0.5-0.7)	328 (269-395)	3.6 (3.1-4.2)	0.6 (0.5-0.7)
Georgia							
	20%	3 (2-3)	0.7 (0.6-0.8)	0.1 (0.1-0.1)	2 (1-2)	0.7 (0.5-0.8)	0.1 (0.1-0.1)
	50%	7 (6-9)	1.7 (1.4-2.1)	0.2 (0.1-0.2)	4 (4-5)	1.6 (1.3-2.0)	0.2 (0.2-0.2)
	100%	14 (11-17)	3.5 (2.9-4.2)	0.4 (0.3-0.5)	9 (7-11)	3.3 (2.7-4.1)	0.4 (0.3-0.5)
Germany							
	20%	250 (199-307)	1.0 (0.8-1.1)	0.1 (0.1-0.2)	104 (83-129)	0.9 (0.8-1.1)	0.1 (0.1-0.2)
	50%	628 (500-772)	2.4 (2.0-2.9)	0.3 (0.3-0.4)	261 (208-324)	2.3 (1.9-2.8)	0.3 (0.3-0.4)
	100%	1,268 (1,008-1,560)	4.9 (4.0-5.8)	0.7 (0.6-0.9)	529 (421-656)	4.8 (3.9-5.7)	0.7 (0.5-0.8)
Greece							
	20%	50 (40-64)	2.5 (2.0-3.1)	0.3 (0.2-0.3)	21 (16-28)	2.4 (2.0-3.1)	0.2 (0.2-0.3)
	50%	127 (100-161)	6.3 (5.1-7.7)	0.7 (0.5-0.8)	54 (41-71)	6.1 (4.9-7.8)	0.6 (0.5-0.8)
	100%	258 (203-330)	12.8 (10.4-15.8)	1.3 (1.0-1.7)	110 (84-145)	12.5 (10.1-16)	1.3 (1.0-1.7)
Hungary							
	20%	47 (38-60)	1.4 (1.2-1.7)	0.2 (0.2-0.3)	24 (20-32)	1.3 (1.1-1.7)	0.2 (0.2-0.3)
	50%	118 (97-152)	3.5 (2.9-4.4)	0.6 (0.5-0.7)	61 (51-80)	3.3 (2.8-4.2)	0.6 (0.5-0.7)
	100%	241 (199-313)	7.1 (6.0-8.9)	1.2 (1.0-1.5)	126 (103-166)	6.8 (5.7-8.7)	1.2 (1.0-1.5)
Iceland							
	20%	1 (1-1)	2.8 (2.4-3.2)	0.3 (0.2-0.3)	0 (0-0)	2.8 (2.4-3.2)	0.2 (0.2-0.3)
	50%	3 (2-3)	7.0 (6.0-8.1)	0.6 (0.5-0.8)	1 (1-1)	7.0 (6.0-8.1)	0.6 (0.5-0.8)
	100%	5 (4-6)	14.3 (12.2-16.5)	1.3 (1.0-1.6)	2 (1-2)	14.2 (12.1-16.4)	1.3 (1.0-1.6)
Ireland							

	20%	19 (15-23)	1.7 (1.5-2.0)	0.2 (0.2-0.3)	6 (5-8)	1.6 (1.4-1.9)	0.2 (0.2-0.3)
	50%	47 (39-58)	4.3 (3.7-5.0)	0.6 (0.5-0.7)	16 (13-20)	4.1 (3.5-4.9)	0.6 (0.5-0.7)
	100%	95 (78-117)	8.8 (7.5-10.3)	1.2 (1.0-1.4)	33 (27-41)	8.4 (7.1-9.9)	1.2 (0.9-1.4)
Israel							
	20%	3 (3-4)	1.4 (1.1-1.6)	0.0 (0.0-0.0)	1 (1-2)	1.4 (1.1-1.6)	0.0 (0.0-0.0)
	50%	9 (7-11)	3.4 (2.8-4.0)	0.1 (0.1-0.1)	4 (3-5)	3.4 (2.8-4.0)	0.1 (0.1-0.1)
	100%	17 (13-21)	6.8 (5.7-8.0)	0.2 (0.1-0.2)	7 (6-9)	6.8 (5.7-8.0)	0.2 (0.1-0.2)
Italy							
	20%	130 (106-158)	1.2 (1.0-1.4)	0.1 (0.1-0.1)	52 (42-63)	1.2 (1.0-1.3)	0.1 (0.1-0.1)
	50%	327 (267-398)	3.0 (2.5-3.4)	0.2 (0.2-0.3)	130 (105-158)	3.0 (2.5-3.4)	0.2 (0.2-0.3)
	100%	658 (536-801)	6.0 (5.1-6.9)	0.5 (0.4-0.6)	262 (211-319)	5.9 (5.0-6.8)	0.5 (0.4-0.6)
Kazakhstan							
	20%	14 (10-18)	1.2 (1.0-1.7)	0.1 (0.1-0.2)	9 (7-11)	1.2 (0.9-1.6)	0.1 (0.1-0.2)
	50%	35 (26-46)	3.1 (2.4-4.2)	0.3 (0.2-0.4)	22 (17-29)	3.0 (2.3-4.0)	0.3 (0.2-0.4)
	100%	71 (53-94)	6.4 (4.9-8.4)	0.6 (0.5-0.8)	45 (34-59)	6.0 (4.6-8.1)	0.6 (0.5-0.8)
Kyrgyzstan							
	20%	3 (2-4)	1.9 (1.5-2.6)	0.2 (0.1-0.2)	2 (1-2)	1.8 (1.4-2.4)	0.2 (0.1-0.2)
	50%	7 (5-10)	5.0 (3.8-6.8)	0.4 (0.3-0.6)	5 (4-6)	4.6 (3.5-6.3)	0.4 (0.3-0.6)
	100%	15 (11-21)	10.4 (8-14.5)	0.9 (0.7-1.3)	10 (7-13)	9.7 (7.4-13.7)	0.9 (0.7-1.2)
Latvia							
	20%	7 (5-9)	1.7 (1.4-2.2)	0.2 (0.2-0.3)	4 (3-5)	1.6 (1.3-2.0)	0.2 (0.2-0.3)
	50%	17 (14-22)	4.4 (3.7-5.5)	0.6 (0.5-0.8)	10 (8-12)	4.0 (3.3-5.2)	0.6 (0.5-0.8)
	100%	35 (28-45)	9.0 (7.4-11.4)	1.2 (1.0-1.6)	20 (16-26)	8.3 (6.7-10.8)	1.2 (1.0-1.6)
Lithuania							
	20%	11 (9-14)	1.6 (1.4-2.0)	0.3 (0.2-0.4)	6 (5-8)	1.5 (1.2-1.8)	0.3 (0.2-0.4)
	50%	28 (23-35)	4.2 (3.5-5.1)	0.7 (0.6-0.9)	16 (13-20)	3.7 (3.1-4.7)	0.7 (0.6-0.9)
	100%	57 (47-73)	8.5 (7.3-10.6)	1.5 (1.2-1.9)	33 (27-43)	7.7 (6.4-9.9)	1.5 (1.2-1.9)
Luxembourg							
	20%	1 (1-1)	0.6 (0.5-0.7)	0.1 (0.1-0.1)	0 (0-0)	0.5 (0.5-0.6)	0.1 (0.1-0.1)
	50%	2 (2-2)	1.4 (1.2-1.6)	0.2 (0.2-0.3)	1 (1-1)	1.4 (1.1-1.6)	0.2 (0.2-0.3)
	100%	4 (3-5)	2.8 (2.3-3.3)	0.4 (0.3-0.5)	1 (1-2)	2.7 (2.3-3.3)	0.4 (0.3-0.5)
Malta							
	20%	1 (1-1)	1.0 (0.8-1.2)	0.1 (0.1-0.1)	0 (0-0)	1.0 (0.8-1.1)	0.1 (0.1-0.1)
	50%	2 (1-2)	2.5 (2.1-2.9)	0.2 (0.2-0.3)	1 (1-1)	2.4 (2.1-2.9)	0.2 (0.2-0.3)
	100%	3 (3-4)	5.0 (4.3-5.9)	0.4 (0.4-0.5)	1 (1-2)	4.9 (4.2-5.8)	0.4 (0.4-0.5)
Moldova							
	20%	7 (4-8)	1.4 (0.9-1.9)	0.2 (0.1-0.2)	4 (2-5)	1.4 (0.8-1.8)	0.2 (0.1-0.2)
	50%	17 (9-20)	3.6 (2.2-4.6)	0.5 (0.2-0.5)	11 (5-13)	3.5 (2.0-4.5)	0.5 (0.2-0.6)
	100%	35 (18-41)	7.4 (4.5-9.3)	0.9 (0.5-1.1)	22 (11-26)	7.1 (4.1-9.1)	1.0 (0.5-1.2)
Montenegro							
	20%	1 (1-2)	1.4 (1.1-1.7)	0.1 (0.1-0.2)	1 (0-1)	1.4 (1.0-1.7)	0.1 (0.1-0.2)
	50%	3 (2-4)	3.6 (2.7-4.3)	0.4 (0.3-0.4)	2 (1-2)	3.4 (2.6-4.2)	0.4 (0.3-0.4)
	100%	7 (5-8)	7.2 (5.5-8.7)	0.7 (0.5-0.9)	3 (2-4)	7.0 (5.3-8.5)	0.7 (0.5-0.9)

Netherlands						
20%	49 (40-60)	1.1 (1.0-1.3)	0.1 (0.1-0.1)	18 (14-22)	1.1 (1.0-1.3)	0.1 (0.1-0.1)
50%	124 (101-151)	2.9 (2.5-3.3)	0.3 (0.3-0.4)	44 (36-54)	2.8 (2.4-3.3)	0.3 (0.2-0.4)
100%	249 (204-304)	5.8 (5.1-6.7)	0.6 (0.5-0.7)	89 (72-110)	5.7 (4.9-6.6)	0.6 (0.5-0.7)
North Macedonia						
20%	2 (1-2)	1.1 (0.8-1.2)	0.1 (0.0-0.1)	1 (1-1)	1.1 (0.8-1.2)	0.1 (0.0-0.1)
50%	4 (3-5)	2.7 (2.0-3.1)	0.1 (0.1-0.2)	2 (2-3)	2.7 (2.0-3.1)	0.1 (0.1-0.2)
100%	8 (6-10)	5.4 (4.0-6.2)	0.3 (0.2-0.3)	5 (3-6)	5.4 (3.9-6.2)	0.3 (0.2-0.4)
Norway						
20%	32 (24-39)	4.6 (3.8-5.4)	0.4 (0.3-0.5)	12 (9-15)	4.7 (3.8-5.5)	0.4 (0.3-0.4)
50%	80 (60-99)	11.7 (9.7-13.7)	0.9 (0.7-1.2)	30 (21-37)	11.7 (9.7-13.8)	0.9 (0.6-1.1)
100%	162 (120-202)	23.7 (19.8-27.6)	1.9 (1.4-2.3)	60 (43-76)	23.8 (19.7-27.9)	1.8 (1.3-2.3)
Poland						
20%	135 (108-171)	1.7 (1.4-2.1)	0.3 (0.2-0.3)	81 (65-106)	1.6 (1.3-2.1)	0.2 (0.2-0.3)
50%	342 (274-435)	4.2 (3.5-5.3)	0.6 (0.5-0.8)	206 (164-269)	4.1 (3.4-5.2)	0.6 (0.5-0.8)
100%	700 (559-895)	8.7 (7.2-10.9)	1.3 (1.1-1.7)	422 (337-555)	8.4 (6.9-10.8)	1.3 (1.0-1.7)
Portugal						
20%	32 (27-40)	0.9 (0.8-1.1)	0.1 (0.1-0.2)	14 (11-17)	0.9 (0.7-1.0)	0.1 (0.1-0.2)
50%	82 (67-100)	2.3 (1.9-2.7)	0.4 (0.3-0.5)	36 (29-44)	2.2 (1.8-2.6)	0.4 (0.3-0.4)
100%	166 (137-204)	4.6 (3.9-5.5)	0.8 (0.6-0.9)	73 (59-90)	4.4 (3.7-5.4)	0.7 (0.6-0.9)
Romania						
20%	60 (46-76)	1.1 (0.9-1.5)	0.2 (0.2-0.3)	34 (25-42)	1.1 (0.8-1.4)	0.2 (0.2-0.3)
50%	153 (116-193)	2.9 (2.2-3.7)	0.5 (0.4-0.7)	85 (64-107)	2.8 (2.1-3.6)	0.5 (0.4-0.7)
100%	311 (236-395)	5.9 (4.5-7.6)	1.1 (0.8-1.4)	173 (130-219)	5.6 (4.2-7.4)	1.1 (0.8-1.4)
Russia						
20%	276 (213-354)	1.1 (0.8-1.4)	0.2 (0.1-0.2)	141 (110-181)	1.0 (0.8-1.3)	0.2 (0.1-0.2)
50%	696 (537-894)	2.7 (2.1-3.4)	0.4 (0.3-0.5)	356 (277-459)	2.5 (1.9-3.3)	0.4 (0.3-0.5)
100%	1,414 (1,090-1,819)	5.4 (4.3-7.0)	0.8 (0.6-1.0)	727 (561-938)	5.0 (3.9-6.7)	0.8 (0.6-1.0)
Serbia						
20%	17 (13-21)	0.9 (0.7-1.1)	0.1 (0.1-0.1)	9 (7-11)	0.8 (0.7-1.1)	0.1 (0.1-0.1)
50%	42 (34-53)	2.2 (1.8-2.7)	0.3 (0.2-0.3)	22 (17-28)	2.1 (1.7-2.7)	0.3 (0.2-0.3)
100%	85 (68-107)	4.3 (3.6-5.4)	0.5 (0.4-0.7)	44 (35-56)	4.2 (3.4-5.4)	0.5 (0.4-0.6)
Slovakia						
20%	21 (17-27)	1.4 (1.1-1.7)	0.2 (0.2-0.3)	10 (8-13)	1.3 (1.0-1.6)	0.2 (0.2-0.3)
50%	54 (43-70)	3.4 (2.9-4.3)	0.5 (0.4-0.7)	26 (21-34)	3.2 (2.6-4.1)	0.6 (0.4-0.7)
100%	109 (87-142)	7.0 (5.8-8.9)	1.1 (0.9-1.4)	54 (43-70)	6.6 (5.4-8.5)	1.1 (0.9-1.5)
Slovenia						
20%	6 (5-7)	1.1 (0.9-1.2)	0.2 (0.1-0.2)	3 (2-3)	1.0 (0.9-1.2)	0.1 (0.1-0.2)
50%	15 (12-18)	2.7 (2.3-3.1)	0.4 (0.3-0.5)	7 (6-9)	2.6 (2.2-3.1)	0.4 (0.3-0.5)
100%	30 (25-37)	5.4 (4.6-6.4)	0.8 (0.7-1.0)	14 (11-18)	5.3 (4.5-6.4)	0.8 (0.6-0.9)
Spain						
20%	84 (69-104)	0.6 (0.5-0.8)	0.1 (0.1-0.1)	31 (25-39)	0.6 (0.5-0.8)	0.1 (0.1-0.1)
50%	211 (173-260)	1.6 (1.3-1.9)	0.2 (0.2-0.3)	79 (64-99)	1.6 (1.3-1.9)	0.2 (0.2-0.3)

	100%	425 (349-525)	3.2 (2.7-3.8)	0.4 (0.4-0.5)	159 (128-199)	3.2 (2.7-3.9)	0.4 (0.3-0.5)
Sweden							
	20%	26 (20-32)	1.9 (1.5-2.2)	0.2 (0.1-0.2)	10 (8-13)	1.8 (1.5-2.2)	0.1 (0.1-0.2)
	50%	64 (50-79)	4.7 (3.9-5.5)	0.4 (0.3-0.5)	25 (19-33)	4.6 (3.8-5.5)	0.4 (0.3-0.5)
	100%	130 (101-160)	9.4 (7.8-11.0)	0.8 (0.6-0.9)	51 (39-66)	9.3 (7.6-11.1)	0.8 (0.6-1.0)
Switzerland							
	20%	16 (13-20)	0.9 (0.7-1.0)	0.1 (0.1-0.1)	6 (5-7)	0.8 (0.7-1.0)	0.1 (0.1-0.1)
	50%	41 (32-50)	2.2 (1.8-2.5)	0.3 (0.2-0.3)	15 (12-19)	2.1 (1.8-2.5)	0.3 (0.2-0.3)
	100%	82 (65-100)	4.4 (3.7-5.1)	0.6 (0.4-0.7)	31 (24-38)	4.2 (3.6-5.0)	0.6 (0.4-0.7)
Tajikistan							
	20%	0 (0-1)	2.3 (1.8-2.6)	0.0 (0.0-0.0)	0 (0-1)	2.3 (1.7-2.6)	0.0 (0.0-0.0)
	50%	1 (1-2)	5.8 (4.4-6.5)	0.1 (0.0-0.1)	1 (0-1)	5.8 (4.4-6.5)	0.1 (0.0-0.1)
	100%	2 (1-3)	11.5 (8.8-12.9)	0.1 (0.1-0.2)	2 (1-3)	11.6 (8.7-12.9)	0.1 (0.1-0.2)
Turkmenistan							
	20%	14 (12-18)	1.9 (1.6-2.3)	0.0 (0.0-0.0)	7 (6-9)	1.8 (1.5-2.2)	0.0 (0.0-0.0)
	50%	36 (29-47)	4.8 (4.1-5.8)	0.1 (0.1-0.1)	18 (15-24)	4.6 (3.9-5.6)	0.1 (0.1-0.1)
	100%	75 (61-97)	9.8 (8.3-12)	0.2 (0.1-0.2)	38 (31-49)	9.4 (8.0-11.6)	0.2 (0.1-0.2)
Turkey							
	20%	2 (2-3)	2.0 (1.6-2.6)	0.1 (0.1-0.1)	2 (1-2)	2.0 (1.5-2.5)	0.1 (0.1-0.1)
	50%	6 (4-7)	5.2 (4.0-6.4)	0.3 (0.2-0.4)	4 (3-5)	5.1 (3.8-6.3)	0.3 (0.2-0.4)
	100%	11 (9-14)	10.6 (8.2-13.1)	0.6 (0.5-0.7)	8 (6-10)	10.3 (7.9-12.9)	0.6 (0.5-0.8)
Ukraine							
	20%	81 (58-98)	1.0 (0.7-1.3)	0.1 (0.1-0.2)	48 (34-59)	0.9 (0.6-1.2)	0.1 (0.1-0.2)
	50%	204 (147-248)	2.4 (1.7-3.2)	0.4 (0.3-0.5)	122 (87-150)	2.3 (1.6-3.1)	0.4 (0.3-0.5)
	100%	413 (297-505)	4.9 (3.5-6.4)	0.8 (0.6-0.9)	248 (176-304)	4.7 (3.3-6.3)	0.8 (0.5-0.9)
United Kingdom							
	20%	353 (291-438)	2.1 (1.8-2.6)	0.3 (0.2-0.3)	132 (108-166)	2.1 (1.8-2.6)	0.3 (0.2-0.3)
	50%	891 (736-1,107)	5.4 (4.6-6.5)	0.7 (0.6-0.9)	334 (274-421)	5.3 (4.6-6.6)	0.6 (0.5-0.8)
	100%	1,813 (1,496-2,262)	10.9 (9.4-13.3)	1.4 (1.2-1.7)	681 (558-864)	10.9 (9.3-13.6)	1.3 (1.1-1.7)
Uzbekistan							
	20%	1 (0-1)	0.1 (0.1-0.2)	0.0 (0.0-0.0)	0 (0-0)	0.1 (0.1-0.2)	0.0 (0.0-0.0)
	50%	1 (1-2)	0.3 (0.3-0.4)	0.0 (0.0-0.0)	1 (1-1)	0.3 (0.3-0.4)	0.0 (0.0-0.0)
	100%	3 (2-3)	0.7 (0.5-0.9)	0.0 (0.0-0.0)	2 (1-2)	0.7 (0.5-0.8)	0.0 (0.0-0.0)

† Tax increase on national, beverage-specific alcohol excise duties on beer, wine, and spirits.

‡ The numbers of avoided incident cancers and avoided deaths due to cancers have been rounded up; for this reason, the sum of these columns is not exactly equal to the results found in Table 2 of the main article.

§ Alcohol-attributable cancers refer to those cancer cases or deaths estimated to have been caused by alcohol.

¶ Alcohol-related cancers refer to all new cases or deaths for cancers whose risk is increased by alcohol consumption.

Supplementary Table S5. Sensitivity analysis 1: Avoidable new alcohol-attributable cancer cases and deaths for applying the same tax rate as Finland, entire WHO European Region.

Cancer site	Cancer incidence			Cancer deaths		
	Total number of avoided cancers†	% alcohol-attributable cancers‡	% alcohol-related cancers§	Total number of avoided cancers†	% alcohol-attributable cancers‡	% alcohol-related cancers§
Breast	3,057 (2,435-3,690)	7.5 (7.1-7.9)	0.6 (0.5-0.7)	894 (709-1,085)	7.5 (7.1-8.0)	0.5 (0.4-0.6)
Colorectum	3,061 (2,206-4,010)	5.2 (4.9-5.6)	0.5 (0.4-0.7)	1,466 (1,051-1,919)	5.1 (4.9-5.5)	0.5 (0.3-0.6)
Larynx	553 (450-654)	3.8 (3.5-4.4)	1.1 (0.9-1.3)	267 (216-316)	3.8 (3.4-4.4)	1.1 (0.9-1.3)
Lip and oral cavity	1,061 (969-1,173)	3.6 (3.4-4.0)	1.6 (1.4-1.7)	462 (418-513)	3.4 (3.1-3.8)	1.5 (1.3-1.6)
Liver	305 (93-531)	5.2 (4.9-5.6)	0.4 (0.1-0.8)	274 (83-480)	5.2 (4.9-5.6)	0.4 (0.1-0.8)
Oesophagus¶	431 (394-470)	4.2 (3.9-4.6)	1.1 (1.0-1.1)	382 (350-414)	4.1 (3.8-4.5)	1.0 (0.9-1.1)
Pharynx	657 (599-736)	3.1 (2.9-3.6)	1.6 (1.4-1.7)	308 (279-341)	3.2 (2.9-3.6)	1.6 (1.5-1.8)
Total	9,123 (7,975-10,389)	5.0 (4.8-5.4)	0.7 (0.6-0.7)	4,051 (3,525-4,633)	4.8 (4.5-5.1)	0.6 (0.5-0.7)

† The numbers of avoided incident cancers and avoided deaths due to cancers have been rounded up; for this reason, the sum of these columns is not exactly equal to the total values shown in the main article.

‡ Alcohol-attributable cancers refer to those cancer cases or deaths estimated to have been caused by alcohol.

§ Alcohol-related cancers refer to all new cases or deaths for cancers whose risk is increased by alcohol consumption.

¶ In oesophagus cancer, only cases of squamous cell carcinoma were considered.

Supplementary Table S6. Sensitivity analysis 1: Avoidable new alcohol-attributable cancer cases and deaths for applying the same tax rate as Finland, by countries of the WHO European Region.

Country	Cancer incidence			Cancer deaths		
	Total number of avoided cancers [†]	% alcohol-attributable cancers [‡]	% alcohol-related cancers [§]	Total number of avoided cancers [†]	% alcohol-attributable cancers [‡]	% alcohol-related cancers [§]
Albania	12 (10-15)	7.8 (6.4-9.4)	0.6 (0.5-0.8)	7 (6-9)	7.6 (6.1-9.4)	0.6 (0.5-0.8)
Armenia	-3 (-5--1)	-2.4 (-3.6--1.2)	-0.1 (-0.2--0.1)	-2 (-3--1)	-2.4 (-3.5--1.2)	-0.1 (-0.2--0.1)
Austria	161 (130-195)	7.6 (6.4-9.0)	1.1 (0.9-1.4)	67 (54-81)	7.3 (6.1-8.6)	1.1 (0.9-1.3)
Azerbaijan	12 (9-15)	8.8 (7.2-10.5)	0.2 (0.2-0.3)	8 (6-11)	8.8 (7.2-10.5)	0.2 (0.2-0.3)
Belarus	70 (54-88)	3.0 (2.5-3.8)	0.6 (0.5-0.7)	34 (27-44)	2.7 (2.2-3.5)	0.6 (0.5-0.7)
Belgium	165 (131-206)	5.6 (4.6-6.7)	0.7 (0.6-0.9)	67 (54-84)	5.5 (4.5-6.6)	0.7 (0.6-0.9)
Bosnia and Herzegovina	29 (20-38)	9.7 (7.4-12.4)	0.6 (0.4-0.8)	18 (13-24)	9.6 (7.2-12.4)	0.6 (0.4-0.8)
Bulgaria	115 (94-142)	6.1 (5.1-7.4)	0.8 (0.7-1.0)	57 (46-71)	5.8 (4.9-7.1)	0.8 (0.7-1.0)
Croatia	78 (64-101)	5.9 (5.0-7.3)	0.9 (0.7-1.1)	38 (31-49)	5.5 (4.6-7.1)	0.9 (0.7-1.1)
Cyprus	20 (16-25)	9.3 (8.0-10.8)	1.1 (0.9-1.3)	6 (5-8)	8.7 (7.4-10.2)	1.0 (0.8-1.3)
Czechia	139 (109-179)	4.9 (4.0-6.1)	0.8 (0.6-1.0)	66 (51-86)	4.6 (3.8-5.9)	0.8 (0.6-1.0)
Denmark	104 (85-129)	6.9 (5.8-8.3)	0.9 (0.7-1.1)	42 (34-53)	6.9 (5.8-8.3)	0.8 (0.7-1.0)
Estonia	3 (2-4)	0.7 (0.6-0.9)	0.1 (0.1-0.2)	1 (1-2)	0.7 (0.6-0.8)	0.1 (0.1-0.1)
Finland	0 (0-0)	0.0 (0.0-0.0)	0.0 (0.0-0.0)	0 (0-0)	0.0 (0.0-0.0)	0.0 (0.0-0.0)
France	1,183 (967-1,441)	5.5 (4.7-6.4)	0.9 (0.7-1.1)	491 (404-598)	5.4 (4.6-6.3)	0.8 (0.7-1.0)
Georgia	32 (26-40)	7.9 (6.6-9.5)	0.8 (0.7-1.0)	20 (16-24)	7.5 (6.2-9.2)	0.9 (0.7-1.0)
Germany	1,694 (1,322-2,137)	6.6 (5.3-8.0)	0.9 (0.7-1.2)	708 (555-905)	6.4 (5.1-7.8)	0.9 (0.7-1.1)
Greece	57 (41-76)	2.8 (2.1-3.7)	0.3 (0.2-0.4)	25 (17-33)	2.8 (2.0-3.7)	0.3 (0.2-0.4)
Hungary	167 (136-212)	4.9 (4.1-6.1)	0.8 (0.7-1.1)	87 (71-113)	4.7 (3.9-6.0)	0.8 (0.7-1.1)
Iceland	0 (0-1)	1.3 (0.8-1.8)	0.1 (0.1-0.2)	0 (0-0)	1.3 (0.8-1.8)	0.1 (0.1-0.2)
Ireland	36 (28-47)	3.3 (2.7-4.0)	0.5 (0.4-0.6)	12 (10-16)	3.2 (2.5-3.9)	0.4 (0.3-0.6)
Israel	31 (25-39)	12.5 (10.7-14.3)	0.3 (0.3-0.4)	13 (10-17)	12.5 (10.7-14.3)	0.3 (0.3-0.4)
Italy	817 (669-995)	7.5 (6.4-8.6)	0.6 (0.5-0.7)	325 (263-397)	7.4 (6.3-8.5)	0.6 (0.5-0.8)
Kazakhstan	47 (39-57)	4.2 (3.5-5.2)	0.4 (0.3-0.5)	30 (25-36)	4.0 (3.3-5.0)	0.4 (0.4-0.5)
Kyrgyzstan	-5 (-7--4)	-3.4 (-4.8--2.5)	-0.3 (-0.4--0.2)	-3 (-4--2)	-3.1 (-4.5--2.3)	-0.3 (-0.4--0.2)
Latvia	5 (4-7)	1.4 (1.1-1.8)	0.2 (0.1-0.3)	3 (2-4)	1.3 (1.0-1.7)	0.2 (0.1-0.3)
Lithuania	4 (1-7)	0.6 (0.1-1.1)	0.1 (0.0-0.2)	2 (0-4)	0.5 (0.1-1.0)	0.1 (0.0-0.2)
Luxembourg	13 (11-16)	9.6 (8.2-11.2)	1.4 (1.2-1.7)	5 (4-6)	9.4 (8.1-11.1)	1.4 (1.1-1.7)
Malta	7 (6-8)	10.7 (9.2-12.2)	0.9 (0.8-1.1)	3 (2-3)	10.5 (9.1-12.1)	0.9 (0.8-1.2)
Moldova	32 (15-37)	6.7 (3.8-8.4)	0.9 (0.4-1.0)	20 (9-23)	6.4 (3.4-8.2)	0.9 (0.4-1.1)
Montenegro	5 (4-6)	5.4 (4.2-6.4)	0.5 (0.4-0.6)	3 (2-3)	5.2 (3.9-6.3)	0.6 (0.4-0.7)
Netherlands	299 (238-376)	7.0 (5.8-8.3)	0.7 (0.6-0.9)	107 (86-135)	6.8 (5.7-8.2)	0.7 (0.6-0.9)
North Macedonia	20 (13-24)	13.0 (10.0-15.0)	0.7 (0.5-0.8)	12 (8-15)	12.9 (9.7-14.9)	0.7 (0.5-0.9)
Norway	-49 (-61--37)	-7.2 (-8.4--5.8)	-0.6 (-0.7--0.4)	-18 (-23--13)	-7.2 (-8.6--5.8)	-0.5 (-0.7--0.4)
Poland	127 (72-190)	1.6 (0.9-2.3)	0.2 (0.1-0.4)	76 (43-115)	1.5 (0.9-2.2)	0.2 (0.1-0.3)
Portugal	156 (128-197)	4.3 (3.6-5.3)	0.7 (0.6-0.9)	68 (54-88)	4.1 (3.4-5.2)	0.7 (0.5-0.9)
Romania	256 (193-320)	4.8 (3.7-6.2)	0.9 (0.7-1.1)	143 (107-178)	4.6 (3.5-6.1)	0.9 (0.7-1.1)
Russia	906 (716-1,121)	3.5 (2.8-4.3)	0.5 (0.4-0.6)	465 (367-575)	3.2 (2.6-4.1)	0.5 (0.4-0.6)
Serbia	201 (158-257)	10.3 (8.4-12.9)	1.2 (1.0-1.6)	105 (82-135)	10.0 (8.0-12.9)	1.2 (1.0-1.6)
Slovakia	69 (55-90)	4.4 (3.6-5.7)	0.7 (0.6-0.9)	34 (27-45)	4.1 (3.3-5.5)	0.7 (0.6-0.9)
Slovenian	30 (24-38)	5.4 (4.5-6.6)	0.8 (0.7-1.0)	14 (11-18)	5.4 (4.4-6.5)	0.8 (0.6-1.0)
Spain	1,039 (831-1,323)	7.9 (6.5-9.7)	1.1 (0.9-1.4)	389 (305-499)	7.9 (6.5-9.8)	1.0 (0.8-1.3)
Sweden	83 (64-103)	6.0 (5.0-7.1)	0.5 (0.4-0.6)	33 (24-42)	5.9 (4.9-7.1)	0.5 (0.4-0.6)

Switzerland	164 (133-196)	8.7 (7.5-10.0)	1.1 (0.9-1.3)	62 (50-74)	8.5 (7.5-10.0)	1.1 (0.9-1.3)
Tajikistan	1 (1-2)	7.4 (5.4-8.4)	0.1 (0.0-0.1)	1 (1-2)	7.4 (5.4-8.4)	0.1 (0.0-0.1)
Turkmenistan	1 (0-1)	0.7 (0.3-1.1)	0.0 (0.0-0.1)	1 (0-1)	0.7 (0.3-1.1)	0.0 (0.0-0.1)
Turkey	-2 (-3--1)	-0.2 (-0.4--0.1)	0.0 (0.0-0.0)	-1 (-2-0)	-0.2 (-0.4--0.1)	0.0 (0.0-0.0)
Ukraine	427 (304-516)	5.0 (3.6-6.5)	0.8 (0.6-0.9)	256 (182-308)	4.9 (3.4-6.3)	0.8 (0.6-0.9)
United Kingdom	311 (215-428)	1.9 (1.3-2.5)	0.2 (0.2-0.3)	117 (81-161)	1.9 (1.3-2.5)	0.2 (0.2-0.3)
Uzbekistan	54 (42-67)	13.4 (10.8-16.5)	0.4 (0.3-0.6)	36 (28-46)	13.1 (10.4-16.4)	0.5 (0.4-0.6)

† The numbers of avoided incident cancers and avoided deaths due to cancers have been rounded up; for this reason, the sum of these columns is not exactly equal to the total values shown in the main article. In countries with higher alcohol excise taxes on beer, wine or spirits than in Finland, the numbers of avoidable new cancer cases and deaths may be lower than 0 if the relevant alcoholic beverages account for a relatively high share of per capita consumption (i.e., Armenia, Kyrgyzstan, Norway and Turkey).

‡ Alcohol-attributable cancers refer to those cancer cases or deaths estimated to have been caused by alcohol.

§ Alcohol-related cancers refer to all new cases or deaths for cancers whose risk is increased by alcohol consumption.

Supplementary Table S7. Sensitivity analysis 2: Avoidable new alcohol-attributable cancer cases and deaths for each tax increase scenario by cancer site and for the entire WHO European Region, applying a lag time of 20 years between alcohol exposure and cancer development and deaths.

Taxation increase scenario†	Cancer incidence			Cancer deaths		
	Total number of avoided cancers ‡	% alcohol-attributable cancers§	% alcohol-related cancers¶	Total number of avoided cancers deaths‡	% alcohol-attributable cancers§	% alcohol-related cancers§§
Breast						
20%	707 (562-849)	1.7 (1.6-1.8)	0.1 (0.1-0.2)	204 (163-245)	1.8 (1.7-1.9)	0.1 (0.1-0.1)
50%	1,769 (1,406-2,122)	4.3 (4.0-4.5)	0.3 (0.3-0.4)	510 (406-613)	4.4 (4.1-4.6)	0.3 (0.2-0.4)
100%	3,537 (2,813-4,244)	8.5 (8.1-9.1)	0.7 (0.5-0.8)	1,019 (813-1,225)	8.7 (8.3-9.3)	0.6 (0.5-0.7)
Colorectum						
20%	664 (446-858)	1.1 (1.1-1.2)	0.1 (0.1-0.1)	325 (216-421)	1.2 (1.1-1.2)	0.1 (0.1-0.1)
50%	1,676 (1,126-2,166)	2.8 (2.7-3.0)	0.3 (0.2-0.4)	820 (544-1064)	2.9 (2.7-3.1)	0.3 (0.2-0.3)
100%	3,405 (2,287-4,404)	5.7 (5.4-6.2)	0.6 (0.4-0.7)	1,667 (1,106-2,163)	5.9 (5.6-6.4)	0.5 (0.4-0.7)
Larynx						
20%	118 (96-138)	0.8 (0.8-1.0)	0.2 (0.2-0.3)	58 (47-69)	0.9 (0.8-1.0)	0.2 (0.2-0.3)
50%	299 (244-351)	2.1 (1.9-2.4)	0.6 (0.5-0.7)	148 (120-175)	2.2 (2.0-2.5)	0.6 (0.5-0.7)
100%	614 (501-723)	4.4 (3.9-5.0)	1.3 (1.0-1.5)	304 (246-361)	4.6 (4.0-5.2)	1.3 (1.0-1.5)
Lip and oral cavity						
20%	232 (207-255)	0.8 (0.7-0.9)	0.3 (0.3-0.4)	107 (94-118)	0.8 (0.7-0.9)	0.3 (0.3-0.4)
50%	590 (525-649)	2.0 (1.9-2.3)	0.9 (0.8-1.0)	272 (239-301)	2.1 (1.9-2.3)	0.9 (0.8-1.0)
100%	1,212 (1,077-1,335)	4.2 (3.9-4.7)	1.8 (1.6-2.0)	559 (491-620)	4.3 (3.9-4.8)	1.8 (1.6-2.0)
Liver						
20%	60 (17-102)	1.0 (0.9-1.1)	0.1 (0.0-0.1)	54 (16-91)	1.0 (1.0-1.1)	0.1 (0.0-0.1)
50%	152 (44-259)	2.5 (2.4-2.7)	0.2 (0.1-0.4)	136 (40-230)	2.6 (2.4-2.8)	0.2 (0.1-0.4)
100%	309 (89-528)	5.1 (4.8-5.5)	0.5 (0.1-0.8)	277 (80-469)	5.2 (4.9-5.6)	0.4 (0.1-0.7)
Oesophagus¶						
20%	94 (86-102)	0.9 (0.9-1.0)	0.2 (0.2-0.2)	86 (79-94)	1.0 (0.9-1.1)	0.2 (0.2-0.3)
50%	238 (217-260)	2.4 (2.2-2.6)	0.6 (0.5-0.6)	219 (199-239)	2.4 (2.2-2.7)	0.6 (0.5-0.6)
100%	487 (444-534)	4.8 (4.5-5.3)	1.2 (1.1-1.3)	447 (407-490)	5.0 (4.6-5.5)	1.2 (1.1-1.3)
Pharynx						
20%	141 (126-156)	0.7 (0.6-0.8)	0.3 (0.3-0.4)	65 (58-72)	0.7 (0.6-0.8)	0.3 (0.3-0.4)
50%	360 (321-399)	1.7 (1.6-2.0)	0.9 (0.8-1.0)	166 (147-183)	1.8 (1.6-2.0)	0.9 (0.8-0.9)
100%	742 (662-827)	3.6 (3.2-4.1)	1.8 (1.6-2.0)	343 (303-377)	3.7 (3.3-4.1)	1.8 (1.6-2.0)
Total						
20%	2,017 (1,727-2,284)	1.1 (1.1-1.2)	0.1 (0.1-0.2)	900 (762-1,024)	1.1 (1.0-1.2)	0.1 (0.1-0.2)
50%	5,084 (4,349-5,761)	2.8 (2.6-3.0)	0.4 (0.3-0.4)	2,271 (1,923-2,588)	2.7 (2.6-2.9)	0.3 (0.3-0.4)
100%	10,308 (8,810-11,676)	5.7 (5.4-6.1)	0.7 (0.6-0.8)	4,616 (3,911-5,264)	5.6 (5.2-6.0)	0.7 (0.6-0.8)

† The numbers of avoided incident cancers and avoided deaths due to cancers have been rounded up; for this reason, the sum of these columns is not exactly equal to the total values shown in the main article.

‡ Alcohol-attributable cancers refer to those cancer cases or deaths estimated to have been caused by alcohol.

§ Alcohol-related cancers refer to all new cases or deaths for cancers whose risk is increased by alcohol consumption.

¶ In oesophagus cancer, only cases of squamous cell carcinoma were considered.