How many lives could be saved in the Baltic states with a minimum level of alcohol tax?

Briefing note on the launch of the NCD Advisory Council Signature Initiative on alcohol tax

In response to the pressing need to reduce non-communicable diseases (NCDs) and their risk factors across the WHO European Region, the WHO Regional Director for Europe has established the Advisory Council on Innovation for Noncommunicable Diseases (NCD Advisory Council). It is aimed at gathering the best expertise on the topic and inspiring Member States to reach the NCD-related Sustainable Development Goals. Six Signature Initiatives were developed by specific working groups of the NCD Advisory Council on the following topics: alcohol, cardiovascular disease, childhood obesity, data and digital health, digital marketing and greener cities.

Although alcohol taxation is one of the most costeffective measures to reduce alcohol consumption and harms, it is also the least implemented policy option in the WHO European Region. While tobacco taxes are clearly seen as health taxes to be levied on products that have negative public health impacts and clear guidance exist that tax should represent at least 75% of the retail price of the most popular brand of cigarettes, no such guidance and thresholds exist for alcoholic beverages.

Compared to tobacco, the proportion of tax in the final consumer prices of alcoholic beverages is several times lower in the WHO European Region and the three Baltic countries (see Table 1).

Table 1: Proportion of tax of final retail price of beer, wine and spirits (off-premise) and the most common cigarette brands in 2020, in %

	Beer	Wine	Spirits	Tobacco
Estonia	33.8%	13.7%	36.2%	87.6%
Latvia	26.1%	11.8%	39.1%	79.9%
Lithuania	20.0%	18.9%	45.8%	74.0%
WHO European Region	14.0%	5.7%	31.3%	76.6%

Alcohol prices across the WHO European Region can be compared by converting the local prices of the different alcoholic beverages into international dollars. Currently, prices for alcoholic beverages are generally lower in the three Baltic countries than in the entire Region, with beer being especially cheap and the lowest alcohol prices being observed for Latvia (Table 2).

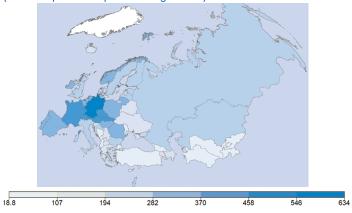
Table 2: Average prices of alcoholic beverages in international dollars per litre.

	Beer	Wine	Spirits
Estonia	3.45	19.80	38.14
Latvia	2.87	17.34	32.30
Lithuania	3.91	19.11	35.20
WHO European Region	6.02	22.10	38.14

Affordability of alcoholic beverages is one of the key factors which affects alcohol consumption. It is determined by consumers' incomes, the price of the alcoholic beverages relative to other products as well as rates of inflation. Alcohol affordability can be measured by the price of alcoholic beverages and the gross domestic product based on purchasing power parity (GDP PPP) per capita, i.e. the purchasing power parity value of all final goods and services produced within a country in a given year, divided by the average population for the same year.

Affordability of alcoholic beverages, defined as GDP PPP per capita divided by the price of 100 g ethanol, varies strongly in the WHO European Region with alcohol being least affordable in Central Asia and most affordable in Western Europe (see Figure 1).

Figure 1: Affordability of alcoholic beverages in the WHO European Region (GDP PPP per month/price of 100 g ethanol).



Given this enormous untapped potential of alcohol tax to benefit public health, the alcohol signature initiative of the NCD Advisory Council focuses on supporting the Member States to increase alcohol taxation and facilitate multistakeholder dialogue between the finance



and health sector to implement the needed measures. A first modelling study¹ was carried out by the working group of the signature initiative to inform decision-makers about the current level of alcohol taxation in the WHO European Region and the potential health gains that can be achieved through increasing the level of tax, similar to existing minimum level for tobacco taxes.

The model estimates the total number of deaths and the proportion of all alcohol-attributable deaths that could be averted if countries of the WHO European Region would introduce a minimum tax level of 15% of the retail prices of alcoholic beverages with the assumption that the average price of one unit of

alcohol would be the same irrespective of beverage type (equalisation). For the model, information on alcohol taxes and prices was available for the year 2020, while mortality and population data were taken from the year 2019.

In total, 132,906 (95% confidence interval: 124,691-151,674) deaths could be averted in one year in the WHO European Region by implementing the 15% minimum tax share with the equalisation principle. Implementation would save 543 lives each in Latvia and Lithuania and 275 lives in Estonia, mostly by averting deaths from the most common diseases like cardiovascular diseases that are impacted by alcohol (Table 3).

Table 3: Estimated number of deaths averted by introducing a minimum alcohol taxation share of 15% plus equalisation.

	Infectious Diseases	Cancers	Cardiovascular Diseases	Gastro- intestinal Diseases	Injuries	Other including alcohol use disorder	Total Deaths Averted
Estonia	6	30	97	22	33	87	275
Latvia	13	51	249	34	79	116	543
Lithuania	21	67	133	67	123	132	543
WHO European Region	4,359	13,143	48,227	17,735	18,302	31,142	132,906

About 24.2% (95% confidence interval: 22.3-27.1) of all alcohol-attributable deaths could be averted in the Region after implementation (Table 4).

Out of the three Baltic countries, the largest decreases in alcohol-attributable deaths are estimated for Latvia.

Table 4: Estimated proportion of deaths averted among all alcohol-attributable deaths by introducing a minimum alcohol taxation share of 15% plus equalisation

	Infectious Diseases	Cancers	Cardiovascular Diseases	Gastro- intestinal Diseases	Injuries	Other including alcohol use disorder	Total Deaths Averted
Estonia	18.7%	16.0%	28.7%	10.3%	16.5%	38.6%	23%
Latvia	19.8%	21.9%	37.1%	10.8%	18%	39.1%	26.8%
Lithuania	17.2%	15.2%	33.7%	10.3%	16.2%	39.5%	20.1%
WHO European Region	18.2%	14.8%	38.7%	13.5%	16.6%	44.1%	24.2%

Establishing a minimum recommended level of tax in the final consumer price of alcohol, following the example of tobacco, would bring health benefits and should be considered as a policy option by countries. The full potential of taxation to reduce alcohol use and its burden is far from being realized in the WHO European Region and there is ample room for improvement in the three Baltic states.

Neufeld, M., Rovira, P., Ferreira-Borges, C., Kilian, C., Sassi, F., Veryga, A., & Rehm, J. Impact of Introducing a Minimum Alcohol Tax Share in Retail Prices on Alcohol-Attributable Mortality in the WHO European Region: A Modelling Study. Lancet Regional Health-Europe, 100325, In Press. DOI: 10.1016/j.lanepe.2022.100325 https://www.thelancet.com/journals/lanepe/article/PIIS2666-7762(22)00018-7/fulltext