

Using fiscal policies to address NCD risk factors

Rosa Sandoval, MPA
Regional advisor, Tobacco Control and Economics of NCDs
PAHO/WHO

PAHO



Pan American
Health
Organization



World Health
Organization
REGIONAL OFFICE FOR THE Americas

Political commitments on health taxes

TOBACCO

ALCOHOL

SUGAR-SWEETENED BEVERAGES

Global



WHO Framework Convention on Tobacco Control (WHO FCTC) Art 6



WHO Global Strategy to Reduce the Harmful use of Alcohol

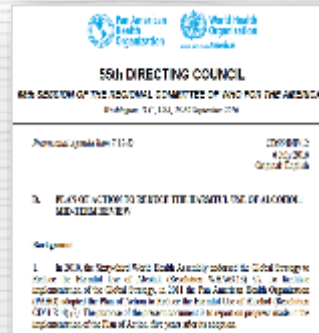


UN Decade of Action on Nutrition 2016-2025

Regional



PAHO Strategy and Plan of Action to Strengthen Tobacco Control in the Region of the Americas 2018-2022

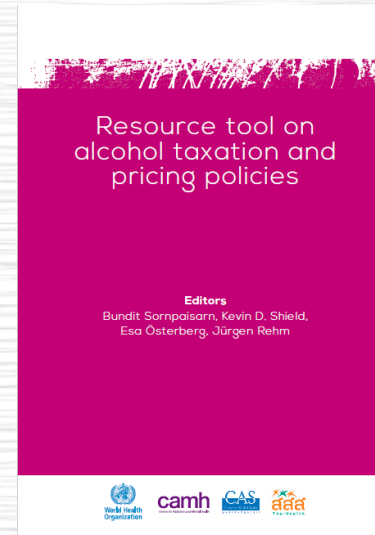
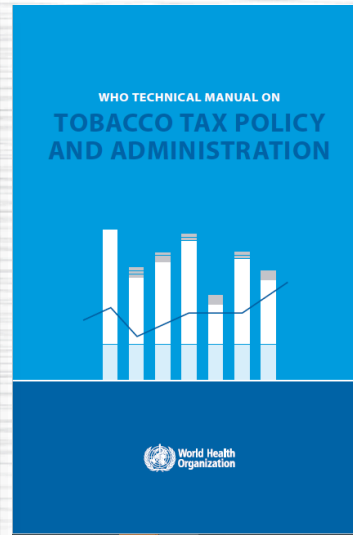
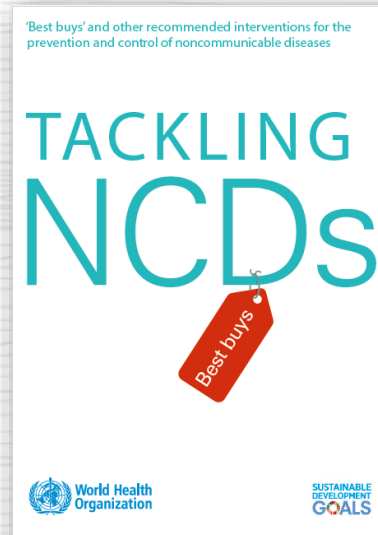
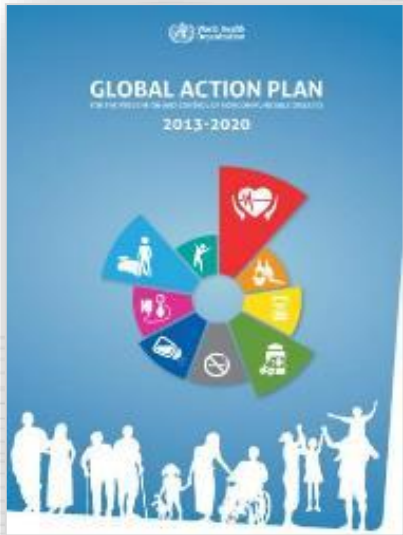


PAHO Plan of Action to Reduce the Harmful Use of Alcohol



PAHO Plan of Action for the Prevention of Obesity in Children and Adolescents

Policy Recommendations



The policy solutions

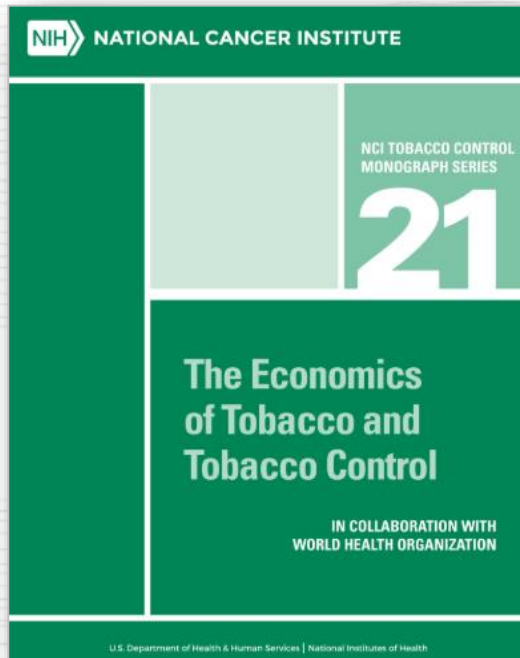
Many of the NCD Best-buys* are of regulatory nature and are *outside* (partially or totally) the direct competence of the health sector



* The 16 interventions considered by WHO to be the most cost-effective and feasible for implementation were those with an average cost-effectiveness ratio of \leq I\$100/DALY averted in low- and lower middle-income countries: <http://www.who.int/ncds/management/best-buys/en/>

Do these taxes work? (reduce consumption?)

U.S. National Cancer Institute and WHO, 2016



“Significantly increasing the excise tax and price of tobacco products is the single most consistently effective tool for reducing tobacco use. In HICs, price elasticities of demand range from –0.2 to –0.6, clustering around –0.4. In LMICs, –0.2 to –0.8, clustering around –0.5.”

Systematic review of price/income elasticity in Latin American and the Caribbean (2015)

- Price elasticity:
-0.4 (long run)
-0.3 (short run)
- Income elasticity: +0.5



Guindon GE, Paraje GR, Chaloupka FJ. The impact of prices and taxes on the use of tobacco products in Latin America and the Caribbean. *American journal of public health.* 2015 Mar

ALCOHOL

Meta-analyses of price elasticity of demand and health outcomes

TABLE 1. PRICE ELASTICITY OF ALCOHOL PRODUCTION**

Alcoholic beverage	% change in alcohol production per % change in alcohol taxation or price*		
	High-income countries		Low- and middle-income countries
	Wagenaar et al., 2009	Elder et al., 2010	Sornpaisarn et al., 2013
Beer	-0.46%	-0.50%	-0.50%
Wine	-0.69%	-0.64%	-0.79%*
Spirits	-0.80%	-0.79%	-0.79%*
All alcoholic beverages (i.e., total)	-0.51%	-0.77%	-0.64%

* Based on the elasticity of wine and spirits combined

** The table shows results related to alcohol production but the same is valid for alcohol consumption.

TABLE 2. PRICE ELASTICITY OF VARIOUS HEALTH OUTCOMES IN HIGH-INCOME COUNTRIES

Outcome	% change in outcome per % change in alcohol taxation or price	
	Wagenaar et al., 2009	Elder et al., 2010
Alcohol dependence	-1.49%	
Alcohol-related disease and injury outcomes	-0.347%	
Death from liver cirrhosis		Inverse relationship between price and cirrhosis deaths, but there are substantial differences in the estimated strength of this relationship
Motor vehicle crashes		-1.20%
Alcohol-impaired driving		-0.50% to -0.81%
Suicide		-0.048%
Violence	-0.022%	-0.13% for rape -0.12% for any violence towards children
Sexually transmitted diseases	-0.055%	
Crimes and related behaviors	-0.014%	-0.09% for robbery

Wagenaar et al. Effects of beverage alcohol price and tax levels on drinking: a meta-analysis of 1003 estimates from 112 studies. *Addiction*. 2009

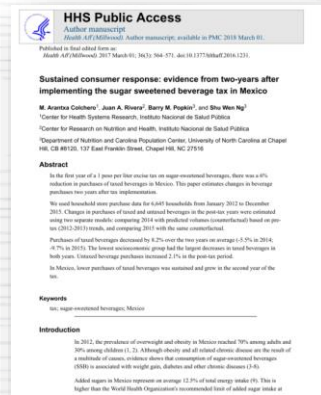
Elder RW et al. The effectiveness of tax policy interventions for reducing excessive alcohol consumption and related harm. *Am J Prev Med*. 2010

Sornpaisarn B et al. Elasticity of alcohol consumption, alcohol-related harms and drinking initiation in low and middle-income countries: a systematic review and meta-analysis. *Int J Drug Alcohol Res*. 2013

SUGAR-SWEETENED BEVERAGES

Impact analyses of excise taxes on SSBs in Mexico, Chile and Barbados

MEX. Specific excise of 1 peso/liter, 2014



2 year after implementation evaluation: on average purchases of taxed beverages **decreased** by 7.6%. Untaxed beverage purchases increased (e.g. water).

CHL. Ad valorem excise, tiered structure, 2014



1 year after implementation evaluation: **Decrease** of 3.4% of household monthly purchases of high-sugar content beverages.

BRB. Ad valorem excise of 10%, 2015



1 year after implementation evaluation: **Decrease** of 4.3% in sales of SSBs.

Colchero, A. et al., In Mexico, evidence of sustained consumer response: evidence from two-years after implementing the SSB tax in Mexico. Health Affairs. 2017
 Caro, J.C. et al., Chile's 2014 SSB tax and changes in prices and purchases of SSBs: An observational study in an urban environment. PLoS medicine. 2018
 Alvarado, M. et al., Trends in beverage prices following the introduction of a tax on SSBs in Barbados. Preventive medicine. 2017

**Do they generate additional
revenues?**

Simulating the health and economic impact of health taxes

Global simulation of the impact of a 20% increase in the price of tobacco, alcohol and sugar-sweetened beverages over 50 years for 30–79 years old on health outcomes and tax revenue (2020)

	YLG – Global (millions)	Additional tax revenue – Global (US\$ billions)	Increase in tax revenue as a %GDP – UMICs	Increase in tax revenue as a %GDP – LMICs
Tobacco	161	1,987	+0.15%	+0.17%
Alcohol	227	9,428	+0.98%	+0.77%
SSBs	24	724	+0.03%	+0.17%

Original research

BMJ Global Health

The potential global gains in health and revenue from increased taxation of tobacco, alcohol and sugar-sweetened beverages: a modelling analysis

Amit Summan,¹ Nicholas Stacey,² Johanna Birckmayer,³ Evan Blecher,⁴ Frank J Chaloupka,⁴ Ramanan Laxminarayan^{1,5*}

ABSTRACT
Introduction: Globally, a growing burden of disability and mortality is attributable to lifestyle behaviours, and in particular to the consumption of tobacco, alcohol and sugar-sweetened beverages (SSBs). In low-income and middle-income countries, the increased disease burden falls on already overloaded and resource-constrained health-care systems. Fiscal policies, specifically taxation, can lower consumption of tobacco, alcohol and SSBs while raising government revenues.
Methods: We simulated the health and economic effects

Key questions
What is already known?
 ► Fiscal policy tools remain underused in reducing consumption of unhealthy commodities that harm human health.
 ► The literature has highlighted the economic and health benefits of taxing tobacco, alcohol and sugar-sweetened beverages.
 ► Modelling for taxes on these commodities is generally conducted for individual countries using varying

To cite: Summan A, Stacey N, Birckmayer J et al. The potential global gains in health and revenue from increased taxation of tobacco, alcohol and sugar-sweetened beverages: a modelling analysis. *BMJ Global Health* 2020;5:e002143. doi:10.1136/bmjgh-2019-002143

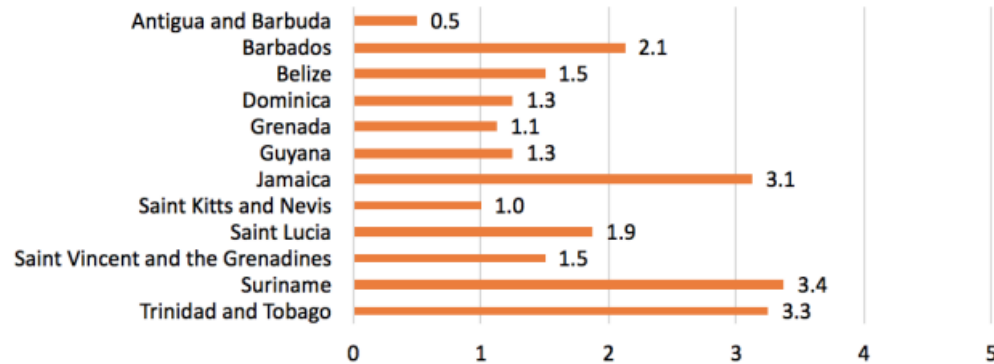
Handling editor: Seye Abimbola

Summan A. et al., The potential global gains in health and revenue from increased taxation of tobacco, alcohol and sugar-sweetened beverages: a modelling analysis. BMJ 2020

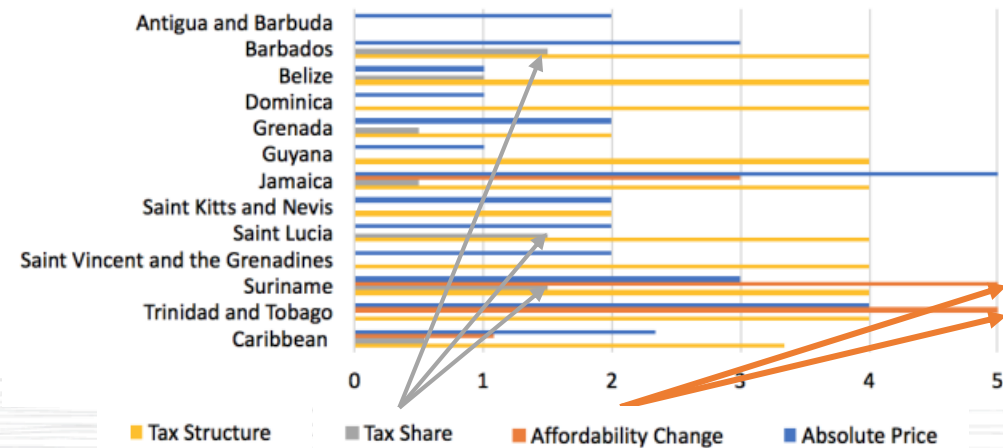
Are these taxes being implemented in the Caribbean?

Tobacco Scorecard

Overall Scores, Caribbean, 2018



Component Scores, Caribbean, 2018



- The Caribbean has **an average score of 1.82**, lower than the 2.26 score of Latin America.
- All countries **score below 3.5 on the 5-point scale**.
- ATG does not have excise tax on tobacco.
- ***Ample room for improvement!***

Cigarette Tax Scorecard: Spotlight on The Caribbean, March 2021, <https://tobacconomics.org/research/cigarette-tax-scorecard-the-caribbean/>

Alcoholic Beverages

- Most countries (92%) impose excise taxes on alcoholic beverages (all except Antigua and Barbuda)
- WHO recommends to apply a specific excise tax (preferably based on the volume of ethanol) on all alcoholic beverages (beer, wine, and spirits), periodically adjusted for inflation, and without any tax incentives or rebates for production of other alcoholic beverages.

Country	Beer	Wine	Spirits
Antigua and Barbuda	No	No	No
Bahamas	Yes	Yes	Yes
Barbados	Yes	Yes	Yes
Belize	Yes	Yes	Yes
Dominica	Yes	Yes	Yes
Grenada	Yes	Yes	Yes
Guyana	Yes	Yes	Yes
Haiti
Jamaica	Yes	Yes	Yes
Saint Kitts and Nevis	Yes	Yes	Yes
Saint Lucia	Yes	Yes	Yes
Saint Vincent and the Grenadines	Yes	Yes	Yes
Suriname	Yes	Yes	Yes
Trinidad and Tobago	Yes	Yes	Yes

^a Information not available

Sources: 1. WHO. Assessing national capacity for the prevention and control of noncommunicable diseases: report of the 2019 global survey.
 2. WHO. Report on alcohol and health, 2018.
 3. WHO. Noncommunicable Diseases Progress Monitor. 2020

Sugar Sweetened Beverages (SSBs)

Country	SSB Excise Taxes
Antigua and Barbuda	No
Bahamas	No
Barbados	Yes
Belize	Yes*
Dominica	Yes
Grenada	No
Guyana	No
Haiti	^a
Jamaica	No
Saint Kitts and Nevis	Yes
Saint Lucia	No
Saint Vincent and the Grenadines	Yes
Suriname	Yes*
Trinidad and Tobago	No

^a Information not available

* Applies taxes to bottled water

Legislation as of March 2019

6 out of 13 countries of the Caribbean for which there is information **apply excise taxes to the SSBs**. 2 of them (Belize and Suriname) also apply excise taxes to bottled water.

WHO recommendation: “**SSB taxes that are calculated based on sugar content can have the greatest health impact**, as they differentiate between options based on sugar content within a product category and can be used to incentivize consumers to substitute to alternatives while simultaneously encouraging producers to reformulate their products”.

Sandoval RC, Roche M, Belausteguigoitia I, Alvarado M, Galicia L, Gomes FS, Paraje G. Excise taxes on sugar-sweetened beverages in Latin America and the Caribbean. Rev Panam Salud Publica. 2021 Mar 12;45:e21. doi: 10.26633/RPSP.2021.21. PMID: 33727907; PMCID: PMC7954193

Policy narrative:

not introduce new taxes



**adjust taxes to contribute to
health outcomes and
development**

Opportunities?

Opportunities

In most countries, there is still much potential to increase tobacco taxes

Covid-19 is a big opportunity (for health taxes). [...] Linking health taxes to a wider tax reform can be very effective.

Higher tobacco and alcohol taxes, and new sugary beverage taxes will significantly reduce consumption and raise revenues

Health taxes in general will improve health outcomes and help raise revenue specially in the short term could decrease health system impact of future waves.



The scientific evidence indicates that **people with NCDs are at higher risk for serious complications if they get COVID-19.**

“We have never seen such a deadly relationship between an infectious disease and NCDs. Some of the data are truly alarming. Especially for our region, where NCDs are pervasive.”

26 May 2020

Dr. Carissa Etienne, Director, PAHO

Both effective and bold policy!

- ✓ Immediate source of tax revenue
- ✓ Together with SSBs and alcohol revenues, revenues are not trivial
- ✓ Long term contribution -- Healthier population and increased **financial sustainability of health systems**
- ✓ Not regressive

Increase health taxes: win-win-win-win

The health taxes on NCDs risk factors have the potential to:



Reduce consumption of health-harming products
→ **Improve health outcomes**

✓ win



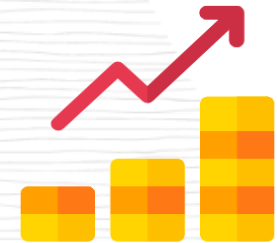
Reduce associated health care
→ **Increase financial viability of health systems**

✓ win



Reduce social indirect costs →
Increases productivity and wellbeing

✓ win



Increase excise tax revenues
→ **Finance development**

✓ win