

45. Jahrestagung

der Österreichischen Gesellschaft für Pneumologie
der Österreichischen Gesellschaft für Thoraxchirurgie

6. - 8. Okt. 2021
Innsbruck → virtuell



Österreichische Gesellschaft
für Pneumologie
Austrian Society of Pneumology



OGTC

ÖSTERREICHISCHE
GESELLSCHAFT FÜR
THORAXCHIRURGIE

Nikotin – Schaden auch ohne Rauch

Nicotine – harmful even without smoke

Manfred NEUBERGER



CENTER FOR PUBLIC HEALTH
MEDICAL UNIVERSITY OF VIENNA



Disclosure:

No conflicts of interest

www.aerzteinitiative.at



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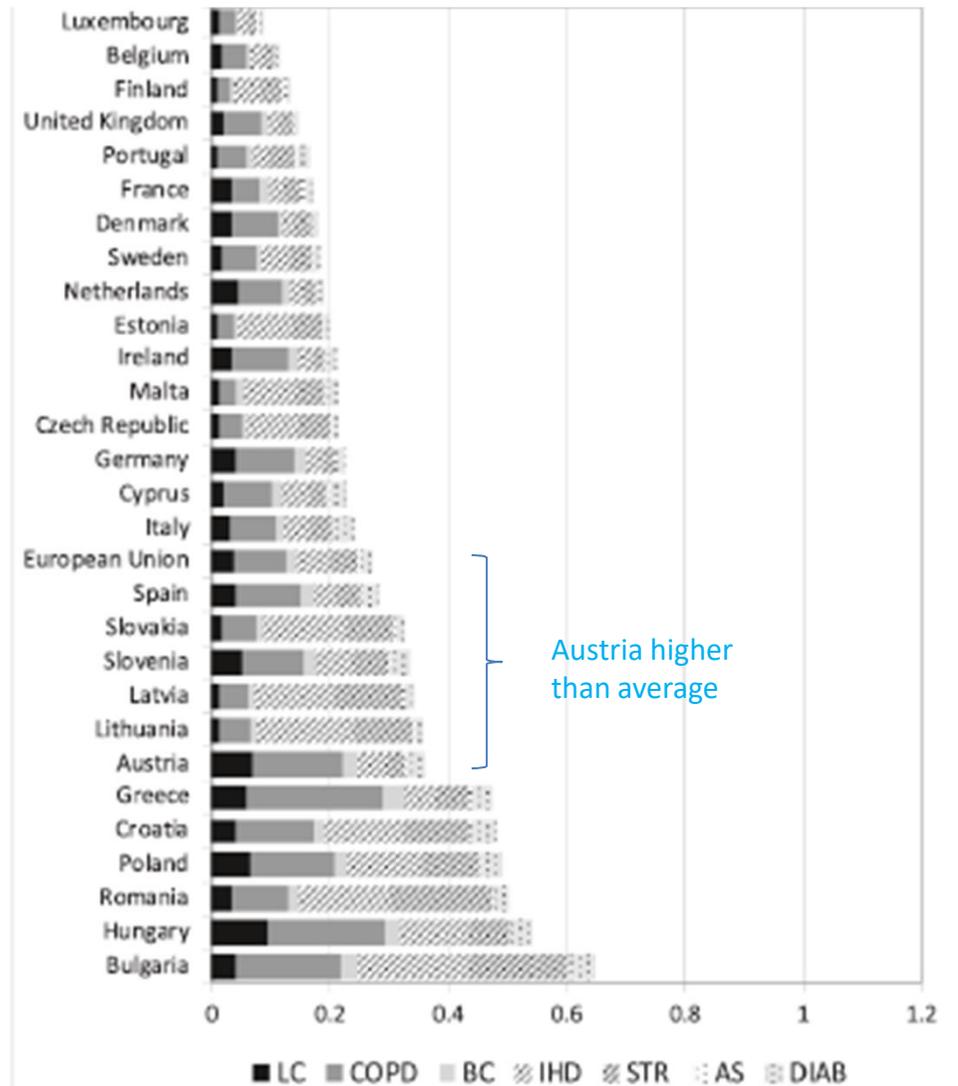
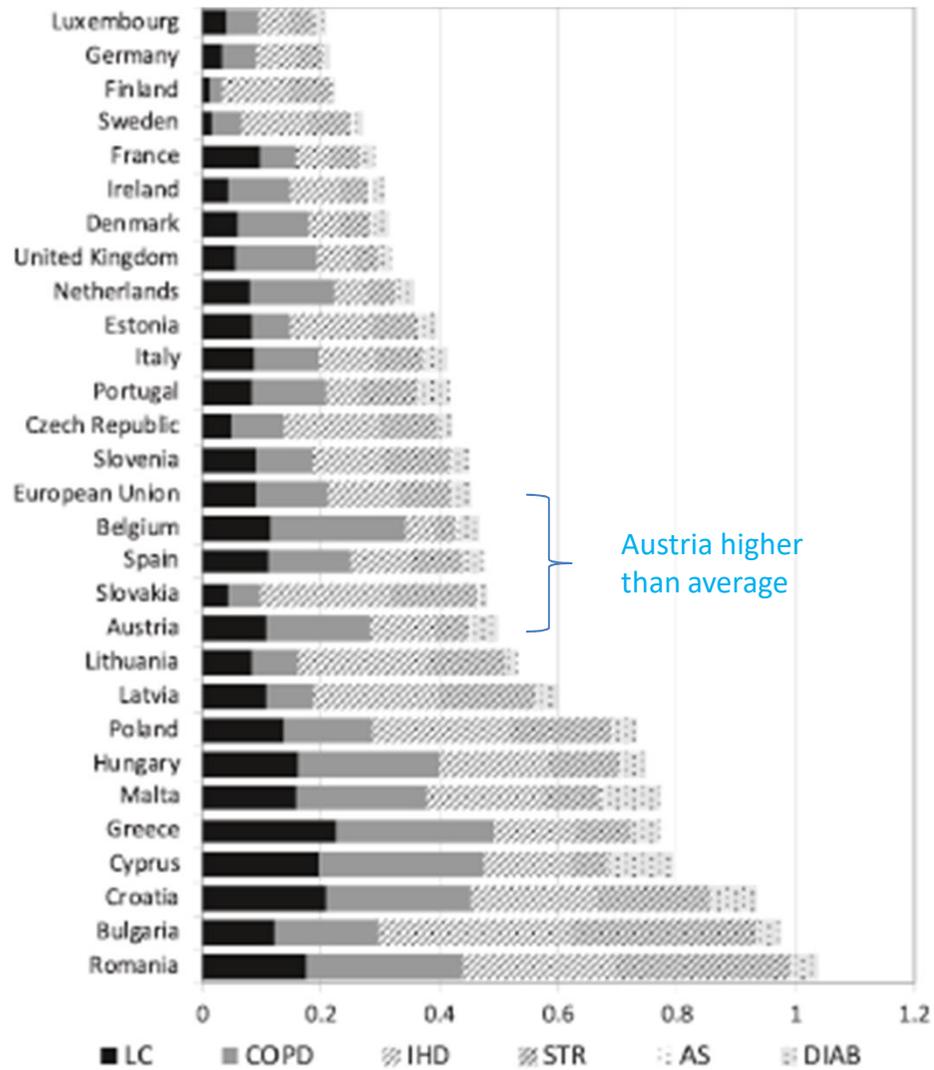
Commission
Climate & Air
Quality

INITIATIVE ÄRZTE GEGEN RAUCHERSCHÄDEN
AUSTRIAN COUNCIL ON SMOKING AND HEALTH

Main advantages of oral nicotine: 1) no respiratory uptake, 2) no second-hand exposure
 Disability adjusted life years lost (DALYs), proportion attributed to **passive smoking**

Males

Females



In the EU (2017) about 526,000 DALYs and 24,000 deaths attributable to SHS exposure at home, mainly from COPD and IHD. Carreras et al. Preventive Medicine 2021

Smokeless tobacco and cancer. Boffetta et al. Lancet Oncology 2008; 9(7): 667-75

Sweden, Norway: pancreatic cancer 1.6 [1.1-2.2] Swedish men 20% of oesophageal
oesophageal cancer 1.6 [1.1-2.3] and pancreatic cancers

Asia, USA: oral cancer 2.6 [1.3-5.2] US men 4% of oral cancers
India, Sudan > 50%

Animals: forestomach, lung, oral cavity, nasal tumours in rats;
lung, skin, forestomach, liver tumours in mice;
oral cavity (cheek pouch) and forestomach tumours in hamsters

IARC: sufficient evidence, smokeless tobacco is carcinogenic to humans (Group 1)

Gesundheitsschäden durch Oraltabak

Österreichische Ärztezeitung, 25.April 2004, Seite 44-45

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Toxicant	Snus			Nicotine Pouch			
	Granit Ice Blue White	Skruf SlimFresh Xstrong Mint	G3 Slim White Xstrong BlueMint	Lyft Freeze	LimeStrong	BerryFrost	Mint
Nicotine %	1.2	2.2	1.5	1.7	1.4	0.6	0.9
Formaldehyde µg/g	1.5	1.2	<1.0	<1.0	<1.0	1.1	1.1
Acetaldehyde µg/g	7.1	9.2	8.4	<1.0	<1.0	<1.0	<1.0
NNN ng/g	610	560	640	<10	<10	<10	<10
NNK ng/g	200	125	89	<10	<10	<10	<10
Cd ng/g	285	460	245	<10	<10	<10	<10
Cr ng/g	1550	1700	815	<50-70	<50	<50-80	<50-51
Ni ng/g	1400	2000	885	<50	<50	<50	<50
As ng/g	92	130	94	<50	<50	<50	<50
Pb ng/g	210	340	190	<20	<20	<20	<20
Ochratoxin A ng/g	<0.5	1.6	1.1	<0.5	<0.5	<0.5	<0.5

LYFT: Lower levels of heavy metals, nitrosamines, acetaldehyde, ochratoxin.

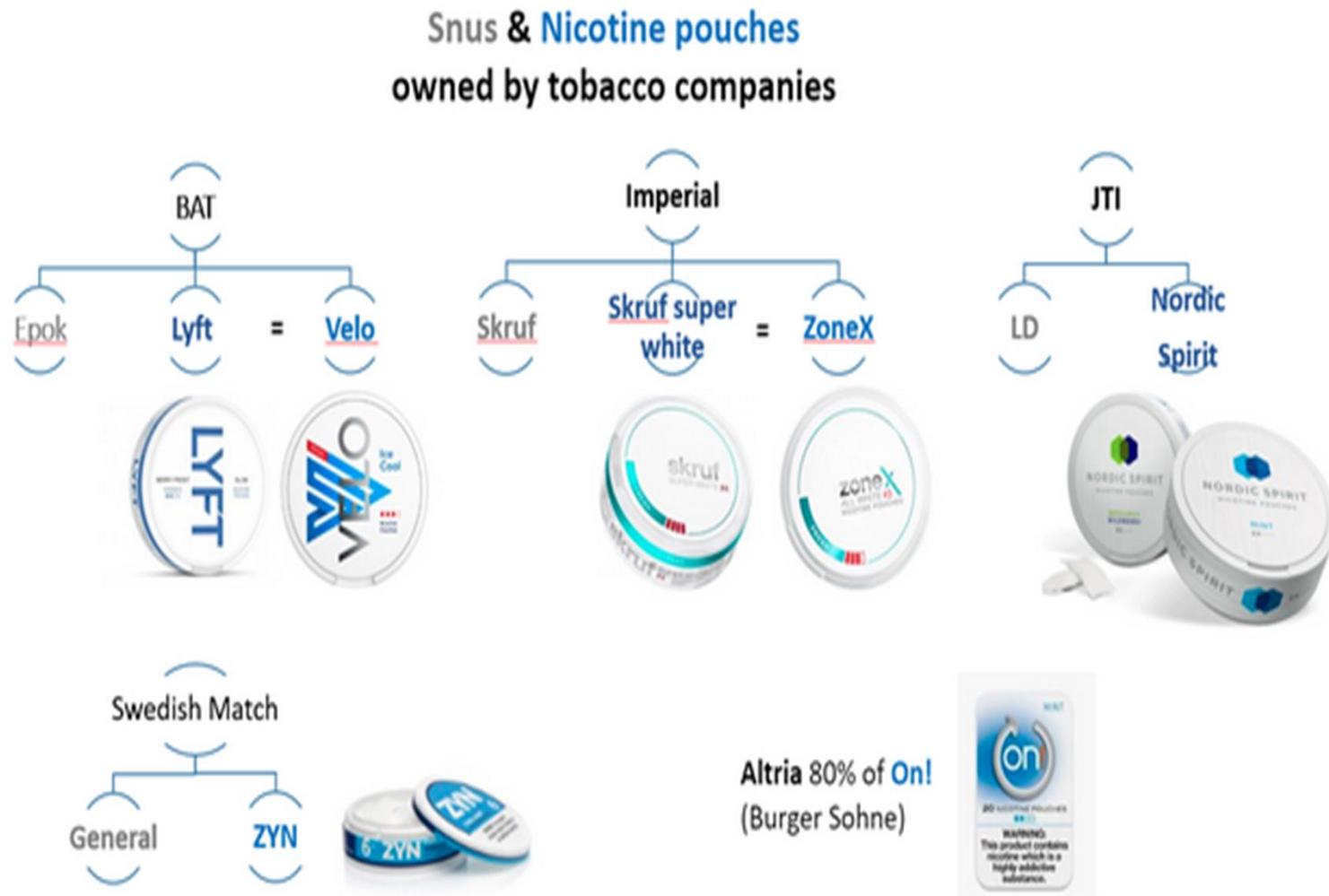
Formaldehyde content was largely comparable (Azzopardi et al. 2021)

Nicotine mainly absorbed by oral mucous membranes: transported to brain without liver filter (like nicotine from cigarettes).

Higher plasma concentrations from ZYN 6mg than from Snus General 8mg
(Lunell et al. 2020)

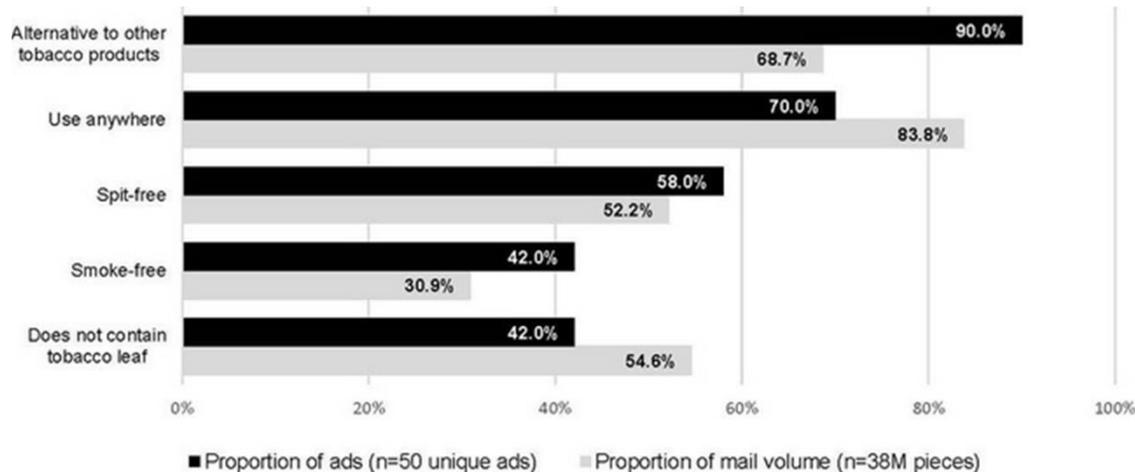
Oral tobacco & oral nicotine products increasing

nicotine salts, Na₂CO₃, NaHCO₃, citric acid, aromas (mint, menthol, etc.)



Source: <https://tobaccotactics.org/wiki/nicotine-pouches/> (summarized pictures from tobacco industry websites)

See: Peeters & Gilmore: Transnational Tobacco Company Interests in Smokeless Tobacco in Europe. PLoS Med 2013 10(9):e1001506

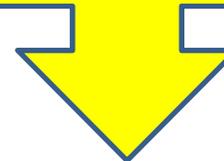


The largest proportion of the 38 million pieces of mail sent contained claims that the product could be used **anywhere / anytime** (84%, 31.8 million pieces)

Czaplicki et al. Tobacco Control 2021

B

Loophole in EU-TPD, Austrian TNRSG:
 No oral tobacco like Snus (EU ban 2001 except Sweden)
 No „related product“ like e-cigarette, heated tobacco, water-pipe (TNRSG §1)



Advertising, Sponsoring, Promotion

Sales to minors

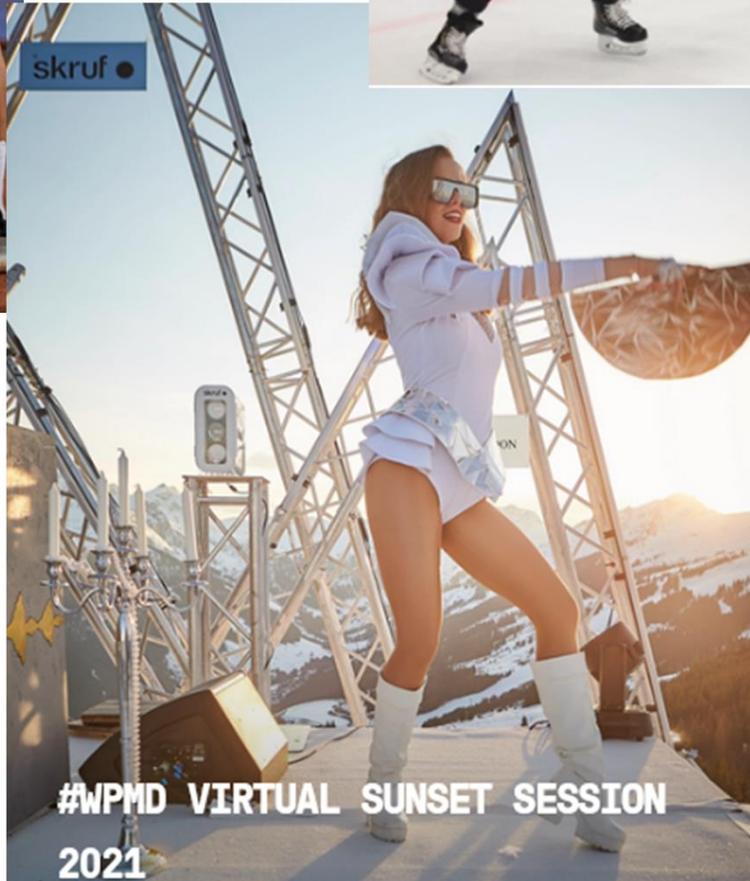
Low tax, low price

Disclaimer: This study is Truth Initiative's analysis of Mintel data, and does not represent the views or the opinions of Mintel. Images used with permission from Mintel.



Tennis in Kitzbühel with Dominic Thiem

Ice hockey in Ferlach



Skicircus-Saalbach since 2016 for „healthy lifestyle“ and Skruf at White Pearl Mountain Days



Vending machines for addictive products.
Electronic age control failed.
Now also for oral nicotine and with aromas and additives (banned already in tobacco products).

Hospitality industry (smokefree since Nov. 2019 including e-cigarettes) starts now to offer oral nicotine products

New ways to seduce adolescents



HTPs, E-cigarettes and oral products are expanding the **tob/nic epidemic**

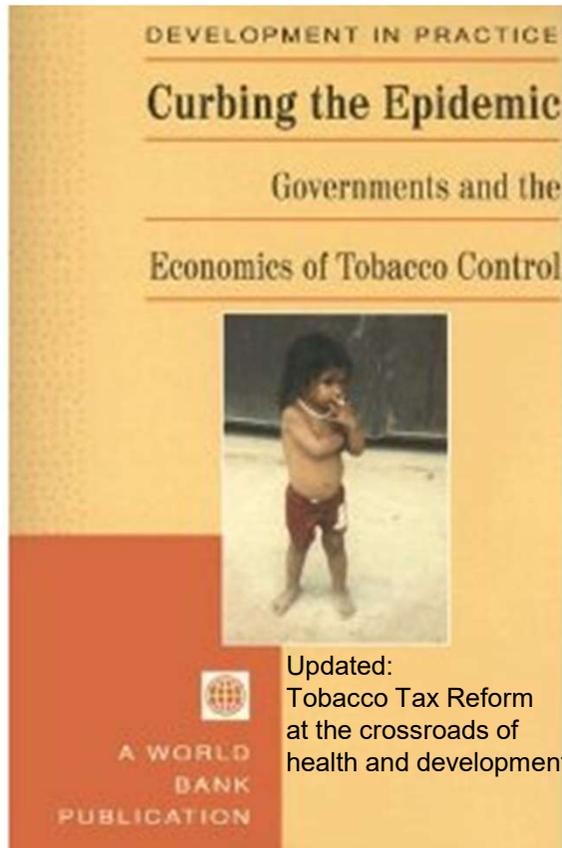
Nicotine pouches undermine bans of **advertising** (youth protection) and **use** (end game, nic-free environments)

Nicotine responsible for addiction and many of the cardiovascular effects (see consensus on HTPs in Austrian Journal of Cardiology, in press), cardiopulmonary effects of e-cigarettes, carcinogenic effects of oral tobacco, cocarcinogenic effects of nicotine, Reproduction (see Regulatory Toxicology, Springer 2021)

P. Morris bought 2021 Danish **Fertin** Pharma (nic gums, cannabinoids, etc.) products for life-style and well-being for oral delivery and the free market

P. Morris bought 2021 British **Vectura** (inhaled medicines for Novartis, GlaxoSmithKline, etc.). To make his own products more addictive? Profit from selling treatments for the diseases caused by its products.

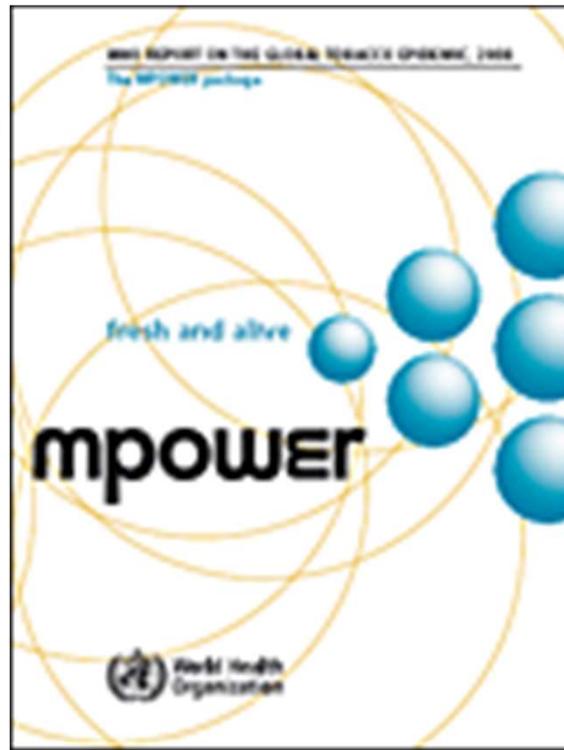
Stop cooperation with these pharma industries!



Updated:
Tobacco Tax Reform
at the crossroads of
health and development

↑Tax (80% of retail price)
publish health effects
prominent warning labels
comprehensive ad bans
smoke-free (work, public)
access to cessation therapies

1999 + update 2017



Monitor tobacco use and prevention policies

Protect people from tobacco smoke

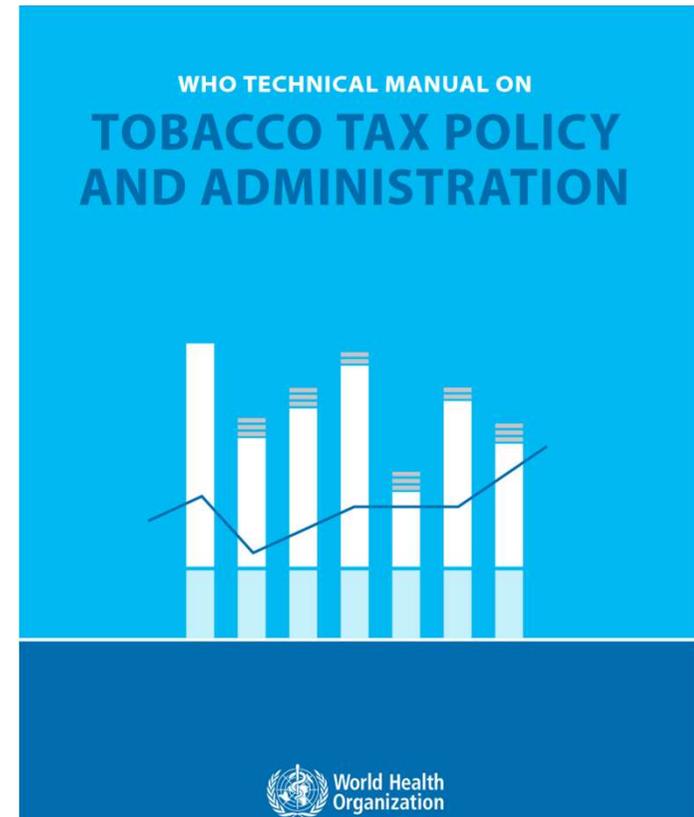
Offer help to quit tob. use

Warn about the dangers

Enforce bans on tob. ads, promotion, sponsorship

Raise taxes on tobacco

2008



Implementation of FCTC (art.5.3)

Limit nicotine concentration, volume for cartridges and refill containers, battery power (nicotine release)

taxing nicotine if not banned in products of the free market

2021