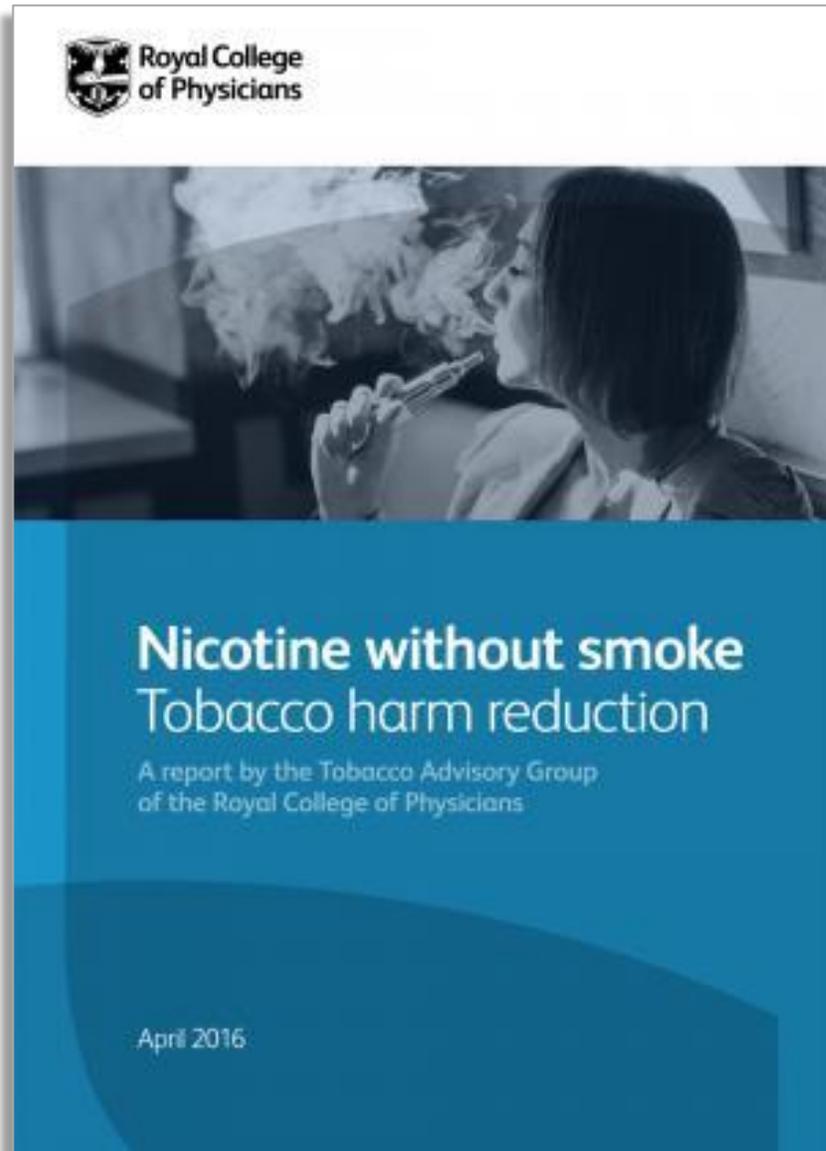


What could possibly go wrong?

Clive Bates
Counterfactual

E-cigarette Summit
14 November 2019
London

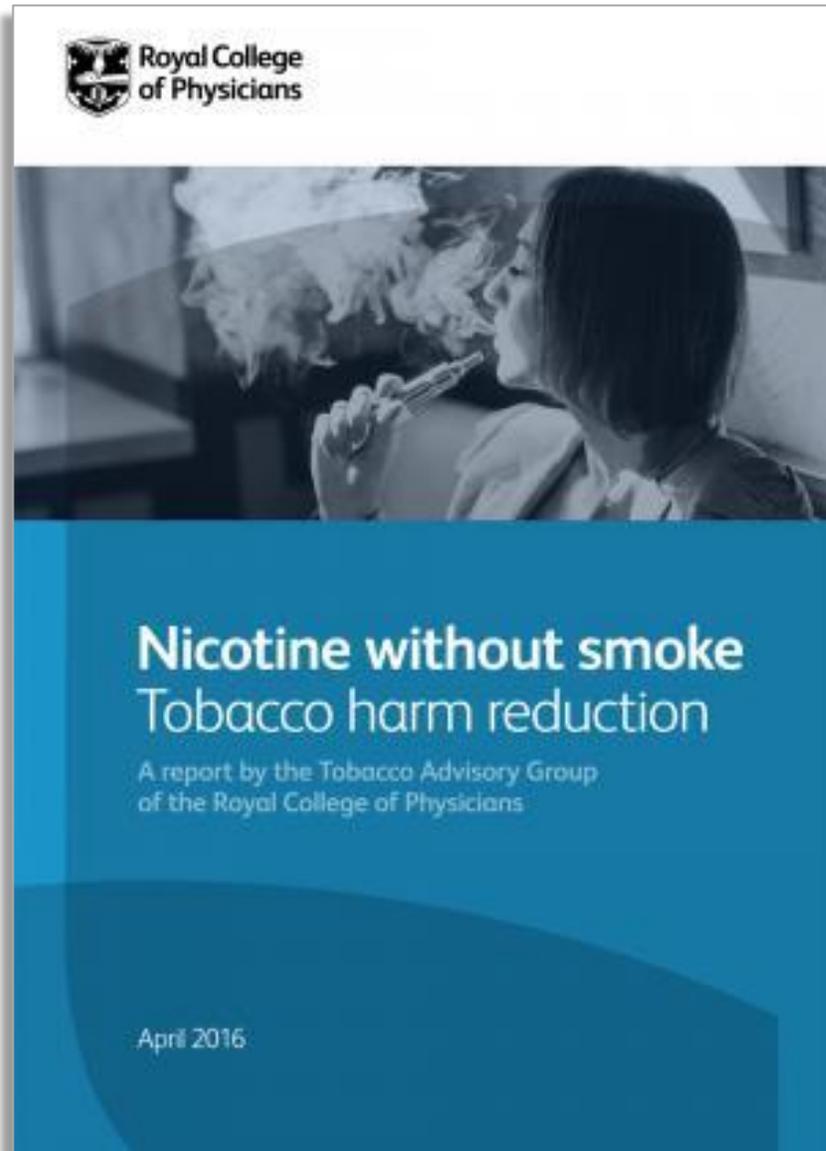
Royal College of Physicians – unintended consequences



12.10 Regulation and harm reduction

It is difficult to determine, and more difficult still to apply, the right level of regulation for reduced-harm products. The wide range of different regulatory approaches adopted in different countries in relation to e-cigarettes, which spans a spectrum from freedom to market as a consumer product to complete prohibition, reflects a desire, on the one hand, to encourage as many smokers as possible to switch from tobacco to e-cigarettes and, on the other, to prevent harm to users or others from e-cigarette use. A risk-averse, precautionary approach to e-cigarette regulation can be proposed as a means of minimising the risk of avoidable harm, eg exposure to toxins in e-cigarette vapour, renormalisation, gateway progression to smoking, or other real or potential risks. However, if this approach also makes e-cigarettes less easily accessible, less palatable or acceptable, more expensive, less consumer friendly or pharmacologically less effective, or inhibits innovation and development of new and improved products, then it causes harm by perpetuating smoking. Getting this balance right is difficult.

Royal College of Physicians – unintended consequences



...if a risk-averse, precautionary approach makes e-cigarettes:

- less easily accessible
- less palatable or acceptable
- more expensive
- less consumer friendly
- pharmacologically less effective
- inhibits innovation ...

...then it causes harm by perpetuating smoking.

and over-taxing or over-regulating

1. Banning the product

Applause for bans...

 **WHO South-East Asia** ✓
@WHOSEARO

WHO congratulates [#India](#)  for banning [#ecigarettes](#).

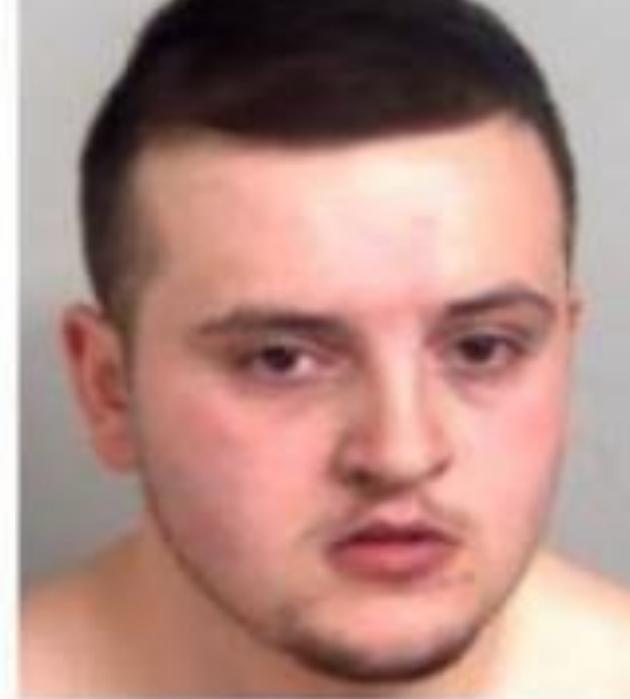


 World Health Organization (WHO) and 8 others

12:26 PM · Sep 18, 2019 · [Twitter Web App](#)

429 Retweets **1.3K** Likes





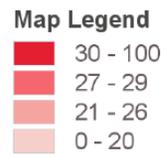
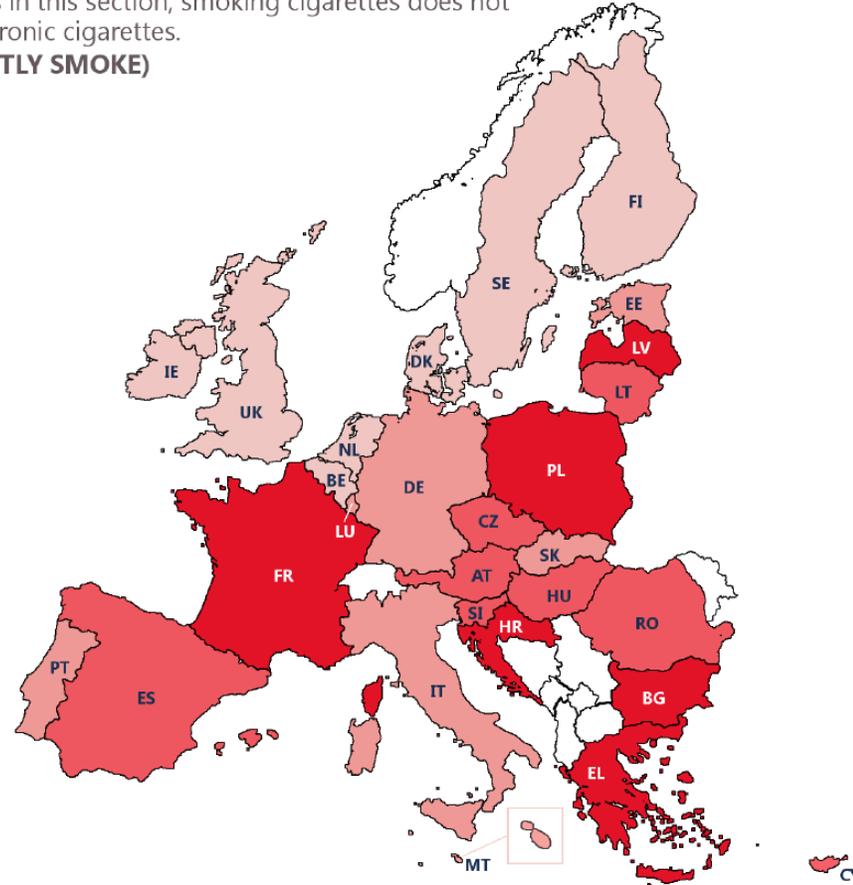


European Union

NL			19
UK			17
SE			7

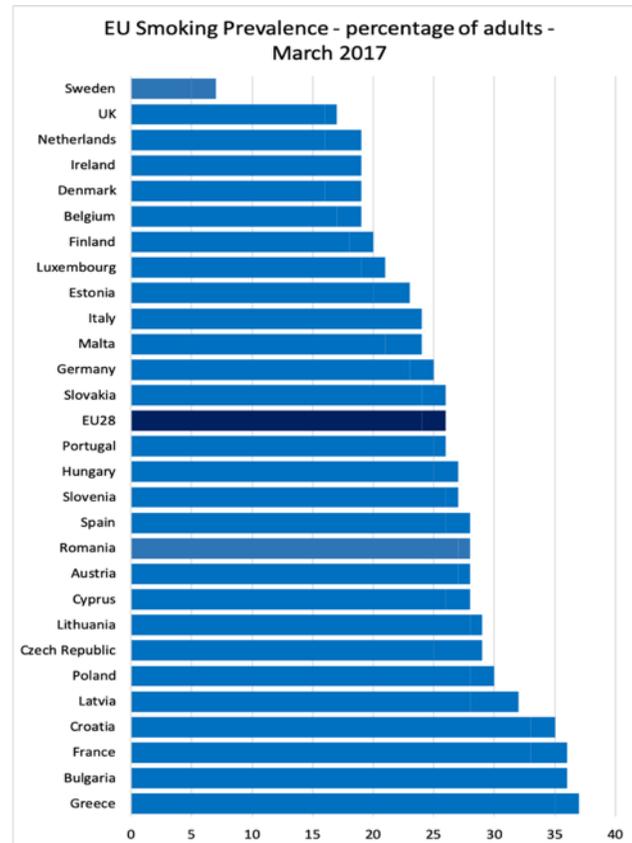
EL		37
BG		36
FR		36
HR		35
LV		32
PL		30
CZ		29
LT		29
CY		28
AT		28
RO		28
SI		28
ES		28
HU		27
PT		26
EU28		26
SK		26
DE		25
MT		24
IT		24
EE		23
LU		21
FI		20
BE		19
DK		19
IE		19
NL		19
UK		17
SE		7

QB1 Regarding smoking cigarettes, cigars, cigarillos or a pipe, which of the following applies to you? In this question and the following questions in this section, smoking cigarettes does not include use of electronic cigarettes.
(% - YOU CURRENTLY SMOKE)

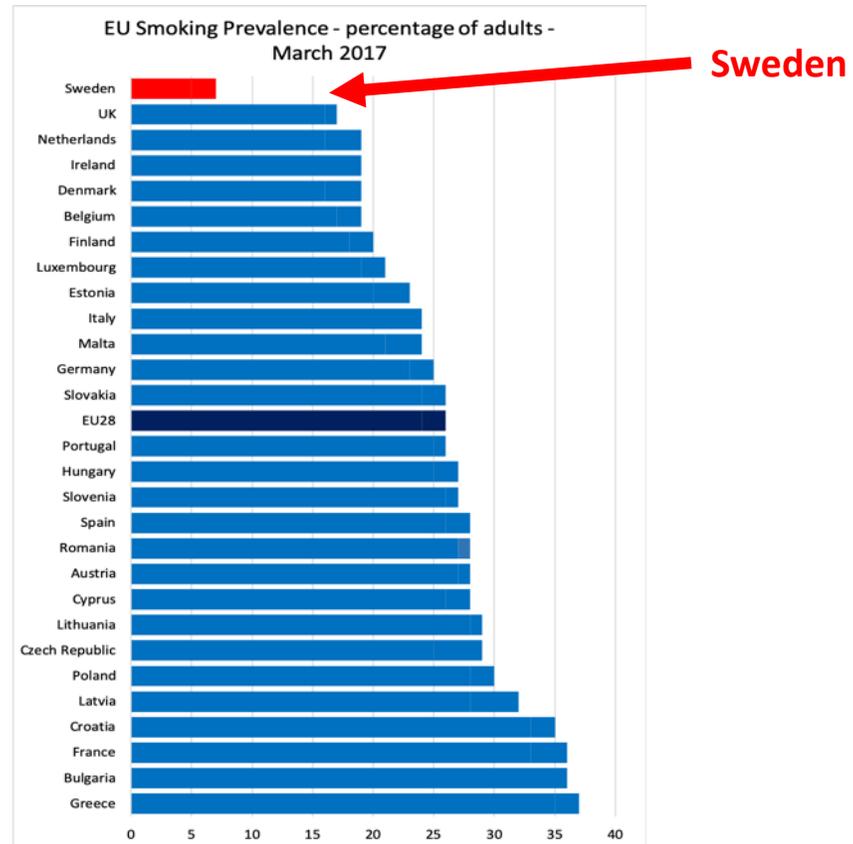


Base: all respondents, N=27,901

European Union smoking prevalence 2017

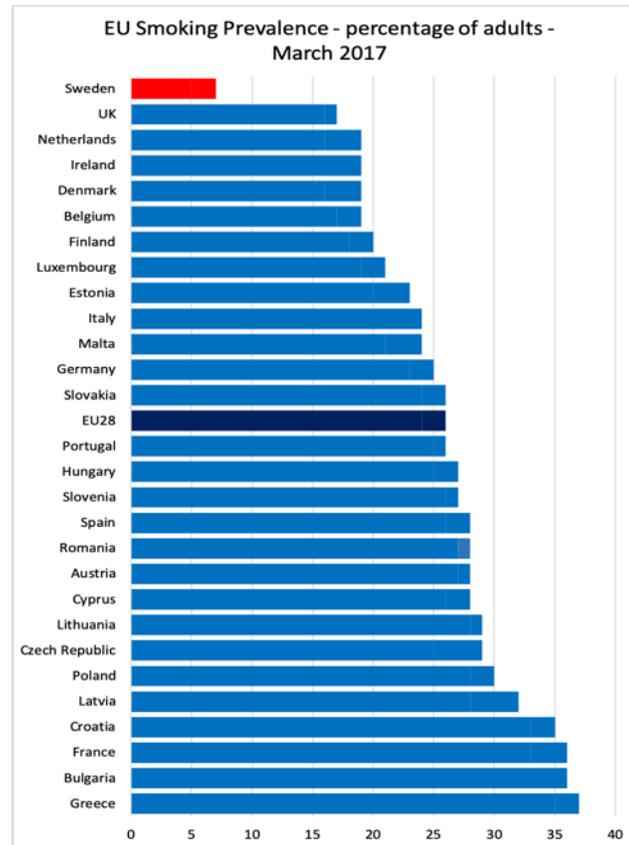


European Union smoking prevalence 2017 - Sweden

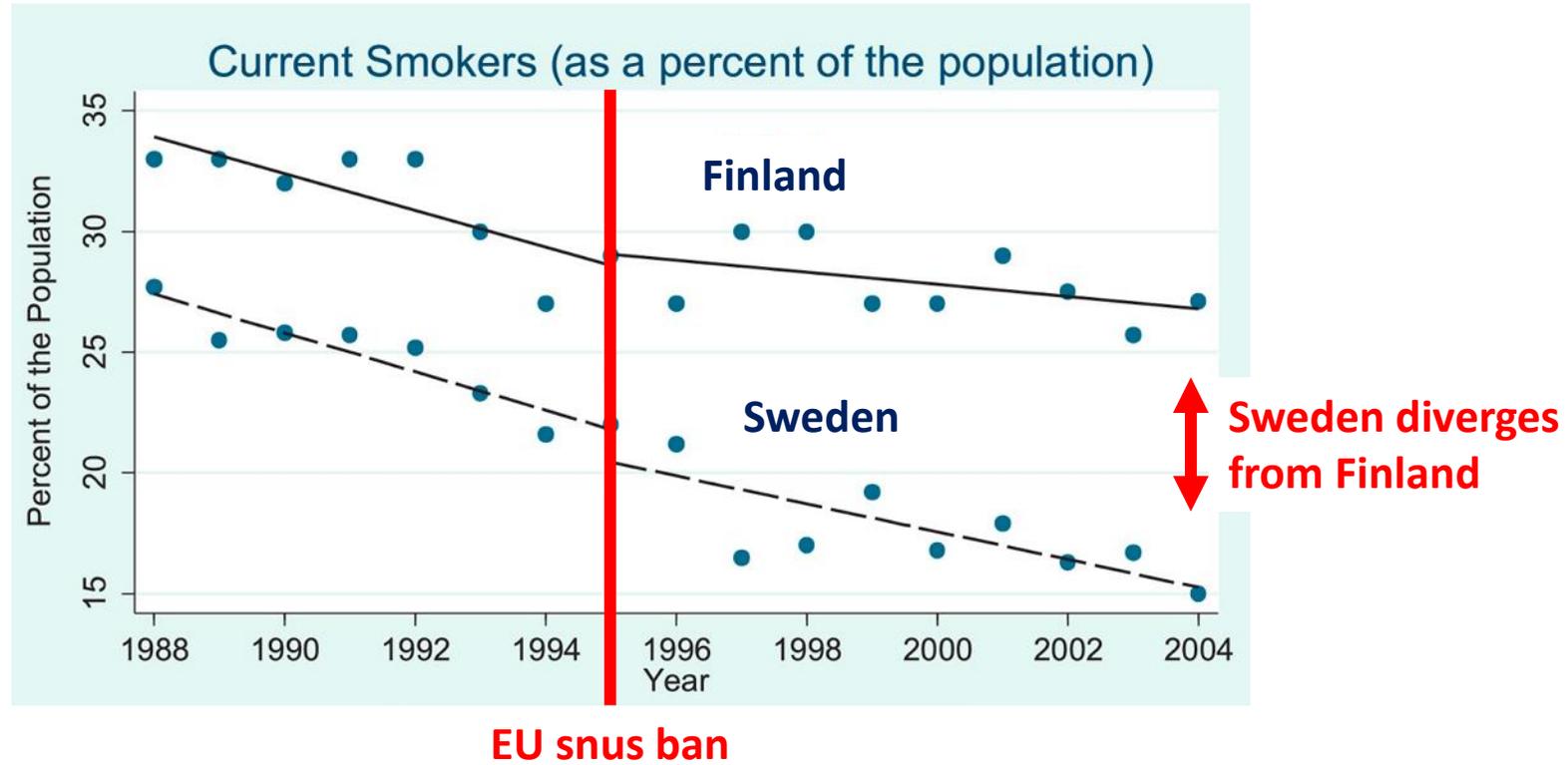


Smoking

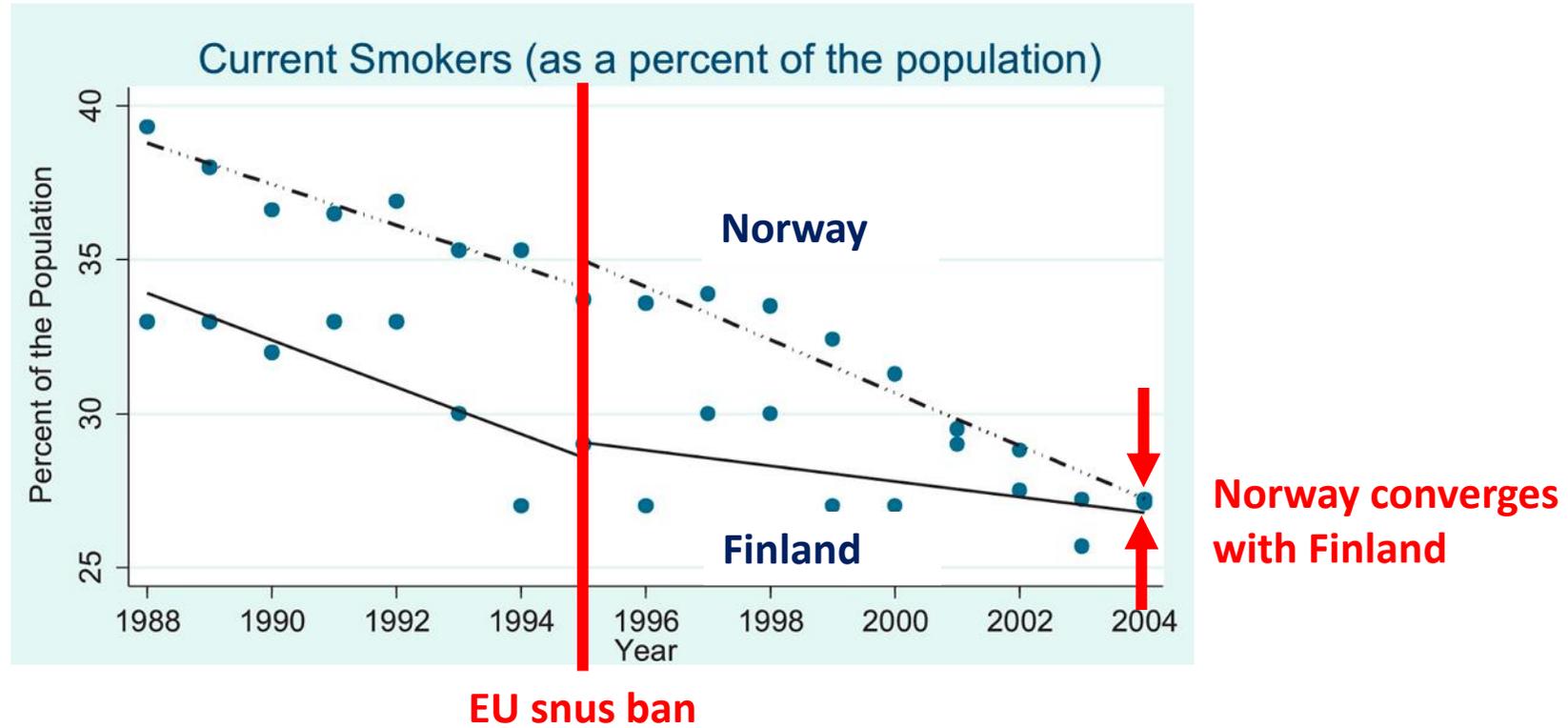
Disease



Finland – the prohibitionists should be paying attention



Finland – the prohibitionists should be paying attention



~~2. Protect the kids~~

2. Being clueless about kids

National Youth Tobacco Survey 2018 data

According to the findings, the number of U.S. high school students who reported being current e-cigarette users increased 78 percent between 2017 and 2018 to 3.05 million (or 20.8 percent).

“Ban flavours”



Drill down into the 2018 NYTS headline



HEADLINE
more than one
in five high
school
students is
vaping

Percentage of high school students who used e-cigarettes in past 30 days

We can distinguish between frequent and infrequent use

**Frequent use
≥20 days per
month**

5.8%

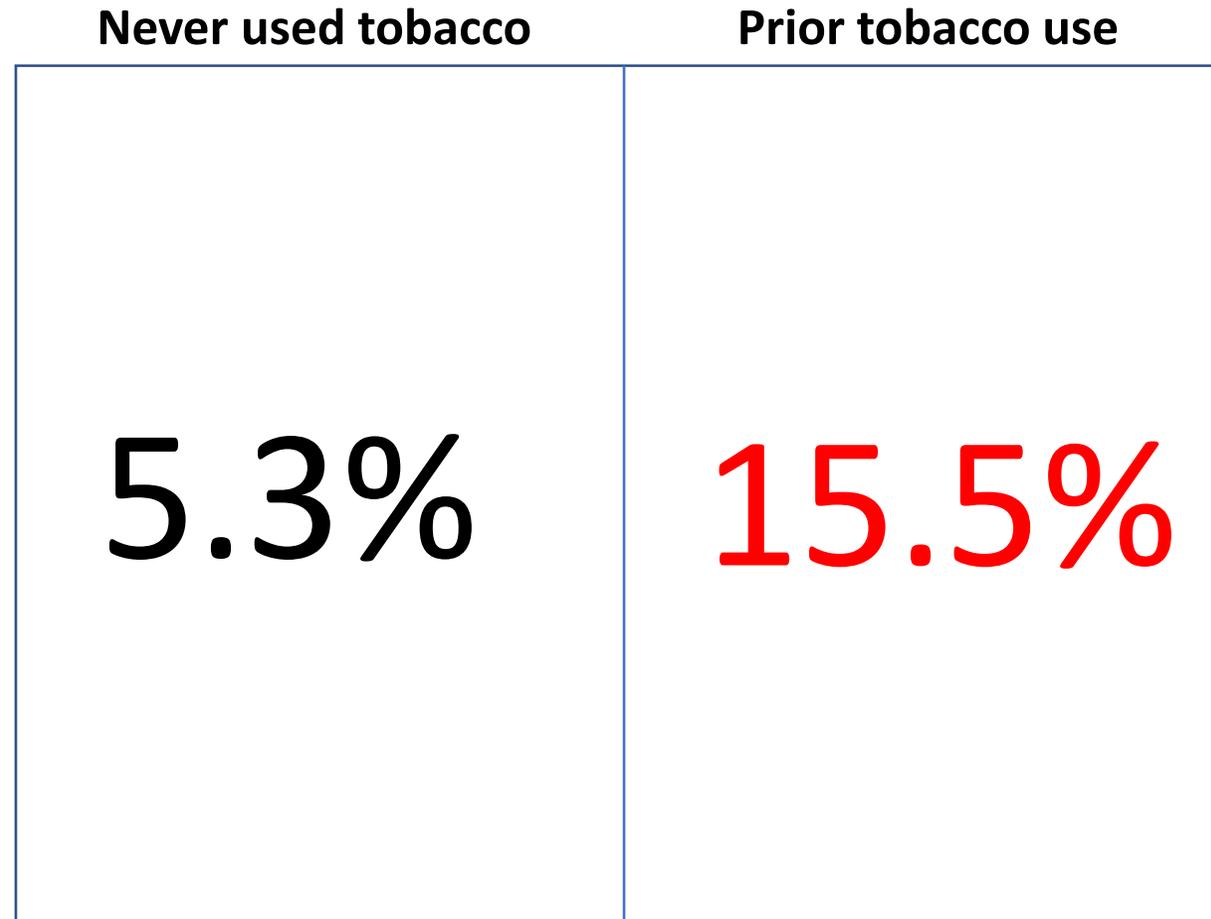
**Infrequent use
≤ 19 days per
month**

15.0%

**Most teen
vapers (72%)
are not
frequent users**

Percentage of high school students who used e-cigarettes in past 30 days

We can distinguish between prior tobacco users and never-users



Most teen
vapers (75%)
are prior
tobacco users

Percentage of high school students who used e-cigarettes in past 30 days

We can segment by both frequency and prior tobacco use

	Never used tobacco	Prior tobacco use
Frequent use ≥20 days per month	0.6%	5.2%
Infrequent use ≤ 19 days per month	4.7%	10.3%

Few teen
vapers (<3%)
are both
tobacco naïve
and frequent
users

Percentage of high school students who used e-cigarettes in past 30 days

Anatomy of the 2018 NYTS headlines

	Never used tobacco	Prior tobacco use
Frequent use ≥20 days per month	0.6%	5.2%
Infrequent use ≤ 19 days per month	4.7%	10.3%

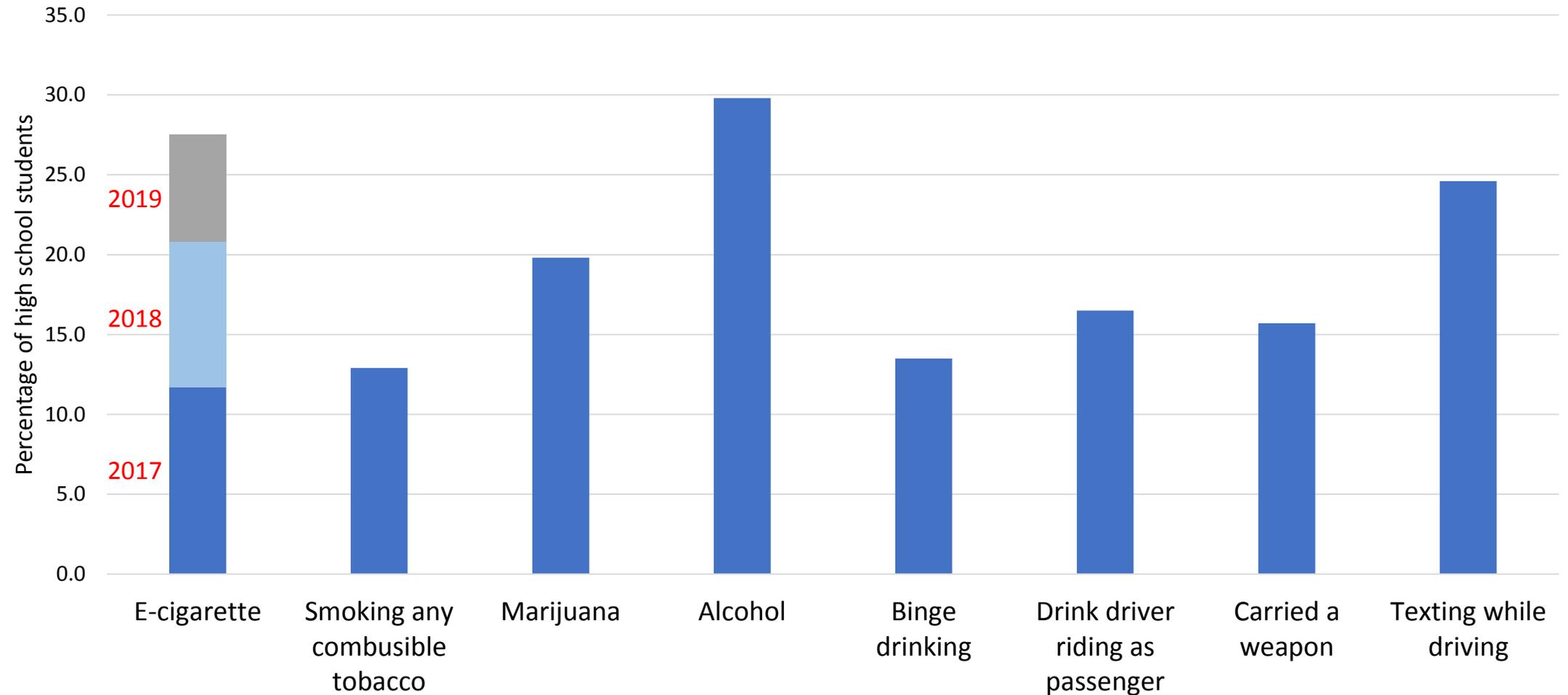
Most of the
teen frequent
vapers (90%)
are prior
tobacco users
– vaping may
be helping
them

Percentage of high school students who used e-cigarettes in past 30 days



Youth risk behaviors in context – United States 2017

Past 30 day prevalence – high school students NYTS and YRBS



Kann L, McManus T, Harris WA, et al. Youth Risk Behavior Surveillance — United States, 2017. *MMWR Surveill Summ* 2018;67(No. SS-8):1–114.

* Refers to driver or passengers riding in vehicles where the driver had been drinking.

Youth risk behaviours

During the 12 months before the survey:

- 7.4% had attempted suicide (23% LGBT)
- 2.4% of students had made a suicide attempt resulting in a serious harm
- 17.2% of students had seriously considered attempting suicide
- 19.0% had been bullied on school property

A nicotine-centric approach distracts from a person-centric approach

3. Warnings

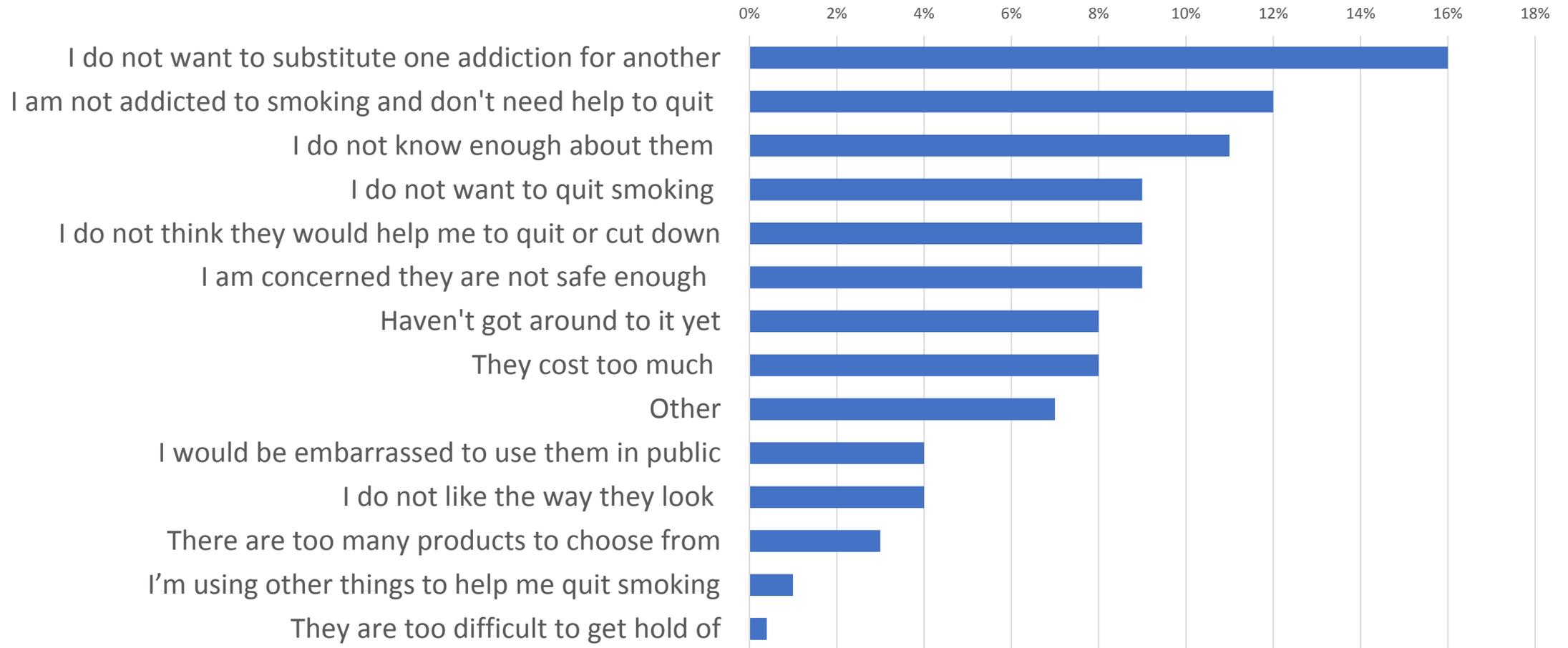


Counter-productive requirement for cigarette-like warnings

This product contains nicotine which is a highly addictive substance. It is not recommended for use by non-smokers

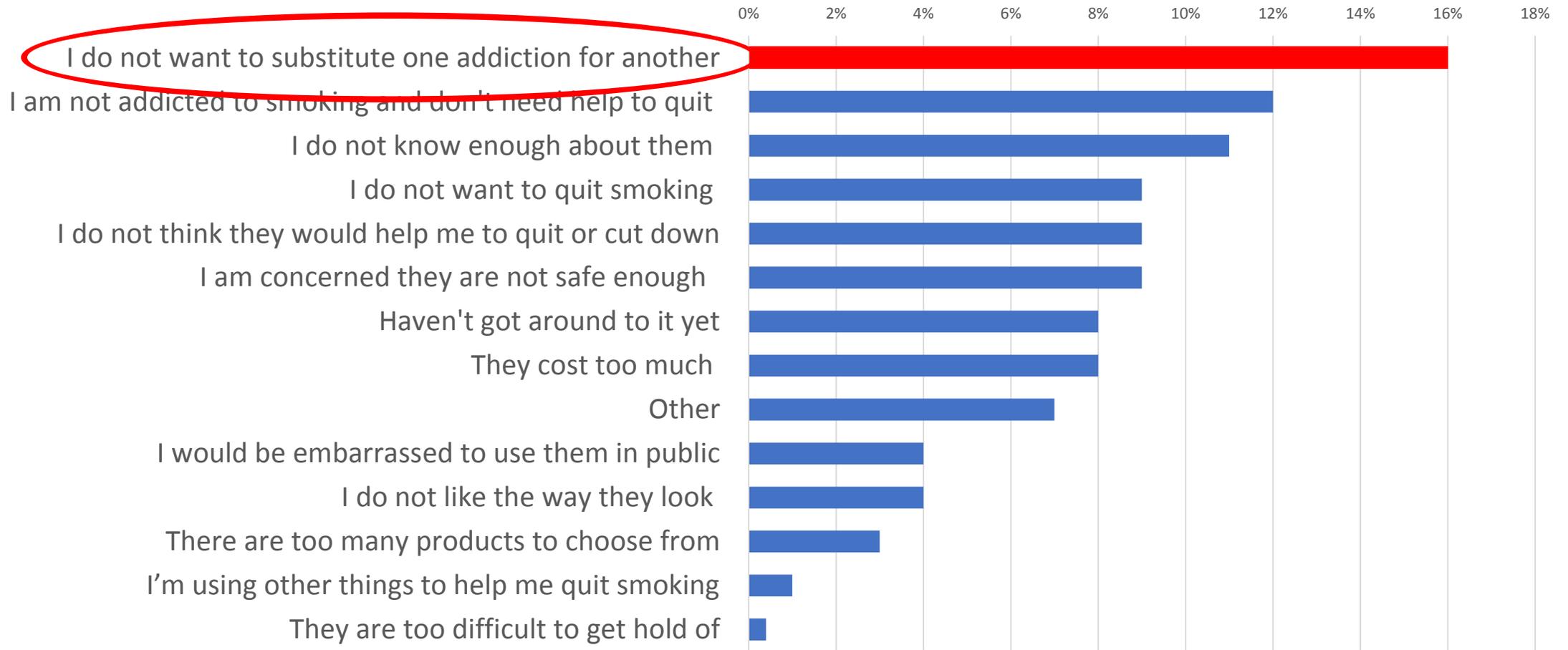
Counter-productive requirement for cigarette-like warnings

Main reason for not trying an e-cigarette among smokers (2019)



Counter-productive requirement for cigarette-like warnings

Main reason for not trying an e-cigarette among smokers (2019)



Research suggests a negative effect

Addictive Behaviors Reports 8 (2018) 136–139



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Contents lists available at [ScienceDirect](#)

Addictive Behaviors Reports

journal homepage: www.elsevier.com/locate/abrep



Messages matter: The Tobacco Products Directive nicotine addiction health warning versus an alternative relative risk message on smokers' willingness to use and purchase an electronic cigarette



Sharon Cox*, Daniel Frings, Reeda Ahmed, Lynne Dawkins

Centre for Addictive Behaviours Research, School of Applied Sciences, London South Bank University, 103 Borough Road, London SE1 0AA, UK

“[Our findings] suggest that the TPD nicotine addiction e-cigarette health warning may reduce smokers' willingness to use, and likelihood of purchasing an e-cigarette.”

What would good consumer information look like?

*This product is likely to
be at least 95% safer
than smoking cigarettes*

*No product is completely
safe, but use of this
product is much less
harmful than smoking*

What would good consumer information look like?



Health Canada – proposed messages (not adopted)

1. If you are a smoker, switching completely to vaping is a much less harmful option.
2. While vaping products emit toxic substances, the amount is significantly lower than in tobacco smoke.
3. By switching completely to vaping products, smokers are exposed to a small fraction of the 7,000 chemicals found in tobacco smoke.
4. Switching completely from combustible tobacco cigarettes to e-cigarettes significantly reduces users' exposure to numerous toxic and cancer-causing substances.
5. Completely replacing your cigarette with a vaping product will significantly reduce your exposure to numerous toxic and cancer causing substances.
6. Switching completely from smoking to e-cigarettes will reduce harms to your health.
7. Completely replacing your cigarette with an e-cigarette will reduce harms to your health.

4. Ban advertising

Banning advertising



Does e-cigarette advertising encourage adult smokers to quit?

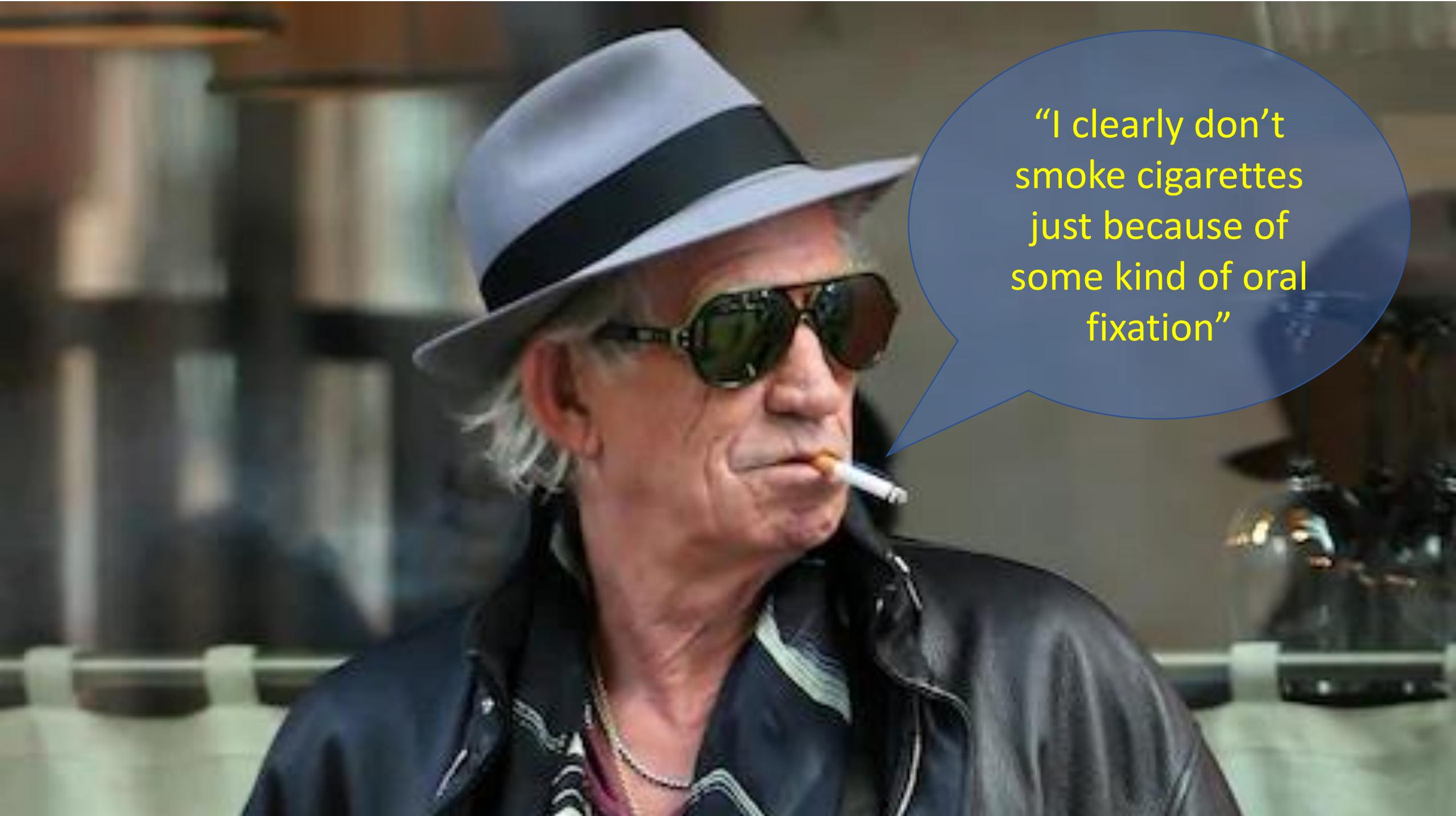


- E-cigarette advertising on TV causes adult smokers to quit.
- A ban on these ads would have reduced the number of smokers who quit by 3%.
- A more relaxed regulatory environment might have increased the quit rate by 10%.

5. Limit nicotine strength

Limit nicotine strength

Tobacco Cigarettes	E-Liquid Nicotine
Unfiltered / Extra strong	36mg
Full strength	24mg
Regular strength	18mg
Mild / Light	12mg
Extra mild / Extra light	6mg



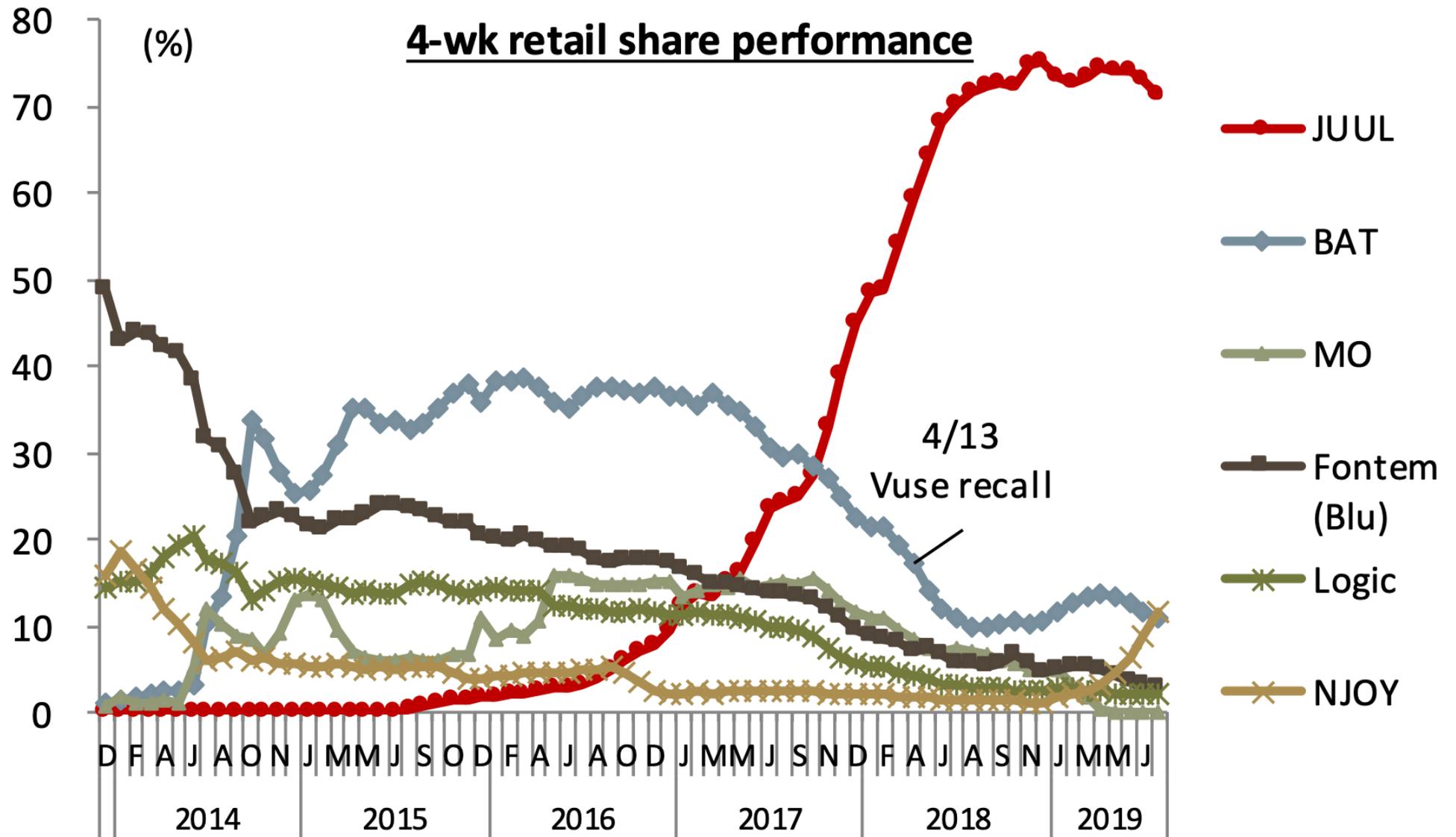
“I clearly don’t
smoke cigarettes
just because of
some kind of oral
fixation”



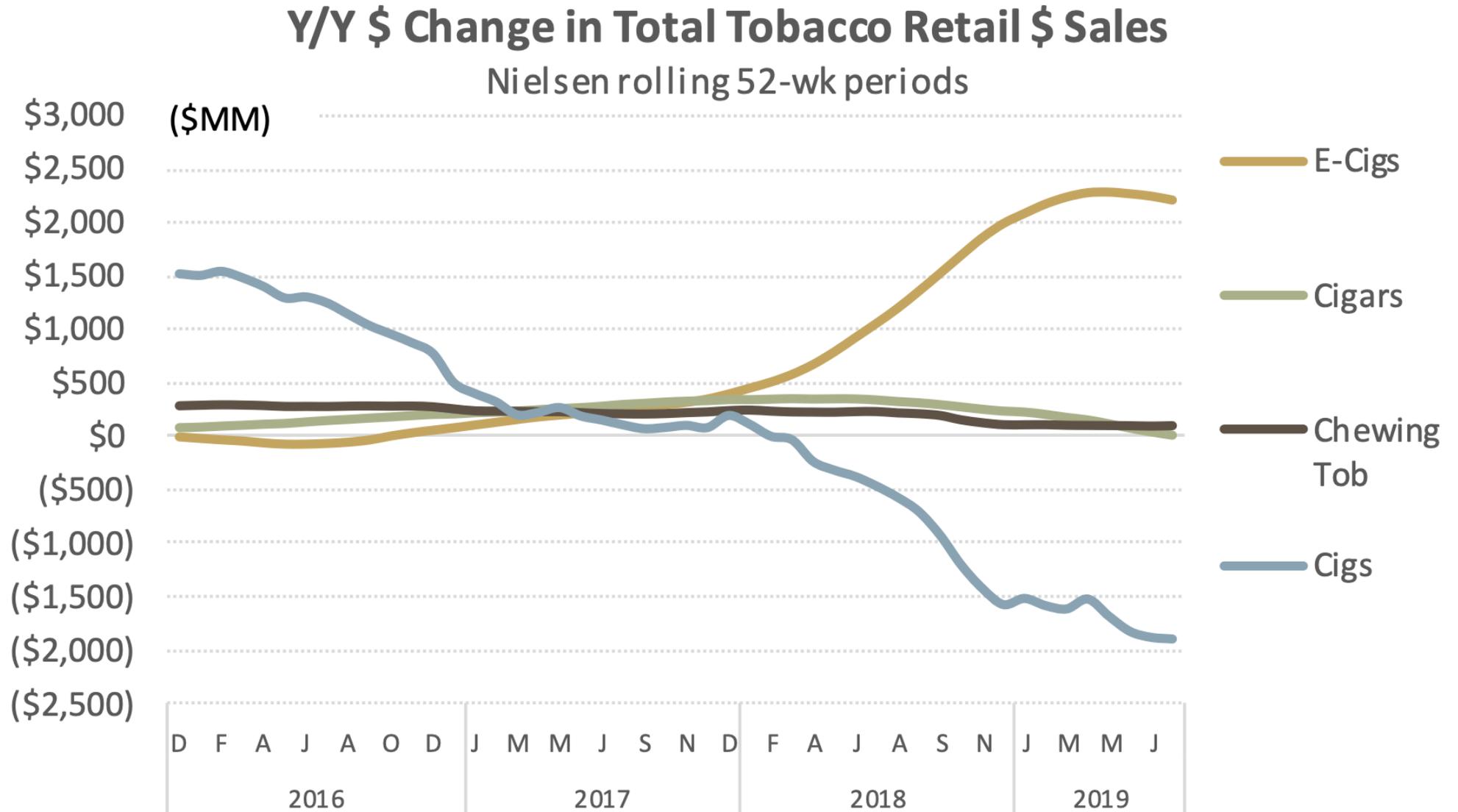
We need to talk about Juul and innovation



The rise of Juul



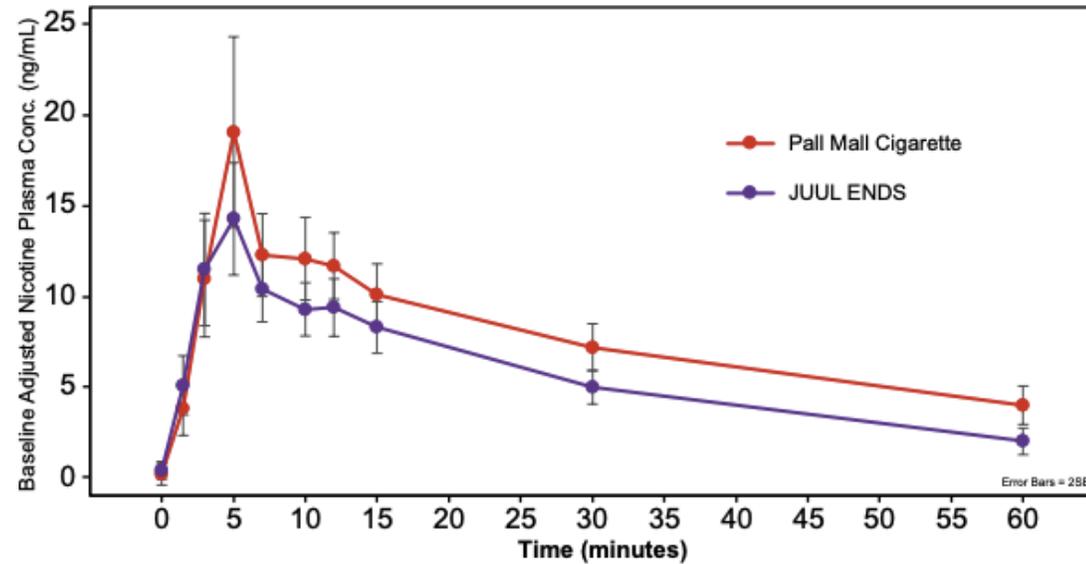
The rise of Juul



Juul innovation to match cigarette

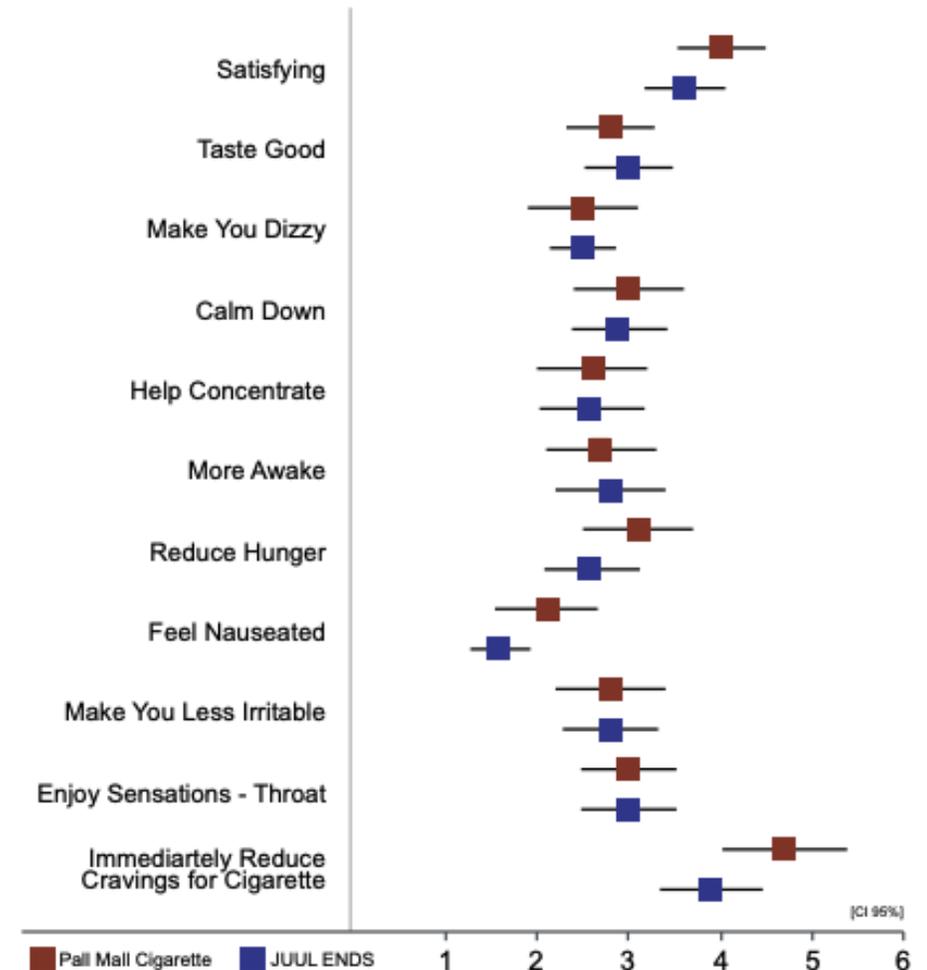
Psychoactive experience

10 Puffs Sessions



Subjective experience

10-Puff Sessions



Acute Use of Nicotine Salt-based ENDS and Combusted Cigarettes Chris Wynne, M.D., Devonie S. Waaka, M.D. Christchurch Clinical Studies Trust, Ltd., NZ Gal Cohen, Ph.D., JUUL Labs, US. SRNT 2019 poster

We need to talk about Juul



To summarise....

Few regulatory interventions so far are superior to...

... doing nothing

Thankyou!



Counterfactual

www.clivebates.com

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