RECEIVE 6 GENERAL CPD POINTS

Snuff out Smoke

Evidence-based insights presented by **Clive Bates**

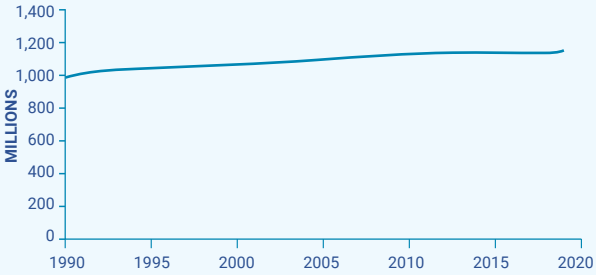
SCIHRIA®
Scientific Insights in Harm Reduction in Africa

1 Smoking is (still) the problem

Smoking has massive system wide effects on the body such as cardiovascular disease, cancer, severe respiratory illness, i.e. chronic obstructive pulmonary disease (COPD), and then a whole variety of minor ailments contributing to significant mortality and morbidity.

Smoking prevalence has been falling over time, however, the **population has been rising**, and the two effects together equates to a **rising global number of adults who still smoke**. So the global problem of smoking is not solved and is getting worse. For every woman who smokes there are about **five times** as many men. However, in certain areas of Europe, smoking levels are nearly equal between men and women.

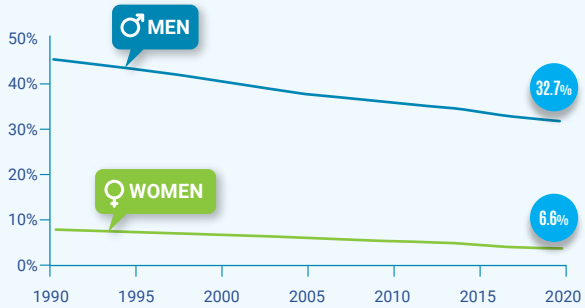
Global number of adults who smoke - millions



Global Burden of Disease Study 2019 (GBD 2019) Smoking Tobacco Use Prevalence 1990-2019

Since males smoke more, if you take all the risk factors associated with premature death and loss of life years, **tobacco is the largest risk factor for men** and that is likely to remain the case for some time because of those population effects.

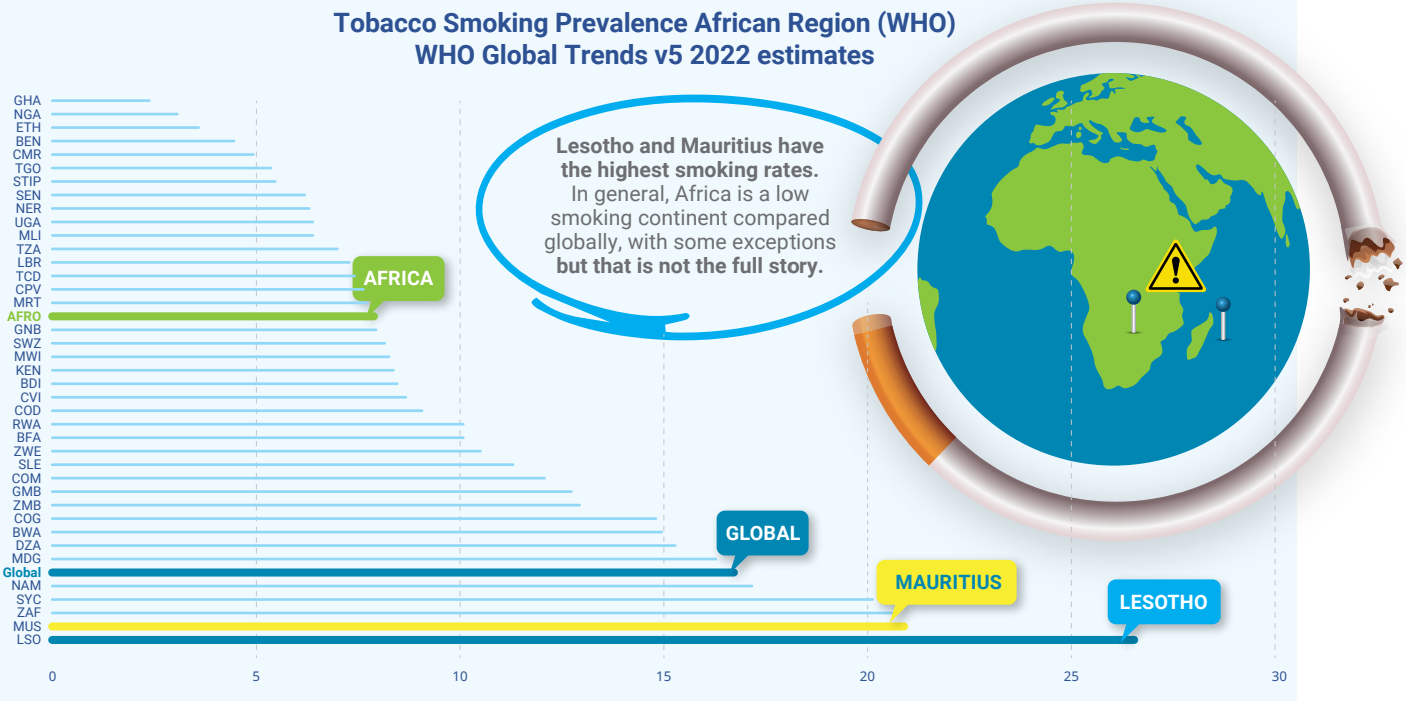
Global smoking prevalence age 15+ men and women 1990-2019



Global Burden of Disease Collaborative Network Global Burden of Disease Study 2019 (GBD 2019) Smoking Tobacco Use Prevalence 1990-2019, Seattle, United States of America Institute for Health Metrics and Evaluation (HME), 2021.

SMOKING PREVALENCE BY AFRICAN COUNTRY

Tobacco Smoking Prevalence African Region (WHO)
WHO Global Trends v5 2022 estimates

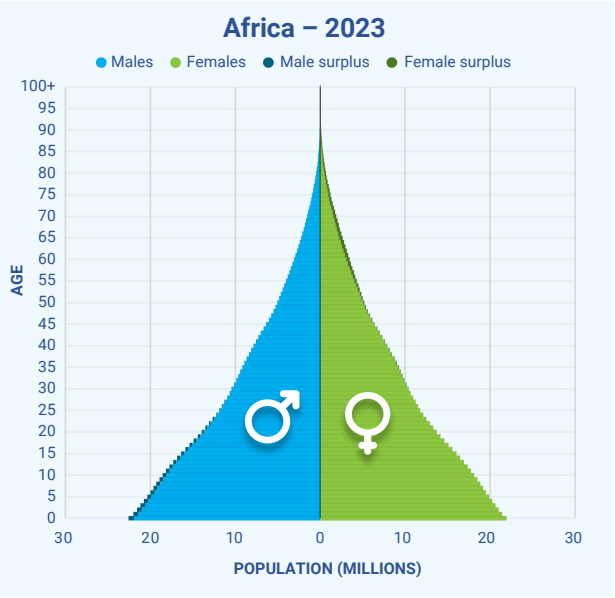


Lesotho and Mauritius have the highest smoking rates. In general, Africa is a low smoking continent compared globally, with some exceptions **but that is not the full story.**

Smoking related deaths worldwide top around 5 million, add on second-hand smoke you get about 7.5 million deaths. Asia dominates the death toll from smoking and Africa has a much lower proportion of the total but that is just now, and that is the issue, because that is about to change.

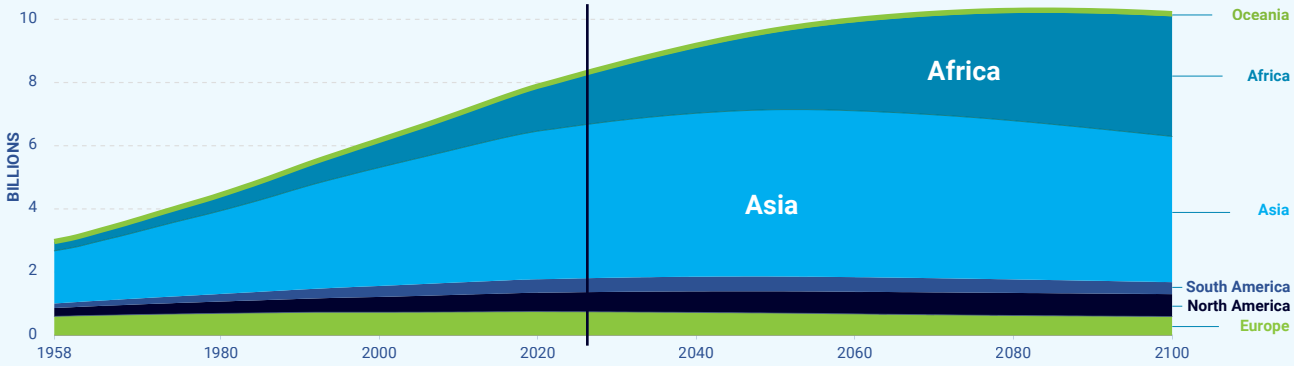
Africa's population is projected to grow significantly, unlike Asia, which is nearing its peak. The African continent has a **large proportion of young people who will soon reach the age where they might start smoking**. High fertility rates in Africa (4.4 live births per woman compared to 1.2–2.1 elsewhere) further contribute to population growth.

These factors - population expansion, a youthful demographic aging into smoking age, and high fertility, result in a substantial projected increase in the number of **smokers in sub-Saharan Africa, far exceeding other regions**, posing a **future public health challenge**.



Population by world region

Historic estimates with future projections based on the UN medium scenario.



Data source: HYDE (2023); Gapminder (2022); UN WPP (2024) OurWorldinData.org/population-growth | CC BY

QUIT

STOPPING SMOKING IN MIDDLE AGE WORKS

Stopping before 40
avoids nearly all loss of life

Stopping by 50
gives a 6-year gain in life

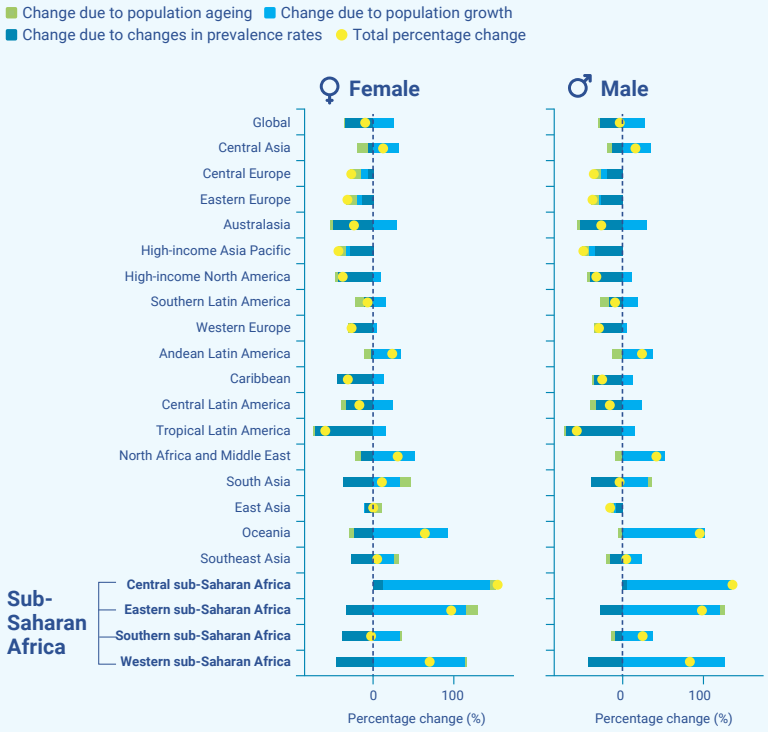
Stopping at any age
is worth it

We can therefore still intervene on the smoking behaviours of adults and still make a major benefit in health and longevity.

People smoke for the nicotine but die from the tar

- Michael Russell, BMJ, 1976

Change in the number of current smokers 2022-2050 (%) - GBD



Bryazka, D *et al*. (2024) Forecasting the effects of smoking prevalence scenarios on years of life lost and life expectancy from 2022 to 2050: A systematic analysis for the Global Burden of Disease Study 2021. *The Lancet Public Health*, 9(10), e729-e744. https://doi.org/10.1016/s2468-2667(24)00166-x

2 People will continue to use nicotine

People smoke for the psychoactive effects of the drug nicotine but they die from the smoke particles, the tar, the hot gases, the burnt products of combustion. They are drawn into the lung, affect the lung surfaces into the blood, circulate around the body, causing cancer and adverse effects. It is not the nicotine, **nicotine is what is making people smoke**, what makes them dependent or addicted, **but it is not what kills them**.

People will continue to use nicotine as it is a drug that appeals to people for very specific reasons and it **triggers the dopamine and adrenaline systems** in the brain **leading to rewarding psychoactive effects.**

BENEFITS OF NICOTINE USE

by Neal Benowitz

Medical

- Nicotine replacement medication
- ? Ulcerative colitis
- ? ADHD
- ? Parkinson's disease
- ? Autoimmune disease

Non-medical

- Pleasure
- Stimulation
- Cognitive enhancement
- Relaxation
- Mood modulation
- Psychiatric benefit
- Enhanced athletic performation
- Weight control

Important caveat: some perceived effects related to reversal of withdrawal symptoms

Source: UCSF Center for Tobacco Control Research and Education

> We have to start thinking about the drug nicotine in the same way that we think about other psychoactive substances, like caffeine, cannabis and alcohol.

3 Smoke-free products are much safer

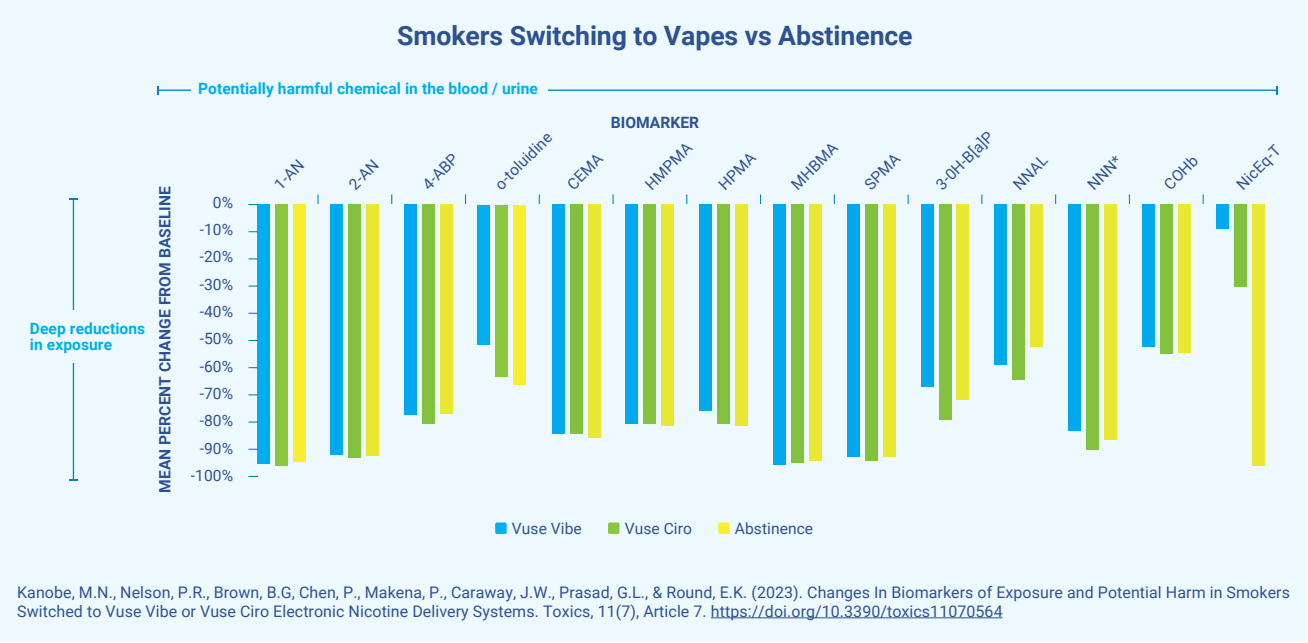
FOUR TYPES OF SMOKE-FREE NICOTINE PRODUCTS:

1. **Vaping products:** users inhale a heated nicotine-containing aerosol.
2. **Heated tobacco products:** produce a tobacco-flavoured nicotine aerosol without burning.
3. **Unheated products:** nicotine pouches, films, gums, or sprays, sometimes used as nicotine replacement therapies (NRTs) for regular consumption.
4. **Smokeless tobacco:** highly dangerous products like some African variants (e.g., toombak) with cancerous contaminants, but can be made safer to serve as a less harmful alternative to smoking or hazardous smokeless tobacco.

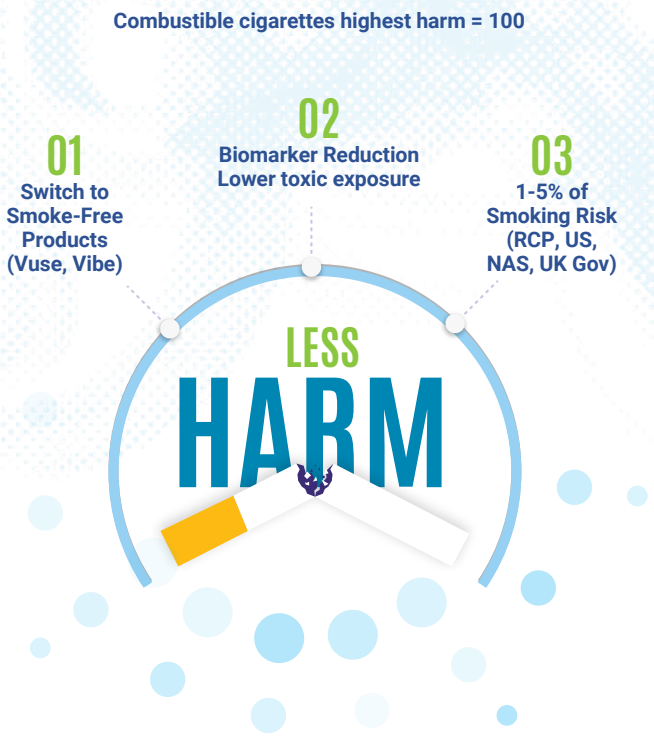
*Items are not shown to scale

WHY ARE SMOKE-FREE PRODUCTS SO MUCH SAFER?

Exposure biomarkers - deep reductions in toxicant exposure



Kanobe, M.N., Nelson, P.R., Brown, B.G, Chen, P., Makena, P., Caraway, J.W., Prasad, G.L., & Round, E.K. (2023). Changes In Biomarkers of Exposure and Potential Harm in Smokers Switched to Vuse Vibe or Vuse Ciro Electronic Nicotine Delivery Systems. Toxics, 11(7), Article 7. https://doi.org/10.3390/toxics11070564



Kanobe MN, *et al* (2023) shows that **biomarkers** (harmful chemicals in blood and urine) are **significantly reduced in users of vape products** (Vuse, Vibe), similar to levels seen in complete abstinence from smoking. While these products still deliver nicotine, they contain much **lower levels of carcinogens and hazardous agents** compared to cigarette smoke.

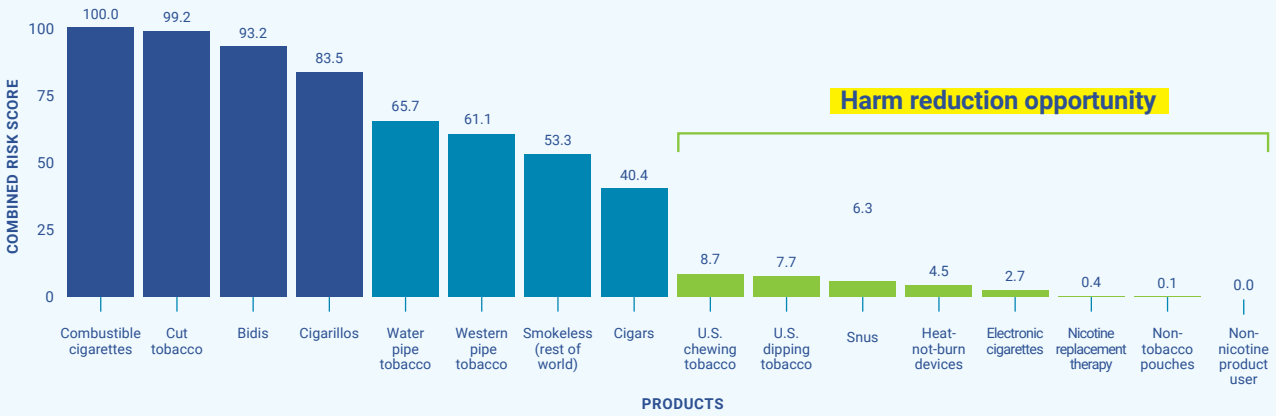
Assessments from reputable sources, such as the Royal College of Physicians (RCP), the US National Academy of Sciences (US NAS), and the UK government (UK Gov), indicate that **vaping poses only a small fraction (1–5%) of the risks** associated with smoking.

Switching from combustible cigarettes to **non-combustible nicotine products** can dramatically **reduce health risks**, offering a **more achievable harm reduction strategy** for those unable to quit nicotine entirely.

If you set smoking combustible cigarettes at 100, these non-combustible products, are all one to two orders of magnitude lower risk than smoking. If you get somebody to **switch from consuming nicotine via a smoking product to consuming nicotine from a smoke free product** this **dramatically reduces their risk** and creates a harm reduction opportunity.

ROUGH ESTIMATES OF RELATIVE HARM

The relative risk spectrum of 15 nicotine product categories



Adapted with permission by global status of tobacco harm reduction from Murkett, R, Rugh, M., & Ding, B. (2022). *Nicotine products relative risk assessment: An updated systematic review and meta-analysis* (0:1225). F1000Research. https://doi.org/10.12688/f1000research.26762.2

NHS
THE UK NATIONAL HEALTH SERVICE GIVES THE FOLLOWING ADVICE TO SMOKERS:

Vapes or e-cigarettes are far **less harmful** than cigarettes and can **help you quit smoking** for good.

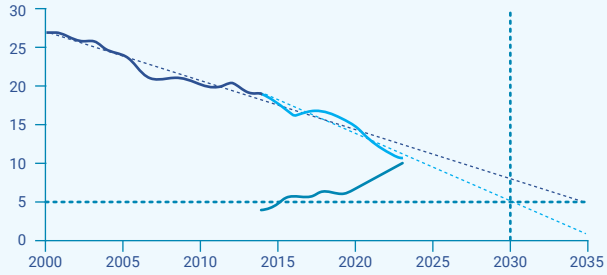
They are **not recommended for non-smokers and** cannot be sold to people **under 18 years** old.

4 Alternatives are displacing smoking

Do these products actually displace smoking or are they addictive? This is the adult smoking prevalence in the UK and you can see that it would have been trending down, but we actually had an acceleration in the downward trend once vapes came on the market after 2015. To the point now where it may allow the UK target to get to 5% smoking rates by 2030, because more people are **quitting smoking** by using these alternatives.

Vaping has accelerate the decline in smoking in Britain

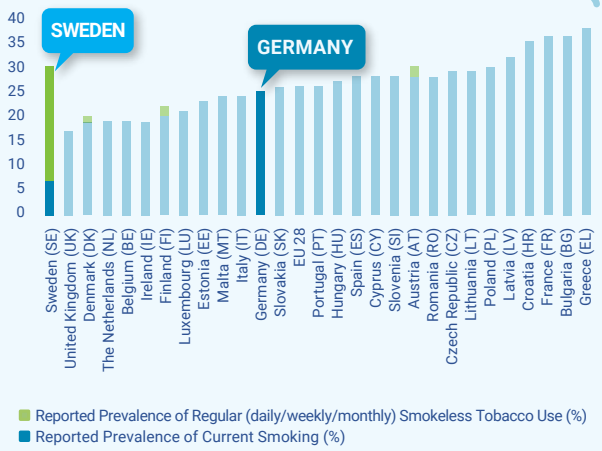
Britain - adult smoking and vaping prevalence (ONS)



Proof of concept: Sweden vs. Germany

Reported Prevalence of Total Tobacco Use in the EU (%)

Source: Special Eurobarometer 458 (2017)



Sweden ⬇ Low levels of smoking, ⬆ high levels of nicotine use
Germany ⬆ High levels of smoking, ⬇ low levels of nicotine use

Japan

Between **2014 and 2023**, the proportion of **cigarette sales were basically halved due to** the introduction of **heated tobacco stick products**. It has made a huge impact on smoking sales in Japan. It happens that heated tobacco products are popular in Japan because e-cigarettes are banned. Heated tobacco products are different to cigarettes and have been classified as appropriate for the protection of public health by the United States (US) Food and Drug Administration (FDA), and they have very similar biomarker characteristics to e-cigarettes.

Norway

Smoking amongst a group of **women** (ages 16-24) **fell from 17% to 1%** in just 10 years with the **introduction of Snus** (a form of smokeless tobacco). Snus use rose to 15%. Smokers switched over time from smoking to Snus use and the use of nicotine continued, but it continued using much safer products, and **snus use is 20-30 times less risky** than smoking.

Europe

Most of Europe smokes with the exception of Sweden. **Sweden has low levels of smoking**, but **high levels of nicotine use** through smokeless tobacco use. **Germany**, however, has a **lower rate of total nicotine use** but **higher smoking rates**.

SWEDEN VS. GERMANY

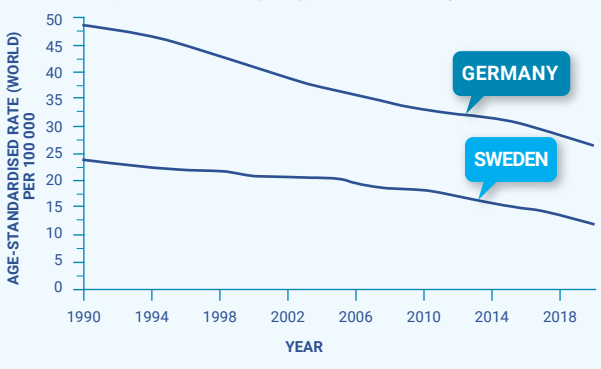
Germany has **twice** the **lung cancer** rate of Sweden. So there's very strong proof of concept here that smoking related disease is linked to the way that tobacco is used and because lung cancer is overwhelmingly associated with smoking Germany has the higher rate.

The level of **oral cancer** is much lower than lung cancer for both countries but also, the level of oral cancer is about half again in Sweden, what it is in Germany and the reason for that is that smoking also causes oral cancer and therefore Sweden is getting a harm reduction effect from its extensive use of smokeless tobacco.

Sweden vs. Germany cancer mortality

Lung cancer mortality (men)

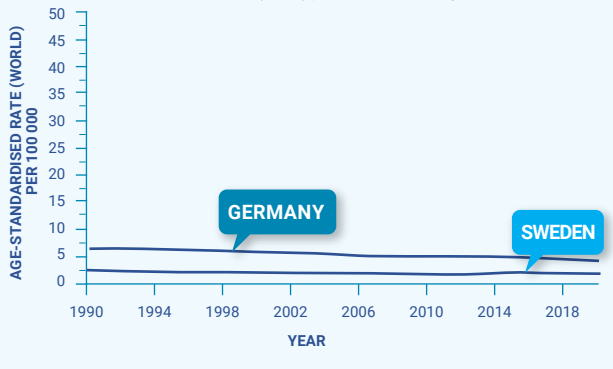
Age-standardised rate (World) per 100 000, mortality, males



Sweden vs. Germany cancer mortality

Lip, oral, and pharynx cancer mortality (men)

Age-standardised rate (World) per 100 000, mortality, males



5 Young people will destroy smoking

We have seen an acceleration in the decline in smoking in the US, despite a big spike in e-cigarette use in 2019. Daily smoking in the US, has almost completely disappeared with an acceleration from 2010 onwards due to youth switching to vaping instead of smoking. A lot of people say that is a bad thing, but it is a lot better than them smoking.

TWO TYPES OF YOUTH VAPING

1. Adolescents who would otherwise be smoking

i.e. these are the **people who have the underlying drivers for nicotine use**, usually a little bit stressed, anxious, rebellious; parents may have smoked or used nicotine. **People who are at risk of smoking who switch to vaping**, or who may not even switch and go straight to vaping, but would have been smoking in the situation where there were no vapes available.

If you would have been a smoker and you take up vaping or you take up pouches, that is a big win. You have diverted from a high risk behaviour to a relatively low risk behaviour, not a completely safe behaviour. It is a large benefit if they vape instead of smoking.

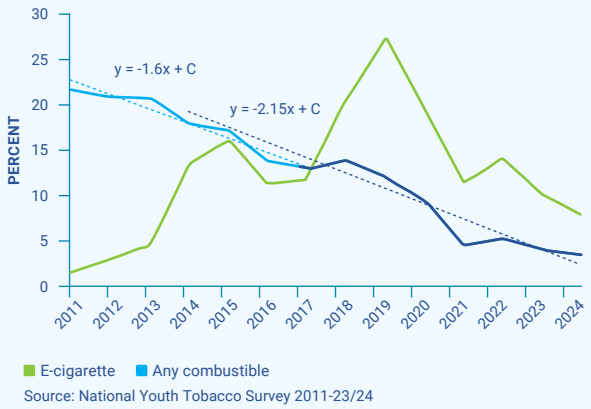
2. Adolescents who would never have smoked

The adolescents who would never have smoked, low risk of smoking, never took smoking up, didn't particularly like nicotine or get very much from it, but they **might try vaping and find that they like it or believe that it is not very risky.**

Adolescents who would never have smoked have moved **from a no risk behaviour, to a low risk behaviour**. These are likely to be people who will give up easily, and their vaping would be transient. These people would just have to give up vaping, which is much safer than smoking, and they really would not suffer very much harm over the long term. It is a small detriment if they vape instead of being abstinent.

Past 30-day e-cigarette & any combustible use

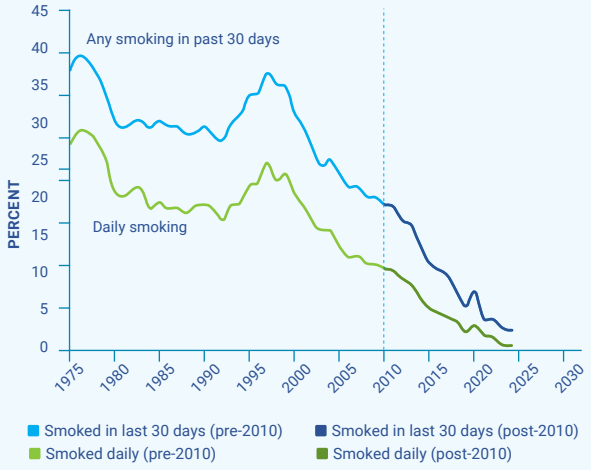
US high school students



Source: National Youth Tobacco Survey 2011-23/24

Past 30-day and daily cigarette smoking prevalence (percent) 1975-2024

US 12th Grade students



Source: Monitoring the Future 2016 and 2024

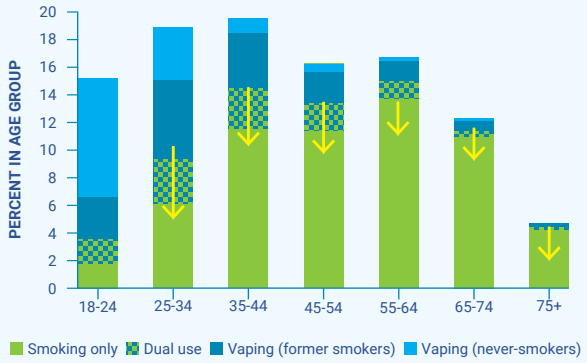
> The decrease in cigarette smoking among American youths is one of the great public health triumphs of the present century. Yet, few people are talking about it.
>
> – AJPH (2024)

> The big issue is smoking. It is not nicotine use, it is not vaping, not heated tobacco products. It is the smoke and the smoking that does the harm. That is what is causing the noncommunicable and communicable diseases, the cancer, the cardiovascular respiratory illnesses and that is where the public health focus needs to remain, whether it is for adults or for young people.

This is a breakdown of American smoking and vaping by age. There is a **higher smoking** prevalence in the **older age groups** and lower vaping prevalence but what **we hope** will happen **over time with good public health campaigns**, is that the **blue bars will push down into the green bars** and more of those people **will vape or quit and get the benefits of quitting smoking**, however old they are and however late. There is also another mechanism by which we are reducing smoking in the American population, which is that these **younger people who switched to vaping**, they are going to **age into the population, never having smoked**. So they will take up vaping instead of smoking and they will never smoke and that is how we will get rid of smoking. The two pressures - existing smokers switching and then new users never taking up smoking in the first place because they are using nicotine in some other way.

Things have rapidly changed in the US since 2014, we had **more nicotine use in total**. We had a lot more smoking and a lot more dual use, **but we had few people who vaped and never smoked**. Look at it now - a **78% reduction in smoking and an 87% reduction in exclusive smoking**. A huge change in the structure of nicotine use amongst 18 to 24 year olds in essentially nine years. It is an absolutely completely transformational thing within that population and then the 18 to 24 year olds will then age into the population over time. The big population took up vaping without ever smoking. These are young people who in the absence of vaping would have taken up smoking. The important point here, is that **over time, the demand for nicotine is far more robust**. Nicotine use has not come down that much, and is far more resilient than any particular way of taking it so you can **move the way people take nicotine from high risk to low risk much easier than you can suppress** total nicotine use, and the reason for that is that people like the drug, and frankly they become dependent on it in some ways.

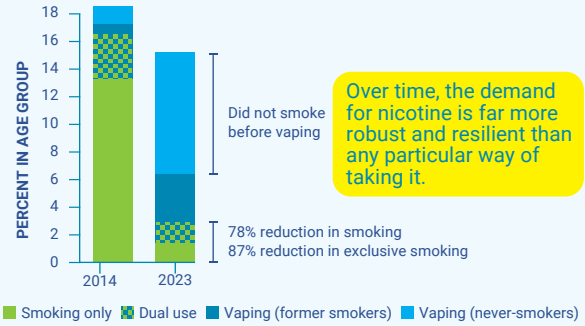
Adult Vaping and Smoking Status by Age Group



Source: National Health Interview Survey, 2023 | Data extract: Brad Rodu, with thanks

Young adult uptake of nicotine 2014-2023 (US)

Smoking & vaping prevalence (%) Americans aged 18-24



Over time, the demand for nicotine is far more robust and resilient than any particular way of taking it.

Source: National Health Interview Survey, 2014-2022
Data extract: Brad Rodu, Professor of Medicine, University of Louisville, U.S.
Graphics and annotations: Clive Bates

THE GATEWAY HYPOTHESIS - THE IDEA THAT VAPING CAUSES SMOKE.

Selya A (2024) concludes:

Evidence offered in support of the gateway hypothesis **does not establish that electronic nicotine delivery systems (ENDS) use causes youth to also smoke cigarettes**. Instead, this evidence is better interpreted as resulting from a common liability to use both ENDS and cigarettes.

Population-level trends are inconsistent with the gateway hypothesis, and instead are **consistent with** (but do not prove) **ENDS displacing cigarettes**.

Policies based on **misinterpreting a causal gateway** effect may be ineffective at best, and risk the negative unintended consequence of **increased cigarette smoking**.

There is no chance that vaping causes smoking. It is not that the vaping causes the smoking. You do see smoking and vaping travel together, but it is the fact that there is similar behaviours and the same characteristics of an individual, their rebelliousness, their mental health, the substances used, their anxiety and depression. Those are the same things that drive vaping.

The population trends, tend to **suggest**, but do not prove, that **e-cigarettes are displacing cigarettes.** We have to be **careful that if we try and ban vaping** or we try and restrict it, we get some sort of blowback and we **end up instead with people taking up smoking** or they do not switch from smoking to vaping.

Adult welfare also matters to youth:

- **Role modelling**
- **Second-hand smoke exposure**
- **Household financial burden**
- **Loss of household income**
- **Caring burden**
- **Grief and loss**

6 Policy and unintended consequences

WORLD HEALTH ORGANIZATION'S (WHO) MPOWER POLICY:

M — **Monitor Tobacco Use and Prevention Policies**

P — **Protect People from Tobacco Smoke**
- Comprehensive smoke-free laws
- Covers indoor public places, workplaces, restaurants, public transport

O — **Offer Help to Quit Tobacco Use**
- National quit lines and counselling
- Brief doctor advice increases quit success by 50–100%
- Nicotine replacement therapy (NRT) i.e. varenicline, bupropion

W — **Warn About the Dangers of Tobacco**
- Graphic health warnings
- Plain/standardised packaging
- Destroys brand appeal and counters misleading "light/mild" claims

E — **Enforce Bans on Tobacco Advertising, Promotion, and Sponsorship**
- Includes media, events, retail displays, and sponsorships
- Point-of-sale display bans (behind shutters/under counter)

R — **Raise Taxes on Tobacco**
- Additional Cross-Cutting Measures such as ban flavours, ingredient disclosure; "light" cigarettes proven ineffective and misleading, control retail access and tackle industry interference (block lobbying, false claims)

MPOWER has been codified into the WHO's framework convention on tobacco control (FCTC)

FRAMEWORK CONVENTION ON TOBACCO CONTROL

Elements	Objective	Evaluation
Adopted in 2003, entered into force in 2005	To protect present and future generations from the devastating health, social, environmental and economic consequences of tobacco consumption and exposure to tobacco smoke	Mixed results
182 parties (excludes US) – each member state is free to introduce their own nationally specific measures	'All about harm'	No evidence to suggest that it would have been effective in reducing cigarette consumption
Conference of the Parties meets every two years		**Parajeet** *et al* (2024) - over a decade across 170 countries the FCTC was associated with 24 million fewer young smokers and 2 million more quitters.
COP-11 in Geneva, 17-22 November 2025		
29 NGOs have observer status		

It should have been possible to get much more rapid declines in smoking. If there was a global move to substitute high risk nicotine use cigarette smoking, and other forms of smoking for low risk nicotine use.

LIST OF POSSIBLE TOBACCO CONTROL GOALS

Improve welfare and wellbeing · Reduce harms (including policy-induced harms) · Reduce serious disease · Reduce smoking · Reduce nicotine use · Protect children or vulnerable groups · Reduce substance use · Reduce second-hand exposure · Destroy the tobacco industry · Secure anti-tobacco legislation · Sue the industry · Prestige, livelihood, travel, grants...

In the era of cigarettes, reducing smoking aligned with multiple goals. However, with vaping and smoke-free products, trade-offs emerge. Reducing smoking might increase nicotine use or fail to reduce it significantly, and focusing on disease reduction could lead to more substance use. **Clear priorities are needed, with a focus on reducing harm and devastating health consequences as the primary goal.**

TWO PURPOSES OF REGULATION: 01 Consumer protection 02 Behaviour change

Excessive behaviour change regulation triggers harmful unintended consequences and undermines public health goals:

Adverse behaviour change
- Worst outcome: Increased smoking
- People who would switch from smoking to safer alternatives (vaping, heated tobacco, pouches, smoke-free) do not switch
- New users start smoking instead of safer alternatives

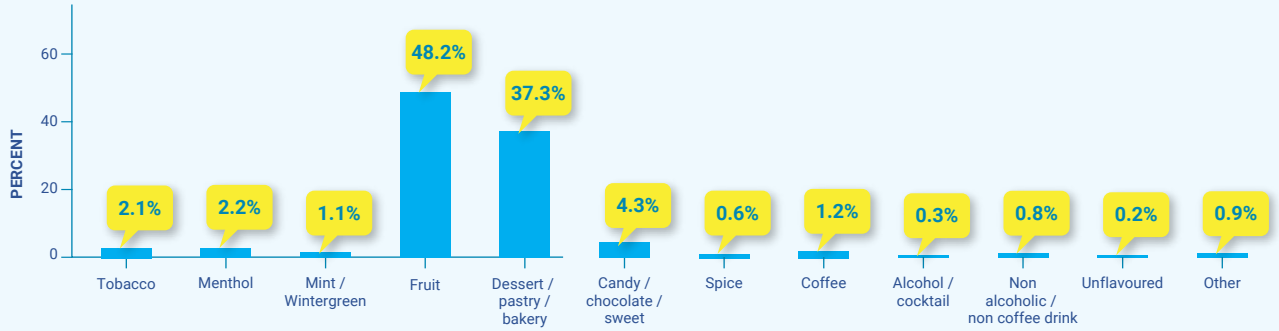
Illicit trade
- Bans create demand for banned products
- Criminal networks/cartels supply unregulated products
- Risks: Criminality, unregulated quality, association with other illicit goods
- Draws young people into criminal supply chains

Workarounds
- Users create homemade alternatives (e.g. DIY vape liquids)
- Risks: Unhygienic conditions, improper chemical use
- Using food flavourings (often oil-based, unsafe for inhalation)
- Aromatherapy oils as substitutes
- Easy access to ingredients enables unsafe DIY production

> Already 46 countries, ban the sale of e-cigarettes. Do you think e-cigarettes are not available? Of course they are. They are just supplied illegally by a criminal supply chain. They may not be so readily available, so there may be more smoking.
> It is not a win to ban something. It does not make it disappear. It means it is supplied differently and that would be true in Africa as well.

WHO calls for urgent action to ban flavoured tobacco products. Now, e-cigarettes rely on thousands of flavours. That is what makes them appealing. They **do not taste like tobacco**, and therefore, they are **helpful in getting away from tobacco**. In a big US study the preferred flavours was fruit or dessert. Only small numbers of people preferred tobacco or menthol/mint.

Single most often used flavour at the time of survey participation by participants who formerly smoked and were using e-cigarettes at the time of quitting smoking (*n* = 51,641)

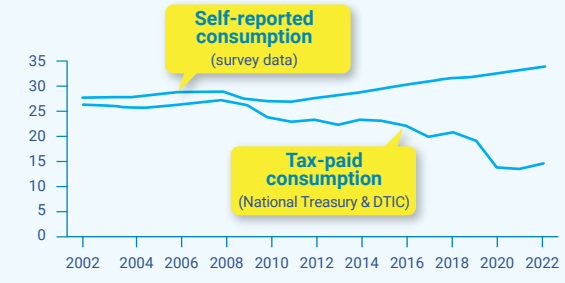


> The research shows that these flavour bans increase smoking. It's not just a theory, it's actually been found in evidence. So what I would say here is that bad regulation is a gateway to smoking. You can come in hard on the safer alternatives, but expect to get more smoking.

ILLICIT TRADE IS A MAJOR FACTOR IN THE SOUTH AFRICAN MARKET

Self-reported consumption is going up, but taxpay consumption is going down, the difference is illicit trade, - around 60% of the South African tobacco market is now illicit and that would easily be able to supply vaping products if the environment for vaping becomes more difficult.

The widening gap between self-reported consumption and tax-paid consumption
(billions of cigarette sticks).



Percentage of the illicit trade in the total market

Vellios, N., & Walbeek, C. van. (2024) Tax revenue lost due to illicit cigarettes in South Africa: 2002–2022. BMJ Open;14(3),e077855. https://doi.org/10.1136/bmjopen-2023-077855

7 Risk proportionate regulation

	Cigarettes, hand-rolling tobacco and other combustibles	Vaping, heated tobacco smokeless and oral nicotine
Taxation	Relatively high taxes	Low or zero tax (sales tax only)
Advertising	Prohibit other than within trade	Control themes and placement
Warnings	Graphic warnings depicting disease	Messages encouraging switching
Public places	Legally mandated controls	Up to the discretion of the owner
Plain packaging	Yes	No
Ingredients	Control reward-enhancing additives	Blacklist material health hazards
Age restrictions	No sales to under-21s	No sales to under-18s
Internet sales	Banned	Permitted with age controls
Product standards	Control risks and reduce appeal	Control risks

Exploiting the opportunities and controlling the risks

01 A realistic model of youth risk behaviours

02 Above all: a lawful adult market

03 Risk-proportionate regulation

04 Age-secure retailing

05 Responsible marketing, including branding and flavour descriptors

ONE BIG IDEA: Make nicotine use much safer.

There is going to be nicotine use whether we like it or not. We know how to make nicotine use much safer, so we should do it. Advise people to use nicotine in its safest form by consent, not coercion.

Further information: https://clivebates.com/evidence/

Further information: https://scihria.org.za/

8 Questions & Answer Session

What is “popcorn lung” and has it ever occurred in vapers?

Popcorn lung (bronchiolitis obliterans) is a severe lung disease linked to high diacetyl exposure. No documented cases in vapers.

Why is popcorn lung discussed in relation to vaping?

Diacetyl was used in some vape flavours (now rarely) at low levels. No cases in vapers or smokers, despite higher diacetyl in cigarette smoke.

What regulatory action has been taken on diacetyl?

Many jurisdictions (e.g., EU) banned diacetyl in vaping products. Most manufacturers removed it voluntarily.

Are there proven long-term risks of vaping?

Long-term vaping risks lack 50-year data, but biomarkers, occupational health, and toxicology suggest much lower risk than smoking.

How do we assess long-term vaping risk without decades of data?

Vaping risk assessed via biomarkers, occupational exposure limits, and modelling. Estimated 95% less harmful than smoking.

If long-term vaping risks are uncertain, isn’t banning it safer?

Banning vaping may increase smoking harm. Precaution should not block harm reduction opportunities.

How are non-combusted nicotine products regulated in Japan?

In Japan, non-combusted nicotine products are medicinally regulated. E-cigarettes restricted; heated tobacco widely adopted.

What happened in Japan despite e-cigarette restrictions?

Heated tobacco popularity in Japan reduced cigarette sales by ~50% in under 10 years.

Who might prefer heated tobacco over vaping?

Committed smokers may prefer heated tobacco, which mimics smoking sensation while being less harmful.

What is the impact of biomass fuel exposure in Africa?

Biomass fuel exposure in Africa causes major indoor air pollution, a top sustainable development priority.

Are non-commercial cigarettes (e.g., tobacco in newspaper) worse than factory cigarettes?

Non-commercial cigarettes (e.g., tobacco in newspaper) are likely worse due to combustion and unknown contaminants.

How risky is hookah smoking compared to cigarettes?

Hookah is less risky than cigarettes due to intermittent use and non-combusted tobacco, but high carbon monoxide is cardiotoxic.

Does nicotine destroy nerve endings or harm brain development?

No evidence nicotine destroys nerve endings. Human evidence on adolescent brain effects is conflicting, with no clear deficits in adult ex-smokers.

Is nicotine carcinogenic or cardiotoxic?

Nicotine is not carcinogenic. May worsen existing cancer/heart disease but is not a major driver of COPD or heart disease.

Is nicotine addiction the same in vaping as in smoking?

Vaping/pouch dependence lacks smoking’s severe disease burden, better classified as dependence, not addiction.

How should rehabilitation centres approach tobacco harm reduction?

Rehabilitation centres should not discourage vaping, respect patient autonomy, advise safer alternatives, and use evidence-based guides (e.g., UK NCSCT).

Is tobacco harm reduction a policy choice or a necessity?

Tobacco harm reduction is a public health imperative, especially in early-stage tobacco epidemics like Africa.

9

Multiple Choice Questions for CPD points

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1. What is the primary cause of death from smoking?

a) Nicotine
b) Carbon dioxide
c) Smoke from combustion
d) Filter chemicals

2. Why is Africa projected to become a major future centre of smoking-related harm?

a) Low cigarette prices
b) High levels of current smoking
c) Rapid population growth and youthful demographics
d) High levels of vaping

3. What is the estimated global number of deaths from smoking and second-hand smoke each year?

a) 2 million
b) 4 million
c) 7.5 million
d) 10 million

4. At what age does quitting smoking avoid nearly all loss of life years?

a) Before 25
b) Before 30
c) Before 40
d) Before 55

5. Why are smoke-free nicotine products considered far safer than cigarettes?

a) They use less nicotine
b) They are approved by all governments
c) They contain no chemicals
d) They avoid combustion and drastically reduce toxic exposure

6. According to UK assessments, vaping carries approximately what fraction of the risk of smoking?

a) 25–30%
b) 10–15%
c) 1–5%
d) 40–50%

7. Which country experienced a 50% decline in cigarette sales due to heated tobacco product adoption?

a) Sweden
b) Germany
c) Japan
d) Norway

8. Which two African countries have the highest smoking prevalence according to the document?

a) Kenya and Egypt
b) Nigeria and Ghana
c) Botswana and Rwanda
d) Lesotho and Mauritius

9. Which country's low lung cancer rate is strongly linked to widespread use of smokeless tobacco (snus)?

a) Italy
b) France
c) Germany
d) Sweden

10. What major risk arises when governments ban vaping products?

a) Increased tourism
b) Growth of illicit markets supplying unregulated products
c) Decline in all nicotine use
d) Improved product safety

11. According to Clive Bates, what is the most important regulatory goal?

a) Reduce nicotine experimentation
b) Protect the tobacco industry
c) Reduce harm from smoking
d) Eliminate nicotine worldwide

12. What is a key unintended consequence of excessive regulation of safer nicotine products?

a) Higher tax revenue
b) Higher cessation rates
c) Increased cigarette smoking
d) More medical supervision

13. What is the main reason flavours are important for vaping as a harm-reduction tool?

a) They are healthier
b) They are cheaper
c) They help smokers move away from tobacco taste
d) They increase nicotine levels

14. Which WHO framework guides global tobacco control policy?

a) FCDR
b) TRIPS
c) FCTC
d) MDG

15. What is the "one big idea" emphasised in the presentation?

a) Ban all nicotine products
b) Make nicotine use much safer
c) Replace vaping with cigarettes
d) Focus only on youth prevention

16. Why do people continue using nicotine, according to the document?

a) It improves lung function
b) It produces rewarding psychoactive effects (dopamine and adrenaline triggers)
c) It is non-addictive
d) It cures stress disorders

Multiple Choice Questions for CPD points

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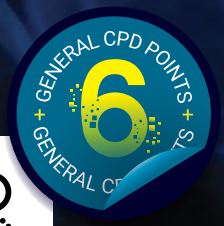
Scientific Insights in Harm Reduction in Africa



view webinar

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Please notify office@scihria.org.za once you have watched the recording

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