

WHO's Call to Action on Electronic Cigarettes

Key recommendations and factors underpinning the Call to Action

Dr Ranti Fayokun

No Tobacco Unit (TFI)

Department of Health Promotion

World Health Organization













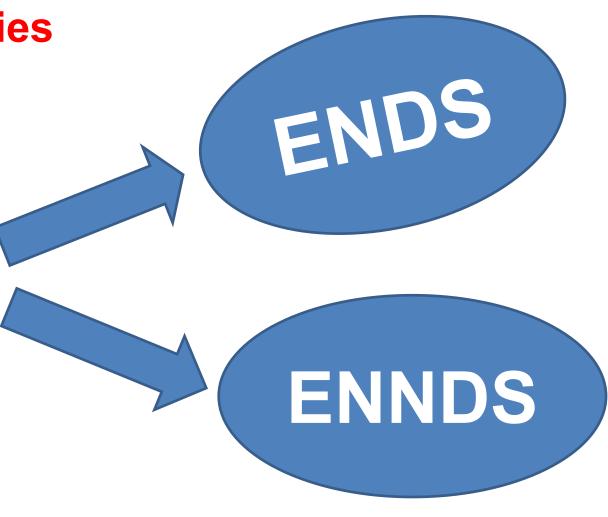




E-Cigarettes - What are they?

Broadly - 2 distinct categories

Electronic nicotine delivery systems and electronic non-nicotine delivery systems



E-cigarettes - the most common

Heats a liquid containing nicotine + PG + VG + Flavours

Third category

*HTPs contain tobacco and are tobacco products
*Nicotine Products (e.g., nicotine pouches)

E-Cigarette: Call to Action (Dec 2023)

Fourth category





ENDS/ENNDS – e-Liquids

ENDS

- 1. Contains nicotine 2. Thousands of flavours
- 3. Diverse volumes
- 4. Range of colours
- 5. Can be manipulated
 - 6. Disposable/refills for devices
 - 7. Pods or cartridges
 - 8. Contain other chemicals
 - 9. Varying nicotine concentration





ENNDS

- 1. Not supposed to Contain nicotine
 - 2. Thousands of flavours
- 3. Comes in diverse volumes
- 4. Range of colours
- 5. Can be manipulated
 - 6. Disposable/refills for devices
- 7. Pods or cartridges
 - 8. Contain other chemicals

Examples - ENDS





Cig-a-likes

These are disposables that have the look and feel of conventional cigarettes. This may renormalize smoking.



Vape-pens

These enable users to vary e-liquid formulations according to their preferences. Some use pre-filled cartridges while others allow users to refill them.



Disposables

These are the latest version of ENDS, often shaped like pods, but are meant to be discarded after the e-liquid has been used. They are available in a wide variety of flavours and are also easily concealable.



Tank systems

These enable users to vary almost every element of the user experience, including e-liquid formulations and battery power.



Pods

These are a newer generation of ENDS. Because this generation often uses nicotine salts, they provide higher doses of nicotine without a harsh sensation. The devices often look like USB sticks allowing users (e.g. young people or students) to conceal them.

E-Cigarette: Call to Action (Dec 2023)

https://www.who.int/publications/i/item/9789240032095



E-cigarettes: Why are we talking about them?



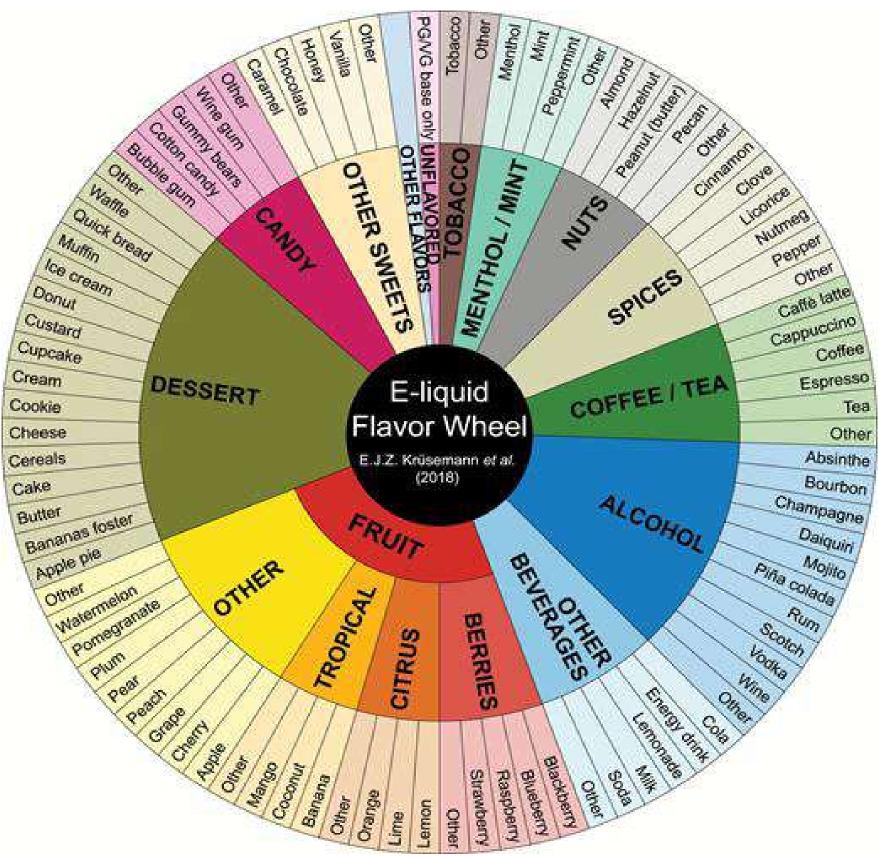




E-Cigarette: Call to Action (Dec 2023)







https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6751518/



Lipstick, Watches and Merchandise













ENDS – Heterogenicity and exposure

Contents, makeup and emissions

Battery voltage/ electrical makeup Variability, heating, nicotine delivery, aerosol composition and toxicant delivery

User behavior
How used, intensity of
inhalation, frequency of use

Exposure to emissions
Nicotine and toxic substances

E-Cigarette: Call to Action (Dec 2023)

World Health Organization

Toxicants with known Health Effects

Formaldehyde

Hydroxycarbonyls

Metals

Volatile Organic Compounds

Dicarbonyls



Acetaldehyde

Ultrafine particles

Glycols

Methylglyoxal

The US Surgeon General - e-cigarette aerosol can contain harmful constituents

E-Cigarette: Call to Action (Dec 2023)

Source: E-Cigarette Use Among Youth and Young Adults: A report of the Surgeon General (2016), FCTC/COP6/10 Rev.1; Uchyama et al. Chem Res Toxicol. 2020 Jan 17. doi: 10.1021/acs.chemrestox.9b00410



E-Cigarettes: WHO Call to Action



E-Cigarette: Call to Action (Dec 2023)



https://www.who.int/publications/m/item/electronic-cigarettes---call-to-action

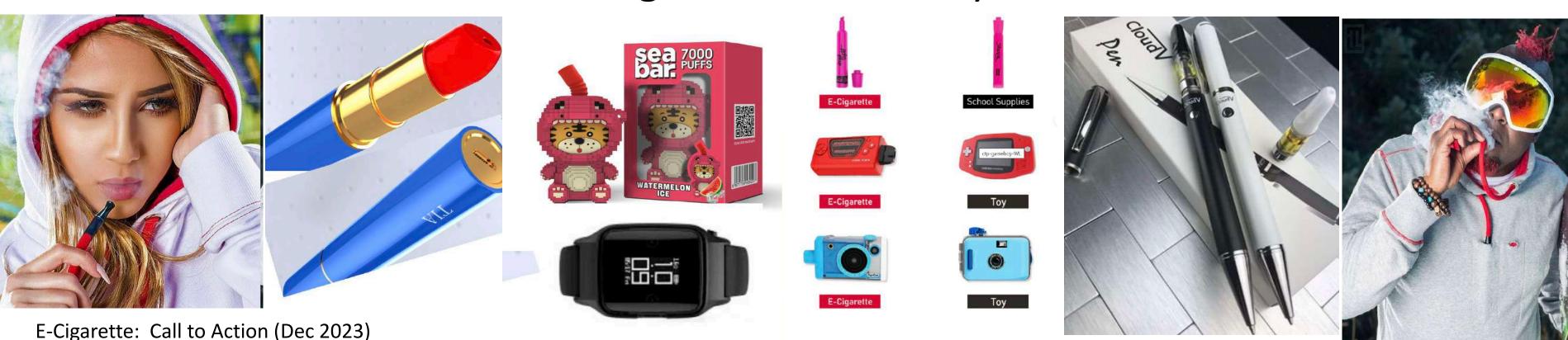
World Health Organization

Problem Statement

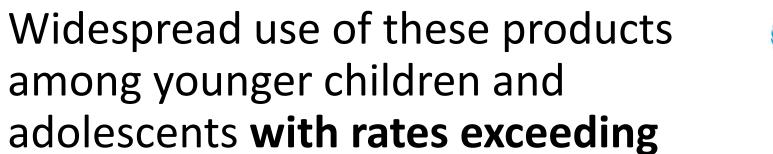
E-cigarettes with nicotine are highly addictive and are harmful to health.

Globally, the market is **growing rapidly**, with a large diversity of products and attractive flavours, **aggressively marketed targeting children and young people**.

This has driven widespread use of these products among younger children and adolescents with rates exceeding adult use in many countries.

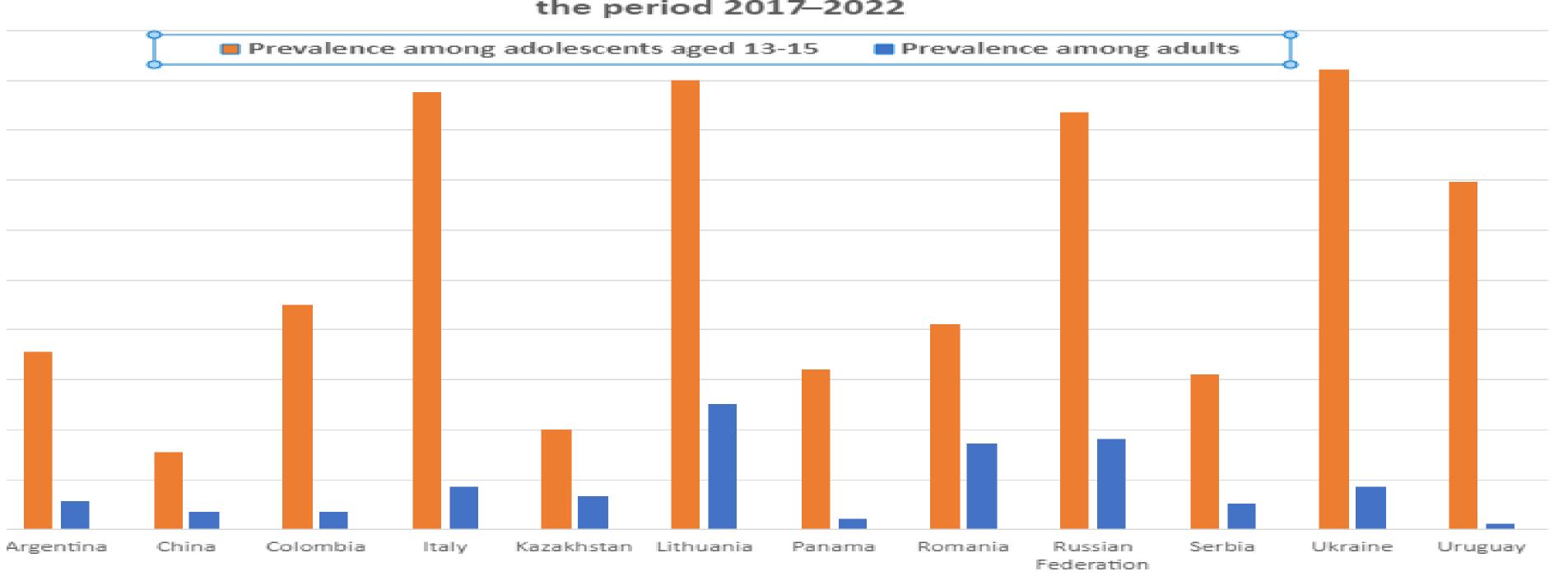


E-cigarettes -**Adolescents and Adults**





Countries reporting e-cigarette use among adolescents aged 13-15 and adults in the period 2017-2022



among younger children and

adult use in many countries



Where countries ban sale of e-cigarettes, they should ensure strong implementation, including:

- monitoring and surveillance measures that support a real-time view of uptake and patterns of use
- complementary measures such as prohibiting advertising,
 promotion and sponsorship (including digital marketing)
- effective enforcement measures



Where countries permit commercialization of e-cigarettes as consumer products, strong regulation is necessary. This includes, at a minimum:

Regulating e-cigarettes to reduce their appeal and their harm to the population, including by:

- Banning all flavouring agents, including menthol and synthetic menthol analogues
- Prohibiting attractive and/or promotional features related to the presentation and packaging of the products
- Regulating features that enable the user to manipulate the product, post-sale



Regulating e-cigarettes to reduce their appeal and their harm to the population, including by: (Continued)

- Limiting the concentration and quantity of nicotine, to reduce the risk of dependence
- Setting a maximum volume for e-cigarette cartridges, to limit toxicants exposure and use
- Setting a maximum battery power, to limit the influence of power on nicotine and toxicant delivery
- Prohibiting device features that permit transmission of information to and from third parties
- Prohibiting additives that have carcinogenic, mutagenic and reprotoxic properties



Where countries permit commercialization of e-cigarettes as consumer products, strong regulation is necessary. (Continued)

Protecting the public from misleading or deceptive claims, such as false claims on safety or efficacy for quitting cigarette smoking.

Prohibiting sale of e-cigarettes to children, controlling the supply chain to reduce the risk of children gaining access and enforcing these restrictions against responsible entities.

Applying tobacco control measures to e-cigarettes, including the supply and demand reduction measures of the WHO FCTC.

E-Cigarette: Call to Action (Dec 2023)



Where countries permit commercialization of e-cigarettes as consumer products, strong regulation is necessary. (Continued)

Strengthening monitoring and surveillance so that governments have a realtime view of the uptake of e-cigarettes and patterns of use (including dual and poly use with cigarettes and other tobacco products) to guide regulatory action.

Strengthening enforcement to ensure that the measures above are effective.

Sharing information regarding the harmful effects of e-cigarette use with the public.



Where countries pursue a smoking cessation strategy utilizing e-cigarettes, they should:

- control the conditions under which the products are accessed to ensure appropriate clinical conditions
- •regulate the products as medicines (including requiring marketing authorization as medicines).

The decision to pursue a smoking cessation objective, even in such a controlled form, should be made <u>only after considering national circumstances</u>, along with the risk of <u>uptake and after exhausting other proven cessation strategies</u>.

For a product to be appropriate for cessation, it must demonstrate both efficacy and safety.



For all countries, a comprehensive approach to tobacco control is critical and should be implemented in line with national circumstances, including existing tobacco control measures.

Countries should implement a comprehensive approach to tobacco control, which includes

- raising tobacco excise taxes
- •bans on tobacco advertising, promotion and sponsorship
- health warnings
- smoke-free areas
- mass-media campaigns



Electronic cigarettes come in thousands of flavours, which are particularly attractive to children and young people. Flavours play a key role in product use initiation, serving as a path from experimentation to regular use, and can increase the general toxicity of the aerosols.

■ There were approximately **16,000 unique flavours** identified for e-cigarettes in 2017, more than double those in 2014.



Disposable electronic cigarettes, particularly popular among youth, have increased in size, contain much more nicotine than before and are increasingly cheaper and accessible.

- 'Disposable' (non-rechargeable and non-refillable) e-cigarettes sold in the USA have –
 - onearly tripled in nicotine strength (dubbed as the "nicotine strength arms race")
 - oquintupled in e-liquid capacity, and
 - odropped in price by nearly 70% between 2017 and 2022.



Electronic cigarettes are harmful.

- All e-cigarettes emit toxic chemicals, often including nicotine. Dual use, which is common, is at least as dangerous and likely more dangerous than smoking conventional cigarettes or using e-cigarettes alone.
- Additional concerns arise regarding customizable electronic cigarettes that allow the user to increase nicotine uptake, as well as newer disposable and pod systems that have higher nicotine delivery.



There is a wide diversity of electronic cigarettes, many of which allow the user to customise the products, including increasing nicotine uptake, and/or the level of toxicants.

Device characteristics – battery power and customizable wattage. This can determine the amount of nicotine & toxicants to which the user is exposed.

- Increasing the device power increases nicotine yields, with one study finding that increasing the power output from 3 to 7.5 W increased the nicotine yield by four or five times.
- However, increasing the power from 4.1 to 8.8 W approximately tripled volatile aldehyde emissions; increasing the power from 6 to 13 W increased emissions of the carcinogen benzene 100 times.



There is a wide diversity of electronic cigarettes, many of which allow the user to customise the products... (Continued)

Liquid constituents – choice of e-liquid.

- The nicotine content of e-liquids in pre-filled devices can contain very high levels
 of nicotine of > 60 mg/mL and "do-it-yourself" liquids can reach levels of nicotine
 of about 130 mg/mL.
- Fourth generation e-cigarettes (pods, pod mods and disposables) contain high concentration nicotine salt e-liquid, creating greater dependence potential than other products.



There is a wide diversity of electronic cigarettes, many of which allow the user to customise the products... (Continued)

User behaviour – user's puffing style. Increasing puffing intensity can generate more nicotine in the smoke.

- By puffing more intensely, some users of e-liquids with low nicotine strength can also achieve the same amount of nicotine per puff as high nicotine liquid users.
- •More intensive puffing patterns can also expose users to higher amounts of toxicants, including carbonyls, which have been linked with pulmonary disease in smokers.



Labelling is not always accurate.

- These products are not routinely tested by governments and people are not aware of what they are inhaling.
- Studies have found that labelling is not consistently a reliable indicator of nicotine content and mislabelling is a common issue.

Commercial and other vested interests related to e-cigarettes harm public health.

In a review of 105 studies analysing the composition of liquids and emissions, 30% had authors that had received funding from ENDS/ENNDS interests – including tobacco and related industries.



Electronic cigarettes as actually used in the population as consumer products have not been proven to be effective for cessation at the population level and may lead to ongoing nicotine dependence.

• E-cigarettes are associated with significantly lower odds of being nicotine free than nicotine replacement therapy and ongoing dependence on nicotine.

Insufficient country level action. Very few countries have measures in place to protect children from e-cigarettes.

■ 88 countries, covering a population of 2.3 billion people, have no minimum age at which these products can be bought and 74 countries, with over 2 billion people, have no regulations in place addressing e-cigarettes.

WHO DG – WHO EB 154





"History [is] repeating itself, but with a different form. The same nicotine, but with a different packaging. And the sad part is the industry is saying it's harm reduction. And what has got harm reduction to do with children?

To call it harm reduction and, deliberately, recruit children and use schools as battleground, is dishonest".

WHO Director-General Dr Tedros Adhanom Ghebreyesus

WHO Executive Board 154, January 2024





















http://www.who.int/tobacco

Thank You!