

Electronic smoking devices: What are the facts?



WHAT ARE ELECTRONIC SMOKING DEVICES?

Electronic smoking devices (ESDs) are electronic products designed to deliver nicotine and other chemicals through inhalation of aerosol. The two main types of ESDs are Electronic Nicotine Delivery Systems (ENDs) and Heated Tobacco Products (HTPs). ENDs typically consist of a battery, a heating element, a tank or cartridge with e-liquid or juice, and an atomizer that converts the liquid into aerosol.¹ HTPs, on the other hand, utilize an electronic device that heats up specially prepared tobacco sticks or loose tobacco leaf, sometimes in combination with a liquid or gel.

ESDs ARE HARMFUL TO ONE'S HEALTH AND WELL-BEING

Contrary to tobacco industry claims, ESDs are not 95% less harmful than traditional cigarettes. A 2020 paper in the American Journal of Public Health² called this a factoid, a misleading piece of information repeated so often that it has become accepted as a fact. The World Health Organization³ is consistent with its warnings against both ENDs and HTPs and the harms that they can cause to one's health.

ESDs require strict regulation due to the presence of harmful chemicals that may cause heart and lung disease, cancer, and other health issues. These chemicals include nicotine, formaldehyde, acetaldehyde, acrolein and others.⁴ These aerosols also contain metals such as lead, chromium, cadmium, and nickel. The WHO, the US Surgeon General, and the US National Academies of Sciences, Engineering, and Medicine (NASEM) have also warned against the risk of inhaling secondhand emissions from electronic cigarettes, citing the dangers of the mixture of chemicals in these emissions.

The tobacco industry promotes ESDs as aids to help people quit smoking. This is false, as research shows that most people who use e-cigarettes to quit smoking end up using both e-cigarettes and traditional ones.^{5,6} Rapidly growing uptake of ESD use among youths in many countries is a major concern.

HOW DOES THE TOBACCO INDUSTRY LURE THE YOUTH TO USE ESDs?

Despite the dangers that ESDs pose to one's health and well-being, the tobacco industry relentlessly targets the youth as replacements for its customers that die or quit using its products. ESDs are sold in sleek shapes and sizes, attractive colors, and fun, fruity, and

1 American Lung Association, "What's in an E-Cigarette?" Available at <https://www.lung.org/quit-smoking/e-cigarettes-vaping/whats-in-an-e-cigarette>

2 Eissenberg E., et al., "Invalidity of an Oft-Cited Estimate of the Relative Harms of Electronic Cigarettes," American Journal of Public Health. Published online 8 January 2020. <https://doi.org/10.2105/AJPH.2019.305424>

3 Seventh Conference of the Parties to the WHO Framework Convention on Tobacco Control. (2016). Electronic Nicotine Delivery Systems and Electronic Non-Nicotine Delivery Systems (ENDs/ENNDs). Geneva: The WHO FCTC Secretariat. FCTC/COP/7/11

4 American Lung Association, "The Impact of E-Cigarettes on the Lung" Available at <https://www.lung.org/quit-smoking/e-cigarettes-vaping/impact-of-e-cigarettes-on-lung>

5 Temourian, Allison A et al. "Why do smokers use e-cigarettes? A study on reasons among dual users." Preventive medicine reports vol. 29 101924. 22 Jul. 2022, doi:10.1016/j.pmedr.2022.101924

6 Wills TA, Knight R, Sargent JD, Gibbons FX, Pagano I, Williams RJ. Longitudinal study of e-cigarette use and onset of cigarette smoking among high school students in Hawaii. Tob Control. 2017 Jan;26(1):34-39. doi: 10.1136/tobaccocontrol-2015-052705. Epub 2016 Jan 25. PMID: 26811353; PMCID: PMC4959970.

HOW ARE COUNTRIES REGULATING ESDs?

Over 40 countries globally have banned ESDs. In the ASEAN region, Brunei, Cambodia, Lao PDR, Singapore, and Thailand have banned ESDs.

The ban on the purchase, distribution, use, possession, advertising, promotion, and sponsorship of electronic smoking devices in Singapore started in 2017 and was implemented to prevent normalization and initiation to these products, especially among the youth.

Similarly, in 2019, Hong Kong banned the importation, manufacture, sale, distribution, and advertisements of alternative smoking products which are defined to include e-cigarettes, HTPs, and herbal cigarettes.

In India, a ban was implemented at the state level first before it was introduced as a national policy in 2019. The national law imposes a ban on the production, manufacture, import, export, transport, sale, and distribution of ESDs.

WHAT ARE THE RECOMMENDED ACTIONS FOR GOVERNMENTS?

A. Impose a complete ban on ESDs.

ESDs are dangerous and their use is creating a new generation of nicotine addicts. Governments should impose a ban on these products to safeguard public health. A complete ban will protect the public from the risks associated with using ESDs and will also prevent their use as a gateway to smoking and substance abuse. A ban on ESDs will also curb the appeal of ESDs to the youth and prevent their access to such devices. Further, a ban on ESDs protects the public from secondhand aerosols that contain toxic chemicals.

sweet flavors that appeal to children. More than 15,000 e-liquid flavors⁷ are in the market, and there is scientific evidence that these flavors are harmful when inhaled.⁸ E-cigarettes are also disguised as toys, snacks, and gadgets to avoid detection by authorities and parents.

The industry also uses social media to promote ESDs as trendy and essential. Social media sites, like Facebook, Tiktok, and Instagram, are used to show ads tailored for young audiences.⁹ These messages are carried over events, concerts, and festivals sponsored by the industry.¹⁰ The industry also uses influencers and celebrities to normalize and glamorize the use of ESDs.



E-cigarettes sold in Cambodia (top), Indonesia (middle), and Lao PDR (bottom) are sold in the form of toys and snacks, luring children into buying and using them.

7 Campaign for Tobacco-free Kids, "Administration's E-Cigarette Policy Leaves Thousands of Flavored E-Cigarettes in the Market." Available at https://www.tobaccofreekids.org/media/2020/2020_01_15_what-isnt-covered

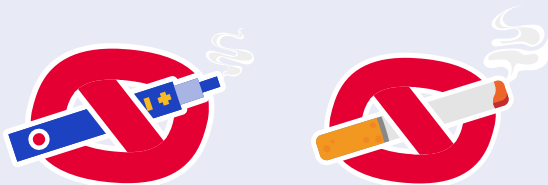
8 Morris AM, Leonard SS, Fowles JR, Boots TE, Mnatsakanova A, Attfield KR. Effects of E-Cigarette Flavoring Chemicals on Human Macrophages and Bronchial Epithelial Cells. *Int J Environ Res Public Health*. 2021 Oct 22;18(21):11107. doi: 10.3390/ijerph182111107. PMID: 34769627; PMCID: PMC8583527.

9 Vital Strategies, "Meta's Facebook, Instagram Used To Target Indonesians, Including Youth, for E-Cigarettes and Other Nicotine Products." Available at <https://www.vitalstrategies.org/metas-facebook-instagram-used-to-target-indonesians-including-youth-for-e-cigarettes-and-nicotine-products/>

10 STOP, "Loud and Clear: Big Tobacco's Music Sponsorship Motives." Available at: <https://exposetobacco.org/news/tobacco-music-sponsorship/>

B. Strictly regulate ESDs.

A less optimal regulatory approach is to restrict the manufacturing, packaging, marketing, sale, and use of ESDs. Policies to restrict ESDs should prevent initiation of ESDs to non-smokers and the youth, which will involve regulations on advertising, promotion, and sponsorship, as well as the kinds of flavors available on the market. Policies should also prevent unproven health claims to be publicized and used as a means to market these products. A strict regulatory framework on ESDs should also include comprehensive smoke-free regulations, large pictorial health warnings on packaging, access restrictions, and tax and price measures that discourage us



C. Collaborate with civil society and public health experts.

Addressing the dangers of ESDs requires a whole-of-society approach. Policymakers should enable collaboration with various stakeholders including civil society, academe, public health experts, researchers, advocacy groups, and others that are not affiliated with the tobacco/nicotine industry. When developing new policies to be implemented related to ESDs, policymakers should actively engage with these stakeholders and collect valuable, updated, and factual insights on ESDs and how they affect the population.

A strong involvement of non-government organizations and the civil society can preempt and mitigate industry interference including recent marketing tactics, unproven health claims, and attempts to influence regulations and policy directions for ESDs.

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