

VAPING AMONG ADOLESCENTS AND YOUTH IN THE CARIBBEAN: SITUATION, POLICY RESPONSES, AND RECOMMENDED ACTIONS

REPORT | JUNE 2023





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The HCC hopes that the priority recommended actions will be well-received by CARICOM governments and their national and international partners in health and development, and will be implemented to counter the emerging threat of ENDS/ENNDS use among adolescents and youth, and to mitigate the impact of the staggering burden of noncommunicable diseases (NCDs) including mental health conditions, in the Caribbean.

Acronyms and Abbreviations

CARICOM	Caribbean Community
CDC	Centers for Disease Control and Prevention
COP6	6th session of the Conference of the Parties to the World Health Organization Framework Convention on Tobacco Control
COVID-19	coronavirus disease 2019
CSO	civil society organisation
ENDS	electronic nicotine delivery systems
ENNDS	electronic non-nicotine delivery systems
GYTS	Global Youth Tobacco Survey
HCC	Healthy Caribbean Coalition
LoA	Letter of Agreement
MoH	Ministry of Health
NCDs	noncommunicable diseases
NGO	nongovernmental organisation
PAHO	Pan American Health Organization
TTCs	transnational tobacco companies
U.S.	United States
WHO	World Health Organization
WHO FCTC	World Health Organization Framework Convention on Tobacco Control

Executive Summary

The scourge of noncommunicable diseases (NCDs), including mental health conditions, the main causes of death and illness in the Caribbean, continues to be a health and economic burden, and a significant impediment to sustainable national development. Tobacco use is one of the main NCD risk factors, and in the Caribbean region, as globally, there has been progress in reducing the use of tobacco, including among adolescents and youth. However, this progress is being put at risk by an increase in the use of electronic nicotine and non-nicotine delivery systems (ENDS/ENNDS), also called electronic cigarettes (e-cigarettes) or vapes, particularly among young people.

The Healthy Caribbean Coalition (HCC) has developed this report to summarise the situation regarding the use of ENDS/ENNDS among adolescents and youth globally and associated policy responses, in the Region of the Americas, and among Caribbean Community (CARICOM) Member Countries, and to make recommendations to CARICOM governments—and their key partners and stakeholders—for priority actions to prevent and reduce ENDS/ENNDS use and harms among young people in the Caribbean.

Key Messages

- There has been progress in the implementation of tobacco control measures globally, regionally, and nationally, in the frameworks of the legally-binding WHO Framework Convention on Tobacco Control (WHO FCTC) and the WHO [MPOWER](https://www.afro.who.int/sites/default/files/2017-06/mpower_english.pdf)¹ technical package, with decreases in tobacco use by adults and youth. However, the Caribbean lags behind relative to other regions of the world and subregions within the Americas.
- Implementation of the FCTC continues to advance in the Region of the Americas, and in recent years significant progress has been made in the non-Spanish-speaking Caribbean. However, this remains the subregion where the implementation level of effective measures is lower than expected. In this subregion, as of December 2022, 7 PAHO Member States had 100% smoke-free environments in enclosed public places and workplaces and public transportation, and large health warnings (covers an average of at least 50% of the front and the back of the packaging) with all the appropriate characteristics. Only 3 Member States ban all forms of tobacco advertising, promotion, and sponsorship (direct and indirect), and none implement taxes that represent 75% or more of the retail price of tobacco products. Further, while the progress towards implementing these measures is lagging behind and still ongoing, there is now the challenge of regulating novel products such as ENDS/ENNDS.
- Overall, evidence on e-cigarette use in the region, and its drivers, is scarce. 2018 Global Youth Tobacco Survey (GYTS) data showed current use of e-cigarettes among 13-15-year-old students ranging from 4.0% in Antigua and Barbuda to 11.0% in St. Lucia, 11.7% in Jamaica, and 17.2% in Trinidad and Tobago.
- ENDS/ENNDS pose a significant public health danger due to the potential of ENDS to cause addiction, given the nicotine content, and the potential of both ENDS and ENNDS to aggravate respiratory, cardiovascular, and other disorders due to additives, flavourings, and chemicals that may be toxic to human health.
- In recent reports and statements, WHO has stated that e-cigarettes are “undoubtedly harmful” and that countries “that have not banned [e-cigarettes] should consider regulating them as harmful products”. In the absence of effective government regulation, ENDS/ENNDS could create a new generation of nicotine and tobacco users and undermine the progress made in combatting the tobacco epidemic.
- ENDS/ENNDS threaten to reverse global, regional, and national progress in tobacco control, in particular among countries with weak/non-FCTC compliant regulatory frameworks. Their use among adolescents and youth is increasing, driven by ease of access; lack or relatively weak enforcement of legislation and regulations; and slick marketing strategies and campaigns implemented by the tobacco industry and other ENDS/ENNDS manufacturers and producers, particularly using social media and the celebrity/entertainment culture, and emphasising aspects such as flavourings to appeal to young people.
- ENDS/ENNDS are often marketed as a safer alternative to conventional cigarettes, especially for those who wish to quit smoking, but this has not been conclusively proven, and the harms of ENDS/ENNDS themselves must be recognised, not only to people’s health, but also to the environment. ‘Vape waste’—including disposable devices, e-liquid containers, packaging, and batteries—pollutes the land and marine resources that are critical to the economies of Caribbean countries and territories.
- In the Caribbean region, in addition to lacking regulatory frameworks in compliance with FCTC, there is insufficient awareness of, and information and knowledge about, ENDS/ENNDS among key stakeholders such as policymakers, adolescents and youth, their parents and caregivers, and health professionals, especially regarding the harmful effects of these products, and the drivers of their use among young people.
- Article 5.2(b) of the WHO FCTC commits Parties to the Convention not only to prevent and reduce tobacco consumption and exposure to tobacco smoke, but also to prevent and reduce nicotine addiction, regardless of its source. Further, there are Decisions adopted by the Conference of the Parties (COP) to the WHO FCTC that address interventions to regulate ENDS/ENNDS, including the prohibition of their commercialisation and/or the application of demand and supply reduction measures. In cases where the commercialisation is not completely prohibited, the suggested regulation involves the application of most of the demand and supply reduction measures of the WHO FCTC. Specifically, the implementation of the WHO MPOWER¹ technical package for tobacco control, which is aligned with WHO FCTC mandates, is suggested, along with other policy approaches such as flavour bans and age restrictions.

¹ https://www.afro.who.int/sites/default/files/2017-06/mpower_english.pdf.

- The prevention and reduction of ENDS/ENNDS use among adolescents and youth are consistent with the obligations of Caribbean countries to respect, protect, and fulfill the Convention on the Rights of the Child and other human rights treaties that address the right of everyone to the highest attainable standard of health, and to reduce health inequities in their progress to achieve the 2030 Sustainable Development Goals, leaving no one behind.
- Despite the challenges faced by Caribbean countries, including limitations in resources; insufficient legislation, policies, and regulations; inadequate enforcement of the laws, policies, and regulations that do exist; ease of affordability and availability of ENDS/ENNDS; and lack of structured programmes for prevention and treatment of ENDS/ENNDS use, there are measures that can be taken to protect the health of young people and mitigate the burden of NCDs. Antigua and Barbuda², Barbados, Bermuda, Guyana, Jamaica, St. Lucia, and Suriname have enacted legislation and/or regulations that address the use or commercialisation of some electronic cigarettes.



Priority recommended actions for CARICOM governments and their partners

Caribbean Community governments, in collaboration with key partners and stakeholders, including nongovernmental organisations (NGOs), academia, faith-based organisations, other civil society organisations (CSOs), and development partners; ensuring meaningful engagement with children, adolescents, youth, and other groups in situations of vulnerability; and involving some private sector in policy implementation only, while addressing conflict of interest, should:



1. Legislation, policy, and regulations

- 1.1** Apply the WHO MPOWER¹ technical package measures to ENDS/ENNDS, as recommended by PAHO/WHO and in line with WHO FCTC mandates and COP Decisions:
- Monitor tobacco use and prevention policies: Governments are recommended to use their existing tobacco surveillance and monitoring systems to assess developments in ENDS/ENNDS and nicotine use by sex and age.
 - Protect people from tobacco smoke: Non-users of ENDS/ENNDS should be protected from exposure to ENDS/ENNDS emissions; indoor smoke-free places should never exempt ENDS/ENNDS from a ban.

² Antigua and Barbuda's Tobacco Act 2018 includes Paragraph 30(3)(d)(iii), which states that "any products that are in the form of or that imitate or resemble tobacco products, including e-cigarettes" are subject to confiscation, forfeiture, and destruction. Further, the country has definitions for these products. However, it does not apply any PWER measures (of the WHO MPOWER technical package), nor does it have restrictions on ENDS/ENNDS sales or flavours.

- Offer to help quit tobacco: Evidence on the use of ENDS/ENNDS as a potential tobacco use cessation aid is still under debate, and there is insufficient evidence to support their use at the population level, as compared with proven approaches. Countries should also use evidence-based approaches to support ENDS/ENNDS users who wish to quit.
- Warn about the dangers of tobacco: Strong, graphic health warnings should be mandated for all ENDS/ENNDS products, in line with overall tobacco control strategies, to deter their use by young people.
- Enforce bans on tobacco advertising, promotion, and sponsorship: Given that the same promotional elements that make ENDS/ENNDS attractive to adult smokers could make them attractive to children and non-smokers, effective banning of ENDS/ENNDS advertising, promotion, and sponsorship should be enforced.
- Raise taxes on tobacco products: ENDS/ENNDS themselves carry health risks. Therefore, taxes should be applied to these products, in line with national standards and WHO FCTC COP Decisions, to prevent their uptake, particularly among children and adolescents.

- 1.2** Enact, and/or update, and enforce legislation, policies, and regulations to include ENDS/ENNDS use in addition to conventional methods of tobacco/nicotine use, in alignment with the WHO FCTC and decisions from the COP to the WHO FCTC, based on the latest evidence, and considering HCC case studies done in 2022 on the implementation of the WHO FCTC in [Antigua and Barbuda](#),³ and in [St. Lucia](#):⁴
- Ban or restrict the manufacture, importation, and sale of ENDS/ENNDS, with regulation of sales channels, including online sales.
 - Ban or restrict advertising, promotion, and sponsorship of ENDS/ENNDS, including point-of-sale advertising and displays, cross-border advertising, and internet promotion.
 - Strongly enforce laws on minimum age of purchase, while recognising that it is paramount to restrict access to tobacco products for minors and adults in order to make it difficult to transition to cigarettes when using ENDS/ENNDS.
 - Consider increasing the legal age for purchasing the products to at least 21 years, instead of 18 years, as suggested by [scientific evidence from the United States](#)⁵ (U.S.) Centers for Disease Control and Prevention (CDC), and supported by the [Campaign for Tobacco-Free Kids](#).⁶
 - Minimise health risks to ENDS/ENNDS users by standardising (and building capacity to standardise through technical cooperation where needed):

³ <https://www.healthycaribbean.org/wp-content/uploads/2022/05/Implementation-of-the-WHO-Framework-Convention-on-Tobacco-Control-in-Antigua-and-Barbuda-Case-Study-May-2022.pdf>.

⁴ <https://www.healthycaribbean.org/wp-content/uploads/2022/05/Implementation-of-the-WHO-Framework-Convention-on-Tobacco-Control-in-Saint-Lucia-Case-Study-May-2022.pdf>.

⁵ https://www.cdc.gov/tobacco/data_statistics/evidence/pdfs/minimum-legal-sales-508.pdf.

⁶ <https://www.tobaccofreekids.org/what-we-do/us/sale-age-21>.

- The manufacture of devices and ENDS/ENNDS components under effective electrical safety regulations, including safe disposal of electrical and electronic equipment, and waste;
 - The content of e-liquids, to limit the amount of nicotine available per cartridge or bottle, and avoid some ingredients such as carcinogens, those that facilitate inhalation or nicotine uptake, and additives such as caffeine or colouring agents; and
 - The packaging of e-liquids, by requiring child-proof containers and labelling ENDS to inform users of the addictive and harmful nature of the product.
 - Require prominent, effective, and scientifically accurate rotating health messages and warnings on all ENDS/ENNDS packaging, and apply plain packaging to e-cigarettes.
 - Minimise health risks to non-users by outlawing the use of ENDS/ENNDS in all indoor public spaces, workplaces, and on public transportation, and in other designated smoke-free places, at minimum.
 - Prohibit ENDS/ENNDS flavours other than tobacco flavour, thus limiting the levels and number of flavours to reduce initiation by young people; ingredients that make the products more attractive, such as caffeine and vitamins; and packaging and labelling that is false, misleading, or likely to create erroneous impressions about health effects or toxicity, including health and cessation claims, especially in the absence of verifiable scientific evidence.
 - Be mindful of the unintended consequences of any regulatory measure in swaying the market towards any specific type of ENDS/ENNDS product.
 - Ensure that any ENDS/ENNDS policy, of whatever nature, is supported by the simultaneous implementation of a very strong tobacco control policy, to curtail any potential trajectory from ENDS/ENNDS use to smoking.
- 1.3** Consider adopting a regional approach for national ratification/adoption of legislation, policies, and regulations; the [European Union \(EU\) Tobacco Products Directive](#) (TPD),⁷ revised in [2016](#)⁸ and again in [2022](#),⁹ provides rules for tobacco-related products across EU Member States and demonstrates a regional approach that may serve as a model for action by CARICOM.
- 1.4** Fully implement [WHO FCTC Article 5.3](#),¹⁰ ensuring the development and implementation of policies to identify, prevent, mitigate, and manage conflict of interest and industry interference related to the use of ENDS/ENNDS, excluding their manufacturers, distributors, and retailers from policymaking to reduce the use of these products.
- 1.5** Ensure more effective border control to prevent or reduce illegal products, become a Party to the FCTC [Protocol to Eliminate Illicit Trade in Tobacco Products](#),¹¹ and establish a functional 'track and trace' regional system for these products, including ENDS/ENNDS.

⁷ https://health.ec.europa.eu/system/files/2016-11/dir_201440_en_0.pdf.

⁸ <https://curia.europa.eu/jcms/upload/docs/application/pdf/2016-05/cp160048en.pdf>.

⁹ <https://www.smokefreepartnership.eu/news/sfp-welcomes-the-delegated-directive>.

¹⁰ <https://fctc.who.int/publications/m/item/guidelines-for-implementation-of-article-5.3>.

¹¹ <https://fctc.who.int/publications/m/item/brochure-protocol-to-eliminate-illicit-trade-in-tobacco-products>.

1.6 Enact, enforce, and monitor policies and regulations for the disposal of tobacco and ENDS/ENNDS waste to reduce and prevent their harmful environmental impact, including application of the WHO MPOWER¹ package modelled off the following examples:

- **M**onitor tobacco use and prevention policies: Monitor tobacco and ENDS/ENNDS waste, the environmental impact of tobacco and ENDS/ENNDS, and the tobacco industry's attempts to "greenwash" its data. Governments need objective data about the environmental impact of the tobacco industry.
- **P**rotect people from tobacco smoke: Extend smoke and tobacco-free environments to outdoor areas, including parks and beaches, to prevent tobacco and ENDS/ENNDS waste from contaminating the soil and waterways.
- **O**ffer to help quit tobacco: Include messages about the environmental harms of tobacco and ENDS/ENNDS in motivation to support nicotine and tobacco use cessation.
- **W**arn about the dangers of tobacco: Add environment-related warnings and images to warning labels on nicotine and tobacco products, including ENDS/ENNDS, and create educational campaigns to raise awareness about the environmental harms of tobacco and ENDS/ENNDS.
- **E**nforce bans on tobacco advertising, promotion, and sponsorship: Strengthen ban on tobacco and ENDS/ENNDS advertisement, promotion, and sponsorship to include publicity on corporate social responsibility initiatives, including greenwashing, and other tobacco industry activities alleging to be focused on protecting the environment.
- **R**aise taxes on tobacco products: Levy corporate taxes to externalise the costs of environmental harms and implement extended producer responsibility regulations on the tobacco industry to reduce, mitigate, and prevent manufacturing and post-consumption tobacco and ENDS/ENNDS waste.

1.7 In conclusion, countries that do not ban the commercialization of these products should apply the measures of the FCTC. Two scenarios are evident: If countries already have comprehensive tobacco laws in line with the FCTC in force, they should update them to include these novel and emerging products. If they do not have such measures, they should enact legislation to include these products from the outset.



2. Taxation and earmarking^{12,13}

2.1 Adopt fiscal measures, including the application of taxes to ENDS/ENNDS, to deter their use and prevent youth initiation. The additional revenues can be earmarked for contribution to the budget for health-promoting interventions.

¹² Bialous SA. Using MPOWER policies to address tobacco impact on the environment. *Rev Panam Salud Publica* 2022; 46:e184. <https://doi.org/10.26633/RPSP.2022.184>.

¹³ World Health Organization. WHO technical manual on tobacco tax policy and administration. Geneva: WHO; 2021. Available at: <https://www.who.int/publications/i/item/9789240019188>.

2.2 In the imposition of excise taxes, using ad valorem tax (percentage of cost), specific tax (fixed amount per quantity), or a combination of both, consider:

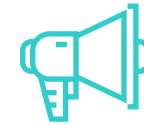
- Adoption of the best tax structure that contributes to the health goals of effectively deterring consumption and preventing initiation;
- Taxing the e-liquids used for consumption. This is critical, and the excise tax should be applied on all e-liquids, whether they contain nicotine or not;
- Taxing the devices as well, depending on the national administrative capacity to do so;
- Setting product characteristics to improve the effectiveness of any taxation structure, regardless of context; and
- Collecting tax in the same way as for tobacco products in the country; in most countries, the collection is made at the source—the manufacturing/importing points. In principle, the administration of taxes on ENDS/ENNDS should be similar to that for cigarettes. However, due to the lack of standardisation of these products, a rapid and constantly evolving understanding of ENDS/ENNDS and their supply chain will be required to achieve effective and efficient administration of taxes.



3. Research

3.1 Conduct research on the prevalence, drivers, and impact of ENDS/ENNDS use among adolescents, youth, and other groups in situations of vulnerability to fill the information gap in the Caribbean, including through inclusion of relevant questions in the Global Youth Tobacco Survey (GYTS), household surveys, and other population-based surveillance that monitors the use of tobacco products and key tobacco control indicators in adolescents, youth, and adults, with adequate budgeting and mechanisms for periodic implementation of these surveys, as recommended by WHO.

3.2 Publish and widely disseminate research results, including to policymakers to inform the development of evidence-based policy aligned with the tobacco control interventions mandated in the WHO FCTC and explicated in the WHO MPOWER¹ technical package; to technical personnel and health care workers at all levels of the health system; to civil society; and to adolescents and youth, with knowledge translation to facilitate meaningful understanding and use of the information.



4. Education, advocacy, and health literacy

4.1 Develop, implement, and evaluate campaigns and other advocacy and public education strategies, including through social media and actively involving adolescents and youth, to increase health literacy¹⁴ and awareness of issues and harms related to the use of ENDS/ENNDS, including their impact on the environment.

4.2 Target policymakers, to obtain their buy-in, boost political will, and obtain their support; adolescents and youth themselves, their caregivers, and agencies/entities that engage or support them, in diverse settings—school, work, and community—integrating education on substance use harms into school, medical, and nursing curricula, and ensuring their meaningful engagement in the development, implementation, and evaluation of the interventions; health care providers; environmental health and sustainability groups; and other key stakeholders.

4.3 Educate, build the capacity of, and involve CSOs working in the reduction of NCDs and their risk factor; faith-based organisations; youth groups; and other CSOs, to strengthen their advocacy and monitoring functions, including with respect to the identification, prevention, mitigation, and management of conflict of interest, industry interference, and undue influence, directly or through agency.

4.4 Use a human rights framework for advocacy and other interventions for prevention and reduction of the use of ENDS/ENNDS, promoting countries' obligations to protect, respect, and fulfill the right of children to the highest attainable standard of health, as set out in the [Convention on the Rights of the Child](#) (CRC),¹⁵ Article 24¹⁶.



5. Prevention, care, and treatment

5.1 Develop, implement, and evaluate programmes to prevent and reduce the use of ENDS/ENNDS among adolescents and youth, integrating them into programmes for adolescent and youth health, tobacco control, substance use prevention and control, mental health programmes for youth, or other programmes for health promotion and NCD risk factor reduction, as deemed most appropriate in the national situation.

5.2 Integrate screening for smoking and vaping at the first level of care as part of the primary care approach, increasing physician education and training family doctors and other primary care physicians to identify young people at risk of vaping, through screening questionnaires.

¹⁴ Osborne RH, Elmer S, Hawkins M, et al. Health literacy development is central to the prevention and control of non-communicable diseases. *BMJ Global Health* 2022; 7(12):e010362. Available at: <https://gh.bmj.com/content/7/12/e010362>.

¹⁵ <https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-child>.

¹⁶ Article 1 of the CRC defines a child as "every human being below the age of 18 years, unless under the law applicable to the child, majority is attained earlier."

- 5.3** Establish facilities and strategies to manage and treat addiction and ENDS/ENNDS users who wish to quit, including counselling and nicotine replacement therapy, ensuring easy access to youth-targeted, youth-friendly services free at the point of provision, as per recommendations of [Article 14 of the WHO FCTC](#),¹⁷ free from discrimination, and widely promoted across sectors, as well as the development of accessible cessation applications (apps).



6. Resource allocation and mobilisation

- 6.1** In addition to the revenue obtained from taxing ENDS/ENNDS, allocate resources and undertake resource mobilisation for programmes to reduce the use of the products, taking advantage of resources available through the WHO FCTC Secretariat, Bloomberg Foundation, PAHO/WHO, and other entities, and seeking 'win-win' co-benefits from interventions that simultaneously address NCD reduction, improving the COVID-19 response, and climate change mitigation and adaptation.



7. Monitoring and accountability

- 7.1** Establish surveillance systems to monitor the evolution in patterns of ENDS/ENNDS use among adolescents, youth, men, and women using standardised instruments in line with regional and global surveillance systems; enabling integration into the tobacco surveillance system; and ensuring the detection of health or safety incidents involving ENDS/ENNDS, and the disposal of vape waste. Given the current state of knowledge about market dynamics, it is extremely important for countries to monitor ENDS/ENNDS products in the market and evaluate the impact of regulation on prices and use, as the market is rapidly evolving and adjustments to taxation may be needed over time. This includes surveillance of population patterns of ENDS/ENNDS use by intensity, type of device, the content of e-liquid and reason for use, and by demographic characteristics and smoking status. This surveillance system should be a component of the tobacco surveillance system.
- 7.2** Undertake continuous monitoring of online e-cigarette marketing using systems such as the [Vital Strategies Tobacco Enforcement and Reporting Movement](#) (TERM),¹⁸ since online platforms make it easier for industry players to avoid oversight.
- 7.3** Involve CSOs, including youth organisations, in monitoring the implementation of laws, policies, regulations, and other interventions to reduce the availability and use of ENDS/ENNDS; tracking and identifying industry interference; and holding governments to account for their commitments and obligations.

¹⁷ <https://fctc.who.int/publications/m/item/guidelines-for-implementation-of-article-14>.

¹⁸ <https://termcommunity.com/>.

Introduction

The HCC, a not-for-profit regional network and alliance of CSOs focused on the prevention and control of NCDs, has taken a strong stance for tobacco control in its advocacy for, and contribution to, NCD risk factor reduction. Tobacco use, one of the main NCD risk factors, often begins in adolescence—in the United States of America, almost 90% of adults who smoke on a daily basis tried their first cigarette during adolescence, and before 18 years of age,¹⁹ and in Latin America and the Caribbean, there is evidence to suggest that tobacco use initiation occurs between 10 and 13 years old, with smokers in Caribbean countries starting the habit at a younger age, on average, than the rest of the region.²⁰

The HCC has been in Official Relations with PAHO since 2012, and in October 2022 the Coalition entered into its fifth Letter of Agreement (LoA) with PAHO to support activities aimed at building the capacity of Caribbean civil society to contribute to NCD prevention and control efforts within CARICOM. In response to recent regional data suggesting an increase in the use of ENDS among Caribbean young people, one of the objectives of the 2022 LoA was *to increase public and policymaker awareness of the use of ENDS and ENNDS among young people, policy responses, and recommended actions in the Caribbean*. The inclusion of ENNDS was based on the potential for those devices to be modified by users to deliver nicotine and other drugs, including cannabis, and to have adverse effects on health, even without modification, and international instruments and agreements, such as, respectively, the WHO FCTC and COP Decisions.

The objectives of this report are to 1) analyse the situation regarding ENDS/ENNDS use among adolescents and youth²¹ in the Caribbean; the policy responses across the region that are addressing this emerging challenge; and the emerging global guidance and best practices, and 2) make recommendations for tackling the use and harms of ENDS/ENNDS among Caribbean adolescents and youth. These recommendations for tackling ENDS/ENNDS are made considering the obligation of CARICOM Member Countries that are Parties to the [WHO FCTC](#)²² to implement effective measures to prevent and control tobacco use and nicotine addiction. The report indicates the methodology used in its development; provides a brief background of the global, regional, and national situations regarding ENDS/ENNDS use and trends among adolescents and youth; summarises selected policy responses and interventions; and makes recommendations for actions to reverse this harmful practice in the Caribbean.

¹⁹ United States Department of Health and Human Services (U.S. DHHS). Preventing tobacco use among youth and young adults: a report of the Surgeon General. Atlanta; U.S. DHHS, Centers for Disease Control and Prevention; 2012. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK99237/>.

²⁰ Pan American Health Organization (PAHO). Report on tobacco control in the Region of the Americas. Washington, D.C.: PAHO; 2018. Available at: <https://iris.paho.org/handle/10665.2/49237>.

²¹ This report uses WHO definitions of adolescents as persons aged 10-19 years, youth as those aged 15-24 years, and young people as those aged 10-24 years. <https://www.who.int/southeastasia/health-topics/adolescent-health>.

²² <https://fctc.who.int/who-fctc/overview>

Methodolgy

The report is based on an online search for, and desk review of, literature on ENDS/ENNDS, and responses to a brief questionnaire that was developed and disseminated to key stakeholders in [CARICOM](https://caricom.org/)²³ Member States and Associate Members, including ministries of health, ministries other than health, and selected HCC Member CSOs. Despite a less-than-desired response rate—of the 20 countries and territories to which the questionnaire was sent, 13 (65%) responded—the respondents shed significant light on issues related to ENDS/ENNDS in the Caribbean region.

Fifteen (15) responses were received from 13 Ministries of Health (MoH), one Ministry of Education (MoE), and one CSO—the CSO response rate was lower than hoped, but it must be noted that very few CSOs in the Caribbean region are involved in tobacco control advocacy. MoH respondents included tobacco focal points (4), personnel from national substance use programmes (6), an adolescent health coordinator, a health promotion officer, and a mental health director. The MoE respondent was a research coordinator, and the CSO respondent was a programme officer for a tobacco control project. The questionnaire is in **Annex 1**; the list of entities that responded is in **Annex 2**.

²³ <https://caricom.org/>

Background

Overview

ENDS are handheld devices that produce an aerosolised mixture from a solution typically containing nicotine, flavouring chemicals, and carrier solvents such as propylene glycol and vegetable glycerine (glycerol) for inhalation by the user, and pose health risks to both users and nonusers.²⁴ There are several types of these devices, which have various names, such as e-cigars, e-pipes, vapes, personal vaporisers, vape pens, vaping devices, hookah pens, electronic hookah, e-hookah, hookah sticks, and mechanical mods.²¹

ENDS and ENNDS are collectively referred to as electronic cigarettes (e-cigarettes, e-cigs)²⁵ and are also commonly called ‘vapes’. Though ENNDS do not contain nicotine, which is the addictive component of tobacco products, both ENDS and ENNDS heat a solution—often referred to as ‘e-liquid’ or ‘e-juice’—to create the aerosol.²⁶ The devices have several common components that include a flow sensor, aerosol generator, battery, and solution storage area, and can be classified as being either open systems or closed systems.^{24,25} Open systems have refillable cartridges that allow users to make their own mixes of the e-liquids they buy, which could be with no nicotine, various concentrations of nicotine, flavours, and psychoactive substances, including marijuana, while closed systems have a prefilled container called a cartridge,

pod, or tank, with no possibility for users to make their own mixes.^{21,24,25}

ENNDS can be almost indistinguishable from ENDS, and they often have enhanced flavours that appeal to young people and are often perceived as “safer” and non-addictive. However, while ENNDS, by definition, should not contain nicotine, in practice many e-liquids marked as containing “zero-nicotine” have been found to contain nicotine when tested.²⁷ Even where ENNDS are nicotine-free, there are other concerns related to the e-liquids they use, which contain harmful and potentially harmful constituents, and, as with ENDS, the act of using ENNDS mimics the use of conventional cigarettes, which is a behavioural pattern that can prevent those trying to quit tobacco from doing so successfully, and may contribute to non-smokers (particularly children and adolescents) taking up the use of conventional cigarettes.²⁴ The presence and availability of ENNDS complicates and confuses regulatory mechanisms intended to protect people from the harms of tobacco and nicotine, potentially generating loopholes that can be exploited by commercial interests.²⁶ **For all these reasons, ENNDS should be regulated and monitored in the same way as ENDS.**²⁶

The Caribbean region has the highest burden of NCDs for developing nations in the Region of the Americas, and NCDs are the leading cause of death in the Caribbean, being linked to more than 70% of deaths in the region, which is similar

²⁴ Etzel R, Wilson KM, Balk SJ, et al. American Academy of Pediatrics. Policy Statement. Electronic nicotine delivery systems. Paediatrics 2015; 136(5):1018-1026. Available at: <https://publications.aap.org/pediatrics/article/136/5/1018/33838/Electronic-Nicotine-Delivery-Systems>.

²⁵ Pan American Health Organization. Report on tobacco control for the Region of the Americas 2022. Washington, D.C.: PAHO; 2022. Available at: <https://iris.paho.org/handle/10665.2/56259>.

²⁶ WHO Framework Convention on Tobacco Control. FCTC/COP/7/11 Electronic Nicotine Delivery Systems and Electronic Non-Nicotine Delivery Systems (ENDS/ENNDS). Technical document, 1 August 2016. Available at: [https://fctc.who.int/publications/m/item/fctc-cop-7-11-electronic-nicotine-delivery-systems-and-electronic-non-nicotine-delivery-systems-\(ends-ennds\)](https://fctc.who.int/publications/m/item/fctc-cop-7-11-electronic-nicotine-delivery-systems-and-electronic-non-nicotine-delivery-systems-(ends-ennds)).

²⁷ World Health Organization. WHO report on the global tobacco epidemic, 2021: addressing new and emerging products. Geneva: WHO; 2021. Available at: <https://apps.who.int/iris/handle/10665/343287>.

to the global average.²⁸ Efforts to prevent and control the major NCDs—cardiovascular diseases, cancer, diabetes, chronic respiratory diseases, and mental, neurological, and substance use disorders—must include risk factor reduction, as countries strive to meet global targets such as the 2030 [Sustainable Development Goals](#) (SDGs),²⁹ including [SDG 3](#),³⁰ the goal most directly related to health, and [SDG target 3.4](#),³¹ which addresses NCDs and mental health. CARICOM Member Countries also have regional frameworks to guide them in their efforts to reduce NCD risk factors, including, but not limited to, the [2007 Declaration of Port of Spain](#)³² made by CARICOM Heads of State and Government, and the HCC's 2021 call for a [Transformative New Agenda for NCDs](#),³³ in the face of the COVID-19 (coronavirus disease 2019) pandemic.

Tobacco use, especially cigarette smoking, is one of the main risk factors for NCDs, with other important risk factors being unhealthy diet, alcohol use, physical inactivity, and air pollution; cigarette smoking accounts for 12% of all deaths among adults.³⁴ In recent years, 15% of relative reduction in smoking rates was reported worldwide, specifically from 22.5% to 19.2% of smoking prevalence over ten years, from 37.1% to 32.7% among men and from 8.0% to 5.8% among women.²⁸ The first commercially successful e-cigarette was created in China in

2003 as an aid to smoking cessation, and was introduced as such to the U.S. market in 2007.³⁵ Attitudes towards tobacco products changed with the introduction of vaping devices, and the global ENDS market reached a value of US\$ 11.5 billion in 2018; it is expected to gain US\$ 26.8 billion by 2023.²⁸

As the harms of conventional tobacco products become better known and countries put tobacco control measures in place, the cigarette market has started to shrink, eliciting the expected response from the profit-oriented transnational tobacco companies (TTCs). Since the early 2000s, TTCs have developed interests and made investments in ENDS, often linking them to alleged harm reduction³⁶ and 'corporate social responsibility', as opposed to [genuine harm reduction](#).³⁷ The TTCs employ a wide range of marketing tactics to promote their products, including traditional media advertising, price promotions, and point-of-sale displays, but as restrictions are placed on e-cigarette advertising, the companies have utilised other strategies, including 'pop-up' stores and events, music festivals, and collaborations with artists and designers, as well as online promotion via social media, paid celebrities, and influencers. This has sparked justified criticism that the companies are targeting young people, rather than adult smokers looking to quit.³⁵

Marketing is a known risk factor for e-cigarette initiation, and social media, in particular, allow ENDS/ENNDS to be marketed to young people across borders at low cost and with less oversight than traditional media platforms; research in high-income countries, such as the United States of America and Australia, has shown that e-cigarette marketing is prevalent on social media platforms such as Instagram, Facebook, YouTube, and Twitter, and that it is associated with youth uptake of e-cigarettes.³⁸ The criticism levelled at TTCs' promotion of ENDS as a 'harm reduction' strategy is supported by a study of e-cigarette marketing on social media in India, Indonesia, and Mexico, designed to address the gap in knowledge about online e-cigarette marketing in low- and middle-income countries with large online youth populations.³⁶ The study showed that the most prominent message framing was around product features, including e-liquid flavours, device colours, and technical specifications, much more so than around harm reduction.

E-liquids are marketed in more than 15,000 unique flavours, classified as tobacco and non-tobacco flavours, the latter including menthol/mint, nuts, spices, fruit, candy, and other 'characterising' flavours.³⁹ Flavours are one of the most appealing features of ENDS/ENNDS and have been described as the major motivation for their use by young people; advertisement on e-liquid containers and vendor websites frequently contain images and descriptions of flavours that convey appealing product sensations, and flavours seem to play a part in promoting the switch from conventional

cigarettes to ENDS/ENNDS.³⁸ They play an important role in increasing uptake of ENDS/ENNDS among young people, more significantly so than among adults, and the use of flavoured e-liquids is generally higher among young people and young adults than in older adults.³⁸

In the absence of effective government regulation, ENDS/ENNDS could create a new generation of nicotine and tobacco users and undermine the progress made in combatting the tobacco epidemic.⁴⁰ As such, international consensus suggests that WHO Member States that have not banned ENDS should consider regulating them as harmful products, and governments should implement the regulatory measures for ENDS/ENNDS that they determine are most appropriate for their domestic context, such as regulating ENDS/ENNDS as tobacco products, products imitating tobacco, or as a specifically defined category.⁴¹ WHO states that although the specific level of risk associated with ENDS has not yet been conclusively estimated, ENDS are "undoubtedly harmful" and should therefore be subject to regulation.⁴⁰ This is aligned with Article 5.2(b) in the General Obligations of the WHO FCTC, which requires Parties to the Convention to implement appropriate policies for preventing and reducing nicotine addiction, as well as tobacco consumption and exposure to tobacco smoke.

Further, there are Decisions adopted by the COP to the WHO FCTC that address interventions to regulate ENDS/ENNDS,³⁸ including prohibition of their commercialisation or their regulation

²⁸ Razzaghi H, Martin DM, Quesnel-Crooks S, et al. 10-year trends in noncommunicable disease mortality in the Caribbean region. *Rev Panam Salud Publica* 2019; 43:e37. Available at: <https://www3.paho.org/ods3/wp-content/uploads/2021/05/v43e372019.pdf>.

²⁹ <https://sdgs.un.org/goals>.

³⁰ <https://sdgs.un.org/goals/goal3>.

³¹ <https://unstats.un.org/sdgs/metadata/?Text=&Goal=3&Target=3.4>.

³² <https://caricom.org/declaration-of-port-of-spain-uniting-to-stop-the-epidemic-of-chronic-ncds/>.

³³ <https://www.healthycaribbean.org/wp-content/uploads/2021/01/TNA-NCD-FINAL.pdf>.

³⁴ Lavacchi D, Roviello G, Rodriquez MG. Electronic nicotine delivery systems (ENDS): not still ready to put on END. *J Thorac Dis* 2020;12(7):3857-3865. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7399423/>.

³⁵ Dinardo P and Rome ES. Vaping: the new wave of nicotine addiction. *Cleveland Clinic Journal of Medicine* 2019; 86(12):789-798. Available at: <https://www.ccm.org/content/86/12/789>.

³⁶ Tobacco Tactics. E-cigarettes (updated 2 February 2023). Available at: <https://tobaccotactics.org/wiki/e-cigarettes/>.

³⁷ <https://www.tobaccofreekids.org/assets/factsheets/0417.pdf>.

³⁸ Murukutla N, Magumbol MS, Raskin H, et al. A content analysis of e-cigarette marketing on social media: findings from the Tobacco Enforcement and Reporting Movement (TERM) in India, Indonesia, and Mexico. *Front. Public Health* 2022; 10:1012727. Available at: <https://pubmed.ncbi.nlm.nih.gov/36424977/>.

³⁹ World Health Organization, Regional Office for Europe (EURO). Electronic nicotine and non-nicotine delivery systems: a brief. Copenhagen: EURO; 2020. Available at: https://www.euro.who.int/__data/assets/pdf_file/0009/443673/Electronic-nicotine-and-non-nicotine-delivery-systems-brief-eng.pdf.

⁴⁰ Campaign for Tobacco-Free Kids, Regulating E-cigarettes, 2019. Available at: https://www.tobaccofreekids.org/assets/global/pdfs/en/Regulating_ecigs.pdf.

⁴¹ World Health Organization. WHO report on the global tobacco epidemic 2019: offer help to quit tobacco use. Geneva: WHO; 2019. Available at: <https://www.who.int/publications/i/item/9789241516204>.

through the application of demand and supply reduction measures. The COP is the governing and only body authorised to interpret the provisions of the WHO FCTC, and comprises all Parties to the Convention. If these products are not regulated in accordance with COP decisions and the latest available conflict-free evidence, efforts to de-normalize and reduce tobacco consumption nationally, regionally, and globally, could be undermined. In cases where the commercialisation of electronic cigarettes is not completely prohibited, the suggested regulation involves the application of most of the demand and supply reduction measures of the WHO FCTC. Specifically, the implementation of the WHO MPOWER¹ technical package is suggested, along with other policy approaches such as flavour bans and age restrictions.

Health risks of ENDS/ENNDS

A 2022 review article on global youth vaping and respiratory health⁴² noted that e-cigarette use was increasingly recognised as a worldwide public health problem, though the devices were often used by smokers to assist with smoking cessation, as a safer alternative to conventional cigarettes—a claim that is somewhat controversial. The WHO Regional Office for Europe, in a 2020 Brief on ENDS/ENNDS,³⁸ cited a conclusion from the National Academy of Sciences, Engineering, and Medicine that there is insufficient evidence from randomised controlled trials on the effectiveness of ENDS as smoking cessation aids, compared with no treatment or approved smoking cessation treatment, though moderate evidence showed that some smokers may successfully quit tobacco by using some types

of ENDS frequently or intensively. However, the [WHO Global Tobacco Epidemic Report 2021](#)⁴³ notes that “many of the long-term health effects of ENDS use are still unknown, there is growing evidence to demonstrate that these products are not harmless”; that “indeed, some research has suggested that, in some cases, ENDS could hinder cessation in some individuals by prolonging or increasing addiction to nicotine”; and that “there are still a number of unknown factors, which means that ENDS cannot be recommended as cessation aids at the population level”. ENDS/ENNDS are increasingly initiated by teenagers, some of whom have never previously smoked, who are therefore exposed to unnecessary ENDS/ENNDS-related health risks.⁴¹

In addition to nicotine—when included in the e-liquid—the aerosol from ENDS/ENNDS contains numerous potentially toxic substances, though they vary considerably, depending on the product characteristics and the way in which the user operates the device. The main substances in the aerosol that raise health concerns are metals, such as chromium, nickel, and lead; carbonyls, such as formaldehyde, acetaldehyde, acrolein, and glyoxal; particulate matter; flavourings; and nicotine.³⁸

The health effects of the main substances in the aerosol may be summarised as follows:^{38,41}

- *Metals:* Exposure to certain levels of some metals may cause diseases of the nervous, cardiovascular, and respiratory systems,
- *Carbonyls:* Formaldehyde causes cancer in humans, and acetaldehyde may also be a human carcinogen; acrolein strongly

irritates the respiratory system; and glyoxal shows mutagenicity—that is, it can induce genetic mutation. The number and levels of carbonyls detected in the aerosol are lower than in smoke from conventional cigarettes, but are still cause for concern.

- *Particulate matter:* The particle count and size in ENDS/ENNDS aerosols are similar to those found in mainstream conventional cigarette smoke, but mainly comprise droplets of water and substances to retain moisture, lacking the organic constituents of tobacco smoke that contain known or suspected carcinogens. These particles are therefore likely to have smaller health risks than the particles in tobacco smoke.
- *Flavourings:* Certain flavourings, such as diacetyl, cinnamaldehyde, and benzaldehyde have been cited as sources of health concerns when heated and inhaled.
- *Nicotine:* There is evidence that nicotine intake from ENDS among experienced ENDS users can be comparable to that from conventional cigarettes. Apart from its addictive properties, nicotine use has been documented to have adverse effects on cognition and the developing adolescent brain, as well as foetal brain development, and nicotine use during adolescence has been linked with increased risk of mental health problems later in life.

E-cigarette use has been linked with:^{38,41}

- Nicotine dependence, the risk and severity of which are influenced by the ENDS product characteristics—nicotine concentration, flavouring, device type, and brand—though the risk and severity of dependence seem lower for ENDS than for conventional cigarettes.

- Asthma and chronic obstructive lung disease; symptoms in regular teenage vapers included headaches, coughing, insomnia, weakness, and chest pain.
- Five times greater odds of teenage vapers getting COVID-19 relative to their non-vaping counterparts.
- Increased risk of dual smoking of e-cigarettes and conventional cigarettes.
- Suggestions of cardiovascular effects in teenagers and compounding of cardiopulmonary risk in dual smokers.
- Increased risk of subsequent cigarette smoking, with e-cigarette users having a 30% chance of initiating cigarette smoking when compared with never-users; nearly half of teenage vapers smoked a cigarette two years later when compared with their non-vaping counterparts, and many teens identified e-cigarettes as a gateway to cigarette smoking.
- Downstream substance use—teenagers who use-cigarettes are more likely to use cannabis when compared with non-e-cigarette users, and it is commonly added to vaping products.
- Evidence of second-hand exposure effects, since, though second-hand exposure to nicotine and particulates is lower from ENDS/ENNDS aerosol compared with conventional cigarettes, it is higher than the smoke-free level recommended by the WHO FCTC. Second-hand exposure may therefore present some health risks for bystanders, and be related to respiratory health in youth, including asthma and generalised wheezing.
- Incidents of ingestion and intoxication associated with e-cigarettes in pre-teens—intentional or accidental exposure to e-liquids from drinking, or eye or skin

⁴² Lyzwinski LN, Naslund JA, Miller CJ, and Eisenberg MJ. Global youth vaping and respiratory health: epidemiology, interventions, and policies. *Prim. Care Respir. Med.* 2022; 32:14. <https://doi.org/10.1038/s41533-022-00277-9>.

⁴³ <https://www.who.int/publications/i/item/9789240032095>.

contact, can result in adverse health effects, sometimes fatal.

- Explosions, burns, and projectile injuries when batteries are of poor quality, stored improperly, or modified by users.

In 2019, the U.S. CDC reported an outbreak of lung disorders associated with the use of e-cigarettes and vaping, referred to as vaping-associated pulmonary injury (VAPI) or e-cigarette or vaping product-use associated lung injury (EVALI); vitamin E acetate, used as an additive in tetrahydrocannabinol-containing vaping products, has been identified as a chemical of concern among people with the illness.^{44,45} As at 18 February 2020, more than 2,800 cases had been reported from 50 States in the United States of America, with 68 deaths confirmed;²⁶ Canada reported a handful of cases, Europe reported its first fatal EVALI case in March 2020, and in the paediatric population, the occurrence of EVALI has been reported in patients as young as 13 years of age.⁴⁴ The number of new cases of EVALI has declined significantly in the United States due to bans on various vaping products and the emergence of the COVID-19 pandemic.⁴⁴

Environmental risks of ENDS/ENNDS

There is increasing recognition of the negative impact of ENDS/ENNDS on the environment, through both their creation and their disposal. Nearly all e-cigarettes contain lithium, a naturally-occurring metal that is used in most

batteries, including those in ENDS/ENNDS. Lithium mining can lead to soil degradation, water shortages, and overall damage to the ecosystem.⁴⁶ The nicotine in most vape products is extracted from tobacco plants, the cultivation of which can result in deforestation, loss of natural habitats and biodiversity, and increased greenhouse gas emissions.⁴⁵ Though little is known about the impact of the ENDS/ENNDS manufacturing process on the environment, it would not be unreasonable to “assume that the immense amounts of natural resources and toxic chemicals used in the production of vapes pose significant threats to the environment and climate”.⁴⁵

‘Vape waste’, including disposable devices, e-liquid containers, packaging, and batteries, comprises three forms of waste: plastic, electronic, and hazardous chemical.^{47,48} Many popular e-cigarettes are pod-based devices with single-use plastic cartridges and are (largely) non-biodegradable and poorly recyclable. They contain both circuit boards and lithium-ion batteries, and as the latter degrade, their toxic compounds progressively leach into the environment; batteries put in rubbish bins pose both an explosion and fire risk in waste and recycling facilities or trucks.⁴⁶ With regard to hazardous chemicals, pods and e-liquid containers cannot be recycled with other plastic waste because, especially in the case of ENDS, they have contained nicotine, a substance listed by the U.S. Environmental

Protection Agency as an acute hazardous waste.⁴⁶ Although some vape industries claim their products contain synthetic nicotine and are better for the environment, all types of nicotine are considered hazardous waste, as nicotine damages the environment when disposed of improperly.⁴⁵

Currently, the majority of ENDS/ENNDS are not reusable or recyclable; many contain elements (such as cartridges) that are disposable, and while independent ENDS/ENNDS manufacturers tend to sell refillable open system e-cigarettes, the TTCs have so far tended to sell throw-away, one-use closed system products.⁴⁹ The few “tank” systems that are sold as refillable still use plastics, metals, batteries and other non-biodegradable substances that become waste products, invariably ending up as electronic waste in

landfills.⁴⁸ The situation is aggravated by the failure of e-cigarette manufacturers to provide consumers with guidance or take responsibility for appropriate disposal methods.⁵⁰ A 2020 study among young e-cigarette users in the United States of America found that 49.1% did not know what to do with used e-cigarette pods and disposable devices, while 51.0% reported disposing of them in the trash, 17% in a regular recycling bin not designed for e-cigarette waste, and 10% reported that they simply threw them on the ground, contributing to litter.⁴⁹ The way in which companies get others to pay the true cost of their products—keeping the profits for shareholders while making society pay for their environmental and social impacts—must be avoided, or at least heavily regulated, to ensure full-cost accounting and accurately reflect and embed the costs of the harms they cause.⁴⁸

⁴⁴ United States Centers for Disease Prevention and Control. Outbreak of lung injury associated with e-cigarette use, or vaping, products. Updated February 25, 2020. https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html#latest-outbreak-information.

⁴⁵ Zulfiqar H, Sankari A, and Rahman O. Vaping-associated pulmonary injury. [Updated 4 November 2022]. In: StatPearls [Internet]. Treasure Island, Florida: StatPearls Publishing; 2022 January. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK560656/>.

⁴⁶ The Association for Non-smokers – Minnesota. The environmental impacts of vaping that the tobacco industry doesn’t want you to know. August 31, 2022. <https://www.ansrmn.org/the-environmental-impacts-of-vaping-that-the-tobacco-industry-doesnt-want-you-to-know/>.

⁴⁷ Pourchez J, Mercier C, and Forest V. From smoking to vaping: a new environmental threat? *Lancet Respiratory Medicine* July 2022; 10(7):E63-E64. DOI: [https://doi.org/10.1016/S2213-2600\(22\)00187-4](https://doi.org/10.1016/S2213-2600(22)00187-4).

⁴⁸ UNDO: End Tobacco Damage Now. Vapes: 3 types of toxic waste in 1. Article March 22, 2022. Available at: <https://www.undo.org/environmental-impact/vape-waste-is-toxic-waste#vape-waste-problem>.

⁴⁹ World Health Organization. Tobacco and its environmental impact: an overview. Geneva: WHO; 2017. Available at: <https://apps.who.int/iris/bitstream/handle/10665/255574/9789241512497-eng.pdf>.

⁵⁰ Truth Initiative. A toxic, plastic problem: e-cigarette waste and the environment. March 8, 2021. <https://truthinitiative.org/research-resources/harmful-effects-tobacco/toxic-plastic-problem-e-cigarette-waste-and-environment>.

Use of ENDS/ENNDS among adolescents and youth

Global

A review of global youth vaping⁴¹ confirmed a marked increase in the uptake of e-cigarettes in recent years worldwide, with an increase of 19% in teenagers in the United States of America between 2011 and 2018; an increase from 10% in 2017-2018 to 20% in 2018-2019 among teens in Canada; and an increase of 24.4% among teens in Eastern and Central Europe. The review found that the prevalence of ever-use of e-cigarettes seemed lower in Asian countries such as Japan, where 3.5% reported past use, and South Korea, where 10.1% reported previous experimentation with the devices, while 2015 data from Brazil indicated that 2.1% had ever tried e-cigarettes, and Argentina reported a rise of 5.2% in prevalence of teenage e-cigarette usage between 2014 and 2015. The review noted fewer studies in India and in African countries, and highlighted the gap in the literature regarding the topic of e-cigarette use in teenagers in low-income countries. Overall, however, the review concluded that there was a rise in prevalence and past use of e-cigarettes across countries, though it also noted that the prevalence declined in 2020 during the COVID-19 pandemic, according to data from Canada and the United States of America.⁴¹

Data on current use of ENDS/ENNDS among young people aged 13-15 years from 22 countries indicate that the proportion using these devices regularly is higher than among adults, with figures ranging from 0.7% in Japan to 18.4% in Ukraine between 2017 and 2019, and a median country value of 8.1%.³⁸ A study comparing the change in ENDS/ENNDS use among 16-19-year-olds in Canada, the United Kingdom (England) and the United States of America between 2017 and 2018 confirmed an increasing number of never-smokers using ENDS/ENNDS during the past 30 days and past week in Canada and the United States, and stability of the rate in the United Kingdom.³⁵ However, subsequent reports suggest that in the United Kingdom, despite restrictions on the sale of ENDS to persons under 18 years of age, there has been a steep rise in underage vaping, with promotion of the products on social media, giving rise to fears that thousands of children are at risk of nicotine addiction, and calls for bans on child-friendly packaging and descriptions.⁵¹

Region of the Americas

The Region of the Americas saw a decrease in the prevalence of current tobacco consumption from 28% in 2000 to 16.3% in 2020, and has achieved the second lowest prevalence of current tobacco use in the world.²⁴ Among individuals aged 13 to 15 years in the 35 PAHO Member States, Brazil reported the lowest prevalence of current tobacco use (6.9%) while Dominica reported the highest prevalence (25.3%).²⁴ Data collection regarding e-cigarettes, began in 2014, and of the 26 countries in the Region with relevant information, the United States of America has the highest prevalence of current use of e-cigarettes by young people (19.6%), and Brazil has the

lowest (0.2%).²⁴ In all countries with available data, e-cigarette use is most prevalent among male adolescents, with the exception of Colombia and Venezuela (Bolivarian Republic of), where the prevalence of e-cigarette use is almost equal among young females and males.⁴¹

In 2016, the U.S. Surgeon General's Report had signalled the problem. The report noted that although conventional cigarette smoking had declined markedly among youth and young adults in the United States of America over the previous decade, there had been a 'dramatic rise' in e-cigarette use among those groups, including a 900% increase among high school students over the period 2011-2015.⁵² The report also stated that e-cigarettes were the most commonly used form of tobacco among youth in the U.S., posing a threat to tobacco control.

Caribbean

The periodic implementation of the [Global Youth Tobacco Survey](#) (GYTS)⁵³ among 13–15-year-old students in several Caribbean countries has facilitated the determination of trends in tobacco use among adolescents in the region. An analysis of GYTS data from 14 Caribbean countries between 2000 and 2008 showed that the prevalence of adolescents who had ever smoked fell from 33.3% to 29.0% over a 5-year period, with the prevalence of current smokers falling from 12.1% to 11.7%.⁵⁴ Though the prevalence of smoking and other tobacco use has fallen among adolescents in the Caribbean, in line with global trends, in 2018, GYTS data indicated current tobacco use among 13-15-year-old students ranging from 7.5% in Antigua and Barbuda to 10.2% in St. Lucia, 14.0% in Trinidad and Tobago, and 15.6% in Jamaica.⁵⁵

Overall, evidence on e-cigarette use in the region, and its drivers, is scarce. 2018 GYTS data showed current use of e-cigarettes among 13-15-year-old students ranging from 4.0% in Antigua and Barbuda to 11.0% in St. Lucia, 11.7% in Jamaica, and 17.2% in Trinidad and Tobago.⁵⁴ **Table 1** summarises GYTS data collected in selected CARICOM Member Countries within the last ten years on the use of e-cigarettes, and current cigarette smoking. The data show that in all the countries, except Suriname and among boys in Guyana, e-cigarette use is more common among this group of adolescents than cigarette smoking, and both are higher among boys than girls.

⁵¹ The Guardian. Child vaping risks becoming 'public health catastrophe' in UK, experts warn. 23 July, 2022. <https://www.theguardian.com/society/2022/jul/23/child-vaping-epidemic-risks-becoming-public-health-catastrophe-in-uk-experts-warn>.

⁵² Pan American Health Organization. Report on tobacco control for the Region of the Americas 2022. Washington, D.C.: PAHO; 2022. Available at: <https://iris.paho.org/handle/10665.2/56259>.

⁵³ <https://www.who.int/teams/noncommunicable-diseases/surveillance/systems-tools/global-youth-tobacco-survey>.

⁵⁴ Hambleton IR, Jeyaeelna SM, Howitt C, and Hennis AJ. Monitoring Caribbean tobacco use: baseline adolescent smoking prevalence and regional disparities. *Salud Publica Mex* 2017; 59(suppl 1):12-S21. Available at: https://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0036-36342017000700012.

⁵⁵ Pan American Health Organization. Youth and Tobacco in the Region of the Americas. Results from the Global Youth Tobacco Survey (2010-2017). Washington, D.C.: PAHO; 2018. Available at: https://iris.paho.org/bitstream/handle/10665.2/51670/PAHONMH18046_eng.pdf?sequence=1&isAllowed=y.

Table 1. GYTS data 2014-2019: E-cigarette use and current cigarette smoking among 13-15-year-old students in selected CARICOM Member States

Country	GYTS Year	Current use of e-cigarettes (%)			Current cigarette smoking (%)		
		Total	Males	Females	Total	Males	Females
Antigua and Barbuda	2017	4.0	4.0	3.7	1.4	1.5	1.2
Belize	2014	6.5	8.9	4.1	7.8	10.4	5.4
Grenada	2016	7.2	9.7	4.9	5.4	6.7	4.1
Guyana	2015	9.0	9.3	8.0	8.6	13.3	3.8
Jamaica	2017	11.7	13.7	9.7	11.2	11.1	10.9
St. Lucia	2017	11.0	15.0	6.6	6.3	7.3	5.3
St. Vincent and the Grenadines	2019	8.1	8.4	7.8	4.1	4.1	4.1
Suriname	2016	5.9	7.4	4.6	8.7	12.8	5.3
Trinidad and Tobago	2017	17.2	21.7	12.9	6.7	8.6	4.9

Source: World Health Organization. Noncommunicable disease surveillance, monitoring, and reporting. <https://www.who.int/teams/noncommunicable-diseases/surveillance/data>.

A study done among young adults aged 18-40 years in Trinidad and Tobago in 2016, six years after e-cigarettes were introduced into that country, showed that 6% had used e-cigarettes, and 41.9% of those had also used conventional tobacco cigarettes; persons aged 18-25 years were more likely than those aged 36-40 years to use e-cigarettes, and males were twice as likely as females to have used the devices.⁵⁶ The predictors of e-cigarette use were current tobacco cigarette smoking, ethnicity, education, and age group; those who quit smoking and those who knew that e-cigarettes contained nicotine were, respectively, eight times and almost three times more likely to use them.⁵⁵ The study also showed that young adults had a low level of knowledge regarding e-cigarettes; noted that research on e-cigarettes was complex and confounded by the wide variation in the composition of the product; and recommended longitudinal studies to confirm the findings and explore causes and practices of e-cigarette use among the targeted population.

In The Bahamas, researchers from the National Anti-Drug Secretariat undertook a study to learn more about e-cigarettes, which were reportedly becoming more popular among non-smokers locally. The results showed a rapid increase in imports and distribution of ENDS, with the three

major supply countries being the United States of America, China, and Hong Kong.⁵⁷ Other findings included online and billboard advertisement of the products; production of a local brand of ENDS, retailing at a cheaper price than the imported ENDS; and availability of the products in hotels, bars, gas stations, and convenience stores. Further, the study found that e-cigarettes were not treated as a tobacco product by the Customs Department; that e-cigarette use was trending among 11-15-year-old males from inner city communities attending junior and senior high schools, more commonly the former; and that these boys tended to smoke other substances such as marijuana, and often substituted marijuana for the e-liquid. In addition, e-cigarettes with fruit or candy flavours were very popular and commonly referred to as 'hookahs', were used because they could be mistaken for pens or other items, and were perceived to be healthier than conventional cigarettes.⁵⁶

At the time of the study, as is the case now, the sale of e-cigarettes was legal in The Bahamas, with no laws and regulations governing their sale, manufacture, or use, except for the regulation that nicotine-containing products should not be sold to persons under age 18 years. Recommendations from the study included: 1) investigation of the health impact of ENDS; 2) adoption of international health agency recommendations regarding the health risks; 3) implementation of a public awareness campaign targeting the public and adolescent youth on the risks of ENDS use; 4) classification of ENDS as tobacco products and their inclusion in all tobacco control measures, including increased excise taxation, proper labelling, graphic warnings, and prohibition of use in certain locations; and 5) monitoring and surveillance of ENDS use among adolescents, children, and other population groups, including women and current smokers.⁵⁶

In the Cayman Islands, the National Drug Council has conducted biennial surveys among students aged 11-18 years since 1998.⁵⁸ The [2022 Cayman Islands Student Drug Survey](#)⁵⁹ (CISDUS 2022) reported 17.3% of students reporting use of e-cigarettes within the past year (15.9% males, 18.7% females), and 10.9% within the last 30 days (9.6% males, 12.2% females), while the [CISDUS 2020](#)⁶⁰ showed 21.0% using e-cigarettes within the past year (21.0% males, 20.0% females), 10.0% within the last 30 days (11.0% males, 8.0% females). The [CISDUS 2018](#)⁶¹ reported a 'lifetime prevalence' of e-cigarette use of 32.8% (males 35.1%, females 30.0%), with 12.4% use in the past 30 days (males 15.3%, females 9.4%). Thus, trends indicate a decrease in the percentage of students using the product over the past year, with a mild decrease and then stabilisation in the percentage using over the past 30 days, and an increase in the proportion of girls using the product between 2020 and 2022.

The CISDUS 2022 noted that e-cigarettes were the second most commonly used substance among the students—alcohol being the most commonly used—and, as in previous studies, identified 13

⁵⁶ Dhandooolal R, De Gannes S, Dhanooolal A, et al. Electronic cigarette use among emerging and young West Indian adults. EMJ Respir. 2017; 5(1):108-115. Available at: <https://www.emjreviews.com/respiratory/article/electronic-cigarette-use-among-emerging-and-young-west-indian-adults/>.

⁵⁷ National Anti-Drug Secretariat. Electronic cigarettes a.k.a. "hookah pens": a briefing report. Ministry of National Security, Commonwealth of the Bahamas; (year). Available at: <https://www.bahamas.gov.bs/wps/wcm/connect/5ad832d4-bb77-4c54-a32f-6599a11e1a50/E-Hookahs.pdf?MOD=AJPERES&CON>.

⁵⁸ Cayman Islands National Drug Council. Cayman Islands Student Drug Use Survey. <https://ndc.ky/download-category/cisdus/>.

⁵⁹ <https://ndc.ky/download-category/cisdus-2022/>.

⁶⁰ <https://ndc.ky/download-category/cisdus-2020/>.

⁶¹ <https://ndc.ky/download-category/cisdus-2018/>.

years as the average age of first use; the 2020 study reported that 20% of students cited friends as the usual source of cigarettes, with 25% saying that they most often used the product at home. The CISDUS 2022⁵⁹ recommendations included prioritisation of prevention programming or campaigns that target students' attitudes and beliefs relating to the risks and harms of substance use, particularly marijuana and e-cigarettes, and inclusion of evidence-based drug education in the school curriculum.

QUESTIONNAIRE RESPONSES

- Four respondents (Belize, Cayman Islands, Jamaica, and St. Lucia) indicated awareness of national or Caribbean regional data on the availability of ENDS/ENNDS to adolescents and youth—Belize and Jamaica cited GYTS Fact Sheets;^{62,63} Cayman Islands cited the [CISDUS 2018](#);⁶¹ and St. Lucia cited the PAHO Report on [Tobacco Control for the Region of the Americas 2022](#)⁶⁴ and the [Youth and Tobacco Use in the Caribbean page](#)⁶⁵ in the [HCC Tobacco Control Advocacy portal](#).⁶⁶ It must be noted, however, that the GYTS, PAHO, and HCC sources do not provide information on availability of the products; they focus on prevalence of use.
- Six respondents (Belize, Cayman Islands, Jamaica (2), St. Lucia, and Turks and Caicos Islands) indicated their awareness of national or Caribbean regional data on the prevalence of ENDS/ENNDS use among adolescents and youth—Belize, Jamaica, and St. Lucia cited the sources mentioned under awareness of availability; Cayman Islands cited the [CISDUS 2020](#)⁶⁰ and [CISDUS 2022](#);⁵⁹ and the Turks and Caicos respondent noted informal reports from secondary schools in the country regarding the use of ENDS/ENNDS after school hours, and cited an August 2014 [PAHO news report](#).⁶⁷ The PAHO report gave highlights of a July 2014 report on ENDS ([Document FCTC/COP/6/10](#))⁶⁸ presented at the 6th Conference of the Parties to the WHO FCTC (COP6), which stated that experimentation with e-cigarettes had increased among adolescents, doubling over the period 2008-2012, but did not specifically mention the territory or the Caribbean region.

Of note, some of the MoH tobacco focal points were unaware of national data on ENDS/ENNDS availability and prevalence of use among youth, or where such data could be sourced.

Policy responses to the use of ENDS/ENNDS among adolescents and youth

“...each Party shall, in accordance with its capabilities, adopt and implement effective legislative, executive, administrative and/or other measures and cooperate, as appropriate, with other Parties in developing appropriate policies for preventing and reducing tobacco consumption, nicotine addiction, and exposure to tobacco smoke.

Article 5.2(b) WHO FCTC

Global

The WHO FCTC, a legally-binding global framework for tobacco control, came into force in 2005, providing guidance to Member States in their efforts to address this risk factor. The WHO FCTC is complemented by the WHO MPOWER¹ technical package and the cost-effective WHO 'best buys' policy options and other recommended interventions for tobacco control.⁶⁹ **Table 2** lists the measures in the WHO MPOWER¹ technical package and the WHO 'best buys' and other recommended interventions, and indicates their alignment with the respective WHO FCTC Articles.

The actions summarised in **Table 2** can all be applied to ENDS/ENNDS. As early as 2014, COP6, through [Decision FCTC/COP6\(9\)](#),⁷⁰ invited Parties to consider “prohibiting or regulating ENDS/ENNDS, including as tobacco products, medicinal products, consumer products, or other categories, as appropriate, taking into account a high level of protection for human health”, and other specific regulatory options contained in a 2014 WHO report on ENDS, [Document FCTC/COP/6/10 Rev. 1](#).⁷¹ In 2016, in COP7, WHO report [FCTC/COP/7/11](#)⁷² suggested that Parties consider regulatory options to achieve four objectives: 1) prevent the initiation of ENDS/ENNDS by non-smokers and youth, with special attention to vulnerable groups; 2) minimise as far as possible potential health risks for ENDS/ENNDS users and protect non-users from exposure to their emissions; 3) prevent unproven health claims from being made about ENDS/ENNDS; and 4) protect tobacco control activities from all commercial and other vested interests related to ENDS/ENNDS, including interests of the tobacco industry. COP7 recommended that Member States that had not banned the importation, sale, and distribution of ENDS/ENNDS consider a list of non-exhaustive regulatory options, including sales

⁶² World Health Organization. 2014 GYTS Fact Sheet Belize. Available at: <https://www.who.int/publications/m/item/2014-gyts-fact-sheet-belize>.

⁶³ GYTS. Fact Sheet Jamaica 2017. Available at: [https://cdn.who.int/media/docs/default-source/ncds/ncd-surveillance/data-reporting/jamaica/jamaica-gyts-2017-factsheet-\(ages-13-15\)-\(final\)_tag508.pdf?sfvrsn=43dc5bd8_1&download=true](https://cdn.who.int/media/docs/default-source/ncds/ncd-surveillance/data-reporting/jamaica/jamaica-gyts-2017-factsheet-(ages-13-15)-(final)_tag508.pdf?sfvrsn=43dc5bd8_1&download=true).

⁶⁴ <https://iris.paho.org/handle/10665.2/56259>.

⁶⁵ <https://www.healthycaribbean.org/tobacco-use-among-caribbean-youths/>.

⁶⁶ <https://www.healthycaribbean.org/tobacco-control-advocacy/>.

⁶⁷ <https://www.paho.org/en/news/28-8-2014-report-regulation-e-cigarettes>.

⁶⁸ https://apps.who.int/gb/fctc/PDF/cop6/FCTC_COP6_10-en.pdf?ua=1.

⁶⁹ World Health Organization. Tackling NCDs: 'best buys' and other recommended interventions for the prevention and control of noncommunicable diseases. Geneva: 2017; WHO. Available at: <https://apps.who.int/iris/handle/10665/259232>. [Note: The 'best buys' are being updated - See <https://www.who.int/teams/noncommunicable-diseases/updating-appendix-3-of-the-who-global-ncd-action-plan-2013-2030>.]

⁷⁰ [https://apps.who.int/gb/fctc/PDF/cop6/FCTC_COP6\(9\)-en.pdf](https://apps.who.int/gb/fctc/PDF/cop6/FCTC_COP6(9)-en.pdf).

⁷¹ https://apps.who.int/gb/fctc/PDF/cop6/FCTC_COP6_10Rev1-en.pdf.

⁷² [https://fctc.who.int/publications/m/item/fctc-cop-7-11-electronic-nicotine-delivery-systems-and-electronic-non-nicotine-delivery-systems-\(ends-ennds\)](https://fctc.who.int/publications/m/item/fctc-cop-7-11-electronic-nicotine-delivery-systems-and-electronic-non-nicotine-delivery-systems-(ends-ennds)).

Table 2. Alignment of WHO FCTC Articles, WHO MPOWER¹ measures, and WHO ‘best buys’ and other recommended interventions

WHO FCTC Articles	WHO MPOWER ¹ measures	WHO ‘best buys’ and other recommended interventions
Article 20: Research, surveillance, and exchange of information	Monitor tobacco use and prevention policies	-
Article 8: Protection from exposure to tobacco smoke	Protect people from tobacco smoke	<ul style="list-style-type: none">Eliminate exposure to second-hand tobacco smoke in all indoor workplaces, public places, public transport.*
Article 14: Demand reduction measures concerning tobacco dependence and cessation	Offer to help quit tobacco	<ul style="list-style-type: none">Provide cost-covered, effective, and population-wide support (including brief advice, national toll-free quit line services) for tobacco cessation to all those who want to quit.Provide mobile phone-based tobacco cessation services for all those who want to quit.
Article 11: Packaging and labelling of tobacco products Article 12: Education, communication, training, and public awareness	Warn about the dangers of tobacco	<ul style="list-style-type: none">Implement plain/standardized packaging and/or large graphic health warnings on all tobacco packages.*Implement effective mass media campaigns that educate the public about the harms of smoking/tobacco use and second-hand smoke.*
Article 13: Tobacco advertising, promotion, and sponsorship	Enforce bans on tobacco advertising, promotion, and sponsorship	<ul style="list-style-type: none">Enact and enforce comprehensive bans on tobacco advertising, promotion, and sponsorship.*Ban cross-border advertising, including using modern means of communication.
Article 6: Price and tax measures to reduce the demand for tobacco	Raise taxes on tobacco products	<ul style="list-style-type: none">Increase excise taxes and prices on tobacco products.*Implement measures to minimise illicit trade in tobacco products.

Note: The ‘best buys’ are marked with asterisks (*)

restrictions; bans or restrictions on advertising, promotion, and sponsorship of ENDS/ENNDS; implementation of measures to combat illicit trade in ENDS/ENNDS; and legal prohibition of the use of ENDS/ENNDS in indoor spaces, or at least where smoking is not permitted.

A 2017 study reviewed policy domains and regulatory mechanisms to regulate ENDS globally,⁷³ and indicated that 68 countries in the six continents regulated e-cigarettes at a national level using a range of regulatory mechanisms such as new or amended laws, alerts, circulars, notifications, ordinances, and statements. Domains of regulations included manufacturing, distribution, importation, sale (including where sales were allowed and minimum age of purchase); use of restrictions, including vape-free public spaces, advertising, promotion, health warning labelling, ingredients/flavours, safety/hygiene, reporting/notification, and nicotine volume/concentration; and child safety packaging. Some countries did not have specific regulations for e-cigarettes, and translated existing tobacco control regulations for these products, banning their use in enclosed public spaces and workplaces, and their advertising and promotion; only a few countries were applying a tax to e-cigarettes. In Europe, ENDS use is regulated by the [European Union \(EU\) Tobacco Products Directive 2014/40/EU](#),⁷⁴ revised in 2016, which mandates and suggests a range of policy domains to address tobacco-related products across EU Member States.⁶⁹

The latest (2021) WHO report on tobacco control in 195 WHO Member States²⁶ highlights the following:

- A total of 111 countries regulate ENDS in some way: 32 ban the sale of ENDS, and the other 79 allow the sale, but have adopted one or more legislative measures to regulate ENDS partially or fully, comprising a wide range of measures with no common approach. Of the countries that have banned the sale of ENDS, 18 are middle-income countries, nine are high-income, the remaining five are low-income; 84 countries still have no bans or regulations to address ENDS, leaving them particularly vulnerable to the activities of the tobacco and related industries.
- Only 30 countries completely ban the use of ENDS in all indoor public places, workplaces, and public transport; only eight mandate the appearance of large graphic health warnings on ENDS packaging; 22 countries completely ban the advertising, promotion and sponsorship of ENDS devices, e-liquids, or both; and only 15 countries have adopted advertising, promotion, and sponsorship bans on both.
- Age restrictions to ENDS sale and purchase are applied in only 42% of countries where ENDS are not banned, and regulations applied on ENDS flavours can be found in only nine countries. Of note, the U.S. CDC has presented scientific evidence in favour of increasing the minimum legal sales age (MLSA) for tobacco products and e-cigarettes, and concluded that raising the MLSA to 21 years can help to prevent and reduce tobacco product use among youth in that

⁷³ Kennedy RD, Awoppegba A, DeLeon E, et. Al. Global approaches to regulating electronic cigarettes. Tob Control 2017; 26(4):440–445. Available at: <https://tobaccocontrol.bmj.com/content/26/4/440>.

⁷⁴ https://health.ec.europa.eu/system/files/2016-11/dir_201440_en_0.pdf.

country,⁷⁵ a position supported by the [Campaign for Tobacco Free Kids](#).⁷⁶ In 2019, the U.S. enacted [Tobacco 21 legislation](#),⁷⁷ making it illegal for a retailer to sell any tobacco product—including e-cigarettes—to anyone under 21 years of age; the federal minimum age of sale applies to all retail establishments and persons, with no exceptions.

- Monitoring ENDS use among children and adolescents, as well as adults, through nationally representative surveys is increasingly conducted globally: 87 countries have now collected data on the prevalence of ENDS use among adolescents and 56 countries have collected data on the prevalence of ENDS use among adults.
- Of the 86 countries where data are available on ENDS taxation, more than one-third do not impose any excise tax on e-liquids; where taxes have been applied, tax rates are generally low, with only three countries taxing ENDS e-liquids at the recommended 75% or more of the retail price.

The importance of enforcement and monitoring is demonstrated by a study showing that in India, despite a complete ban on e-cigarettes focused on protecting youth from vaping-related harm, educated young people were still able to access the products.⁷⁸ Though 33% reported never having heard of e-cigarettes, 23% reported ever-use, and 8% were dual users of both e-cigarettes and tobacco. E-cigarette users sourced the products from retail outlets (vape shops, tobacconists), and their social network (friends, siblings), and just under two-thirds of those who were aware of e-cigarettes believed that they were harmful and contained chemicals, suggesting that greater education on vaping harms, in addition to enforcement and monitoring, would be a useful strategy in reducing uptake.⁷⁵

With regard to ENDS/ENNDS and the environment, although research continues to emerge documenting the extent and costs of the negative environmental impact of tobacco products and ENDS/ENNDS, the evidence is sufficient to warrant discussion of a range of policies to mitigate current, and prevent future, harms to the environment caused by these products.⁷⁹ Several policies have been proposed to hold the tobacco industry accountable for the environmental harms of its products, including policy changes that limit environmental damages while shifting responsibility for these damages away from the public and upstream to tobacco product producers, suppliers, and retailers.⁷⁸ The WHO MPOWER¹ package could also be deployed in support of reducing the environmental harms of tobacco,⁷⁸ as suggested in priority recommended action 1.6 in this report.

Region of the Americas

Based on the most recent information available in the PAHO database, in the Region of the Americas, eight of the 35 PAHO Member States have banned the sale of e-cigarettes—Argentina, Brazil, Mexico, Nicaragua, Panama, Suriname, Uruguay, and Venezuela (Bolivarian Republic of)—only one of which, Suriname, is a CARICOM Member Country. However, as the ban on sales does not eliminate the possibility of these products entering the market illegally, six of these countries have also opted to regulate their use to be consistent with legislation on smoke-free environments.²⁴

Of those countries that have not banned the sale of these products, 13 have regulated the sale, use, and/or advertising of ENDS/ENNDS. Only two of them—Costa Rica and Ecuador—have implemented tobacco taxes on these products. Tobacco taxation (WHO MPOWER¹ measure ‘R’) is the least implemented measure at the highest level of achievement, and it is not surprising that novel and emerging nicotine and tobacco products, including ENDS/ENNDS—around which the evidence base is still developing, and market dynamics are still evolving—pose challenges that further complicate regulatory efforts.⁸⁰ Thirteen countries allow the sale of e-cigarettes but provide use, sales, and/or advertising restrictions, including Barbados, Guyana, Jamaica, and St. Lucia; fourteen countries do not impose any form of regulatory framework on ENDS/ENNDS.²⁴

Caribbean

The WHO FCTC has been ratified by all CARICOM countries except Haiti,⁸¹ and the countries have effected interventions to fulfill their WHO FCTC obligations to varying degrees, encompassing enactment of tobacco control legislation and regulations, with the inclusion of restrictions on the use of ENDS/ENNDS in some of the more recent frameworks. **Table 3** summarises the status of WHO FCTC ratification and enactment of tobacco control legislation, regulations, or policies in CARICOM Member States and Associate Members; the seven countries with legislations/regulations marked with an asterisk (*)—Antigua and Barbuda, Barbados, Bermuda, Guyana, Jamaica, St. Lucia, and Suriname—address the use or commercialisation of electronic cigarettes. These frameworks and other policies aiming to protect youth from the effects of tobacco and nicotine addiction,⁸² have no doubt contributed to the reduction in tobacco use among this population group in the Caribbean.

⁷⁵ Centers for Disease Control and Prevention, Office of Smoking and Health. Summary of scientific evidence: raising the minimum legal sales age for tobacco products. February 2021. Available at: https://www.cdc.gov/tobacco/data_statistics/evidence/pdfs/minimum-legal-sales-508.pdf.

⁷⁶ <https://www.tobaccofreekids.org/what-we-do/us/sale-age-21>.

⁷⁷ <https://www.fda.gov/tobacco-products/retail-sales-tobacco-products/tobacco-21>.

⁷⁸ Pettigrew S, Santos JA, Miller M, et al. E-cigarettes: a continuing public health challenge in India despite comprehensive bans. Preventive Medicine Reports 2023; 31(102108). Available at <https://www.sciencedirect.com/science/article/pii/S2211335522004156>.

⁷⁹ Bialous SA. Using MPOWER policies to address tobacco impact on the environment. Rev Panam Salud Publica 2022; 46:e184. <https://doi.org/10.26633/RPSP.2022.184>.

⁸⁰ Perucic A-M, Sandoval RC, Malik S, Morales-Zamora G. Taxation of novel and emerging nicotine and tobacco products (HTPs, ENDS, and ENNDS) globally and in Latin America. Rev Panam Salud Publica 2022; 46:e175. Available at: <https://iris.paho.org/handle/10665.2/56515>.

⁸¹ Pan American Health Organization. Status of implementation of the WHO FCTC and related regional commitments in the Caribbean. Presentation. Miami, March 2020. Available at: <https://www.paho.org/sites/default/files/presentation-status-implementation-of-who-fctc-farmada.pdf>.

⁸² Healthy Caribbean Coalition. Youth-centred tobacco control policies. Available at: <https://www.healthycaribbean.org/youth-centred-tobacco-control-policies/>.

Table 3. CARICOM Member States and Associate Members: Status of FCTC ratification and tobacco control legislation/regulations/policies

Country	Party to the WHO FCTC	Legislations/Regulations	Policies
Anguilla(+)	N/A	-	Yes
Antigua and Barbuda	5 June 2006	Cabinet Decision 16th March 2010: Smoke and Tobacco-Free Working Environments within the Public Service of Antigua and Barbuda ; ⁸³ Tobacco Control Act 2018 *. ⁸⁴	Yes
Bahamas	1 February 2010	Health Services (Tobacco Advertising and Sales) Rules 1977 . ⁸⁵	Yes
Barbados	3 November 2005	Health Services (Amendment) Act 2009 ; ⁸⁶ Health Services (Protection of Minors from Tobacco Products) Regulations 2010 ; ⁸⁷ Health Services (Prohibition of Tobacco Smoking in Public Places) Regulations 2010 ; ⁸⁸ Health Services (Amendment) Act 2017 *. ⁸⁹ Health Services (Packaging and Labelling of Tobacco Products) Regulations 2017 ; ⁹⁰ Health Services (Smoking) Regulations 2017 *. ⁹¹	Yes
Belize	15 December 2005	-	Yes
Bermuda (+)	N/A	Tobacco Products (Public Health) Act 1987 ; ⁹² Tobacco Products (Public Health) Regulations 1988 ; ⁹³ Tobacco Products (Public Health) Amendment Act 2005 ; ⁹⁴ Tobacco Control Act 2015 *. ⁹⁵	Yes

⁸³ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Antigua%20and%20Barbuda/Antigua-and-Barbuda-Cabinet-Decision-on-Smoke-Free-Public-Workplaces-national.pdf>.
⁸⁴ <http://laws.gov.ag/wp-content/uploads/2019/02/No.-17-of-2018-Tobacco-Control-Act-2018.pdf>.
⁸⁵ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Bahamas/Bahamas-Stat.-Law-Ch.-231-%C2%A729-national.pdf>.
⁸⁶ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Barbados/Barbados-HS-Amdt.-Act-national.pdf>.
⁸⁷ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Barbados/Barbados-Minors-Regs-national.pdf>.
⁸⁸ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Barbados/Barbados-SF-Regs-national.pdf>.
⁸⁹ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Barbados/Barbados-Amdt.-Act-2017-national.pdf>.
⁹⁰ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Barbados/Barbados-Packaging-Regs-2017-national.pdf>.
⁹¹ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Barbados/Barbados-Smoking-Regs-2017-national.pdf>.
⁹² <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Bermuda/Bermuda-Public-Health-Act-national.pdf>.
⁹³ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Bermuda/Bermuda-Pub.-Health-Regs-1998-national.pdf>.
⁹⁴ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Bermuda/Bermuda-Public-Health-Amdt.-Act-national.pdf>.
⁹⁵ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Bermuda/Bermuda-TC-Act-2015-national.pdf>.

Country	Party to the WHO FCTC	Legislations/Regulations	Policies
British Virgin Islands (+)	N/A	Tobacco Products Control Act 2006 ; ⁹⁶ Tobacco Products Control Regulations 2007 . ⁹⁷	Yes
Cayman Islands (+)	N/A	The Tobacco Law 2008 ; ⁹⁸ The Tobacco Regulations 2009 ; ⁹⁹ The Tobacco Regulations 2010 . ¹⁰⁰	Yes
Dominica	24 July 2006	-	-
Grenada	12 November 2007	-	-
Guyana	14 December 2005	Tobacco Control Act 2017 *; ¹⁰¹ Tobacco Product Packaging and Labelling Regulations 2018 *. ¹⁰²	Yes
Haiti	No	-	-
Jamaica	7 July 2005	Public Health (Tobacco Control) Regulations 2013 *; ¹⁰³ Public Health (Tobacco Control) Regulations Amendment 2014 *. ¹⁰⁴	Yes
Montserrat (+)	N/A	-	-
St. Kitts and Nevis	21 June 2011	-	-
St. Lucia	7 November 2005	Cabinet Conclusion No.650, 1994: Prohibition of Smoking in all Government Institutions ; ¹⁰⁵ Public Health (Amendment) Act 2019 ; ¹⁰⁶ Public Health (Smoking Control) Regulations 2020 *. ¹⁰⁷	Yes
St. Vincent and the Grenadines	29 October 2010	-	-

⁹⁶ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/British Virgin Islands/British-Virgin-Islands-TC-Act-2006-national.pdf>.
⁹⁷ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/British Virgin Islands/British-Virgin-Islands-TC-Regs-2007-national.pdf>.
⁹⁸ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Cayman Islands/Cayman-Islands-2008-Law-national.pdf>.
⁹⁹ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Cayman Islands/Cayman-Islands-2009-Regs-national.pdf>.
¹⁰⁰ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Cayman Islands/Cayman-Islands-2010-Regs-national.pdf>.
¹⁰¹ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Guyana/Guyana-TC-Act-2017-national.pdf>.
¹⁰² <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Guyana/Guyana-PL-Regs-2018-national.pdf>.
¹⁰³ [https://japarliament.gov.jm/attachments/412_The Public Health \(Tobacco Control\) Regulations, 2013.pdf](https://japarliament.gov.jm/attachments/412_The Public Health (Tobacco Control) Regulations, 2013.pdf).
¹⁰⁴ [https://japarliament.gov.jm/attachments/412_The Public Health \(Tobacco Control\)\(Amendment\) Regulations, 2014.pdf](https://japarliament.gov.jm/attachments/412_The Public Health (Tobacco Control)(Amendment) Regulations, 2014.pdf).
¹⁰⁵ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Saint Lucia/Saint-Lucia-Cabinet-Conclusion-No.-650-1994-national.pdf>.
¹⁰⁶ <https://perma.cc/Q42Z-9DJ2>.
¹⁰⁷ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Saint Lucia/Saint-Lucia-Smoking-Control-Regs-2020-national.pdf>.

Country	Party to the WHO FCTC	Legislations/Regulations	Policies
Suriname	16 December 2008	Law of 20th February 2013, Containing Rules for Limiting the Use of Tobacco and Tobacco Products (Tobacco Law) *, ¹⁰⁸ Decision of the Minister of Health of December 9, 2013 No. 4061/13, on detailed rules on the packaging and labeling of cigarettes , ¹⁰⁹ Decision of the Minister of Health of November 10, 2016 no. 3553, order to implement Article 5 sub b of the decision of the Minister of Health of 9 December 2013 no. 4061/13, regarding determination detailed rules regarding the packaging and labeling of cigarettes , ¹¹⁰ Decree of the Minister of Public Health of 03 May 2018, no. 1391 determining the adoption of a new set of health warnings pursuant to Article 5(b) of the Decree of the Minister of Public Health of 09 December 2013 no. 4061 . ¹¹¹	Yes
Trinidad and Tobago	19 August 2004	Tobacco Control Act 2009 , ¹¹² Tobacco Control Regulations 2013 , ¹¹³ Tobacco Control (Amendment) Regulations 2019 , ¹¹⁴ Ministry of Health Public Notice TCU-001-2022, June 15, 2022 ¹¹⁵ (regarding moratorium for pictorial health warnings).	Yes
Turks and Caicos (+)	N/A	Tobacco Control Ordinance 2015 , ¹¹⁶ Tobacco Control Regulations 2017 . ¹¹⁷	Yes

Sources: www.tobaccocontrollaws.org/legislation; <https://www.healthycaribbean.org/tobacco-use-among-caribbean-youths/>; and <https://www.healthycaribbean.org/youth-centred-tobacco-control-policies/> and https://treaties.un.org/pages/ViewDetails.aspx?src=IND&mtdsg_no=IX-4&chapter=9&clang=en

(+) indicates United Kingdom Overseas Territories – as such, they cannot sign on to the FCTC as separate jurisdictions, but the UK became a Party to the FCTC on 16 March 2005.

N/A = Not applicable.

‘-’ indicates no information found.

¹⁰⁸ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Suriname/Suriname-Tobacco-Act-2013.pdf>.

¹⁰⁹ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Suriname/Suriname-PL-Rules.pdf>.

¹¹⁰ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Suriname/Suriname-Decision-No.-3553-2016.pdf>.

¹¹¹ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Suriname/Suriname-Decree-No.-1391-2018.pdf>.

¹¹² <https://health.gov.tt/sites/default/files/pdf/Tobacco-Control-Act-2009.pdf>.

¹¹³ [https://health.gov.tt/sites/default/files/2021-04/tobacco control regulations 2013.pdf.pdf](https://health.gov.tt/sites/default/files/2021-04/tobacco%20control%20regulations%202013.pdf.pdf).

¹¹⁴ [https://health.gov.tt/sites/default/files/2021-04/Tobacco Control %28Amendment%29 Regulations 2019.pdf](https://health.gov.tt/sites/default/files/2021-04/Tobacco%20Control%20Amendment%29%20Regulations%202019.pdf).

¹¹⁵ [https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Trinidad and Tobago/Trinidad-and-Tobago-MOH-Public-Notice-No.-1_2022-national.pdf](https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Trinidad%20and%20Tobago/Trinidad-and-Tobago-MOH-Public-Notice-No.-1_2022-national.pdf).

¹¹⁶ [https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Turks and Caicos/Turks-and-Caicos-TC-Ord-2015-national.pdf](https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Turks%20and%20Caicos/Turks-and-Caicos-TC-Ord-2015-national.pdf).

¹¹⁷ [https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Turks and Caicos/Turks-and-Caicos-TC-Regs-2017-national.pdf](https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Turks%20and%20Caicos/Turks-and-Caicos-TC-Regs-2017-national.pdf).

Table 4 summarises the status of regulation of ENDS/ENNDS in the 14 independent CARICOM Member Countries, in the framework of the WHO MPOWER¹ measures—only one country (Suriname) has a total ban on sales; four (Barbados, Guyana, Jamaica, and St. Lucia) regulate the products, including their use and/or advertisement; and nine monitor use among youth.

Table 4. Status of regulations of ENDS/ENNDS in CARICOM independent Member States, 2021¹¹⁸

Country	Total ban on sales	Regulation of product	Regulation of use and advertisement	Raise tobacco taxes ¹¹⁹	Monitoring measures	
					Adult	Youth
Antigua and Barbuda	No ¹²⁰	No ¹¹⁹	N/A ¹¹⁹		No	Yes
Bahamas	No	No	N/A		No	No
Barbados	No	Yes	Yes		No	No
Belize	No	No	N/A		No	Yes
Dominica	No	No	N/A		No	No
Grenada	No	No	N/A		No	Yes
Guyana	No	Yes	Yes		No	Yes
Haiti	No	No	N/A		No	No
Jamaica	No	Yes	Yes		No	Yes
St. Kitts and Nevis	No	No	N/A		No	No
St. Lucia	No	Yes	Yes		No	Yes
St. Vincent and the Grenadines	No	No	N/A		No	Yes
Suriname	Yes	No	N/A		No	Yes
Trinidad and Tobago	No	No	N/A		No	Yes

Additional, selected resources related to ENDS/ENNDS are in **Annex 3**.

¹¹⁸ Extracted from Table 20, PAHO Report on Tobacco Control for the Region of the Americas 2022 (reference 15 of this report). N/A = Not applicable.

¹¹⁹ No CARICOM country had implemented a level of taxation where taxes represented ≥75% of the retail sale price.

¹²⁰ Antigua and Barbuda’s Tobacco Act 2018 includes Paragraph 30(3)(d)(iii), which states that “any products that are in the form of or that imitate or resemble tobacco products, including e-cigarettes” are subject to confiscation, forfeiture, and destruction. Further, the country has definitions for these products. However, it does not apply any PWER measures (of the WHO MPOWER technical package), nor does it have restrictions on ENDS/ENNDS sales or flavours.

QUESTIONNAIRE RESPONSES

Seven respondents indicated their awareness of policies, legislation or interventions that cover ENDS/ENNDS use, as follows:

- The Bahamas: Persons must be of legal age to purchase ENDS.
- Guyana: The Tobacco Control Act 2017.
- Jamaica: Both the MoH and CSO respondents cited the [Draft Tobacco Control Bill \(2020\)](#)¹⁰⁶ which was being debated and amended by the Joint Select Committee to incorporate stakeholder comments; the Bill covered ENDS/ENNDS, including their availability and sale to minors.
- St. Lucia: Cabinet Conclusion No.650, 1994; St. Lucia National Standard 2016 Specification for Labelling of Tobacco Products, SLNS27, 2016; and Public Health Smoking Regulations 2020.
- Suriname: Amendments to the [Tobacco Act 2013](#)¹⁰⁷ address restrictions on the availability and use of ENDS/ENNDS among adolescents and youth—specifically Article 13.
- Turks and Caicos Islands: [The Tobacco Control Ordinance 2015](#),¹⁰⁸ which serves to regulate and monitor the activities of all entities operating in the territory that have applied for tobacco licensure, also governs the inspection of entities that were recognised as proprietors of tobacco products prior to implementation of the law. It enables monitoring of establishments that have been listed as smoke-free, those that have applied for smoking areas, and those that have previously been known for, or are now suspected of, operating contrary to the Ordinance.¹⁰⁹

¹⁰⁶ <https://www.moh.gov.jm/wp-content/uploads/2021/09/The-Tobacco-Control-Act-2020.pdf>.

¹⁰⁷ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Suriname/Suriname-Tobacco-Act-2013.pdf>.

¹⁰⁸ <https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Turks%20and%20Caicos/Turks-and-Caicos-TC-Ord-2015-national.pdf>.

¹⁰⁹ Turks and Caicos Islands also has Tobacco Regulations 2017 (<https://d3vqfzrrx1ccvd.cloudfront.net/uploads/legislation/Turks%20and%20Caicos/Turks-and-Caicos-TC-Regs-2017-national.pdf>), which primarily addresses smoke-free areas

Challenges in the Caribbean

In their replies to the questionnaire, respondents from CARICOM countries and territories identified the main challenges to prevention and reduction of ENDS/ENNDS use among adolescents and youth as:

- Insufficient political will to address the issue of ENDS/ENNDS.
- Insufficient legislation, policies, and regulations regarding the manufacture, production, sale, advertising, promotion, and sponsorship of these products, except for the restrictions that apply to all nicotine products.
- Inadequate enforcement of the laws, policies, and regulations that do exist, including restriction of sale to minors.
- Lack of recognition of these products as ‘drugs’, with resulting failure of persons to see ENDS/ENNDS use as a problem, aggravated by lack of awareness of ENDS/ENNDS among many adults, including parents, caregivers, and teachers.
- Lack of education and knowledge about the dangers of the products among young people and their parents, caregivers, teachers, and other people in positions of authority; inadequate parental monitoring and supervision.
- Limited financial resources available to health educators for programme development and implementation.
- Ease of availability, affordability, and access to the products by young people; their views that ENDS/ENNDS are relatively harmless; and their heightened curiosity to experiment.
- Effective marketing strategies by ENDS/ENNDS producers and retailers, including intentional marketing to youth by the tobacco industry in ways that make the products seem appealing and safe to use—at least safer than conventional cigarettes—through use of social media in particular; increased peer pressure; and new cultural norms.
- Unavailability of data and research on the use of, and trends relating to, ENDS/ENNDS.
- Lack of structured comprehensive prevention programmes at all developmental stages, and limited support available for young people who want to quit using ENDS/ENNDS.
- Illegal trade in the products, with ineffective border control.
- Relatively recent introduction of ENDS/ENNDS, with lack of documentation of their long-term effects.

Conclusions and recommended actions

Conclusions

“Tobacco control efforts must remain focused on reducing tobacco use and avoid distractions created by tobacco and related industries.

WHO report on the global tobacco epidemic, 2021:
Addressing new and emerging products

“We must remain vigilant to the challenges posed by new products such as electronic nicotine delivery systems.

Dr. Tedros Adhanom Ghebreyesus
WHO Director General

The dearth of information, regulations, and effective action aimed at preventing and reducing the use of ENDS/ENNDS in the Caribbean region calls for accelerated action by CARICOM governments, civil society, and the health-supporting private sector to address this emerging and increasingly prevalent issue, and contribute to preserving the health of adolescents and youth, and reducing the crippling burden of NCDs in the region.

Priority recommended actions for CARICOM governments and their partners

Based on the information presented and on selected recommendations from WHO, PAHO, and questionnaire respondents, it is recommended that CARICOM governments undertake the following actions, in collaboration with key partners and stakeholders, including NGOs, academia, faith-based organisations, other CSOs, and development partners; ensuring meaningful engagement with children, adolescents, youth, and other groups in situations of vulnerability; and involving the private sector in policy implementation only, while addressing conflict of interest:



1. Legislation, policy, and regulations

- 1.1 Apply the WHO MPOWER¹ technical package measures to ENDS/ENNDS, as recommended by PAHO/WHO and in line with WHO FCTC mandates and COP Decisions:
- Monitor tobacco use and prevention policies: Governments are recommended to use their existing tobacco surveillance and monitoring systems to assess developments in ENDS/ENNDS and nicotine use by sex and age.
 - Protect people from tobacco smoke: Non-users of ENDS/ENNDS should be protected from exposure to ENDS/ENNDS emissions; indoor smoke-free places should never exempt ENDS/ENNDS from a ban.
 - Offer to help quit tobacco: Evidence on the use of ENDS/ENNDS as a potential tobacco use cessation aid is still under debate, and there is insufficient evidence to support their use at the population level, as compared with proven approaches. Countries should also use evidence-based approaches to support ENDS/ENNDS users who wish to quit.
 - Warn about the dangers of tobacco: Strong, graphic health warnings should be mandated for all ENDS/ENNDS products, in line with overall tobacco control strategies, to deter their use by young people.
 - Enforce bans on tobacco advertising, promotion, and sponsorship: Given that the same promotional elements that make ENDS/ENNDS attractive to adult smokers could make them attractive to children and non-smokers, effective banning of ENDS/ENNDS advertising, promotion, and sponsorship should be enforced.
 - Raise taxes on tobacco products: ENDS/ENNDS themselves carry health risks. Therefore, taxes should be applied to these products, in line with national standards and WHO FCTC COP Decisions, to prevent their uptake, particularly among children and adolescents.
- 1.2 Enact, and/or update, and enforce legislation, policies, and regulations to include ENDS/ENNDS use in addition to conventional methods of tobacco/nicotine use, in alignment with the WHO FCTC and decisions from the COP to the WHO FCTC, based on the latest evidence, and considering HCC case studies done in 2022 on the implementation of the WHO FCTC in Antigua and Barbuda,³ and in St. Lucia:⁴
- Ban or restrict the manufacture, importation, and sale of ENDS/ENNDS, with regulation of sales channels, including online sales.
 - Ban or restrict advertising, promotion, and sponsorship of ENDS/ENNDS, including point-of-sale advertising and displays, cross-border advertising, and internet promotion.
 - Strongly enforce laws on minimum age of purchase, while recognising that it is paramount to restrict access to tobacco products for minors and adults in order to make it difficult to transition to cigarettes when using ENDS/ENNDS.

- Consider increasing the legal age for purchasing the products to at least 21 years, instead of 18 years, as suggested by scientific evidence from the United States⁵ (U.S.) Centers for Disease Control and Prevention (CDC), and supported by the Campaign for Tobacco-Free Kids.⁶
 - Minimise health risks to ENDS/ENNDS users by standardising (and building capacity to standardise through technical cooperation where needed):
 - The manufacture of devices and ENDS/ENNDS components under effective electrical safety regulations, including safe disposal of electrical and electronic equipment, and waste;
 - The content of e-liquids, to limit the amount of nicotine available per cartridge or bottle, and avoid some ingredients such as carcinogens, those that facilitate inhalation or nicotine uptake, and additives such as caffeine or colouring agents; and
 - The packaging of e-liquids, by requiring child-proof containers and labelling ENDS to inform users of the addictive and harmful nature of the product.
 - Require prominent, effective, and scientifically accurate rotating health messages and warnings on all ENDS/ENNDS packaging, and apply plain packaging to e-cigarettes.
 - Minimise health risks to non-users by outlawing the use of ENDS/ENNDS in all indoor public spaces, workplaces, and on public transportation, and in other designated smoke-free places, at minimum.
 - Prohibit ENDS/ENNDS flavours other than tobacco flavour, thus limiting the levels and number of flavours to reduce initiation by young people; ingredients that make the products more attractive, such as caffeine and vitamins; and packaging and labelling that is false, misleading, or likely to create erroneous impressions about health effects or toxicity, including health and cessation claims, especially in the absence of verifiable scientific evidence.
 - Be mindful of the unintended consequences of any regulatory measure in swaying the market towards any specific type of ENDS/ENNDS product.
 - Ensure that any ENDS/ENNDS policy, of whatever nature, is supported by the simultaneous implementation of a very strong tobacco control policy, to curtail any potential trajectory from ENDS/ENNDS use to smoking.
- 1.3** Consider adopting a regional approach for national ratification/adoption of legislation, policies, and regulations; the European Union (EU) Tobacco Products Directive (TPD),⁷ revised in 2016⁸ and again in 2022,⁹ provides rules for tobacco-related products across EU Member States and demonstrates a regional approach that may serve as a model for action by CARICOM.
- 1.4** Fully implement WHO FCTC Article 5.3,¹⁰ ensuring the development and implementation of policies to identify, prevent, mitigate, and manage conflict of interest and industry interference related to the use of ENDS/ENNDS, excluding their manufacturers, distributors, and retailers from policymaking to reduce the use of these products.
- 1.5** Ensure more effective border control to prevent or reduce illegal products, become a Party to the FCTC Protocol to Eliminate Illicit Trade in Tobacco Products,¹¹ and establish a functional 'track and trace' regional system for these products, including ENDS/ENNDS.
- 1.6** Enact, enforce, and monitor policies and regulations for the disposal of tobacco and ENDS/ENNDS waste to reduce and prevent their harmful environmental impact, including application of the WHO MPOWER¹ package modelled off the following examples:
- **M**onitor tobacco use and prevention policies: Monitor tobacco and ENDS/ENNDS waste, the environmental impact of tobacco and ENDS/ENNDS, and the tobacco industry's attempts to "greenwash" its data. Governments need objective data about the environmental impact of the tobacco industry.
 - **P**rotect people from tobacco smoke: Extend smoke and tobacco-free environments to outdoor areas, including parks and beaches, to prevent tobacco and ENDS/ENNDS waste from contaminating the soil and waterways.
 - **O**ffer to help quit tobacco: Include messages about the environmental harms of tobacco and ENDS/ENNDS in motivation to support nicotine and tobacco use cessation.
 - **W**arn about the dangers of tobacco: Add environment-related warnings and images to warning labels on nicotine and tobacco products, including ENDS/ENNDS, and create educational campaigns to raise awareness about the environmental harms of tobacco and ENDS/ENNDS.
 - **E**nforce bans on tobacco advertising, promotion, and sponsorship: Strengthen ban on tobacco and ENDS/ENNDS advertisement, promotion, and sponsorship to include publicity on corporate social responsibility initiatives, including greenwashing, and other tobacco industry activities alleging to be focused on protecting the environment.
 - **R**aise taxes on tobacco products: Levy corporate taxes to externalise the costs of environmental harms and implement extended producer responsibility regulations on the tobacco industry to reduce, mitigate, and prevent manufacturing and post-consumption tobacco and ENDS/ENNDS waste.
- 1.7** In conclusion, countries that do not ban the commercialization of these products should apply the measures of the FCTC. Two scenarios are evident: If countries already have comprehensive tobacco laws in line with the FCTC in force, they should update them to include these novel products. If they do not have such measures, they should enact this legislation, including these products, from the outset.



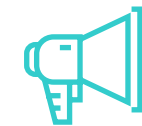
2. Taxation and earmarking

- 2.1** Adopt fiscal measures, including the application of taxes to ENDS/ENNDS, to deter their use and prevent youth initiation. The additional revenues can be earmarked for contribution to the budget for health-promoting interventions.
- 2.2** In the imposition of excise taxes, using ad valorem tax (percentage of cost), specific tax (fixed amount per quantity), or a combination of both, consider:
- Adoption of the best tax structure that contributes to the health goals of effectively deterring consumption and preventing initiation;
 - Taxing the e-liquids used for consumption. This is critical, and the excise tax should be applied on all e-liquids, whether they contain nicotine or not;
 - Taxing the devices as well, depending on the national administrative capacity to do so;
 - Setting product characteristics to improve the effectiveness of any taxation structure, regardless of context; and
 - Collecting tax in the same way as for tobacco products in the country; in most countries, the collection is made at the source—the manufacturing/importing points. In principle, the administration of taxes on ENDS/ENNDS should be similar to that for cigarettes. However, due to the lack of standardisation of these products, a rapid and constantly evolving understanding of ENDS/ENNDS and their supply chain will be required to achieve effective and efficient administration of taxes.



3. Research

- 3.1** Conduct research on the prevalence, drivers, and impact of ENDS/ENNDS use among adolescents, youth, and other groups in situations of vulnerability to fill the information gap in the Caribbean, including through inclusion of relevant questions in the Global Youth Tobacco Survey (GYTS), household surveys, and other population-based surveillance that monitors the use of tobacco products and key tobacco control indicators in adolescents, youth, and adults, with adequate budgeting and mechanisms for periodic implementation of these surveys, as recommended by WHO.
- 3.2** Publish and widely disseminate research results, including to policymakers to inform the development of evidence-based policy aligned with the tobacco control interventions mandated in the WHO FCTC and explicated in the WHO MPOWER¹ technical package; to technical personnel and health care workers at all levels of the health system; to civil society; and to adolescents and youth, with knowledge translation to facilitate meaningful understanding and use of the information.



4. Education, advocacy, and health literacy

- 4.1** Develop, implement, and evaluate campaigns and other advocacy and public education strategies, including through social media and actively involving adolescents and youth, to increase health literacy¹⁴ and awareness of issues and harms related to the use of ENDS/ENNDS, including their impact on the environment.
- 4.2** Target policymakers, to obtain their buy-in, boost political will, and obtain their support; adolescents and youth themselves, their caregivers, and agencies/entities that engage or support them, in diverse settings—school, work, and community—integrating education on substance use harms into school, medical, and nursing curricula, and ensuring their meaningful engagement in the development, implementation, and evaluation of the interventions; health care providers; environmental health and sustainability groups; and other key stakeholders.
- 4.3** Educate, build the capacity of, and involve CSOs working in the reduction of NCDs and their risk factor; faith-based organisations; youth groups; and other CSOs, to strengthen their advocacy and monitoring functions, including with respect to the identification, prevention, mitigation, and management of conflict of interest, industry interference, and undue influence, directly or through agency.
- 4.4** Use a human rights framework for advocacy and other interventions for prevention and reduction of the use of ENDS/ENNDS, promoting countries' obligations to protect, respect, and fulfill the right of children to the highest attainable standard of health, as set out in the Convention on the Rights of the Child (CRC),¹⁵ Article 24¹⁶.



5. Prevention, care, and treatment

- 5.1** Develop, implement, and evaluate programmes to prevent and reduce the use of ENDS/ENNDS among adolescents and youth, integrating them into programmes for adolescent and youth health, tobacco control, substance use prevention and control, mental health programmes for youth, or other programmes for health promotion and NCD risk factor reduction, as deemed most appropriate in the national situation.
- 5.2** Integrate screening for smoking and vaping at the first level of care as part of the primary care approach, increasing physician education and training family doctors and other primary care physicians to identify young people at risk of vaping, through screening questionnaires.
- 5.3** Establish facilities and strategies to manage and treat addiction and ENDS/ENNDS users who wish to quit, including counselling and nicotine replacement therapy, ensuring easy access to youth-targeted, youth-friendly services free at the point of provision, as per recommendations of Article 14 of the WHO FCTC,¹⁷ free from discrimination, and widely promoted across sectors, as well as the development of accessible cessation applications (apps).



6. Resource allocation and mobilisation

- 6.1** In addition to the revenue obtained from taxing ENDS/ENNDS, allocate resources and undertake resource mobilisation for programmes to reduce the use of the products, taking advantage of resources available through the WHO FCTC Secretariat, Bloomberg Foundation, PAHO/WHO, and other entities, and seeking ‘win-win’ co-benefits from interventions that simultaneously address NCD reduction, improving the COVID-19 response, and climate change mitigation and adaptation.



7. Monitoring and accountability

- 7.1** Establish surveillance systems to monitor the evolution in patterns of ENDS/ENNDS use among adolescents, youth, men, and women using standardised instruments in line with regional and global surveillance systems; enabling integration into the tobacco surveillance system; and ensuring the detection of health or safety incidents involving ENDS/ENNDS, and the disposal of vape waste. Given the current state of knowledge about market dynamics, it is extremely important for countries to monitor ENDS/ENNDS products in the market and evaluate the impact of regulation on prices and use, as the market is rapidly evolving and adjustments to taxation may be needed over time. This includes surveillance of population patterns of ENDS/ENNDS use by intensity, type of device, the content of e-liquid and reason for use, and by demographic characteristics and smoking status. This surveillance system should be a component of the tobacco surveillance system.
- 7.2** Undertake continuous monitoring of online e-cigarette marketing using systems such as the Vital Strategies Tobacco Enforcement and Reporting Movement (TERM),¹⁸ since online platforms make it easier for industry players to avoid oversight.
- 7.3** Involve CSOs, including youth organisations, in monitoring the implementation of laws, policies, regulations, and other interventions to reduce the availability and use of ENDS/ENNDS; tracking and identifying industry interference; and holding governments to account for their commitments and obligations.

Annexes

Annex 1: Questionnaire

VAPING AMONG ADOLESCENTS AND YOUTH IN THE CARIBBEAN: SITUATION, POLICY RESPONSES, AND RECOMMENDED ACTIONS

Introduction

In October 2022, the Healthy Caribbean Coalition (HCC) entered into its fifth Letter of Agreement (LOA) with the Pan American Health Organization (PAHO). In response to recent regional data indicating a rise in the use of [electronic nicotine delivery systems](#) (ENDS) and electronic non-nicotine delivery systems (ENNDS)⁵⁴ such as vapes, vaporisers, vape pens, hookah pens, electronic cigarettes (e-cigarettes or e-cigs), e-cigars, and e-pipes among Caribbean young people, one of the objectives of the 2022 LOA is **to increase public and policymaker awareness about the availability of these devices, their use among adolescents and youth, their dangers, policy responses, and recommended actions in the Caribbean.**

The HCC Secretariat would greatly appreciate the completion of this [very brief questionnaire](#) by relevant persons in Caribbean Community (CARICOM) Ministries of Health, other relevant ministries, HCC Member CSOs, and selected persons in academia. **The questionnaire should be completed electronically—there is space for insertion of text and the check boxes are clickable. Responses will be amalgamated and reported anonymously (that is, not by individual).**

Please return the completed questionnaire to Ms. Janea Ifill, HCC Administrator (janea.ifill@healthycaribbean.org), with copy to Ms. Maisha Hutton, HCC Executive Director (maisha.hutton@healthycaribbean.org) by **16 February 2023**.

A. General information

- 1. Country:
- 2. Date of completion of questionnaire:
- 3. Name of person completing the questionnaire:
- 4. Position/post/title of person completing the questionnaire:

5. Institution that the person completing the questionnaire represents:

- ☐ Ministry of Health
- ☐ Other Ministry/Government Department (Name):
- ☐ Civil Society Organisation (Name):
- ☐ Academic institution (Name):
- ☐ Other (please specify):

B. Information on availability of ENDS and ENNDS to, and prevalence of ENDS and ENNDS use among, adolescents and youth in the Caribbean

6. Are you aware of any [data/information/studies](#)⁵⁵ on the availability of electronic nicotine delivery systems and/or electronic non-nicotine delivery systems to adolescents and youth (persons aged 10-24 years) in your country or in the Caribbean region?

- ☐ No ☐ Yes

If **No**, please go to Question 7.

If **Yes**, please provide names, links, or references to data/information/studies on the availability of ENDS and/or ENNDS in the space below.

- ...
- ...
- ...

7. Are you aware of any [data/information/studies](#)² on the prevalence of the use of electronic nicotine delivery systems and/or electronic non-nicotine delivery systems among adolescents and youth (persons aged 10-24 years) in your country or in the Caribbean region?

- ☐ No ☐ Yes

If **No**, please go to Question 8.

If **Yes**, please provide names, links, or references to data/information/studies on the prevalence of the use of ENDS and/or ENNDS in the space below.

- ...
- ...
- ...

C. Information on policy responses, legislation, and/or interventions to prevent and/or reduce ENDS and ENNDS availability and use among adolescents and youth in the Caribbean

8. Are you aware of any policy responses, legislation, and/or interventions to prevent and/or reduce the availability and use of ENDS and/or ENNDS among adolescents and youth (persons aged 10-24 years) in your country or in the Caribbean region?

NoYes

☐☐

If No, please go to Question 9.

If Yes, please briefly describe the relevant policy response(s), legislation, and/or interventions, and include names, links, or references to them in the space below.

- ...
- ...
- ...

D. Main challenges to preventing and/or reducing ENDS and ENNDS availability and use among Caribbean adolescents and youth

9. What do you think are the main challenges to preventing and/or reducing ENDS and/or ENNDS availability and use among Caribbean adolescents and youth?

- ...
- ...
- ...

E. Recommended actions for preventing and/or reducing ENDS and ENNDS availability and use among Caribbean adolescents and youth

10. What actions would you recommend to prevent and/or reduce ENDS and ENNDS availability and use among Caribbean adolescents and youth?

- ...
- ...
- ...

This completes the questionnaire. Thank you for your responses and your continued contribution to NCD prevention and control in the Caribbean!

Annex 2: List of respondents to questionnaire

Government Ministries

Antigua and Barbuda – Ministry of Health
 The Bahamas – Ministry of Health, Ministry of Education
 Belize – Ministry of Health and Wellness
 Cayman Islands – Ministry of Health
 Dominica – Ministry of Health
 Guyana – Ministry of Health
 Jamaica – Ministry of Health
 St. Kitts and Nevis – Ministry of Health
 St. Lucia – Ministry of Health
 St. Vincent and the Grenadines – Ministry of Health
 Suriname – Ministry of Health
 Trinidad and Tobago – Ministry of Health
 Turks and Caicos Islands – Ministry of Health

Civil society organisations





Heart Foundation of Jamaica

Annex 3: Selected resources on ENDS/ENNDS use by adolescents and youth

- CDC. <https://www.cdc.gov/niosh/topics/tobacco/electronicnicotinedeliverysystems.html>.
- CDC. https://www.cdc.gov/tobacco/basic_information/e-cigarettes/index.htm.
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