

Tobacco and Nicotine Use among Adolescents in Kenya:

Findings from the DaYTA Survey, 2024

Kenya Report 2024











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The Kenya Data on Youth and Tobacco (DaYTA) Survey 2024 was implemented by the African Population and Health Research Center (APHRC) and with support from the Development Gateway (DG): an IREX Venture, in collaboration with the Ministry of Health (MoH) Kenya and the Kenya National Bureau of Statistics (KNBS). Funding for the survey was provided by the Gates Foundation (INV-048743). A Research Advisory Committee (RAC) comprising representatives from the Kenya National Bureau of Statistics (KNBS), Kenya Institute of Curriculum Development (KICD), the Division of Adolescent Health in the Ministry of Health, the International Institute for Legislative Affairs (IILA), and Youth in Power Africa Rise (YIPAR) provided technical insights throughout the implementation of the survey.

Additional information about the survey may be obtained from APHRC, P.O. Box 10787 - 00100, GPO Nairobi, Kenya; Telephone: +254-722-205-933, +254-733-410-102; Email: info@aphrc.org; Website: www.aphrc.org

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The conclusions and opinions expressed in this work are those of the author(s) alone and shall not be attributed to the Gates Foundation.

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Tobacco and nicotine use among adolescents remains a major public health concern in Kenya, posing significant risks to the health and wellbeing of the country's young population. Adolescents are particularly vulnerable to the harmful effects of these substances, which not only compromise their physical health but also increase their risk of getting addicted and acquiring long-term non-communicable diseases. The Government of Kenya, through the Ministry of Health, is committed to safeguarding the health of its youth by implementing evidence-based interventions and strengthening policies aimed at preventing and reducing tobacco and nicotine use.

Exposure to tobacco and nicotine greatly affects the still-developing adolescent brain. Such exposure could lead to disruptions in normal brain function, leading to a higher risk of addiction and associated cognitive impairments. In addition, nicotine's activation of the pleasure centers in the brain can make it particularly alluring to the youth, further heightening the risk of experimentation and subsequent use.

In response to these concerns, the Kenya Data on Youth and Tobacco Survey 2024 was initiated to gather vital data on the prevalence and associated factors of tobacco and nicotine use among adolescents. The insights gained from this survey are crucial for understanding the patterns of consumption and the demographic factors associated with adolescent use. This information will not only inform public health interventions but also support policymakers in developing comprehensive, innovative, and effective multi-sectorial tobacco control strategies aimed at adolescents.

I firmly believe that a collective approach is key to making a significant impact in the fight against to bacco and nicotine use among adolescents. Together, let us advocate for a tobacco-free society, dedicated to ensuring the health and wellbeing of Kenya's future generations. Engaging everyone in this effort is vital as we strive to protect our adolescents and foster a healthier Kenya for all.

(Signature)

Dr. Patrick Amoth, EBS

Director General, Ministry of Health



The Kenya Data on Youth and Tobacco (DaYTA) Survey 2024 aimed to estimate the prevalence and associated factors of tobacco and nicotine use among adolescents aged 10 to 17 years in Kenya. This was a nationally representative survey conducted across 16 randomly sampled counties, namely Nairobi, Kilifi, Mombasa, Marsabit, Meru, Kitui, Garissa, Nyeri, Kirinyaga, Busia, Migori, Nyamira, Nandi, Laikipia, Turkana, and Trans-Nzoia. The Enumeration Areas (EAs) were drawn randomly from a sampling frame provided by Kenya National Bureau of Statistics, which is a comprehensive list of areas in the entire country.

Kenya, like many low- and middle-income countries, faces a proliferation of new and emerging tobacco and nicotine products that are sophisticated and very enticing to adolescents who, being at the stage of experimentation, are oblivious of the negative effects associated with these products. Without any intervention from the government, many will end up getting addicted to nicotine.

The findings from the survey form key evidence that can be used in shaping policy, advocacy, and program implementation, in line with the World Health Organization Framework Convention on Tobacco Control (WHO - FCTC), the Protocol to Eliminate Illicit Trade in Tobacco Products, the Tobacco Control Act 2007, and the Kenya National Tobacco Control Strategic Plan 2019-2023.

The survey highlights the vulnerability of adolescents to tobacco and nicotine use. The Ministry of Health is thus committed to protecting the current and future generations from the devastating effects of tobacco and nicotine use and exposure through evidence-based demand and supply reduction strategies, with emphasis on six 'MPOWER' measures, namely:

MPOWER'

- Monitoring tobacco use and prevention policies.
- Protecting people from exposure to second-hand smoke.
- Offering help to guit tobacco use.
- Warning about the dangers of tobacco.
- Enforcing bans on tobacco advertising, promotion and sponsorship.
- Raising taxes on tobacco.

The Ministry of Health remains committed to providing stewardship and the requisite policy guidance and resources to ensure the recommendations emanating from this survey are urgently addressed.

(Signature)

Dr. Joseph Lenai, OGW

Head Directorate of Primary Health Care

C Acknowledgements

The Ministry of Health and the Kenya National Bureau of Statistics (KNBS) wish to express gratitude for the undertaking of the first household-based tobacco and nicotine survey that included both inschool and out-of-school adolescent populations across the country. We appreciate the invaluable support from the Office of the Cabinet Secretary, the Office of the Principal Secretary, the State Department of Public Health and Professional Standards, the Director General and Head of the Directorate of Primary Health Care, the Head of the Division of Drug and Substance Abuse and Control, and the Head of the Adolescent and School Health Section in the Division of Reproductive, Maternal, Newborn, and Child Health.

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Finally, we would like to thank Development Gateway: an IREX Venture for its valuable support and the Gates Foundation for the financial resources it provided for this survey.



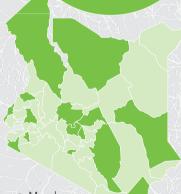
(Signature)

Dr. Andrew J. Toro, OGW

Head, Drug and Substance Abuse Control Division

Executive summary

6,435 adolescents 16 counties



- Mombasa
- Kilifi
- Garissa
- Marsabit
- Meru
- Kitui Nyeri
- Kirinyaga
- Turkana
- Trans Nzoia
- Nandi
- Laikipia
- Busia
- Migori
- Nyamira
- Nairobi

The use of tobacco and nicotine products among adolescents must be continually monitored, especially considering their everevolving nature in the market. Previous nationally representative studies among adolescents (e.g., Global Youth Tobacco Survey [GYTS] 2013) need to be updated. In addition, over the two decades most research has focused on adolescents enrolled in school and traditional tobacco products. Given the prevailing data gaps, the Data on Youth and Tobacco (DaYTA) survey aimed to:

- 1. Determine the prevalence of tobacco and nicotine use among adolescents aged 10 to 17 years in Kenya.
- Determine the multi-level factors (individual, household, and environmental) associated with all forms of adolescent tobacco and nicotine use in Kenya.

This was a household-based, cross-sectional national survey of adolescents aged 10 to 17 years in urban and rural Kenya. The survey sampled 6,435 adolescents from 16 sampled counties: Mombasa, Kilifi, Garissa, Marsabit, Meru, Kitui, Nyeri, Kirinyaga, Turkana, Trans Nzoia, Nandi, Laikipia, Busia, Migori, Nyamira, and Nairobi. Stratification was applied at the sampling stage by separating urban and rural areas, thereby ensuring proportional representation. This resulted in 224 EAs proportionally distributed across the 16 sampled counties (81 in urban areas and 143 in rural areas). The EAs were drawn randomly from a sampling frame provided by KNBS, which is a comprehensive list of natural villages covering the entire country.

Overall, the survey showed that the ever use prevalence of any tobacco and/or nicotine products among adolescents was 6.46% (equivalent to ~622,000 adolescents in the general population), while the current use was 2.52% (244,000 adolescents). The survey also revealed the ever use prevalence was higher among boys (8.84%) compared with girls (4.20%).

The ever use prevalence of any tobacco product was 6.20% (598,000 adolescents in the general population), while current use was 2.47% (239,000 adolescents). Adolescents who were out of school reported a higher prevalence of both ever use of any tobacco products (at 24.26%) and current use (at 17.59%) compared with their in-school counterparts, whose prevalence rates were 4.42% and 0.98%, respectively. The ever use prevalence of smoked tobacco products was 3.53% (342,000 adolescents), while the current prevalence was 1.03% (100,000 adolescents).

Despite there being a high ever use prevalence of cigarettes (3.23%) among adolescents, this did not translate into a high current use rate (0.92%). Additionally, the ever use prevalence for smokeless products was 3.36% (324,000) while current use was 1.72% (166,000).

Key factors that increased the likelihood of using tobacco products were: being a boy, being in an older age group, and having a family member/relative who used tobacco in the home. On the other hand, having a household head with a high level of education decreased the likelihood of an adolescent using tobacco.

Notably, the prevalence of nicotine products, which include electronic cigarettes (e-cigarettes) and nicotine pouches, was low and localized to urban areas. This is likely because of the greater availability of these products and their dominant advertising in the urban areas. This low prevalence was also observed for other products, including shisha, heated tobacco products (HTPs), and other smoked tobacco, such as cigars and cigarillos.

The age of initiation varied with different tobacco and nicotine products, with manufactured and roll-your-own (RYO) cigarettes being initiated as early as six and five years, respectively. The average age of initiation for RYO cigarettes was 11 years. The initiation age for smokeless tobacco products was even lower, at 9.83 years on average.

Overall, about 45% of current users reported that they intended to quit tobacco within the next 12 months. The intention to quit was highest among boys (52.10%), among the 13 to 15 age group (51.63%), among urban dwellers (61.31%), and among adolescents enrolled in school (61.65%). For those that had tried to quit, improvement to health was cited as the key reason to quit by more than half of all users (58.38%) followed by family disapproval of their usage of the products (19.56%).

About 44% of adolescents who had ever used had knowledge of health effects of tobacco products. Adolescents in school (54.38%) displayed deeper knowledge levels compared with those who were out of school (10.83%). Furthermore, 64% of adolescents showed negative attitudes and perceptions toward tobacco products.

While tobacco advertising of any form is banned in the country, about 10% of adolescents reported seeing tobacco advertisements at points of sale, with a higher proportion of those in urban areas (24.86%), in the richest wealth quintile (23.17%), and out of school (19.06%).

THE KEY RECOMMENDATIONS ARISING FROM THE SURVEY ARE:

- on Institute legal reforms
- oz Commit towards strengthening enforcement measures
- O3 Sustain and enhance school-based programs
- o4 Focus on impactful awareness creation
- os Improve multi-sectoral coordination
- Comprehensively integrate research in tobacco control efforts



► of current users reported that they intended to quit tobacco within the next 12 months

E Acronyms & Abbreviation

ASH-Y ASH Smokefree Great Britain Youth Survey
CDC Centers for Disease Control and Prevention

DaYTA Data on Youth and Tobacco in Africa

EAs Enumeration Areas

GATS Global Adult Tobacco Survey

GSHS Global School-based Student Health Surveys

GYTS Global Youth Tobacco Survey
ITC International Tobacco Control

KIHBS Kenya Integrated Household Budget Survey

KIPPRA The Kenya Institute for Public Policy Research and Analysis

KNBS Kenya National Bureau of Statistics

NACADA National Authority for the Campaign Against Alcohol and Drug Abuse

NYTS National Youth Tobacco Survey

RYO Roll-Your-Own
SSA Sub-Saharan Africa

TAPS Tobacco, advertising, promotion and sponsorship

WHO World Health Organization

UN United Nations



Definition of terms

Current use: Adolescents aged 10 to 17 years who used a tobacco or nicotine product in the past 30 days.

EA: This is an area with an average of about 100 households, but may vary from 50 to 149 households depending on the population density, terrain, and vastness of the area concerned.

Emancipated minors: Adolescents under the age of 18 who are living separately from their parents and are self-supporting, married, parenting, and competent to make their own decisions and provide consent to participate in research (Ministry of Labour and Social Protection of Kenya, 2019; National AIDS and STI Control Programme, 2013).

Ever use: Adolescents aged 10 to 17 years who have ever used a tobacco and nicotine product.

Household: A person or group of related or unrelated individuals who live together in the same dwelling unit(s), acknowledge one adult (male or female) as the head of the household, pool some or all their income and resources, consume certain goods and services collectively (mainly housing and food), and are considered as a single unit.

01 Introduction

The use of tobacco is a major public health concern associated with over 8 million deaths annually, including 1.2 million non-smokers who die from second-hand smoke (WHO, 2023). Globally, about 12% of adolescents aged 13 to 15 years use some form of tobacco, with the prevalence among adolescents in low- and middle-income countries ranging between 11% and 13% (WHO, 2021).

The use of tobacco and nicotine products among adolescents is a particular concern for African countries. These countries have some of the youngest populations in the world, with about 40% aged 15 years and younger (Statista, 2023). In Kenya, 41.5% of the population is made up of the youth (KNBS, 2019a). Studies have reported that smoking initiation can occur as early as seven years old in some Sub-Saharan Africa (SSA) countries (Chido-Amajuoyi et al., 2021; Veeranki et al., 2017). In Kenya, tobacco use has been reported to start as early as six years old, which is the earliest initiation age among the other psychoactive substances (National Authority for the Campaign Against Alcohol and Drug Abuse [NACADA] & the Kenya Institute for Public Policy Research and Analysis [KIPPRA], 2019). Tobacco has also been reported to be the most widely known and used psychoactive substance among primary school children aged below 15 years in Kenya (Kamenderi et al., 2019).

Adolescents in Africa are increasingly vulnerable to tobacco and nicotine product use due to the aggressive marketing strategies that are targeted at young people, particularly promotions of flavored products (Brown et al., 2023; Struik et al., 2020). Legislative policies such as restricting advertising, raising taxes on tobacco products, and banning sales near schools have proven effective in reducing adolescents' exposure to and use of tobacco products (Chapman & Freeman, 2009; U.S National Cancer Institute & WHO, 2016). In Kenya, many of these policies have been implemented as part of the Tobacco Control Act (2007). For example, according to the Act, the sale of tobacco products to a person under 18 years is prohibited, as is the sale of single stick cigarettes (the minimum pack size is 10 cigarettes).

Tobacco advertising, promotion, and sponsorship (TAPS), smoking in public places such as schools, and sale of tobacco products in automated vending machines are prohibited. Tobacco product packaging is required to have two health warnings. The sale, use, advertising, and promotion of shisha is also prohibited in Kenya (Campaign for Tobacco-Free Kids, 2025). However, certain prohibitions remain permitted or are unclear, such as selling tobacco products within education facilities (Campaign for Tobacco-Free Kids, 2025). This means that adolescents are still exposed to smoking within schools and other public places. The Tobacco Control Amendment Bill (Senate Bill No. 35 of 2024) was tabled in the Kenya parliament in 2024. This bill sought to amend the Tobacco Control Act of 2007 to include nicotine products such as e-cigarettes and nicotine pouches.

With Africa's youth at a heightened risk, available data on adolescent tobacco and nicotine use must be increased to monitor tobacco use and improve decision-making. The DaYTA program aimed to address gaps in adolescent tobacco use data across three African countries: Kenya, Democratic Republic of Congo, and Nigeria. This report presents the Kenya-specific survey findings.

02 Purpose of the survey

The primary goal of the survey was to collect country-level data in Kenya on tobacco and nicotine product use among adolescents aged 10 to 17 years to address key evidence gaps and enhance existing knowledge.

Specific objectives:

- 1. To determine the prevalence of tobacco and nicotine product use among adolescents aged 10 to 17 years in Kenya.
- 2. To determine the multi-level factors (individual, household, and environmental) associated with all forms of adolescent tobacco and nicotine product use in Kenya.



03 Methodology

This was a household-based, cross-sectional national survey. It targeted adolescents aged 10 to 17 years in Kenya.

3.1 Survey setting

Kenya has a devolved system of governance comprising a national government and 47 county governments. The administrative structure of the counties comprises sub-counties, wards, and villages. The major cities are Nairobi (the capital), Mombasa, Kisumu, Nakuru, and Eldoret. This nationally representative survey was implemented in 224 EAs across 16 selected counties, namely Nairobi, Kilifi, Mombasa, Marsabit, Meru, Kitui, Garissa, Nyeri, Kirinyaga, Busia, Migori, Nyamira, Nandi, Laikipia, Turkana, and Trans-Nzoia. The EAs were randomly selected from a sampling frame provided by KNBS, which is a comprehensive list of EAs covering the entire country (see Section 4.4. Sampling procedures).

3.2 Survey population

The survey targeted households with adolescents aged 10 to 17 years.

3.2.1 Household eligibility criteria

A household was eligible if it had an adolescent aged 10 to 17 years. During the household listing process, field interviewers determined if an adolescent aged 10 to 17 years lived in the household or not.

3.2.2 Individual interview eligibility criteria

The survey covered adolescents aged 10 to 17 years. Adolescents were excluded from participation if they were unable to provide informed consent due to refusal or an inability to comprehend survey information or if their parents did not consent to their participation. Additionally, adolescents who did not have the capacity to understand the questions or had significant physical disabilities (e.g., hearing and speech impairments) that made oral administration of the surveys impractical were excluded.

The survey targeted adolescents aged

10 - 17 years

3.3 Sample size

The sample size for this survey was calculated using the United Nations (UN) formula (see Appendix 2) for estimating sample sizes in prevalence studies for household surveys (UN, 2008). In the computation of the sample, a 95% confidence level was applied, along with a default design effect of 2.0 to account for multistage sampling. A 10% non-response rate was factored into the calculations, consistent with other studies in Kenya (KNBS, 2015). An estimate of 16.2% was used for the expected prevalence of tobacco use among adolescents (Nazir et al., 2019). The adolescent population proportion was estimated at 20.45% and the average household size estimated at 3.9, based on the 2019 Kenya Population and Housing Census (KNBS, 2019). Using these parameters, the calculation resulted in a nationally representative sample of 6,061 adolescents in Kenya, which is sufficient for analysis and national-level inferences. However, to adjust for the 10% non-response rate, a targeted sample size of 6,734 was computed.

3.4 Sampling procedures

The survey utilized a three-stage stratified cluster sample design.

The first stage involved the selection of 16 counties from Kenya's 47 counties. Prior to sampling, the counties were stratified by grouping them into the eight former provinces. Thereafter, a representative and proportionate sample was selected from each province. The number of sampled counties was computed using Taro Yamane's simplified formula for proportions (Tepping, 1968). Nairobi county was included by default because it is a capital city, a region, and a county. The remaining 15 counties were randomly selected based on a computer-generated sequence using R statistical software.

The second stage involved random selection of EAs within the 16 sampled counties, which was done with probability proportional to the size of the EA. Prior to EA sample selection, the EA sampling frame was first stratified by residence (rural and urban) and 224 EAs were selected: 81 in urban areas and 143 in rural areas. To generate a household sampling frame and identify households with eligible adolescents, the survey team conducted a household listing operation within the selected EAs. The operation involved visiting each EA to list all eligible households and their addresses.

In the third stage, 30 households were randomly selected from each EA. In each selected household, only one adolescent aged 10 to 17 years was interviewed. These interviewees were randomly sampled if multiple adolescents were present in the household.

3.5 Sampling weights

Since the survey was a multi-stage survey with a complex sampling design, it was essential to properly account for all sample design features. Initial sampling weights were assigned to sample units. These initial weights were computed by taking the inverse of the selection probability at each stage of the survey design and multiplying the inverse of the selection probabilities at each stage. Calculations in this computation stage included probabilities of selection of counties, selection of EAs, selection of households, and selection of eligible adolescents. Next, adjustments to the initial weights were made to account for non-response by dividing the weights of respondents by the response rates. This step made non-response adjustments for households and adolescents.

In the final stage, a calibration adjustment factor was calculated by dividing the population totals with the corresponding sample estimates for each stratum (to adjust the weights to conform to the projected population census data distributed by stratum and age). The strata variable was formed by region, residence type (urban/rural), and age group.

The final weights were computed by multiplying the initial weights, the non-response adjustment factor, and the calibration or post-stratification factor for each sampled unit. These weights were used when conducting the analysis to ensure that the results accurately represented the target population.

3.6 Participants recruitment

During data collection, fieldworkers visited all the sampled EAs with the help of KNBS officers and village elders to map out the boundaries of EAs and villages. Once the boundaries were established, the teams conducted household listing to generate a sampling frame for the survey. Fieldworkers provided a brief explanation of the survey to the heads of the households or any other eligible respondent and inquired whether there was an adolescent aged 10 to 17 years residing in their households. This resulted in a sampling frame of households with eligible adolescents, from which random sampling was applied to select 30 households per EA.

Fieldworkers subsequently visited each of the sampled households, explaining the purpose of the survey and seeking consent from the head of the household or any other eligible respondent before administering the household questionnaire (see Section 4.11. Ethical Considerations). Once the household interview was complete, the SurveyCTO system was programmed to randomly select one eligible adolescent from all (if there was more than one) eligible adolescents listed in the household roster. Informed consent was then sought from the parent or guardian to interview the adolescent. If consent was granted, assent was sought from the selected adolescent prior to the administration of the individual questionnaire. For emancipated minors, informed consent was obtained directly from the adolescent prior to conducting the household and adolescent interviews. At the end of the individual interview, the field interviewers debriefed the adolescent using an information sheet that outlined the harmful effects of tobacco and nicotine products.

3.7 Questionnaire development

The DaYTA standardized questionnaire was developed through an intensive process that involved a review of literature and a series of consultations with stakeholders at different levels (Figure 1). The process was guided by the overall survey objectives to fill key evidence gaps and complement existing data.

The review of literature included reference to a variety of internationally recognized survey questionnaires, such as the Center for Disease Control (CDC) National Youth Tobacco Survey (NYTS), the GYTS, the Global Adult Tobacco Survey (GATS), the ASH Smokefree Great Britain Youth survey (ASH-Y), the International Tobacco Control (ITC)-Youth Surveys, and the WHO Tobacco Questions for Surveys of Youth (TQS-Youth). The first draft was developed from the literature review and interviews with key stakeholders in Kenya. The stakeholders then gave feedback on the first draft to identify any gaps and align the questionnaire to the Kenyan context. Thereafter, the second draft was shared with key partners and stakeholders from the three survey countries to ensure standardization. The third draft was then field tested. These steps were necessary to ensure that the questionnaires were both appropriate and relevant for policy-making. Additionally, they ensured that the collected data would address national contexts and government priorities while allowing for cross-country comparisons.

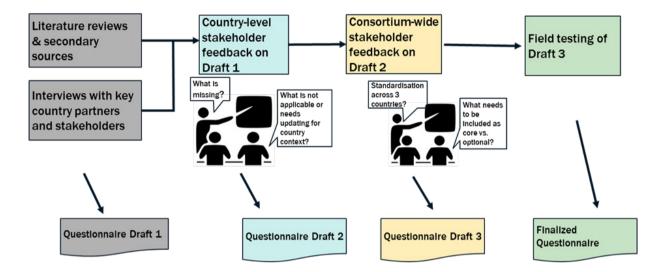


Figure 1: Questionnaire development process

3.7.1 Household questionnaire

The household questionnaire was administered to the consenting or acting head of household. It collected data on demographics and socio-economic status through the following modules:

- Module 1: Household roster demographic data of household members, including de facto residents who usually reside in the household.
- Module 2: Household characteristics socio-economic information about the household.

3.7.2 Adolescent questionnaire

The adolescent questionnaire collected information from 10 to 17 year old adolescents through the following modules:

- **Module 1:** Socio-demographic characteristics including age, sex, in-school/out-of-school status, school year (if in school), marital status, employment status, religious affiliation, average weekly spending money, and functional disabilities (i.e., impairment in vision, mobility, cognition, memory, self-care, and communication).
- Modules 2-8 focused on use of tobacco and nicotine products (Figure 2). These modules collected detailed information on:
 - Smoked tobacco products, specifically manufactured/factory-made cigarettes, RYO/hand-rolled cigarettes, shisha/waterpipe/hookah, and other tobacco products such as cigars, cheroots, and cigarillos.
 - HTPs such as heat sticks.

- Smokeless tobacco products such as chewing tobacco (e.g., tobacco leaf, tobacco leaf and lime, kuber), tobacco applied topically (e.g., tobacco toothpaste like Dentobac or tobacco tooth powder like lal), and snuff.
- Nicotine products, specifically e-cigarettes.

Modules 2-8 collected data on type and quantity of products smoked, frequency of smoking, age of initiation, context of tobacco use (e.g., where and with whom they smoke), access to tobacco and novel products (e.g., how they obtain these products, where, and the cost), tobacco and nicotine product use intentions among current non-users, and ability to resist use when offered a product by friends or family.

- Module 9 focused on adolescents' knowledge, attitudes, perceptions, and intentions regarding tobacco and its consequences, tobacco use history of parents, guardians, or family members, tobacco use among close friends, and exposure to TAPS and anti-tobacco messages.
- **Optional module 1** focused on the use of nicotine pouches and collected data similar to modules 2-8 above.
- Optional module 2 focused on cessation of tobacco use.
- Optional module 3 assessed exposure to tobacco smoke in indoor and outdoor public places.

Figure 2 provides an overview of the tobacco and nicotine product categories and sub-categories examined in the survey. The chart classifies products into tobacco and nicotine, with further subdivisions to illustrate specific product types within each group. In this survey, tobacco products were defined as substances derived from the leaf of the tobacco plant, whether processed or unprocessed, for consumption in various forms. These products were categorized into smoked, heated, and smokeless tobacco based on their method of use. Smoked tobacco covers products that are burned and inhaled (WHO AFRO, 2017). The sub-categories under smoked tobacco include manufactured/factory-made cigarettes, hand-rolled/RYO cigarettes, shisha (also known as waterpipe or hookah), and other smoked tobacco such as cigars. HTPs are products in which tobacco is heated rather than burned, producing an aerosol for inhalation, such as heat sticks (WHO, 2020). Smokeless tobacco covers products that are consumed without combustion and include options that are chewed, sucked, or applied, such as snuff or chewing tobacco (WHO, 2020).

Nicotine products were defined as substances that do not contain the tobacco plant leaf but instead contain nicotine, a stimulant that accelerates neural transmission between the brain and the body. These products were categorized into two subgroups: e-cigarettes and nicotine pouches. E-cigarettes are devices that vaporize liquid solutions containing nicotine for inhalation, often referred to as "vaping," whereas nicotine pouches are small bags/pouches filled with nicotine-containing powder that are placed between the gums and lips for absorption (WHO, 2020, 2023b).

Nicotine products

were defined as substances that do not contain the tobacco plant leaf but instead contain nicotine, a stimulant that accelerates neural transmission between the brain and the body.

Nicotine pouches

are small bags/ pouches filled with nicotine-containing powder that are placed between the gums and lips for absorption (WHO, 2020, 2023b).

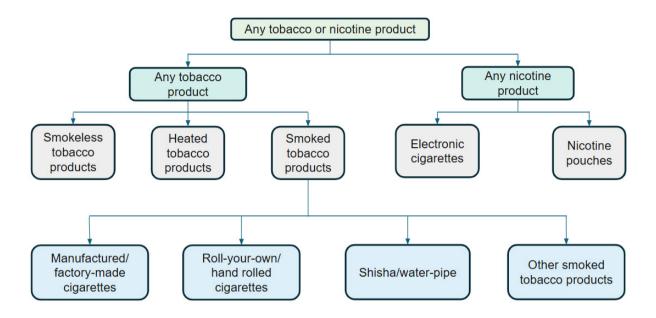


Figure 2: Tobacco and nicotine product categories and sub-categories used in the survey

3.8 Training of the research team on survey procedures

The recruitment process was transparent and involved advertising the field interviewer position, shortlisting candidates, conducting interviews, and inviting successful candidates to participate in training. Field interviewers were recruited and selected based on their level of education (a secondary education was the minimum), prior experience working on similar surveys, ability to comprehend and speak English and Kiswahili, knowledge of the selected local languages, and residency in the sampled survey sites. One hundred and eighteen field interviewers, mostly young people from across the 16 sampled counties, participated in a six-day training workshop in Nairobi. The training consisted of comprehensive sessions on the survey objectives, survey tools, data collection techniques, quantitative research, ethical considerations, and safeguarding on protecting people's health, wellbeing, and human rights. Additional training sessions on conducting mapping and listing within EAs and understanding the landscape of tobacco control and the harms of using tobacco and nicotine products were conducted. These sessions were delivered through presentations, mock interviews, and role plays, and a written quiz was conducted to assess overall understanding of the survey objectives, survey procedures, and research ethics. This ensured effective learning, engagement, and insight and experience sharing. An additional one-day training event was held to orient 26 selected team leaders on field supervision activities. Such activities included engaging with local KNBS officers and local administrators during mobilization and listing activities, conducting data quality checks, and liaising on a field-level data collection operationalization plan. All field interviewers were required to attend all training sessions/days and participate in planned activities, including the pilot and debrief exercise.

3.9 Piloting of survey procedures and questionnaires

Prior to data collection, a one-day piloting exercise was conducted in selected EAs within one sub-county in Nairobi that had not been sampled. The field interviewers were briefed, organized into their respective county groups, and assigned a local administrator to assist in sensitization and mobilization within the selected EAs. The field interviewers administered the household questionnaire to the household head or designated head and the individual questionnaire to an adolescent within the household. The number of participants included about 105 households and 100 adolescents. The pilot exercise allowed the field interviewers to apply the skills and knowledge acquired during training in a real-world situation to ensure the clarity, understanding, and logical flow of the questions within the survey tools. The exercise also informed the operational and logistical aspects to consider for the main data collection, such as the time taken to conduct interviews.

3.10 Data collection

Data collection activities were conducted concurrently across the sampled counties between April and May 2024. This coincided with school holidays to ensure that most adolescents would be at home. The questionnaires were interviewer-administered using tablets and conducted face to face, taking on average 20-45 minutes per interview.

The 118 field interviewers were initially grouped into 16 teams (one team for each county). The teams were then sub-divided into 26 smaller teams of three to five interviewers per team. The exact number of field interviewers per EA varied based on the number of EAs to be covered within a county. The household and adolescent questionnaires were available in both English and Kiswahili, and the interview was conducted in the language that was most comfortable to the participant. Field interviewers collected data within their home or resident counties and completed data collection in one EA before moving to the next.

3.11 Ethical considerations

The protocol received research clearance from APHRC's internal scientific review committee and was approved on November 16th, 2023 by AMREF Health Africa's Ethics and Scientific Review Committee (ESRC; ref P1570/2023), which is an accredited Institutional Review Board. The survey also received a research license on January 12th, 2024 from the National Commission for Science, Technology, and Innovation (NACOSTI; ref 608388). This license is necessary to gain ethical approval for all research studies in Kenya.

To ensure confidentiality, all personal identifiers – including names, identity numbers, phone numbers, and addresses – were removed from the analytical datasets before any data was shared or analyzed. The consenting/assenting process covered details about the survey objectives and aims, the survey administration procedures, the participant's rights, the survey's benefits and risks, confidentiality measures, and contact information for any questions or clarifications. Participants were provided with the hard copy of the consent/assent form, and the field interviewers verbally took them through the sections. Participants were also given an opportunity to ask questions during and after going through the form. Once the questions were addressed, participants either gave written or verbal consent/assent or refused to participate. Written consent was documented on hard copies signed by the participant and the field interviewer, and a picture of the signed consent page was captured on the tablet. Verbal consent was also captured directly on the tablet. The consent documents had sections to capture a witness's consent in the event the participant could not give written consent/assent. Once an interview was completed, the data was submitted to the APHRC servers.

3.12 Data processing, management, and analysis

Data was captured on the SurveyCTO platform. To reduce anticipated data quality issues, tools were embedded with automated quality checks, logical skips, and constraints. Field data was collected offline and uploaded to a server daily to minimize loss in the event of tablet loss or malfunction. Data on tablets and in transit was encrypted to ensure confidentiality. Once transferred to the central server, the data was safeguarded with passwords to restrict access to authorized personnel only, and data on the tablets was then erased. Submitted data was transferred to STATA and high frequency checks were performed on all the data submitted. Reports flagging any data quality issues were shared on a weekly basis. Flagged issues were resolved in consultation with the field teams and appropriate actions taken were documented.

3.13 Data processing and management

3.13.1 Data creation and re-coding

Outliers for continuous variables (e.g., pocket money, household head age) were identified by computing the interquartile range (IQR). Extreme values were reviewed to determine whether they were valid responses or data entry errors, with corrections applied as needed.

To make the data ready for analysis and enhance interpretability, certain continuous and categorical variables were generated and re-coded as follows:

- a Variables from the household questionnaire
 - Wealth quintile: A composite index of cumulative living standards for rural and urban households was calculated by applying the Principal Components Analysis. This used data on ownership of selected household assets (such as televisions and bicycles), materials used for housing construction, sources of drinking water, and sanitation facilities. The indices were then used to categorize households into wealth quintiles (i.e., poorest, poor, middle, rich, and richest). This was done by first determining the weighted cut-off values for the wealth quintiles, and then using these cut-offs to assign each household to a wealth quintile.
 - Household head's main income activity: This variable was originally ten categories which were recoded into six categories: "none" (retained its original category), "own business" (combining unestablished and established businesses), "salaried" (including both informal and formal salaried employment), "casual" (including informal casual and formal casual), "agriculture" (combining rural and urban agriculture), and "other" (retained its original category).
- b Variables from the adolescent questionnaire
 - Age category: The continuous variable for adolescent age was categorized into three groups: 10 to 12 years, 13 to 15 years, and 16 to 17 years. This would allow for the analysis of differences in tobacco and nicotine use by age group.
 - Marital status: This variable was originally six categories (never married, married, living together, divorced, separated, and widowed), which were recoded into two broad categories. These were 'in a union,' which comprised individuals who were either married or living together, and 'not in a union,' which included individuals who were never married, separated, widowed, or divorced. This question was asked to adolescents aged 15 years and above.

- Level of knowledge: The variable on the level of knowledge was generated based on an individual questionnaire comprising four questions. These questions were framed to assess the general understanding of common myths about tobacco or nicotine products as well as the health consequences associated with their use among adolescents who had ever used any tobacco and/or nicotine products. Each question offered multiple-choice answers, with one or more options considered correct assigned a score of 1, while incorrect options or 'don't know' responses were scored as 0. The questions were: 'do you think using tobacco is harmful to your health?,' 'do you think it is safe to use tobacco for only a year or two as long as you quit after that?,' 'do you think there are safe tobacco products?,' and 'do you think the smoke from other people's tobacco smoking is harmful to you?' The total knowledge score was computed as the sum of correct answers, ranging from 0 (no correct answers) to 4 (all answers correct). Participants were then categorized as having 'no knowledge' if they had a score of 0, 'low knowledge' if they scored 1 or 2, 'moderate knowledge' if they scored 3, and 'high knowledge' if they scored 4.
- Perception: The variable assessing adolescents' perceptions of tobacco products was derived from two survey questions. The first question asked, 'do you think using tobacco makes young people look more or less attractive?' with response options: 'don't know,' 'more attractive,' 'less attractive,' and 'no difference from non-smokers.' Responses of 'more attractive' and 'don't know' were assigned a score of 1, indicating a positive attitude, while responses of 'less attractive' or 'no difference' were assigned a score of 0, indicating a negative attitude. The second question asked, 'do you think smoking tobacco helps people feel more comfortable or less comfortable at celebrations, parties, or in other social gatherings?' with response options 'more comfortable,' 'less comfortable,' and 'no difference whether smoking or not.' Responses of 'more comfortable' and 'don't know' were assigned a score of 1, implying a positive attitude, while responses of 'less comfortable' or 'no difference' were assigned a score of 0, indicating a negative attitude. The total perception score was calculated as the sum of scores from the two questions, ranging from 0 to 2. Adolescents were categorized as having a positive attitude toward tobacco products if they had at least one positive response across the two questions. Those with scores of 0 on both questions were categorized as having a negative attitude.
- **Living status of both biological parents of adolescents:** The living status of both biological parents of adolescents was determined by combining two separate variables: whether the adolescent's biological mother was alive and whether the biological father was alive. If both the mother and father were reported as alive, the adolescent was categorized as having both parents alive. If one parent was reported as alive while the other was deceased, or if both the mother and father were reported as deceased, the adolescent was categorized as not having both parents alive.
- Functional disability: This variable was generated using the Washington Group (WG) Short Set of six questions on functioning and followed the methodology proposed by WG for analyzing disability (CDC National Center for Health Statistics, 2021). The questionnaire gathered information about difficulties in basic activity functioning such as visual, hearing, mobility, cognition, memory, self-care, and communication. Each domain was scored based on the responses: 'no difficulty' (0 points), 'some difficulty' (1 point), 'a lot of difficulty' (6 points), and 'cannot do at all' (36 points). The total score, calculated by summing the domain scores, was used to classify adolescents into four severity categories: none (no difficulty in all domains, score = 0), milder (some difficulty in one to four domains without 'a lot of difficulty' or 'cannot do at all,' score = 1-4), moderate (some difficulty in five to six domains or up to three domains coded as 'a lot of difficulty,' score = 5-23), and severe (four or more domains coded as 'a lot of difficulty' or any domain as 'cannot do at all,' score = 24-216).

- Current schooling status: The variable for current schooling status was derived by combining responses from two questions: 'have you ever attended school?' and 'are you currently enrolled in school?' Adolescents who answered 'yes' to being currently enrolled in school were categorized as 'in school' and coded as 1. Conversely, those who reported not being currently enrolled in school, as well as those who indicated they had never attended school, were grouped together into the 'out of school' category and coded as 0.
- Family smoking status: This variable was derived by combining responses from several questions assessing the presence of family members smoking in the household. The questions included: 'how often do you see your father (stepfather or mother's partner) smoking in your home?,' 'how often do you see your mother (stepmother or father's partner) smoking in your home?,' and 'how often do you see your brother/sister smoking in your home?' The response options for these questions were: 'don't have/don't see this person,' 'about every day,' 'sometimes,' and 'never.' Responses of 'about every day' and 'sometimes' were coded as 1, indicating tobacco use by family members, while responses of 'never' were coded as 0, indicating no family member smoking. Additionally, these responses were combined with data from a multi-response question: 'do any of your family members, relatives, tutor/teacher, or neighbor use tobacco products?' Response options included 'none,' 'father,' 'mother,' 'tutor,' 'teacher,' 'sister,' 'brother,' 'another family member,' 'neighbor,' 'don't know,' and 'other.' A response indicating 'father,' 'mother,' 'sister,' 'brother,' or 'another family member' was coded as 1, indicating tobacco use by family members. These were then combined with the previously coded responses to form the final variable for family smoking status, with 'yes' indicating the presence of smoking family members (coded as 1) and 'no' indicating no family member smoking (coded as 0).
- **Exposure to smoking at home:** This variable was calculated based on the question: 'during the past 30 days, on how many days has anyone smoked inside your home, in your presence?' Responses ranged from 0 to 30 days. A response of 1 or more days was categorized as 'exposed at home' (coded as 1), while a response of 0 days was categorized as 'not exposed at home' (coded as 0).
- Outcome variables: Additionally, the outcome variables below were generated and included in the logistic regression (see section 3.14):
 - Current use of any tobacco: This variable was generated based on adolescents' self-reported use of any tobacco products, namely manufactured cigarettes, RYO cigarettes, shisha, other smoked tobacco products, smokeless tobacco, and HTPs within the past 30 days. Adolescents who reported use of at least one of these products during the specified period were classified as current tobacco users.
 - Current use of smoked tobacco: This variable was computed based on adolescents' self-reported use of any smoked tobacco products, namely manufactured cigarettes, RYO cigarettes, shisha, and other smoked tobacco products within the past 30 days. Adolescents who reported using any of these products during the past 30 days were classified as current smoked tobacco users and coded as 1.
 - **Current use of smokeless tobacco:** This variable was generated based on adolescents who had ever used smokeless tobacco and reported the use of smokeless tobacco products within the past 30 days.

3.14 Data Analysis

Descriptive statistics were computed to summarize the characteristics of the survey population at both the household and individual levels, as well as to assess the prevalence of tobacco and nicotine product use. Frequencies and percentages were calculated for categorical variables such as residence type (rural/urban), household head's sex, education level, marital status, primary income activity, adolescent age group, and school status, among others. These statistics provided an overview of the demographic composition of the sample and the distribution of responses to key survey questions. For continuous variables such as the household head's age, household size, total number of eligible adolescents per household, and pocket money, means and standard deviations were calculated to describe central tendencies and variability. Standard errors were reported alongside point estimates.

The prevalence of ever use and current use of each tobacco and nicotine product(s) was estimated for the survey population and further disaggregated by age group, sex (boys/girls), school enrolment status, residence type, household wealth quintile, marital status, and work engagement. Ever use prevalence was defined as the proportion of adolescents who had used the product at least once at any point in their lifetime. Current use prevalence was defined as the proportion of adolescents who had used the product at least once in the 30 days preceding the completion of the survey. To ensure these prevalence estimates are accurate and nationally representative of the broader adolescent population, survey weights were applied to adjust for the probability of selection, non-response, and post-stratification. The Taylor series linearization method was used to compute 95% confidence intervals to account for the complex survey design and quantify the uncertainty around the point estimates. Refusals and 'don't know' responses were treated as missing values.

To understand the patterns of tobacco and nicotine product use, a detailed analysis was performed focusing on the frequency and intensity of use. For each product type, the average number of smoking days per month was calculated, along with the average quantity of tobacco or nicotine product used per day in a 30-day period and on a typical use day. This provided a clear picture of how often and in what quantities adolescents were using tobacco and nicotine products. We also explored the age of initiation, the context of use (e.g., where the products were mostly used and with whom), and how the products were accessed.

Frequencies and percentages were calculated for categorical variables such as:

residence type (rural/ urban), household head's sex, education level, marita status, primary income activity, adolescent age group, and school status.



Binary logistic regression was estimated to identify factors associated with current use of any tobacco, current use of smoked tobacco, and current use of smokeless tobacco. The selection of the independent variables used in the models was based on their theoretical relevance, evidence from prior studies, and their statistical contribution to the model (Meher et al., 2012). Informed by the socio-ecological framework (Green et al., 1996; Keller-Hamilton, 2019), independent variables were categorized across three levels: individual, household, and environmental. At the individual level, covariates included sex, age group, employment status, current schooling status, and the living status of the adolescent's biological parents. At the household level, the variables used in the models were family smoking status at home, household head gender, wealth quintile, household size, and household head education level. Environmental-level variables included place of residence (rural/urban) and witnessing of tobacco use by anyone inside school buildings. The exclusion of some variables in the model(s) was mainly due to sparseness of the data rather than theoretical irrelevance. For example, the variable representing the education level of the household head was excluded from the model for current smokeless tobacco use due to cells with counts less than five for some sub-categories (as the model could not estimate meaningful odds ratios). In addition, variables related to exposure of second-hand smoke, such as exposure at home or school, were excluded from the smokeless tobacco model.

Separate multivariable logistic regression models were constructed to adjust for potential confounders, and the results are presented as adjusted odds ratios (aOR) with associated 95% confidence intervals. Individual, household-, and environmental-level factors associated with current tobacco product use were examined. However, this analysis was not conducted for current nicotine product users due to insufficient samples to generate regression estimates. Given the limited subsample, any resulting estimates would have lacked statistical reliability and robustness, making it inappropriate to draw meaningful conclusions. All analyses were done using Stata version 17.



4.1 The flow of participants through the survey process

4.1.1 Household sample

Figure 3 is a schematic representation of the flow of households from the total number listed to the total number of households that completed the questionnaire. Out of the 22,676 households that were listed, 10,557 met the eligibility criteria (had an adolescent aged 10-17 years), of which 6,719 were randomly sampled for data collection. Among the sampled households, 185 were not interviewed due to the household heads being unavailable or refusing to participate in the survey. Thus, 6,534 households consented to participate. However, during data collection and after completion of the household questionnaire, 39 households were deemed ineligible because the adolescents' exact age fell outside the computed age criteria in days, months, and years. In addition, 21 household heads did not allow their adolescents to be interviewed. Hence, 6,474 households completed the household questionnaire, and one adolescent was randomly selected within these households.

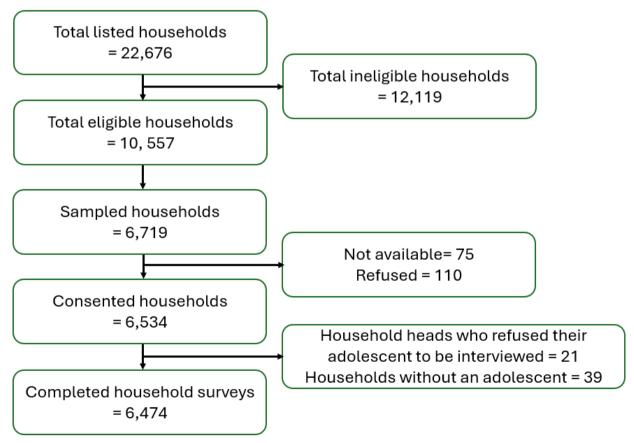


Figure 3: Number of households throughout the survey process

4.1.2 Adolescent sample

Figure 4 presents the number of adolescents sampled from the sampled households in Figure 3. Out of the 6,474 adolescents who were randomly selected, three adolescents refused to participate, while 36 were not available for interview even after three visits. Therefore, 6,435 gave assent (or consent) to participate in the survey, completed the questionnaire, and were included in the analysis. Of the interviewed adolescents, five were emancipated minors. The survey aimed to recruit 6,734 adolescents, a sample size that accounted for an anticipated 10% non-response rate to ensure sufficient statistical power. The sample size achieved of 6,435 remained within the acceptable range, as the actual non-response was lower than the anticipated 10%, and thus the survey retained adequate statistical power to address its research objectives, having achieved a response rate of 96%.

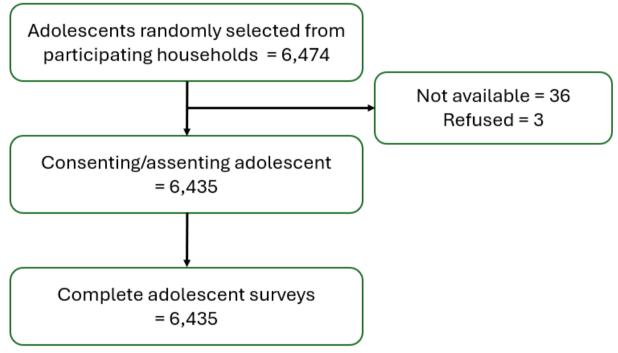


Figure 4: Number of adolescents throughout the survey process

4.2 Background characteristics

4.2.1 Household and household head background characteristics

Table 1 presents the background of the households and household heads included in the survey, disaggregated by regions. Overall, the distribution of male- and female-headed households was nearly equal, at 51.09% and 48.91% respectively. The average age of the household heads was 46.35 years. Most household heads were in some type of marital union (75.74%). Nearly half (48.41%) had attained at least primary education, and their common main source of income was agriculture (37.02%). Most households were in rural areas (76.63%), and 24.84% of households sampled were in the poorest wealth quintile. In addition, only 23.33% of household heads reported having health insurance, and 3.33% reported living with a disability. The average household size was four members, with an average of one adolescent aged 10 to 17 years per household.

Table 1: Household and household head background characteristics by regions

Character-				Reg	ion (%)				• "	Weighted
istics	Central	Coast	Eastern	Nairobi	North Eastern	Nyanza	Rift Valley	Western	Overall	sample
Sex (househo	old head)									
Male	50.29	50.11	52.26	54.07	51.19	52.02	49.55	51.79	51.09	3136
Female	49.71	49.89	47.74	45.93	48.81	47.98	50.45	48.21	48.91	3003
Marital status	s (head)									
Not in a union	33.51	29.4	17.22	31.02	25.12	18.77	26.21	21.16	24.26	1346
In a union	66.49	70.6	82.78	68.98	74.88	81.23	73.79	78.84	75.74	4206
Education le	vel (head))								
No education	1.36	27.54	8.85	1.11	87.73	4.20	28.73	8.63	18.86	1050
Primary	38.36	46.81	60.66	37.8	5.16	56.05	42.89	70.45	48.41	2698
Secondary	49.01	18.39	20.89	44.94	5.03	33.27	21.79	15.36	25.04	1395
Technical/ Vocational	8.12	3.77	45.08	7.81	0	2.55	2.81	3.13	3.86	215
Higher	3.15	3.49	4.51	8.34	2.08	3.93	3.77	2.43	3.84	214
Income source	ce (head)									
None	5.20	26.21	11.97	24.04	75.06	7.31	23.48	13.62	19.8	1108
Own business	18.35	22.66	18.35	29.93	18.50	17.16	17.44	17.61	18.9	1058
Salaried	6.83	9.07	8.10	15.99	3.00	4.28	7.05	3.73	6.84	383
Casual	36.17	17.69	10.5	29.94	2.50	11.14	12.11	14.55	15.14	848
Agriculture	33.33	23.52	50.83	0.10	0.95	59.8	32.59	50.08	37.02	2073
Other	0.13	0.86	0.25	0	0	0.31	7.33	0.40	2.29	128
Person with	disability	(head)								
Yes	0.9	0.9	1.78	0.85	4.64	8.94	3.19	2.89	3.32	185
No	99.1	99.1	98.22	99.15	95.36	91.06	96.81	97.11	96.68	5417
Residence										

Character-				Reg	ion (%)				Overall	Weighted
istics	Central	Coast	Eastern	Nairobi	North Eastern	Nyanza	Rift Valley	Western	Overali	sample
Rural	67.09	64.8	89.15	0	74.12	87.15	81.61	91.22	76.63	4930
Urban	32.91	35.2	10.85	100	25.88	12.85	18.39	8.78	23.37	1504
Household w	vealth qui	ntile								
Poorest	6.87	29.62	13.04	14.62	78.12	15.29	36.00	11.88	24.84	1598
Poor	12.50	25.56	16.09	25.61	12.72	26.31	17.62	31.4	20.77	1336
Middle	20.66	14.09	17.84	21.93	5.08	26.84	18.43	27.72	19.93	1282
Rich	29.57	14.89	25.37	20.05	3.4	16.84	15.48	17.08	18.04	1161
Richest	30.40	15.84	27.66	17.8	0.68	14.71	12.46	11.92	16.41	1056
Health insura	nce (head	d)								
Yes	46.60	10.97	21.19	40.65	8.21	25.53	23.41	13.8	23.33	1307
No	53.40	89.03	78.81	59.35	91.79	74.47	76.59	86.20	76.67	4296
Age (head), mean [SD]	46.44 [11.18]	46.23 [13.07]	46.79 [11.50]	42.01 [9.07]	46.46 [15.05]	46.54 [13.49]	47.13 [12.50]	49.22 [14.01]	46.35 [12.34]	
Household size, mean [SD]	3.50 [1.25]	3.84 [1.59]	4.21 [1.53]	4.22 [1.38]	4.69 [2.36]	4.22 [1.67]	4.36 [1.75]	4.59 [1.78]	4.22 [1.66]	
Eligible adolescents, mean [SD]	1.16 [0.41]	1.36 [0.72]	1.31 [0.60]	1.28 [0.55]	1.73 [1.03]	1.44 [0.72]	1.44 [0.72]	1.42 [0.74]	1.36 [0 .67]	

Notes: Refusal and 'don't know' responses were treated as missing values. % is the survey-weighted percentage and is in parentheses. Standard deviations (SD) for continuous variables are in square brackets.

4.2.2 Adolescent background characteristics

Table 2 provides the background characteristics of adolescents disaggregated by sex. There was a slightly higher proportion of girls (51.31%) compared with boys (48.69%). Nearly 40% of adolescents were aged between 10 to 12 years, with an average age of 13.22 years. Most adolescents (93.35%) were not engaged in any form of work and more than 75% resided in rural areas. A small proportion (1.11%) reported being in some form of marital union, while approximately 9% were currently out of school. About 83% of adolescents had living biological parents (mother and father). The distribution by sex is also shown in Table 2.

Table 2: Adolescent background characteristics	
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Background characteristic	Boys %	Girls %	Overall %	Surveyed adolescents	Weighted sample
Overall	48.69	51.31	100	6435	6435
Adolescent age, mean [SD]	13.23 [2.21]	13.21 [2.16]	13.22 [2.18]	6435	6435
Age group					
10-12 years	39.47	40.35	39.92	2565	2569
13-15 years	36.89	38.32	37.63	2662	2421
16-17 years	23.63	21.32	22.45	1208	1445
Residence					
Rural	77.24	76.04	76.63	4171	4930
Urban	22.76	23.96	23.37	2264	1504
Current school status					
In-school	91.13	90.79	90.96	6067	5853
Out of school	8.87	9.11	8.99	365	579
Engagement in work					
Employed	7.01	2.93	4.92	272	316
Self-employed	2.58	0.92	1.73	91	111
No work	90.41	96.12	93.35	6071	6006
Marital status					
Not in a union	98.98	98.8	98.89	2040	2242
In a union	1.02	1.2	1.11	21	25
Functional disability					
None	82.63	82.39	82.55	5274	5309
Mild	15.19	15.93	15.06	1005	969
Moderate	1.86	2.06	1.96	133	126
Severe	0.29	0.56	0.43	19	28
Adolescents with both parer	nts alive				
Yes	82.67	82.54	82.6	5158	5315
No	17.33	17.46	17.4	1277	641
Yes	91.88	92.74	92.32	5865	5941
No	2.53	2.36	2.44	160	157
Adolescent's father alive					
Yes	84.25	84.04	84.14	5260	5414
No	8.28	8.72	8.51	556	548
Pocket money, median, (IQR)	50 (150)	50 (140)	50 (150)		

Notes: Refusals and "don't know" responses were treated as missing values. % is the survey-weighted percentage and 95% (CI) is the 95% confidence interval for weighted percentages. Missing confidence intervals are due to an insufficient number of observations within certain subgroups, even after collapsing some levels to increase sample size.

4.3 Prevalence of tobacco and nicotine products

4.3.1 Prevalence of any tobacco and/or nicotine products

Table 3 provides the prevalence of ever use and current use of any tobacco or nicotine product among adolescents aged 10 to 17 years. The overall prevalence of ever use was 6.46%, translating to approximately 622,000 adolescents in the general population, while the prevalence of current use was 2.52% (244,000 adolescents). Boys had a higher prevalence of ever use (8.84%) compared with girls (3.27%), but the current use prevalence was similar between boys and girls. Out-of-school adolescents had a higher prevalence of ever use (24.48%) and current use (17.73%) compared with their in-school counterparts, whose prevalence was 4.68% and 1.02%, respectively. The prevalence of both ever use and current use was comparable between adolescents residing in rural (6.44%) and urban (6.37%) areas, as well as across different age groups and employment categories. (See Appendix 3 for the proportions of ever and current use of any tobacco and/or nicotine product by county).

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Table 3: Prevalence of	t ever and	CURRENT USE OF A	ny tohacco	and/or nicotine	product
idble of the valetice of	CVCI alla	carrerr asc or a	my tobacco	arra, or micounic	product

Background characteristics	Ever use % (95% CI)	Current use % (95% CI)	Surveyed adolescents	Weighted sample		
Overall	6.46 (5.10, 8.15)	2.52 (1.55, 4.06)	6435	6435		
Sex						
Boys	8.84 (7.05, 11.02)	3.27 (2.09, 5.10)	3096	3133		
Girls	4.20 (3.01, 5.84)	1.80 (1.00, 3.31)	3339	3302		
Age group						
10 - 12 years	4.23 (2.67, 6.62)	1.39 (0.72, 2.64)	2565	2569		
13 - 15 years	7.56 (4.86, 11.57)	3.61 (1.55, 8.17)	2662	2421		
16 - 17 years	8.58 (6.76, 10.84)	2.71 (1.85, 4.00)	1208	1445		
Residence type						
Rural	6.48 (4.81, 8.67)	2.77 (1.57, 4.83)	4171	4930		
Urban	6.40 (4.93, 8.26)	1.70 (1.01, 2.87)	2264	1504		
Wealth quintile						
Poorest	11.31 (7.44, 16.81)	6.83 (3.60, 12.56)	1288	1598		
Poor	3.91 (2.84, 5.36)	0.96 (0.55, 1.67)	1287	1337		
Middle	4.03 (2.19, 7.29)	0.85 (0.36, 2.01)	1287	1283		
Rich	6.19	1.97	1287	1161		
Richest	5.58	0.61	1286	1056		
Current school status						
In School	4.68 (3.81, 5.74)	1.02 (0.73, 1.43)	6067	5853		
Out of school	24.48 (15.97, 35.62)	17.73 (10.07, 29.30)	365	579		
Adolescent marital status						
In a union	17.05	17.05	21	25		
Not in a union	9.24 (6.94, 12.21)	3.96 (2.33, 6.66)	2040	2242		
Work engagement						
Employed	9.47 (6.49, 13.61)	4.37 (2.36, 7.96)	272	316		
Self-employed	9.05 (4.56, 17.14)	5.74 (2.28, 13.70)	91	111		
No Work	6.25 (4.83, 8.06)	2.36 (1.37, 4.05)	6071	6006		

Notes: Refusals and "don't know" responses were treated as missing values. % is the survey-weighted percentage and 95% (CI) is the 95% confidence interval for weighted percentages. Missing confidence intervals are due to an insufficient number of observations within certain subgroups, even after collapsing some levels to increase sample size.

4.3.2 Prevalence of ever use and current use of any tobacco products

Table 4 shows the ever use and current use prevalence of any tobacco product among adolescents. The overall prevalence of ever use of any tobacco product was 6.20%, corresponding to approximately 598,000 adolescents in the general population, while the prevalence for current use was 2.47% (about 239,000 adolescents in the general population). The prevalence of ever use of tobacco products was higher among boys (8.54%) compared with girls (3.18%). However, the prevalence of current use was similar between boys and girls. Adolescents who were out of school reported a higher prevalence of both ever use (24.26%) and current use (17.59%) compared with their in-school counterparts, whose prevalence rates were 4.42% and 0.98%, respectively. The prevalence of ever use was similar between adolescents residing in rural (6.35%) and urban (5.73%) areas. Tobacco use prevalence was similar across age groups or employment categories.

Table 4: Prevalence of ever use and	l
Iania 4. Provalence of ever lise and	CURRENT USE OT ANY TONACCO PROGUCT

Background characteristics	Ever use % (95% CI)	Current use % (95% CI)	Surveyed adolescents	Weighted sample		
Overall	6.20 (4.86, 7.89)	2.47 (1.51, 4.02)	6435	6435		
Sex						
Boys	8.54 (6.77, 10.71)	3.18 (2.01, 5.02)	3096	3133		
Girls	3.98 (2.81, 5.62)	1.80 (0.97, 3.31)	3339	3302		
Age group						
10 - 12 years	4.17 (2.62, 6.57)	1.33 (0.68, 2.60)	2565	2569		
13 - 15 years	7.14 (4.48, 11.20)	3.60 (1.55, 8.16)	2662	2421		
16 - 17 years	8.23 (6.44, 10.46)	2.61 (1.75, 3.86)	1208	1445		
Residence type						
Rural	6.35 (4.69, 8.54)	2.75 (1.55, 4.82)	4171	4930		
Urban	5.73 (4.34, 7.53)	1.57 (0.89, 2.75)	2264	1504		
Wealth quintile						
Poorest	11.18 (7.32, 16.71)	6.82 (3.59, 12.56)	1288	1598		
Poor	3.70 (2.65, 5.15)	0.86 (0.47, 1.55)	1287	1337		
Middle	3.90 (2.08, 7.19) *	0.84 (0.35, 2.00) *	1287	1283		
Rich	5.42	1.85	1287	1161		
Richest	5.47	0.61	1286	1056		
Current school status						
In School	4.42 (3.57, 5.47)	0.98 (0.69, 1.39)	6067	5853		
Out of school	24.26 (15.71,35.50)	17.59 (9.93, 29.26)	365	579		
Adolescent marital status						
In a union	17.05	17.05	21	25		
Not in a union	8.83 (6.55, 11.80)	3.89 (2.26, 6.60)	2040	2242		
Work engagement						
Employed	9.07 (6.15, 13.19)	4.13 (2.17, 7.72) *	272	316		
Self-employed	9.05 (4.56, 17.14)	5.74 (2.28, 13.70) *	91	111		
No Work	6.00 (4.59, 7.81)	2.33 (1.33, 4.03)	6071	6006		

Notes: Refusals and "don't know" responses are not reported in the table. % is the survey-weighted percentage and 95% (CI) is the 95% confidence interval for weighted percentages. * Indicates moderately unstable estimates with a relative standard error (RSE) greater than 30% but not exceeding 50%. Missing confidence intervals are due to an insufficient number of observations within certain strata, even after collapsing some strata to increase sample size.

4.3.3 Prevalence of ever use and current use of smoked tobacco products

Table 5 shows the ever use and current use prevalence of any smoked tobacco product among adolescents. Overall, 3.53% of adolescents had an ever use prevalence of any smoked tobacco product, representing about 342,000 adolescents in the general population, and 1.03% current use prevalence, which is equivalent to approximately 100,000 adolescents. Boys had a higher prevalence of ever use (5.53%) compared with girls whose prevalence rate was 1.65%, but current use prevalence was similar between the two groups. Out-of-school adolescents had higher prevalence of ever use (10.96%) and current use (5.34%) compared with their in-school counterparts, with corresponding prevalence rates of 2.81% and 0.60%, respectively. The prevalence of ever use and current use was similar between adolescents residing in rural and urban areas. Similarly, the prevalence of ever use and current use was comparable between adolescents aged 13-15 years and those aged 16-17 years. The prevalence of ever use and current use was also similar among those who were employed or self-employed.

Background characteristics	Ever use % (95% CI)	Current use % (95% CI)	Surveyed adolescents	Weighted sample
Overall	3.54 (2.82, 4.43)	1.03 (0.69, 1.53)	6435	6435
Sex				
Boys	5.53 (4.33, 7.03)	1.56 (1.05, 2.32)	3096	3133
Girls	1.65 (1.12, 2.42)	0.52 (02.2, 1.21)	3339	3302
Age group				
10 - 12 years	1.91 (1.21, 2.98)	0.33 (0.12, 0.88)	2565	2569
13 - 15 years	4.06 (2.73, 6.01)	1.31 (0.65, 2.60)	2662	2421
16 - 17 years	5.56 (4.07, 7.54)	1.81 (1.15, 2.81)	1208	1445
Residence type				
Rural	3.46 (2.62, 4.57)	1.01 (0.62, 1.63)	4171	4930
Urban	3.79 (2.69, 5.31)	1.10 (0.58, 2.08)	2264	1504
Wealth quintile				
Poorest	5.54 (3.63, 8.37)	2.07 (1.12, 3.79)	1288	1598
Poor	2.18 (1.41, 3.34)	0.65 (0.33, 1.31)	1287	1337
Middle	1.75 (1.03, 2.95)	0.52 (0.17, 1.50) **	1287	1283
Rich	3.61	1.13	1287	1161
Richest	4.33	0.45	1286	1056
Current school stat	tus			
In School	2.81 (2.24, 3.53)	0.60 (0.39, 0.93)	6067	5853
Out of school	10.96 (6.93, 16.90) *	5.34 (2.64, 10.54) *	365	579
Adolescent marital	status			
In a union	0 ****	0***	21	25
Not in a union	5.57 (4.22, 7.34)	2.11 (1.32, 3.37)	2040	2242
Work engagement				
Employed	6.17 (3.80, 9.86)	2.58 (1.08, 6.02) *	272	316
Self-employed	6.44 (3.12, 12.81) *	3.13 (1.05, 8.98) **	91	111
No Work	3.35 (2.62, 4.27)	0.91 (0.57, 14.4)	6071	6006

4.3.4 Prevalence of ever smoking and current smoking of cigarettes (manufactured and RYO cigarettes)

Table 6 presents the prevalence of ever use and current use of cigarettes among adolescents. The overall ever use prevalence of cigarettes was 3.23% (about 312,000 adolescents of the general population), while the current use prevalence was 0.92% (approximately 89,000 adolescents of the general population). Boys had a higher prevalence of ever use (5.19%) than girls, whose ever use prevalence was 1.36%. However, the current use prevalence was similar between the two groups. The prevalence of both ever and current cigarette use was higher among adolescents who were out of school compared with those enrolled in school. Cigarette use prevalence was similar across adolescents residing in rural and urban areas, between those aged 13-15 years and 16-17 years, as well as among those who were employed or self-employed.

Background characteristics	Ever use % (95% CI)	Current use % (95% CI)	Surveyed adolescents	Weighted sample
Overall	3.23 (2.55, 4.07)	0.92 (0.61, 1.39)	6435	6435
Sex				
Boys	5.19 (4.02, 6.68)	1.48 (0.98, 2.22)	3096	3133
Girls	1.36 (0.88, 2.08)	0.39 (0.14, 1.07)	3339	3302
Age group				
10 - 12 years	1.75 (1.09, 2.81)	0.33 (0.12, 0.88)	2565	2569
13 - 15 years	3.74 (2.50, 5.56)	1.16 (0.56, 2.38)	2662	2421
16 - 17 years	4.98 (3.56, 6.91)	1.58 (0.97, 2.56)	1208	1445
Residence type				
Rural	3.31 (2.50, 4.37)	1.01 (0.62, 1.63)	4171	4930
Urban	2.95 (2.04, 4.24)	0.64 (0.37, 1.11)	2264	1504
Wealth quintile				
Poorest	5.19 (3.33, 8.01)	2.07 (1.12, 3.79)	1288	1598
Poor	1.89 (1.26, 2.84)	0.65 (0.33, 1.31)	1287	1337
Middle	1.68 (0.97, 2.89)	0.52 (0.18, 1.49) *	1287	1283
Rich	3.01	0.65	1287	1161
Richest	4.05	0.32	1286	1056
Current school status				
In School	2.49 (1.98, 3.13)	0.49 (0.32, 0.74)	6067	5853
Out of school	10.69 (6.64, 16.75) *	5.35 (2.64, 10.54) *	365	579
Adolescent marital st	atus			
In a union	0 ****	0 ****	21	25
Not in a union	5.04 (3.78, 6.69)	1.82 (1.14, 2.90)	2040	2242
Work Engagement				
Employed	6.12 (3.78, 9.78)	2.58 (1.08, 6.02) *	272	316

Background characteristics	Ever use % (95% CI)	Current use % (95% CI)	Surveyed adolescents	Weighted sample
Self-employed	6.44 (3.12, 12.81) *	3.13 (1.05, 8.98) **	91	111
No Work	3.01 (2.33, 3.89)	0.79 (0.49, 1.29)	6071	6006

4.3.5 Prevalence of ever and current use of manufactured cigarettes

Table 7 displays the prevalence of ever use and current use of manufactured cigarettes among adolescents. The overall prevalence of ever use was 1.32% (about 128,000 adolescents in the general population), and the prevalence of current use was 0.35% (34,000 adolescents). Boys showed a higher prevalence of ever use (2.02%) compared with girls, with their prevalence of ever use being 0.65%. The prevalence of current use of manufactured cigarettes was similar between boys and girls. The prevalence of both ever and current use was similar across rural and urban settings as well as between adolescents aged 13-15 years and 16-17 years. Furthermore, similar prevalence rates were observed among adolescents who were employed and among those who were self-employed. The prevalence of both ever use and current use was higher among adolescents who were out of school compared with those in school.

Table 7: Prevalence of ever use and current use of manufactured cigarettes						
Background characteristics	Ever use % (95% CI)	Current use % (95% CI)	Surveyed adolescents	Weighted sample		
Overall	1.32 (1.01, 1.71)	0.35 (0.21, 0.57)	6435	6435		
Sex						
Boys	2.02 (1.49, 2.72)	0.54 (0.31, 0.91)	3096	3133		
Girls	0.65 (0.38, 1.12)	0.17 (0.05, 0.60) **	3339	3302		
Age group						
10 - 12 years	0.45 (0.25, 0.81)	0.13 (0.04, 0.43) **	2565	2569		
13 - 15 years	1.49 (0.95, 2.35)	0.31 (0.10, 0.96)	2662	2421		
16 - 17 years	2.56 (1.79, 3.66)	0.79 (0.45, 1.40)	1208	1445		
Residence type						
Rural	1.25 (0.91, 1.71)	0.37 (0.21, 0.67) *	4171	4930		
Urban	1.56 (0.98, 2.48)	0.27 (0.12, 0.61)	2264	1504		
Wealth quintile						
Poorest	1.17 (0.57, 2.38)	0.45 (0.17, 1.14) *	1288	1598		
Poor	0.98 (0.55, 1.75)	0.20 (0.06, 0.63) **	1287	1337		
Middle	1.00 (0.45, 2.22) *	0.40 (0.11, 1.48) **	1287	1283		
Rich	1.72	0.43	1287	1161		
Richest	1.93	0.23	1286	1056		
Current school status						
In School	1.16 (0.88, 1.53)	0.28 (0.16, 0.50)	6067	5853		
Out of school	2.95 (1.76, 4.89) *	1.02 (0.34, 2.96) *	365	579		

Background characteristics	Ever use % (95% CI)	Current use % (95% CI)	Surveyed adolescents	Weighted sample
Adolescent Marital Sta	ntus			
In a union	0 ****	0 ****	21	25
Not in a union	2.41 (1.72, 3.37)	0.70 (0.41, 1.18)	2040	2242
Work Engagement				
Employed	3.05 (1.58, 5.81) *	0.71 (0.14, 3.66) **	272	316
Self-employed	3.98 (1.49, 10.21) *	1.27 (0.29, 5.38) **	91	111
No Work	1.18 (0.87, 1.59)	0.31 (0.18, 0.55)	6071	6006

4.3.5.1 Prevalence of ever and current RYO cigarette smoking

Table 8 presents the prevalence of ever and current use of RYO cigarettes among adolescents. The overall prevalence of ever use of RYO cigarettes was 2.11% (204,000 adolescents in the general population) while the prevalence of current use was 0.64% (about 62,000 adolescents). Boys reported a higher prevalence of ever use (3.57%) compared with girls, whose prevalence was 0.73%. However, the prevalence of current use was similar between the two groups. There were no significant differences in the prevalence of ever use and current use of RYO cigarettes across age groups or between rural and urban residences. Adolescents who were not engaged in any work showed lower prevalence rates than those who were either employed or self-employed, whose prevalence rates were similar.

Table 8: Prevalence of ever and current RYO cigarette smoking

Background characteristics	Ever use % (95% CI)	Current use % (95% CI)	Surveyed adolescents	Weighted sample
Overall	2.11 (1.56,2.86)	0.64 (0.37, 1.08)	6435	6435
Sex				
Boys	3.57 (2.54, 4.99)	1.07 (0.65, 1.76)	3096	3133
Girls	0.73 (0.38, 1.40) *	0.22 (0.05, 0.99) **	3339	3302
Age group				
10 - 12 years	1.45 (0.84, 2.50)	0.24 (0.10, 0.60) *	2565	2569
13 - 15 years	2.34 (1.39, 3.90)	0.90 (0.38, 2.12) *	2662	2421
16 - 17 years	2.90 (1.75, 4.77)	0.89 (0.42, 1.86) *	1208	1445
Residence type				
Rural	2.24 (1.57, 3.19)	0.71 (0.38, 1.30) *	4171	4930
Urban	1.70 (1.02, 2.81)	0.42 (0.21, 0.84) *	2264	1504
Wealth quintile				
Poorest	4.13 (2.56, 6.59)	1.62 (0.78, 3.34) *	1288	1598
Poor	1.39 (0.85, 2.26)	0.57 (0.27, 1.20) *	1287	1337
Middle	0.68 (0.36, 1.26)	0.11 (0.02, 0.52) **	1287	1283
Rich	1.64	0.34	1287	1161
Richest	2.24	0.2	1286	1056

Background characteristics	Ever use % (95% CI)	Current use % (95% CI)	Surveyed adolescents	Weighted sample
Current school status				
In School	1.50 (1.08, 2.08)	0.26 (0.15, 0.45)	6067	5853
Out of school	8.35 (4.84, 14.04)	4.50 (2.00, 9.80) **	365	579
Adolescent marital status				
In a union	0 ****	0 ****	21	25
Not in a union	3.04 (2.05, 4.50)	1.25 (0.68, 2.30) *	2040	2242
Work engagement				
Employed	4.44 (2.85, 7.80)	2.28 (0.93, 5.47) *	272	316
Self-employed	4.89 (4.89, 2.13)	3.13 (1.04, 8.98) *	91	111
No Work	1.94 (1.38, 2.71)	0.50 (0.26, 0.99)	6071	6006

4.3.6 Prevalence of ever and current shisha smoking

Table 9 shows the prevalence of ever use and current use of shisha among adolescents. The overall prevalence of ever use was 0.33% (about 32,000 adolescents in the general population), while the prevalence of current use was 0.10% (about 10,000 adolescents). Adolescents residing in urban areas had a higher prevalence of ever use (0.99%) compared with those in rural areas (0.12%). While there was no significant difference between boys and girls and across age groups, boys had a slightly higher prevalence of ever use 0.36% compared with girls (0.29%). However, for current use, girls had a higher prevalence than boys.

Table 0.	Provalence	of over and	current shisha	smokina
Table 9:	Prevalence i	or ever and	current shisha	smokina

Background characteristics	Ever use % (95% CI)	Current use % (95% CI)	Surveyed adolescents	Weighted sample
Overall	0.33 (0.19, 0.55)	0.10 (0.03, 0.32) **	6435	6435
Sex				
Boys	0.36 (0.19, 0.69) *	0.07 (0.02, 0.36) **	3096	3133
Girls	0.29 (0.12, 0.69) *	0.13 (0.03, 0.61) **	3339	3302
Age group				
10 - 12 years	0.17 (0.05, 0.52) *	0.02 (0.00, 0.15) **	2565	2569
13 - 15 years	0.21 (0.05, 0.78) *	0.15 (0.03, 0.88) **	2662	2421
16 - 17 years	0.82 (0.44, 1.50)	0.16 (0.03, 0.77) **	1208	1445
Residence type				
Rural	0.12 (0.05, 0.30) *	0 ****	4171	4930
Urban	0.99 (0.53, 1.85) *	0.43 (0.14, 1.35) **	2264	1504
Wealth quintile				
Poorest	0.17 (0.03, 0.88) **	0.03 (0.00, 0.24) **	1288	1598
Poor	0.27 (0.07, 1.00) **	0 ****	1287	1337
Middle	0.11 (0.03, 0.37) *	0 ****	1287	1283
Rich	0.71	0.48	1287	1161

Background characteristics	Ever use % (95% CI)	Current use % (95% CI)	Surveyed adolescents	Weighted sample	
Richest	0.47	0.04	1286	1056	
Current school status					
In School	0.34 (0.19, 0.58)	0.11 (0.03, 0.35) **	6067	5853	
Out of school	0.23 (0.03, 1.81) **	0 ****	365	579	
Adolescent marital stat	us				
In a union	0 ****	0 ****	21	25	
Not in a union	0.68 (0.32, 1.47) *	0.25 (0.04, 1.47) **	2040	2242	
Work engagement					
Employed	0.29 (0.04, 2.07)	0	272	316	
Self-employed	0	0	91	111	
No Work	0.33 (0.19, 0.57)	0.11 (0.03, 0.34) **	6071	6006	

4.3.7 Prevalence of ever and current use of other smoked tobacco products

Table 10 shows the ever and current use of other smoked tobacco products among adolescents. The overall prevalence of ever use was 0.08% (about 8,000 adolescents in the general population) while that of current use was 0.02% (about 2,000 adolescents). Boys had a higher prevalence (0.17%) than girls (0%) of ever use and current use (0.04% versus 0%). The prevalence of ever use and current use among adolescents across the age categories and residence areas was similar.

Table 10: Pi	rovalance of	over and cui	rantuca of	other smak	ad tabacca	products
Table 10: Pl	revalence of (ever and cui	rent use or	otner smok	ea tobacco	products

Table 1011 revalence of ever and current use of other smoked tobacco products						
Background characteristics	Ever use % (95% CI)	Current use % (95% CI)	Surveyed adolescents	Weighted sample		
Overall	0.08 (0.02, 0.30) **	0.02 (0.00, 0.09) **	6435	6435		
Sex						
Boys	0.17 (0.04, 0.62) **	0.04 (0.01, 0.19) **	3096	3133		
Girls	0 ****	0 ****	3339	3302		
Age group						
10 - 12 years	0 ****	0 ****	2565	2569		
13 - 15 years	0.15 (0.03, 0.90) **	0.02 (0.00, 0.11) **	2662	2421		
16 - 17 years	0.10 (0.02, 0.44) **	0.07 (0.01, 0.47) **	1208	1445		
Residence type						
Rural	0.07 (0.01, 0.48) **	0 ****	4171	4930		
Urban	0.12 (0.04, 0.42) **	0.09 (0.02, 0.40) **	2264	1504		
Wealth quintile						
Poorest	0.21 (0.03, 1.47) **	0 ****	1288	1598		
Poor	0.03 (0.00, 0.19) **	0.03 (0.00, 0.19) **	1287	1337		

Background characteristics	Ever use % (95% CI)	Current use % (95% CI)	Surveyed adolescents	Weighted sample
Middle	0.04 (0.01, 0.31) **	0 ****	1287	1283
Rich	0 ****	0 ****	1287	1161
Richest	0.09	0.09	1286	1056
Current school status				
In School	0.09 (0.02, 0.33) **	0.02 (0.00, 0.10) **	21	5853
Out of school	0 ****	0 ****	2040	579
Adolescent marital sta	ntus			
In a union	0 ****	0 ****	21	25
Not in a union	0.07 (0.02, 0.28) **	0.04	2040	2242
Work engagement				
Employed	0.12 (0.02, 0.85) **	0.12	272	316
Self-employed	0 ****	0 ****	91	111
No Work	0.08 (0.02, 0.33) **	0.02 (0.00, 0.11) **	6071	6006

4.3.8 Prevalence of ever and current use of smokeless tobacco products

Table 11 shows the prevalence of ever use and current use of smokeless tobacco products among adolescents. The overall prevalence of ever use was 3.36% (approximately 324,000 adolescents in the general population), while current use prevalence was 1.72% (about 166,000 adolescents). Prevalence of ever use was similar between boys and girls and across age groups. Similarly, ever use and current use prevalence was similar for adolescents residing in rural and urban areas. Ever use and current use prevalence of smokeless tobacco products was higher among out-of-school adolescents (6.05% and 3.13%, respectively) compared with those in school (1.77% and 0.37%, respectively).

Table 11: Prevalence of ever and current use of smokeless to

Background characteristics	Ever use % (95% CI)	Current use % (95% CI)	Surveyed adolescents	Weighted sample
Overall	3.36 (2.22, 5.05)	1.72 (0.94, 3.13)	6435	6435
Sex				
Boys	4.21 (2.77, 6.36)	2.05 (1.18, 3.52)	3096	3133
Girls	2.54 (1.51, 4.24)	1.41 (0.65, 3.00) *	3339	3302
Age group				
10 - 12 years	2.53 (1.35, 4.71) *	1.19 (0.57, 2.47) *	2565	2569
13 - 15 years	4.32 (2.04, 8.91) *	2.75 (1.08, 6.86) *	2662	2421
16 - 17 years	3.21 (2.24, 4.58)	0.92 (0.45, 1.82) *	1208	1445
Residence type				
Rural	3.75 (2.33, 5.99)	2.07 (1.08, 3.94) *	4171	4930
Urban	2.07 (1.38, 3.11)	0.56 (0.25, 1.26) *	2264	1504

Background characteristics	Ever use % (95% CI)	Current use % (95% CI)	Surveyed adolescents	Weighted sample
Wealth quintile				
Poorest	8.09 (4.49, 14.16)	5.93 (3.15, 10.89) *	1288	1598
Poor	1.83 (1.13, 2.93)	0.33 (0.14, 0.76) *	1287	1337
Middle	2.14 (0.72, 6.13) **	0.27 (0.10, 0.73) *	1287	1283
Rich	1.79	0.58	1287	1161
Richest	1.34	0.11	1286	1056
Current school status				
In School	1.77 (1.26, 2.48)	0.37 (0.22, 0.63)	21	5853
Out of school	19.50 (10.59, 33.12)*	15.33 (8.57, 25.91) *	2040	579
Adolescent marital sta	ntus			
In a union	17.05	17.05	21	25
Not in a union	4.23 (2.48, 7.12)	2.11 (1.02, 4.24) *	2040	2242
Work engagement				
Employed	4.32 (2.34, 7.82)	1.55 (0.59, 4.05) *	272	316
Self-employed	4.55 (1.66, 11.84) *	3.85 (1.24, 11.29) **	91	111
No Work	3.29 (2.09, 5.12)	1.69 (0.87, 3.24) *	6071	6006

4.3.9 Prevalence of ever and current use of HTPs

Table 12 shows the prevalence of ever use and current use of HTPs among adolescents. The overall ever and current use prevalence was 0.44% (42,000 adolescents in the general population) and 0.12% (12,000 adolescents), respectively. There were no significant differences in both ever use and current use across boys and girls, age groups, schooling status, residence, and work engagement subgroups.

Background characteristics	Ever use % (95% CI)	Current use % (95% CI)	Surveyed adolescents	Weighted sample
Overall	0.44 (0.24, 0.81) *	0.12 (0.06, 0.25) *	6435	6435
Sex				
Boys	0.69 (0.35, 1.34) *	0.21 (0.10, 0.44) *	3096	3133
Girls	0.20 (0.07, 0.53) **	0.04 (0.01, 0.28) **	3339	3302
Age group				
10 - 12 years	0.17 (0.06, 0.50) **	0.07 (0.02, 0.32) **	2565	2569
13 - 15 years	0.23 (0.11, 0.47) *	0.07 (0.03, 0.22) **	2662	2421
16 - 17 years	1.27 (0.53, 2.99) *	0.29 (0.10, 0.82) **	1208	1445
Residence				
Rural	0.24 (0.08, 0.73) **	0.05 (0.02, 0.17) **	4171	4930
Urban	1.08 (0.54, 2.13) *	0.33 (0.14, 0.82) **	2264	1504
Wealth quintile				
Poorest	0.13 (0.00, 0.37) **	0.03 (0.00, 0.24) **	1288	1598
Poor	0.38 (0.17, 0.82) *	0.09 (0.02, 0.39) **	1287	1337
Middle	0.48 (0.18, 1.28) *	0.16 (0.03, 0.88) **	1287	1283
Rich	0.5	0.21	1287	1161
Richest	0.87	0.15	1286	1056
Current school status				
In School	0.42 (0.22, 0.81) *	0.13 (0.06, 0.27) *	21	5853
Out of school	0.59 (0.15, 2.25) **	0.06 (0.01, 0.44) **	2040	579
Marital status				
In a union	0 ****	0 ****	21	25
Not in a union	0.88 (0.39, 1.98) *	0.25 (0.11, 0.59) *	2040	2242
Work engagement				
Employed	0.53 (0.11, 2.60) **	0.53 (0.11, 2.60) **	272	316
Self-employed	1.43 (0.29, 6.78) **	0 ****	91	111
No Work	0.42 (0.21, 0.82) *	0.10 (0.05, 0.23) *	6071	6006

Notes: Refusals and "don't know" responses are not reported in the table. % is the survey-weighted percentage and 95% (CI) is the 95% confidence interval for weighted percentages. * Indicates moderately unstable estimates with a RSE greater than 30% but not exceeding 50%, ** indicates unstable estimates with a RSE greater than 50, and **** signifies that the result should also be interpreted with caution, as we cannot assume that the prevalence in the population is exactly zero. Missing confidence intervals are due to an insufficient number of observations within certain strata, even after collapsing some strata to increase sample size.

4.3.10 Prevalence of ever and current use of any nicotine product

Table 13 shows the prevalence of ever and current use of any nicotine products among adolescents. The overall prevalence of ever use was 0.56% (about 54,000 in the general population), while prevalence of current use was 0.10% (9,600 adolescents). Ever use prevalence was similar among boys and girls. However, the current use was higher among boys (0.18%) compared with girls (0.02%). The prevalence of ever use of nicotine products was high among adolescents residing in urban areas (1.70%) compared with their rural counterparts (0.21%). Prevalence of ever use increased with age, standing at 0.11% among adolescents aged 10-12 years, 0.62% among those aged 13-15 years, and 1.25% among 16-17-year-olds. However, the prevalence among the 13-15 and 16-17-year age groups was similar.

Table	13: Prevalence of	f ever and current use c	of any nicotine products

Background characteristics	Ever use % (95% CI)	Current use % (95% CI)	Surveyed adolescents	Weighted sample
Overall	0.56 (0.38, 0.82)	0.10 (0.05, 0.21) *	6435	6435
Sex				
Boys	0.77 (0.47, 1.26)	0.18 (0.08, 0.41) *	3096	3133
Girls	0.36 (0.19, 0.70) *	0.02 (0.00, 0.08) **	3339	3302
Age group				
10 - 12 years	0.11 (0.04, 0.29) *	0.07 (0.02, 0.26) **	2565	2569
13 - 15 years	0.62 (0.31, 1.25) *	0.05 (0.02, 0.15) **	2662	2421
16 - 17 years	1.25 (0.77, 2.04)	0.22 (0.07, 0.75) **	1208	1445
Residence type				
Rural	0.21 (0.11, 0.41) *	0.02 (0.00, 0.15) **	4171	4930
Urban	1.70 (1.07, 2.69)	0.36 (0.16, 0.80) *	2264	1504
Wealth quintile				
Poorest	0.26 (0.10, 0.72) **	0.04 (0.01, 0.21) **	1288	1598
Poor	0.56 (0.30, 1.05) *	0.13 (0.03, 0.47) **	1287	1337
Middle	0.46 (0.20, 1.05) *	0.15 (0.02, 0.93) *	1287	1283
Rich	1.05	0.15	1287	1161
Richest	0.59	0.04	1286	1056
Current school status				
In School	0.54 (0.35, 0.83)	0.10 (0.04, 0.22) *	6067	5853
Out of school	0.07 (0.27, 1.95) **	0.13 (0.14, 1.11) **	365	579
Adolescent marital sta	atus			
In a union	0 ****	0 ****	21	25
Not in a union	1.04 (0.68, 1.60)	0.16 (0.05, 0.47) **	2040	2242
Work Engagement				
Employed	1.41 (0.65, 3.02)	0.36 (0.08, 1.59) *	272	316
Self-employed	1.43 (0.29, 6.78) **	0 ****	91	111
No Work	0.50 (0.32, 0.78)	0.09 (0.04, 0.20) *	6071	6006

Notes: Refusals and "don't know" responses are not reported in the table. % is the survey-weighted percentage and 95% (CI) is the 95% confidence interval for weighted percentages. * Indicates moderately unstable estimates with a RSE greater than 30% but not exceeding 50%, ** indicates unstable estimates with a RSE greater than 50 and **** signifies that the result should also be interpreted with caution, as we cannot assume that the prevalence in the population is exactly zero. Missing confidence intervals are due to an insufficient number of observations within certain strata, even after collapsing some strata to increase sample size.

4.3.11 Prevalence ever and current use of e-cigarettes

Table 14 shows the prevalence of ever and current use of e-cigarettes among adolescents. The overall prevalence of ever use was 0.52% (51,000 adolescents in the general population) while the prevalence of current use was 0.09% (9,000 adolescents). Adolescents residing in urban areas had a higher ever use prevalence of 1.59% compared with their counterparts in rural areas (0.20%). No significant differences were observed in the prevalence of ever or current use between boys and girls, across different age groups, or among various work engagement categories.

Table	14: Preval	lence ever and	current use of	electronic cigarettes

Background characteristics	Ever use % (95% CI)	Current use % (95% CI)	Surveyed adolescents	Weighted sample
Overall	0.52 (0.35, 0.79)	0.09 (0.04, 0.20) *	6435	6435
Sex				
Boys	0.73 (0.43, 1.22)	0.18 (0.08, 0.41) *	3096	3133
Girls	0.33 (0.16, 0.67) *	0.01 (0.00, 0.06) **	3339	3302
Age group				
10 - 12 years	0.11 (0.04, 0.28) *	0.07 (0.02, 0.26) **	2565	2569
13 - 15 years	0.58 (0.27, 1.22) *	0.04 (0.01, 0.13) **	2662	2421
16 - 17 years	1.17 (0.70, 1.96)	0.22 (0.07, 0.75) **	1208	1445
Residence				
Rural	0.20 (0.10, 0.40) *	0.02 (0.00, 0.15) **	4171	4930
Urban	1.59 (0.97, 2.59)	0.33 (0.14, 0.78) *	2264	1504
Wealth quintile				
Poorest	0.26 (0.10, 72) **	0.04 (0.01, 0.21) **	1288	1598
Poor	0.53 (0.28, 1.02)*	0.13 (0.03, 0.47) **	1287	1337
Middle	0.42 (0.17, 1.03) *	0.15 (0.02, 0.93) **	1287	1283
Rich	0.99	0.15	1287	1161
Richest	0.51	0 ****	1286	1056
Current school status				
In School	0.51 (0.33, 0.80)	0.09 (0.03, 0.21) *	6067	5853
Out of school	0.60 (0.20, 1.81) **	0.13 (0.02, 1.00) **	365	579
Marital status				
In a union	0 ****	0 ****	21	25
Not in a union	0.95 (0.60, 1.51)	0.16 (0.05, 0.47) *	2040	2242
Work engagement				
Employed	1.04 (0.42, 2.53) *	0.36 (0.08, 1.59) **	272	316
Self-employed	1.43 (0.28, 6.78) **	0 ****	91	111
No Work	0.48 (0.30, 0.76)	0.08 (0.04, 0.20) *	6071	6006

Notes: Refusals and "don't know" responses are not reported in the table. % is the survey-weighted percentage and 95% (CI) is the 95% confidence interval for weighted percentages. * Indicates moderately unstable estimates with a RSE greater than 30% but not exceeding 50%, ** indicates unstable estimates with a RSE greater than 50, and **** signifies that the result should also be interpreted with caution, as we cannot assume that the prevalence in the population is exactly zero. Missing confidence intervals are due to an insufficient number of observations within certain strata, even after collapsing some strata to increase sample size.

4.3.12 Prevalence of ever and current use of nicotine pouches

Table 15 shows the prevalence of ever and current use of nicotine pouches among adolescents. Overall, the prevalence of ever and current use for nicotine pouches was 0.04% (4,000 adolescents in the general population) and 0.01% (600 adolescents), respectively. The prevalence was also very low across the different background characteristics.

Table 15: Prevalence	ever and	current	use of	nicotine	pouches
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Background characteristics	Ever use % (95% CI)	Current use % (95% CI)	Surveyed adolescents	Weighted sample
Overall	0.04 (0.01, 0.09) *	0.01 (0.00, 0.04) **	6435	6435
Sex				
Boys	0.04 (0.01, 0.16) **	0 ****	3096	3133
Girls	0.04 (0.01, 0.11) **	0.01 (0.00, 0.08) **	3339	3302
Age group				
10 - 12 years	0 ****	0 ****	2565	2569
13 - 15 years	0.05 (0.02, 0.16) **	0.02 (0.00, 0.12) **	2662	2421
16 - 17 years	0.07 (0.02, 0.33) **	0 ****	1208	1445
Residence				
Rural	0.01 (0.00, 0.10) **	0 ****	4171	4930
Urban	0.11 (0.04, 0.30) **	0.03 (0.00, 0.19) **	2264	1504
Wealth quintile				
Poorest	0 ****	0 ****	1288	1598
Poor	0.03 (0.00, 0.22) **	0 ****	1287	1337
Middle	0.03 (0.00, 0.23) **	0 ****	1287	1283
Rich	0.06	0 ****	1287	1161
Richest	0.08	0.04	1286	1056
Current school status				
In School	0.03 (0.01, 0.07) **	0.01 (0.00, 0.05) **	6067	5853
Out of school	0.12 (0.02, 0.94) **	0 ****	365	579
Marital status				
In a union	0 ****	0 ****	21	25
Not in a union	0.09 (0.03, 0.25) **	0 ****	2040	2242
Work engagement				
Employed	0.37 (0.09, 1.58) **	0 ****	272	316
Self-employed	0 ****	0 ****	91	111
No Work	0.02 (0.01, 0.06) **	0.01 (0.00, 0.05) **	6071	6006

Notes: Refusals and "don't know" responses are not reported in the table. % is the survey-weighted percentage and 95% (CI) is the 95% confidence interval for weighted percentages. * Indicates moderately unstable estimates with a RSE greater than 30% but not exceeding 50%, ** indicates unstable estimates with a RSE greater than 50, and **** signifies that the result should also be interpreted with caution, as we cannot assume that the prevalence in the population is exactly zero. Missing confidence intervals are due to an insufficient number of observations within certain strata, even after collapsing some strata to increase sample size.

4.4 Patterns of Tobacco and Nicotine Product use

4.4.1 Daily use of tobacco and nicotine products

Table 16 presents the proportion of current users that were daily users of tobacco and nicotine products, where daily use is defined as the percentage of adolescents who used the product for at least 20 days in the previous 30 days. Manufactured cigarettes had the highest proportion of daily users (22.11%), followed by smokeless tobacco (18.77%). The percentage of daily users of any cigarettes was 8.34%, with a higher percentage of boys being daily users compared with girls, and no differences across the other subgroups. Both HTPs and e-cigarettes had only one daily user among the current users, with a weighted proportion of 16.55% and 4.32%, respectively. As such, the results were not disaggregated by background characteristics. Shisha, RYO, other smoked tobacco products, and nicotine pouches did not have daily users

Table 16: Proportion of	f current tobacco and	d nicotine products i	users who were daily users

	Any cigarettes	Manufactured cigarette	Smokeless tobacco
	% (95% CI)	% (95% CI)	% (95% CI)
Overall	8.34 (2.66, 23.23)	22.11 (7,71, 41.08)	18.77 (8.43, 36.70)
Sex			
Boys	10.67 (3.48, 28.40)	29.46 (11.11, 58.24)	24.01(9.57, 48.52)
Girls	0	0	11.53 (4.50, 26.50)
Age group			
10 - 12 years	0	0	14.02 (2.90, 47.08)
13 - 15 years	9.02 (1.16, 45.60)	33.63 (4.34, 84.97)	24.68 (11.25, 45.84)
16 - 17 years	10.60 (3.76, 26.50)	21.11 (8.40, 43.83)	0
Residence			
Rural	8.19 (2.11, 27.02)	22.15 (6.29, 54.65)	19.82 (8.88, 38.52)
Urban	9.11 (2.08, 32.08)	21.91 (4.77, 61.12)	6.19 (0.73, 37.18)
Wealth quintile			
Poorest	7.65 (1.00, 40.40)	35.35 (5.53, 83.62)	21.25 (9.70, 40.41)
Poor	10.70 (1.37, 50.84)	35.73 (4.39, 87.05)	13.61 (1.70, 58.92)
Middle	13.32 (2.61, 50.55)	17.08 (2.35, 63.83)	0
Rich	7.99 (0.10, 42.77)	12.12 (1.51, 55.39)	0
Richest	0	0	0
Current school status			
In School	5.23 (1.20, 20.06)	9.02 (2.02, 32.33)	2.42 (0.32, 16.11)
Out of school	33.63 (6.34, 79.12)	58.58 (18.01, 90.10)	22.80 (10.71, 42.07)

4.4.2 Smoking/use days in the past 30 days

Table 17 displays the average number of smoking/use days in the past 30 days among current users of tobacco and nicotine products. Smokeless tobacco had the highest average number of smoking/use days at about 12 days per month, followed by manufactured cigarettes (eight days), HTPs (six days), RYO cigarettes (five days) and shisha (one day). Meanwhile, nicotine products (e-cigarettes and nicotine pouches) had averages of four and three days per month, respectively. Boys had the highest average number of use days across all the products, except smokeless tobacco where girls exhibited a slightly higher number of smoking days. Manufactured cigarettes had the highest number of smoking days among adolescents aged 15 to17 years and among those in the poor wealth category. Smokeless tobacco was most used in rural areas (at about 10 use days) compared with urban areas (at four days).

Table 17: Average	number of sm	okina/use da	vs in the r	past 30 day	s by product
Tubic II. Average	Hullibel of Sili	oking/usc uu	ys iii liic p	Jasi Jo day	3 by product

			Tobacco p	roducts			Nicotine	oroducts
Do donos d	Manufactured cigarette	RYO	Shisha	Other smoked	Smokeless	HTPs	E- cigarettes	Pouches
Background characteristics	Mean (std. err)	Mean (std. err)	Mean (std. err)	Mean (std. err)	Mean (std. err)	Mean (std. err)	Mean (std. err)	Mean (std. err)
Overall	8.37 (2.73)	4.93 (1.71)	1.14 (1.14)	2.83 (0.85)	11.45 (1.75)	5.88 (2.54)	4.03 (1.54)	3
Sex								
Boys	10.63 (3.05)	5.73 (1.80)	1.23 (0.25)	2.83 (0.85)	10.39 (2.31)	3.08 (0.64)	2.86 (0.85)	-
Girls	1.58 (0.51)	1.29 (0.30)	1.09 (0.11)	-	12.91 (1.25)	20	30	3
Age group								
10 - 12 years	2.80 (1.02)	3.67 (1.24)	2	-	10.83 (2.26)	14.82 (5.21)	3.52 (2.32)	-
13 - 15 years	11.01 (7.03)	5.38 (3.04)	1.11 (0.13)	5	13.15 (1.99)	3.38 (1.91)	4.22 (0.64)	3
16 - 17 years	8.29 (2.31)	4.78 (1.28)	1	2	4.26 (1.15)	3.09 (0.59)	4.28 (2.56)	-
Residence type								
Rural	8.44 (3.26)	5.12 (1.99)	-	-	12.16 (1.69)	9.87 (5.51)	1	-
Urban	8.06 (3.03)	3.86 (1.13)	1.14 (0.12)	2.82 (0.85)	2.85 (1.23)	3.69 (0.72)	4.66 (1.85)	3
Wealth quintile								
Poorest	11.73 (6.13)	5.49 (1.59)	2	-	12.79 (1.61)	2	8.06 (2.15)	-
Poor	14.58 (7.86)	4.55 (1.59)	-	5	5.40 (3.73)	3.64 (2.80)	2.06 (1.07)	-
Middle	4.24 (7.86)	2	-	-	3.56 (2.13)	3.84 (0.19)	1.94 (0.08)	-
Rich	7.20 (2.64)	4.34 (1.14)	1	-	1.83 (0.36)	11.52 (5.34)	6.73 (4.52)	-
Richest	3.06 (1.35)	2.53 (0.80)	2	2	4	2.84 (1.01)	-	3
Current schooli	ng status							
In School	4.81 (1.89)	4.34 (1.04)	1.14 (0.11)	2.82 (0.85)	3.18 (1.10)	6.01 (2.64)	4.47 (1.77)	-
Out of school	18.29 (4.42)	5.27 (3.00)	-		13.48 (1.73)	3	1	3

Notes: Estimates are based on survey-weighted means, with standard errors (Std. Err) shown in parentheses. A dash (-) indicates categories with no current users of the product.

Table 18 presents the type of HTPs consumed often by adolescents. Among the adolescents who reported to have used HTPs, the most consumed HTP was Marlboro Original (silver), accounting for 21.67% of users. Moreover, a significant proportion of adolescents (21.89%) did not know the type of HTPs they used.

Table 18: Frequently consumed HTPs

HTPs type	%
I don't know the type	21.89
Marlboro Original (silver)	21.67
Turquoise (menthol)	8.05
Blue (menthol)	14.28
Use a specific variety more often	30.18
Other	25.83
Notes: % is the survey-weighted percentage.	

Table 19 presents the type of e-cigarettes used by adolescents who had used the product in the past 30 days. The majority (55.48%) were unable to identify the type of e-cigarette they used. The most commonly used types of nicotine pouches by adolescents in the 30 days prior to the survey were mint and clove or spice-flavored nicotine pouches.

Table 19: E-cigarette type smoked in the past 30 days

9.79	
25.95	
8.78	
55.48	
	8.78

Notes: % is the survey-weighted percentage.

$4.4.3 \; \text{Average}$ quantity of cigarettes or other smoked to bacco products smoked on a typical smoking day

Table 20 shows the average quantity of manufactured cigarettes, RYO cigarettes, and other smoked tobacco products smoked by current users on a typical smoking day. Other smoked tobacco was used most frequently on a typical day (two per day), followed by manufactured and RYO cigarettes. The average quantity of manufactured cigarettes smoked on a typical smoking day was highest among boys (about 2), among those in the 16 to 17 age group (1.78), among rural dwellers (1.73), and among those from the poor wealth quintile (3.34). (See Appendix 3 for average quantity of cigarettes or other smoked tobacco products smoked per day in the past 30 days).

Table 20: Average quantity of cigarettes or other smoked tobacco products smoked on a typical use day

Background	Manufactured cigarettes	RYO	Other smoked tobacco
characteristics	Mean (std. err)	Mean (std. err)	Mean (std. err)
Overall	1.66 (0.28)	1.55 (0.18)	2.10 (1.13)
Sex			
Boys	1.84 (0.35)	1.51 (0.19)	2.10 (1.13)
Girls	1.22 (0.18)	1.75 (0.22)	-
Age group			
10 - 12 years	1.45 (0.40)	1.34 (0.26)	-
13 - 15 years	1.48 (0.54)	1.49 (0.23)	5
16 - 17 years	1.78 (0.36)	1.75 (0.40)	1
Residence type			
Rural	1.73 (0.35)	1.45 (0.17)	-
Urban	1.38 (0.20)	2.13 (0.67)	2.10 (1.13)
Wealth quintile			
Poorest	1.83 (0.50)	1.46 (0.21)	-
Poor	3.34 (1.20)	2.26 (0.52)	5
Middle	1.06 (0.07)	1	-
Rich	1.26 (0.21)	1	-
Richest	1.47 (0.34)	1.47 (0.20)	1
Current schooling status			
In School	1.38 (0.25)	1.29 (0.13)	2.10
Out of school	-	1.71 (0.24)	-

Notes: Estimates are based on survey-weighted means, with standard errors (Std. Err.) shown in parentheses. A dash (-) indicates categories with no current users of the product.

4.4.4 Average number of times shisha and smokeless tobacco products are used on a typical use day

Table 21 presents the average number of times shisha and smokeless tobacco products were used on a typical use day. Shisha and smokeless tobacco products were used once and twice, respectively. on a typical use day. For shisha, the average number of times used was highest among girls (2) and adolescents aged 13 to 15 (3). For smokeless tobacco products, the average number of times used was highest among girls (2.27), among adolescents in the 10 to 12 age group (2.19), among those living in rural areas (1.95), among those from the richest wealth quintile (2), and among those in school (1.61). (See Appendix 3 for average number of times/sessions shisha and smokeless tobacco product are used per day in the past 30 days)

Table 21: Average number of times shisha and smokeless tobacco products are used on a typical use day

	Shisha Mean (std. err)	Smokeless tobacco Mean (std. err)
Overall	1.24 (0.26)	1.91 (0.12)
Sex		
Boys	1	1.65 (0.23)
Girls	1.86 (0.69)	2.27 (0.13)
Age group		
10 - 12 years	1	2.19 (0.25)
13 - 15 years	3	1.81 (0.13)
16 - 17 years	1	1.89 (0.24)
Residence type		
Rural	-	1.95 (0.13)
Urban	1.24 (0.26)	1.37 (0.25)
Wealth quintile		
Poorest	1	1.95 (0.14)
Poor	-	1.67 (0.36)
Middle	-	1
Rich	1	1.94 (0.52)
Richest	3	2
Current schooling status		
In School	1.24 (0.26)	1.61 (0.27)
Out of school	-	1.99 (0.11)

Notes: Estimates are based on survey-weighted means, with standard errors (Std. Err.) shown in parentheses. A dash indicates categories with no current users of the product.

4.4.5 Percentage of HTPs and e-cigarette current users using the product for a particular number of times per typical smoking day

Table 22 shows the percentage of HTPs and e-cigarette current users who used HTPs and e-cigarettes for a particular number of times per day. Majority of the users reported using HTPs (72.27%) and e-cigarettes (87.57%) once per typical use day.

Table 22: Percentage of HTPs and e-cigarette current users using the product for a particular number of times on a typical use day

HTPs	%
One time per day	72.37 (33.82, 93.07)
2 to 5 times per day	5.58 (0.68, 33.52)
6 to 10 times per day	6.09 (0.73, 36.49)
More than 20 times per day	15.96 (2.15, 62.15)
Electronic cigarette	
One time per day	87.57 (37.09, 98.82)
2 to 5 times per day	12.43 (1.17, 62.91)
6 to 10 times per day	-
More than 20 times per day	-
Notes:% is the survey-weighted percentages. A dash indicate	es categories with no current users of the product.

4.4.6 Age of initiation of use of tobacco and nicotine products

Table 23 presents the minimum and average age of initiation of use of tobacco and nicotine products among ever users. RYO cigarettes and smokeless tobacco had the lowest minimum initiation age of five years. The lowest average ages of initiation were observed for other smoked tobacco (9.29 years) and smokeless tobacco products (9.83 years). HTPs had the highest average initiation age, at 14.52 years. For nicotine products, e-cigarettes and nicotine pouches had average initiation ages of 14.32 years and 13.10 years, respectively. Adolescents who were currently enrolled in school initiated the use of manufactured cigarettes, RYO cigarettes, and smokeless tobacco at an earlier age than their out-of-school counterparts.

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Table

			Tobacco products	ıcts	·				Tobacco products	lucts			Nice	Nicotine products	oducts	
	Manufactured	red	RYO		Shisha		Other		Heated		Smokeless	y.	Electronic	į	Nicotine	a
	Cigarette	3 2 - W					Smoked		Торассо		Торассо	2	cigarette	. φ	Pouches	, ñ
	Mean (std. err)	Min	Mean (std. err)	Min	Mean (std.err)	Min	Mean (std. err)	Min	Mean (std. err)	Min	Mean (std. err)	Min	Mean (std.	Min	Mean (std. err)	Min
Overall	11.97 (0.35)	9	10.58 (0.35)	r.	13.42 (0.57)	9	9.29 (2.48)	9	14.52 (0.56)	6	9.83 (0.36)	2	14.32 (0.29)	6	13.10 (0.93)	6
Sex																
Boys	12.15 (0.41)	9	10.83 (0.38)	C)	12.99 (0,94)	9	9.29 (2.48)	9	14.57 (0.57)	10	10.66 (0.43)	D.	14.28 (0.34)	6	13.82 (1.01)	12
Girls	11.45 (0.68)	9	9.41 (0.43)	D	13.92 (0.34)	1	1	1	14.32 (1.37)	6	8.60 (0.48)	2	14.39 (0.55)	10	12.38 (1.34)	6
Age group																
10 - 12 years	8.92 (0.61)	9	9.07 (0.41)	9	9.44 (0.48)	11	1	1	10.24 (0.52)	6	8.88 (0.66)	5	10.31 (0.38)	6		
13 - 15 years	11.69 (0.51)	9	10.63 (0.33)	D.	13.40 (0.46)	12	6.79 (1.01)	9	13.78 (0.28)	12	9.83 (0.46)	S	13.48 (0.15)	11	11.72 (1.12)	6
16 - 17 years	13.15 (0.44)	9	11.82 (0.93)	D.	14.85 (0.26)	12	15.36 (0.33)	15	15.78 (0.16)	14	11.07 (0.76)	2	15.64 (0.20)	13	14.64 (0.33)	14
Residence type	9															
Rural																
	11.82 (0.40)	9	10.57 (0.39)	5	13.03 (0.63)	9	9	9	14.25 (1.19)	6	9.72 (0.38)	5	14.60 (0.59)	11	15	15
Urban																
	12.40 (0.72)	9	10.65 (0.69)	2	13.57 (0.77)	6	15.10 (0.34)	14	14.72 (0.46)	10	10.46 (0.76)	2	14.20 (0.32)	6	12.27 (0.97)	6
Wealth quintile	е															
Poorest	11.85 (0.96)	9	10.53 (0.53)	5	9.19 (0.21)	6	9	9	13.96 (1.52)	10	8.78 (0.30)	2	14.16 (0.83)	6	٠	1
Poor	11.28 (1.15)	9	11.43 (0.94)	5	14.09 (0.44)	11	14	14	13.66 (0.39)	10	11.24 (0.70)	5	13.02 (0.47)	10	14	14
Middle	13.19 (0.61)	7	11.96 (0.73)	00	15.55 (0.31)	15	16	16	13.99 (1.12)	11	10.36 (0.85)	2	14.99 (0.46)	13	14	14
Rich	11.19 (0.53)	9	10.21 (0.89)	7	14.16 (0.29)	12	1	1	13.94 (1.49)	6	13.19 (1.04)	8	14.28 (0.48)	10	15	15
Richest	12.54 (0.53)	7	9.76 (0.92)	9	13.44 (0.97)	9	15	15	15.83 (0.17)	15	10.58 (0.89)	Ŋ	15.56 (0.38)	12	10.63	6
															(00:1)	
Current school status	status															
In School	11.93 (0.39)	9	10.51 (0.34)	2	13.31 (0.59)	9	9.29 (2.48)	9	14.33 (0.62)	6	10.68 (0.47)	Ω	14.18 (0.31)	6	12.27 (0.97)	6
Out of school	12.19 (0.75)	7	10.72 (1.08)	7	15	1	1	1	15.86 (0.94)	17	9.01 (0.40)	2	15.48 (0.68)	16	15	15
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Notes: Estimates are based on the survey-weighted means with the corresponding standard errors (Std. Err.) provided in parentheses. A dash (-) indicates categories with no ever users of the product, and min stands for minimum and represents the earliest initiation age of each product.

4.4.7 Reasons for initiating use of tobacco and nicotine products

Table 24 shows the reasons why adolescents first used tobacco or nicotine products. The most common reasons driving adolescents to start using tobacco and nicotine products were family and friends influences and curiosity about the products. Among adolescents who had ever used manufactured cigarettes, the main reasons for initiation were 'a friend smoked them' (58.67%), 'curiosity about the product' (32.85%), and 'a family member used the product' (14.96%). A similar case was observed for RYO cigarettes, shisha, HTPs, and nicotine pouches. Among adolescents who had ever used e-cigarettes, the majority (76.29%) indicated that they first used them because 'a friend smoked them,' followed by 'curiosity' (43.45%), 'the packaging looked nice' (21.70%), and 'a family member used the product' (11.93%).

For HTPs, the reasons indicated were 'a friend smoked them' (65.19%), 'I was curious about the product' (41.76%), and 'a family member used the product' (12.28%). For adolescents who had ever used nicotine products, 76.29% had first used e-cigarettes because 'a friend smoked them,' 'I was curious about the product' (43.45%), 'packaging looked nice' (21.70%), and 'a family member used the product' (11.93%). Finally, for nicotine pouches, the reasons for initiating use were reported as 'a friend used them' (47.19%), 'I was curious about the product' (36.47%), and 'a family member used the product' (16.34%).

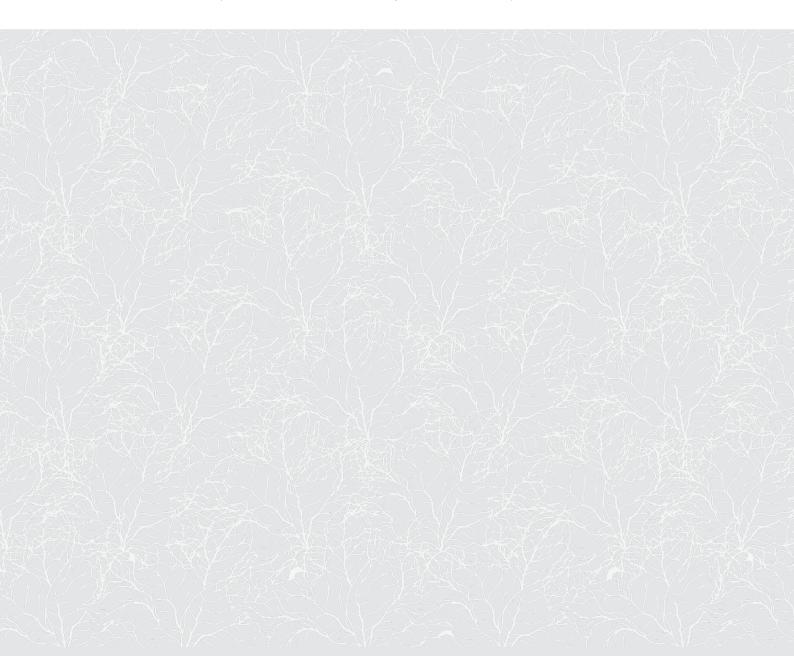


 Table 24: Reasons for initiating use of tobacco and nicotine products

			Tobacco products	oducts			Nicotine products	roducts
Reason for Initiation	Manufactured cigarettes	RYO cigarettes	Shisha	Other smoked tobacco	Smokeless tobacco	HTPs	Electronic	Nicotine pouches
	%	%	%	%	%	%	%	%
A friend smoked them	58.67	66.20	62.95	92.96	42.22	62.19	76.29	47.19
A family member smoked them	14.96	8.27	22.42	0.0	48.12	12.28	11.93	16.34
They costed less than other tobacco products	0	3.72	0.0	0.0	1.21	4.63	0.0	0.0
They were easier to get than other tobacco products	4.05	3.91	1.49	0.0	6.93	1.79	0.0	0.0
I had seen people on TV, online, or in movies smoke them	2.74	0.68	0.0	0.0	0.47	12.56	5.12	0.0
They are less harmful than other forms of tobacco	1.46	0.0	0.0	0.0	0.22	0	0.87	0.0
I could use them to do tricks	3.21	3.12	0.0	0.0	0.28	1.06	2.46	0.0
I was curious about them	32.85	25.82	34.14	7.40	36.28	41.76	43.45	36.47
Because I felt anxious, stressed, or depressed	1.16	4.65	3.11	0.0	0.0	0.94	3.97	17.11
To get a high or buzz	2.13	4.84	0.0	0.0	90.9	2.63	5.00	0.0
Packaging looks nice	1.40	1.47	0.0	0.0		8.45	21.66	0.0
Easy to hide	7.25	0.39	0.0	0.0	3.02	1	-	1
To get social acceptance	3.70	1.51	0.0	0.0	7.09	1.57	15.8	0.0
Using the product might be less harmful to people around me than other products	1	1	0.0	0.0		6.28	1.56	0.0
It was available in flavours, such as menthol, mint, candy, fruit,	1	1	2.17	0.0	•	7.94	16.27	0.0
I could smoke it in places where I can't smoke cigarettes	-	-	0.0	0.0	-	0.0	0.79	0.0
Other reason	3.63	2.06			12.13	2.63	3.07	

Notes: % represents the survey weighted percentage. A dash (-) indicates initiation reasons with no current users of the product. (Responses for this indicator are based on multiple responses from participants).

4.4.8 Who the adolescents were with when they initiated use of tobacco and nicotine products

Table 25 lists the people who adolescents were with when they first used tobacco and nicotine products. The most reported companions during initiation of tobacco or nicotine products were friends and family members. However, for other smoked tobacco products such as cigars, adolescents mainly initiated use on their own.

Table 25: The people who adolescents were with when they first used the various tobacco and nicotine products

Person with		То	bacco pr	oducts			Nicotine	products
during initiation	Manufactured cigarette	Roll your own	Shisha	Other smoked	HTPs	Smokeless tobacco	Electronic cigarette	Nicotine pouches
	%	%	%	%	%	%	%	%
Alone	19.74	12.12	3.35	70.93	19.18	13.05	5.70	19.45
With friend (s)	65.71	80.88	73.94	29.07	68.45	52.76	87.48	-
With family member(s)	16.30	7.52	20.57	-	13.32	51.08	11.93	17.01
With a new acquaintance	-	-	4.66	-	0.94	0.12	0.79	-
Others	1.30	2.34	-	-	-	0.39	-	-

Notes: % is the survey-weighted percentages. A dash (-) indicates initiation person with no current users of the product

4.4.9 Access to tobacco products

Table 26 highlights how adolescents obtained tobacco products the last time they used them over a 30-day period. Manufactured cigarettes and smokeless tobacco were mostly obtained from stores or shops, at 50.10% and 52.21% respectively. RYO cigarettes were mostly obtained from someone else, at 64.3%. Meanwhile, adolescents obtained shisha in some other way in 93.99% of all instances. Other smoked tobacco was acquired from street vendors 100% of the time.



	Manufa	Manufactured cigarette	yarette	Rol	Roll your own	Ę		Shisha		Other sr	Other smoked tobacco	pacco	Smok	Smokeless tobacco	acco
How the product was acquired	Total %	Boys %	Girls %	Total %	Boys %	Girls	Total %	Boys %	Girls	Total %	Total Boys Girls % %	Girls %	Total %	Boys %	Girls %
I bought them in a store or shop or a kiosk	50.10	92.99	,	16.59	20.27	1	,	1	1	,	1	1	52.21	47.55	59.00
I bought them from a street vendor	2.61	3.48	1	10.83	13.23	1	1	1		100	100	1	89.6	7.56 12.77	12.77
I bought them from a vending machine	1	1	1	1	1	1	1	1	1	1	-	1	1	1	'
I got them from someone else	38.87	23.31 85.66	85.66	64.30	59.46 86.09	86.09	6.01	100							
I got them some other way	8.41	8.41 6.45 14.33	14.33	8.28	7.04	7.04 13.91	93.99	1	69.06	1	1	1	4.26	4.63	3.73

Notes: % is the survey-weighted percentages. A dash indicates that there were no current users of the product who obtained them from the source.

Table 27 highlights how current users of HTPs and e-cigarettes obtained them in the previous 30 days. About 23% of adolescent current users acquired HTPs from a friend, ~22% bought for themselves (22.46%), and ~21% had someone else buy for them. For e-cigarettes, half of the adolescents reported having gotten them from a family member, 32.47% from a friend, and 22.32% from someone else.

Table 27: Access to HTPs and e-cigarettes

How the product was acquired	HTPs %	Electronic cigarette %
I bought them myself	22.46	11.81
I had someone else buy them for me	20.78	22.32
I asked someone to give me some	7.23	0
Someone offered them to me	7.68	21.80
I got them from a friend	23.12	32.47
I got them from a family member	0	50.50
I got them from a store or another person	12.10	0

Notes: % is the survey-weighted percentages. (Responses for this indicator are based on multiple responses from participants).

4.4.10 Place where tobacco and nicotine products were used in the past 30 days

Table 28 presents the place where current users used tobacco and nicotine products in the last 30 days. Most adolescents reported having used the products at home, that is, 46.7%, 50.51%, 73.1%, and 48.6% for manufactured cigarettes, shisha, smokeless tobacco, and e-cigarettes respectively. RYO cigarettes were used mainly in public spaces (at 33.51%). HTPs were used last at a friend's place (53.4%), and for other smoked tobacco products, at school (72.4%).

Table 28: Place where tobacco and nicotine products were used in the past 30 days

			Tobacco p	roducts			Nicotine p	roducts
Location product was used	Manufactured cigarette	RYO	Shisha	HTPs	Other smoked tobacco	Smokeless tobacco	E-cigarette	Nicotine pouches
	%	%	%	%	%	%	%	%
At home	46.75	30.78	50.51	14.20	27.60	73.10	48.65	100
At a restaurant	0	0	0	0	0	0	0	0
At a bar or club	2.61	4.21	0	0	0	0.89	0	0
At school	8.65	0	0	14.50	72.40	2.36	0	0
At work	4.19	0	6.01	0	0	0	0	0
At friends' houses	22.19	30.61	35.45	53.41	0	10.92	13.59	0
In public spaces (parks, shopping centers, street corners)	10.78	33.51	8.02	17.89	0	5.30	12.76	0
Other	4.84	0.89	0	0	0	7.43	25.01	0

Notes: % is the survey-weighted percentages. (Responses for this indicator are based on multiple responses from participants).

4.4.11 Pack size of manufactured cigarettes bought during the last purchase

Table 29 presents the pack size of manufactured cigarettes purchased by adolescents the last time they bought the products. Most adolescents who had ever purchased manufactured cigarettes (78.73%) reported purchasing single sticks, while smaller proportions purchased cigarette packs, with 8.93% buying packs of 10 and 3.80% buying packs of 20. Only 0.28% purchased a pack of 30 and 8.25% reported buying other quantities.

Table 29: Pack size of manufactured cigarettes bought in the last purchase

Quantity	% (95% CI)
Single sticks	78.73 (75.39, 81.72)
Pack of 10	8.93 (6.82, 11.61)
Pack of 20	3.80 (2.73, 5.27)
Pack of 30	0.28 (0.11, 0.72)
Other quantity	8.25 (6.52, 10.40)

Notes: % represents the survey-weighted percentage and 95% CI indicates the 95% confidence interval for weighted percentages. Adolescents who refused to answer or indicated that they had never purchased cigarettes were excluded from the analysis.

4.4.12 Sale of tobacco to adolescents

Table 30 presents adolescents who were denied purchase of tobacco or nicotine products due to age (among those who attempted to purchase the product). Across all the products, age-related purchase refusal was more commonly reported for RYO cigarettes and HTPs, at 11.14% and 10.59% respectively. Refusal was least common for nicotine products, namely e-cigarettes and nicotine pouches, at 5.37% and 6.06% respectively.

Table 30: Purchase refusal due to age among adolescents who tried to purchase the product

	Manufactured cigarettes	Roll- your- own	Shisha	Other smoked tobacco	HTPs	Smokeless tobacco	Electronic cigarettes	Nicotine pouches
	%	%	%	%	%	%	%	%
Yes, someone refused to sell me the product	8.74	11.14	10.16	7.43	10.59	6.54	5.37	6.06
No one refused to sell me the product	91.26	88.85	89.84	92.57	89.41	93.46	94.63	93.94

Notes: % is the survey-weighted percentage.

4.4.13 Use susceptibility and self-efficacy to resist tobacco and nicotine products among current non-users

Table 31 presents the use susceptibility of adolescents who were current non-users of tobacco products. Susceptibility is defined as the likelihood that a current non-user will use a product within the next year. Across the different tobacco products, less than 1% of the adolescents were susceptible to tobacco use within the next 12 months. More boys reported that they would use them within a year compared with girls.

Table 31: Use susceptibility of current non-smokers/users

	Cu	rrent non-users' susceptibil	ity
Product	Overall % (95% CI)	Boys % (95% CI)	Girls % (95% CI)
Manufactured cigarette	0.82 (0.04, 1.88)	0.84 (0.11, 5.73)	-
Roll your own	0.58 (0.24, 1.41)	0.93 (0.31, 2.75)	0.26 (0.07, 0.89)
Shisha	0.83 (0.52, 1.31)	1.12 (0.59, 2.12)	0.55 (0.33, 0.91)
Other smoked tobacco products	0.20 (0.10, 0.41)	0.28 (0.12, 0.69)	0.13 (0.04, 0.39)
HTPs	0.20 (0.11, 0.38)	0.22 (0.09, 0.54)	0.17 (0.07, 0.45)
Smokeless tobacco products	0.25 (0.12, 0.54)	0.44 (0.19, 1.04)	0.08 (0.03, 0.23)
Electronic cigarette	0.54 (0.35, 0.83)	0.69 (0.39, 1.22)	0.40 (0.20, 0.79)
Nicotine pouches	0.32 (0.19, 0.52)	0.43 (0.22, 0.83)	0.21 (0.10, 0.46)

Notes: % is the survey-weighted percentages and 95% (CI) is the 95% confidence interval for the weighted percentages.

4.4.14 Self-efficacy to resist tobacco and nicotine products among current non-users

Table 32 shows the proportion of current non-users who had low self-efficacy to resist the use of tobacco and nicotine products. Low self-efficacy was defined as responding definitely/probably yes to one of the following questions: 'if one of your best friends were to offer you [product], would you smoke/use it?' or 'if one of your close relatives were to offer you a [product], would you smoke/use it?' Among adolescents who were current non-users, 1.70% reported that they would probably or definitely use shisha, 1.50% would use manufactured cigarettes, and 1.08% would use RYO cigarettes if offered by friends or close relatives. Boys were more likely than girls to use the products if offered by a friend/close relative.

Table 32: Self-efficacy of current non-smokers/users

	Current	non-users with low self	-efficacy
Product	Total % (95% CI)	Boys % (95% CI)	Girls % (95% CI)
Manufactured cigarette	1.50 (0.91, 2.46)	2.23 (1.19, 4.16)	0.81 (0.43, 1.51)
Roll your own	1.08 (0.64, 1.80)	1.67 (0.87, 3.18)	0.52 (0.25, 1.06)
Shisha	1.70 (1.29, 2.24)	2.12 (1.43, 3.13)	1.30 (0.90, 1.89)
Other smoked tobacco products	0.42 (0.27, 0.65)	0.55 (0.30, 1.00)	0.29 (0.15, 0.57)
HTPs	0.82 (0.58, 1.18)	1.00 (0.60, 1.54)	0.69 (0.40, 1.20)
Smokeless tobacco products	0.51 (0.32, 0.82)	0.74 (0.40, 1.35)	0.29 (0.13, 0.64)
Electronic cigarette	0.75 (0.54, 1.05)	0.94 (0.60, 1.45)	0.58 (0.34, 1.00)
Nicotine pouches	0.79 (0.53, 1.17)	1.04 (0.59, 1.82)	0.54 (0.33, 0.90)

Notes: % is the survey-weighted percentages and 95% (CI) is the 95% confidence interval for the weighted percentages.

4.5 Factors associated with tobacco use

4.5.1 Factors associated with the use of any tobacco, smoked, and smokeless products

Table 33 presents the factors associated with current use of any tobacco, smoked, and smokeless product. At the individual level, boys were two times more likely than girls to use any tobacco product (aOR: 2.03, 95% CI: 1.29, 3.20). Adolescents aged 13-15 years had the highest likelihood of any tobacco use compared with those aged 10-12 (aOR: 2.23, 95% CI: 1.30, 3.83). Similarly, adolescents aged 16-17 years had a higher likelihood of any tobacco use compared with those aged 10-12 years. At the household level, having a family member who uses any tobacco product significantly increased the likelihood of adolescent tobacco use (aOR: 16.75, 95% CI: 9.82, 28.56) compared with households without any tobacco user. Additionally, adolescents from households where the household head had higher levels of education (primary, secondary, tertiary, or higher education) were less likely to use tobacco compared with those from households where the head had no formal education. At the environmental level, witnessing someone smoking inside school buildings (aOR: 2.73, 95% CI: 1.38,5.41) increased the likelihood of tobacco use. Similarly, observing smoking behavior at home by either mother, father, sibling, or any other person (aOR: 2.41, 95% CI: 1.24,4.70) was strongly associated with tobacco use.

For smoked tobacco products, boys were more than twice as likely than girls to use smoked tobacco (aOR: 2.78, 95% CI: 1.38, 5.62). Older adolescents aged 16-17 years had significantly higher odds of using smoked tobacco compared with their younger counterparts aged 10-12 years (aOR: 3.89, 95% CI: 1.57, 9.63). Adolescents enrolled in school were less likely to use smoked tobacco compared with those out of school (aOR: 0.23 (0.11, 0.48). At the household level, family tobacco use was a strong predictor, with adolescents from households where smoked tobacco was being used by a family member(s) being nine times more likely to use smoked tobacco (aOR: 9.08, 95% CI: 4.97, 16.56). Additionally, adolescents from male-headed houses were 1.92 times more likely to use smoked tobacco than those from female-headed households. At the environmental level, witnessing someone smoking inside school buildings (aOR: 3.33, 95% CI: 1.43, 7.75) was a significant factor increasing the likelihood of smoked tobacco use.

For smokeless tobacco, boys had significantly higher odds of using smokeless tobacco compared with girls (aOR: 1.92, 95% CI: 1.09–3.39). Adolescents aged 13-15 years were 2.17 times more likely to use smokeless tobacco than those aged 10-12 years. Being currently in school was associated with a lower likelihood of smokeless tobacco use than being out-of-school (aOR: 0.02, 95% CI: 0.01, 0.04). At the household level, having a family member who smoked increased the odds of smokeless tobacco use (aOR: 40.13, 95% CI: 15.85, 101.67). Adolescents from the poor, middle, rich, and richest wealth quintiles were less likely to use smokeless tobacco compared to those in the poorest wealth quintile. At the environmental level, adolescents residing in rural areas were nearly three times more likely to use smokeless tobacco than their urban counterparts.

Table 33: Factors associated with	n the use of tobacco produc	ts	
	Any Tobacco aOR (95% CI) n = 5,805	Smoked tobacco aOR (95% CI) n = 6,431	Smokeless tobacco aOR (95% CI) n = 5,805
Individual-level			
Sex			
Girl (ref)			
Boy	2.03 (1.29, 3.20)	2.78 (1.38, 5.62)	1.92 (1.09, 3.39)
Age group			
10-12 years (ref)			
13 - 15 years	2.23 (1.30, 3.83)	2.09 (0.91, 4.83)	2.17 (1.16, 4.08)
16 - 17 years	2.11 (1.09, 4.07)	3.89 (1.57, 9.63)	0.56 (0.21, 1.55)
Current schooling status			
No (ref)			
Yes	0.60 (0.38, 1.09)	0.23 (0.11, 0.48)	0.02 (0.01, 0.04)
Work engagement			
No work (ref)			
Employed	1.43 (0.66, 3.11)	2.25 (0.88, 5.75)	1.09 (0.35, 3.38)
Self-employed	1.62 (0.61, 4.28)	3.37 (1.06, 10.74)	1.38 (0.42, 4.56)
Both parents alive			
No (ref)			
Yes	1.05 (0.55, 2.01)	1.14 (0.44, 2.96)	1.55 (0.63, 3.81)
Household-level	aOR (95% CI)	aOR (95% CI)	aOR (95% CI)
Family smoking status			
No (ref)			
Yes	16.75 (9.82, 28.56)	9.08 (4.97, 16.56)	40.13 (15.85, 101.67)
Household head sex			
Female (ref)			
Male	1.71 (1.08, 2.72)	1.92 (1.06, 3.48)	1.44 (0.81, 2.57)
Education of Household Head			
No education (ref)			
Primary	0.22 (0.12, 0.40)	-	-
Secondary	0.25 (0.12, 0.52)	-	-
Technical/vocational	0.08 (0.09, 0.62)	-	-
Higher/Tertiary	0.11 (0.01, 0.91)	-	-
Wealth quintile			
Poorest (ref)			
Poor	0.31 (0.13, 0.70)	0.51 (0.22, 1.21)	0.10 (0.03, 0.27)
Middle	0.43 (0.19, 0.98)	0.39 (0.15, 1.02)	0.10 (0.04, 0.29)
Rich	0.90 (0.45, 1.80)	0.79 (0.37, 1.70)	0.13 (0.05, 0.34)
Richest	0.58 (0.26, 1.32)	0.57 (0.24, 1.35)	0.03 (0.00, 0.21)
Household size	0.89 (0.78, 1.03)	0.90 (0.75, 1.09)	1.06 (0.91, 1.23)
Environmental level	aOR (95% CI)	aOR (95% CI)	aOR (95% CI)

aOR (95% CI) n = 5,805	aOR (95% CI) n = 6,431	Smokeless tobacco aOR (95% CI) n = 5,805
in school buildings		
2.73 (1.38, 5.41)	3.33 (1.43, 7.75)	-
0.66 (0.34, 1.29)	0.52 (0.22, 1.19)	2.90 (1.47, 5.71)
re at home		
2.41 (1.24, 4.70)	1.72 (0.71, 4.15)	-
	2.73 (1.38, 5.41) 0.66 (0.34, 1.29) re at home	in school buildings 2.73 (1.38, 5.41) 3.33 (1.43, 7.75) 0.66 (0.34, 1.29) 0.52 (0.22, 1.19) re at home 2.41 (1.24, 4.70) 1.72 (0.71, 4.15)

4.5.2 Second-hand smoke exposure

Table 34 presents the proportions of adolescents exposed to second-hand tobacco smoke in various locations. The proportion of adolescents who reported second-hand tobacco smoke exposure at home was 22.31% and at school was 10.52%. Exposure in outdoor public places such as parks, playgrounds, or streets was 6.99%. In indoor public places such as restaurants or public transportation, this exposure was 6.58%.

Table 34: Second-hand smoke exposure

Exposure to second-hand smoke	Total	Boys	Girls	Total adolescents
Smoke	% (95% CI)	% (95% CI)	% (95% CI)	
Exposure at home	22.31 (20.80, 23.89)	24.37 (22.37, 26.49)	20.35 (18.50, 22.33)	6435
In enclosed public places	6.58 (5.62, 7.69)	6.89 (5.57, 8.49)	6.28 (5.24, 7.52)	6435
Outdoor public places	6.99 (6.10, 8.00)	7.23 (6.07, 8.61)	6.77 (5.66, 8.06)	6435
School	10.52 (9.33, 11.84)	11.48 (9.79, 13.42)	9.61 (8.33, 11.06)	6435

Notes: % is the survey-weighted percentages and 95% CI is the 95% Confidence Interval for the weighted percentages.

Table 35 reports the frequency of observing smoking at home by family members or others. Majority of adolescents never saw their father, mother, brother/sister, or another person smoking in the home. Only a small proportion reported frequent or occasional exposure, with 5.03% observing their father smoking about every day, 0.39% observing their mother smoking daily, and 8.88 % observing another person smoking daily. Moreover, some adolescents indicated they did not have or did not see these individuals, ranging from 1-9.74% for another person to 45.20% for siblings.

Table 35: Frequency of exposure to smoking at home

Frequency of exposure	Father %	Mother %	Brother/Sister %	Another person %
Don't have/don't see these people	30.30	27.92	45.20	19.74
About every day	5.03	0.39	0.63	8.88
Sometimes	5.78	0.82	1.96	25.16
Never	58.89	70.87	52.20	46.21

Notes: % is the survey-weighted percentages.

Table 36 presents the frequency of adolescents observing teachers smoking at school 30 days prior to the survey. Majority of adolescents (91.02%) reported never observing teachers smoking at school. A small proportion reported frequent exposure, with 1.98% observing teachers smoking every day and 7.00% observing them sometimes.

 Table 36: Frequency of observing teachers smoking at school

Teacher smoking at school	%	
About every day	1.98	
Sometimes	7.00	
Never	91.02	
Notes: % is the survey-weighted percentages.		

4.6 Knowledge, attitudes, and perceptions

4.6.1 Knowledge

Table 37 presents adolescents' level of knowledge about tobacco myths and health effects among those who had ever used any tobacco and/or nicotine product. About 44% of adolescents who had ever used tobacco and/or nicotine products demonstrated high knowledge of tobacco myths and health effects. A larger proportion of adolescents in school (54.38%) displayed higher knowledge levels compared with those who were out of school (10.83%). Majority of the adolescents residing in urban areas (59.27%) had high knowledge compared with those residing in rural areas (39.43%).

Table 37: Knowledge of tobacco myths and health effects

	Level of knowledge				
Background characteristics	No knowledge	Low knowledge	Moderate knowledge	High knowledge	Weighted sample
	%	%	%	%	
Overall	2.24	28.08	25.69	43.98	6435
Sex					
Boys	1.67	27.29	27.15	43.90	3133
Girls	3.38	29.69	22.77	44.16	3302
Age group					
10 - 12 years	2.41	25.54	31.14	40.91	2569
13 - 15 years	2.89	34.47	19.59	43.05	2421
16 - 17 years	1.13	20.92	29.90	48.05	1445
Residence type					
Rural	2.78	33.02	24.76	39.43	4930
Urban	0.41	11.50	28.82	59.27	1504
Wealth quintile					
Poorest	3.44	44.51	26.22	25.82	1598
Poor	1.17	34.55	27.48	36.79	1337
Middle	-	8.71	15.43	75.86	1283
Rich	1.08	14.88	24.94	59.10	1161
Richest	2.86	4.79	32.41	59.94	1056
Current school status					
In School	0.90	16.26	28.46	54.38	5853
Out of school	2.00	26.45	60.72	10.83	579

Notes: % is the survey-weighted percentages.

Table 38 presents the results on adolescents' prior awareness of HTPs, e-cigarettes, and nicotine pouches. Awareness of e-cigarettes was the highest, with 16.92% of adolescents reporting having seen or heard about them before. This was followed by HTPs, with 14.18% of adolescents being aware of these devices. Nicotine pouches had the lowest level of awareness, with 10.74% of adolescents reporting prior knowledge of this product.

Table 38: Prior awareness of novel tobacco and nicotine products	Table 38:	Prior awareness of	of novel tobacco	and nicotine	products
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Product	%		
HTPs	14.18 (12.91, 15.56)		
Electronic cigarettes	16.92 (15.32, 18.66)		
Nicotine pouches	10.74 (9.68, 11.90)		

Notes: % is the survey-weighted percentage.

4.6.2 Adolescents' attitudes/perceptions about tobacco products

Table 39 presents adolescents' attitudes/perceptions of tobacco products among those who had ever used any tobacco or nicotine product. About 64% of adolescents showed negative attitudes/perceptions toward tobacco products, while 36% had a positive attitude/perception about tobacco products.

Table 39: Attitudes/perceptions about tobacco products

De alcono un el abana et anietico	Negative attitudes/perceptions	Positive attitudes/perceptions
Background characteristics	%	%
Overall	63.43	36.56
Sex		
Boys	60.97	39.03
Girls	68.39	31.61
Age group		
10-12 years	81.09	18.91
13-15 years	60.54	39.46
16-17 years	52.27	47.72
Residence		
Rural	66.78	33.22
Urban	52.23	47.77
Wealth quintile		
Poorest	72.87	27.13
Poor	52.37	47.63
Middle	75.27	24.73
Rich	52.32	47.68
Richest	47.36	52.64
Current school status		
In school	62.73	37.27
Out of school	55.79	44.21

4.6.3 Adolescents who might use tobacco-branded products

Table 40 presents the percentage of adolescents who might use or wear items featuring tobacco products or images among those who had ever used any tobacco or nicotine product. Approximately 42% of adolescents indicated they might use or wear something displaying a tobacco company name, product, or picture. A slightly higher percentage of boys (41.91%) than girls (40.77%) reported they might wear something with a tobacco logo. Similarly, a higher percentage of adolescents aged 13 to 15 (45.34%), adolescents residing in urban areas (46.25%), adolescents in the richest quintile (47.57%), and adolescents out of school (55.76%) reported that they might wear something with a tobacco logo compared with their respective counterparts.

Table 40: Adolescents who might use or wear something that has a tobacco company or product name or picture on it

Background characteristics	Might use branded product %		
Overall	41.53		
Sex			
Boys	41.91		
Girls	40.77		
Age group			
10-12 years	32.21		
13-15 years	45.34		
16-17 years	44.08		
Residence			
Rural	40.13		
Urban	46.25		
Wealth quintile			
Poorest	39.09		
Poor	45.94		
Middle	37.17		
Rich	47.57		
Richest	41.60		
Current school status			
In school	39.61		
Out of school	45.25		
Notes: % is the survey-weighted percentage.			

Table 41 presents adolescents' beliefs about the addictiveness of smoking and the dangers of second-hand smoke among those who had ever used any tobacco or nicotine product. Approximately 35% of adolescents believe that once someone starts smoking, it is difficult to quit. This belief was more common among adolescents aged 13-15 (42.48%), adolescents from rural areas (37.76%), adolescents in the poorest wealth quintile (56.26%), and adolescents out of school (37.05%) compared with those aged 10-12 (29.57%), those residing in urban areas (24.42%), those from the richest wealth quintile (13.19%), and those in school (19.68%).

A large majority (86.67%) of adolescents who had ever used any form of tobacco or nicotine product believed that second-hand smoke poses health risks. This belief was particularly prevalent among those in urban areas and those currently attending school compared with their rural and out-of-school counterparts.

Out of school

Notes: % is the survey-weighted percentage

Table 41: Belief about the addictiveness of smoking and beliefs about the dangers of second-hand smoke **Belief that once someone starts** Beliefs that second-hand smoke **Background characteristics** smoking, it is difficult to quit poses health risks % % Overall 34.70 86.67 Sex Boys 34.36 86.60 35.37 Girls 86.81 Age group 10-12 years 92.84 29.57 13-15 years 42.48 83.54 16-17 years 27.74 85.86 Residence Rural 37.76 85.53 Urban 24.42 90.49 Wealth quintile Poorest 56.26 82.26 24.05 75.01 Poor Middle 10.95 92.84 22.53 Rich 95.18 Richest 13.19 94.68 **Current school status** In school 19.68 91.54

63.65

77.26

4.7 Tobacco marketing at points of sale and in media platforms

Table 42 presents the percent of adolescents who saw any tobacco marketing at points of sale as well as those who saw someone using tobacco on television, videos, or movies during the 30 days preceding the survey (among the adolescents who had ever used any tobacco and/or nicotine products). About 10% of adolescents reported seeing tobacco advertisements at points of sale, with a higher percentage among girls than boys.

Additionally, a higher proportion of those residing in urban areas (24.86%), in the richest wealth quintile (23.17%), and out of school (19.06%) reported exposure to tobacco marketing at points of sale compared with those in rural areas, those from the poorest wealth quintile, and those attending school.

In addition, 39.74% of the adolescents reported seeing someone using tobacco on television or movies with the majority being boys (41.92%), adolescents aged 16-17 years (63.93%), adolescents residing in urban areas (72.62%), adolescents from the richest wealth quintile (71.67%), and adolescents in school (55.39%).

Table 42: Proportion of adolescents who saw tobacco marketing at the point of sale and in media platforms (television, videos, or movies)

Seeing tobacco marketing at point of sale	Seeing people using tobacco on television, videos, or movies	
%	%	
10.46	39.74	
9.88	41.92	
11.62	35.34	
3.09	17.89	
10.13	36.27	
17.40	63.93	
6.17	29.4	
24.86	72.62	
2.24	8.69	
7.67	71.30	
13.30	43.57	
20.76	66.44	
23.17	71.67	
14.05	55.39	
3.53	9.55	
	% 10.46 9.88 11.62 3.09 10.13 17.40 6.17 24.86 2.24 7.67 13.30 20.76 23.17	

Table 43 presents adolescents' exposure to anti-tobacco messages among those who had ever used any tobacco and/or nicotine products. About 76% of adolescents reported hearing anti-tobacco messages through traditional media channels such as television, radio, internet, billboards, posters, newspapers, magazines, and movies, while exposure to anti-tobacco messages on social media platforms was 81.31%.

Table 43:	Exposure to	anti-tobacco	messages.	by media	platform
	Exposure to	ariti tobacco	11100000900,	ey incara	piacioiiii

Media source	%
Media: television, radio, internet, billboards, posters, newspapers, magazines, movies	75.79
Social media: Instagram, Facebook, WhatsApp, TikTok, Twitter, LinkedIn, Pinterest, YouTube, and Snapchat	81.31

Notes: % is the survey-weighted percentage.

4.8 Tobacco cessation

Table 44 shows current users' intention to quit tobacco use within the next 12 months. Overall, about 45% of adolescents who were current users reported that they intended to quit tobacco within the next 12 months. The intention to quit was highest among boys (52.10%), those in the 13 to 15 age group (51.63%), those who lived in urban areas (61.31%), and those in school (61.65%). Nearly the same proportion of adolescents in the middle (71.28%) and the richest wealth quintile (71.30%) intended to quit tobacco use within a year.

Table 44: Proportion of current tobacco users who reported intending to quit within the next 12 months

Tobacco cessation within a year					
Background characteristic	% (95% CI)				
Overall	44.54 (34.34, 55.27)				
Sex					
Boys	52.10 (30.09, 73.32)				
Girls	31.84 (13.78, 57.72)				
Age group					
10-12 years	29.01 (15.27, 48.10)				
13-15 years	51.63 (40.29, 62.80)				
16-17 years	42.27 (25.60, 60.90)				
Residence					
Rural	41.63 (30.22, 54.01)				
Urban	61.31 (31.14, 84.74)				
Wealth quintile					
Poorest	38.28 (24.22, 54.61)				
Poor	47.46 (21.41, 74.97)				
Middle	71.28 (34.55, 92.11)				
Rich	53.31 (29.76, 75.47)				
Richest	71.30 (35.93, 91.67)				
Current school status					
In school	61.65 (44.18, 76.56)				
Out of school	34.90 (22.18, 50.22)				
Notes: % is the survey-weighted percentage					

Table 45 shows cessation reasons among adolescents who tried to quit using all tobacco products the last time they tried to quit. The most reported reasons for cessation were 'to improve my health' (58.38%) followed by 'because my family doesn't like it' (19.56%). More boys (20.62%) than girls (16.71%) tried to quit tobacco use due to family disapproval. The most cited reason for boys is to improve their health (61.37%) and because their family doesn't like it (20.62%).

Table 45: Cessation reasons

Constinue	Total	Boys	Girls
Cessation reasons	%	%	%
To improve my health	58.38	61.37	50.31
To save money	4.97	5.3	3.09
Because my family doesn't like it	19.56	20.62	16.71
Because my friends do not like it	1.44	1.46	1.41
Others	15.64	10.88	28.48

Notes: % is the weighted percentages.

Discussion

Summary of findings

Findings from this nationally representative household survey showed that ever use and current use prevalence of any tobacco and/or nicotine product in Kenya was 6.46% and 2.52%, respectively, in 2024. The ever use and current use prevalence of any tobacco product was 6.20% and 2.47%, respectively. For smoked tobacco products, the ever use prevalence was 3.54% and the current use prevalence was 1.03%, while for smokeless tobacco products, the prevalence was 3.36% (ever use) and 1.72% (current use). The ever use and current use of any nicotine product was 0.56% and 0.10%, respectively. The key factors associated with increased to bacco use included being a boy, being of older age, and having a family member or relative who used tobacco in the home. On the other hand, having a household head with a high level of education reduced the likelihood of tobacco use. These findings provide valuable insights that can inform targeted interventions and policies aimed at reducing adolescent tobacco and nicotine consumption.

Prevalence of tobacco and nicotine use

The ever use (6.2%) and current use (2.5%) prevalence rates for tobacco use in this survey were similar to the ever use (6.0%) and current use (3.2%) prevalence rates reported in a 2019 study conducted by NACADA among primary school children aged eight to 20 years (NACADA & KIPPRA, 2019). The ever use (7.1%) and current use (3.6%) prevalence for adolescents aged 13 to 15 years in this survey was lower than the ever use (25.6%) and current use (9.9%) prevalence reported among the same age group in the 2013 GYTS report (GYTS Kenya, 2013). The current use prevalence among adolescents aged 13 to 15 years was also lower than the global prevalence of about 12% (WHO, 2021).

The drop in tobacco use among adolescents can be attributed to the adoption and implementation of tobacco control measures in the Tobacco Control Act 2007 and subsequent regulations in 2014. There are several factors that have had a particular impact on adolescent tobacco use in Kenya. These include the high compliance with the ban on TAPS, with Kenya being acknowledged globally as having attained the highest level of achievement in this area (ITC Project, 2021; WHO, 2021). In addition, progressive increases in tobacco taxation measures between 2015 and 2022 significantly decreased the affordability of cigarettes in Kenya (Drope et al., 2024). Moreover, Kenya has made tremendous efforts to integrate modules on drug and substance abuse, including the harmful effects of tobacco use, into the national school curriculum. This has been especially important as majority of adolescents in the country

Ever use

prevalence of any tobacco and/or nicotine product in Kenya was 6.46%, in 2024.

Current use

prevalence of any tobacco and/or nicotine product in Kenya was 2.52%, in 2024.



Some studies have shown that adolescents are particularly vulnerable before the age of 15 and likely to experiment with substances as they enter adolescence

are in school - a possible effect of Kenya's free primary and secondary education, along with the initiative to transition 100% of learners from primary to secondary schools. Indeed, our findings showed that out-of-school adolescents had higher prevalence rates for both ever and current use of tobacco and nicotine products.

A study conducted across 53 African countries using GYTS data showed that the current use prevalence for smokeless tobacco (4.1%) in East Africa (Pokothoane et al., 2025) was lower (1.7%) than what was found in the current survey. The results from this survey showed that the prevalence of smoked tobacco products such as shisha, other smoked products, and HTPs was low. Additionally, there was a link between the use of shisha and peer influence. A report by NACADA revealed that about half of university students reported that shisha was easily accessible (NACADA, 2024). Although the prevalence of nicotine products (e-cigarettes and nicotine pouches) might seem low, their usage is of particular concern, especially among adolescents, because they contain a high concentration of nicotine and a combination of harmful substances (Ashraf et al., 2024; eClinicalMedicine, 2022). A study that explored the portrayal of e-cigarettes in African media showed that 50% of the articles reviewed presented the use of the product in a positive way, with many health authorities cited as lacking a unified stance against its use (Ngoma & Adebisi, 2023). Nicotine pouches are also a fairly new product to the Kenyan market, which may explain their low prevalence. However, the tobacco industry has been tactfully marketing nicotine products as a safer option to conventional cigarettes and using social media influencers to boost the product visibility, especially among young people (Ashraf et al., 2024; Davies & Chapman, 2021).

Factors associated with use

The results from this survey were consistent with other studies conducted in Kenya and SSA that showed that boys had a significantly higher likelihood of using tobacco products than girls (Agaku et al., 2024; Magitta, 2018; Onoh et al., 2023). This pattern was observed across various types of tobacco products, including smoked tobacco, cigarettes (both manufactured and RYO), and smokeless tobacco. Studies suggest that there are social and cultural factors that influence how the use of tobacco and nicotine products is perceived and accepted between males and females (Agaku et al., 2024; Mdege et al., 2024). However, for shisha, the survey results showed that girls had higher use rates than boys. This may be attributed to shisha smoking being viewed as more socially acceptable for females compared to other tobacco products (Dadipoor et al., 2019; Mdege et al., 2024; NACADA, 2014).

The observed association between older age and increased tobacco use aligns with other studies that show a rising risk of tobacco and substance use as adolescents gain more independence (Das et al., 2016; Mwenda et al., 2015; Urrutia-Pereira et al., 2017). Some studies have shown that adolescents are particularly vulnerable before the age of 15 and likely to experiment with substances as they enter adolescence (Fagbule et al., 2021; Xing et al., 2022). Notably, the survey results showed that across all age groups, less than half of the adolescents had a high level of knowledge about tobacco myths and health effects. Certain studies have revealed that few adolescents had correct knowledge about the dangers of tobacco use (Huong et al., 2016) and the harmful effects of smoking besides lung cancer (Elton-Marshall et al., 2018). Furthermore, our findings showed that only 54.4% of adolescents in school had a high level of knowledge about tobacco myths and health effects. This is especially concerning considering that content on drug and substance abuse has been incorporated into the Kenyan school curriculum.

Other findings

The results also highlight an alarming early average age of initiation of tobacco use (11 years), with manufactured and RYO cigarettes being initiated as early as six and five years, respectively. These findings align with the initiation ages reported in other studies (Bhaskar et al., 2016; Tobacco Control Board [TCB], 2022; Urrutia-Pereira et al., 2017; Wang et al., 2017) and are even lower than those reported in the 2015 STEPS survey (Ngaruiya et al., 2018). This raises significant concerns about early exposure and the potential for long-term addiction (Sharp & Chen, 2019). The survey findings also revealed that only 44% of adolescents who used tobacco intended to quit, which is lower than what was reported in the Tobacco, Alcohol, Drugs, and Substance Abuse Survey (TADSAS) report where 70% of Kenyan adults aged 15-65 years intended to quit smoking (TCB, 2022). Low quit intentions among adolescents are worrying because their brains are still developing, thus use of tobacco or nicotine products can lead to cognitive impairment and psychological disorders (Castro et al., 2023; Goriounova & Mansvelder, 2012; Yuan et al., 2015).

Adolescents in urban areas showed a higher prevalence of nicotine products compared with their rural counterparts. This is likely due to the greater availability of nicotine products and more frequent exposure to advertising in urban settings (Gaiha et al., 2023). In Kenya, the sale of e-cigarettes is not regulated. Such products are often sold online or at retail shops which are more accessible to those who live in urban areas.

Moreover, despite the law prohibiting the sale of tobacco to those under 18 years old, the survey results showed that majority of adolescents who tried to purchase any kind of tobacco product reported that they were not denied purchase because of their age. Likewise, about 79% of adolescents who had purchased manufactured cigarettes reported purchasing single sticks despite the ban on the sale of single stick cigarettes. Furthermore, adolescents reported that they primarily accessed manufactured cigarettes and smokeless tobacco from stores/shops. These results indicate a need for stronger enforcement of the provisions in the Tobacco Control Act banning sales to minors, sales of single sticks, advertising at points of sale, and sales to underage individuals. Additionally, it creates an opportunity to regulate and restrict tobacco and nicotine products at points of sale.

Regarding second-hand smoke exposure, the adolescents exposed to second-hand smoke at home (23%) in this survey was higher than the 11% reported in the TADSAS report (TCB, 2022). The findings from this survey also showed that a few adolescents (11%) were exposed at school. This indicates the need for more sensitization of parents and teachers about the impact of their smoking on adolescent children and the importance of positive role modelling.



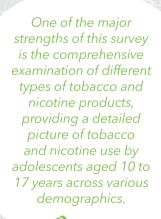
One of the major strengths of this survey is the comprehensive examination of different types of tobacco and nicotine products, providing a detailed picture of tobacco and nicotine use by adolescents aged 10 to 17 years across various demographics. Another strength of the study was that we managed to enroll 96% of the sampled households, and 99% of sampled adolescents completed the survey, suggesting high acceptability of the survey in the participating communities. However, adolescents who were homeless and lived in institutions were not included (as the survey only included those in conventional households). Moreover, as the survey was conducted during the short school holidays, we may have underestimated the current use prevalence of products since adolescents may have had less access or used the product less in the preceding 30 days. The reliance on self-reported data may introduce social desirability bias where adolescents might misreport their tobacco use. To mitigate this problem, interviewers ensured that adolescents were interviewed in private and, in case of any interference, the interview was stopped until privacy was reestablished. Interviewers also took adolescents through the assenting process and reassured them of confidentiality.

5.2 Key opportunities, challenges, and lessons learnt during implementation

Key stakeholders from the MoH, KNBS, and civil society organizations in the tobacco control and youth space were involved throughout the survey. The continuous engagements strengthened the ownership and trust of the survey results. Additionally, working closely with KNBS ensured the survey procedures were aligned as much as possible with the standards adopted at a national level. Information leaflets on the harms of tobacco and nicotine use were distributed to adolescents after the interviews were completed. This created a unique opportunity to raise awareness within the communities.

Lessons were also learned from the challenges that arose during data collection. For example, the rains experienced during the data collections months resulted in unexpected heavy floods. This meant that the field teams sometimes had to stop data collection activities for a day or two until the water levels started to drop. Therefore, it is important that survey teams budget time appropriately and put in place risk mitigation strategies. However, this also meant that adolescents were home for a longer period as school opening dates were postponed by nearly two weeks. This survey showed that approximately 9% of our sample were out-of-school adolescents, against a backdrop of 7.8% out-of-school adolescents among the general population of adolescents (KNBS, UNICEF, & UNFPA, 2024). Therefore, it demonstrated that household surveys can effectively reach and include out-of-school adolescents, which is a population often not captured in other surveys.

In the very few instances where parents wanted to be present during the adolescent's interview, field interviewers went through the consent process again with the parents, giving examples of some of the questions in the questionnaire and ensuring that the parents understood the importance of privacy. Additionally, to coordinate field activities across the 16 counties, the use of daily validation methods, consistency checks, and communication platforms like WhatsApp helped address issues promptly and improve the overall quality of the survey data.





5.3 Recommendations

Adolescent exposure to tobacco and nicotine must be systematically curtailed through comprehensive, cross-cutting strategies that integrate legal enforcement with community awareness initiatives. The findings are useful in informing public health policy, and the following recommendations are proposed:

Institute legal reforms: Robust legal measures are essential to prevent adolescents from accessing and handling tobacco and nicotine products. The survey findings highlight the need to amend the Tobacco Control Act of 2007 and other associated legislation. An amendment will be needed to incorporate a multi-faceted dimension that will eliminate the use of tobacco and nicotine among adolescents. Specifically, there is a need to impose clearer restrictions on the sale of tobacco products to minors. This includes regulating points of sale to reduce easy accessibility (such as requiring retailers to obtain licenses to sell tobacco and nicotine products). Secondly, the existing policies should expand their scope to include provisions that regulate nicotine products, including their sale, use, advertising, promotion, sponsorship, and packaging and labelling.

Therefore:

- Parliament should enact laws to restrict points of sale for tobacco and nicotine products.
- O Parliament should enact laws to prevent further penetration of new and emerging tobacco and nicotine products such as HTPs, e-cigarettes, and nicotine pouches by banning their manufacture, importation, sale, and use.
- Commit to strengthening enforcement measures: Those mandated to enforce tobacco control measures should strengthen implementation of the existing tobacco control laws, especially the ban on marketing at points of sale, age verification before sales, and sales to minors. This effort should include stricter monitoring of compliance with the ban on the sale of tobacco and nicotine products to minors, increased regulation of advertising and promotion, and stronger penalties for violations. For instance, considering that the sale, use, promotion, distribution, and advertisement of shisha is banned in Kenya, enforcement needs to be strengthened given the availability of the product. Additionally, restrictions on flavored tobacco and nicotine products need to be strengthened, considering that the industry is increasingly using attractive packaging and flavors to attract youth (Cruz et al., 2019). Attention should also be given to strengthening prevention and control of the use of nicotine products in urban areas and preventing penetration to rural areas, especially as the market is expected to keep growing (Statista, 2024). Law enforcement agencies should be adequately trained and resourced to conduct regular inspections and crack down on illicit trade. Additionally, multi-sectoral collaboration between health authorities, police, and community organizations should be prioritized to ensure comprehensive enforcement. There is strong evidence to suggest that enforcement programs targeting reduced sale of cigarettes to minors leads to a reduction of smoking rates among adolescents (DiFranza, 2012).
- Sustain and enhance school-based programs: Stakeholders should implement school programs that focus on building skills to recognize and resist negative influences. Additionally, they should review the current content of the curriculum to increase the knowledge level, harmful use of the products, and pay particular attention to age-inclusive content. Media and technological equipment have shown to be effective tools in reducing tobacco use among adolescents; as such, they should be leveraged continuously in schools (Bafunno et al., 2019). The KICD in the Ministry of Education should utilize the school curriculum to provide inclusive, gender-specific information on tobacco and nicotine use to students. The Directorate of Quality Assurance and Standards in the Ministry of Education should further enforce child-friendly environments in schools to ensure they are 100% tobacco and nicotine free and enhance guidance and counselling in learning institutions. Additionally, the Ministry of Education together with the MoH and county governments should increase access to cessation services by strengthening guidance and counselling in schools to offer brief cessation interventions.

- Focus on impactful awareness creation: All relevant stakeholders should prioritize impactful awareness creation to prevent and reduce adolescent tobacco and nicotine use. This should involve the development and implementation of inclusive, age-appropriate educational campaigns that highlight the health risks of tobacco and nicotine products. Schools, communities, and digital platforms should be leveraged to disseminate accurate information, using interactive and engaging methods to effectively reach young people. Additionally, parents, teachers, and community leaders should be equipped with the knowledge and tools to educate adolescents on the dangers of tobacco and nicotine use. The MoH and county governments should also run awareness campaigns focusing on adolescents from rural areas and low-income households as well as those out of school, with an emphasis on the risks associated with tobacco and nicotine use.
- Improve multisectoral coordination: Tobacco control stakeholders should work toward creating a system that enhances information and resource sharing to ensure that adolescents are protected. The various child protection programs and policies established by various statutes in Kenya (including the Public Health Act, Basic Education Act of 2013, the Children Act of 2022, the KICD Act of 2013, and national and county-level health laws) need to be harmonized and ensure synergy. Additionally, the State Department of Youth Affairs and Creative Economy in the Ministry of Youth Affairs, Creative Environments, and Sports should facilitate adolescent engagement in tobacco control by supporting adolescent-led projects that aim to prevent tobacco and nicotine use within their communities. The MoH in conjunction with NACADA, the Ministry of Education, and county governments should build the capacity of caregivers in parental monitoring and positive role modelling to reduce exposure of children to second-hand smoke within the home. Inclusive interventions are also needed to ensure out-of-school adolescents are reached and supported. Community-level youth advocacy platforms, such as empowerment programs by peer leaders, have been proven to be effective for out-of-school adolescents (Arora et al., 2024). Therefore, such advocacy platforms should be used to encourage out-of-school adolescents to enroll or return to school, so that they take advantage of the programs within the school curriculum on drug and substance abuse.
- **Comprehensively integrate research in tobacco control efforts:** Future research should prioritize qualitative studies to explore the underlying reasons behind the high prevalence of tobacco and nicotine products, the high proportion of users within certain counties, the various access points for products (including nicotine products and banned substances such as shisha), the demographic differences in product use, and the influence of cultural, social, and environmental factors. Adolescent tobacco and nicotine use data should also be collected every five years to track trends over time and pinpoint the emergence of new products in the market. Additionally, future and follow up research should endeavor to collect tobacco and nicotine prevalence at all the 47 counties in Kenya. This is inportant to be able to get all county-specific estimates for improved policy and decision making at the county levels.

06 Conclusions

This survey highlights the state of tobacco and nicotine use among adolescents in Kenya. There are significant variations in product use across different demographics, with peer and family influences playing a substantive role in adolescent use of these products. The findings also show that boys and older adolescents are at significantly higher risk of using tobacco and nicotine products. The factors associated with the use of tobacco were being a boy, being older in age, having a family member who uses tobacco, observing someone smoking inside school buildings, and being exposed to second-hand smoke at home. Conversely, higher levels of education of the household head were a protective factor. These findings emphasize the urgent need to action recommendations to curb adolescent tobacco and nicotine use, including implementation of legal reforms, stricter enforcement of tobacco control policies, enhancement of public awareness campaigns, improvement to multisectoral collaboration and research, and formulation of inclusive prevention programs (including schoolbased programs and access to adolescent-friendly cessation services). Strengthening these measures will be essential in protecting the health and wellbeing of Kenya's youth and reducing the long-term burden of tobacco-related diseases

The factors associated with the use of tobacco were being a boy, being older in age, having a family member who uses tobacco, observing someone smoking inside school buildings, and being exposed to second-hand smoke at home.



07 References

Agaku, I. T., Sulentic, R., Dragicevic, A., Njie, G., Jones, C. K., Odani, S., Tsafa, T., Gwar, J., Vardavas, C. I., & Ayo-Yusuf, O. (2024). Gender differences in use of cigarette and non-cigarette tobacco products among adolescents aged 13-15 years in 20 African countries. Tobacco Induced Diseases, 22, 10.18332/tid/169753. https://doi.org/10.18332/TID/169753

Arora, M., Bassi, S., Bahl, D., Thapliyal, N., Kumar, D., Pemde, H. K., & Rizvi, Z. A. (2024). Implementation outcomes of peer education programme comparing state-led and NGO-facilitated models in two Indian states: qualitative findings. Frontiers in Public Health, 12, 1434959. https://doi.org/10.3389/FPUBH.2024.1434959/BIBTEX

Ashraf, A., Rahim, F., Gitali, J., & Muthemba, T. (2024). Countering Big Tobacco's Influence in Kenya to Protect Young Africans. BMJ Global Health.

Åstrøm, A. N., & Ogwell, E. A. (2004). Use of tobacco in Kenya: Sources of information, beliefs and attitudes toward tobacco control measures among primary school students. Journal of Adolescent Health, 35(3), 234-237. https://doi.org/10.1016/j.jadohealth.2004.02.017

Bafunno, D., Catino, A., Lamorgese, V., Pizzutilo, P., Di Lauro, A., Petrillo, P., Lapadula, V., Mastrandrea, A., Ricci, D., & Galetta, D. (2019). Tobacco control in Europe: A review of campaign strategies for teenagers and adults. Critical Reviews in Oncology/Hematology, 138, 139-147. https://doi.org/10.1016/J. CRITREVONC.2019.01.022

Bhaskar, R. K., Sah, M. N., Gaurav, K., Bhaskar, S. C., Singh, R., Yadav, M. K., & Ojha, S. (2016). Prevalence and correlates of tobacco use among adolescents in the schools of Kalaiya, Nepal: a cross-sectional questionnaire based study. Tobacco Induced Diseases, 14(1), 11. https://doi.org/10.1186/s12971-016-0075-x

Brown, J. L., Rosen, D., Carmona, M. G., Parra, N., Hurley, M., & Cohen, J. E. (2023). Spinning a global web: tactics used by Big Tobacco to attract children at tobacco points-of-sale. Tobacco Control, 32(5), 645-651. https://doi.org/10.1136/TOBACCOCONTROL-2021-057095

Campaign for Tobacco-Free Kids. (2025). Kenya Legal Summary | Tobacco Control Laws. https://www.tobaccocontrollaws.org/legislation/kenya/summary

Castro, E. M., Lotfipour, S., & Leslie, F. M. (2023). Nicotine on the developing brain. Pharmacological Research, 190, 106716. https://doi.org/10.1016/j.phrs.2023.106716

CDC National Center for Health Statistics. (2021). Creating Domain Specific Disability Indicators Using the WG Short Set on Functioning (WG-SS) (Stata). http://www.washingtongroup-disability.com/.

Chapman, S., & Freeman, B. (2009). Regulating the tobacco retail environment: beyond reducing sales to minors. Tobacco Control, 18(6), 496-501. https://doi.org/10.1136/TC.2009.031724

Chido-Amajuoyi, O. G., Fueta, P., & Mantey, D. (2021). Age at Smoking Initiation and Prevalence of Cigarette Use Among Youths in Sub-Saharan Africa, 2014-2017. JAMA Network Open, 4(5). https://doi.org/10.1001/JAMANETWORKOPEN.2021.8060

Cruz, T. B., Rose, S. W., Lienemann, B. A., Byron, M. J., Meissner, H. I., Baezconde-Garbanati, L., Huang, L. L., Carroll, D. M., Soto, C., & Unger, J. B. (2019). Pro-tobacco marketing and anti-tobacco campaigns aimed at vulnerable populations: A review of the literature. Tobacco Induced Diseases, 17(September), 68. https://doi.org/10.18332/TID/111397

Dadipoor, S., Kok, G., Aghamolaei, T., Heyrani, A., Ghaffari, M., & Ghanbarnezhad, A. (2019). Factors associated with hookah smoking among women: A systematic review. Tobacco Prevention & Cessation, 5(August), 26. https://doi.org/10.18332/TPC/110586

Das, J. K., Salam, R. A., Arshad, A., Finkelstein, Y., & Bhutta, Z. A. (2016). Interventions for Adolescent Substance Abuse: An Overview of Systematic Reviews. Journal of Adolescent Health, 59(4), S61–S75. https://doi.org/10.1016/j.jadohealth.2016.06.021

Davies, R., & Chapman, M. (2021). Tobacco giant bets £1bn on influencers to boost "more lung-friendly" sales. The Guardian.

DiFranza, J. R. (2012). Which interventions against the sale of tobacco to minors can be expected to reduce smoking? Tobacco Control, 21(4), 436-442. https://doi.org/10.1136/TOBACCOCONTROL-2011-050145

Drope, J., Oo, S. T., Lee, H., Dorokhina, M., Guerrero-López, C., Rodriguez-Iglesias, G., Mugosa, A., Mirza, M., Bontu, A., & Chaloupka, F. (2024). Tobacconomics Cigarette Tax Scorecard 3rd edition. www.tobacconomics. org

eClinicalMedicine. (2022). E-cigarette use among adolescents: Are we doing enough? EClinicalMedicine, 50, 101623. https://doi.org/10.1016/j.eclinm.2022.101623

Elton-Marshall, T., Wijesingha, R., Kennedy, R. D., & Hammond, D. (2018). Disparities in knowledge about the health effects of smoking among adolescents following the release of new pictorial health warning labels. Preventive Medicine, 111, 358-365. https://doi.org/10.1016/J.YPMED.2017.11.025

Fagbule, O. F., Kanmodi, K. K., Samuel, V. O., Isola, T. O., Aliemeke, E. O., Ogbeide, M. E., Ogunniyi, K. E., Nnyanzi, L. A., Adewuyi, H. O., Lawal, F. B., & Ibiyemi, O. (2021). Prevalence and Predictors of Cigarette Smoking and Alcohol use among Secondary School Students in Nigeria. Annals of Ibadan Postgraduate Medicine, 19(2), 112. https://pmc.ncbi.nlm.nih.gov/articles/PMC9484315/

Gaiha, S. M., Lin, C., Lempert, L. K., & Halpern-Felsher, B. (2023). Use, marketing, and appeal of oral nicotine products among adolescents, young adults, and adults. Addictive Behaviors, 140, 107632. https://doi.org/10.1016/j.addbeh.2023.107632

Goriounova, N. A., & Mansvelder, H. D. (2012). Short- and Long-Term Consequences of Nicotine Exposure during Adolescence for Prefrontal Cortex Neuronal Network Function. Cold Spring Harbor Perspectives in Medicine, 2(12), a012120-a012120. https://doi.org/10.1101/cshperspect.a012120

Green, L. W., Richard, L., & Potvin, L. (1996). Ecological foundations of health promotion. American Journal of Health Promotion, 10(4), 270-281. https://doi.org/10.4278/0890-1171-10.4.270

GYTS Kenya. (2013). GYTS Kenya: Fact Sheet 2013.

Huong, N. T., Kien, N. T., Giang, K. B., Minh, H. Van, Hai, P. T., Huyen, D. T., Khue, L. N., Linh, N. T., & Nga, P. T. Q. (2016). Knowledge and Attitude Towards Tobacco Smoking among 13-15 Year-Old School Children in Viet Nam - Findings from GYTS 2014. Asian Pacific Journal of Cancer Prevention, 17. https://journal.waocp.org/article_46052_8a0110095093d361179881d8f05a80cf.pdf

ITC Project. (2021). The International Tobacco Control Policy Evaluation Project ITC Kenya National Report Ministry of Health.

Kamenderi, M., Mutetei, J., Okioma, V., Kimani, S., Kanana, F., & Kahiu, C. (2019). Status of Drugs and Substance Abuse in Kenya. African Journal of Alcohol and Drug Abuse, 1, 54-59. https://www.researchgate.net/publication/345805433_Status_of_Drugs_and_Substance_Abuse_in_Kenya

Keller-Hamilton, B. (2019). Application of the Social Ecological Model to Reduce Tobacco Use Among Adolescents . https://etd.ohiolink.edu/acprod/odb_etd/ws/send_file/send?accession=osu156838652081847&disposition=inline

KNBS. (2015). 2015/16 Kenya Integrated Household Budget Survey (KIHBS) Progress Report October 2015 - Kenya National Bureau of Statistics. https://www.knbs.or.ke/2015-16-kenya-integrated-household-budget-survey-kihbs-progress-report-october-2015/?option=com_phocadownload&view=category&download=797:2015-16-kenya-integrated-household-budget-survey-kihbs-progress-report-october-2015&id=129:2015-16-kenya-integrated-household-budget-survey-kihbs<emid=599

KNBS. (2019). 2019 Kenya Population and Housing Census: Distribution of Population by Age and Sex (Vol. 3). http://www.knbs.or.ke

KNBS, UNICEF, & UNFPA. (2024). Situation of Adolescents in Kenya 2024 An Infographic Snapshot.

Magitta, N. F. (2018). Epidemiology of tobacco use and dependence in Sub-Saharan Africa: A systematic review. Journal of Pulmonology and Clinical Research, 2(1), 9-15.

Mdege, N. D., Ekpo, R., Ogolla, S., Ali, S. J., Camara, A., & Mugweni, E. (2024). Reasons for shisha smoking: Findings from a mixed methods study among adult shisha smokers in Nigeria. PLOS Global Public Health, 4(2), e0002853. https://doi.org/10.1371/JOURNAL.PGPH.0002853

Meher, B. K., Das, L., & Mohanty, A. K. (2012). Social, Environmental, Cognitive, and Genetic Influences on the Use of Tobacco Among Youth. Asian Journal of Clinical Pediatrics and Neonatology, 2(3), 1-2. https://www.ncbi.nlm.nih.gov/books/NBK99236/

Ministry of Labour and Social Protection of Kenya, D. of C. S. (2019). Violence against Children in Kenya: Findings from a National Survey, 2019. https://www.knbs.or.ke/wp-content/uploads/2023/09/Violence-Against-Children-Survey-Report-June-2020.pdf

Mwenda, Samwel. N., Wanjoya, A. K., & Waititu, A. G. (2015). Analysis of Tobacco Smoking Patterns in Kenya Using the Multinomial Logit Model. American Journal of Theoretical and Applied Statistics, 4(3), 89. https://doi.org/10.11648/j.ajtas.20150403.14

NACADA. (2014). Survey to establish the Status of Shisha and Kuber use in the Country.

NACADA. (2024). Status of Drugs and Substance use among university students in Kenya.

NACADA, & KIPPRA. (2019). Status of Drugs and Substance Abuse among Primary School Pupils in Kenya.

National AIDS and STI Control Programme. (2013). Kenya AIDS Indicator Survey 2012: Preliminary Report.

Nazir, M. A., Al-Ansari, A., Abbasi, N., & Almas, K. (2019). Global Prevalence of Tobacco Use in Adolescents and Its Adverse Oral Health Consequences. Open Access Macedonian Journal of Medical Sciences, 7(21), 3659–3666. https://doi.org/10.3889/OAMJMS.2019.542

Ngaruiya, C., Abubakar, H., Kiptui, D., Kendagor, A., Ntakuka, M. W., Nyakundi, P., & Gathecha, G. (2018). Tobacco use and its determinants in the 2015 Kenya WHO STEPS survey. BMC Public Health, 18(S3), 1223. https://doi.org/10.1186/s12889-018-6058-5

Ngoma, C., & Adebisi, Y. A. (2023). Exploring electronic cigarette portrayals: a content and thematic analysis of African online news coverage. Substance Abuse Treatment, Prevention, and Policy, 18(1), 50. https://doi.org/10.1186/s13011-023-00559-6

Onoh, I., Dairo, M. D., Balogun, M. S., & Fawole, O. (2023). Prevalence and Predictors of Tobacco Use Among Adolescents in Ibadan, Nigeria. Preventing Chronic Disease, 20, E40. https://doi.org/10.5888/PCD20.220234

Pokothoane, R., Agerfa, T. G., Miderho, C. C., & Mdege, N. D. (2025). Prevalence and determinants of tobacco use among school-going adolescents in 53 African countries: Evidence from the Global Youth Tobacco Survey. Addictive Behaviors Reports, 21, 100581. https://doi.org/10.1016/J.ABREP.2024.100581

Sharp, B. M., & Chen, H. (2019). Neurogenetic determinants and mechanisms of addiction to nicotine and smoked tobacco. European Journal of Neuroscience, 50(3), 2164-2179. https://doi.org/10.1111/ejn.14171

Statista. (2023). World population by age and region 2023. https://www.statista.com/statistics/265759/world-population-by-age-and-region/

Statista. (2024). E-Cigarettes - Kenya. Statista.

Struik, L. L., Dow-Fleisner, S., Belliveau, M., Thompson, D., & Janke, R. (2020). Tactics for Drawing Youth to Vaping: Content Analysis of Electronic Cigarette Advertisements. Journal of Medical Internet Research, 22(8), e18943. https://doi.org/10.2196/18943

TCB. (2022). National Survey on the Status of Tobacco use in Kenya. https://mail.google.com/mail/u/0/#search/rach/KtbxLvhRccBtszXVwZRQSxvzzcrfDMZXpL?projector=1&messagePartId=0.1

Tepping, B. J. (1968). Elementary Sampling Theory, Taro Yamane. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967. Pp. x-405. Journal of the American Statistical Association, 63(322), 728-730. https://doi.org/10.1080/01621459.1968.11009297

The Tobacco Control (Amendment) Bill (Senate Bills No. 35 of 2024) (2024).

UN. (2008). Studies in Methods: Designing Household Survey Samples: Practical Guidelines: Vol. F (98th ed.).

Urrutia-Pereira, M., Oliano, V. J., Aranda, C. S., Mallol, J., & Solé, D. (2017). Prevalence and factors associated with smoking among adolescents. Jornal de Pediatria, 93(3), 230-237. https://doi.org/10.1016/j.jped.2016.07.003

U.S National Cancer Institute, & WHO. (2016). The Economics of Tobacco and Tobacco Control (U.S. Department of Health and Human Services, National Institutes of Health, & National Cancer Institute, Eds.). ational Cancer Institute Tobacco Control Monograph 21.

Veeranki, S. P., John, R. M., Ibrahim, A., Pillendla, D., Thrasher, J. F., Owusu, D., Ouma, A. E. O., & Mamudu, H. M. (2017). Age of smoking initiation among adolescents in Africa. International Journal of Public Health, 62(1), 63-72. https://doi.org/10.1007/S00038-016-0888-7/METRICS

Wang, L., Mamudu, H. M., Collins, C., & Wang, Y. (2017). High prevalence of tobacco use and exposure to secondhand tobacco smoke among adolescents in low- and middle-income countries. Annals of Translational Medicine, 5(S1), S4-S4. https://doi.org/10.21037/atm.2017.03.37

WHO. (2020). Tobacco fact sheet.

WHO. (2021). WHO Report on the Global Tobacco Epidemic: Addressing new and emerging products fresh and alive.

WHO. (2023a). Fact Sheet: Tobacco. https://www.who.int/news-room/fact-sheets/detail/tobacco

WHO. (2023b). Types of Nicotine and Tobacco Products. https://www.who.int/docs/librariesprovider2/default-document-library/2-types-of-tobacco-and-nicotine-products.pdf?sfvrsn=88bee704_3

WHO AFRO. (2017). Types of Tobacco Use. https://www.afro.who.int/sites/default/files/2017-09/Chapter%201.%20Types%20of%20tobacco%20use_1.pdf

World Health Organization. (2021). WHO global report on trends in prevalence of tobacco use 2000-2025 fourth edition.

Xing, S., Zhao, M., Magnussen, C. G., & Xi, B. (2022). Proportion and trend in the age of cigarette smoking initiation among adolescent smoking experiencers aged 13-15 years in 148 countries/territories. Frontiers in Public Health, 10. https://doi.org/10.3389/fpubh.2022.1054842

Yuan, M., Cross, S. J., Loughlin, S. E., & Leslie, F. M. (2015). Nicotine and the adolescent brain. The Journal of Physiology, 593(16), 3397-3412. https://doi.org/10.1113/JP270492



Appendix 1: Advisory and Research Teams

Name	Organization	Role
Dr. Andrew Toro	MOH (DDSAC)	Technical Advisory
Anne Kendagor	MOH (DDSAC)	Technical Advisory
Pauline Achieng	MOH (DDSAC)	Technical Advisory
Samuel Kinyua	MOH (DDSAC)	Technical Advisory
Elias Nyaga	KNBS	Technical and Research Advisory
Edwin Metto	KNBS	Technical and Research Advisory
Jim Kirimi	KNBS	Technical and Research Advisory
Jackline Chepkorir	KNBS	Technical and Research Advisory
Dr Christine Wambugu	MOH (AHS)	Research Advisory Committee
Dr. Lydia Mucheru	KICD	Research Advisory Committee
Rosemary Chepkoech	KNBS	Research Advisory Committee
Elvina Majiwa	YIPAR	Research Advisory Committee
Fabian Oriri	IILA	Research Advisory Committee
Lyagamula Kisia	APHRC	Research Team
Samuel Iddi	APHRC	Research Team
Shukri Mohamed	APHRC	Research Team
Damazo Kadenge	APHRC	Research Team
Franklin Koech	APHRC	Research Team
James Kavai	APHRC	Research Team
Nelson Mbaya	APHRC	Research Team
Grace Kyule	APHRC	Research Team
Bosco Okumu	APHRC	Research Team
Terefe Gelibo Agerfa	DG	Research Team
Retselisitsoe Pokothoane	DG	Research Team
Josiane Djiofack Tsague	DG	Research Team
Noreen Dadirai Mdege	DG	Research Team
Rachel Kitonyo-Devotsu	DG	Programs Team
Winnie Awuor	DG	Programs Team

Appendix 2: Sample size formula

The formula for the sample size, nh, is given as:

$$n_h = \frac{(z^2)(r)(1-r)(f)(k)}{(p)(\check{n})(e^2)}$$

- *nh* is the sample size of households.
- z, level of confidence, is set at 1.96 for the 95% level of confidence.
- *r* is an estimate of the expected prevalence of tobacco use among adolescents. The global prevalence of tobacco use among adolescents according to GYTS (Nazir et al., 2019) is 19.33% overall (23.29% of male and 15.35% female). The estimate, 16.2%, was used as a proxy in this survey to enable us to get optimally sufficient numbers.
- *f* is the sample design effect assumed to be 2.0 (default value) since sampling will be conducted at a minimum of two stages.
- k is a multiplier required to account for the anticipated rate of non-response. For adult populations and in previous adolescent studies in Kenya, non-response has normally been estimated at 10% such that k = 1.1.
- p is the proportion of the adolescents in the total population. This was set at 20.45% according to the 2019 census.
- \check{n} is the number of young people aged 10 17 years per household. The average household size in Kenya was 3.9 members according to the 2019 census. This gives 0.8.
- e is the level of precision to be attained set at 20% of r such that e = 3.87% (preferred instead of the usual 5% for rare events with prevalence of less than 10%).

Taro Yamane's simplified formula for proportion with a population correction factor

$$n_0 = \frac{N}{1 + Ne^2}$$

Where;

- N represents the total number of counties in Kenya
- e is the sampling error (0.15).

Population correction factor.

$$n = \frac{n_o}{1 + \left(\frac{n_o - 1}{N}\right)}$$

Appendix 3: Supplementary Tables

Table 1: Proportions of ever and current use of any tobacco and/or nicotine product by county

Background characteristics	Ever use % (95% CI)	Current use % (95% CI)	Surveyed adolescents	Weighted sample	
Overall	6.46 (5.10, 8.15)	2.52 (1.55, 4.06)	6435	6435	
County					
Mombasa	4.01 (7.61, 18.54) **	0 ****	118	149	
Kilifi	4.89 (1.50, 14.82) **	2.21(0.34, 12.87) **	429	398	
Garissa	8.89 (4.42, 17.07) *	0.95 (0.20, 4.34) **	209	419	
Marsabit	1.70 (0.21, 12.25) **	0 ****	117	69	
Meru	5.23 (3.33, 8.11)	1.37 (0.57, 3.25) *	519	424	
Kitui	10.06 (3.82, 23.96) *	0.87 (0.20, 3.60) **	320	436	
Nyeri	8.15 (5.67, 11.58)	0.10 (0.34, 2.76) **	530	321	
Kirinyaga	6.07 (2.39, 14.58) *	1.73 (0.66, 4.43) *	405	270	
Turkana	21.54 (12.87, 33.79)	17.63 (9.65, 30.17)	319	564	
Trans Nzoia	4.56 (2.96, 6.97)	0.63 (0.22, 1.80) **	518	589	
Nandi	2.36 (1.19, 4.63) *	0.88 (0.29, 2.65) **	436	372	
Laikipia	4.81 (2.27, 9.93) *	0.19 (0.02, 1.49) **	342	273	
Busia	0.64 (0.26, 1.57) *	0.13 (0.02, 0.96) **	614	802	
Migori	4.24 (2.22, 7.96) *	2.14 (0.92, 4.91) *	554	603	
Nyamira	4.32 (2.31, 7.94)	1.61 (0.52, 4.84) *	259	357	
Nairobi	6.73 (4.58, 9.77)	1.36 (0.71, 2.59) *	748	382	

Notes: Refusals and "don't know" are not reported in the table. % is the survey-weighted percentage and 95% (CI) is the 95% Confidence Interval for weighted percentages. Missing confidence intervals are due to an insufficient number of observations within certain strata, even after collapsing some strata to increase sample size. * Indicates moderately unstable estimates with a RSE greater than 30% but not exceeding 50%, ** indicates unstable estimates with a RSE greater than 50, and **** signifies that the result should also be interpreted with caution, as we cannot assume that the prevalence in the population is exactly zero.

Table2: Average quantity of cigarettes or other smoked tobacco products smoked per day in the past 30 days

Background characteristics	Manufactured cigarette	RYO	Other smoked
	Mean (std. err)	Mean (std. err)	Mean (std. err)
Overall	0.55 (0.25)	0.24 (0.06)	0.28 (0.22)
Sex			
Boys	0.74 (0.32)	0.27 (0.06)	0.28 (0.22)
Girls	0.08 (0.04)	0.07 (0.01)	-
Age group			
10 - 12 years	0.22 (0.16)	0.15 (0.04)	-
13 - 15 years	0.34 (0.33)	0.21 (0.09)	0.83
16 - 17 years	0.71 (0.35)	0.32 (0.11)	0.07
Residence type			
Rural	0.60 (0.32)	0.22 (0.07)	-
Urban	0.36 (0.13)	0.30 (0.13)	0.28 (0.22)
Wealth quintile			
Poorest	0.25 (0.11)	0.22 (0.08)	-
Poor	2.37 (1.35)	0.39 (0.13)	0.83
Middle	0.18 (0.13)	0.07	
Rich	0.36 (0.13)	0.14 (0.04)	-
Richest	0.22 (0.14)	0.14 (0.05)	0.07
Current schooling status			
In School	0.44 (0.30)	0.21 (0.07)	0.28 (0.22)
Out of school	1.05 (0.32)	0.25 (0.11)	-

Notes: Estimates are based on survey-weighted means, with standard errors (Std. Err.) shown in parentheses. A dash (-) indicates categories with no current users of the product.

Table3: Average number of times/sessions shisha and smokeless tobacco product are used per day in the past 30 days

Background characteristics	Shisha	Smokeless tobacco	
	Mean (std. err)	Mean (std. err)	
Overall	0.06 (0.02)	0.70 (0.09)	
Sex			
Boys	0.04 (0.01)	0.42 (0.08)	
Girls	0.10 (0.06)	1.08 (0.10)	
Age group			
10 - 12 years		0.82 (0.23)	
13 - 15 years	0.20	0.73 (0.10)	
16 - 17 years	0.03	0.33 (0.13)	
Residence type			
Rural	-	0.74 (0.09)	
Urban	0.06 (0.022)	0.18 (0.10)	
Wealth quintile			
Poorest	0.07	0.79 (0.08)	
Poor	-	0.09 (0.03)	
Middle	-	0.14 (0.08)	
Rich	0.03	0.14 (0.04)	
Richest	0.20	0.27	
Current schooling status			
In School	0.6 (0.02)	0.25 (0.12)	
Out of school	-	0.82 (0.08)	

Notes: Estimates are based on survey-weighted means, with standard errors (Std. Err.) shown in parentheses. A dash (-) indicates categories with no current users of the product.

Appendix 4: Survey Questionnaires

HOUSEHOLD QUESTIONNAIRE

The household questionnaire will be administered to the consenting head of household or acting head of household. The household questionnaire collects information on demographics and socio-economic status.

BACKGROUND INFORMATION

No	QUESTIONS	CODING CATEGORIES
1	County	
II	Sub County	
Ш	Location	
IV	Sub location	
V	EA Number	
VI	Village Name	
VII	Geographical Location	1. Rural 2. Urban
VIII	Household Number	
IX	Start Time	
Χ	Date of Interview	
XI	Field Workers Name	

MODULE 1: HOUSEHOLD ROSTER

I would like to ask you questions about this household and the people who usually live here, starting with the head of the household.

LINE NO.	NAME	RELATIONSHIP TO HEAD OF HOUSEHOLD	What is (NAME'S) sex?	RESIDENCE	DISABILITY STATUS
HH101	HH102	HH103	HH104	HH105	HH106
	What is the name of the person?	What is the relationship of (PERSON) to the head of the household?	Is (PERSON): 1. male 2. female	Is (PERSON)here today; or, if not, did they sleep in the household the night before? (1 = Yes, 2 = No)	Is (PERSON) a: 1 = Person with difficulties 2 = Person with no difficulties

CODES FOR HH103: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = Head

07 = Parent-in-law

02 = Spouse/partner

08 = Brother or sister

03 = Son or daughter

09 = Other relative

04 = Son-in-law/ daughter-in-law

10 = Adopted/foster/ stepchild

05 = Grandchild

11 = not related

06 = Parent

-98 = don't know

-97=Refused

Age in completed Years	ELIGIBILITY (10-17 years)	IF AGE 10-17 YEA SURVIVORSHIP C BIOLOGICAL PAR)F	AN EMANCIPATED MINOR	MAIN INCOME	MARITAL STATUS [ASK IF AGE 15 OR OLDER]
HH107	HH108	HH109	HH110	HH111	HH112	HH113
How old is (PERSON)? IF 95 OR MORE, RECORD '95'	Eligible 10-17 years? (1=Yes, 2=No)	Is (PERSON) biological mother alive? (1 = Yes, 2 = No)	Is (PERSON) biological father alive?(1 = Yes, 2 = No)	Is (PERSON) an emancipated minor? (1 = Yes, 2 = No)		What is (PERSON)'s current marital status?

CODES FOR HH112: MAIN INCOME

= None

= Unestablished own business

= Established own business

= Informal casual

= Informal salaried

= Formal salaried

= Formal casual

= Rural Agriculture

= Urban Agriculture

= Other (specify)

-97=Refused

-98 = I don't know

CODES FOR HH113: CURRENT MARITAL STATUS

= Never married

= Widowed

= Married

-97 = Refusal to answer

03 = Living together

= Divorced

= Separated

EDUCATION	ELIGIBILITY (10-17 years)	HEALTH INSURANCE	ADDITIONAL HOUSEHOLD MEMBERS
HH114	HH115	HH116	HH117
What is the highest level of education that (PERSON) has attained?	What is the highest grade completed at that level?	Is (PERSON) covered by a health insurance scheme? 1 = Yes 2 = No	Are there any other people living in this household?

CODES FOR HH114: EDUCATION

= No education

= Primary

= Secondary

= Technical/Vocational

= Higher

-98 = Don't know

-97 = Refused

MODULE 2: HOUSEHOLD CHARACTERISTICS

I would like to ask you questions about the characteristics of this household.

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE
HH201	What is the main source of drinking water for members of your household?	PIPED WATER 1. Piped Into Dwelling 2. Piped To Yard/Plot 3. Public Tap/Standpipe 4. Tube Well Or Borehole DUG WELL 1. Protected Well 2. Unprotected Well WATER FROM SPRING 1. Protected Spring 2. Unprotected Spring 3. Rainwater 4. Tanker Truck 5. Cart With Small Tank 6. Surface Water (River/Dam/Lake/ Pond/Stream/Canal 7. Bottled Water 8. Irrigation Channel		DHS	
		96. Other(SPECIFY)			
HH202	What kind of toilet facility do members of your household usually use?	 Flush Or Pour Flush Toilet Traditional Pit Latrine Ventilated Improved Pit Latrine (Vip) Composting Toilet Bucket Toilet Hanging Toilet/Latrine No Facility/Bush/Field Other(SPECIFY) 	Code 7, 96 HH205	DHS	
HH203	Do you share this toilet facility with other households?	1. Yes 2. No	Code 2 HH205	DHS	
HH204	How many households use this toilet facility?	Households		DHS	
	FORE QUESTIONS HH2	205-HH219:			
HH205	Electricity?	1. Yes 2. No		DHS	
HH206	A radio?	1. Yes 2. No		DHS	
HH207	A television?	1. Yes 2. No		DHS	
HH208	A telephone/mobile telephone?	1. Yes 2. No		DHS	
HH209	A refrigerator?	1. Yes 2. No		DHS	
HH210	A freezer?	1. Yes 2. No		DHS	
HH211	A computer/laptop?	1. Yes 2. No		DHS	

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE
HH212	A stove?	1. Yes 2. No		DHS	
HH213	A microwave?	1. Yes 2. No		DHS	
HH214	Home internet connectivity?	1. Yes 2. No		DHS	
HH215	A wardrobe?	1. Yes 2. No		DHS	
HH216	A sofa?	1. Yes 2. No		DHS	
HH217	A bed?	1. Yes 2. No		DHS	
HH218	A table and chairs?	1. Yes 2. No		DHS	
HH219	Windows with glass?	1. Yes 2. No		DHS	
HH220	What type of fuel does your household mainly use for cooking?	 Electricity LPG/Natural Gas Biogas Paraffin / Kerosene Coal, Lignite Charcoal From Wood Firewood / Straw Dung No Food Cooked In Household Other_(Specify) 		DHS	
HH221	Is the cooking usually done in the house, in a separate building or outdoors?	 House Separate Building Outdoors 	Code 2, 3 -> H223	DHS	
HH222	Do you have a separate room which is used as a kitchen?	1. Yes 2. No		DHS	
HH223	MAIN MATERIAL OF FLOOR OBSERVE AND CHECK THE CORRECT ANSWER.	NATURAL FLOOR 1. Earth/Sand 2. Dung 3. Mud/Clay RUDIMENTARY FLOOR 1. Wood Planks 2. Palm/Bamboo FINISHED FLOOR 1. Parquet Or Polished Wood 2. Vinyl Or Asphalt Strip 3. Ceramic Tiles 4. Cement/Terrazzo 5. Carpet 96. Other(Specify)		DHS	

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE
HH224	MAIN MATERIAL OF THE ROOF OBSERVE AND CHECK THE CORRECT ANSWER.	NATURAL ROOFING 1. No Roof 2. Thatch/Palm Leaf/Grass 3. Dung/Mud 4. Sod RUDIMENTARY ROOFING 1. Rustic Mat 2. Wood Planks 3. Cardboard 4. Tin Cans 5. Palm/Bamboo 6. Sticks With Mud And Dung 7. Plastic/PVC FINISHED ROOFING 1. Corrugated Iron 2. Wood 3. Calamine/Cement Fiber 4. Asbestos Sheet 5. Concrete 6. Tiles (Ceramic/Brick/Etc.) 7. Roofing Shingles 8. Tin 9. Slate		DHS	
HH225	MAIN MATERIAL OF THE EXTERIOR WALLS OBSERVE AND CHECK THE CORRECT ANSWER.	96. Other_(Specify) NATURAL WALLS 1. No Walls 2. Cane/Palm/Trunks 3. Dirt RUDIMENTARY WALLS 1. Dung/Mud/Clay 2. Sticks With Mud/Clay/ Dung 3. Bamboo With Mud/Clay/ Dung 4. Stone With Mud 5. Carton 6. Reused Wood 7. Plywood 8. Cardboard 9. Uncovered Adobe FINISHED WALLS 1. Cement 2. Stone With Lime/Cement 3. Bricks 4. Cement Blocks 5. Wood Planks/Shingles 96. Other_(Specify)		DHS	
HH226a	How many rooms are in the household?	Number Of Rooms:		DHS	
HH226b	How many rooms are used for sleeping?	Number Of Rooms:		DHS	

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE
	FORE QUESTIONS HH2				
Does any me	mber of your household	own:			
HH227	A bicycle?	1. Yes 2. No		DHS	
HH228	A motorcycle or motor scooter?	1. Yes 2. No		DHS	
HH229	A Bajaj?	1. Yes 2. No		DHS	
HH230	A car or truck?	1. Yes 2. No		DHS	
HH231	A boat with a motor?	1. Yes 2. No		DHS	
HH232	A watch?	1. Yes 2. No		DHS	
HH233	An animal drawn cart?	1. Yes 2. No		DHS	
	FORE QUESTIONS HH2				
Does any me	mber of your household	own:			
HH234	Cows (Cattle)?	1. Yes 2. No		DHS	
HH235	Milk cows?	1. Yes 2. No		DHS	
HH236	Bulls?	1. Yes 2. No		DHS	
HH237	Goats/Sheep?	1. Yes 2. No		DHS	
HH238	Poultry (e.g., ducks, chickens)?	1. Yes 2. No		DHS	
HH239	Dogs?	1. Yes 2. No		DHS	
HH240	Other animals (camels, horses, donkeys)?	1. Yes 2. No		DHS	
HH241	Does any member of the household own any agricultural land?	1. Yes 2. No		DHS	
HH242	How many acres/ hectares of agricultural land do members of this household own?	Hectares_[] Acres [] Don't Know -8		DHS	
HH243	Does any member of this household have an active bank account?	1. Yes 2. No		DHS	

INDIVIDUAL QUESTIONNAIRE

The individual questionnaire will be administered to the selected eligible adolescent. The questionnaire collects information on individual characteristics and the use of tobacco and nicotine products.

MODULE 1: BACKGROUND INFORMATION

Section 1: Socio-demographic characteristics

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
GENDER101	Is the Respondent Male or Female?	Male = 1 Female = 2 Refused=-97		GENERAL	С
AGE102	How old were you at your last birthday?	Age in Completed Years don't Know Age = 98 Refused =- 97		ITC SUR- VEY	С
EVESCH103	Have you ever attended school?	Yes = 1 No = 2 Refused = -97	2 MONEY 107	PHIA, VACS, DHS	С
SCH104	Are you currently enrolled in school?	Yes = 1 No = 2 Refused = -97	2 MONEY 107	ICT-YATVS	С
SCHTYP105	What type of school are you currently attending?	Public/government = 1 Private for profit = 2 Private for non-profit = 3 International schools=4 Other (Specify) = 96 Refused =- 97			
CURGRD106	What grade are you in now?	Grade Refused = -97		GYTS, ICT-YATVS	С
MONEIY107	During an average week, how much money do you have that you can spend on yourself, however you want? [ADJUST CATEGORIES FOR SPECIFIC COUNTRY]	Amount of money in the local currency Refused = -97		GYTS	С
ETHNIC108	What is your ethnic/cultural / others] background? [ADJUST CATEGORIES FOR SPECIFIC COUNTRY]	[ADJUST CATEGORIES FOR SPECIFIC COUNTRY] OTHER = 96 SPECIFY: REFUSED = -97		STEPs	С

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
WORK109	At any time during the past 12 months did you engage in any work as an employee, or self-employed individual?	Employee=1 Self-employed=2 No work=3 Refused=-97		PHIA	С
RELIG110	What is your religious affiliation [ADJUST CATEGORIES FOR SPECIFIC COUNTRY]?	01. = No religion 02. = Christianity; 03. = Islam; 04. = Hinduism 96 = Other (Specify) Refused=-97			
MARITAL111	What is your current marital status? Would you say you are single, married, separated, divorced, or widowed?	01. = Never married 02. = Married 03. = Living together 04. = Divorced 05. = Separated 06. = Widowed 197 = Refusal to answerSingle 2. Married 3. Separated 4. Divorced 5. Widowed Refused=-97		GATS	

MODULE 1: BACKGROUND INFORMATION

Section 2: Functional Difficulties

Now I am going to ask you questions about difficulties you may have doing certain activities. I will ask about difficulties seeing, hearing, walking or climbing stairs, remembering or concentrating, self-care, and communication (expressive and receptive).

DIS101	Do you have difficulty seeing, even if wearing glasses? (VISION)	 No difficulty Some difficulty A lot of difficulty Cannot do entirely Refused=-97 	WGSS	С
DIS102	Do you have difficulty hearing, even if using a hearing aid? (HEARING)	 No difficulty Some difficulty A lot of difficulty Cannot do entirely Refused=-97 	WGSS	С
DIS103	Do you have difficulty walking or climbing steps? (MOBILITY)	 No difficulty Some difficulty A lot of difficulty Cannot do entirely Refused=-97 	WGSS	С

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
DIS104	Do you have difficulty remembering or concentrating? (COGNITION REMEMBERING)	 No difficulty Some difficulty A lot of difficulty Cannot do entirely Refused=-97 		WGSS	С
DIS105	Do you have difficulty with self-care (such as washing all over or dressing)? (SELF- CARE)	 No difficulty Some difficulty A lot of difficulty Cannot do entirely Refused=-97 		WGSS	С
DIS106	Using your usual language, do you have difficulty communicating, for example understanding or being understood? (COMMUNI- CATION)	O. No difficulty Some difficulty A lot of difficulty Cannot do entirely Refused=-97		WGSS	С

MODULE 2: MANUFACTURED/FACTORY- MADE CIGARETTES

The next section has questions that ask about smoking manufactured or factory-made cigarettes.

T201	Have you ever smoked manufactured cigarettes, even once or twice?? (USE SHOWCARD)?	Yes = 1 No = 2 Refused =- 97	Code 2, -97 T209	ICT-YATVS, GYTS, NYTS	С
T202	How old were you when you first smoked a manufactured cigarette?	Age in years Refused =-97			С

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
T203	When you first smoked manufactured cigarettes, why did you smoke them? (Select one or more)	A. A friend smoked them B. A family member smoked them C. They costed less than other tobacco products, such as e-cigarettes D. They were easier to get than other tobacco products, such as e-cigarettes E. I had seen people on TV, online, or in movies smoke them F. They are less harmful than other forms of tobacco, such as e-cigarettes G. I could use them to do tricks H. I was curious about them I. Because I felt anxious, stressed, or depressed J. To get a high or buzz K. Packaging looks nice L. Easy to hide M. To get social acceptance X. Other reason (specify:) Refused =-97		NYTS/ ITC-Survey	C
T204	Who were you with when you first smoked manufactured cigarettes?	A. Alone B. With one friend C. With more than one friend D. With a family member E. With more than one family member F. With a new acquaintance X. Others (specify)			
T205	During the past 30 days, on how many days did you smoke manufactured cigarettes?	days (0-30) Refused=-97	Code 0, -97 T209	ICT-YATVS, GYTS, NYTS	С

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
T206	During the past 30 days, on the days you smoked manufactured cigarettes, about how many manufactured cigarettes did you smoke per day? FW: A pack usually has 20 cigarettes in it (USE SHOWCARD)?	manufactured cigarettes per day Refused =-97 manufactured cigarettes per day Refused =-97	man- ufactured ciga- rettes per day Refused =-97	ICT-YAT- VS,NYTS	C
T207	The last time you smoked manufactured cigarettes during the past 30 days, how did you get them? (SELECT ONLY ONE RESPONSE)	 I bought them in a store or shop I bought them from a street vendor I bought them at a kiosk [COUNTRY-SPECIFIC] I bought them from a vending machine [COUNTRY-SPECIFIC] I got them from someone else I got them some other way, specify		GYTS	С
T208	The last time you smoked manufactured cigarettes, during the past 30 days, where did you smoke them?	 At home At a restaurant At a bar or club At school At work At friends' houses In public spaces (e.g. parks, shopping centers, street corners) Other. [Please specify] Refused =-97 			С
T209	During the past 30 days, did anyone refuse to sell you manufactured cigarettes because of your age?	 I did not try to buy manufactured cigarettes during the past 30 days. Yes, someone refused to sell me manufactured cigarettes because of my age. No one refused to sell me manufactured cigarettes because of my age.No, my age did not keep me from buying manufactured cigarettes. Refused =-97 		GYTS	C

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
T210	When was the last time you bought manufactured cigarettes?	 The last 30 days 2-3 months 4-6 months ago 7-12 months ago More than 12 months ago I have never bought manufactured cigarettes Refused =-97 	Code 6, -97 TN213		С
T211	The last time you bought manufactured cigarettes, did you buy them as single stick(s) or pack(s)?	 Single sticks Pack of 10 Pack of 20 Pack of 30 Any others (specify) Refused=-97 	Code -97 TN213		С
T212	The last time you bought manufactured cigarettes, how much money in total did you pay for the pack containing 10 cigarettes or 20 cigarettes, or for a single stick, or any other pack size?	Amount paid Refused =-97		NA- CANDA 2022-Ken- ya	С
T213	Do you think you will smoke manufactured cigarettes in the next 12 months?	 Definitely yes Probably yes Probably not Definitely not Refused =-97 		NYTS	С
T214	If one of your best friends were to offer you a manufac- tured cigarette, would you smoke it?	 Definitely yes Probably yes Probably not Definitely not Refused =-97 		NYTS	С
T215	If one of your close relatives were to offer you a manufac- tured cigarette, would you smoke it?	 Definitely yes Probably yes Probably not Definitely not Refused =-97 			С

MODULE 3: HAND-ROLLED/ROLL-YOUR-OWN (RYO) CIGARETTES

The next section has questions that ask about smoking hand-rolled or roll-your-own cigarettes. Whenever the question refers to hand-rolled cigarettes, remember that it is also referring to roll-your-own cigarettes

T301	Have you ever smoked hand-rolled cigarettes, even once or twice?	Yes = 1 No = 2 Refused =-97	Code 2, -97 T309	ICT-YATVS, GYTS, NYTS	С
	(USE SHOWCARD)?				

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
T302	How old were you when you first smoked a hand-rolled cigarette?	Age in years Refused =-97			С
T303	When you first smoked hand-rolled cigarettes, why did you smoke them? (Select one or more)	 A. A friend smoked them B. A family member smoked them C. They costed less than other tobacco products such as manufactured cigarettes D. They were easier to get than other tobacco products such as manufactured cigarettes E. I had seen people on TV, online, or in movies smoke them F. They are less harmful than other tobacco products such as manufactured cigarettes G. I could use them to do tricks H. I was curious about them I. Because I felt anxious, stressed, or depressed J. To get a high or buzz K. Packaging looked nice L. Easier to hide M. To get social acceptance X. Other reason (specify:) Refused=-97 		NYTS/ ITC-Survey	C
T304	Who were you with when you first smoked hand rolled cigarettes? (Multiple responses allowed)	 A. Alone B. With one friend C. With more than one friend D. With a family member E. With more than one family member F. With a new acquaintance X. Others (specify)			C
T305	During the past 30 days, on how many days did you smoke hand-rolled ciga- rettes?	days (0-30) Refused=-97	Code 0,-97 T309	ICT-YATVS, GYTS, NYTS	С

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
T306	During the past 30 days, on the days you smoked, about how many hand-rolled cigarettes did you smoke per day?	hand-rolled cigarettes daily Refused=-97		ICT-YATVS	С
T307	The last time you smoked hand-rolled cigarettes during the past 30 days, how did you get them? (SELECT ONLY ONE RESPONSE)	 I bought them in a store or shop I bought them from a street vendor I bought them at a kiosk [COUNTRY-SPECIFIC] I bought them from a vending machine [COUNTRY-SPECIFIC] I got them from someone else I got them some other way, specify		GYTS	C
T308	The last time you smoked hand-rolled cigarettes, during the past 30 days, where did you smoke them?	 At home At a restaurant At a bar or club At school At work At friends' houses In public spaces (e.g. parks, shopping centers, street corners) Other. [Please specify] Refused=-97 			С
T309	During the past 30 days, did anyone refuse to sell you hand-rolled cigarettes because of your age?	 I did not try to buy handrolled cigarettes during the past 30 days. Yes, someone refused to sell me hand-rolled cigarettes because of my age. No one refused to sell me hand-rolled cigarettes because of my ageNo, my age did not keep me from buying hand rolled cigarettes. Refused=-97 		GYTS	C

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
T310	When was the last time you bought hand-rolled cigarettes?	 The last 30 days 2-3 months 4-6 months ago 7-12 months ago More than 12 months ago I have never bought hand-rolled cigarettes Refused=-97 	Code 6, -97 TN313		С
T311	The last time you bought hand-rolled cigarettes, what pack size (or how much) did you buy?	(Pack size/ Amount/ Weight) Refused=-97			С
T312	The last time you bought hand-rolled cigarettes, how much money in total did you pay?	(Amount) Refused=-97		NA- CANDA 2022-Ken- ya	С
T313	Do you think you will smoke hand-rolled cigarettes in the next 12 months?	 Definitely yes Probably yes Probably not Definitely not Refused=-97 		NYTS	С
T314	If one of your best friends were to offer you a hand- rolled cigarette, would you smoke it?	 Definitely yes Probably yes Probably not Definitely not Refused=-97 		NYTS	С
T315	If one of your close relatives were to offer you a hand- rolled cigarette, would you smoke it?	 Definitely yes Probably yes Probably not Definitely not Refused=-97 			С

MODULE 4: SHISHA, WATERPIPE, OR HOOKAH

The next section has questions that ask about shisha smoking. Shisha is also known as hookah or waterpipe. Whenever the question refers to shisha, remember it is also referring to hookah or waterpipe.

T401	Have you ever smoked shisha, even one or two puffs?? (USE SHOWCARD)?	Yes = 1 No = 2 Refused = -97	Code 2, -97 T411	GYTS, NYTS	С
T402	How old were you when you first smoked shisha?	Age in years Refused=-97		GYTS, NYTS	С

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
T403	When you first smoked a shisha, why did you smoke it? (Select one or more)	A. A friend smoked it B. A family member smoked it C. To try to quit using cigarettes D. It costed less than cigarettes E. It was easier to get than cigarettes F. I had seen people on TV, online, or in movies smoke it G. It is less harmful than cigarettes H. Smoking shisha may be less harmful to people around me than smoking cigarettes I. It was available in flavors, such as menthol, mint, candy, fruit, or chocolate J. I could smoke it unnoticed at home or at school K. I could use it to do tricks L. I was curious about it M. Because I felt anxious, stressed, or depressed N. To get a high or buzz O. Packaging looked nice P. To get social acceptance Q. I could smoke it in places where I can't smoke cigarettes R. To cut down the number of cigarettes I smoke 96. Other reason		NYTS/ ITC-Survey	C
T404	Who were you with when you first smoked shisha? (Multiple responses allowed)	A. Alone B. With one friend C. With more than one friend D. With a family member E. With more than one family member F. With a new acquaintance X.Others (specify)			C
T405	During the past 30 days, on how many days did you smoke shisha?	days (0-30) Refused=-97	Code 0, -97 T411	GYTS, NYTS	С

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
T406	During the past 30 days, on the days you smoked shisha, about how many shisha ses- sions did you participate in on a typical shisha smoking day? (USE SHOWCARD)?	shisha sessions on a typical shisha smoking day Refused=-97		GATS	С
T407	The last time you smoked shisha during the past 30 days, how did you get it?	1. I bought it in a store or shop 2. I bought it from a street vendor 3. I bought it at a kiosk [COUNTRY-SPECIFIC] 4. I bought it from a vending machine [COUNTRY-SPECIFIC] 5. I got it from someone else 6. I bought it from a restaurant/bar/club 96. I got it some other way, specify Refused=-97			C
T408	Was any of the shisha that you smoked in the past 30 days flavored to taste like menthol, mint, clove or spice, alcoholic drinks, candy, fruit, chocolate, or any other flavor?	Yes = 1 No = 2 Refused =-97		NYTS	C
T409	Was any of the shisha that you smoked in the past 30 days mixed with other drugs such as bhang/marijuana?	Yes = 1 No = 2 Refused = -97			С
T410	The last time you smoked shisha during the past 30 days, where did you smoke it?	 At home At a restaurant At a bar or club At school At work At friends' houses In public spaces (e.g. parks, shopping centers, street corners) Other. [Please specify] Refused=-97 		Nigeria survey, GYTS	C

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION-
T411	During the past 30 days, did anyone refuse to sell you shisha because of your age?	 I did not try to buy shisha during the past 30 days. Yes, someone refused to sell me shisha because of my age. No one refused to sell me shisha because of my age.No, my age did not keep me from buying shisha. Refused=-97 		GYTS	C
T412	When was the last time you bought shisha?	 The last 30 days 2-3 months 4-6 months ago 7-12 months ago More than 12 months ago I have never bought shisha Refused=-97 	Code 6, -97 T414		С
T413	The last time you bought shisha, how much in total did you buy? A. Complete hookah setup (a Hookah Pipe, a Hose, A Bowl, Shisha Tobacco, Charcoals, Tongs, Tin Foil or a Heat Management Device, Something to Light Your Charcoal)	/Complete hookah setup Refused=-97			С
	B. OR Shisha session	/Shisha session Refused=-97			
	C. OR Shisha Pot	/Shisha Pot Refused=-97			
	D. OR Per gram	/gram Refused=-97			
	E. OR Others (specify)	/Others (specify) Refused=-97			
T414	Do you think you will smoke shisha in the next 12 months?	 Definitely yes Probably yes Probably not Definitely not Refused=-97 		NYTS	С

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
T415	If one of your best friends were to offer you shisha, would you smoke it?	 Definitely yes Probably yes Probably not Definitely not Refused=-97 		NYTS	С
T416	If one of your close relatives were to offer you shisha would you smoke it?	 Definitely yes Probably yes Probably not Definitely not Refused=-97 			С

MODULE 5: HEATED TOBACCO PRODUCTS

The next section has questions that ask about heated tobacco products. These devices heat actual tobacco (in sticks or capsules) to create an aerosol that is inhaled. These are NOT THE SAME as e-cigarettes, which use liquids. Heated tobacco products include brands like IQOS ([CA/UK: HEETS; US: Marlboro HeatSticks])

HTP501	Do you own a heated tobacco device (SHOWCARD)?	Yes = 1 No = 2 Refused = -97	Code 1, -97 HTP504	ICT-YATVS	С
HTP502	Before this survey, had you seen or heard of heated tobacco products? (USE SHOWCARD)	Yes = 1 No = 2 Refused =- 97	Code 2, -97 HTP504	ICT-YATVS	С
HTP503	Where did you first see or hear about heated tobacco products?	 Traditional media: Television, radio, newspapers The internet (online malls, news and non- news web pages) Social media (Facebook, twitter, Instagram, WhatsApp groups) Friends Social gatherings (parties, lounges) Others specify Refused=-97 		Nigeria survey	C
HTP504	Have you ever smoked heat- ed tobacco products, even one or two puffs? (USE SHOWCARD)	Yes = 1 No = 2 Refused = -97	Code 2, -97 HTP514	ICT-YATVS	С
HTP505	How old were you when you first smoked heated tobacco products?	Age in years Refused=-97		ICT-YATVS	С

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
HTP506	When you first smoked heated tobacco products, why did you smoke them? (Select one or more)	 A. A friend smoked them B. A family member smoked them C. To try to quit smoking cigarettes D. They costed less than cigarettes E. They were easier to get than cigarettes F. I had seen people on TV, online, or in movies smoking them G. They are less harmful than cigarettes H. Smoking heated tobacco may be less harmful to people around me than smoking cigarettes I. They were available in flavors, such as menthol, mint, candy, fruit, or chocolate J. I could smoke them unnoticed at home or at school K. I could use them to do tricks L. I was curious about them M. Because I felt anxious, stressed, or depressed N. To get a high or buzz O. Packaging looks nice P. To get social acceptance Q. I could smoke them in places where I can't smoke cigarettes R. To cut down the number of cigarettes I smoke X. Other 		NYTS/ ITC-Survey	C
HTP507	Who were you with when you first smoked a heated tobacco product? (Multiple responses allowed)	 A. Alone B. With one friend C. With more than one friend D. With a family member E. With more than one family member F. With a new acquaintance X.Others (specify)			С

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
HTP508	What specific variety of heated tobacco product do you smoke most often? [ADJUST CATEGORIES FOR SPECIFIC COUNTRY]	1. Marlboro Original (silver) 2. Marlboro Fresh Menthol 3. Marlboro Smooth Menthol 4. Amber 5. Yellow 6. Sienna 7. Mauve 8. Russet 9. Teak 10. Green (menthol) 11. Turquoise (menthol) 12. Blue (menthol) 13. Other (Please specify:) 14. I don't use a specific variety more often than others I don't know the type=-98 Refused=-97 [ADJUST CATEGORIES FOR SPECIFIC COUNTRY]		ICT-YATVS	C
HTP509	During the past 30 days, on how many days did you smoke heated tobacco products?	days (0-30) Refused=-97	Code 0, -97 HTP514	ICT-YATVS	С
НТР510	During the past 30 days, on the days you smoked a heated tobacco product, about how many times did you smoke it each day?	 1 time per day 2 to 5 times per day 6 to 10 times per day 11 to 20 times per day More than 20 times per day Don't know Refused=-97 		ПС	С
HTP511	What brand of heated tobacco product did you smoke most often in the past 30 days?	 IQOS glo Ploom iFuse lil Other (Please specify: I don't have a usual brand I don't know the brand=-98 Refused=-97 		ICT-YATVS	С

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
HTP512	What flavors were the heated tobacco products that you have smoked in the past 30 days? (Select one or more)	A. Menthol B. Mint C. Clove or spice D. Fruit E. Chocolate F. Alcoholic drinks (such as wine, margarita, or other cocktails) G. Candy, desserts, or other sweets 96. Some other flavor not listed here (Specify:) Refused=-97		NYTS	С
HTP513	The last time you smoked heated tobacco products during the past 30 days, where did you smoke them?	 At home At a restaurant At a bar or club School At work At friends' houses In public spaces (e.g. parks, shopping centers, street corners) Other. [Please specify] Refused=-97 		GYTS	С
HTP514	During the past 30 days, did anyone refuse to sell you heated tobacco products because of your age?	 I did not try to buy heated tobacco products during the past 30 days. Yes, someone refused to sell me heated tobacco products because of my age. No one refused to sell me heated tobacco products because of my ageNo, my age did not keep me from buying heated tobacco products. Refused =-97 		GYTS	C

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
HTP515	When you smoked heated tobacco products during the past 30 days, how did you get your heated tobacco products? (Select one or more)	A. I bought them myself B. I had someone else buy them for me C. I asked someone to give me some D. Someone offered them to me E. I got them from a friend F. I got them from a family member G. I got them from a store or another person X. I got them in some other way (specify:		NYTS	C
HTP516	If you bought these products, how much did you spend for a full package?	/full package Refused=-97			С
HTP517	During the past 30 days, where did you buy heated tobacco products and devices? (Select one or more)	A. I did not buy heated tobacco products during the past 30 days [EXCLUSIVE RESPONSE] B. I bought them from another person (a friend, family member, or someone else) C. A gas station or convenience store D. A grocery store E. A drugstore F. A mall or shopping center kiosk/stand G. A vending machine H. On the Internet (such as a product website or store website like eBay or Facebook Marketplace) I. Through the mail J. Through a delivery service (such as DoorDash or Postmates) K. A vape shop or tobacco shop X. Some other place not listed here (specify):		NYTS	C

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
HTP518	Do you think you will smoke heated tobacco products in the next 12 months?	 Definitely yes Probably yes Probably not Definitely not Refused=-97 		NYTS	С
HTP519	If one of your best friends were to offer you a heated tobacco product, would you smoke it?	 Definitely yes Probably yes Probably not Definitely not Refused=-97 		ICT-YATVS	С
HTP520	If one of your close relatives were to offer you a heated tobacco product, would you smoke it?	 Definitely yes Probably yes Probably not Definitely not Refused=-97 		ICT-YATVS	С

MODULE 6: OTHER SMOKED TOBACCO PRODUCTS

The next section has questions that ask about smoking other tobacco products such as cigars, cheroots, cigarillos. These exclude manufactured, hand-rolled cigarettes, shisha, or heated tobacco products which have already been explored.

T601	Have you ever smoked other tobacco products such as cigars/cheroots/cigarillos, even once or twice? (USE SHOWCARD)	Yes = 1 No = 2 Refused =- 97	Code 2 T609	ICT-YATVS, GYTS, NYTS	С
T602	How old were you when you first smoked other tobacco products such as cigars/cheroots/cigarillos?	Age in years Refused=-97			С

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
T603	When you first smoked other tobacco products such as cigars/cheroots/cigarillos, why did you smoke them? (Select one or more)	 A. A friend smoked them B. A family member smoked them C. To try to quit smoking cigarettes D. They costed less than cigarettes E. They were easier to get than cigarettes F. I had seen people on TV, online, or in movies smoking them G. They are less harmful than cigarettes H. Smoking other tobacco products such as cigars, cheroots or cigarillos may be less harmful to people around me than smoking cigarettes I. They were available in flavors, such as menthol, mint, candy, fruit, or chocolate J. I could smoke them unnoticed at home or at school K. I could use them to do tricks L. I was curious about them M. Because I felt anxious, stressed, or depressed N. To get a high or buzz O. Packaging looks nice P. To get social acceptance Q. I could smoke them in places where I can't smoke cigarettes R. To cut down the number of cigarettes I smoke X. Other 		NYTS/ ITC-Survey	C
T604	Who were you with when you first smoked other tobacco products (such as cigars/cheroots/cigarillos)? (Multiple responses allowed)	 A. Alone B. With one friend C. With more than one friend D. With a family member E. With more than one family member F. With a new acquaintance X.Others (specify)			C

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
T605	During the past 30 days, on how many days did you smoke other tobacco prod- ucts such as cigars/cheroots/ cigarillos?	days (0-30) Refused=-97	Code 0 T609	ICT-YATVS, GYTS, NYTS	С
T606	During the past 30 days, on the days you smoked other tobacco products such as cigars/cheroots/cigarillos, about how many did you smoke per day? (USE SHOWCARD)?	cigars/day cheroots/day cigarillos/day other tobacco products (specify)/day Refused=-97		ICT-YATVS	С
T607	The last time you smoked other tobacco products such as cigars/cheroots/cigarillos during the past 30 days, how did you get them? (SELECT ONLY ONE RESPONSE)	1. I bought them in a store or shop 2. I bought them from a street vendor 3. I bought them at a kiosk [COUNTRY-SPECIFIC] 4. I bought them from a vending machine [COUNTRY-SPECIFIC] 5. I got them from someone else 96. Other way specify Refused=-97		GYTS	C
T608	The last time you smoked other tobacco products, during the past 30 days, where did you smoke them?	 At home At a restaurant At a bar or club At school At work At friends' houses In public spaces (e.g. parks, shopping centers, street corners) Other. [Please specify] Refused=-97 			С

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
T609	During the past 30 days, did anyone refuse to sell you other smoked tobacco products such as cigars/ cheroots/cigarillos because of your age?	 I did not try to buy other smoked tobacco products during the past 30 days. Yes, someone refused to sell me other smoked tobacco products because of my age. No one refused to sell me other smoked tobacco products because of my ageNo, my age did not keep me from buying other smoked tobacco products. Refused=-97 		GYTS	С
T610	When was the last time you bought other smoked tobacco products such as cigars/cheroots/cigarillos?	 The last 30 days 2-3 months 4-6 months ago 7-12 months ago More than 12 months ago I have never bought other tobacco products such as cigars Refused=-97 	Code 6 TN613		С
T611	The last time you bought other smoked tobacco products such as cigars/cheroots/cigarillos, did you buy them as a rod or pack(s)?	1. Rods 2. Packs Refused =-97			С
T612	The last time you bought other smoked tobacco products such as cigars/cheroots/cigarillos, how much did you spend for a rod/ pack?	/cigar rod pack/cheroots rod/pack/cigarillos rod/pack/other smoked tobacco product (specify) rod/pack Refused=-97			C
T613	Do you think you will smoke other tobacco products such as cigars/cheroots/cigarillos in the next 12 months?	 Definitely yes Probably yes Probably not Definitely not Refused=-97 		NYTS	С

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
T614	If one of your best friends were to offer you other smoked tobacco products such as cigars/cheroots/ cigarillos, would you smoke them?	 Definitely yes Probably yes Probably not Definitely not Refused=-97 		NYTS	С
T615	If one of your close relatives were to offer you other smoked tobacco products such as cigars/cheroots/cigarillos would you smoke them?	 Definitely yes Probably yes Probably not Definitely not Refused=-97 			С

MODULE 7: SMOKELESS TOBACCO

The next section has questions that ask about smokeless tobacco use. This includes (FILL AS APPROPRIATE): i) chewing tobacco such as tobacco leaf, tobacco leaf and lime, ii) applying tobacco such as, tobacco toothpaste-dentobac etc.; tobacco tooth powder-lal, etc.; snuff).

ST701	Have you ever used smokeless tobacco products such as chewing tobacco, snuff, or dip, even just a small amount once or twice? (USE SHOWCARD)?	Yes = 1 No = 2 Refused = 97	Code 2 ST710	GYTS, NYTS	С
ST702	How old were you when you first used smokeless tobacco such as chewing tobacco, snuff, or dip?	Age in years Refused=-97		GYTS, NYTS	С
ST703	When you first used smokeless tobacco products such as chewing tobacco, snuff, or dip, why did you use them? (Select one or more)	 A. A friend uses them B. A family member uses them C. They costed less than cigarettes D. They were easier to get than cigarettes E. I had seen people on TV, online, or in movies use them F. They are less harmful than other forms of tobacco, cigarettes G. I could use them to do tricks H. I was curious about them I. Because I felt anxious, stressed, or depressed J. To get a high or buzz K. Packaging looked nice L. Easy to hide M. To get social acceptance X. Other reason 		NYTS/ ITC-Survey	C

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
ST704	Who were you with when you first used a smokeless tobacco product? (Multiple responses allowed)	A. Alone B. With one friend C. With more than one friend D. With a family member E. With more than one family member F. With a new acquaintance X.Others (specify)			
ST705	During the past 30 days, on how many days did you use smokeless tobacco such as chewing tobacco, snuff, or dip?	days (0-30) Refused=-97	Code 0, -97 ->ST710	GYTS, NYTS	С
ST706	During the past 30 days, on the days you used smokeless tobacco such as chewing tobacco, snuff, or dip, about how many times did you use it per day?	times/day Refused=-97			С
ST707	The last time you used smokeless tobacco such as chewing tobacco, snuff, or dip during the past 30 days, how did you get them? (SELECT ONLY ONE RESPONSE)	1. I did not use smokeless tobacco such as chewing tobacco, snuff, or dip products during the past 30 days 2. I bought them in a store or shop 3. I bought them from a street vendor 4. I bought them at a kiosk [COUNTRY-SPECIFIC] 5. I bought them from a vending machine [COUNTRY-SPECIFIC] 6. I got them from someone else 96. I got them some other way. Specify Refused=-97		GYTS	C
ST708	Was any of the smokeless tobacco products such as chewing tobacco, snuff, or dip that you used in the past 30 days flavored to taste like menthol, mint, clove or spice, alcoholic drinks, candy, fruit, chocolate, or any other flavor?	Yes = 1 No = 2 Refused =- 97		NYTS	С

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
ST709	The last time you used smokeless tobacco products, during the past 30 days, where did you use them?	 At home At a restaurant At a bar or club At school At work At friends' houses In public spaces (e.g. parks, shopping centers, street corners) Other. [Please specify] Refused=-97 			С
ST710	During the past 30 days, did anyone refuse to sell you smokeless tobacco products such as chewing tobacco, snuff, or dip because of your age?	 I did not try to buy smokeless tobacco products during the past 30 days. Yes, someone refused to sell me smokeless tobacco products because of my age. No one refused to sell me smokeless tobacco products because of my age. No, my age did not keep me from buying smokeless tobacco products. Refused=-97 		GYTS	C
ST711	When was the last time you bought smokeless tobacco products such as chewing tobacco, snuff, or dip?	 The last 30 days 2-3 months 4-6 months ago 7-12 months ago More than 12 months ago I have never bought smokeless tobacco products such as chewing tobacco, snuff, or dip Refused=-97 	Code 6 ->STN714		C
ST712	The last time you bought smokeless tobacco products, what pack size (or how much) did you buy?	(Pack size/ QuantityAmount) Refused=-97			С
ST713	The last time you bought smokeless tobacco products, how much money in total did you pay?	(Amount) Refused=-97		NA- CANDA 2022-Ken- ya	С

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
ST714	Do you think you will use smokeless tobacco in the next 12 months?	 Definitely yes Probably yes Probably not Definitely not Refused=-97 		NYTS	С
ST715	If one of your best friends were to offer you smokeless tobacco, would you use it?	 Definitely yes Probably yes Probably not Definitely not Refused=-97 		NYTS	С
ST716	If one of your close relatives were to offer you smokeless tobacco, would you use it?	 Definitely yes Probably yes Probably not Definitely not Refused=-97 			С

MODULE 8: ELECTRONIC CIGARETTES MODULE

The next section has questions that ask about electronic cigarettes, or e-cigarettes. Electronic cigarettes are electronic devices that usually contain a nicotine-based liquid that is vaporized and inhaled. You may also know them as vapes, vape-pens, hookah-pens, electronic hookahs (e-hookahs), electronic cigars (e-cigars), electronic pipes (e-pipes), or e-vaporizers. Some look like cigarettes and others look like pens or small pipes. These are battery-powered devices that produce vapor instead of smoke.

ET801	Before today, had you ever seen or heard of electronic cigarettes or e-cigarettes such as JUUL, SMOK, Suorin, Vuse, blu, Puff Bar, or STIG? (USE SHOWCARD)	Yes = 1 No = 2 Refused =-97	Code 2, -97 ->ET803	GYTS	С
ET802	Where did you first see or hear about electronic ciga- rettes such as JUUL, SMOK, Suorin, Vuse, blu, Puff Bar, or STIG?	 Traditional media: Television, radio, newspapers? The internet (online malls, news and non- news web pages)? Social media (Facebook, twitter, Instagram, WhatsApp groups)? Friends? Social gatherings (parties, lounges) Other specify Refused=-97 		Nigeria survey	C

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
ET803	Have you ever smoked an electronic cigarette, or e-cigarette such as JUUL, SMOK, Suorin, Vuse, blu, Puff Bar, or STIG, even once or twice? (USE SHOWCARD) FW note: Ask for all the responses in ET801	Yes = 1 No = 2 Refused = -97	Code 2, -97- >ET8123	ICT-YATVS, GYTS, NYTS	С
ET804	How old were you when you first smoked an electronic cigarette?	Age in years Refused=-97			С

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
ET805	When you first smoked electronic cigarettes, why did you smoke them? (Select one or more)	 A. A friend smoked them B. A family member smoked them C. To try to quit smoking cigarettes D. They costed less than cigarettes E. They were easier to get than cigarettes F. I had seen people on TV, online, or in movies smoking them G. They are less harmful than cigarettes H. Smoking electronic cigarettes may be less harmful to people around me than smoking cigarettes I. They were available in flavors, such as menthol, mint, candy, fruit, or chocolate J. I could smoke them unnoticed at home or at school K. I could use them to do tricks L. I was curious about them M. Because I felt anxious, stressed, or depressed N. To get a high or buzz O. Packaging looks nice P. To get social acceptance Q. I could smoke them in places where I can't smoke cigarettes R. To cut down the number of cigarettes I smoke X. Other reasons (specify:) Refused=-97 		NYTS/ ITC-Survey	C

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
ET806	Who were you with when you first smoked an electronic cigarette? (Multiple responses allowed)	 A. Alone B. With one friend C. With more than one friend D. With a family member E. With more than one family member F. With a new acquaintance X.Others (specify) Refused=-97 			С
ET807	During the past 30 days, on how many days did you smoke an electronic cigarette?	days (0-30) Refused=-97	Code 0,-97 ET813	GYTS/ NYTS	С
ET808	During the past 30 days, on the days you smoked an electronic cigarette, about how many times did you use it each day?	 1 time per day 2 to 5 times per day 6 to 10 times per day 11 to 20 times per day More than 20 times per day Don't know Refused=-97 		ITC	С
ET809	Which of the following best describes the type of electronic cigarette you have smoked in the past 30 days? If you have used more than one type, please think about the one you use most often.	 A disposable electronic cigarette (for example, Puff Bar or STIG) An electronic cigarette that uses pre-filled or refillable pods or cartridges (for example, JUUL, SMOK, or Suorin) An electronic cigarette with a tank that you refill with liquids (including mod systems that can be customized by the user) I don't know the type 		NYTS	C
ET810	Were any of the electronic cigarettes that you smoked in the past 30 days flavored to taste like menthol, mint, clove or spice, alcoholic drinks, candy, fruit, chocolate, or any other flavor?	Yes = 1 No = 2 Refused = -97	Code 2, -97 ET812	NYTS	С

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
ET811	What flavors were the electronic cigarettes that you have smoked in the past 30 days? (Select one or more)	A. Menthol B. Mint C. Clove or spice D. Fruit E. Chocolate F. Alcoholic drinks (such as wine, margarita, or other cocktails) G. Candy, desserts, or other sweets X. Some other flavor not listed here (Specify:) Refused=-97		NYTS	C
ET812	The last time you smoked an electronic cigarette during the past 30 days, where did you smoke it?	 At home At a restaurant At a bar or club School At work At friends' houses In public spaces (e.g. parks, shopping centers, street corners) Other. [Please specify] Refused=-97 		Nigeria survey, GYTS	C
ET813	During the past 30 days, did anyone refuse to sell you an electronic cigarette device, pods, cartridges, or e-liquid refills because of your age?	 I did not try to buy an electronic cigarette device, pods, cartridges, or e-liquid refills during the past 30 days. Yes, someone refused to sell me an electronic cigarette device, pods, cartridges, or e-liquid refills because of my age. No one refusedNo refused to sell me, my age did not keep me from buying an electronic cigarette device, pods, cartridges, or e-liquid refills because of my age. 		GYTS	C

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
ET814	During the past 30 days, how did you get electronic cigarette devices, pods, cartridges, or e-liquid refills? (Select one or more)	A. I bought them myself B. I had someone else buy them for me C. I asked someone to give me some D. Someone offered them to me E. I got them from a friend F. I got them from a family member G. I got them from a store or another person X. I got them in some other way (specify:) Refused=-97		NYTS	C
ET815	If you bought these products, how much did you spend for a full package?	/full package (in local currency) Refused=-97			С
ET816	During the past 30 days, where did you buy your electronic cigarette devices, pods, cartridges, or e-liquid refills? (Select one or more)	A. I did not buy e-cigarettes during the past 30 days [EXCLUSIVE RESPONSE] B. I bought them from another person (a friend, family member, or someone else) C. A gas station or convenience store D. A grocery store E. A drugstore F. A mall or shopping center kiosk/stand G. A vending machine H. On the Internet (such as a product website or store website like eBay or Facebook Marketplace) I. Through the mail J. Through a delivery service (such as DoorDash or Postmates) K. A vape shop or tobacco shop X. Some other place not listed here (specify): Refused=-97		NYTS	C

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
ET817	Do you think you will smoke electronic cigarettes in the next 12 months?	 Definitely yes Probably yes Probably not Definitely not Refused=-97 		NYTS	С
ET818	If one of your best friends were to offer you an elec- tronic cigarette, would you smoke it?	 Definitely yes Probably yes Probably not Definitely not Refused=-97 		NYTS	С
ET819	If one of your close relatives were to offer you an elec- tronic cigarette, would you smoke it?	 Definitely yes Probably yes Probably not Definitely not Refused=-97 			С
MODULE 9: Kn	owledge, Attitudes, Perceptic	ons, Intentions			
KAPI901	Are your parents/legal guardians aware that you use a tobacco product?	1.Yes 2.No 3. Don't know Refused=-97	Not applicable for those who responded no to all of the follow- ing: T201; T301; T401; HTP504; T601; ST701; ET803		С
KAPI902	Do any of your family members, relatives, /tutor/teacher, or neighbor use tobacco products? (More than one response allowed)	A. None B. Father C. Mother D. Tutor E. Teacher F. Sister G. Brother H. Another family member I. Neighbor J. Don't know X. Others specify Refused=-97		GYTS	C
KAPI903	Do any of your closest friends use tobacco?	 None of them Some of them Most of them All of them Don't know=-98 Refused=-97 		GYTS	С
KAPI904	How many young people aged between 10 and 17 in your immediate circle consume tobacco products?	young people Refused=-97 Don't know=-98			С

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
KAPI905	Do you think using tobacco makes young people look more or less attractive?	 More attractive Less attractive No difference from non- smokers Refused=-97 Don't know=-98 		GYTS	С
KAPI906	Do you think using tobacco is harmful to your health?	 Definitely not Probably not Probably yes Definitely yes I don't know=-98 Refused=-97 		GYTS	С
KAPI907	Do you think it is safe to use tobacco for only a year or two as long as you quit after that?	 Definitely not Probably not Probably yes Definitely yes I don't know=-98 Refused=-97 		GYTS	С
KAPI908	Do you think there are safe tobacco products?	1. Yes 2. No I don't know=-98 Refused=-97	Code 2, -98 or -97 KAPI910		С
KAPI909	What tobacco products are safe (mention all the products)?				С
KAPI910	During the past 12 months, did you read in your school texts or books about the health effects of tobacco?	 Yes No I do not have school texts or books Refused=-97 		GYTS	С
KAPI911	Do you think the smoke from other people's tobacco smoking is harmful to you?	 Definitely not Probably not Probably yes Definitely yes I don't know= -98 Refused=-97 		GYTS	С
KAPI912	Do you think smoking tobac- co helps people feel more comfortable or less comfort- able at celebrations, parties, or in other social gatherings?	 More comfortable Less comfortable No difference whether smoking or not Refused=-97 		GYTS	С
KAPI913	On average, how much do you think a pack of 20 manufactured cigarettes costs?	Cost (in local currency) I don't know=-98 Refused=-97		GYTS	С

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/ OPTION- AL
KAPI914	During the past 30 days, did you see or hear any anti-to- bacco media messages on television, radio, internet, billboards, posters, newspa- pers, magazines, movies?	1. Yes 2. No Refused=-97		GYTS	С
KAPI915	During the past 30 days, did you see or hear any anti-to-bacco media messages on social media platforms such as Instagram, Facebook, WhatsApp, TikTok, Twitter, LinkedIn, Pinterest, YouTube, and Snapchat?	1. Yes 2. No Refused=-97		GYTS	С
KAPI916	During the past 30 days, did you see any people using tobacco on TV?	1. Yes 2. No Refused=-97		GYTS	С
KAPI917	During the past 30 days, did you see any people using tobacco in social media platforms such as Instagram, Facebook, WhatsApp, TikTok, Twitter, LinkedIn, Pinterest, YouTube, and Snapchat?	3. Yes 4. No Refused=-97		GYTS	С
KAPI918	During the past 30 days, did you see any advertisements or promotions for tobacco products at points of sale (such as FILL APPROPRIATE COUNTRY EXAMPLES: stores, shops, kiosks, etc.)?	 I did not visit any points of sale in the past 30 days Yes No Refused=-97 		GYTS	С
KAPI919	Would you ever use or wear something that has a to-bacco company or tobacco product name or picture on it such as a lighter, t-shirt, hat, or sunglasses?	 Yes Maybe No Refused=-97 		GYTS	С
KAPI920	Has a person working for a tobacco company ever offered you a free tobacco product?	1. Yes 2. No Refused=-97		GYTS	С

OPTIONAL MODULES

OPTIONAL MODULE 1: NICOTINE POUCHES

The next section is about "nicotine pouches" such as Zyn, on!, or Velo. These small pouches contain nicotine, and users place them in their mouth. Nicotine pouches are different from other smokeless tobacco products such as snus, dip, or chewing tobacco, because they do not contain any tobacco leaf.

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/OP- TIONAL
OPM101	Before today, had you ever seen or heard of nicotine pouches? (USE SHOWCARD)	Yes = 1 No = 2 Refused = -97	Code 2, -97- >OPM103	NYTS	0
OPM102	Where did you first see or hear about nicotine pouches?	1. Traditional media: Television, radio, newspapers? 2. The internet (online malls, news and non- news web pages)? 3. Social media (Facebook, twitter, Instagram, WhatsApp groups)? 4. Friends? 5. Social gatherings (parties, lounges) 96.Others specify Refused=-97		NYTS	0
OPM103	Have you ever used nicotine pouches, even once or twice? (USE SHOWCARD)? FW Note: Ask this question for all the responses in OPM101	Yes = 1 No = 2 Refused =- 97	Code 2, -97- >OPM111	NYTS	0
OPM104	How old were you when you first used nicotine pouches?	Age in years Refused=-97		NYTS	0

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/OP- TIONAL
OPM105	When you first used nicotine pouches, why did you use them? (Select one or more)	A. A friend uses them B. A family member uses them C. To try to quit using other tobacco products, such as cigarettes D. They costed less than cigarettes E. They were easier to get than cigarettes F. I had seen people on TV, online, or in movies use them G. They are less harmful than other forms of tobacco, such as cigarettes H. They were available in flavors, such as menthol, mint, candy, fruit, or chocolate I. I could use them unnoticed at home or at school J. I could use them to do tricks K. I was curious about them L. Because I felt anxious, stressed, or depressed M. To get a high or buzz X. Other reason		NYTS	0
OPM106	Who were you with when you first used nicotine pouches? (Multiple responses allowed)	 A. Alone B. With one friend C. With more than one friend D. With a family member E. With more than one family member F. With a new acquaintance X.Others (specify)			0
OPM107	During the past 30 days, on how many days did you use nicotine pouches?	days (0-30) Refused=-97	0 OPM111	NYTS	0

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/OP- TIONAL
OPM108	Were any of the nicotine pouches that you used in the past 30 days flavored to taste like menthol, mint, clove or spice, alcoholic drinks, candy, fruit, chocolate, or any other flavor?	Yes = 1 No = 2 Refused =- 97		NYTS	0
OPM109	What flavors were the nicotine pouches that you have used in the past 30 days? (Select one or more)	A. Menthol B. Mint C. Clove or spice D. Fruit E. Chocolate F. Alcoholic drinks (such as wine, margarita, or other cocktails) G. Candy, desserts, or other sweets 96. Some other flavor not listed here (Specify:) Refused=-97		NYTS	O
OPM110	The last time you used nic- otine pouches during the past 30 days, where did you use them?	 At home At a restaurant At a bar or club School At work At friends' houses In public spaces (e.g. parks, shopping centers, street corners) Other. [Please specify] Refused=-97 		Nigeria survey, GYTS	0
OPM111	During the past 30 days, did anyone refuse to sell you nicotine pouches because of your age?	 I did not try to buy nicotine pouches during the past 30 days. Yes, someone refused to sell me nicotine pouches because of my age. No one refused to sell me nicotine pouches because of my age.No, my age did not keep me from buying nicotine pouches. Refused=-97 		GYTS	0

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/OP- TIONAL
OPM112	During the past 30 days, how did you get your nicotine pouches? (Select one or more)	A. I bought them myself B. I had someone else buy them for me C. I asked someone to give me some D. Someone offered them to me E. I got them from a friend F. I got them from a family member G. I took them from a store or another person X. I got them in some other way (specify:) Refused=-97		NYTS	0
OPM113	During the past 30 days, where did you buy nicotine pouches? (Select one or more)	A. I did not buy nicotine pouches during the past 30 days [EXCLUSIVE RESPONSE] B. I bought them from another person (a friend, family member, or someone else) C. A gas station or convenience store D. A grocery store E. A drugstore F. A mall or shopping center kiosk/stand G. A vending machine H. On the Internet (such as a product website or store website like eBay or Facebook Marketplace) I. Through the mail J. Through a delivery service (such as DoorDash or Postmates) K. A vape shop or tobacco shop X. Some other place not listed here		NYTS	0
OPM114	If you bought these products, How much did you spend for a pack?	/pack Refused=-97		NYTS	0

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/OP- TIONAL
OPMN115	Do you think you will use nicotine pouches in the next 12 months?	 Definitely yes Probably yes Probably not Definitely not Refused=-97 		NYTS	0
OPMN116	If one of your best friends were to offer you a nicotine pouch, would you use it?	 Definitely yes Probably yes Probably not Definitely not Refused=-97 		ICT-YATVS	0
OPMN117	If one of your close relatives were to offer you a nicotine pouch, would you use it?	 Definitely yes Probably yes Probably not Definitely not Refused=-97 		ICT-YATVS	0

OPTIONAL MODULE 2: CESSATION OF TOBACCO USE

The next questions ask about tobacco use cessation

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/OP- TIONAL
OPM201	How easy or difficult would you find it to go without using all tobacco products for as long as a week?	 Very difficult Fairly difficult Fairly easy Very easy Refused=-97 		GYTS	0
OPM202	How easy or difficult would you find it to give up using all tobacco products alto- gether if you wanted to?	 Very difficult Fairly difficult Fairly easy Very easy Refused=-97 		GYTS	0
OPM203	Are you seriously thinking about quitting the use of all tobacco products? (Please choose the answer that best describes your situation)	 Yes, during the next 30 days Yes, during the next 6 months Yes, during the next 12 months Yes, but not during the next 12 months No, I am not thinking about quitting the use of all tobacco products Refused=-97 		NYTS	O
OPM204	Thinking about the last time you tried to quit, how long did you stop using all tobacco products?	1. MONTHS 2. WEEKS 3. DAYS 4. LESS THAN 1 DAY (24HRS) 5. I have never tried to quit Refused= -97	5 -> OPM208	GYTS	O
OPM205	Thinking about the last time you tried to quit, did you receive any help or support to stop using tobacco (Select all that apply)	 A. Yes, from a program or professional B. Yes, from a friend C. Yes, from a family member. D. I tried to quit using medication. E. No, I tried to quit on my own without any help Refused=-97 			O

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/OP- TIONAL
OPM206	Thinking about the last time you tried to quit, what was the main reason you decided to stop using all tobacco products? (SELECT ONE RESPONSE ONLY)	 To improve my health To save money Because my family doesn't like it Because my friends do not like it Others specify Refused=-97 		GYTS	0
OPM207	Thinking about the last time you tried to quit, when you stopped using all tobacco products, how did you feel about it?	 It was very difficult It was rather difficult It was rather easy It was very easy Refused=-97 		GYTS	0
OPM208	Have you ever received help or advice to help you stop using tobacco? (SELECT ONLY ONE RE- SPONSE)	 A. Yes, from a program or professional B. Yes, from a friend. C. Yes, from a family member. D. Yes, from both programs or professionals and from friends or family members. E. No Refused=-97 		GYTS	0

OPTIONAL MODULE 3: SECOND-HAND SMOKE EXPOSURE

The next questions ask about exposure to second-hand tobacco smoke

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/OP- TIONAL
OPM301	During the past 30 days, on how many days has any- one smoked inside your home, in your presence?	days Refused=-97		GYTS	0
OPM302	How often do you see your father (stepfather or mother's partner) smoking in your home?	 Don't have/don't see this person About every day Sometimes Never Refused=-97 		GYTS	0
OPM303	How often do you see your mother (stepmother or father's partner) smoking in your home?	 Don't have/don't see this person About every day Sometimes Never Refused=-97 		GYTS	0
OPM304	How often do you see your brother/sister smoking in your home?	 Don't have/don't see this person About every day Sometimes Never Refused=-97 	5-> OPM208	NYTS	0
OPM305	If the response for OPM304 is 2, 3, or 4, is the sibling younger or older? Select all that apply	A. Younger B. Older Refused=-97			0
OPM306	How often do you see other people smoking in your home?	 Don't have/don't see these people About every day Sometimes Never Refused=-97 		GYTS	0
OPM307	During the past 30 days, did you visit any schools?	Yes = 1 No = 2 Refused =- 97	2 -> OPM309	GATS	0
ОРМ308	Did anyone smoke inside of any school buildings that you visited in the past 30 days?	Yes = 1 No = 2 Refused =- 97		GATS	0

VARNAME	QUESTIONS	CODING CATEGORIES	SKIPS	SOURCE	CORE/OP- TIONAL
OPM309	How often do you see teachers smoking in or around the school?	 Don't have/not enrolled in school About every day Sometimes Never Refused=-97 			0
OPM310	During the past 30 days, on how many days has anyone smoked in your presence, inside of any school, university or health facility buildings?	 I did not visit a school, university, or health facility during the past 30 days I have visited a school, university, or health facility but no one smoked in my presence 1 to 2 days 3 to 4 days 7 days More than 7 days Refused=-97 		GYTS	0
OPM311	During the past 30 days, on how many days has anyone smoked in your presence, inside any public transportation vehicles, such as trains, buses, or taxicabs?	 I did not use public transportation during the past 30 days I used public transportation but no one smoked in my presence 1 to 2 days 3 to 4 days 5 to 6 days 7 days More than 7 days Refused=-97 		GYTS	O

Appendix 5: Showcards

DaYTA Survey Showcard

Different Tobacco products







Manufactured/ factory-made cigarettes (T201-TN212).







RYO cigarettes/ hand-rolled cigarettes (T301-TN312).







Shisha, waterpipe, or hookah (T401-TN416).









Other smoked tobacco products (T501-TN511).







Smokeless tobacco (ST601-STN614).



Plug Chewing Tobacco





Electronic cigars (e-cigars) (ET701-ETN716).







Heated tobacco products (HTP801-HTPN817).







Nicotine pouches (OPM101-OPM112).







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