2024 NATIONAL YOUTH TOBACCO SURVEY: METHODOLOGY REPORT

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CHAPTER 1—NYTS OVERVIEW

The National Youth Tobacco Survey (NYTS) is an annual cross-sectional survey of students in grades 6–12 in U.S. public and private schools.

The NYTS is the only nationally representative survey of middle and high school students focusing exclusively on tobacco use patterns and associated factors. The NYTS is an assessment of knowledge, attitudes, perceptions, and behaviors related to multiple types of tobacco products. It also includes items about exposure to secondhand smoke and aerosol, exposure to pro- and anti-tobacco influences such as portrayals of tobacco in advertising and mass media, youth access to tobacco, and cessation indicators. These data have been used to inform the design, implementation and evaluation of comprehensive tobacco control programs; inform progress towards achieving national objectives related to tobacco and youth; identify urgent issues surrounding youth tobacco use (such as the rapid increase in e-cigarette use among youth); and to provide national benchmark data for state-level Youth Tobacco Surveys. Note that the term "tobacco" as used in this report refers to commercial tobacco products and not to the sacred and traditional use of tobacco by some American Indian communities.

The 2024 NYTS was an online questionnaire that assessed:

- use behaviors for 12 types of tobacco products
    1. e-cigarettes
    2. cigarettes
    3. cigars
    4. smokeless tobacco
    5. snus
    6. nicotine pouches
    7. other oral nicotine products
    8. hookahs
    9. heated tobacco products
    10. pipe tobacco
    11. bidis
    12. roll-your own-cigarettes
- knowledge, attitudes, and perceptions of tobacco use
- cessation attempts and behaviors
- access to tobacco products
- exposure to social media
- demographic characteristics
- discrimination experiences
- neighborhood environment
- mental health status

CHAPTER 2—NYTS SAMPLING METHODS

2.1.   SAMPLING FRAME

The sampling frame for the 2024 NYTS was generated in early fall of 2023 to accommodate school recruitment for the fielding of the survey in early spring of 2024. The frame used to select the 2024 NYTS sample combined data files from the National Center for Education Statistics (NCES) and Market Data Retrieval Inc. (MDR). NCES data came from two sources: the 2021–2022 Common Core of Data (CCD) for public schools and the 2019–2020 Private School Universe Survey (PSS) for private schools. The 2021–2022 CCD was mandatory for public schools and the 2019–2020 PSS was optional for private schools.[1] The response rate to the 2019–2020 PSS was 74.5%, consequently, 25.5% of private schools were not represented in the PSS.[2] MDR data were from the spring of 2023.[3] Private schools captured in the MDR data that were not in the PSS were included in the 2024 NYTS sampling frame.

The 2024 NYTS frame included the subset of all public (including charter) and private school students enrolled in middle and high schools in grades 6 through 12 in the 50 U.S. states and the District of Columbia. Only schools with 40 or more students were eligible for the sampling frame. Including schools with less than 40 students in the frame would have resulted in fewer responding students per school, which results in less precise estimates (see Section 2.1.1 for more information).

The following school types were excluded: alternative, special education, Department of Defense-operated, Bureau of Indian Affairs (also known as Bureau of Indian Education schools)[4], and vocational schools. In the 2024 sample, schools that were composed of both high school and middle school students were considered a single school for sampling and data collection purposes; in 2023, schools composed of both middle and high school students were broken into two schools for sampling purposes. The 2024 frame had 60,140 eligible schools with 40 or more students, yielding a total of 28,006,599 students. The MDR data provided information for 36.4% of the private schools on the frame with 40 or more students (4,628 out of 12,700).

2.1.1.   Coverage Error

The coverage error is the set of schools and students in those schools that are eligible but have zero probability of selection. Coverage error comes from two sources: schools that are not sampled because they have less than 40 students, and the eligible schools not included on the sample frame

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[1] Although the 2021–2022 CCD data files were used to construct both the 2023 and 2024 NYTS frames, the CCD files used were not identical due to mid-year updates made by NCES.
[2] Broughman, S. P., Kincel, B., & Peterson, J. (2021). *Private School Universe Survey (PSS): Public-use data file user's manual for school year 2019–20* (NCES 2022021). US Department of Education: National Center for Education Statistics. Retrieved 15 August 2023 from https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2022021 ↗
[3] The MDR data is created by MDR Education, a division of Dun & Bradstreet. The MDR data uses the CCD & PPS data as well as other proprietary data sources. MDR shares an updated file with RTI whenever they update the file (usually monthly.). The following is a link to the MDR Education website: https://mdreducation.com/i-am-looking-to/access-education-data/ ↗
[4] Bureau of Indian Education schools include tribal-controlled and Bureau-operated schools. Additional information is available here: https://biamaps.geoplatform.gov/BIE-Sch.ools-Directory/   .

due to frame error. Students in eligible schools with less than 40 students had zero probability of selection into the sample.

Overall, 0.8% of all eligible students were not covered because schools with less than 40 students were not sampled; this figure represents 0.4% of all public school students and 4.8% of all private school students. Table 1 displays the coverage error due to assigning a zero probability of selection to schools with less than 40 students. This small amount of coverage error is accepted in favor of more precise estimates. The coverage error due to failure to include a school on the frame cannot be reported because it is unknown.

Table 1. School and Student Coverage Error* Due to Excluding Small Schools

School type	Schools				Students			
	All	With 40 or more students	With less than 40 students	Coverage error (%)	All	In schools with 40 or more students	In schools with less than 40 students	Coverage error (%)
Public	52,463	47,440	5,023	9.6	25,886,114	25,780,859	105,255	0.4
Private	22,157	12,700	9,457	42.7	2,337,979	2,225,740	112,239	4.8
Total	**74,620**	**60,140**	**14,480**	**19.4**	**28,224,093**	**28,006,599**	**217,494**	**0.8**

*Proportion of schools on the sampling frame that are not eligible to be sampled because they have less than 40 students.

2.2. SAMPLE DESIGN

2.2.1. Overview of the Design

The 2024 NYTS sample is nationally representative of students in grades 6 through 12 who attend regular U.S. public and private schools. The 2024 NYTS sample was designed to produce precise national estimates by school level (middle and high school), by grade (6, 7, 8, 9, 10, 11, and 12), by sex (male and female), and by race/ethnicity (non-Hispanic [NH] White, NH Black, Hispanic, NH Asian, and NH American Indian/Alaskan Native). The sample was not designed to yield estimates for subnational geographical regions.

The following six steps outline the sample design.

1) The frame was partitioned into seven strata (see Section 2.2.2).

2) There were 3,080 PSUs formed by grouping schools within strata (see Section 2.2.3).

3) Within strata, 223 PSUs were selected, with probability proportional to the number of students in the PSU (see Section 2.2.5.1).

4) Within each selected PSUs, three (or four) schools were selected by systematic sampling with probability proportional to enrollment (see Section 2.2.5.2).

5) Within the selected schools, classes were selected using a random start and a sampling interval (see Section 2.2.5.3).

6) In each selected class, all students were selected (see Section 2.2.5.4).

2.2.2. Stratification

The frame was partitioned into seven strata.

- Stratum 1—Schools with 20% to 40% NH American Indian/Alaskan Native students.
- Stratum 2—Schools with more than 40% NH AI/AN students.
- Stratum 3—Schools with 20% to 40% NH Asian students.
- Stratum 4—Schools with more than 40% NH Asian students.
- Stratum 5—Schools not in strata 1 to 4 with only middle school students
- Stratum 6—Schools not in strata 1 to 4 with only high school students
- Stratum 7—Schools not in strata 1 to 4 with both middle school and high school students

The stratification enables the control of the allocation of high school and middle school students by manipulating the sampling fraction across strata. The stratification also enables the oversampling of NH AI/AN and NH Asian students to achieve the goal of collecting data on a minimum of 1,000 responding NH AI/AN students and 1,000 responding NH Asian students (to yield sufficiently precise estimates for these groups). The 2024 NYTS received 1,455 responses from NH AI/AN students and 1,871 responses from NH Asian students. There are enough NH Black, Hispanic, and rural students to make precise estimates without manipulating the sample allocation through oversampling. The 2024 NYTS received 3,655 responses from NH Black students, 10,325 responses from Hispanic students, and 1,942 responses from rural students.

Table 2 presents counts of schools and students on the frame by stratum.

Table 2.   Counts of Schools and Students on the Frame by Stratum

Stratum	Schools	Students
1) Schools with 20 to 40% NH AI/AN students	432	99,291
2) Schools with more than 40% NH AI/AN students	573	100,245
3) Schools with 20 to 40% NH Asian students	1,541	1,192,929
4) Schools with more than 40% NH Asian students	638	500,612
5) Schools not in strata 1–4 with only middle school students	31,397	9,700,189
6) Schools not in strata 1–4 with only high school students	14,440	12,684,352
7) Schools not in strata 1–4 with both middle and high school students	11,119	3,728,981
All Strata	**60,140**	**28,006,599**

Abbreviations: AI/AN = American Indian/Alaska Native; NH = Non-Hispanic

2.2.3. Formation of PSUs

Strata 1 and 2 contain schools with high densities of NH AI/AN students. For schools with over 20% NH AI/AN students, PSUs were formed by sorting the schools by NH AI/AN density and forming groups of consecutive schools that had 5,000 or more students, four or more middle schools, and five or more high schools. PSUs consisting of schools with 20 to 40% NH AI/AN were assigned to Stratum 1, whereas PSUs consisting of schools with more than 40% NH AI/AN students were assigned to Stratum 2.

Strata 3 and 4 contain schools with high densities of NH Asian students. For schools with over 20% NH Asian students, PSUs were formed by sorting the schools by NH Asian density and forming groups of consecutive schools that had 6,000 or more students, four or more middle schools, and five or more high schools. PSUs consisting of schools with 20 to 40% NH Asian were assigned to Stratum 3, whereas PSUs consisting of schools with more than 40% NH Asian students were assigned to Stratum 4.

The cut-off to define a PSU was lower for the high-density NH AI/AN strata (5,000 students) than the high density NH Asian strata (6,000 students) in order to produce a larger number of PSUs in the NH AI/AN strata. This aspect of the design was necessary because the NH AI/AN strata contain fewer schools (and, on average, fewer students per school) than the NH Asian strata.

Fourteen counties had more than 150,000 eligible students. The schools in these counties were sorted by school district and broken into sub-county groups with less than 100,000 students in each group. Each of these sub-county groups is a PSU. In strata 5, 6, and 7, for counties with less than 150,000 eligible students, (see Section 2.2.2. for stratum definitions), counties that had 10 or more schools and 1,000 or more students became a PSU; 566, 306, and 235 counties, respectively, formed PSUs by this procedure. Counties with less than 10 schools or less than 1,000 students were combined with either another small county or with multiple counties in the same state to form a PSU; 628, 584, and 526 PSUs were created by grouping counties using this procedure.

2.2.4. Sample Size Goals and Response Rate Assumptions

Our goal was to collect data from 285 responding schools. This quantity was selected based on the goal of yielding precise estimates for tobacco use outcomes for key groups of interest. Table 3 displays recent NYTS school response rates by year. School response rates declined in 2020 in the context of COVID-19, but it was not known if they had yet recovered to pre-pandemic levels when we selected the 2024 sample (in 2023), so assumptions were based on pre-pandemic levels. We selected schools in two sample draws. In the first sample draw, we assumed a 70.6% school response rate and a 96% school eligibility rate. In the first sample draw, we estimated that obtaining 285 responding schools would require 420 schools (285 / (0.706 * 0.96)) in 140 PSUs. When several states passed laws requiring active consent for youth surveys during the summer and fall of 2023, it became clear that a 70.6% school response rate would be unattainable for the 2024 NYTS data collection. To attain the goal of 285 participating schools, an additional 250 schools were selected. Across both sample draws, three schools were selected per PSU in 222 PSUs. One PSU had four schools selected.

Table 3.   School Response Rate by NYTS Data Collection Year

NYTS Data Collection Year	School Response Rate (%)
2018	76.8
2019	77.2
2020	49.9
2021	54.9
2022	59.4
2023	43.0

2.2.5. Sample Selection

The NYTS 2024 sample selection had three sampling stages:

Stage 1— Select 223 PSUs.

Stage 2— Select three (or four) schools within each selected PSU.

Stage 3— Select classes within selected schools.

2.2.5.1   Stage One—Selecting the PSUs

A total of 223 PSUs were selected, within seven strata, using a systematic selection with probability proportional to size (PPS). In the first sample, 140 PSUs were selected with PPS. In the second sample, an additional 83 PSUs were selected with PPS, from the set of PSUs that were not selected in the first sample draw. Within strata, the PSUs were sorted by state FIPS code and county FIPS code to ensure geographic diversity in the sample. The sampling fraction, which is the probability of selecting each PSU within a stratum, was adjusted to ensure that a minimum of 1,000 NH AI/AN responding students and a minimum of 1,000 NH Asian responding students and so that approximately three-sevenths of the responding students were middle school students. There were no PSUs that were selected with certainty.

2.2.5.2   Stage Two—Selecting the Schools[5]

Within each selected PSU, schools were selected using systematic sampling with PPS, as previously described. Probabilities of school selection were proportional to a measure of size (MOS) that is based on the student enrollment for each school. Except for very large schools and very small schools, the measure of size was the 6th to 12th grade student enrollment. All but one PSU had three schools selected. The one PSU that had four schools selected was the PSU with the largest number of students in the second sample draw.

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[5] Much of the methodology described in Section 2.2.5.2. "*Second Stage—Selecting the Schools*" has been adapted from the State YTS Methodology Report: Office on Smoking and Health. State Youth Tobacco Survey (YTS) Methodology Report. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2018.

An initial sampling interval was calculated for each PSU by dividing the sum of the enrollment of all the schools in each PSU by the number of schools selected in the PSU. The five schools that had an enrollment greater than the sampling interval were treated as certainty schools and were removed from the sample frame. Certainty schools are always selected for the sample. This procedure ensures that, within strata, each student has the same probability of selection into the sample and that this probability is equal to the overall sampling rate. Each time a school was selected with certainty and removed from the frame, the sampling interval was recomputed based on the enrollments of the schools remaining on the sampling frame and on the number of schools remaining to be selected.

The sampling procedure for the noncertainty schools included an adjustment to the measure of size (MOS) for schools with very small enrollments. Noncertainty schools were selected using systematic sampling with a random start and an adjusted school sampling interval that uses total enrollment based on the revised MOS. The selection procedure uses implicit stratification based on state FIPS code and county FIPS code, thereby, ensuring the geographical diversity of the selected schools.

2.2.5.3   Stage Three—Class Selection

In the third stage, classes were selected. First, to create the frame for class selection, a list of classes was created for each school that agreed to participate; enrollment counts for each class were requested. The list was constructed so that eligible students had only one chance of being selected, but the specific procedures varied by school based on each school's scheduling procedures (e.g., block schedule). When contacting schools to obtain the class list, a list of required core courses was requested. Among middle school students—and high school students in a few states—physical education and/or health were also considered core courses. Ineligible classes (e.g., special education, English as a Second Language) were excluded from the list. In a small number of schools where the approach of using core courses could not be executed, classes were selected by using a time of day (e.g., second period).

Using the list of classes and accompanying enrollment information, within each selected school, the probability of each student being selected was calculated. This probability is defined as the overall sampling rate divided by the product of the probability of the first and second stage of selection. Consequently, within each stratum, every sample member has an equal probability of selection. The probability of selection is used to create a sampling interval that can be used to randomly select classes while ensuring that a sufficient number of students will be selected for a given school. Within each school, the class sampling interval is defined as the inverse of the Stage 3 probability of selection.

Before applying the sampling interval, the classes were ordered by grade to provide implicit stratification by grade, then a random start was initialized, and the class sampling interval was applied. For example, for a school with 480 students and a class sampling interval of 4, the random start is a random number between 1 and the sampling interval (4). If, for example, 3 is selected after applying a random process, the following classes would be selected for the survey: 3, 7, 11, 15, and so on (3 + 4 = 7, 7 + 4 = 11, etc.). If there was a total of eight classes in a

school, the 3rd and 7th classes would be selected based on the ordering. The number of classes in a school was unknown before contacting the school, so, the sampling team picked a larger number of classes to be selected than were used. For additional information, see Appendix C.

2.2.5.4   *Student Selection Within Class*

All students were selected in the sampled classes. This is not considered a sampling stage.

2.2.5.5   *Mathematical Representation of the Sample*

The following formula describes the probability of selection for each student. Each factor in the product on the right size of the formula corresponds to a sampling stage.

$$Prob_{i,j,k,l,m} = [\frac{\alpha_i^1 * MOS_{i,j}}{\sum_{\forall j} MOS_{i,j}} + (1 - \frac{\alpha_i^1 * MOS_{i,j}}{\sum_{\forall j} MOS_{i,j}}) * \frac{\alpha_i^2 * MOS_{i,j}}{\sum_{\forall j} MOS_{i,j}^2}] * \frac{3 * MOS_{i,j,k}}{MOS_{i,j}} * \frac{\beta_{i,j,k} * students\ per\ class_{i,j,k}}{MOS_{i,j,k}}$$

Where, i = stratum, j = PSU, k = school, l = class, m = student.

$Prob_{i,j,k,l,m}$ = Probability of selecting the mth student, in the lth class, in the kth school, in the jth PSU in the ith stratum.

α_i^1 = The number of PSUs selected in the ith stratum in the first sample draw.

α_i^2 = The number of PSUs selected in the ith stratum in the second sample draw.

$MOS_{i,j}$ = number of eligible students in the ith stratum and jth PSU; MOS is measure of size.

$\sum_{\forall j} MOS_{i,j}$ = number of eligible students in the ith stratum in first sample draw, all PSUs in stratum i.

$\sum_{\forall j} MOS_{i,j}^2$ = number of eligible students in the ith stratum in the second sample draw, all PSUs in stratum i that were not selected in the first draw.

$MOS_{i,j,k}$ = This is the number of eligible students in the ith stratum and jth PSU and kth school.

$\beta_{i,j,k}$ = classes selected in the kth school, in the jth PSU, in the ith stratum.

The expression $[\frac{\alpha_i^1 * MOS_{i,j}}{\sum_{\forall j} MOS_{i,j}} + (1 - \frac{\alpha_i^1 * MOS_{i,j}}{\sum_{\forall j} MOS_{i,j}}) * \frac{\alpha_i^2 * MOS_{i,j}}{\sum_{\forall j} MOS_{i,j}^2}]$ is the probability of selecting the PSU. It is composed of the probability of selecting the PSU in the first draw plus the product of not selecting the PSU in the first draw and the probability of selecting the PSU in the second draw.

Table 4 presents, by stratum and overall, the counts of PSUs, schools, and students in the sampling frame and selected for participation in the study.

Table 4.   Counts of PSUs, Schools, and Students in the Sampling Frame and Selected for Participation in the Study by Stratum

Stratum Code	Frame Counts			Selection Counts		
	PSUs	Schools	Students	PSUs	Schools	Students
1) NH AI/AN 20 to 40%	18	432	99,291	6	18	1,871
2) NH AI/AN more than 40%	19	573	100,245	11	33	3,584
3) NH Asian 20 to 40%	139	1,541	1,192,929	11	33	3,982
4) NH Asian more than 40%	59	638	500,612	8	24	2,886
5) Other schools with only middle school students	1,194	31,397	9,700,189	69	207	23,404
6) Other schools with only high school students	890	14,440	12,684,352	91	274	32,773
7) Other schools with both middle and high school students	761	11,119	3,728,981	27	81	9,361
All Strata	**3,080**	**60,140**	**28,006,599**	**223**	**670**	**77,862**

Abbreviations: AI/AN = American Indian/Alaska Native; NH = Non-Hispanic; PSU = Primary Sampling Unit

The unequal weighting effect of the 2024 design for estimates to the entire population was 1.08.[6] The 2024 design deviated from an equal probability of sampling method (EPSOM) design for all sample members for the following reasons:

1) The number of PSUs selected in a stratum (α_i) varied. This aspect of the design was implemented:

   a. To increase the proportion of NH AI/AN, and NH Asian students.

   b. Because an integer number of PSUs were selected within each stratum. Consequently, an allocation exactly proportional to size across strata was not possible.

2) During the selection of schools, middle schools were oversampled so that three-sevenths of the respondents were attending middle schools. We had the goal of obtaining an equal number of students in each of the seven grades captured by the NYTS (6th, 7th, 8th, 9th, 10th, 11th, and 12th). Because there were fewer grades in middle school (three) than high school (four), it was necessary to oversample middle schools in order to yield an equal number of students in each grade.

Table 5 presents the estimates of the number of respondents by school type and overall, for grade, race/ethnicity category, and rural status, assuming 285 responding schools and 85% student response rate. These results assume that response propensity is not correlated with the various characteristics (e.g., race/ethnicity category, high school/middle school, and rural status).[7]

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[6] This reported unequal weighting effect applied to the student weights without nonresponse adjustment and without calibration.
[7] We found that response propensity was correlated with grade, high school/middle school, and race/ethnicity.

Table 5.   Estimate of Respondents by Domain with 285 Responding Schools and 85% Student Response Rate

School Type	Total Respondents	Each Grade	NH White	NH Black	Hispanic	NH Asian	NH AI/AN	Rural
Middle school	11,602	3,867	4,476	1,723	2,791	703	423	2,002
High school	16,550	4,138	6,387	2,221	4,170	1,048	937	2,735
Total	**28,152**	**4,022**	**10,863**	**3,944**	**6,961**	**1,751**	**1,360**	**4,737**

Abbreviations: AI/AN = American Indian/Alaska Native; NH = non-Hispanic

CHAPTER 3—NYTS DATA COLLECTION AND PROCESSING

3.1.   SURVEY INSTRUMENT

The 2024 survey instrument was the same as the instrument fielded in 2023 and included 149 questions. The survey was administered as a web-based survey and created using Qualtrics XM. The survey instrument is included in Appendix B.

The survey followed a skip-pattern logic based on the student's responses to questions about ever and current tobacco product use behaviors. To improve student privacy, only one question was shown at a time, preventing others from seeing previous answers. Students were allowed to take the survey in the classroom, at home, or some other location. Students who could not take the survey on the planned date of administration were asked to take the survey at the next possible opportunity.

The length of interview (LOI) was captured for each record and was calculated as the amount of time elapsed between the date/time of the first response and the date/time of the last response for each student. LOI ranged from 3 minutes, 26 seconds to 55 minutes, 4 seconds with a median time of 17 minutes, 3 seconds.

3.2.   STUDY LIAISON STAFFING

Study Liaisons (SLs) provided virtual support to schools and teachers before, during, and after survey administration to (1) ensure teachers had received all the necessary materials to administer the survey; (2) answer any of the questions that school contacts and/or teachers had prior to, during, or after survey administration; (3) ascertain that parental consent was properly obtained prior to the scheduled survey administration date; and (4) provide remote IT support, if needed. A local SL was assigned to all participating schools to ensure schools were adequately supported in all time zones.

3.3.   RECRUITMENT PROCEDURES

The 670 schools selected to participate in the 2024 NYTS were located in 42 states. Recruitment began in September of 2023. A date for survey administration in each school was agreed upon based on

school schedules and requirements. During recruitment, 13 of the 670 schools (1.9%) were found to be ineligible to participate in the NYTS, six of which were replaced (see section 3.5.1), resulting in 663 eligible schools.

Once schools agreed to participate in the NYTS, SLs worked with the school to assign a school coordinator who oversaw the school's data collection. The school coordinator could be any member of the school's staff. Although counselors and assistant principals most commonly served as school coordinators, principals, teachers, and administrative assistants could also fill this role.

3.4. SURVEY ADMINISTRATION

Data were collected January–May 2024. In general, there were six steps followed for data collection in schools:

1) Conduct pre-contact call with the school coordinator to confirm survey arrangements and to answer any questions.

2) Send tailored communications and survey materials to the school coordinator to distribute to selected teachers.

3) Confirm receipt of materials, verify intentions to administer the survey on the scheduled date, and confirm parental consent procedures were followed.

4) Virtually monitor survey activities and respond to requests for technical support, as needed.

5) Follow up with the school coordinator and/or teachers regarding student response rates and class enrollment.

6) Report final progress to school coordinator and thank them for their school's participation.

Procedures were designed to protect students' privacy by assuring that student participation was anonymous and voluntary. Teachers read a script at the start of the student session that introduced the study and provided informed consent. Using a school-issued or personal internet-connected device students logged into a secure website.

After schools were recruited, classes selected, and a date for survey administration scheduled, the school coordinator received an email with pre-survey materials containing instructions for survey administration, the survey URL to confirm access, and the parental permission forms to be distributed to all students in the selected classes prior to data collection.

3.5. PARTICIPATION RATES

Preliminary student participation rates were calculated based on class enrollment numbers provided by teachers of selected classes and the number of surveys received in the central repository. If teachers reported a different number of expected completes than what was received in the central repository, an SL followed up to resolve discrepancies and determine additional

strategies to maximize student participation. As additional surveys were received after the initial survey administration date, the number of records received, and participation rates were revised accordingly.

3.5.1. School Participation Rate

There were 670 schools selected in 42 states. Thirteen (1.9%) of the schools were deemed ineligible during recruitment. Six of the ineligible schools were identified in sample one and were replaced. Ineligible schools were replaced with the next school in the stratum where the list was sorted by stratum and enrollment. Seven ineligible schools were identified in sample two but were not replaced due to the later timing close to the end of the school year. In total, 283 of the 663 (42.7%) eligible schools participated in the study. The remaining 380 schools were considered refusals. The school response rate was 42.7% and was calculated by dividing the total number of responding schools by the number of eligible schools in the sample. Table 6 displays the components of the school response rate overall and by stratum.

Table 6. Components of the School Response Rate Overall and by Stratum

Stratum	Schools Selected	Responding Schools	Nonresponding Schools	Ineligible Schools	School Response Rate (%)
1) NH AI/AN 20 to 40%	18	10	8	0	55.6
2) NH AI/AN more than 40%	33	21	7	5	75.0
3) NH Asian 20 to 40%	33	14	18	1	43.8
4) NH Asian more than 40%	24	8	16	0	33.3
5) Other schools with only middle school students	207	99	108	0	47.8
6) Other schools with only high school students	274	99	174	1	36.3
7) Other schools with both middle and high school students	81	32	49	0	39.5
All Strata	**670**	**283**	**380**	**7**	**42.7**

Abbreviations: AI/AN = American Indian/Alaska Native; NH = non-Hispanic

3.5.2. Student Participation Rate

Initial student-level participation rates were calculated from the field as teachers reported enrollment information and submitted surveys in the central repository. In subsequent follow-ups between teachers and SLs, further refinements were made to (1) revise the number of eligible students based on available documentation, (2) correct mathematical errors, (3) review counts of surveys received, and (4) account for make-ups as they were received from students and classes that did not participate on the initial day of survey administration.

According to enrollment estimates, 38,133 students were enrolled in the selected classrooms within responding schools. Of these, 29,861 students completed the questionnaire.[8] The overall student response rate was 78.3% (29,861/38,133). Table 7 displays the components of the student response rate overall and by stratum.

Table 7. Components of the Student Response Rate Overall and by Stratum

Stratum	Students Selected	Responding Students	Student Response Rate
1) NH AI/AN 20 to 40%	1,303	1,052	80.7
2) NH AI/AN more than 40%	2,327	1,633	70.2
3) NH Asian 20 to 40%	1,998	1,675	83.8
4) NH Asian more than 40%	1,148	952	82.9
5) Other schools with only middle school students	13,333	10,897	81.7
6) Other schools with only high school students	13,830	10,350	74.8
7) Other schools with both middle and high school students	4,194	3,302	78.7
All Strata	**38,133**	**29,861**	**78.3**

Abbreviations: AI/AN = American Indian/Alaska Native; NH = non-Hispanic

3.5.3. Study Participation Rate

The study participation rate was 33.4%. The study participation rate is the product of the school participation rate (42.7%) and the student participation rate (78.3%). Table 8 displays the study participation rate overall and by stratum.

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[8] A complete (i.e., number of students who completed the survey) was defined as a student who started the survey, consented to participate, viewed at least the first three questions in the survey, and responded to at least one of the first three questions. This data cleaning practice is consistent with the procedures used to clean the 2021, 2022, and 2023 NYTS datasets. Of note, any records that were created by proctors testing the survey link were removed from the student-level dataset.

Table 8.   Overall Study Participation Rate and by Stratum

Stratum	School Participation Rate	Student Participation Rate	Study Participation Rate
1) NH AI/AN 20 to 40%	55.6	80.7	44.9
2) NH AI/AN more than 40%	75.0	70.2	52.6
3) NH Asian 20 to 40%	43.8	83.8	36.7
4) NH Asian more than 40%	33.3	82.9	27.6
5) Other schools with only middle school students	47.8	81.7	39.1
6) Other schools with only high school students	36.3	74.8	27.1
7) Other schools with both middle and high school students	39.5	78.7	31.1
All Strata	**42.7**	**78.3**	**33.4**

Abbreviations: AI/AN = American Indian/Alaska Native; NH = non-Hispanic

3.6.   EVALUATE THE DISTRIBUTION OF THE RESPONDENTS

Table 9 displays the respondents by sex and grade. Of the respondents, 49.2% were female.

Table 9.   Respondents by Sex and Grade

Sex	Grade							
	6	7	8	9	10	11	12	Total
Female	2,259	2,428	2,482	2,237	2,099	1,699	1,487	14,691
Male	2,281	2,523	2,660	2,315	2,068	1,846	1,477	15,170
Total	**4,540**	**4,951**	**5,142**	**4,552**	**4,167**	**3,545**	**2,964**	**29,861**

Table 10 displays the respondents by middle school/high school, race/ethnicity and rural status.

Table 10. Respondents by Middle School/High School, Race/Ethnicity Category, and Rural Status

School Type	NH White	NH Black	Hispanic	NH Asian	NH AI/AN	Rural	Total
Middle school	5,081	2,030	5,220	843	561	898	14,633
High school	5,532	1,625	5,105	1,028	894	1,044	15,228
Total	**10,613**	**3,655**	**10,325**	**1,871**	**1,455**	**1,942**	**29,861**

Abbreviations: AI/AN = American Indian/Alaska Native; NH = non-Hispanic

3.7. DATA MANAGEMENT

To take advantage of the electronic format of the NYTS, the dataset was designed to be self-cleaning based on programming logic. However, to ensure accuracy, CDC created a series of data-cleaning specifications that were applied to eliminate internal inconsistencies. These cleaning specifications also computed analytic variables and recoded responses to questions about race and ethnicity to match definitions of race and ethnicity used in previous rounds of the NYTS. Data "missingness" was categorized into one of four types: a legitimate skip based on programmed logic, item-level refusal if a student viewed the question but chose to advance the survey without providing a response, not answered because the student never reached the item because they only completed part of the survey (e.g., partial complete), or missing due to edit checks. The types of missingness are distinguished in the dataset as follows:

- .S – Legitimate skip
- .N – Displayed, not answered (item-level refusal)
- .Z – Not displayed (partial complete)
- .E – Missing due to edit check

CHAPTER 4—WEIGHTING OF NYTS RESPONDENT DATA

4.1. OVERVIEW

This chapter describes the weighting methodology applied to create the analysis weights. The analysis weights are used when estimating population parameters with the 2024 NYTS data. The 2024 weighting methodology is consistent with the 2023 NYTS methodology. Slight differences between the 2024 and 2023 weighting methodology are noted in the text. Of note, this section refers to two samples— the original sample of schools and the additional sample that was added due to the increasing adoption of active consent laws in states. We refer to these samples as sample one and sample two, respectively. For more information, see Section 2.2.4.

Sampling weights are the link between the survey sample and the population. In lay terms, the sampling weights ensure that estimates calculated from the sample represent the population. To construct the weights that are used to make population estimates, also known as the analysis weights, we applied the following six steps.

1) Calculated the base weight for every school sampled—the inverse of the probability of selecting each school.

2) Calculated a school nonresponse adjustment to the base weight.

3) Calculated the class weight—the inverse of the probability of selecting each class within the school.

4) Calculated a student nonresponse adjustment.

5) Calculated the nonresponse adjusted student weights—the product of the school base weight, the school nonresponse adjustment, the inverse of the class selection probability, and the student nonresponse adjustments.

6) Calibrated the nonresponse adjusted student weights to population totals.

No weight trimming was applied during the creation of the 2024 NYTS weights.

4.2. CALCULATE THE WEIGHTS

4.2.1. Weighting Step 1—Calculate the Base Weight for Each Sampled School

The base weight of each sampled school is the inverse of the probability of selecting each school. The probability of selecting each school is the product of the probability of selecting the PSU and the probability of selecting the school. The calculation of the school base weight is described in detail in sections 4.2.1.1-4.2.1.3.

4.2.1.1. Probability of Selecting the PSU

The probability of selecting the PSU is $\left[\frac{\alpha_i^1 * MOS_{i,j}}{\sum_{\forall j} MOS_{i,j}} + \left(1 - \frac{\alpha_i^1 * MOS_{i,j}}{\sum_{\forall j} MOS_{i,j}}\right) * \frac{\alpha_i^2 * MOS_{i,j}}{\sum_{\forall j} MOS_{i,j}^2}\right]$.

Where, $\alpha_i^1 = $ The number of PSUs selected in the ith stratum in the first sample.

$\alpha_i^2 = $ The number of PSUs selected in the ith stratum in the second sample.

$MOS_{i,j} = $ number of eligible students in the ith stratum and jth PSU; MOS is the measure of size.

$\sum_{\forall j} MOS_{i,j} = $ number of eligible students in the ith stratum in Sample 1, all PSUs in stratum i.

$\sum_{\forall j} MOS_{i,j}^2 = $ number of eligible students in the ith stratum in Sample 2, all PSUs in stratum i that were not selected in sample 1.

Within stratum, across all PSUs selected, the sum of the product of the PSU weight and the PSU enrollment ($\sum_{PSUs\ selected\ in\ i} PSU\_WT_{i,j} * MOS_{i,j}$) is not exactly equal to the enrollment in the PSU ($\sum_{all\ PSUs\ in\ i} MOS_{i,j}$). For 6 of the 7 strata, these values differ by less than 0.3%, for the other stratum the difference is 1.0%. The discrepancy is a result of conducting the 2 sample draws since the sum of the students in the PSUs not selected in the first sample draw ($\sum_{\forall j} MOS_{i,j}^2$) is a random variable. To correct this discrepancy, for each selected PSU, the probability of selection is adjusted by the factor $\frac{\sum_{PSUs\ selected\ in\ i} PSU\_WT_{i,j} * MOS_{i,j}}{\sum_{all\ PSUs\ in\ i} MOS_{i,j}}$. This step is not included in the formula in Section 4.2.1.3, to simplify the formula and because the adjustments are negligible.

4.2.1.2. Probability of Selecting the School

The probability of selecting the school is $\frac{3\ (or\ 4) * MOS_{i,j,k}}{MOS_{i,j}}$.

The numbers "3 (or 4)" refers to the number of schools selected in the PSU. One PSU had four schools selected; the other 223 PSUs had three schools per PSU selected.

$MOS_{i,j,k}$ is the number of eligible students in the ith stratum in the jth PSU in the kth school. $MOS_{i,j}$ is the number of eligible students in the ith stratum and jth PSU.

4.2.1.3. School Base Weight

Each school's base weight is the inverse of the product of the probabilities of selection of the first two sampling stages. The following is the formula for $Prob_{i,j,k}$, the probability of selection for each school sampled.

$$Prob_{i,j,k} = [\frac{\alpha_i^1 * MOS_{i,j}}{\sum_{\forall j} MOS_{i,j}} + (1 - \frac{\alpha_i^1 * MOS_{i,j}}{\sum_{\forall j} MOS_{i,j}}) * \frac{\alpha_i^2 * MOS_{i,j}}{\sum_{\forall j} MOS_{i,j}^2}] * \frac{3 \text{ (or 4)} * MOS_{i,j,k}}{MOS_{i,j}}$$

The base weight assigned to each selected school is the inverse of $Prob_{i,j,k}$.

$$W_{i,j,k}^{School} = \frac{1}{Prob_{i,j,k}}$$

where $W_{i,j,k}^{School}$ is the base weight of the kth school in the jth PSU, in the ith stratum.

4.2.2. Weighting Step 2—Calculate a School Nonresponse Adjustment

A logistic regression model was used to predict each eligible school's probability of response based on the characteristics of the school. The weights of the responding schools were increased by dividing the school's weight by the predicted probability of response. This adjustment is done so that the weights of the nonresponding schools get distributed to the responding schools, and the responding schools that are more similar to the nonresponding schools receive a higher proportion of the nonresponding schools' weights. The data from the 663 eligible schools were fit to a logistic regression model where school response was the dependent variable, and the following independent variables were considered:

- Stratum
- Census region (4 levels)[9]
- Census division (9 levels)[10]
- Frame (Common Core of Data (CCD), Private School Universe Survey (PPS), or Market Data Retrieval Inc. (MDR))
- Private school/public school
- Middle school/high school
- Enrollment
- Rural/urban
- Percentage of Non-Hispanic (NH) White students categorized into quintiles
- Percentage of NH Black students categorized into quintiles

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[9] The definition of Census region and Census division can be found here: https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf
[10] See the previous footnote.

- Percentage of Hispanic students categorized into quintiles
- Percentage of NH Asian students categorized into quintiles
- Percentage of NH AI/AN students categorized into quintiles
- Sample draw (1st or 2nd draw)

A backward stepwise model fitting procedure was implemented. A logistic regression model was fit with the school response as the dependent variable and all the independent variables listed above. The variable with the largest p-value greater than 0.05 was removed from the model. This process was iterated until all variables left in the model had p-values less than 0.05.

The final model contained the following independent variables:
- Frame—CCD, PPS, or MDR (p-value = <0.0001),
- Sample Draw (p-value = 0.0002)
- Hispanic quintile (p-value = 0.0018),
- Rural/urban (p-value = 0.0119), and
- Enrollment (p-value = 0.0010).

The area under the receiver operating characteristics curve (ROC) curve was 0.68, indicating that the independent variables explain much of the variance in school response.

The fitted logistic regression model has the form:

$$\text{logit}(p_{i,j,k}) = \beta_0 + \beta_1 X_{1,i,j,k} + \cdots + \beta_n X_{n,i,j,k}$$

We calculated the probability of response for each school sampled:

$$p_{i,j,} = \frac{1}{1 + e^{-\text{logit}(p_{i,j,k})}}$$

The index i corresponds to a stratum i.
The index j corresponds to a PSU j.
The index k corresponds to school k.

The school nonresponse adjustment was calculated as

$$Adj_{i,j,k}^{School\ NR} = \frac{1}{P_{i,j,k}},$$

where,

$Adj_{i,j,k}^{School\ NR}$ = School nonresponse adjustment for the kth responding school, in the jth PSU, in the ith stratum.

$P_{i,j,k}$ = the predicted probability of response from the logistic regression model for the kth responding school, in the jth PSU, in the ith stratum.

4.2.3. Weighting Step 3—Calculate the Class Weight

The probability of selecting a class within each selected school is:

$$Prob_{i,j,k,l} = \frac{\beta_{i,j,k} * mean\ students\ per\ class_{i,j,k}}{MOS_{i,j,k}}$$

Where $Prob_{i,j,k,l}$ = the probability of selecting the lth class, in the kth school, in the jth PSU, in the ith stratum.

$\beta_{i,j,k}$ = Number of classes selected in the kth school, in the jth PSU, in the ith stratum.

$MOS_{i,j,k}$ = The number of eligible students in the ith stratum and jth PSU and kth school.

l = Class.

The class weight is:

$$W_{i,j,k,l}^{Class} = \frac{1}{Prob_{i,j,k,l}}$$

Where $W_{i,j,k,l}^{Class}$ is the contribution to the weight from selecting the class within a school for the lth class, in the kth school, in the jth PSU, in the ith stratum.

Since all students are selected in each class the student weight is equal to the class weight.

4.2.4. Weighting Step 4—Student Nonresponse Adjustment

The fourth step is to adjust for student nonresponse. Within weighting classes, the student nonresponse adjustment is the ratio of sampled students to responding students.

The school characteristics that are correlated to student nonresponse form the weighting classes. To determine the school characteristics that are correlated to student nonresponse, a linear model was fit to a dataset containing the 283 responding schools. The schools' student response rate was the dependent variable. The independent variables were the same ones considered in the model to predict school nonresponse (Section 4.2.2). A backward stepwise model fitting procedure was implemented. The independent variable with the largest p-value greater than 0.05 was removed from the model. This process was iterated until all variables left in the model had p-values less than 0.05.

Stratum (p-value = 0.0202) was the only statistically significant predictor of student response propensity. Weighting classes were formed by strata. Within each stratum, the student nonresponse adjustment is the ratio of the students selected in the stratum to the students responding in the stratum.

$$Adj_i^{Student\ NR} = \frac{Students\ selected\ in\ stratum_i}{Students\ responding\ in\ stratum_i}$$

Table 11 displays, by stratum and overall, the number of students selected and responding, and the student nonresponse adjustment.

Table 11. Student Nonresponse Adjustment by Stratum

Stratum	Students		Student response rate	Student nonresponse adjustment
	Selected	Responding		
1) NH AI/AN 20 to 40%	1,303	1,052	80.7	1.24
2) NH AI/AN more than 40%	2,327	1,633	70.2	1.42
3) NH Asian 20 to 40%	1,998	1,675	83.8	1.19
4) NH Asian more than 40%	1,148	952	82.9	1.21
5) Other schools with only middle school students	13,333	10,897	81.7	1.22
6) Other schools with only high school students	13,830	10,350	74.8	1.34
7) Other schools with both middle and high school students	4,194	3,302	78.7	1.27
All Strata	**38,133**	**29,861**	**78.3**	

Abbreviations: AI/AN = American Indian/Alaska Native; NH = non-Hispanic

4.2.5. Weighting Step 5—Calculate the Nonresponse Adjusted Student Weight

The nonresponse-adjusted student weight is the product of the school weight, the school nonresponse adjustment, the class weight, and the student nonresponse adjustment.

$$W_{i,j,k,l,m}^{NR\ adj\ student} = W_{i,j,k}^{School} * Adj_{i,j,k}^{School\ NR} * W_{i,j,k,l}^{Class} * Adj_i^{Student\ NR}$$

Where, $W_{i,j,k,l,m}^{NR\ adj\ student}$ is the nonresponse adjusted student weight, for the mth student, in the lth class, in the kth school, in the jth PSU, in the ith stratum.

The nonresponse-adjusted student weight is the input weight used in the calibration procedure.

4.2.6. Weighting Step 6—Calibration

In calibration, for various demographic distributions, the sums of the weights are constrained to equal population totals calculated from the sampling frame. Calibration can reduce coverage bias and nonresponse bias. Calibration was performed using SUDAAN PROC WTADJUST. We used the same calibration categories as the 2023 NYTS:

- For public schools:
  - Combinations of grade and sex
  - Combinations of grade and race/ethnicity

- The race categories are NH AI/AN, NH Asian, NH Black, Hispanic, NH White, and NH Other (people who identify with some other race not in this list and / or identify with more than one race)
- For private schools:
  - Grade

Grade was missing for 183 (0.6%) of the responding students, sex was missing for 187 (0.6%) of the students, and race/ethnicity was missing for 453 (1.5%) of the students. These missing values were imputed using two different methods.[11] Grade was imputed using the mode of the reported grade in the class of the missing data item. Sex and race were imputed using a hot-deck imputation procedure. In the hot-deck procedure, students are sorted by school and class, then randomized within class. The missing values are replaced with the data value from the preceding student based on the ordering of the file. The hot-deck imputation method is designed to preserve the distribution of the imputed variables.

Tables 12, 13, and 14 contain the distributions and population totals used in the calibration, as well as the number and percentage of respondents in each calibration cell.

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[11] Imputation is only used for calibration. The imputed values will not be used when reporting estimates. It is necessary to impute prior to calibration because a weight cannot be calculated for cases where the respondent is missing any of the variables used in the calibration.

Table 12. Calibration Distribution among Public/Private Schools by Sex and Grade

Public/ Private	Sex	Grade	Population		Respondents	
			n	%	n	%
Public	Female	6th grade	1,730,035	6.2	2,174	7.3
		7th grade	1,808,429	6.5	2,348	7.9
		8th grade	1,855,243	6.6	2,370	7.9
		9th grade	1,984,219	7.1	2,087	7.0
		10th grade	1,829,840	6.5	2,016	6.8
		11th grade	1,727,630	6.2	1,626	5.4
		12th grade	1,674,794	6.0	1,434	4.8
	Male	6th grade	1,816,371	6.5	2,178	7.3
		7th grade	1,898,349	6.8	2,436	8.2
		8th grade	1,947,619	7.0	2,556	8.6
		9th grade	2,067,360	7.4	2,205	7.4
		10th grade	1,904,761	6.8	1,938	6.5
		11th grade	1,796,083	6.4	1,746	5.8
		12th grade	1,740,126	6.2	1,361	4.6
Private	Male and Female	All grades	2,225,740	7.9	1,386	4.6
Total			**28,006,599**	**100.0**	**29,861**	**100.0**

Table 13. Calibration Distribution among Public/ Private Schools by Race/Ethnicity and Grade

Public/ Private	Race/ Ethnicity	Grade	Population		Respondents	
			n	%	n	%
Public	NH White	6th grade	1,585,653	5.7	1,583	5.3
		7th grade	1,673,236	6.0	1,580	5.3
		8th grade	1,719,613	6.1	1,638	5.5
		9th grade	1,850,776	6.6	1,502	5.0
		10th grade	1,735,873	6.2	1,449	4.9
		11th grade	1,651,875	5.9	1,213	4.1
		12th grade	1,621,848	5.8	1,030	3.4
	NH Black	6th grade	540,700	1.9	620	2.1
		7th grade	564,413	2.0	732	2.5
		8th grade	571,643	2.0	634	2.1
		9th grade	623,097	2.2	406	1.4
		10th grade	542,252	1.9	415	1.4
		11th grade	501,004	1.8	378	1.3
		12th grade	475,903	1.7	259	0.9
	Hispanic	6th grade	1,018,310	3.6	1,446	4.8
		7th grade	1,055,429	3.8	1,714	5.7
		8th grade	1,085,416	3.9	1,855	6.2
		9th grade	1,142,879	4.1	1,399	4.7
		10th grade	1,049,922	3.7	1,321	4.4
		11th grade	982,698	3.5	1,207	4.0
		12th grade	936,468	3.3	976	3.3
	NH Asian	6th grade	190,594	0.7	230	0.8
		7th grade	194,998	0.7	275	0.9
		8th grade	201,162	0.7	325	1.1
		9th grade	215,031	0.8	356	1.2
		10th grade	204,776	0.7	221	0.7
		11th grade	197,902	0.7	175	0.6
		12th grade	196,124	0.7	219	0.7
	NH AI/AN	6th grade	33,290	0.1	212	0.7
		7th grade	36,375	0.1	174	0.6
		8th grade	37,043	0.1	170	0.6
		9th grade	39,975	0.1	304	1.0
		10th grade	35,812	0.1	271	0.9
		11th grade	33,590	0.1	189	0.6
		12th grade	32,479	0.1	126	0.4
	NH Other*	6th grade	177,859	0.6	261	0.9
		7th grade	182,327	0.7	309	1.0
		8th grade	187,986	0.7	304	1.0
		9th grade	179,820	0.6	325	1.1
		10th grade	165,967	0.6	277	0.9
		11th grade	156,644	0.6	210	0.7
		12th grade	152,098	0.5	185	0.6
Private	All races	All grades	2,225,740	7.9	1,386	4.6
Total			**28,006,600**	**100.0**	**29,861**	**100.0**

Abbreviations: AI/AN = American Indian/Alaska Native; NH = non-Hispanic

* Refers to students who identify with some other race not listed in the table and/or students who identify with more than one race.

Table 14. Calibration Distribution among Public/Private Schools by Grade

Public/ Private	Grade	Population		Respondents	
		n	%	n	%
Private	6th grade	328,692	1.2	188	0.6
	7th grade	328,133	1.2	167	0.6
	8th grade	326,775	1.2	216	0.7
	9th grade	315,604	1.1	260	0.9
	10th grade	314,911	1.1	213	0.7
	11th grade	309,035	1.1	173	0.6
	12th grade	302,590	1.1	169	0.6
Public	All grades	25,780,859	92.1	28,475	95.4
Total		**28,006,599**	**100.0**	**29,861**	**100.0**

4.3. GUIDANCE ON MAKING POPULATION ESTIMATES

Weighted estimates of means, percentages and totals can be computed using common statistical software packages such as SAS, SUDAAN, or R. When calculating population estimates, the user needs to include the design variables, stratum, and cluster, as well as the analysis weights. The following are the variables on the analysis dataset used for estimating population parameters:

STRATUM—This variable identifies the sampling stratum. Not including stratification in the analysis will not produce incorrect estimates. However, including stratum generally reduces the variance of the estimates slightly. STRATUM_NUM is a numeric version of this variable.

PSU—This variable identifies the clusters used in the analysis. If the clustering variable is omitted, variances will be underestimated. PSU_NUM is a numeric version of this variable.

WT_ANALYSIS—This variable contains the weight of each responding student. The respondent's weight reflects the number of population members the respondent represents. Omitting the weight in the analysis will provide estimates of the characteristics of the set of respondents, not the population members (e.g., the estimates will not reflect the population).

The following is example SAS code:

```
proc surveyfreq data=work.dataset;
 stratum stratum;
 cluster PSU;
 weight WT_analysis;
 tables outcome_1*outcome_2/row cl;
 ods output CrossTabs=p;
run;
```

The following is example SUDAAN code:

```
proc sort data=work.dataset;
 by stratum_num PSU_num;
run;

proc crosstab data=work.dataset;
 nest stratum_num PSU_num;
 weight WT_analysis;
 class outcome_1 outcome_2;
 tables outcome_1*outcome_2;
run;
```

4.4. QC CHECKS PERFORMED DURING THE CREATION OF THE SAMPLING WEIGHTS

1) Confirm that all students come from a school that matches the sample frame.

2) Identify records on the student file that were not valid.

   Some of the records on the student file were school employees evaluating the content of the questionnaire. There was one school with one responding questionnaire that we confirmed was not a legitimate student respondent. If we did not remove that one student record, the school would have been considered a responding school, and the one student would have a very large weight to account for the large amount of student nonresponse.

3) Evaluate the school's disposition codes.

   The disposition code identifies if the school is a responding school, nonresponding school, or ineligible school. Disposition codes are used by recruitment and data collection staff to track school responses. Table 6 contains the counts of schools with each disposition by stratum. This table was used to evaluate the accuracy of the assignment of disposition codes to the schools.

4) Evaluate the independent variables used in the school-level nonresponse model.

   For the nonresponse model, we created the quintiles for the distributions: percentage of NH White, NH Black, Hispanic, NH Asian, and NH AI/AN students. Schools with missing values for race and ethnicity were placed in a separate category. We checked that each level of the variables contained approximately 20% of the schools after accounting for missing values.

5) Check the class enrollment values.

   The class enrollment data come from three sources:

   (1) A school administrator when the classes were enumerated

(2) The classroom teacher when the students are answering the questionnaire

(3) The count of responding students in a class (i.e., number of surveys received)

If (3) is greater than (1) or (2), the class size is initialized to (3) because the class size has to be at least as large as the number of responding students. Otherwise, if (2) is equal to or greater than (3), the class size is initialized to (2) because we assume that the teacher specified class size at the time of survey administration is more accurate than the class size provided by the administrator when the class list was provided. The reason for this assumption is that teacher-reported enrollment is provided closer to the actual date of the survey than administrator-reported enrollment. Also, because they interact more closely with students, teachers are more likely to have an accurate count of students in their class than administrators. If (2) is missing and (1) is greater or equal to (3), we use (1). For the one school that did not provide class size ((1) and (2) were missing), we imputed the class size to 1.25 times the number of responding students. We printed out a class-level file, organized by school, with all the relevant data that was used to initialize class size. We reviewed this file to identify any suspicious class sizes. During this review, we found a few cases in which one class ID was used for several classes. For these classes, we recoded class enrollment to equal the sum of the enrollment for all affected classes divided by the number of affected classes.

6) Check that the variables used in calibration are nonmissing.

First, we determined whether the components of the variables used in calibration contained any missing values. Next, we imputed these values as described in the calibration section. Then, we checked the imputed values for missing values.

7) Check that the coding of the calibration variables matches the order of the population totals listed in the procedure that implements the calibration.

8) Evaluate the application of the calibration.

Tables 12, 13, and 14 contain the population totals for each calibration category. The totals in these tables were generated from the macro variables used for the constraints in the calibration procedure. To check if the calibration procedure worked correctly, the population totals were recreated by calculating the weighted cross-tabulations of the calibration distributions from the final weighted survey data. These totals matched the inputs to the calibration procedure, demonstrating that the calibration worked correctly.

9) Evaluate the number of respondents in a PSU.

The data are clustered by school because of the study design. To reduce disclosure risk, on the analysis file, each PSU contains groupings of schools. We checked that the number of students in each PSU was large enough to ensure that estimating the interclass correlation within PSU was possible; this step was part of creating estimates of precision.

10) Evaluate the unequal weighting effect.

We calculated the unequal weighting effect for the entire population. It is 1.3. [12]

11) Examine the distribution of the weights and confirm there are no missing weights.

Table 15 shows the distribution of the calculated sampling weights.

Table 15. Distribution of Sampling Weights by Percentile

Minimum	Percentile					Maximum
	10%	25%	50%	75%	90%	
19.7	382.5	626.8	862.1	1,190.9	1,592.4	4,894.8

12) Evaluate the variance of the estimates.

We calculated ever and current tobacco use estimates for 12 tobacco product types for high school and middle school students in eight domains (overall, by sex, and by race/ethnicity). We evaluated the standard errors of the estimates and found them to be almost identical to the standard errors of the 2023 estimates. We also found that the level of precision of the 2024 estimates is slightly better than the precision of the 2023 estimates because more schools and students responded to the 2024 NYTS than to the 2023 NYTS.

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[12] 1.3 is the unequal weighting effect of the analysis weights, which include school and student nonresponse adjustments and calibration to population totals. When the design of the survey was discussed, we described the unequal weighting effect as 1.08. This is the unequal weighting effect of the base weight, which does not include any post-survey adjustment.

APPENDIX A. COMMON CORE OF DATA RACE AND ETHNICITY DEFINITIONS

Non-Hispanic American Indian/Alaska Native—A person having origins in any of the original peoples of North and South America (including Central America) and who maintains cultural identification through tribal affiliation or community recognition.

Non-Hispanic Asian—A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent.

Non-Hispanic Black—A person having origins in any of the Black racial groups of Africa; African American.

Hispanic—A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

Non-Hispanic White—A person having origins in any of the original peoples of Europe, North Africa, or the Middle East.

National Youth Tobacco Survey (NYTS)
2024 Questionnaire

National Youth Tobacco Survey (NYTS)
2024 Questionnaire

This survey is about tobacco. We would like to know about you and things you do that may affect your health. Your answers will be used for programs for young people like yourself.

The answers you give will be kept private.

NO one will know what you answered. Answer the questions based on what you really do and know.

Completing the survey is voluntary. Whether or not you answer the questions will not affect your grade in this class. Try to answer all the questions. If you do not want to answer a question, just leave it blank. There are no wrong answers.

The questions that ask about your background will only be used to describe the types of students completing this survey. The information will not be used to find out your name. No names will ever be reported.

Please read every question. Try to answer all the questions. Select the squares next to the response you choose. When you are finished, follow the instructions of the person giving you the survey.

Thank You Very Much For Your Help.

Q_NUM	Question Text and Skip Instructions

Location	*Instruction Universe: all students*
	
	Where are you currently taking this survey?
	    A. In a school building/classroom
	    B. At home (virtual learning)
	    C. Some other place

INSTRUCT_1	*Instruction Universe: all students* The first five questions ask some background information about you.

1	*Question Universe: all students*
	
	How old are you?
	    A. 9 years old
	    B. 10 years old
	    C. 11 years old
	    D. 12 years old
	    E. 13 years old
	    F. 14 years old
	    G. 15 years old
	    H. 16 years old
	    I. 17 years old
	    J. 18 years old
	    K. 19 years old or older

2	*Question Universe: all students*
	
	What is your sex?
	    A. Male
	    B. Female

3	*Question Universe: all students*
	
	What grade are you in?
	    A. 6th
	    B. 7th
	    C. 8th
	    D. 9th
	    E. 10th
	    F. 11th
	    G. 12th
	    H. Ungraded or other grade

4	*Question Universe: all students*
	
	Are you Hispanic, Latino, Latina, or of Spanish origin? **(Select one or more)**
	    A. No, not of Hispanic, Latino, Latina, or Spanish origin → **[EXCLUSIVE]**
	    B. Yes, Mexican, Mexican American, Chicano, or Chicana
	    C. Yes, Puerto Rican
	    D. Yes, Cuban
	    E. Yes, Another Hispanic, Latino, Latina, or Spanish origin

5	*Question Universe: all students*
	
	What race or races do you consider yourself to be? **(Select one or more)**
	    A. American Indian or Alaska Native
	    B. Asian
	    C. Black or African American
	    D. Native Hawaiian or Other Pacific Islander
	    E. White

Q_NUM	Question Text and Skip Instructions
INSTRUCT_2	*Instruction Universe: all students* The next several sections of questions ask about your use of particular kinds of tobacco products, such as e-cigarettes, cigarettes, cigars, smokeless tobacco, snus, nicotine pouches, other oral nicotine products, hookahs, heated tobacco products, pipe tobacco, bidis, and roll-your own-cigarettes. At the beginning of each section, you will see a brief description and an image showing examples of each kind of tobacco product.
INSTRUCT_3	*Instruction Universe: all students* The next several questions are about **electronic cigarettes or e-cigarettes**, such as JUUL, Vuse, NJOY, Elf Bar, or blu. You also may know them as vapes, mods, e-cigs, e-hookahs, or vape-pens. **For the rest of this survey, these products and devices will be called e-cigarettes.** E-cigarettes are battery powered devices that usually contain a nicotine-based liquid that is vaporized and inhaled.

6	*Question Universe: all students*
	
	Have you **ever used** an e-cigarette, even once or twice?
	    A. Yes → [CONTINUE TO Q7]
	    B. No → [SKIP TO Q30]
	
	        [IF Q6 EQ (NA) [Not Answered] → SOFT VALIDATION]
	        [IF Q6 EQ (NA) → SKIP TO Q9]

7	*Question Universe: ever e-cigarette users [known]*
	
	How old were you when you **first used** an e-cigarette, even once or twice?
	    A. 8 years old or younger
	    B. 9 years old
	    C. 10 years old
	    D. 11 years old
	    E. 12 years old
	    F. 13 years old
	    G. 14 years old
	    H. 15 years old
	    I. 16 years old
	    J. 17 years old
	    K. 18 years old
	    L. 19 years old or older

8	*Question Universe: ever e-cigarette users [known]*
	
	In total, on how many days have you used e-cigarettes in your entire life?
	    A. 1 day
	    B. 2 to 10 days
	    C. 11 to 20 days
	    D. 21 to 50 days
	    E. 51 to 100 days
	    F. Over 100 days

Q_NUM	Question Text and Skip Instructions
9	*Question Universe: ever e-cigarette users [or unknown]* During the **past 30 days**, on how many days did you use e-cigarettes? Specify: |__|__| (Range 0 – 30) **[PROGRAMMING: RANGE (0 – 30) ALLOWED]** **IF Q9 EQ (NA) → SOFT VALIDATION** **[IF Q6 EQ (NA) AND Q9 EQ (NA) → SKIP TO INSTRUCT_4]** **[IF Q6 EQ (NA) AND Q9 EQ (0) → SKIP TO INSTRUCT_4]** **[IF Q6 EQ (1) AND Q9 EQ (NA) → CONTINUE TO Q10: show all options]** **[IF Q6 EQ (NA) AND Q9 EQ (1-30) → CONTINUE TO Q10: show options A-C only]** **[IF Q6 EQ (1) AND Q9 EQ (0) → CONTINUE TO Q10: show options D-G only]** **[IF Q6 EQ (1) AND Q9 EQ (1-30) → CONTINUE TO Q10: show options A-C only]**

10	*Question Universe: ever/current e-cigarette users [known]*
	
	When was the last time you used an e-cigarette, even one or two times? (**Please choose the first answer that fits**)
	    A. Earlier today
	    B. Not today, but sometime during the past 7 days
	    C. Not during the past 7 days, but sometime during the past 30 days
	    D. Not during the past 30 days, but sometime during the past 6 months
	    E. Not during the past 6 months, but sometime during the past year
	    F. 1 to 4 years ago
	    G. 5 or more years ago
	
	[ALL RESPONSES → CONTINUE TO Q11]

11	*Question Universe: ever/current e-cigarette users [known]*
	
	Why did you **first use** an e-cigarette? (**Select one or more**)
	    A. A friend used them
	    B. A family member used them
	    C. To try to quit using other tobacco products, such as cigarettes
	    D. They cost less than other tobacco products, such as cigarettes
	    E. They were easier to get than other tobacco products, such as cigarettes
	    F. I've 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. I was feeling anxious, stressed, or depressed
	    M. To get a high or buzz from nicotine
	    N. I used them for some other reason (specify: _____)
	
	[IF Q11 EQ (NA) AND Q9 EQ (1-30)→ CONTINUE TO Q12]
	[IF Q11 EQ (NA) AND Q9 EQ (0 or NA) → SKIP TO Q25]
	[IF Q9 EQ (0 or NA) → SKIP TO Q25]
	[ELSE IF Q9 EQ (1-30) → CONTINUE TO Q12]

Q_NUM	Question Text and Skip Instructions

12	*Question Universe: current e-cigarette users [known]*
	
	Why do you **currently use** e-cigarettes? (**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 cost less than other tobacco products, such as cigarettes
	    E. They are easier to get than other tobacco products, such as cigarettes
	    F. I've 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 are available in flavors, such as menthol, mint, candy, fruit, or chocolate
	    I. I can use them unnoticed at home or at school
	    J. I can use them to do tricks
	    K. I am curious about them
	    L. Because I feel anxious, stressed, or depressed
	    M. To get a high or buzz from nicotine
	    N. I use them for some other reason (specify: _____)

13	*Question Universe: past 30-day e-cigarette user [known]*
	
	Which of the following best describes the type of e-cigarette you have used in the past 30 days?
	If you have used more than one type, please think about the one you use most often.
	    A. A disposable e-cigarette (for example, Elf Bar, or Kangvape)
	    B. An e-cigarette that uses pre-filled or refillable pods or cartridges (for example, JUUL, Vuse, or Suorin)
	    C. An e-cigarette with a tank that you refill with liquids (including mod systems that can be customized by the user)
	    D. I don't know the type

14	*Question Universe: past 30-day e-cigarette user [known]*
	
	During the past 30 days, what e-cigarette brands did you use? (**Select one or more**)
	    A. blu
	    B. Breeze
	    C. Elf Bar
	    D. Esco Bars
	    E. Fume
	    F. JUUL
	    G. HQD
	    H. Kangvape (including Onee Stick)
	    I. Logic
	    J. Mr. Fog
	    K. NJOY
	    L. SMOK (including NOVO)
	    M. Suorin (including Air Bar)
	    N. Vuse
	    O. Some other brand(s) not listed here (specify): _____
	    P. Not sure / I don't know the brand
	
	[IF >1 OPTION SELECTED → CONTINUE TO Q15]
	[IF 1 OPTION SELECTED → SKIP TO Q16]
	[IF Q14 EQ (NA) → SKIP TO Q16]

Q_NUM	Question Text and Skip Instructions

15	*Question Universe: past 30-day e-cigarette user reporting >1 brand [known]*
	
	During the past 30 days, what brand of e-cigarettes did you **usually use**? **(Choose only one answer)**
	    A. I did not use a usual brand
	    B. blu
	    C. Breeze
	    D. Elf Bar
	    E. Esco Bars
	    F. Fume
	    G. JUUL
	    H. HQD
	    I. Kangvape (including Onee Stick)
	    J. Logic
	    K. Mr. Fog
	    L. NJOY
	    M. SMOK (including NOVO)
	    N. Suorin (including Air Bar)
	    O. Vuse
	    P. Some other brand not listed here (specify): _____
	    Q. Not sure / I don't know the brand
	
	[ALL RESPONSES → CONTINUE TO Q16]

16	*Question Universe: past 30-day e-cigarette users [known]*
	
	Did any of the e-cigarettes that you used in the past 30 days contain nicotine?
	    A. Yes
	    B. No
	    C. Don't know

17	*Question Universe: past 30-day e-cigarette users [known]*
	
	Nicotine salts, or "nic salts", is a type of nicotine that is found in some e-liquids, pods, and cartridges. Did any of the e-cigarettes that you used in the **past 30 days** contain nicotine salts?
	    A. Yes
	    B. No
	    C. Don't know

18a	*Question Universe: past 30-day e-cigarette users [known]*
	
	In the past 30 days when you used e-cigarettes, what flavors did you use? **(Select one or more)**
	    A. Tobacco-flavor
	    B. Menthol
	    C. Mint
	    D. Spice (such as cinnamon, vanilla, or clove)
	    E. Fruit
	    F. Chocolate
	    G. Alcoholic drinks (such as wine, margarita, or other cocktails)
	    H. Non-alcoholic drink (such as coffee, soda, lemonade, or other beverage)
	    I. Candy, desserts, or other sweets
	    J. Unflavored
	    K. Some other flavor not listed here (Specify: _____)

19	*Question Universe: past 30-day user of e-cigarettes*
	
	Did any of the flavors that you used in the past 30 days have names or descriptions that included the word "ice" or "iced" (for example, blueberry ice or strawberry ice)?
	    A. Yes
	    B. No
	    C. Don't know

Q_NUM	Question Text and Skip Instructions
20	*Question Universe: past 30-day user of e-cigarettes* Did any of the flavors that you used in the past 30 days have a name that **did not describe a specific flavor**, such as "solar," "purple," "jazz," "island bash," "fusion" or some other word or phrase? A. Yes (specify): _____ B. No C. Don't know
21a	*Question Universe: past 30-day e-cigarette user [known]* During the **past 30 days**, how did you get your e-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 took them from a store or another person H. I got them in some other way (specify: _____) **[ALL RESPONSES → CONTINUE TO Q22a]**
22a	*Question Universe: past 30-day e-cigarette user [known]* During the **past 30 days**, where did you **buy** your e-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, online vape or tobacco store or other online marketplace) I. Through the mail J. Through a delivery service (such as DoorDash or Postmates) K. A vape shop or tobacco shop L. Some other place not listed here (specify): _____ **[IF [((Q21a_B EQ (1)) OR (Q21a_C EQ (1)) OR (Q21a_D EQ (1)) OR (Q21a_E EQ (1)) OR (Q21a_F EQ (1)) OR Q22a_B EQ (1))] → CONTINUE TO Q23]** **[ELSE → SKIP TO Q25]**
23	*Question Universe: past 30-day e-cigarette user (who got a product from someone else)* Earlier you answered that you got or bought your e-cigarette devices, pods, cartridges, or e-liquid refills from another person, such as a friend or family member during the **past 30 days**. How old was this person? A. Younger than 18 years old B. 18 years old C. 19 years old D. 20 years old E. 21 years old or older F. I don't know

Q_NUM	Question Text and Skip Instructions

24	*Question Universe: past 30-day e-cigarette user (who got a product from someone else)*
	
	During the **past 30 days**, which of the following e-cigarette product(s) did you get or buy from another person? **(Select one or more)**
	    A. A new e-cigarette device (including disposable devices)
	    B. A pod, cartridge, or e-liquid refill
	    C. A hit or a drag from another person's e-cigarette device
	    D. Something else (specify:_____)

25	*Question Universe: ever e-cigarette user [known]*
	
	Have you **ever** purchased an e-cigarette device (including disposable devices), pod, cartridge, single hit, or e-liquid refill while at school or on school property?
	    A. Yes
	    B. No
	
	[IF Q25 EQ (NA) AND Q9 EQ (0 or NA) →SKIP TO INSTRUCT_4]
	[IF Q25 IN (1,2) AND Q9 EQ (0 or NA) → SKIP TO INSTRUCT_4]
	[ELSE IF Q9 EQ (1-30) → CONTINUE TO Q26]

26	*Question Universe: past 30-day e-cigarette user [known]*
	
	During the **past 30 days**, how often did you use someone else's e-cigarette device?
	    A. Never
	    B. Rarely
	    C. Sometimes
	    D. Most of the Time
	    E. Always

27	*Question Universe: past 30-day users of e-cigarettes [known]*
	
	Are you seriously thinking about quitting **e-cigarettes**? (**Please choose the first answer that fits**)
	    A. Yes, during the next 30 days
	    B. Yes, during the next 6 months
	    C. Yes, during the next 12 months
	    D. Yes, but not during the next 12 months
	    E. No, I am not thinking about quitting e-cigarettes

28	*Question Universe: past 30-day users of e-cigarettes [known]*
	
	During the **past 12 months**, how many times have you stopped using **e-cigarettes** for **one day or longer** because you were trying to quit using e-cigarettes **for good**?
	    A. I did not try to quit during the past 12 months → **[SKIP TO INSTRUCT_4]**
	    B. 1 time
	    C. 2 times
	    D. 3 to 5 times
	    E. 6 to 9 times
	    F. 10 or more times
	
	[IF Q28 EQ (2,3,4,5,6) → CONTINUE TO Q29]
	[IF Q28 EQ (NA) → SKIP TO INSTRUCT_4]

Q_NUM	Question Text and Skip Instructions

29	*Question Universe: e-cigarette users who reported ≥1 quit attempt in past 12 months [known]*
	
	When you tried to quit using e-cigarettes, did you use any of the following? **(Select one or more)**
	    A. I did not use any resources → **[EXCLUSIVE]**
	    B. Help or advice from a parent or caregiver
	    C. Help or advice from a friend or peer
	    D. Help or advice from a teacher or coach
	    E. Help, advice, or counseling from a doctor or health care provider
	    F. Treatment from a hospital, medical center, or some other facility
	    G. Help or advice from the Internet
	    H. A mobile app or texting program
	    I. A telephone helpline or Quitline
	    J. Something else (specify): _____
	
	[ALL RESPONSES → SKIP TO INSTRUCT_4]

30	*Question Universe: never e-cigarette users [known]*
	
	Have you ever been curious about using an e-cigarette?
	    A. Definitely yes
	    B. Probably yes
	    C. Probably not
	    D. Definitely not

31	*Question Universe: never e-cigarette users [known]*
	
	Do you think that you will try an e-cigarette soon?
	    A. Definitely yes
	    B. Probably yes
	    C. Probably not
	    D. Definitely not

32	*Question Universe: never e-cigarette users [known]*
	
	Do you think you will use an e-cigarette in the next year?
	    A. Definitely yes
	    B. Probably yes
	    C. Probably not
	    D. Definitely not

33	*Question Universe: never e-cigarette users [known]*
	
	If one of your best friends were to offer you an e-cigarette, would you use it?
	    A. Definitely yes
	    B. Probably yes
	    C. Probably not
	    D. Definitely not
	
	[ALL RESPONSES CONTINUE TO INSTRUCT_4]

INSTRUCT_4	*Instruction Universe: all students* The next questions ask about other substances that could be vaped.

Q_NUM	Question Text and Skip Instructions
34	*Question Universe: all students* Have you **ever vaped** any of the following substances (even once)? |	Yes	No	Don't Know | |---|---|---|---| | A. Marijuana (also called pot, weed, or cannabis), including THC, THC concentrates, hash oil, or waxes | A | B | C | | B. CBD or CBD oils | A | B | C | | C. Synthetic marijuana or cannabinoids, such as K2 or Spice | A | B | C | | D. Another substance Specify): | A | B | C | **[IF Q34A EQ (2) AND Q34B EQ (2) AND Q34C EQ (2) AND Q34D EQ (2) → SKIP TO INSTRUCT_5]** **[ELSE IF Q34A EQ (1,3,NA) OR Q34B EQ (1,3,NA) OR Q34C EQ (1,3,NA) OR Q34D EQ (1,3,NA) → CONTINUE TO Q35]**
35	*Question Universe: all students* Have you **vaped** any of the following substances during the **past 30 days**? | | Yes | No | Don't Know | |---|---|---|---| | **[SHOW IF Q34A EQ (1, 3, NA)]:** A. Marijuana (also called pot, weed, or cannabis), including THC, THC concentrates, hash oil, or waxes | A | B | C | | **[SHOW IF Q34B EQ (1, 3, NA)]:** B. CBD or CBD oils | A | B | C | | **[SHOW IF Q34C EQ (1, 3, NA)]:** C. Synthetic marijuana or cannabinoids, such as K2 or Spice | A | B | C | | **[SHOW IF Q34D EQ (1, 3, NA)]:** D. Another substance (Specify): | A | B | C | **[ALL RESPONSES CONTINUE TO INSTRUCT_5]**
INSTRUCT_5	*Instruction Universe: all students* The next several questions are about smoking **cigarettes** (ones that have to be lit and burned).

36	*Question Universe: all students*
	
	Have you **ever smoked** a cigarette, even one or two puffs?
	    A. Yes → **[CONTINUE TO Q37]**
	    B. No → **[SKIP TO Q48]**
	
	    [IF Q36 EQ (NA) → SOFT VALIDATION]
	    [IF Q36 EQ (NA) → SKIP TO Q39]

37	*Question Universe: ever cigarette smokers [known]*
	
	How old were you when you **first smoked** a cigarette, even one or two puffs?
	    A. 8 years old or younger
	    B. 9 years old
	    C. 10 years old
	    D. 11 years old
	    E. 12 years old
	    F. 13 years old
	    G. 14 years old
	    H. 15 years old
	    I. 16 years old
	    J. 17 years old
	    K. 18 years old
	    L. 19 years old or older

Q_NUM	Question Text and Skip Instructions

38	*Question Universe: ever cigarette smokers [known]*
	
	About how many cigarettes have you smoked in your **entire life**?
	    A. 1 or more puffs but never a whole cigarette
	    B. 1 cigarette
	    C. 2 to 5 cigarettes
	    D. 6 to 15 cigarettes (about 1/2 a pack total)
	    E. 16 to 25 cigarettes (about 1 pack total)
	    F. 26 to 99 cigarettes (more than 1 pack, but less than 5 packs)
	    G. 100 or more cigarettes (5 or more packs)

39	*Question Universe: ever cigarette smokers [or unknown]*
	
	During the **past 30 days**, on how many days did you smoke cigarettes?
	
	    Specify: |__|__| (Range: 0 – 30)
	
	    [PROGRAMMING: RANGE (0 – 30) ALLOWED]
	
	    IF Q39 EQ (NA) –SOFT VALIDATION
	
	    [IF Q36 EQ (NA) AND Q39 EQ (NA) → SKIP TO INSTRUCT_6]
	    [IF Q36 EQ (NA) AND Q39 EQ (0) → SKIP TO INSTRUCT_6]
	    [IF Q36 EQ (NA) AND Q39 EQ (1-30) → CONTINUE TO Q40: show options A-C only]
	    [IF Q36 EQ (1) AND Q39 EQ (NA) → CONTINUE TO Q40: show all options]
	    [ELSE, IF Q36 EQ (1) AND Q39 EQ (0) → CONTINUE TO Q40: show options D-G only]
	    [ELSE, IF Q36 EQ (1) AND Q39 EQ (1-30) → CONTINUE TO Q40: show options A-C only]

40	*Question Universe: ever/current cigarette smokers [known]*
	
	When was the last time you smoked a cigarette, even one or two puffs? (**Please choose the first answer that fits**)
	    A. Earlier today
	    B. Not today but sometime during the past 7 days
	    C. Not during the past 7 days but sometime during the past 30 days
	    D. Not during the past 30 days but sometime during the past 6 months
	    E. Not during the past 6 months but sometime during the past year
	    F. 1 to 4 years ago
	    G. 5 or more years ago
	
	    [IF Q39 EQ (NA) → GO TO INSTRUCT_6]
	    [IF Q39 EQ (0) → GO TO INSTRUCT_6]
	    [ELSE IF Q39 EQ (1-30) → CONTINUE TO Q41]

41	*Question Universe: past 30-day cigarette smokers [known]*
	
	During the past 30 days, **on the days you smoked**, about how many cigarettes did you smoke per day? A pack usually has 20 cigarettes in it.
	    A. Less than 1 cigarette per day
	    B. 1 cigarette per day
	    C. 2 to 5 cigarettes per day
	    D. 6 to 10 cigarettes per day
	    E. 11 to 20 cigarettes per day
	    F. More than 20 cigarettes per day

Q_NUM	Question Text and Skip Instructions

42	*Question Universe: past 30-day cigarette smokers [known]*
	
	During the past 30 days, what brands of cigarettes did you smoke? **(Select one or more)**
	    A. American Spirit
	    B. Camel
	    C. Eagle
	    D. Kool
	    E. Marlboro
	    F. Maverick
	    G. Newport
	    H. L&M
	    I. Lucky Strike
	    J. Pall Mall
	    K. Winston
	    L. Some other brand not listed here (Please specify: _____)
	    M. Not sure / I don't know the brand
	
	[IF >1 OPTION SELECTED → CONTINUE TO Q43]
	[IF 1 OPTION SELECTED → SKIP TO Q44]
	[IF Q41 EQ (NA) → SKIP TO Q44]

43	*Question Universe: past 30-day cigarette smokers reporting more than 1 brand [known]*
	
	During the past 30 days, what brand of cigarettes did you **usually smoke**? **(Choose only one answer)**
	    A. I did not smoke a usual brand
	    B. American Spirit
	    C. Camel
	    D. Eagle
	    E. Kool
	    F. Marlboro
	    G. Maverick
	    H. Newport
	    I. L&M
	    J. Lucky Strike
	    K. Pall Mall
	    L. Winston
	    M. Some other brand not listed here (Please specify: _____)
	    N. Not sure / I don't know the brand

44	*Question Universe: past 30-day cigarette smokers [known]*
	
	Menthol cigarettes are cigarettes that taste like mint. During the past 30 days, were the cigarettes that you **usually smoked** menthol?
	    A. Yes
	    B. No
	    C. Not sure

21b	*Question Universe: past 30-day cigarette smokers [known]*
	
	During the **past 30 days**, how did you get your cigarettes? **(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
	    H. I got them in some other way (specify: _____)
	
	[ALL RESPONSES CONTINUE TO Q22b]

Q_NUM	Question Text and Skip Instructions

22b	*Question Universe: past 30-day cigarette smokers [known]*
	
	During the **past 30 days**, where did you **buy** your cigarettes? **(Select one or more)**
	    A. I did not buy 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, online vape or tobacco store or another online marketplace)
	    I. Through the mail
	    J. Through a delivery service (such as DoorDash or Postmates)
	    K. A vape shop or tobacco shop
	    L. Some other place not listed here (specify): _____
	
	    [IF [((Q21b_B EQ (1)) OR (Q21b_C EQ (1)) OR (Q21b_D EQ (1)) OR (Q21b_E EQ (1)) OR (Q21b_F EQ (1)) OR Q22b_B EQ (1))] → CONTINUE TO Q45]
	
	    [ELSE → SKIP TO Q46]

45	*Question Universe: past 30-day cigarette user (who got a product from someone else)*
	
	Earlier you mentioned that you got or bought your cigarettes from another person, such as a friend or family member during the **past 30 days**. How old was this person?
	    A. Younger than 18 years old
	    B. 18 years old
	    C. 19 years old
	    D. 20 years old
	    E. 21 years old or older
	    F. I don't know

46	*Question Universe: past 30-day users of cigarettes [known]*
	
	Are you seriously thinking about quitting **cigarettes**? (**Please choose the first answer that fits**)
	    A. Yes, during the next 30 days
	    B. Yes, during the next 6 months
	    C. Yes, during the next 12 months
	    D. Yes, but not during the next 12 months
	    E. No, I am not thinking about quitting cigarettes

47	*Question Universe: past 30-day users of cigarettes [known]*
	
	During the **past 12 months**, how many times have you stopped smoking **cigarettes** for **one day or longer** because you were trying to quit smoking cigarettes **for good**?
	    A. I did not try to quit during the past 12 months
	    B. 1 time
	    C. 2 times
	    D. 3 to 5 times
	    E. 6 to 9 times
	    F. 10 or more times
	
	    [ALL RESPONSES → SKIP TO INSTRUCT_6]

48	*Question Universe: never cigarette smokers [known]*
	
	Have you ever been curious about smoking a cigarette?
	    A. Definitely yes
	    B. Probably yes
	    C. Probably not
	    D. Definitely not

Q_NUM	Question Text and Skip Instructions

49	*Question Universe: never cigarette smokers [known]*
	
	Do you think that you will try a cigarette soon?
	    A. Definitely yes
	    B. Probably yes
	    C. Probably not
	    D. Definitely not

50	*Question Universe: never cigarette smokers [known]*
	
	Do you think you will smoke a cigarette in the next year?
	    A. Definitely yes
	    B. Probably yes
	    C. Probably not
	    D. Definitely not

51	*Question Universe: never cigarette smokers [known]*
	
	If one of your best friends were to offer you a cigarette, would you smoke it?
	    A. Definitely yes
	    B. Probably yes
	    C. Probably not
	    D. Definitely not

INSTRUCT_6	*Instruction Universe: all students* The next several questions are about the use of **cigars, cigarillos, or little cigars** such as Swisher Sweets, Middleton's (Black & Mild), Backwoods, Garcia y Vega, Cheyenne, White Owl, or Dutch Masters.

52	*Question Universe: all students*
	
	Have you **ever smoked** a cigar, cigarillo, or little cigar, even one or two puffs?
	    A. Yes → [CONTINUE TO Q53]
	    B. No → [SKIP TO Q62]
	
	        [IF Q52 EQ (NA) → SOFT VALIDATION]
	        [IF Q52 EQ (NA) → SKIP TO Q54]

53	*Question Universe: ever cigar smokers [known]*
	
	How old were you when you **first smoked** a cigar, cigarillo, or little cigar, even one or two puffs?
	    A. 8 years old or younger
	    B. 9 years old
	    C. 10 years old
	    D. 11 years old
	    E. 12 years old
	    F. 13 years old
	    G. 14 years old
	    H. 15 years old
	    I. 16 years old
	    J. 17 years old
	    K. 18 years old
	    L. 19 years old or older

Q_NUM	Question Text and Skip Instructions
54	*Question Universe: ever cigar smokers [or unknown]* During the **past 30 days**, on how many days did you smoke cigars, cigarillos, or little cigars? Specify: |__|__| (Range 0 – 30) **[PROGRAMMING: RANGE (0 – 30) ALLOWED]** **IF Q54 EQ (NA) – SOFT VALIDATION** **[IF Q52 EQ (1) AND Q54 EQ (0) → SKIP TO INSTRUCT_7]** **[IF Q52 EQ (NA) AND Q54 EQ (NA) → SKIP TO INSTRUCT_7]** **[IF Q52 EQ (NA) AND Q54 EQ (0) → SKIP TO INSTRUCT_7]** **[IF Q52 EQ (NA) AND Q54 EQ (1-30) → CONTINUE TO Q55]** **[IF Q52 EQ (1) AND Q54 EQ (1-30) → CONTINUE TO Q55]** **[IF Q52 EQ (1) AND Q54 EQ (NA) → SKIP TO INSTRUCT_7]**

55	*Question Universe: past 30-day cigar smokers [known]*
	
	During the past 30 days, **on the days that you smoked**, about how many cigars, cigarillos, or little cigars did you smoke per day?
	    A. Less than 1 cigar, cigarillo, or little cigar per day
	    B. 1 per day
	    C. 2 to 5 per day
	    D. 6 to 10 per day
	    E. 11 to 20 per day
	    F. More than 20 per day

56	*Question Universe: past 30-day cigar smokers [known]*
	
	During the past 30 days, which of the following types of cigars have you smoked? (**Select one or more**)
	    A. Regular cigars
	    B. Cigarillos
	    C. Little Cigars
	    D. Don't Know → **[EXCLUSIVE]**

57	*Question Universe: past 30-day cigar smokers [known]*
	
	During the past 30 days, what brands of cigars, cigarillos, or little cigars did you smoke? (**Select one or more**)
	    A. Al Capone
	    B. Backwoods
	    C. Cheyenne
	    D. Djarum
	    E. Dutch Masters
	    F. Garcia Y Vega
	    G. Grabba Leaf
	    H. Middleton's (including Black & Mild)
	    I. Optimo
	    J. Phillies
	    K. Swisher Sweets
	    L. White Owl
	    M. Some other brand not listed here (specify): _____
	    N. Not Sure / I don't know the brand
	
	[IF >1 OPTION SELECTED → CONTINUE TO Q58]
	[IF 1 OPTION SELECTED → SKIP TO Q18b]
	[IF Q57 EQ (NA) → SKIP TO Q18b]

Q_NUM	Question Text and Skip Instructions

58	*Question Universe: past 30-day cigar user reporting >1 brand [known]*
	
	During the past 30 days, what brand of cigars, cigarillos, or little cigars did you **usually use**? **(Choose only one answer)**
	    A. I did not use a usual brand
	    B. Al Capone
	    C. Backwoods
	    D. Cheyenne
	    E. Djarum
	    F. Dutch Masters
	    G. Garcia Y Vega
	    H. Grabba Leaf
	    I. Middleton's (including Black & Mild)
	    J. Optimo
	    K. Phillies
	    L. Swisher Sweets
	    M. White Owl
	    N. Some other brand not listed here (specify): _____
	    O. Not Sure / I don't know the brand
	
	[ALL RESPONSES → CONTINUE TO Q18b]

18b	*Question Universe: past 30-day cigar user [known]*
	
	In the past 30 days when you used cigars, cigarillos, or little cigars, what flavors did you use? **(Select one or more)**
	
	    A. Tobacco-flavor
	    B. Menthol
	    C. Mint
	    D. Spice (such as cinnamon, vanilla, or clove)
	    E. Fruit
	    F. Chocolate
	    G. Alcoholic drinks (such as wine, margarita, or other cocktails)
	    H. Non-alcoholic drink (such as coffee, soda, lemonade, or other beverage)
	    I. Candy, desserts, or other sweets
	    J. Some other flavor not listed here (Specify: _____)
	
	[ALL RESPONSES CONTINUE TO 59]

59	*Question Universe: past 30-day cigar user [known]*
	
	Did any of the flavors that you used in the past 30 days have names or descriptions that included the word "ice" or "iced" (for example, blueberry ice or strawberry ice)?
	    A. Yes
	    B. No
	    C. Don't know

60	*Question Universe: past 30-day cigar user [known]*
	
	Did any of the flavors that you used in the past 30 days have a name that **did not describe a specific flavor**, such as "solar," "purple," "jazz," "island bash," "fusion" or some other word or phrase?
	
	    A. Yes (specify): _____
	    B. No
	    C. Don't know

Q_NUM	Question Text and Skip Instructions

21c	*Question Universe: past 30-day cigar smokers [known]*
	
	During the **past 30 days**, how did you get your cigars, cigarillos, or little cigars? **(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
	    H. I got them in some other way (specify: _____)
	
	[ALL RESPONSES CONTINUE TO Q22c]

22c	*Question Universe: past 30-day cigar smokers [known]*
	
	During the **past 30 days**, where did you **buy** your cigars, cigarillos, or little cigars? **(Select one or more)**
	    A. I did not buy cigars, cigarillos, or little cigars 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, online vape or tobacco store or another online marketplace)
	    I. Through the mail
	    J. Through a delivery service (such as DoorDash or Postmates)
	    K. A vape shop or tobacco shop
	    L. Some other place not listed here (specify): _____
	
	[IF [((Q21c_B EQ (1)) OR (Q21c_C EQ (1)) OR (Q21c_D EQ (1)) OR (Q21c_E EQ (1)) OR (Q21c_F EQ (1)) OR Q22c_B EQ (1))] → CONTINUE TO Q61]
	
	[ELSE → SKIP TO INSTRUCT_7]

61	*Question Universe: past 30-day cigar user (who got a product from someone else)*
	
	Earlier you mentioned that you got or bought your cigars, cigarillos, or little cigars from another person, such as a friend or family member during the **past 30 days**. How old was this person?
	    A. Younger than 18 years old
	    B. 18 years old
	    C. 19 years old
	    D. 20 years old
	    E. 21 years old or older
	    F. I don't know
	
	[ALL RESPONSES → SKIP TO INSTRUCT_7]

62	*Question Universe: never cigar smokers [known]*
	
	Have you ever been curious about smoking a cigar, cigarillo, or little cigar?
	    A. Definitely yes
	    B. Probably yes
	    C. Probably not
	    D. Definitely not

Q_NUM	Question Text and Skip Instructions

63	*Question Universe: never cigar smokers [known]*
	
	Do you think you will try a cigar, cigarillo, or little cigar soon?
	    A. Definitely yes
	    B. Probably yes
	    C. Probably not
	    D. Definitely not

64	*Question Universe: never cigar smokers [known]*
	
	Do you think you will smoke a cigar, cigarillo, or little cigar in the next year?
	    A. Definitely yes
	    B. Probably yes
	    C. Probably not
	    D. Definitely not

65	*Question Universe: never cigar smokers [known]*
	
	If one of your best friends were to offer you a cigar, cigarillo, or little cigar, would you smoke it?
	    A. Definitely yes
	    B. Probably yes
	    C. Probably not
	    D. Definitely not

INSTRUCT_7	*Instruction Universe: all students* The next question asks about marijuana use in cigars, cigarillos, or little cigars. Sometimes people take the tobacco out of a cigar, cigarillo, or little cigar and replace it with marijuana (also called pot, weed, or cannabis). This is sometimes called a blunt.

66	*Question Universe: all students*
	
	Have you ever smoked part or all of a cigar, cigarillo, or little cigar with marijuana in it?
	    A. Yes
	    B. No

INSTRUCT_8	*Instruction Universe: all students* The next several questions are about the use of **chewing tobacco, snuff, or dip**, such as Copenhagen, Grizzly, Skoal, or Red Seal. **Do not think about snus, nicotine pouches, or other oral nicotine products when you answer these questions.**

67	*Question Universe: all students*
	
	Have you **ever used** chewing tobacco, snuff, or dip, even just a small amount?
	    A. Yes → **[CONTINUE TO Q68]**
	    B. No → **[SKIP TO Q73]**
	
	      [IF Q67 EQ (NA) – SOFT VALIDATION]
	      [IF Q67 EQ (NA) → SKIP TO Q69]

Q_NUM	Question Text and Skip Instructions

68	*Question Universe: ever smokeless tobacco users [known]*
	
	How old were you when you **first used** chewing tobacco, snuff, or dip, even just a small amount?
	    A. 8 years old or younger
	    B. 9 years old
	    C. 10 years old
	    D. 11 years old
	    E. 12 years old
	    F. 13 years old
	    G. 14 years old
	    H. 15 years old
	    I. 16 years old
	    J. 17 years old
	    K. 18 years old
	    L. 19 years old or older

69	*Question Universe: ever smokeless tobacco users [or unknown]*
	
	During the **past 30 days**, on how many days did you use chewing tobacco, snuff, or dip?
	
	    Specify: |__|__| (Range 0 – 30)
	
	    [PROGRAMMING: RANGE (0 – 30) ALLOWED]
	
	    [IF Q69 EQ (NA) → SOFT VALIDATION]
	    [IF Q69 EQ (0, NA) → SKIP TO INSTRUCT_9]
	    [ELSE IF Q69 EQ (1-30) CONTINUE TO 70]

70	*Question Universe: ever smokeless tobacco users [known]*
	
	During the past 30 days, what brands of chewing tobacco, snuff, or dip did you use? **(Select one or more)**
	    A. Copenhagen
	    B. Grizzly
	    C. Kayak
	    D. Kodiak
	    E. Longhorn
	    F. Red Man
	    G. Red Seal
	    H. Skoal
	    I. Stoker's
	    J. Timber Wolf
	    K. Some other brand(s) not listed here (specify): _____
	    L. Not sure / I don't know the brand
	
	    [IF >1 OPTION SELECTED → CONTINUE TO Q71]
	    [IF 1 OPTION SELECTED → SKIP TO Q18c]
	    [IF Q70 (NA) → SKIP TO Q18c]

Q_NUM	Question Text and Skip Instructions

71	*Question Universe: past 30-day chewing tobacco, snuff, or dip user reporting >1 brand [known]*
	
	During the past 30 days, what brand of chewing tobacco, snuff, or dip did you **usually use**? **(Choose only one answer)**
	    A. I did not use a usual brand
	    B. Copenhagen
	    C. Grizzly
	    D. Kayak
	    E. Kodiak
	    F. Longhorn
	    G. Red Man
	    H. Red Seal
	    I. Skoal
	    J. Stoker's
	    K. Timber Wolf
	    L. Some other brand not listed here (specify): _____
	    M. Not sure / I don't know the brand
	
	[ALL RESPONSES → CONTINUE TO Q18c]

18c	*Question Universe: past 30-day smokeless tobacco user [known]*
	
	In the past 30 days when you used smokeless tobacco, what flavors did you use? **(Select one or more)**
	    A. Tobacco-flavor
	    B. Menthol
	    C. Mint
	    D. Spice (such as cinnamon, vanilla, or clove)
	    E. Fruit
	    F. Chocolate
	    G. Alcoholic drinks (such as wine, margarita, or other cocktails)
	    H. Non-alcoholic drink (such as coffee, soda, lemonade, or other beverage)
	    I. Candy, desserts, or other sweets
	    J. Some other flavor not listed here (Specify: _____)
	
	[ALL RESPONSES → CONTINUE Q21d]

21d	*Question Universe: past 30-day smokeless tobacco user [known]*
	
	During the **past 30 days**, how did you get your chewing tobacco, snuff, or dip? **(Select one or more)**
	    A. I bought it myself
	    B. I had someone else buy it for me
	    C. I asked someone to give me some
	    D. Someone offered it to me
	    E. I got it from a friend
	    F. I got it from a family member
	    G. I took it from a store or another person
	    H. I got it in some other way (specify: _____)
	
	[ALL RESPONSES CONTINUE TO Q22d]

Q_NUM	Question Text and Skip Instructions
22d	*Question Universe: past 30-day smokeless tobacco user [known]* During the **past 30 days**, where did you **buy** your chewing tobacco, snuff, or dip? **(Select one or more)** A. I did not buy chewing tobacco, snuff, or dip during the past 30 days → **[EXCLUSIVE RESPONSE]** B. I bought it 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, online vape or tobacco store or other online marketplace) I. Through the mail J. Through a delivery service (such as DoorDash or Postmates) K. A vape shop or tobacco shop L. Some other place not listed here (specify):_____ **[IF [((Q21d_B EQ (1)) OR (Q21d_C EQ (1)) OR (Q21d_D EQ (1)) OR (Q21d_E EQ (1)) OR (Q21d_F EQ (1)) OR Q22d_B EQ (1))] → CONTINUE TO Q72]** **[ELSE → SKIP TO INSTRUCT_9]**
72	*Question Universe: past 30-day smokeless tobacco user (who got a product from someone else)* Earlier you mentioned that you got or bought your chewing tobacco, snuff, or dip from another person, such as a friend or family member. How old was this person? A. Younger than 18 years old B. 18 years old C. 19 years old D. 20 years old E. 21 years old or older F. I don't know **[ALL RESPONSES → SKIP TO INSTRUCT_9]**
73	*Question Universe: never smokeless tobacco product users [known]* Have you ever been curious about using chewing tobacco, snuff, or dip? A. Definitely yes B. Probably yes C. Probably not D. Definitely not
INSTRUCT_9	*Instruction Universe: all students* The next few questions are about **snus**, such as Camel Snus, Marlboro Snus, or General Snus. Snus is a type of smokeless tobacco that comes in a small pouch that you put under your lip. Snus is different from some other smokeless tobacco products such as nicotine pouches, because it does contain tobacco leaf. **Do not think about chewing tobacco, snuff, dip, nicotine pouches, or other oral nicotine products when answering these questions.**
74	*Question Universe: all students* Have you ever used snus, even just one time? A. Yes → [CONTINUE TO Q75] B. No → [SKIP TO INSTRUCT_10] **[IF Q74 EQ (NA) → SOFT VALIDATION]** **[IF Q74 EQ (NA) → CONTINUE TO Q75]**

Q_NUM	Question Text and Skip Instructions
75	*Question Universe: ever users of snus [or unknown]* During the **past 30 days**, on how many days did you use snus? Specify: |_|_| (Range 0 – 30) **[PROGRAMMING: RANGE (0 – 30) ALLOWED]** **[IF Q75 EQ (NA) → SOFT VALIDATION]** **[IF Q75 EQ (1-30) → CONTINUE TO Q18d]** **[ELSE IF Q75 EQ (NA) → SKIP TO INSTRUCT_10]** **[ELSE IF Q75 EQ (0) → SKIP TO INSTRUCT_10]**

18d	*Question Universe: past 30-day snus user [known]*
	
	In the past 30 days when you used snus, what flavors did you use? **(Select one or more)**
	  A. Tobacco-flavor
	  B. Menthol
	  C. Mint
	  D. Spice (such as cinnamon, vanilla, or clove)
	  E. Fruit
	  F. Chocolate
	  G. Alcoholic drinks (such as wine, margarita, or other cocktails)
	  H. Non-alcoholic drinks (such as coffee, soda, lemonade, or other beverage)
	  I. Candy, desserts, or other sweets
	  J. Some other flavor not listed here (Specify: _____)
	
	[ALL RESPONSES → CONTINUE TO Q21e]

21e	*Question Universe: past 30-day snus user [known]*
	
	During the **past 30 days**, how did you get your snus? **(Select one or more)**
	  A. I bought it myself
	  B. I had someone else buy it for me
	  C. I asked someone to give me some
	  D. Someone offered it to me
	  E. I got it from a friend
	  F. I got it from a family member
	  G. I took it from a store or another person
	  H. I got it in some other way (specify: _____)
	
	[ALL RESPONSES CONTINUE TO Q22e]

22e	*Question Universe: past 30-day snus user [known]*
	
	During the **past 30 days**, where did you **buy** your snus? **(Select one or more)**
	  A. I did not buy snus during the past 30 days → **[EXCLUSIVE RESPONSE]**
	  B. I bought it 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, online vape or tobacco store or other online marketplace)
	  I. Through the mail
	  J. Through a delivery service (such as DoorDash or Postmates)
	  K. A vape shop or tobacco shop
	  L. Some other place not listed here (specify): _____

Q_NUM	Question Text and Skip Instructions
INSTRUCT_10	*Instruction Universe: all students* The next section is about **nicotine pouches** such as ZYN, on!, VELO or Rogue. These small, flavored pouches are filled with a nicotine-containing powder. Users place nicotine pouches in their mouth and do not need to spit. Nicotine pouches are different from some other smokeless tobacco products such as snus, dip, or chewing tobacco, because they **do not** contain any tobacco leaf. **Do not think about chewing tobacco, snuff, dip, snus, or other oral nicotine products when answering these questions.**
76	*Question Universe: all students* Before today, have you heard of nicotine pouches? A. Yes B. No C. Don't know/Not Sure **[ALL RESPONSES CONTINUE TO Q77]**
77	*Question Universe: all students* Have you **ever used** a nicotine pouch, even just one time? A. Yes → **[CONTINUE TO Q78]** B. No → **[SKIP TO INSTRUCT_11]** C. Don't Know/Not Sure → **[CONTINUE TO Q78]** **[IF Q77 EQ (NA) → SOFT VALIDATION]** **[IF Q77 EQ (NA) → CONTINUE TO Q78]**
78	*Question Universe: ever nicotine pouch user [or unknown/don't know]* During the **past 30 days**, on how many days did you use a nicotine pouch? Specify: |__|__| (Range 0 – 30) **[PROGRAMMING: RANGE (0 – 30) ALLOWED]** **[IF Q78 EQ (NA) → SOFT VALIDATION]** **[IF Q78 EQ (1-30) → CONTINUE TO Q79]** **[ELSE IF Q78 EQ (0) → SKIP TO INSTRUCT_11]** **[ELSE IF Q78 EQ (NA) → SKIP TO INSTRUCT_11]**
79	*Question Universe: past 30-day nicotine pouch user [known]* During the past 30 days, what nicotine pouch brands did you use? **(Select one or more)** A. 2ONE B. FRE C. on! D. Rogue E. VELO F. ZYN G. Juice Head ZTN H. Some other brand(s) not listed here (specify): _____ I. Not sure / I don't know the brand **[IF >1 OPTION SELECTED → CONTINUE TO Q80]** **[IF 1 OPTION SELECTED → SKIP TO Q18e]** **[IF Q79 EQ (NA) → SKIP TO Q18e]**

Q_NUM	Question Text and Skip Instructions
80	*Question Universe: past 30-day nicotine pouch user reporting >1 brand [known]* During the past 30 days, what brand of nicotine pouches did you **usually use**? **(Choose only one answer)** A. I did not use a usual brand B. 2ONE C. FRE D. on! E. Rogue F. VELO G. ZYN H. Juice Head ZTN I. Some other brand(s) not listed here (specify): _____ J. Not sure / I don't know the brand **[ALL RESPONSES → CONTINUE TO Q18e]**
18e	*Question Universe: past 30-day nicotine pouch user [known]* In the past 30 days that you used nicotine pouches, what flavors did you use? **(Select one or more)** A. Tobacco-flavor B. Menthol C. Mint D. Spice (such as cinnamon, vanilla, or clove) E. Fruit F. Chocolate G. Alcoholic drinks (such as wine, margarita, or other cocktails) H. Non-alcoholic drinks (such as coffee, soda, lemonade, or other beverage) I. Candy, desserts, or other sweets J. Unflavored K. Some other flavor not listed here (Specify: _____)
81	*Question Universe: past 30-day user of nicotine pouches* Did any of the flavors that you used in the past 30 days have names or descriptions that included the word "ice" or "iced" (for example, blueberry ice or strawberry ice)? A. Yes B. No C. Don't know
82	*Question Universe: past 30-day user of nicotine pouches* Did any of the flavors that you used in the past 30 days have a name that **did not describe a specific flavor**, such as "solar," "purple," "jazz," "island bash," "fusion" or some other word or phrase? A. Yes (specify): _____ B. No C. Don't know

Q_NUM	Question Text and Skip Instructions

21f	*Question Universe: past 30-day nicotine pouch user [known]*
	
	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
	    H. I got them in some other way (specify: _____)
	
	[ALL RESPONSES CONTINUE TO Q22f]

22f	*Question Universe: past 30-day nicotine pouch user [known]*
	
	During the **past 30 days**, where did you **buy** your 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, online vape or tobacco store or other online marketplace)
	    I. Through the mail
	    J. Through a delivery service (such as DoorDash or Postmates)
	    K. A vape shop or tobacco shop
	    L. Some other place not listed here (specify): _____

INSTRUCT_11	*Instruction Universe: all students* The next few questions are about other **oral nicotine products**. Oral nicotine products come in a variety of shapes and types, such as lozenges, discs, tablets, gums, dissolvable tobacco products, and other products. Examples of these products include Velo Nicotine Lozenges, Rogue Lozenges, Rogue Tablets, Verve discs or Stonewall. Most oral nicotine products dissolve in your mouth and do not require spitting. **Do not think about chewing tobacco, snuff, dip, snus, or nicotine pouches when answering these questions.**

83	*Question Universe: all students*
	
	Have you ever used any oral nicotine products, even just one time?
	    A. Yes → [CONTINUE TO Q84]
	    B. No → [SKIP TO INSTRUCT_12]
	
	    [IF Q83 EQ (NA) → SOFT VALIDATION]
	    [IF Q83 EQ (NA) → CONTINUE TO Q84]

84	*Question Universe: ever users of oral nicotine products [or unknown]*
	
	During the **past 30 days**, on how many days did you use oral nicotine products?
	
	    Specify: |__|__| (Range 0 – 30)
	
	    [PROGRAMMING: RANGE (0 – 30) ALLOWED]
	
	    [IF Q84 EQ (NA) → SOFT VALIDATION]
	
	    [IF Q84 EQ (1-30) → CONTINUE TO Q18f]
	    [ELSE IF Q84 EQ (NA) → SKIP TO INSTRUCT_12]
	    [ELSE IF Q84 EQ (0) → SKIP TO INSTRUCT_12]

Q_NUM	Question Text and Skip Instructions

18f	*Question Universe: past 30-day oral nicotine product user [known]*
	
	In the past 30 days when you used oral nicotine products, what flavors did you use? **(Select one or more)**
	    A. Tobacco-flavor
	    B. Menthol
	    C. Mint
	    D. Spice (such as cinnamon, vanilla, or clove)
	    E. Fruit
	    F. Chocolate
	    G. Alcoholic drinks (such as wine, margarita, or other cocktails)
	    H. Non-alcoholic drinks (such as coffee, soda, lemonade, or other beverage)
	    I. Candy, desserts, or other sweets
	    J. Unflavored
	    K. Some other flavor not listed here (Specify: _____)
	
	[ALL RESPONSES → CONTINUE TO Q21g]

21g	*Question Universe: past 30-day oral nicotine product user [known]*
	
	During the **past 30 days**, how did you get your oral nicotine 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 took them from a store or another person
	    H. I got them in some other way (specify: _____)
	
	[ALL RESPONSES CONTINUE TO Q22g]

22g	*Question Universe: past 30-day oral nicotine product user [known]*
	
	During the **past 30 days**, where did you **buy** your oral nicotine products? **(Select one or more)**
	    A. I did not buy oral nicotine 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, online vape or tobacco store or other online marketplace)
	    I. Through the mail
	    J. Through a delivery service (such as DoorDash or Postmates)
	    K. A vape shop or tobacco shop
	    L. Some other place not listed here (specify): _____

INSTRUCT_12	*Instruction Universe: all students* The next several questions are about smoking **tobacco in a hookah**, which is a type of waterpipe. Shisha (or hookah tobacco) is smoked in a hookah.

85	*Question Universe: all students*
	
	Have you **ever smoked** tobacco in a hookah or waterpipe, even one or two puffs?
	    A. Yes → [CONTINUE TO Q86]
	    B. No → [SKIP TO Q90]
	
	    [IF Q85 EQ (NA) – SOFT VALIDATION]
	    [IF Q85 EQ (NA) → SKIP TO Q87]

Q_NUM	Question Text and Skip Instructions

86	*Question Universe: ever hookah users [known]*
	
	How old were you when you **first smoked** tobacco in a hookah or waterpipe, even one or two puffs?
	    A. 8 years old or younger
	    B. 9 years old
	    C. 10 years old
	    D. 11 years old
	    E. 12 years old
	    F. 13 years old
	    G. 14 years old
	    H. 15 years old
	    I. 16 years old
	    J. 17 years old
	    K. 18 years old
	    L. 19 years old or older

87	*Question Universe: ever hookah users [or unknown]* During the **past 30 days**, on how many days did you smoke tobacco in a hookah or waterpipe? Specify: |__|__| (Range 0 – 30) **[PROGRAMMING: RANGE (0 – 30) ALLOWED]** **[IF Q87 EQ (NA) → SOFT VALIDATION]** **[IF Q85 EQ (1) AND Q87 EQ (0) → SKIP TO INSTRUCT_13]** **[IF Q85 EQ (NA) AND Q87 EQ (NA) → SKIP TO INSTRUCT_13]** **[IF Q85 EQ (1) AND Q87 EQ (NA) → SKIP TO INSTRUCT_13]** **[IF Q85 EQ (NA) AND Q87 EQ (0) → SKIP TO INSTRUCT_13]** **[IF Q85 EQ (NA) AND Q87 EQ (1-30) → CONTINUE TO Q88]** **[IF Q85 EQ (1) AND Q87 EQ (1-30) → CONTINUE TO Q88]**

88	*Question Universe: past 30-day hookah users [known]*
	
	During the **past 30 days**, where did you smoke tobacco in a hookah or waterpipe? (**Select one or more**)
	    A. At my house
	    B. At a friend's house
	    C. At a family member's house, other than my house
	    D. At a hookah bar
	    E. At a café or restaurant
	    F. Some other place not listed here

18g	*Question Universe: past 30-day hookah user [known]*
	
	In the past 30 days when you used hookah or waterpipe, what flavors did you use? (**Select one or more**)
	    A. Tobacco-flavor
	    B. Menthol
	    C. Mint
	    D. Spice (such as cinnamon, vanilla, or clove)
	    E. Fruit
	    F. Chocolate
	    G. Alcoholic drinks (such as wine, margarita, or other cocktails)
	    H. Non-alcoholic drinks (such as coffee, soda, lemonade, or other beverage)
	    I. Candy, desserts, or other sweets
	    J. Some other flavor not listed here (Specify: _____)
	
	[ALL RESPONSES → CONTINUE TO Q21h]

Q_NUM	Question Text and Skip Instructions

21h	*Question Universe: past 30-day hookah user [known]*
	
	During the **past 30 days**, how did you get your hookah tobacco? **(Select one or more)**
	    A. I bought it myself
	    B. I had someone else buy it for me
	    C. I asked someone to give me some
	    D. Someone offered it to me
	    E. I got it from a friend
	    F. I got it from a family member
	    G. I took it from a store or another person
	    H. I got it in some other way (Specify: _____)
	
	[ALL RESPONSES CONTINUE TO Q22h]

22h	*Question Universe: past 30-day hookah user [known]*
	
	During the **past 30 days**, where did you **buy** your hookah tobacco? **(Select one or more)**
	    A. I did not buy hookah tobacco during the past 30 days → **[EXCLUSIVE RESPONSE]**
	    B. I bought it 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, online vape or tobacco store or other online marketplace)
	    I. Through the mail
	    J. Through a delivery service (such as DoorDash or Postmates)
	    K. A vape shop or tobacco shop
	    L. Some other place not listed here (specify): _____
	
	[IF [((Q21h_B EQ (1)) OR (Q21h_C EQ (1)) OR (Q21h_D EQ (1)) OR (Q21h_E EQ (1)) OR (Q21h_F EQ (1)) OR Q22h_B EQ (1))] → CONTINUE TO Q89]
	
	[ELSE → SKIP TO INSTRUCT_13]

89	*Question Universe: past 30-day hookah user (who got a product from someone else)*
	
	Earlier you mentioned that you got or bought your hookah tobacco from another person, such as a friend or family member. How old was this person?
	    A. Younger than 18 years old
	    B. 18 years old
	    C. 19 years old
	    D. 20 years old
	    E. 21 years old or older
	    F. I don't know
	
	[ALL RESPONSES → SKIP TO INSTRUCT_13]

90	*Question Universe: never hookah users [known]*
	
	Have you ever been curious about smoking tobacco in a hookah or waterpipe?
	    A. Definitely yes
	    B. Probably yes
	    C. Probably not
	    D. Definitely not

Q_NUM	Question Text and Skip Instructions
INSTRUCT_13	*Instruction Universe: all students* The next section is about **heated tobacco products** such as IQOS or Eclipse. You may know them as heated cigarettes or "heat-not-burn" tobacco products. Heated tobacco products heat processed tobacco leaf in the form of sticks ("heatsticks"), plugs, or capsules to produce a vapor that the user inhales. They are different from e-cigarettes, which heat a liquid to produce a vapor. **Do not think about e-cigarettes when answering these questions**.

91	*Question Universe: all students*
	
	Before today, have you heard of heated tobacco products?
	    A. Yes
	    B. No
	    C. Don't know/Not Sure
	
	[ALL RESPONSES CONTINUE TO Q92]

92	*Question Universe: all students*
	
	Have you **ever used** a heated tobacco product, even just one time?
	    A. Yes → **[CONTINUE TO Q93]**
	    B. No → **[SKIP TO INSTRUCT_14]**
	    C. Don't Know/Not Sure → **[CONTINUE TO Q93]**
	
	    [IF Q92 EQ (NA) → SOFT VALIDATION]
	    [IF Q92 EQ (NA) → CONTINUE TO Q93]

93	*Question Universe: ever heated tobacco product user [or unknown/don't know]*
	
	During the **past 30 days**, on how many days did you use a heated tobacco product?
	
	    Specify: |__|__| (Range 0 – 30)
	
	    [PROGRAMMING: RANGE (0 – 30) ALLOWED]
	
	    [IF Q93 EQ (NA) → SOFT VALIDATION]
	
	    [IF Q93 EQ (1-30) → CONTINUE TO Q18h]
	    [ELSE IF Q93 EQ (0) → SKIP TO INSTRUCT_14]
	    [ELSE IF Q93 EQ (NA) → SKIP TO INSTRUCT_14]

18h	*Question Universe: past 30-day heated tobacco product user [known]*
	
	In the past 30 days when you used heated tobacco products, what flavors did you use? **(Select one or more)**
	    A. Tobacco-flavor
	    B. Menthol
	    C. Mint
	    D. Spice (such as cinnamon, vanilla, or clove)
	    E. Fruit
	    F. Chocolate
	    G. Alcoholic drinks (such as wine, margarita, or other cocktails)
	    H. Non-alcoholic drinks (such as coffee, soda, lemonade, or other beverage)
	    I. Candy, desserts, or other sweets
	    J. Unflavored
	    K. Some other flavor not listed here (Specify: _____)
	
	    [ALL RESPONSES → CONTINUE TO Q21i]

Q_NUM	Question Text and Skip Instructions

21i	*Question Universe: past 30-day heated tobacco product user [known]*
	
	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 took them from a store or another person
	    H. I got them in some other way (specify: _____)
	
	[ALL RESPONSES CONTINUE TO Q22i]

22i	*Question Universe: past 30-day heated tobacco product user [known]*
	
	During the **past 30 days**, where did you **buy** your heated tobacco products? **(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, online vape or tobacco store or other online marketplace)
	    I. Through the mail
	    J. Through a delivery service (such as DoorDash or Postmates)
	    K. A vape shop or tobacco shop
	    L. Some other place not listed here (specify): _____

INSTRUCT_14	*Instruction Universe: all students* The next few questions are about smoking **tobacco in a pipe**. **Do not think about smoking tobacco in a hookah (waterpipe) when answering these questions.**

94	*Question Universe: all students*
	
	Have you ever smoked pipes filled with tobacco (**not** hookah or waterpipe), even just one time?
	    A. Yes → [CONTINUE TO Q95]
	    B. No → [SKIP TO INSTRUCT_15]
	
	[IF Q94 EQ (NA) → SOFT VALIDATION]
	[IF Q94 EQ (NA) → CONTINUE TO Q95]

95	*Question Universe: ever users of pipes [or unknown]* During the **past 30 days**, on how many days did you smoke pipes filled with tobacco? Specify: |__|__| (Range 0 – 30) **[PROGRAMMING: RANGE (0 – 30) ALLOWED]** **[IF Q95 EQ (NA) – SOFT VALIDATION]** **[IF Q95 EQ (1-30) → CONTINUE TO Q18i]** **[ELSE IF Q95 EQ (NA) → SKIP TO INSTRUCT_15]** **[ELSE IF Q95 EQ (0) → SKIP TO INSTRUCT_15]**

Q_NUM	Question Text and Skip Instructions

18i	*Question Universe: past 30-day pipe tobacco user [known]*
	
	In the past 30 days when you smoked pipes filled with tobacco, what flavors did you use? **(Select one or more)**
	
	    A. Tobacco-flavor
	    B. Menthol
	    C. Mint
	    D. Spice (such as cinnamon, vanilla, or clove)
	    E. Fruit
	    F. Chocolate
	    G. Alcoholic drinks (such as wine, margarita, or other cocktails)
	    H. Non-alcoholic drinks (such as coffee, soda, lemonade, or other beverages)
	    I. Candy, desserts, or other sweets
	    J. Some other flavor not listed here (Specify: _____)
	
	[ALL RESPONSES → CONTINUE TO Q21j]

21j	*Question Universe: past 30-day pipe tobacco user [known]*
	
	During the **past 30 days**, how did you get your pipe tobacco? **(Select one or more)**
	    A. I bought it myself
	    B. I had someone else buy it for me
	    C. I asked someone to give me some
	    D. Someone offered it to me
	    E. I got it from a friend
	    F. I got it from a family member
	    G. I took it from a store or another person
	    H. I got it in some other way (specify: _____)
	
	[ALL RESPONSES CONTINUE TO Q24j]

22j	*Question Universe: past 30-day pipe tobacco user [known]*
	
	During the **past 30 days**, where did you **buy** your pipe tobacco? **(Select one or more)**
	    A. I did not buy pipe tobacco during the past 30 days → **[EXCLUSIVE RESPONSE]**
	    B. I bought it 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, online vape or tobacco store or other online marketplace)
	    I. Through the mail
	    J. Through a delivery service (such as DoorDash or Postmates)
	    K. A vape shop or tobacco shop
	    L. Some other place not listed here (specify): _____

INSTRUCT_15	*Instruction Universe: all students* The next few questions are about **bidis**. Bidis are small brown cigarettes wrapped in a leaf that are typically tied on one or both ends with a string.

96	*Question Universe: all students*
	
	Have you ever smoked bidis, even just one time?
	    A. Yes → [CONTINUE TO Q97]
	    B. No → [SKIP TO INSTRUCT_16]
	
	[IF Q96 EQ (NA) → SOFT VALIDATION]
	[IF Q96 EQ (NA) → CONTINUE TO Q97]

Q_NUM	Question Text and Skip Instructions
97	*Question Universe: ever users of bidis [or unknown]* During the **past 30 days**, on how many days did you smoke bidis? Specify: |__|__| (Range 0 – 30) **[PROGRAMMING: RANGE (0 – 30) ALLOWED]** **[IF Q97 EQ (NA) → SOFT VALIDATION]** **[IF Q97 EQ (1-30) → CONTINUE TO Q18j]** **[ELSE IF Q97 EQ (NA) → SKIP TO INSTRUCT_16]** **[ELSE IF Q97 EQ (0) → SKIP TO INSTRUCT_16]**
18j	*Question Universe: past 30-day bidis user [known]* In the past 30 days when you used bidis, what flavors did you use? **(Select one or more** A. Tobacco-flavor B. Menthol C. Mint D. Spice (such as cinnamon, vanilla, or clove) E. Fruit F. Chocolate G. Alcoholic drinks (such as wine, margarita, or other cocktails) H. Non-alcoholic drinks (such as coffee, soda, lemonade, or other beverages) I. Candy, desserts, or other sweets J. Some other flavor not listed here (Specify: _____) **[ALL RESPONSES → CONTINUE TO 21k]**
21k	*Question Universe: past 30-day bidis user [known]* During the **past 30 days**, how did you get your bidis? **(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 H. I got them in some other way (specify: _____) **[ALL RESPONSES CONTINUE TO Q22k]**
22k	*Question Universe: past 30-day bidis user [known]* During the **past 30 days**, where did you **buy** your bidis? **(Select one or more)** A. I did not buy bidis 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, online vape or tobacco store or other online marketplace) I. Through the mail J. Through a delivery service (such as DoorDash or Postmates) K. A vape shop or tobacco shop L. Some other place not listed here (specify): _____ **[ALL RESPONSES → CONTINUE TO INSTRUCT_16]**

Q_NUM	Question Text and Skip Instructions
INSTRUCT_16	*Instruction Universe: all students* The next few questions are about **roll-your-own cigarettes**. **Do not think about manufactured cigarettes when answering these questions.**

98	*Question Universe: all students*
	
	Have you ever smoked roll-your-own cigarettes, even just one time?
	    A. Yes →[CONTINUE TO Q99]
	    B. No → [SKIP TO INSTRUCT_17]
	
	    [IF Q98 EQ (NA) →SOFT VALIDATION]
	    [IF Q98 EQ (NA) → CONTINUE TO Q99]

99	*Question Universe: ever users of roll-your-own tobacco products [or unknown]*
	
	During the **past 30 days**, on how many days did you smoke roll-your-own cigarettes?
	
	    Specify: |__|__| (Range 0 – 30)
	
	    [PROGRAMMING: RANGE (0 – 30) ALLOWED]
	
	    [IF Q99 EQ (NA) → SOFT VALIDATION]
	
	    [IF Q99 EQ (1-30) → CONTINUE TO Q18k]
	    [ELSE IF Q99 EQ (NA) → SKIP TO INSTRUCT_17]
	    [ELSE IF Q99 EQ (0) → SKIP TO INSTRUCT_17]

18k	*Question Universe: past 30-day roll-your-own user [known]*
	
	In the past 30 days when you used roll-your-own cigarettes, what flavors did you use? **(Select one or more)**
	    A. Tobacco-flavor
	    B. Menthol
	    C. Mint
	    D. Spice (such as cinnamon, vanilla, or clove)
	    E. Fruit
	    F. Chocolate
	    G. Alcoholic drinks (such as wine, margarita, or other cocktails)
	    H. Non-alcoholic drinks (such as coffee, soda, lemonade, or other beverages)
	    I. Candy, desserts, or other sweets
	    J. Some other flavor not listed here (Specify: _____)
	
	    [ALL RESPONSES → CONTINUE TO Q21l]

21l	*Question Universe: past 30-day roll-your-own user [known]*
	
	During the **past 30 days**, how did you get your roll-your-own cigarettes? **(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
	    H. I got them in some other way (specify: _____)
	
	    [ALL RESPONSES CONTINUE TO Q22l]

Q_NUM	Question Text and Skip Instructions

22I	*Question Universe: past 30-day roll-your-own user [known]*
	
	During the **past 30 days**, where did you **buy** your roll-your-own cigarettes? **(Select one or more)**
	    A. I did not buy roll-your-own 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, online vape or tobacco store or other online marketplace)
	    I. Through the mail
	    J. Through a delivery service (such as DoorDash or Postmates)
	    K. A vape shop or tobacco shop
	    L. Some other place not listed here (specify): _____

INSTRUCT_17	*Programming Universe: all students*
	
	Programming note, only.
	
	CONDITION #1: "current tobacco product user"
	
	    IF { [Q9=(1-30)] OR [Q39=(1-30)] OR [Q54=(1-30)] OR [Q69=(1-30)] OR [Q75=(1-30)] OR [Q78=(1-30)] OR [Q84=(1-30)] OR [Q87=(1-30)] OR [Q93=(1-30)] OR [Q95=(1-30)] OR [Q97=(1-30)] OR [(Q99=(1-30)] } → CONTINUE TO INSTRUCT_18
	
	CONDITION #2: "never tobacco product user"; "former user of at least one product"
	    ELSE → SKIP TO INSTUCT_20

INSTRUCT_18	*Instruction Universe: current (past 30-day) tobacco product user (any product) [known]* In answering the next 5 questions, please think about **all of the tobacco products** that you have used in the past 30 days, including e-cigarettes, cigarettes, cigars, smokeless tobacco, snus, nicotine pouches, other oral nicotine products, hookahs, heated tobacco products, pipe tobacco, bidis, and roll-your own-cigarettes.
100	*Question Universe: current (past 30-day) tobacco product user (any product) [known]* During the **past 30 days**, on how many days did you use **any tobacco product(s)?** Specify: |___|___| (Range 1 – 30) **[PROGRAMMING: RANGE (1 – 30) ALLOWED]**

101	*Question Universe: past 30-day users of any tobacco product [known]*
	
	During the past 30 days, have you had a strong craving or felt like you really needed to use a **tobacco product of any kind**?
	    A. Yes
	    B. No

102	*Question Universe: past 30-day users of any tobacco product [known]*
	
	How soon after you wake up do you want to use a **tobacco product of any kind**?
	    A. I do not want to use tobacco products
	    B. Within 5 minutes
	    C. From 6 to 30 minutes
	    D. From more than 30 minutes to 1 hour
	    E. After more than 1 hour but less than 24 hours
	    F. I rarely want to use tobacco products

Q_NUM	Question Text and Skip Instructions

103	*Question Universe: past 30-day tobacco product users (any product) [known]*
	
	Are you seriously thinking about quitting the use of **all tobacco products**? (**Please choose the first answer that fits**)
	    A. Yes, during the next 30 days
	    B. Yes, during the next 6 months
	    C. Yes, during the next 12 months
	    D. Yes, but not during the next 12 months
	    E. No, I am not thinking about quitting the use of all tobacco products

104	*Question Universe: past 30-day tobacco product users (any product) [known]*
	
	During the **past 12 months**, how many times have you stopped using **all tobacco products** for **one day or longer** because you were trying to quit all tobacco products **for good**?
	    A. I did not try to quit all tobacco products during the past 12 months
	    B. 1 time
	    C. 2 times
	    D. 3 to 5 times
	    E. 6 to 9 times
	    F. 10 or more times

INSTRUCT_19	*Instruction Universe: past 30-day tobacco product users (any product) [known]* The next few questions are about getting tobacco products.

105	*Question Universe: past 30-day tobacco product users (any product) [known]*
	
	During the **past 30 days**, did anyone **refuse** to sell you any tobacco products because of your age?
	    A. I did not try to buy any tobacco products during the past 30 days
	    B. Yes
	    C. No
	
	        [ALL RESPONSES → SKIP TO Q106]

INSTRUCT_20	*Instruction Universe: never, former users of any tobacco product [known/unknown]* The next two questions ask your thoughts about getting tobacco products.

106	*Question Universe: all students*
	
	How easy do you think it is for people your age to buy tobacco products **in a store**?
	    A. Easy
	    B. Somewhat easy
	    C. Not easy at all

107	*Question Universe: all students*
	
	How easy do you think it is for people your age to buy tobacco products **online**?
	    A. Easy
	    B. Somewhat easy
	    C. Not easy at all

INSTRUCT_21	*Instruction Universe: all students* The next five questions are related to antitobacco messaging.

Q_NUM	Question Text and Skip Instructions
108 109 110 111 112	*Question Universe: all students* **A warning label tells you if a product is harmful to you and can be either a picture or words.** During the past 30 days, how often did you see a warning label on…

	Never	Rarely	Sometimes	Most of the Time	Always	I didn't see this tobacco product packaging in the past 30 days
An e-cigarette package?	A	B	C	D	E	F
A cigarette package?	A	B	C	D	E	F
A cigar, cigarillo, or little cigar package?	A	B	C	D	E	F
A package of chewing tobacco, snuff, or dip?	A	B	C	D	E	F
A package of hookah tobacco?	A	B	C	D	E	F

Q_NUM	Question Text and Skip Instructions
INSTRUCT_22	*Instruction Universe: all students* The next several questions ask about your thoughts on tobacco products.
113	*Question Universe: all students* How much do you think people harm themselves when they **smoke cigarettes** some days but not every day? A. No harm B. Little harm C. Some harm D. A lot of harm
114	*Question Universe: all students* How much do you think people harm themselves when they **smoke cigars, cigarillos, or little cigars,** some days but not every day? A. No harm B. Little harm C. Some harm D. A lot of harm
115	*Question Universe: all students* Do you believe that **cigars, cigarillos, or little cigars** are (LESS ADDICTIVE, EQUALLY ADDICTIVE, or MORE ADDICTIVE) than cigarettes? A. Less addictive B. Equally addictive C. More addictive D. I have never heard of cigars, cigarillos, or little cigars E. I don't know enough about these products
116	*Question Universe: all students* How much do you think people harm themselves when they use **e-cigarettes** some days but not every day? A. No harm B. Little harm C. Some harm D. A lot of harm

Q_NUM	Question Text and Skip Instructions

117	*Question Universe: all students*
	
	Do you believe that **e-cigarettes** are (LESS ADDICTIVE, EQUALLY ADDICTIVE, or MORE ADDICTIVE) than cigarettes?
	    A. Less addictive
	    B. Equally addictive
	    C. More addictive
	    D. I have never heard of e-cigarettes
	    E. I don't know enough about these products

118	*Question Universe: all students*
	
	Compared to a typical cigarette, would you think that a cigarette advertised as low nicotine would be…
	    A. Much less harmful
	    B. Slightly less harmful
	    C. Equally harmful
	    D. Slightly more harmful
	    E. Much more harmful

119	*Question Universe: all students*
	
	Out of every 10 students in your grade at school, how many do you think **smoke cigarettes?**
	    A. 0
	    B. 1
	    C. 2
	    D. 3
	    E. 4
	    F. 5
	    G. 6
	    H. 7
	    I. 8
	    J. 9
	    K. 10

120	*Question Universe: all students*
	
	Out of every 10 students in your grade at school, how many do you think **use e-cigarettes**?
	    A. 0
	    B. 1
	    C. 2
	    D. 3
	    E. 4
	    F. 5
	    G. 6
	    H. 7
	    I. 8
	    J. 9
	    K. 10

INSTRUCT_23	*Instruction Universe: all students* The next several questions ask about e-cigarettes and social media (such as YouTube, Instagram, Snapchat, Twitter, Facebook, Reddit, TikTok, or Twitch). **Do not think about cigarettes or other tobacco products when answering these questions.**

Q_NUM	Question Text and Skip Instructions
121	*Question Universe: all students* How often do you use social media? A. Never / I don't use social media → **[SKIP TO INSTRUCT_24]** B. Less than one time per week C. About one time per week D. A few times per week E. Less than 1 hour, daily F. About 1-2 hours, daily G. About 3-4 hours, daily H. 4 hours or more, daily **[IF Q121 EQ (2,3,4,5,6,7) → CONTINUE TO Q122]** **IF Q121 EQ (NA) → SKIP TO INSTRUCT_24]**
122	*Question Universe: students who report using social media* When you use social media, how often do you **see posts or content (pictures, videos, or text)** related to **e-cigarettes**? A. Never → **[SKIP TO Q124]** B. Less than monthly C. Monthly D. Weekly E. Daily **[IF Q122 EQ (2,3,4,5) → CONTINUE TO Q123]** **[IF Q122 EQ (NA) → SKIP TO Q124]**
123	*Question Universe: students who report seeing e-cigarette posts* On which social media sites have you seen posts or content related to **e-cigarettes**? **(Select one or more)** A. Facebook B. Instagram C. Snapchat D. TikTok E. Twitch F. Twitter G. Reddit H. YouTube I. Some other site (specify: _____) **[ALL RESPONSES CONTINUE TO Q124]**
124	*Question Universe: students who report using social media* When you use social media, how often **do you post pictures or videos** of yourself or someone else using **e-cigarettes**? A. Never B. Less than monthly C. Monthly D. Weekly E. Daily
125	*Question Universe: students who report using social media* When you use social media, how often have you **liked, commented, or shared posts or content (pictures, videos, or text)** related to e-cigarettes? A. Never B. Less than monthly C. Monthly D. Weekly E. Daily

Q_NUM	Question Text and Skip Instructions

126	*Question Universe: students who report using social media*
	
	Who usually posted the content related to **e-cigarettes** on your social media? **(Select one or more)**
	    A. People I know in real life
	    B. Online friends I have not met in real life
	    C. Celebrities or social media influencers
	    D. E-cigarette brands or sellers
	    E. Online news articles
	    F. Public health campaigns (e.g., Truth Initiative, Real Cost)
	    G. Other (SPECIFY):_____

INSTRUCT_24	*Instruction Universe: all students* The next four questions ask about you being around other people's tobacco smoke. **Do not include exposure to vapor from e-cigarettes.**

127	*Question Universe: all students*
	
	During the **past 7 days**, on how many days did someone smoke tobacco products in your home while you were there?
	    A. 0 days
	    B. 1 day
	    C. 2 days
	    D. 3 days
	    E. 4 days
	    F. 5 days
	    G. 6 days
	    H. 7 days

128	*Question Universe: all students*
	
	During the **past 7 days**, on how many days did you ride in a vehicle when someone was smoking a tobacco product?
	    A. 0 days
	    B. 1 day
	    C. 2 days
	    D. 3 days
	    E. 4 days
	    F. 5 days
	    G. 6 days
	    H. 7 days

129	*Question Universe: all students*
	
	During the **past 30 days**, on how many days were you exposed to the smoke from someone who was smoking tobacco products in an **indoor public place**?
	Examples of indoor public places are school buildings, stores, restaurants, and sports arenas. Do not think about homes when answering this question.
	    A. 0 days
	    B. 1 or 2 days
	    C. 3 to 5 days
	    D. 6 to 9 days
	    E. 10 to 19 days
	    F. 20 to 29 days
	    G. All 30 days

Q_NUM	Question Text and Skip Instructions

130	*Question Universe: all students*
	
	During the **past 30 days**, on how many days were you exposed to the smoke from someone who was smoking tobacco products in an **outdoor public place**?
	Examples of outdoor public places are school grounds, sidewalks, parking lots, stadiums, and parks.
	    A. 0 days
	    B. 1 or 2 days
	    C. 3 to 5 days
	    D. 6 to 9 days
	    E. 10 to 19 days
	    F. 20 to 29 days
	    G. All 30 days

INSTRUCT_25	*Instruction Universe: all students* The next five questions ask about being around other people's e-cigarette vapor. **Do not include exposure to smoke from cigarettes or other tobacco products.**

131	*Question Universe: all students*
	
	During the **past 7 days**, on how many days did someone use e-cigarettes in your home while you were there?
	    A. 0 days
	    B. 1 day
	    C. 2 days
	    D. 3 days
	    E. 4 days
	    F. 5 days
	    G. 6 days
	    H. 7 days

132	*Question Universe: all students*
	
	During the **past 7 days**, on how many days did you ride in a vehicle when someone was using an e-cigarette?
	    A. 0 days
	    B. 1 day
	    C. 2 days
	    D. 3 days
	    E. 4 days
	    F. 5 days
	    G. 6 days
	    H. 7 days

133	*Question Universe: all students*
	
	During the **past 30 days**, on how many days were you exposed to the vapor from someone who was using an e-cigarette in an **indoor public place**?
	Examples of indoor public places are school buildings, stores, restaurants, and sports arenas. Do not think about homes when answering this question.
	    A. 0 days
	    B. 1 or 2 days
	    C. 3 to 5 days
	    D. 6 to 9 days
	    E. 10 to 19 days
	    F. 20 to 29 days
	    G. All 30 days

Q_NUM	Question Text and Skip Instructions

134	*Question Universe: all students*
	
	During the **past 30 days**, on how many days were you exposed to the vapor from someone who was using an e-cigarette in an **outdoor public place**?
	Examples of outdoor public places are school grounds, sidewalks, parking lots, stadiums, and parks.
	    A. 0 days
	    B. 1 or 2 days
	    C. 3 to 5 days
	    D. 6 to 9 days
	    E. 10 to 19 days
	    F. 20 to 29 days
	    G. All 30 days

INSTRUCT_26	*Instruction Universe: all students* The next two questions ask about your experiences with tobacco products at school and at home.

135	*Question Universe: all students*
	
	While at school or on school property, have you ever seen anyone using an **e-cigarette**, such as JUUL, Vuse, NJOY, Elf Bar, or blu in any of the following locations? **(Select one or more)**
	    A. Yes, inside a school bathroom or locker room
	    B. Yes, inside a classroom
	    C. Yes, inside some other area of the school (hallway, cafeteria)
	    D. Yes, outside of the school, such as in the parking lot, sidewalk, sports field, or other school grounds
	    E. Yes, somewhere else not listed here [SPECIFY: _____]
	    F. No → **[EXCLUSIVE]**

136	*Question Universe: all students*
	
	Does anyone who lives with you now…? (**Select one or more**)
	    A. Use e-cigarettes
	    B. Smoke cigarettes
	    C. Smoke cigars, cigarillos, or little cigars
	    D. Use chewing tobacco, snuff, or dip
	    E. Use snus
	    F. Use nicotine pouches
	    G. Use other oral nicotine products
	    H. Smoke tobacco in a hookah or waterpipe
	    I. Use heated tobacco products
	    J. Smoke pipes filled with tobacco (not hookah or waterpipe)
	    K. Smoke bidis
	    L. Smoke roll-your-own cigarettes
	    M. No one who lives with me now uses any form of tobacco → **[EXCLUSIVE]**

INSTRUCT_27	*Instruction Universe: all students* The next two sets of questions ask about discrimination you may have experienced because of your race and ethnicity.

Q_NUM	Question Text and Skip Instructions
137	*Question Universe: all students*
	After each statement in this question, tell us whether you have experienced each of the following types of discrimination because of your race or ethnicity. Remember, we are only interested in occasions when racial-ethnic discrimination was at least partly responsible for your experience.
	Have you experienced this?

Experience	A. Yes	B. No
A. You were discouraged from joining an advanced level class.		
B. You were wrongly disciplined or given after-school detention.		
C. You were given a lower grade than you deserved.		
D. You were discouraged from joining a club.		
E. Others your age did not include you in their activities.		
F. People expected more of you than they expected of others your age.		
G. People expected less of you than they expected of others your age.		
H. People assumed your English was poor.		
I. You were hassled by the police.		
J. You were hassled by a store clerk or store guard.		
K. You were called racially insulting names.		
L. You received poor service at a restaurant or store.		
M. People acted as if they thought you were not smart.		
N. People acted as if they were afraid of you.		
O. You were threatened.		

[IF (Q137a | Q137b | Q137c | Q137d | Q137e | Q137f | Q137g | Q137h | Q137i | Q137j | Q137k | Q137l | Q137m | Q137n | Q137o) EQ (1) → CONTINUE TO Q138(a-o)]
[ELSE SKIP TO INSTRUCT_28]

Q_NUM	Question Text and Skip Instructions
138	*Question Universe: all students*

How much did this experience upset you?

Experience	A. Not at all	B. Slightly	C. Moderately	D. Considerably	E. Extremely
[SHOW IF 137a = 1] A. You were discouraged from joining an advanced level class.					
[SHOW IF 137b = 1] B. You were wrongly disciplined or given after-school detention.					
[SHOW IF 137c = 1] C. You were given a lower grade than you deserved.					
[SHOW IF 137d = 1] D. You were discouraged from joining a club.					
[SHOW IF 137e = 1] E. Others your age did not include you in their activities.					
[SHOW IF 137f = 1] F. People expected more of you than they expected of others your age.					
[SHOW IF 137g = 1] G. People expected less of you than they expected of others your age.					
[SHOW IF 137h = 1] H. People assumed your English was poor.					
[SHOW IF 137i = 1] I. You were hassled by the police.					
[SHOW IF 137j = 1] J. You were hassled by a store clerk or store guard.					
[SHOW IF 137k = 1] K. You were called racially insulting names.					
[SHOW IF 137l = 1] L. You received poor service at a restaurant or store.					
[SHOW IF 137m = 1] M. People acted as if they thought you were not smart.					
[SHOW IF 137n = 1] N. People acted as if they were afraid of you.					
[SHOW IF 137o = 1] O. You were threatened.					

[ALL RESPONSES → CONTINUE TO INSTRUCT_28]

| INSTRUCT_28 | *Instruction Universe: all students*

The next set of questions ask about the neighborhood where you live. |

Q_NUM	Question Text and Skip Instructions
139	*Question Universe: all students* How true are the following statements about your neighborhood? |	A. Not at all true	B. A Little true	C. Sort of true	D. Very true
---	---	---	---	---
A. There are plenty of safe places to walk or spend time outdoors in my neighborhood.				
B. Every few weeks, some kid in my neighborhood gets beat-up or mugged.				
C. Every few weeks, some adult gets beat-up or mugged in my neighborhood.				
D. I have seen people using or selling drugs in my neighborhood.				
E. In the morning or later in the day, I often see drunk people on the street in my neighborhood.				
F. Most adults in my neighborhood respect the law.				
G. I feel safe when I walk around my neighborhood by myself during the day.				
H. People who live in my neighborhood often damage or steal each other's property.				
I. I feel safe when I walk around my neighborhood by myself at night.				
J. In my neighborhood, the people with the most money are the drug dealers.					 **[ALL RESPONSES → CONTINUE TO INSTRUCT_29]**
INSTRUCT_29	*Instruction Universe: all students* The last several questions ask about your experiences at home and at school.

140	*Question Universe: all students*
	
	Do you speak a language other than English at home?
	    A. Yes
	    B. No

141	*Question Universe: all students*
	
	Sexual orientation is a person's emotional, romantic, and/or sexual attraction to another person. There are many ways a person can describe their sexual orientation and many labels a person can use. Which of these options best describes your sexual orientation?
	    A. Straight or heterosexual
	    B. Gay or lesbian
	    C. Bisexual, pansexual, or queer
	    D. Asexual
	    E. I am not sure or I am questioning
	    F. I do not know what this question means
	    G. Something else not included here [Specify:_____]
	    H. Decline to answer

Q_NUM	Question Text and Skip Instructions

142	*Question Universe: all students*
	
	Which of the following best describes your gender?
	    A. Girl or woman
	    B. Boy or man
	    C. Nonbinary, genderfluid, or genderqueer
	    D. Something else not included here [Specify:_____]
	    E. I am not sure or I am questioning
	    F. Decline to answer

143	*Question Universe: all students*
	
	Some people describe themselves as transgender when their sex at birth does not match the way they think or feel about their gender. Are you transgender?
	    A. No, I am not transgender
	    B. Yes, I am transgender
	    C. I am not sure or I am questioning if I am transgender
	    D. I do not know what this question means
	    E. Decline to answer

144 145 146 147	*Question Universe: all students* During the past two weeks, how often have you been bothered by any of the following problems? <table><tr><td></td><td>Not at all</td><td>Several Days</td><td>More than half of the days</td><td>Nearly every day</td></tr><tr><td>Little interest or pleasure in doing things</td><td>A</td><td>B</td><td>C</td><td>D</td></tr><tr><td>Feeling down, depressed, or hopeless</td><td>A</td><td>B</td><td>C</td><td>D</td></tr><tr><td>Feeling nervous, anxious, or on edge</td><td>A</td><td>B</td><td>C</td><td>D</td></tr><tr><td>Not being able to stop or control worrying</td><td>A</td><td>B</td><td>C</td><td>D</td></tr></table>

148	*Question Universe: all students*
	
	During the past 12 months, how would you describe your grades in school?
	    A. Mostly A's
	    B. Mostly B's
	    C. Mostly C's
	    D. Mostly D's
	    E. Mostly F's
	    F. None of these grades
	    G. Not sure

149	*Question Universe: all students*
	
	Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?
	    A. Yes
	    B. No

APPENDIX C. TECHNICAL APPENDIX

Additional Information about Class Selection

Partway through 2024 data collection, the RTI team found that we had too few student respondents because (1) the student response rate was 78%, but we estimated that the student response rate would be 85%, and (2) the class skip rate was based on the enrollment on the frame. The sum of the students on the class list from the administration, on average, was lower than the frame enrollment. In addition, the student enrollment provided by teachers, on average, was lower than the enrollment from the administration. This resulted in fewer responding students than anticipated.

RTI made two changes to protocol to accommodate this issue during data collection: (1) We increased the number of students selected per school, and (2) if the sum of the students on the administrator's class list differed from the frame enrollment by more than 20%, we used the enrollment from the administrator's list to recalculate the class skip rate when selecting classes.