

Canadian Student Tobacco, Alcohol and Drugs Survey (CSTADS) 2021-2022 PUMF User Guide

Health Canada & CCI Research Inc. (2022)

Suggested Acknowledgement when using CSTADS Data:

Data used for this research were taken from Health Canada’s Canadian Student Tobacco, Alcohol and Drugs Survey (CSTADS), which was conducted for Health Canada by CCI Research Inc. in 2021-2022. Health Canada has not reviewed, approved, nor endorsed this research. Any views expressed or conclusions drawn herein do not necessarily represent those of Health Canada.

Background

This User Guide is for the CSTADS 2021-2022 Public Use Microdata File (PUMF). In producing the PUMF, measures were taken to protect the anonymity of survey respondents – both schools and students. Several variables that could help in identifying schools or students were removed, as were variables that could help in regrouping student records by school on the PUMF. Remaining variables that could, in combination, serve to identify students (i.e., Indirect Identifiers) were subjected to Statistical Disclosure Control (SDC) methods (i.e., have been recoded, suppressed or perturbed) in order to maintain privacy and minimize the risk of re-identification of respondents.

Variables that have been removed from the CSTADS 2021-2022 PUMF data file include:

- school board and school identifiers (including postal code),
- student survey id and school survey id numbers,
- survey sampling stratification identifiers, intermediate weights and weight calibration totals
- the language in which the survey was completed
- age
- sex, and
- median household income of the area where the respondent’s school is located.

Other indirect identifier variables that were included in this PUMF were subjected to SDC methods. Response categories for some were combined. The `sdcmicro` package¹ using RStudio was then used to find respondents having rare combinations of values that made them at risk of re-identification, and to select which of those values to suppress to bring down the risk.

¹ Templ, M. (2007). “SDC MICRO”: A New Flexible R-Package for the Generation of Anonymised Microdata - Design Issues and New Methods. In Joint UNECE/Eurostat work session on statistical data confidentiality, Manchester, U.K., 17-19 December 2007. (<https://unece.org/fileadmin/DAM/stats/documents/ece/ces/2007/12/confidentiality/wp.31.e.pdf>)

Specific variables that have been subjected to suppression or perturbation are noted below. Due to these SDC methods, summary statistics may be slightly different than what is posted on Health Canada’s website for CSTADS 2021-2022 analysis. All variables are categorical (with the exception of “seqid” and “wtpumf”) and are coded as numeric variables. Categorical value 99 is used to represent missing data due to nonresponse, suppression or an invalid/uncodable response and has been summarized as “99 or 999 = not stated” in the label definitions below.

Please refer to Section 2.0 Guidelines for Tabulation, Analysis and Release of this document before analyzing or releasing any data from the CSTADS 2021-2022 PUMF. PLEASE NOTE: For technical questions on using the CSTADS PUMF, please email odss-bssd@hc-sc.gc.ca

Please note that CSTADS 2021-2022 data uses weighting as a statistical technique to allow the study sample results to be representative of the target population; in other words, any participant’s response is weighted so that it represents a specific number of identical responses in the target population (all students enrolled in grades 7 through 12 in participating provinces). For more information on how weights were generated for the CSTADS 2021-2022 PUMF please refer to Section 2.3 and 2.4 of this document.

Section 1.0 Variable Description

Table 1: Variable description, values and labels in CSTADS 2021-2022 PUMF

Variable Name	Position	Description of variable/survey question	Values and Labels for categorical data
SEQID	1	Unique ID	1 to 61,096
PROVID	2	Province of respondent	10 = Newfoundland and Labrador 11 = Prince Edward Island 12 = Nova Scotia 24 = Québec 35 = Ontario 46 = Manitoba 47 = Saskatchewan 48 = Alberta 59 = British Columbia

GRADE	3	What grade are you in?	7 = Grade 7 or Secondary I 8 = Grade 8 or Secondary II 9 = Grade 9 or Secondary III 10 = Grade 10 or Secondary IV 11 = Grade 11 or Secondary V 12 = Grade 12
DVGENDER	4	What is your gender? (Note: Gender refers to current gender which may be different from sex assigned at birth and may be different from what is indicated on legal documents. Responses for gender were collapsed into two categories, plus 99, and subjected to suppression.)	1 = Woman / girl 2 = Man / boy 99 = Another gender or gender not stated
DVURBAN	5	Is the respondent's school in an urban or rural region?	1 = Urban 2 = Rural
DVRES	6	How many years have you lived in Canada? (Note: years lived in Canada were collapsed into 3 categories, plus 99, and subjected to suppression).	1 = I was born in Canada 2 = 1 to 10 years 3 = 11 or more years 99 = Not Stated
DVORIENT	7	Which of the following best describes you? (Note: sexual orientation was collapsed into two categories, plus 99, and subjected to suppression.)	1 = Another sexual orientation 2 = Straight/heterosexual 99 = Not Stated
DVDESCRIBE	8	How would you describe yourself? (Note: dvdescribe was transformed from "Mark all that apply" multiple response variables into a single variable with 8 categories. If more than one response option was selected by a respondent, their response was coded as "8: Another race/Multiple". Respondents were also able to choose the "Another race/Multiple" response option if their population group was not listed. In the Atlantic Provinces, categories 2-8 were collapsed into "8: Another race/Multiple". This variable was also subjected to suppression.)	1 = White 2 = Black 3 = West Asian/Arab 4 = South Asian (Indian, ...) 5 = East/Southeast Asian (Chinese, ...) 6 = Latin American/Hispanic 7 = Aboriginal (First Nations, Métis, Inuit, ...) 8 = Another race/Multiple 99 = Not stated

WTPUMF	9	Weight assigned to each individual record. (Note: this variable was subjected to perturbation to maintain privacy; more information on how these weights were generated can be found in section 2.3 below)	
GH_010	10	In general, would you say your physical health is excellent, very good, good, fair or poor?	1 = Excellent 2 = Very good 3 = Good 4 = Fair 5 = Poor 6 = I do not know 99 = Not stated
GH_020	11	In general, would you say your <u>mental</u> health is excellent, very good, good, fair or poor?	1 = Excellent 2 = Very good 3 = Good 4 = Fair 5 = Poor 6 = I do not know 99 = Not stated
SS_010	12	Have you <u>ever</u> tried cigarette smoking, even just a few puffs?	1 = Yes 2 = No 99 = Not stated

SS_020	13	How old were you when you first tried smoking cigarettes, even just a few puffs?	2 = I do not know 8 = 8 years or younger 9 = 9 years 10 = 10 years 11 = 11 years 12 = 12 years 13 = 13 years 14 = 14 years 15 = 15 years 16 = 16 years 17 = 17 years 18 = 18 years or older 96 = Valid Skip 98 = I have never done this 99 = Not Stated
TS_011	14	At any time during the <u>next 12 months</u> do you think you will smoke a cigarette?	1 = Definitely yes 2 = Probably yes 3 = Probably not 4 = Definitely not 99 = Not Stated
SS_030	15	Have you ever smoked a <u>whole</u> cigarette?	1 = Yes 2 = No 96 = Valid Skip 99 = Not Stated
SS_040	16	Have you ever smoked 100 or more <u>whole</u> cigarettes in your life?	1 = Yes 2 = No 96 = Valid Skip 99 = Not Stated
WP_040a	17	Thinking back over the <u>last 7 days</u> , how many <u>whole cigarettes</u> did you smoke each day? Sunday	0 = 0 whole cigarettes smoked 1:36 = Range: 1 to 36 whole cigarettes smoked 96 = Valid Skip 99 = Not Stated

WP_040b	18	Thinking back over the <u>last 7 days</u> , how many <u>whole cigarettes</u> did you smoke each day? Monday	0 = 0 whole cigarettes smoked 1:36 = Range: 1 to 36 whole cigarettes smoked 96 = Valid Skip 99 = Not Stated
WP_040c	19	Thinking back over the <u>last 7 days</u> , how many <u>whole cigarettes</u> did you smoke each day? Tuesday	0 = 0 whole cigarettes smoked 1:36 = Range: 1 to 36 whole cigarettes smoked 96 = Valid Skip 99 = Not Stated
WP_040d	20	Thinking back over the <u>last 7 days</u> , how many <u>whole cigarettes</u> did you smoke each day? Wednesday	0 = 0 whole cigarettes smoked 1:36 = Range: 1 to 36 whole cigarettes smoked 96 = Valid Skip 99 = Not Stated
WP_040e	21	Thinking back over the <u>last 7 days</u> , how many <u>whole cigarettes</u> did you smoke each day? Thursday	0 = 0 whole cigarettes smoked 1:36 = Range: 1 to 36 whole cigarettes smoked 96 = Valid Skip 99 = Not Stated
WP_040f	22	Thinking back over the <u>last 7 days</u> , how many <u>whole cigarettes</u> did you smoke each day? Friday	0 = 0 whole cigarettes smoked 1:36 = Range: 1 to 36 whole cigarettes smoked 96 = Valid Skip 99 = Not Stated
WP_040g	23	Thinking back over the <u>last 7 days</u> , how many <u>whole cigarettes</u> did you smoke each day? Saturday	0 = 0 whole cigarettes smoked 1:36 = Range: 1 to 36 whole cigarettes smoked 96 = Valid Skip 99 = Not Stated

SC_010	24	During the <u>past 12 months</u> , how many times have you stopped for one day or longer because you were trying to quit smoking?	<p>1 = I have not smoked cigarettes in the past 12 months</p> <p>2 = I have never smoked</p> <p>3 = 0 times</p> <p>4 = 1 time</p> <p>5 = 2 or 3 times</p> <p>6 = 4 or more times</p> <p>96 = Valid Skip</p> <p>99 = Not Stated</p>
CA_011	25	Where do you <u>usually</u> get your cigarettes?	<p>1 = I do not smoke</p> <p>2 = I buy them myself at a store</p> <p>3 = I buy them from a First Nation Reserve (i.e., delivery service)</p> <p>4 = I buy them on a First Nation Reserve</p> <p>5 = I buy them from a friend</p> <p>6 = I buy them from someone else</p> <p>7 = I ask someone to buy them for me</p> <p>8 = My brother or sister gives them to me</p> <p>9 = My mother or father gives them to me</p> <p>10 = A friend gives them to me</p> <p>11 = Someone else gives them to me</p> <p>12 = I take them from my mother, father, or siblings</p> <p>13 = Other</p> <p>96 = Valid Skip</p> <p>99 = Not Stated</p>
TP_001	26	In the <u>last 30 days</u> , how often did you use cigarettes?	<p>1 = Daily</p> <p>2 = Less than daily, but at least once a week</p> <p>3 = Less than weekly, but at least once in the last 30 days</p> <p>4 = Tried, but did not use in the last 30 days</p> <p>5 = I have never tried</p> <p>96 = Valid Skip</p> <p>99 = Not Stated</p>

TP_016	27	In the <u>last 30 days</u> , how often did you use cigars, little cigars or cigarillos (plain or flavoured)?	1 = Daily 2 = Less than daily, but at least once a week 3 = Less than weekly, but at least once in the last 30 days 4 = Tried, but did not use in the last 30 days 5 = I have never tried 99 = Not Stated
TP_046	28	In the <u>last 30 days</u> , how often did you use smokeless tobacco (chewing tobacco, pinch, dip, snuff, or snus)?	1 = Daily 2 = Less than daily, but at least once a week 3 = Less than weekly, but at least once in the last 30 days 4 = Tried, but did not use in the last 30 days 5 = I have never tried 99 = Not Stated
TP_056	29	In the <u>last 30 days</u> , how often did you use nicotine patches, nicotine gum, nicotine lozenges, nicotine inhalers, or nicotine spray?	1 = Daily 2 = Less than daily, but at least once a week 3 = Less than weekly, but at least once in the last 30 days 4 = Tried, but did not use in the last 30 days 5 = I have never tried 99 = Not Stated
TP_066	30	In the <u>last 30 days</u> , how often did you use a water-pipe (hookah) to smoke shisha (tobacco)?	1 = Daily 2 = Less than daily, but at least once a week 3 = Less than weekly, but at least once in the last 30 days 4 = Tried, but did not use in the last 30 days 5 = I have never tried 99 = Not Stated

TP_086	31	In the <u>last 30 days</u> , how often did you use heated tobacco products (iQOS™ or Glo™)?	1 = Daily 2 = Less than daily, but at least once a week 3 = Less than weekly, but at least once in the last 30 days 4 = Tried, but did not use in the last 30 days 5 = I have never tried 99 = Not Stated
ELC_026a	32	In the <u>last 30 days</u> , how often did you vape an e-liquid or pod <u>with</u> nicotine?	1 = Daily 2 = Less than daily, but at least once a week 3 = Less than weekly, but at least once in the last 30 days 4 = Tried, but did not use in the last 30 days 5 = I have never tried 99 = Not Stated
ELC_026b	33	In the <u>last 30 days</u> , how often did you vape an e-liquid or pod <u>without</u> nicotine?	1 = Daily 2 = Less than daily, but at least once a week 3 = Less than weekly, but at least once in the last 30 days 4 = Tried, but did not use in the last 30 days 5 = I have never tried 99 = Not Stated
ELC_026c	34	In the <u>last 30 days</u> , how often did you vape an e-liquid or pod, but you did not know what it contained?	1 = Daily 2 = Less than daily, but at least once a week 3 = Less than weekly, but at least once in the last 30 days 4 = Tried, but did not use in the last 30 days 5 = I have never tried 99 = Not Stated
VAP_010	35	At any time during the <u>next 12 months</u> do you think you will use a vape?	1 = Definitely yes 2 = Probably yes 3 = Probably not 4 = Definitely not 99 = Not Stated

CI_010	36	Which did you try first: a cigarette or an e-cigarette (vape, vape pen, tank & mod)?	<p>1 = I have never tried a cigarette nor an e-cigarette 2 = I have only tried a cigarette and never tried an e-cigarette 3 = I have only tried an e-cigarette and never tried a cigarette 4 = I have tried both and tried a cigarette first 5 = I have tried both and tried an e-cigarette first 6 = I do not remember 99 = Not Stated</p>
VAP_020	37	Which flavor do you vape most often? (Note: mark only one)	<p>1 = I do not vape 2 = Tobacco 3 = Fruit 4 = Candy 5 = Dessert 6 = Mint/Menthol 7 = Coffee/Tea 8 = Alcohol 9 = Flavourless 10 = No usual flavour 99 = Not Stated</p>

VAP_030	38	<p>What is your main reason for <u>trying vaping the first time</u>? (Note: mark only one)</p>	<p>1 = I do not vape 2 = Just to give it a try – to see what it’s like 3 = I like the flavours 4 = To have a good time with my friends 5 = Peer pressure 6 = I use them instead of smoking cigarettes 7 = I am trying to quit smoking cigarettes 8 = I enjoy them 9 = I am addicted to them 10 = To relax or relieve tension 11 = To feel good / to get a nicotine high 12 = Other reasons 99 = Not Stated</p>
VAP_040	39	<p>What is your main reason for <u>currently/continued vaping</u>? (Note: mark only one)</p>	<p>1 = I do not vape 2 = Just to give it a try – to see what it’s like 3 = I like the flavours 4 = To have a good time with my friends 5 = Peer pressure 6 = I use them instead of smoking cigarettes 7 = I am trying to quit smoking cigarettes 8 = I enjoy them 9 = I am addicted to them 10 = To relax or relieve tension 11 = To feel good / to get a nicotine high 12 = Other reasons 99 = Not Stated</p>

VAP_050a	40	<p>Where do you usually get your vaping devices (vape, vape pen, tank & mod)? (Note: mark only one, if you get them from more than one place, please select where you get your devices and e-liquids or pods most often.)</p>	<p>1 = I do not vape 2 = I buy them from a vape shop (in person, not online) 3 = I buy them from a convenience store 4 = I ask someone to buy them for me 5 = I buy them online 6 = A family member gives them to me (bought, borrowed, shared) 7 = A friend gives them to me (bought, borrowed, shared) 8 = Someone else gives them to me (bought, borrowed, shared) 9 = I use my mother's, father's, or sibling's without their permission 10 = I use someone else's without their permission 11 = Other 99 = Not stated</p>
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VAP_050b	41	Where do you usually get your e-liquids or pods? (Note: mark only one, if you get them from more than one place, please select where you get your devices and e-liquids or pods most often.)	1 = I do not vape 2 = I buy them from a vape shop (in person, not online) 3 = I buy them from a convenience store 4 = I ask someone to buy them for me 5 = I buy them online 6 = A family member gives them to me (bought, borrowed, shared) 7 = A friend gives them to me (bought, borrowed, shared) 8 = Someone else gives them to me (bought, borrowed, shared) 9 = I use my mother's, father's, or sibling's without their permission 10 = I use someone else's without their permission 11 = Other 99 = Not stated
VAP_060	42	During the <u>past 12 months</u> , how many times have you stopped for one day or longer because you were trying to quit vaping?	1 = I have not vaped in the past 12 months 2 = I have never vaped 3 = 0 times 4 = 1 time 5 = 2 or 3 times 6 = 4 or more times 99 = Not stated
ALC_010	43	Have you <u>ever</u> had a drink of alcohol that was more than just a sip? (Note: a <u>drink</u> means: 1 regular sized bottle, can, or draft of beer; 1 glass of wine; 1 bottle or can of cooler; 1 shot of liquor (rum, whiskey, Baileys®, etc.); or 1 mixed drink (1 shot of liquor with pop, juice, energy drink, etc.).)	1 = Yes 2 = No 99 = Not Stated

ALC_020	44	In the <u>last 12 months</u> , how often did you have a drink of alcohol that was more than just a sip?	1 = I did not drink alcohol in the last 12 months 3 = Less than once a month 4 = Once a month 5 = 2 or 3 times a month 6 = Once a week 7 = 2 or 3 times a week 8 = 4 to 6 times a week 9 = Every day 10 = I do not know 96 = Valid Skip 99 = Not Stated
ALC_030	45	How old were you when you first had a drink of alcohol that was more than just a sip?	3 = I do not know 8 = 8 years or younger 9 = 9 years 10 = 10 years 11 = 11 years 12 = 12 years 13 = 13 years 14 = 14 years 15 = 15 years 16 = 16 years 17 = 17 years 18 = 18 years or older 96 = Valid Skip 99 = Not Stated

ALC_040	46	In the <u>last 30 days</u> , how often did you have a drink of alcohol that was more than just a sip?	1 = I have not done this in the last 30 days 2 = Once or twice 3 = Once or twice a week 4 = 3 or 4 times a week 5 = 5 or 6 times a week 6 = Every day 7 = I do not know 96 = Valid Skip 99 = Not Stated
ALC_050	47	In the <u>last 12 months</u> , how often did you have 5 or more drinks of alcohol on one occasion?	1 = I have never had 5 or more drinks of alcohol on one occasion 2 = I have not done this in the last 12 months 3 = Less than once a month 4 = Once a month 5 = 2 or 3 times a month 6 = Once a week 7 = 2 to 5 times a week 8 = Daily or almost daily 9 = I do not know 96 = Valid Skip 99 = Not Stated

ALC_060	48	How old were you when you first had 5 or more drinks of alcohol on one occasion?	2 = I do not know 8 = 8 years or younger 9 = 9 years 10 = 10 years 11 = 11 years 12 = 12 years 13 = 13 years 14 = 14 years 15 = 15 years 16 = 16 years 17 = 17 years 18 = 18 years or older 96 = Valid Skip 99 = Not Stated
ALC_071	49	In the <u>last 30 days</u> , how often did you have 5 or more drinks of alcohol on one occasion?	2 = I have not done this in the last 30 days 3 = Once or twice 4 = Once or twice a week 5 = 3 or 4 times a week 6 = 5 or 6 times a week 7 = Every day 8 = I do not know 96 = Valid Skip 99 = Not Stated
NRG_010	50	In the <u>last 12 months</u> , did you drink an energy drink like Red Bull®, Monster® and Rockstar® (not sports drinks)?	1 = Yes 2 = No 99 = Not Stated
NRG_020	51	In the <u>last 12 months</u> , did you drink alcohol and an energy drink drank separately on one occasion?	1 = Yes 2 = No 99 = Not Stated
NRG_030	52	In the <u>last 12 months</u> , did you drink alcohol and an energy drink hand-mixed together by you or someone else?	1 = Yes 2 = No 99 = Not Stated

NRG_040	53	In the <u>last 12 months</u> , did you drink store-bought pre-mixed alcoholic beverages with energy drink names (such as Rockstar®+Vodka)?	1 = Yes 2 = No 99 = Not Stated
NRG_050	54	In the <u>last 12 months</u> , did you drink sweetened beverages with high alcohol content (7% or higher), (such as Four Loko, FCKD UP, Clubtails)?	1 = Yes 2 = No 99 = Not Stated
ALC_075	55	In the <u>last 12 months</u> , how did you usually get the alcohol you consumed? (Note: mark only one)	1 = I have never consumed alcohol 2 = I have not consumed alcohol in the last 12 months 3 = I took it from a friend or a family member without permission 4 = I took it from someone else without permission 5 = A parent (or guardian) gave it to me 6 = I got or bought it from a friend or a family member (not a parent or a guardian) 7 = I got or bought it from someone else 8 = It was shared at a party 9 = I got or bought it at a public event (e.g., concert, sporting event) 10 = I bought it or someone bought it for me at a store (e.g., liquor store, convenience store, grocery store) 11 = I bought it or someone bought it for me at a restaurant or bar 12 = Other 96 = Valid Skip 99 = Not Stated
CAN_010	56	Have you <u>ever</u> used or tried marijuana or cannabis (a joint, pot, weed, hash, or hash oil)?	1 = Yes 2 = No 99 = Not Stated

CAN_020	57	In the <u>last 12 months</u> , how often did you use marijuana or cannabis?	1 = I have not done this in the last 12 months 3 = Less than once a month 4 = Once a month 5 = 2 or 3 times a month 6 = Once a week 7 = 2 or 3 times a week 8 = 4 to 6 times a week 9 = Every day 10 = I do not know 96 = Valid Skip 99 = Not Stated
CAN_030	58	How old were you when you first used marijuana or cannabis?	2 = I do not know 8 = 8 years or younger 9 = 9 years 10 = 10 years 11 = 11 years 12 = 12 years 13 = 13 years 14 = 14 years 15 = 15 years 16 = 16 years 17 = 17 years 18 = 18 years or older 96 = Valid Skip 99 = Not Stated

CAN_040	59	In the <u>last 30 days</u> , how often did you use marijuana or cannabis?	<p>1 = I have not done this in the last 30 days</p> <p>2 = Once or twice</p> <p>3 = Once or twice a week</p> <p>4 = 3 or 4 times a week</p> <p>5 = 5 or 6 times a week</p> <p>6 = Every day</p> <p>7 = I do not know</p> <p>96 = Valid Skip</p> <p>99 = Not Stated</p>
CAN_060	60	Indicate whether you have used marijuana or cannabis (a joint, pot, weed, hash, or hash oil) in the following ways: Smoked a joint, bong, pipe or blunt	<p>1 = No, I have never done this</p> <p>2 = Yes, I have done this in the last 30 days</p> <p>3 = Yes, I have done this in the last 12 months</p> <p>4 = Yes, I have done this, but not in the last 12 months</p> <p>96 = Valid Skip</p> <p>99 = Not Stated</p>
CAN_070	61	Indicate whether you have used marijuana or cannabis (a joint, pot, weed, hash, or hash oil) in the following ways: Eaten it in food such as brownies, cakes, cookies or candy	<p>1 = No, I have never done this</p> <p>2 = Yes, I have done this in the last 30 days</p> <p>3 = Yes, I have done this in the last 12 months</p> <p>4 = Yes, I have done this, but not in the last 12 months</p> <p>96 = Valid Skip</p> <p>99 = Not Stated</p>
CAN_080	62	Indicate whether you have used marijuana or cannabis (a joint, pot, weed, hash, or hash oil) in the following ways: Drank it in tea, cola, alcohol, or other drinks	<p>1 = No, I have never done this</p> <p>2 = Yes, I have done this in the last 30 days</p> <p>3 = Yes, I have done this in the last 12 months</p> <p>4 = Yes, I have done this, but not in the last 12 months</p> <p>96 = Valid Skip</p> <p>99 = Not Stated</p>

CAN_091	63	Indicate whether you have used marijuana or cannabis (a joint, pot, weed, hash, or hash oil) in the following ways: Vaped dried cannabis (e.g., using the same type of cannabis used in a joint)	1 = No, I have never done this 2 = Yes, I have done this in the last 30 days 3 = Yes, I have done this in the last 12 months 4 = Yes, I have done this, but not in the last 12 months 96 = Valid Skip 99 = Not Stated
CAN_092	64	Indicate whether you have used marijuana or cannabis (a joint, pot, weed, hash, or hash oil) in the following ways: Vaped liquid cannabis (also known as 'vaping concentrates' and 'vaping extracts')	1 = No, I have never done this 2 = Yes, I have done this in the last 30 days 3 = Yes, I have done this in the last 12 months 4 = Yes, I have done this, but not in the last 12 months 96 = Valid Skip 99 = Not Stated
CAN_100	65	Indicate whether you have used marijuana or cannabis (a joint, pot, weed, hash, or hash oil) in the following ways: Dabbed it (i.e., heated on a hot surface, including hot knife or nail, and the resulting smoke is then inhaled)	1 = No, I have never done this 2 = Yes, I have done this in the last 30 days 3 = Yes, I have done this in the last 12 months 4 = Yes, I have done this, but not in the last 12 months 96 = Valid Skip 99 = Not Stated
CAN_110	66	Indicate whether you have used marijuana or cannabis (a joint, pot, weed, hash, or hash oil) in the following ways: Used it some other way	1 = No, I have never done this 2 = Yes, I have done this in the last 30 days 3 = Yes, I have done this in the last 12 months 4 = Yes, I have done this, but not in the last 12 months 96 = Valid Skip 99 = Not Stated

CAN_121	67	<p>In the last 12 months, how did you usually get the marijuana or cannabis you used? (Note: mark only one, if you get the marijuana or cannabis from more than one place, please select where you get it most often.)</p>	<p>2 = I have not done this in the last 12 months 3 = I grow my own 4 = It was shared around a group of friends 5 = I took it from a family member or friend without their permission 6 = I took it from someone else without their permission 7 = I got or bought it online (e.g., website, social media store, etc.) 8 = I got or bought it from a family member or a friend 9 = I got or bought it from someone else 10 = I bought it from a store 11 = Someone bought it for me at a retail store 12 = Other 96 = Valid Skip 99 = Not Stated</p>
CAN_130	68	<p>The use of cannabis was made legal for adults in Canada. Has it been easier to get marijuana or cannabis for yourself after legalization?</p>	<p>1 = I have never bought/got marijuana or cannabis 2 = It has been easier 3 = It has been harder 4 = Neither easier nor harder 99 = Not Stated</p>

CAN_140	69	In the <u>last 12 months</u> , how often did you have alcohol <u>AND</u> marijuana or cannabis on the same occasion? (e.g., at a party, in the same evening, etc.)	<p>1 = I have never had alcohol AND cannabis on one occasion</p> <p>2 = I have not done this in the last 12 months</p> <p>3 = Less than once a month</p> <p>4 = Once a month</p> <p>5 = 2 to 3 times a month</p> <p>6 = Once a week</p> <p>7 = 2 to 5 times a week</p> <p>8 = Daily or almost daily</p> <p>9 = I do not know</p> <p>99 = Not Stated</p>
UND_010	70	Have you ever used a drug or substance to get high without knowing what it was?	<p>1 = No, I have never done this</p> <p>2 = Yes, I have done this in the last 12 months</p> <p>3 = Yes, I have done this, but not in the last 12 months</p> <p>99 = Not Stated</p>
UND_020	71	Have you ever used a drug or substance to get high that was not what you thought it was?	<p>1 = No, I have never done this</p> <p>2 = Yes, I have done this in the last 12 months</p> <p>3 = Yes, I have done this, but not in the last 12 months</p> <p>99 = Not Stated</p>
MET_010	72	Have you ever used or tried amphetamines (speed, crystal meth or ice, meth, crank, ...)?	<p>1 = No, I have never done this</p> <p>2 = Yes, I have done this in the last 12 months</p> <p>3 = Yes, I have done this, but not in the last 12 months</p> <p>99 = Not Stated</p>

XTC_010	73	Have you ever used or tried MDMA (ecstasy, E, X, ...)?	1 = No, I have never done this 2 = Yes, I have done this in the last 12 months 3 = Yes, I have done this, but not in the last 12 months 99 = Not Stated
HAL_010	74	Have you ever used or tried hallucinogens (LSD, acid, PCP, magic mushrooms or 'shrooms', mesc, ketamines, ...)?	1 = No, I have never done this 2 = Yes, I have done this in the last 12 months 3 = Yes, I have done this, but not in the last 12 months 99 = Not Stated
HER_010	75	Have you ever used or tried heroin (smack, junk, horse, ...)?	1 = No, I have never done this 2 = Yes, I have done this in the last 12 months 3 = Yes, I have done this, but not in the last 12 months 99 = Not Stated
COC_010	76	Have you ever used or tried cocaine (crack, blow, snow, ...)?	1 = No, I have never done this 2 = Yes, I have done this in the last 12 months 3 = Yes, I have done this, but not in the last 12 months 99 = Not Stated
SYN_010	77	Have you ever used or tried synthetic cannabinoids (spice, synthetic marijuana, scence, herbal mixtures, herbal incense, ...)?	1 = No, I have never done this 2 = Yes, I have done this in the last 12 months 3 = Yes, I have done this, but not in the last 12 months 99 = Not Stated

BZP_010	78	Have you ever used or tried BZP/TFMPP (legal X, A2, piperazine, frenzy, nemesis, ...)?	1 = No, I have never done this 2 = Yes, I have done this in the last 12 months 3 = Yes, I have done this, but not in the last 12 months 99 = Not Stated
BS_010	79	Have you ever used or tried bath salts (mephedrone, MDPV, meph, MCAT, ...)?	1 = No, I have never done this 2 = Yes, I have done this in the last 12 months 3 = Yes, I have done this, but not in the last 12 months 99 = Not Stated
TNB_010	80	Have you ever used or tried 2C (nexus, 2C-B, 2C-I, 2C-C, ...) or NBOMe (25C-NBOMe, 25B-NBOMe, 25I-NBOMe, ...)?	1 = No, I have never done this 2 = Yes, I have done this in the last 12 months 3 = Yes, I have done this, but not in the last 12 months 99 = Not Stated
TRP_010	81	Have you ever used or tried tryptamines (DMT, 'psychosis', AMT, foxy, ...)?	1 = No, I have never done this 2 = Yes, I have done this in the last 12 months 3 = Yes, I have done this, but not in the last 12 months 99 = Not Stated
GLU_010	82	Have you ever used or tried glue, gasoline, or other solvents to get high?	1 = No, I have never done this 2 = Yes, I have done this in the last 12 months 3 = Yes, I have done this, but not in the last 12 months 99 = Not Stated

SAL_010	83	Have you ever used or tried salvia (divine sage, magic mint, sally D, ...)?	1 = No, I have never done this 2 = Yes, I have done this in the last 12 months 3 = Yes, I have done this, but not in the last 12 months 99 = Not Stated
SLP_010	84	Have you ever used or tried any of the following medications for non-medical reasons or to get high? Sleeping medicine from a store (Nytol®, Unisom®, ...)?	1 = No, I have never done this 2 = Yes, I have done this in the last 12 months 3 = Yes, I have done this, but not in the last 12 months 99 = Not Stated
STI_030	85	Have you ever used or tried any of the following medications for non-medical reasons or to get high? Stimulants (diet pills, stay awake pills, uppers, bennies, wake-ups, ...)?	1 = No, I have never done this 2 = Yes, I have done this in the last 12 months 3 = Yes, I have done this, but not in the last 12 months 99 = Not Stated
DEX_010	86	Have you ever used or tried any of the following medications for non-medical reasons or to get high? Dextromethorphan such as cold and cough medicine (Robitussin DM®, Benylin DM®, robos, dex, DXM, ...)?	1 = No, I have never done this 2 = Yes, I have done this in the last 12 months 3 = Yes, I have done this, but not in the last 12 months 99 = Not Stated
GRV_010	87	Have you ever used or tried any of the following medications for non-medical reasons or to get high? Gravol®?	1 = No, I have never done this 2 = Yes, I have done this in the last 12 months 3 = Yes, I have done this, but not in the last 12 months 99 = Not Stated
STI_080	88	In the <u>last 12 months</u> , were you given a prescription by a Health Care Provider for medicine to treat hyperactivity or concentration difficulty, also called ADHD (Ritalin®, Concerta®, Adderall®, Dexedrine®, ...)?	1 = Yes 2 = No 3 = I do not know 99 = Not Stated

STI_050	89	Have you ever used ADHD medicine for non-medical reasons or to get high (Ritalin®, Concerta®, Adderall®, Dexedrine®, ...)?	1 = No, I have never done this 2 = Yes, I have done this in the last 12 months 3 = Yes, I have done this, but not in the last 12 months 99 = Not Stated
SED_050	90	In the <u>last 12 months</u> , were you given a prescription by a Health Care Provider for sedatives or tranquilizers to help you sleep, calm down, or relax your muscles (Ativan®, Xanax®, Valium®, ...)?	1 = Yes 2 = No 3 = I do not know 99 = Not Stated
SED_030	91	Have you ever used sedatives or tranquilizers for non-medical reasons or to get high (Ativan®, Xanax®, Valium®, ...)?	1 = No, I have never done this 2 = Yes, I have done this in the last 12 months 3 = Yes, I have done this, but not in the last 12 months 99 = Not Stated
PR_100	92	In the <u>last 12 months</u> , were you given a prescription by a Health Care Provider for prescribed pain relievers (oxycodone, fentanyl, morphine, codeine, T3, ...)? This does <u>not</u> include pain relievers such as Advil®, Aspirin®, or regular Tylenol® that anyone can buy in a drug store.	1 = Yes 2 = No 3 = I do not know 99 = Not Stated
PR_030	93	Have you ever used the following prescription pain relievers for non-medical reasons or to get high? Oxycodone (oxy, OC, APO, OxyContin®, percs, roxies, OxyNEO®, ...)	1 = No, I have never done this 2 = Yes, I have done this in the last 12 months 3 = Yes, I have done this, but not in the last 12 months 99 = Not Stated
PR_050	94	Have you ever used the following prescription pain relievers for non-medical reasons or to get high? Fentanyl	1 = No, I have never done this 2 = Yes, I have done this in the last 12 months 3 = Yes, I have done this, but not in the last 12 months 99 = Not Stated

PR_060	95	Have you ever used the following prescription pain relievers for non-medical reasons or to get high? Other prescribed pain relievers (morphine, codeine, etc.)	1 = No, I have never done this 2 = Yes, I have done this in the last 12 months 3 = Yes, I have done this, but not in the last 12 months 99 = Not Stated
PR_110	96	In the last 12 months, if you did use prescribed pain relievers for non-medical reasons or to get high, how did you get them? (Note: mark only one, if you get the prescribed pain relievers from more than one place, please select where you get them most often.)	1 = I have never taken prescribed pain relievers for non-medical reasons or to get high 2 = I did not do this in the last 12 months 3 = I used pain relievers from my own prescription for non-medical reasons or to get high 4 = I took them from a family member or friend without their permission 5 = I took them from someone else without their permission 6 = I got or bought them from a family member or friend 7 = I got or bought them from someone else 8 = I got or bought them online (e.g., website, social media store, etc.) 9 = Other 99 = Not Stated
POLY_010	97	In the <u>last 12 months</u> , have you used alcohol and amphetamines (speed, crystal meth or ice, meth, crank, ...) to get high <u>on the same occasion</u> ? (e.g., at the same party, in the same evening, etc.)	1 = No, never 2 = Yes, less than once a month 3 = Yes, at least once a month 4 = Yes, I have done this, but not in the last 12 months 5 = I do not know 99 = Not stated

POLY_020	98	In the <u>last 12 months</u> , have you used alcohol and MDMA (ecstasy, E, X, ...) to get high <u>on the same occasion?</u> (e.g., at the same party, in the same evening, etc.)	1 = No, never 2 = Yes, less than once a month 3 = Yes, at least once a month 4 = Yes, I have done this, but not in the last 12 months 5 = I do not know 99 = Not stated
POLY_030	99	In the <u>last 12 months</u> , have you used alcohol and hallucinogens (LSD, acid, PCP, magic mushrooms or 'shrooms', mesc, ketamines, ...) to get high <u>on the same occasion?</u> (e.g., at the same party, in the same evening, etc.)	1 = No, never 2 = Yes, less than once a month 3 = Yes, at least once a month 4 = Yes, I have done this, but not in the last 12 months 5 = I do not know 99 = Not stated
POLY_040	100	In the <u>last 12 months</u> , have you used alcohol and heroin (smack, junk, horse, ...) to get high <u>on the same occasion?</u> (e.g., at the same party, in the same evening, etc.)	1 = No, never 2 = Yes, less than once a month 3 = Yes, at least once a month 4 = Yes, I have done this, but not in the last 12 months 5 = I do not know 99 = Not stated
POLY_050	101	In the <u>last 12 months</u> , have you used alcohol and cocaine (crack, blow, snow, ...) to get high <u>on the same occasion?</u> (e.g., at the same party, in the same evening, etc.)	1 = No, never 2 = Yes, less than once a month 3 = Yes, at least once a month 4 = Yes, I have done this, but not in the last 12 months 5 = I do not know 99 = Not stated

POLY_060	102	In the <u>last 12 months</u> , have you used alcohol and ADHD medications (Ritalin®, Concerta®, Adderall®, Dexedrine®, ...) to get high <u>on the same occasion?</u> (e.g., at the same party, in the same evening, etc.)	1 = No, never 2 = Yes, less than once a month 3 = Yes, at least once a month 4 = Yes, I have done this, but not in the last 12 months 5 = I do not know 99 = Not stated
POLY_070	103	In the <u>last 12 months</u> , have you used alcohol and sedatives or tranquilizers (Ativan®, Xanax®, Valium®, ...) to get high <u>on the same occasion?</u> (e.g., at the same party, in the same evening, etc.)	1 = No, never 2 = Yes, less than once a month 3 = Yes, at least once a month 4 = Yes, I have done this, but not in the last 12 months 5 = I do not know 99 = Not stated
POLY_080	104	In the <u>last 12 months</u> , have you used alcohol and prescription pain relievers (oxycodone, fentanyl, morphine, codeine, etc.) to get high <u>on the same occasion?</u> (e.g., at the same party, in the same evening, etc.)	1 = No, never 2 = Yes, less than once a month 3 = Yes, at least once a month 4 = Yes, I have done this, but not in the last 12 months 5 = I do not know 99 = Not stated
POLY_090	105	In the <u>last 12 months</u> , have you used alcohol and sleeping medicine from a store (Nytol®, Unisom®, ...) to get high <u>on the same occasion?</u> (e.g., at the same party, in the same evening, etc.)	1 = No, never 2 = Yes, less than once a month 3 = Yes, at least once a month 4 = Yes, I have done this, but not in the last 12 months 5 = I do not know 99 = Not stated

POLY_100	106	In the <u>last 12 months</u> , have you used alcohol and stimulants (diet pills, stay awake pills, uppers, bennies, wake-ups, ...) to get high <u>on the same occasion?</u> (e.g., at the same party, in the same evening, etc.)	1 = No, never 2 = Yes, less than once a month 3 = Yes, at least once a month 4 =Yes, I have done this, but not in the last 12 months 5 = I do not know 99 = Not stated
POLY_110	107	In the <u>last 12 months</u> , have you used alcohol and dextromethorphan such as cold and cough medicine (Robitussin DM®, Benylin DM®, robos, dex, DXM, ...) to get high <u>on the same occasion?</u> (e.g., at the same party, in the same evening, etc.)	1 = No, never 2 = Yes, less than once a month 3 = Yes, at least once a month 4 =Yes, I have done this, but not in the last 12 months 5 = I do not know 99 = Not stated
POLY_120	108	In the <u>last 12 months</u> , have you used alcohol and Graval® to get high <u>on the same occasion?</u> (e.g., at the same party, in the same evening, etc.)	1 = No, never 2 = Yes, less than once a month 3 = Yes, at least once a month 4 =Yes, I have done this, but not in the last 12 months 5 = I do not know 99 = Not stated
POLY_130	109	In the <u>last 12 months</u> , have you used opioids and amphetamines (speed, crystal meth or ice, meth, crank, ...) to get high <u>on the same occasion?</u> (e.g., at the same party, in the same evening, etc.) (Opioids include heroin, prescription pain relievers (oxycodone, fentanyl, morphine, codeine, etc.)	1 = No, never 2 = Yes, less than once a month 3 = Yes, at least once a month 4 =Yes, I have done this, but not in the last 12 months 5 = I do not know 99 = Not stated

POLY_140	110	In the <u>last 12 months</u> , have you used opioids and MDMA (ecstasy, E, X, ...) to get high <u>on the same occasion?</u> (e.g., at the same party, in the same evening, etc.) (Opioids include heroin, prescription pain relievers (oxycodone, fentanyl, morphine, codeine, etc.)	1 = No, never 2 = Yes, less than once a month 3 = Yes, at least once a month 4 =Yes, I have done this, but not in the last 12 months 5 = I do not know 99 = Not stated
POLY_150	111	In the <u>last 12 months</u> , have you used opioids and cocaine (crack, blow, snow, ...) to get high <u>on the same occasion?</u> (e.g., at the same party, in the same evening, etc.) (Opioids include heroin, prescription pain relievers (oxycodone, fentanyl, morphine, codeine, etc.)	1 = No, never 2 = Yes, less than once a month 3 = Yes, at least once a month 4 =Yes, I have done this, but not in the last 12 months 5 = I do not know 99 = Not stated
POLY_160	112	In the <u>last 12 months</u> , have you used opioids and ADHD medications (Ritalin®, Concerta®, Adderall®, Dexedrine®,...) to get high <u>on the same occasion?</u> (e.g., at the same party, in the same evening, etc.) (Opioids include heroin, prescription pain relievers (oxycodone, fentanyl, morphine, codeine, etc.)	1 = No, never 2 = Yes, less than once a month 3 = Yes, at least once a month 4 =Yes, I have done this, but not in the last 12 months 5 = I do not know 99 = Not stated
POLY_170	113	In the <u>last 12 months</u> , have you used opioids and stimulants (diet pills, stay awake pills, uppers, bennies, wake-ups, ...) to get high <u>on the same occasion?</u> (e.g., at the same party, in the same evening, etc.) (Opioids include heroin, prescription pain relievers (oxycodone, fentanyl, morphine, codeine, etc.)	1 = No, never 2 = Yes, less than once a month 3 = Yes, at least once a month 4 =Yes, I have done this, but not in the last 12 months 5 = I do not know 99 = Not stated

POLY_180	114	In the <u>last 12 months</u> , have you used opioids and sedatives or tranquilizers (Ativan®, Xanax®, Valium®, ...) to get high <u>on the same occasion?</u> (e.g., at the same party, in the same evening, etc.) (Opioids include heroin, prescription pain relievers (oxycodone, fentanyl, morphine, codeine, etc.)	1 = No, never 2 = Yes, less than once a month 3 = Yes, at least once a month 4 = Yes, I have done this, but not in the last 12 months 5 = I do not know 99 = Not stated
PH_010	115	How much do you think people risk harming themselves when they smoke cigarettes once in a while?	1 = No risk 2 = Slight risk 3 = Moderate risk 4 = Great risk 5 = I do not know 99 = Not Stated
PH_020	116	How much do you think people risk harming themselves when they smoke cigarettes on a regular basis?	1 = No risk 2 = Slight risk 3 = Moderate risk 4 = Great risk 5 = I do not know 99 = Not Stated
PH_030	117	How much do you think people risk harming themselves when they smoke a water-pipe with tobacco (hookah) once in a while?	1 = No risk 2 = Slight risk 3 = Moderate risk 4 = Great risk 5 = I do not know 99 = Not Stated
PH_040	118	How much do you think people risk harming themselves when they smoke a water-pipe with tobacco (hookah) on a regular basis?	1 = No risk 2 = Slight risk 3 = Moderate risk 4 = Great risk 5 = I do not know 99 = Not Stated

PH_051	119	How much do you think people risk harming themselves when they use an e-cigarette WITH nicotine once in a while?	1 = No risk 2 = Slight risk 3 = Moderate risk 4 = Great risk 5 = I do not know 99 = Not Stated
PH_061	120	How much do you think people risk harming themselves when they use an e-cigarette WITH nicotine on a regular basis?	1 = No risk 2 = Slight risk 3 = Moderate risk 4 = Great risk 5 = I do not know 99 = Not Stated
PH_052	121	How much do you think people risk harming themselves when they use an e-cigarette WITHOUT nicotine once in a while?	1 = No risk 2 = Slight risk 3 = Moderate risk 4 = Great risk 5 = I do not know 99 = Not Stated
PH_062	122	How much do you think people risk harming themselves when they use an e-cigarette WITHOUT nicotine on a regular basis?	1 = No risk 2 = Slight risk 3 = Moderate risk 4 = Great risk 5 = I do not know 99 = Not Stated
PH_110	123	How much do you think people risk harming themselves when they drink alcohol once in a while?	1 = No risk 2 = Slight risk 3 = Moderate risk 4 = Great risk 5 = I do not know 99 = Not Stated

PH_120	124	How much do you think people risk harming themselves when they drink alcohol on a regular basis?	1 = No risk 2 = Slight risk 3 = Moderate risk 4 = Great risk 5 = I do not know 99 = Not Stated
PH_070	125	How much do you think people risk harming themselves when they smoke marijuana or cannabis once in a while?	1 = No risk 2 = Slight risk 3 = Moderate risk 4 = Great risk 5 = I do not know 99 = Not Stated
PH_080	126	How much do you think people risk harming themselves when they smoke marijuana or cannabis on a regular basis?	1 = No risk 2 = Slight risk 3 = Moderate risk 4 = Great risk 5 = I do not know 99 = Not Stated
PH_130	127	How much do you think people risk harming themselves when they use marijuana or cannabis, in a way OTHER than smoking it, once in a while?	1 = No risk 2 = Slight risk 3 = Moderate risk 4 = Great risk 5 = I do not know 99 = Not Stated
PH_140	128	How much do you think people risk harming themselves when they use marijuana or cannabis, in a way OTHER than smoking it, on a regular basis?	1 = No risk 2 = Slight risk 3 = Moderate risk 4 = Great risk 5 = I do not know 99 = Not Stated

PH_090	129	How much do you think people risk harming themselves when they use prescribed medication such as prescribed pain relievers, tranquilizers, or medicine to treat ADHD, "to get high" once in a while?	1 = No risk 2 = Slight risk 3 = Moderate risk 4 = Great risk 5 = I do not know 99 = Not Stated
PH_100	130	How much do you think people risk harming themselves when they use prescribed medication such as prescribed pain relievers, tranquilizers, or medicine to treat ADHD, "to get high" on a regular basis?	1 = No risk 2 = Slight risk 3 = Moderate risk 4 = Great risk 5 = I do not know 99 = Not Stated
CA_020	131	How difficult or easy do you think it would be for you to get a cigarette, if you wanted one?	1 = Very difficult 2 = Fairly difficult 3 = Fairly easy 4 = Very easy 5 = I do not know 99 = Not Stated
ELC_041	132	How difficult or easy do you think it would be for you to get an e-cigarette WITH NICOTINE, if you wanted one?	1 = Very difficult 2 = Fairly difficult 3 = Fairly easy 4 = Very easy 5 = I do not know 99 = Not Stated
ELC_042	133	How difficult or easy do you think it would be for you to get an e-cigarette WITHOUT NICOTINE, if you wanted one?	1 = Very difficult 2 = Fairly difficult 3 = Fairly easy 4 = Very easy 5 = I do not know 99 = Not Stated

ALC_080	134	How difficult or easy do you think it would be for you to get alcohol, if you wanted some?	1 = Very difficult 2 = Fairly difficult 3 = Fairly easy 4 = Very easy 5 = I do not know 99 = Not Stated
CAN_050	135	How difficult or easy do you think it would be for you to get marijuana or cannabis, if you wanted some?	1 = Very difficult 2 = Fairly difficult 3 = Fairly easy 4 = Very easy 5 = I do not know 99 = Not Stated
MET_030	136	How difficult or easy do you think it would be for you to get amphetamines (speed, crystal meth or ice, meth, crank, ...), if you wanted some?	1 = Very difficult 2 = Fairly difficult 3 = Fairly easy 4 = Very easy 5 = I do not know 99 = Not Stated
XTC_030	137	How difficult or easy do you think it would be for you to get MDMA (ecstasy, E, X, ...), if you wanted some?	1 = Very difficult 2 = Fairly difficult 3 = Fairly easy 4 = Very easy 5 = I do not know 99 = Not Stated
HAL_030	138	How difficult or easy do you think it would be for you to get hallucinogens (LSD, acid, PCP, magic mushrooms, mesc, ...), if you wanted some?	1 = Very difficult 2 = Fairly difficult 3 = Fairly easy 4 = Very easy 5 = I do not know 99 = Not Stated

COC_030	139	How difficult or easy do you think it would be for you to get cocaine (crack, blow, snow, ...), if you wanted some?	1 = Very difficult 2 = Fairly difficult 3 = Fairly easy 4 = Very easy 5 = I do not know 99 = Not Stated
PR_090	140	How difficult or easy do you think it would be for you to get prescribed pain relievers (oxycodone, fentanyl, morphine, codeine, T3, ...), if you wanted some?	1 = Very difficult 2 = Fairly difficult 3 = Fairly easy 4 = Very easy 5 = I do not know 99 = Not Stated
STI_070	141	How difficult or easy do you think it would be for you to get medicine to treat ADHD (Ritalin®, Concerta®, Adderall®, Dexedrine®, ...), if you wanted some?	1 = Very difficult 2 = Fairly difficult 3 = Fairly easy 4 = Very easy 5 = I do not know 99 = Not Stated
DR_010	142	Have you ever <u>driven a vehicle</u> (e.g., car, snowmobile, motor boat, or all-terrain vehicle (ATV)) within an hour of drinking one or more drinks of alcohol?	1 = No, never 2 = Yes, in the last 30 days 3 = Yes, more than 30 days ago 99 = Not Stated
DR_020	143	Have you ever <u>driven a vehicle</u> (e.g., car, snowmobile, motor boat, or all-terrain vehicle (ATV)) within 2 hours of using marijuana or cannabis?	1 = No, never 2 = Yes, in the last 30 days 3 = Yes, more than 30 days ago 99 = Not Stated
DR_060	144	Have you ever <u>been a passenger</u> in a vehicle (e.g., car, snowmobile, motor boat, or all-terrain vehicle (ATV)) driven by someone who had one or more drinks of alcohol in the last hour?	1 = No, never 2 = Yes, in the last 30 days 3 = Yes, more than 30 days ago 4 = I do not know 99 = Not Stated

DR_070	145	Have you ever <u>been a passenger</u> in a vehicle (e.g., car, snowmobile, motor boat, or all-terrain vehicle (ATV)) driven by someone who had been using marijuana or cannabis in the last 2 hours?	1 = No, never 2 = Yes, in the last 30 days 3 = Yes, more than 30 days ago 4 = I do not know 99 = Not Stated
BEH_010	146	Is smoking cigarettes allowed (or do you think is allowed) at your house?	1 = Allowed inside and outside 2 = Allowed inside only 3 = Allowed outside only 4 = Not allowed inside or outside 99 = Not Stated
BEH_020	147	Is smoking cannabis allowed (or do you think is allowed) at your house?	1 = Allowed inside and outside 2 = Allowed inside only 3 = Allowed outside only 4 = Not allowed inside or outside 99 = Not Stated
BEH_030	148	Is vaping e-cigarettes allowed (or do you think is allowed) at your house?	1 = Allowed inside and outside 2 = Allowed inside only 3 = Allowed outside only 4 = Not allowed inside or outside 99 = Not Stated
BEH_040	149	Is vaping cannabis allowed (or do you think is allowed) at your house?	1 = Allowed inside and outside 2 = Allowed inside only 3 = Allowed outside only 4 = Not allowed inside or outside 99 = Not Stated
BUL_010	150	In the <u>last 30 days</u> , in what ways were you bullied by other students? Physical attacks (getting beaten up, pushed, or kicked, ...)	1 = Yes 2 = No 99 = Not Stated
BUL_020	151	In the <u>last 30 days</u> , in what ways were you bullied by other students? Verbal attacks (getting teased, threatened, or having rumours spread about you, ...)	1 = Yes 2 = No 99 = Not Stated

BUL_030	152	In the <u>last 30 days</u> , in what ways were you bullied by other students? Non-verbal attacks (being ignored, being left out or excluded, being given dirty looks, ...)	1 = Yes 2 = No 99 = Not Stated
BUL_040	153	In the <u>last 30 days</u> , in what ways were you bullied by other students? Cyber-attacks (being sent mean text messages or having rumours spread about you on the internet, ...)	1 = Yes 2 = No 99 = Not Stated
BUL_050	154	In the <u>last 30 days</u> , in what ways were you bullied by other students? Had someone steal from you or damage your things	1 = Yes 2 = No 99 = Not Stated
BUL_060	155	In the <u>last 30 days</u> , how often have you been bullied by other students?	1 = I have not been bullied by other students in the last 30 days 2 = Less than once a week 3 = About once a week 4 = 2 or 3 times a week 5 = Daily or almost daily 99 = Not Stated
BUL_070	156	In the <u>last 30 days</u> , in what ways did you bully other students? Physical attacks (beat up, pushed, or kicked them, ...)	1 = Yes 2 = No 99 = Not Stated
BUL_080	157	In the <u>last 30 days</u> , in what ways did you bully other students? Verbal attacks (teased, threatened, or spread rumours about them, ...)	1 = Yes 2 = No 99 = Not Stated
BUL_090	158	In the <u>last 30 days</u> , in what ways did you bully other students? Non-verbal attacks (ignoring, leaving someone out or excluding them, giving dirty looks, ...)	1 = Yes 2 = No 99 = Not Stated
BUL_100	159	In the <u>last 30 days</u> , in what ways did you bully other students? Cyber-attacks (sent mean text messages or spread rumours about them on the internet, ...)	1 = Yes 2 = No 99 = Not Stated

BUL_110	160	In the <u>last 30 days</u> , in what ways did you bully other students? Stolen from them or damaged their things	1 = Yes 2 = No 99 = Not Stated
BUL_120	161	In the <u>last 30 days</u> , how often did you bully other students?	1 = I have not bullied other students in the last 30 days 2 = Less than once a week 3 = About once a week 4 = 2 or 3 times a week 5 = Daily or almost daily 99 = Not Stated
DVTY1ST	162	Derived smoking status	1 = Current Smoker 2 = Former Smoker 3 = Never Smoker 99 = Not Stated
DVTY2ST	163	Detailed smoking classifications (derived)	1 = Current Daily Smoker 2 = Current Occasional Smoker 3 = Former Smoker 4 = Experimental Smoker (Beginner) 5 = Past Experimental Smoker 6 = Puffer 7 = Never Tried 99 = Not Stated
DVLAST30	164	Has the respondent smoked one or more cigarettes in the last 30 days	1 = Yes 2 = No 99 = Not Stated
DVAMTSMK	165	If a respondent is a current smoker, the average number of whole cigarettes smoked per day in the past week. (Note: Values with a decimal of .5 or greater were rounded up)	0 = 0 whole cigarettes smoked 1:36 = Range: 1 to 36 whole cigarettes smoked 96 = Valid Skip 99 = Not Stated

DVCIGWK	166	If a respondent is a current smoker, the total number of whole cigarettes smoked in the past 7 days prior to the survey	0 = 0 whole cigarettes smoked 1:252 = Range: 1 to 252 whole cigarettes smoked 996 = Valid Skip 999 = Not Stated
DVNDSMK	167	If a respondent is a current smoker, the number of days on which respondent smoked at least one whole cigarette in the week prior to the survey	0 = Did not smoke in the last 7 days 1 = Smoked 1 day in the last 7 days 2 = Smoked 2 days in the last 7 days 3 = Smoked 3 days in the last 7 days 4 = Smoked 4 days in the last 7 days 5 = Smoked 5 days in the last 7 days 6 = Smoked 6 days in the last 7 days 7 = Smoked every day in the last 7 days 96 = Valid Skip 99 = Not Stated
DVAVCIGD	168	If a respondent is a current smoker, the average number of whole cigarettes smoked on the days that the respondent smoked	0 whole cigarettes smoked 1:36 = Range: 1 to 36 whole cigarettes smoked 96 = Valid Skip 99 = Not Stated

Section 2.0 Guidelines for Tabulation, Analysis and Release of CSTADS 2021-2022 Data

This section details guidelines for users when tabulating, analyzing, and publishing or otherwise releasing any data derived from the CSTADS 2021-2022 Public Use Microdata File (PUMF). With the aid of these guidelines, PUMF users will be able to generate results that are consistent with those of other users and, at the same time, will be able to develop currently unpublished figures in a manner consistent with these established guidelines.

2.1 Survey Errors

The estimates derived from this survey are based on a sample of schools. Somewhat different estimates might be obtained if a complete census had been taken using the same questionnaire, data collection staff, and processing methods. The difference between the estimates obtained from the sample and those resulting from a complete count taken under similar conditions are called the sampling error of the estimate.

Errors that are not related to sampling may occur at almost every phase of survey implementation. Administrators may misunderstand instructions, respondents may refuse to participate in the survey, be unable or unwilling to answer questions, or make errors in answering questions, the

answers may be incorrectly entered on the questionnaire, and errors may be introduced in the processing and tabulation of the data. These are all examples of non-sampling errors.

Over a large number of observations, randomly occurring errors will have little effect on estimates derived from the survey; however, errors occurring systematically will contribute to biases in the survey estimates. Considerable time and effort were taken to reduce non-sampling errors in the survey. Quality assurance measures were implemented at each step of the data collection and processing cycle to monitor the quality of the data. These measures included 1) detailed instructions for teachers and participating students; 2) extensive training of project staff with respect to survey procedures; 3) procedures to ensure that data capture errors were minimized; 4) coding and editing quality checks to verify the processing logic; and 5) adjusting survey weights for total (survey) nonresponse.

2.2 Rounding Guide

Rounding is a technique that aids in disclosure avoidance and that minimizes perceptions of exaggerated precision. Users are urged to adhere to the following guidelines regarding the rounding of such estimates:

1. Estimates in the main body of a statistical table are to be rounded to the nearest hundred units using the normal rounding technique. In normal rounding, if the first or only digit to be dropped is 0 to 4, the last digit to be retained is not changed. If the first or only digit to be dropped is 5 to 9, the last digit to be retained is raised by 1. For example, in normal rounding to the nearest 100, if the last two digits are between 00 and 49, they are changed to 00 and the preceding digit (the hundreds digit) is left unchanged. If the last digits are between 50 and 99, they are changed to 00 and the preceding digit is incremented by 1.
2. Marginal sub-totals and totals in statistical tables are to be derived from their corresponding un-rounded components and then are to be rounded themselves to the nearest 100 units using normal rounding.
3. Averages, proportions, rates and percentages are to be computed from un-rounded components (i.e., numerators and/or denominators) and then are to be rounded to one decimal using normal rounding. In normal rounding to a single digit, if the final or only digit to be dropped is 0 to 4, the last digit to be retained is not changed. If the first or only digit to be dropped is 5 to 9, the last digit to be retained is increased by 1.
4. Sums and differences of aggregates (or ratios) are to be derived from their corresponding un-rounded components and then are to be rounded themselves to the nearest 100 units (or the nearest one decimal) using normal rounding.

Under no circumstances are un-rounded estimates to be published or otherwise released by users. Un-rounded estimates imply greater precision than actually exists.

2.3 Use of Survey Weights

Why should survey weights be used?

When producing simple population estimates, including the production of ordinary statistical tables, users must apply the proper survey weights. There are two reasons why a survey weight variable should be used when performing analyses.

1. **Total population versus sample size**¹⁹. Users may want results based on population figures instead of estimates based on the sample of individuals included in the study. For example, the CSTADS survey weight, when used, will produce results based on a national population estimate of N , which represents all the students in the participating provinces (grades 7-12) instead of n , which is the total number of students who actually completed the survey. The latter is known as the sample size of the CSTADS.
2. **Adjusting for sampling and nonresponse**. The second use of survey weights is to adjust for sampling methods and for total (survey) nonresponse. If every member of a population had an equal probability of being selected in a sample and had the same likelihood of participating in the survey, each case would carry the same survey weight and the survey weight for all individuals would be the inverse probability of selection and response. However, CSTADS sampling employed more complex considerations, and nonresponse was not homogeneous (described in Section 2.4). As a result, individuals did not have an equal probability of participating in the survey. To correct for this unequal probability, the survey weight variable was created. In short, using the survey weight variable permits the user to make generalizations to the population from the sample of respondents.

If proper weights (w_{pumpf}) are not used, the estimates derived from the PUMF cannot be considered as representative of the survey population.

Generation of CSTADS Survey Weights

For weighting purposes, the CSTADS operates like a two-stage sample. In the first stage, a simple random sample of schools is selected in every stratum. In the second stage, all grade 7-12 students in selected schools are asked to participate in the survey, and those that do are treated as constituting a random sample.

A four-step process is used to generate the CSTADS survey weights. Step 1 consists of generating first stage weights at the school level. Weights are generated separately for each stratum. For stratum h , the first stage weight equals the number of schools in the stratum (N_h) divided by the number of schools in the sample (n_h), giving $w_{1h} = N_h/n_h$. This weight is the same for all schools in the same stratum.

Step 2 consists of generating second stage weights at the student level. In each school (j), weights are calculated at the grade (g) and sex (s) level by dividing the total number of students in that grade and sex (N_{jgs}), as provided by the school, by the number of participating students (n_{jgs}).

This gives $w_{2jgs} = N_{jgs}/n_{jgs}$.

In Step 3, the first and second stage weights are multiplied as $w_{3hjgs} = w_{1h} w_{2jgs}$. On rare occasions, very low response rates can result in very high values for w_{3hjgs} , which will negatively impact on estimates. For this reason, values of w_{3hjgs} are capped in every province, based on the distribution of weights therein. If we denote capped weights as \hat{w}_{3hjgs} then $\hat{w}_{3hjgs} = \min(w_{3hjgs}, w_{cap})$, where w_{cap} is fixed at the provincial level. Less than one-half of one percent of weights were capped.

The final step consists of calibrating capped sample weights \hat{w}_{3higs} so that they sum to provincial population counts by grade and sex (F_{pgs}), as obtained from the sample frame. In provinces where counts were not available by sex, a breakdown by sex was generated based on post-censal 2021 age-sex counts from Statistics Canada. The final weight for a student in school j , grade g , and sex s is $w_{tpjgs} = \hat{w}_{3higs} F_{pgs} / (\sum \hat{w}_{3higs})$, where the sum in the denominator is over all respondents in their province, grade, and sex.

Survey estimates of population totals Y for a variable y are weighted sums $\hat{Y} = \sum_j w_{tpj} y_j$, where the sums are taken over all respondents j in the population of interest. The weights w_{tpj} were used for all statistics in 2021-2022 CSTADS results summary and detailed tables released on the [Health Canada website](#).

Creation of Perturbed Weights for the PUMF

Variables school and sex are not included on the PUMF. Since the w_{tpj} are closely tied to both, random noise is added to survey weights on the PUMF as part of the confidentiality treatment. The PUMF weights (w_{tpumfj}) are generated from the original weights w_{tpj} in a two-step process. First, unbiased random noise is added to the w_{tpj} . Resulting weights are then calibrated to match original (w_{tpj}) weighted totals using a modified gender* variable instead of sex. Gender=1 and gender=2 values contribute 1 to gender*=1 and 2, respectively, while gender=99 (missing) values contribute 0.5 to both gender*=1 and gender*=2. The calibration of w_{tpumf} is done at the province, grade and gender* level, with gender=99 respondents assigned the average of their calibrated weight under each gender*. As a result, w_{tpj} and w_{tpumfj} totals are equivalent at the province and grade level only.

2.4 Use of Weights for Estimation and Variance Estimation

Use of Weights w_{tpumf} for Estimation

Estimates of population sizes can be obtained from the CSTADS PUMF by summing the final weights (w_{tpumf}) for all records that belong to the population of interest. For example, to obtain an estimate of the total number of current smokers (derived variable DVTY1ST=1) in grade 9 (secondary III in Quebec), sum the weights w_{tpumf} for all records having GRADE equal to 9 and DVTY1ST equal to 1. Note that this quantity will be underestimating the true population size by the extent to which grade 9 students did not report their smoking status (DVTY1ST=99, for Not Stated). A method to adjust estimates for such item nonresponse is given below.

Estimates of quantities can be obtained by multiplying the value of the variable of interest by the final weight for each record, then summing this quantity over all records of interest. For example, to obtain an estimate of the total number of whole cigarettes smoked in the past 7 days prior to the survey by students in grade 9, multiply the value reported in the derived variable DVCIGWK (number of whole cigarettes smoked in the past 7 days prior to the survey) by the final weight for the record (w_{tpumf}), then sum this product for all records where DVCIGWK < 996 and GRADE equals 9. An adjustment for item nonresponse (DVCIGWK=999) will be necessary here as well.

Estimates of ratios are obtained by taking the ratios of weighted estimates. For example, to obtain an estimate of the *average* number of whole cigarettes smoked in the past 7 days prior to the survey by students in grade 9, divide the preceding estimate of the total number of whole

cigarettes smoked in the past 7 days prior to the survey by students in grade 9 by the estimate of the number of grade 9 students, or by the estimate of the number of grade 9 students who are smokers, if that is desired. Here too an adjustment will be necessary for nonresponse to the numerator and/or the denominator.

Adjusting Weighted Estimates for Item Nonresponse

The final survey weights (wtpumf) are adjusted to account for total nonresponse (nonresponse to the survey), but not for item nonresponse (nonresponse to individual questions). Adjusting for item nonresponse is necessary to avoid biases in survey estimates. The adjustment can be simple or complicated, depending on the statistic being estimated, the information available for nonrespondents, and the model used for nonresponse.

A simple adjustment for item nonresponse consists of multiplying the final weights (wtpumf) of each respondent in the population of interest by the ratio of the sum of final weights for all records in the population of interest divided by the sum of final weights for all respondents *to that question* in the population of interest. For example, consider the following survey results for DVTY1ST for grade 9 students.

DVTY1ST	Number of records	Sum of wtpumf
1 = Current Smoker	180	6,802.1
2 = Former Smoker	24	696.8
3 = Never Smoker	10,815	375,630.6
99 = Not Stated	36	1,338.6
Total (Grade 9)	11,055	384,468.2

To adjust estimates of current smokers, former smokers and never smokers in grade 9 for nonresponse, multiply their weights wtpumf by the ratio $384468.2 / (6802.1 + 696.8 + 375630.6) = 1.00349$ before summing. The nonresponse adjusted estimate for the number of current smokers in grade 9 will thus be 6,825.8. The adjustment is small because there is very low nonresponse to that question.

The nonresponse adjustment for the estimate of the total number of whole cigarettes smoked in the past 7 days prior to the survey by students in grade 9 is slightly more complicated because the variable DVCIGWK is subject to a skip based on answers to an earlier question (SS_030: Have you ever smoked a whole cigarette?) which itself is subject to nonresponse. What is important is to determine which records to use to adjust for nonresponse. In some cases, it may be necessary to carry out two separate adjustments; first, for nonresponse to the filter question (SS_030) and then, for nonresponse to the question of interest (DVCIGWK). In this particular case, since nonrespondents to SS_030 were not made to skip the question of interest, we do not have to deal with question SS_030 when adjusting for nonresponse to DVCIGWK. Consider the following responses to DVCIGWK among grade 9 students.

DVCIGWK	Number of records	Sum of wtpumf
0 = 0 whole cigarettes smoked	358	10,358.1
1:252 = Range: 1 to 252 whole cigarettes smoked	334	11,866.2
996 = Valid Skip	10,234	357,512.6
999 = Not Stated	129	4,731.3
Total (Grade 9)	11,055	384,468.2

The adjustment for nonresponse to DVCIGWK for grade 9 consists of multiplying the weights wtpumf of respondents by the ratio of the sum of weights for all grade 9 students who were administered the question (10358.1 + 11866.2 + 4731.3) divided by the sum of weights for those who responded (10358.1 + 11866.2), which is 1.21289. The estimate of cigarettes smoked should be calculated using these adjusted weights instead of weights wtpumf, otherwise cigarette consumption may be underestimated by about one-sixth.

When estimating a quantity that is based on more than one question or item, such as a ratio, the set of respondents would normally consist of records that have reported all questions or items (i.e., reported values for both the numerator and the denominator, in the case of ratios).

Finally, note that the nonrespondent adjustment can be refined by being carried out separately by subgroup. This is recommended when item nonresponse rates are not very small and the nonresponse patterns differ for different sub-populations (e.g., by gender, grade, and/or geography), and these sub-populations are identifiable on the PUMF. In the case of gender, this may involve separate adjustments for Woman/girl, Man/boy, and Other/Not Stated. To generate total population estimates, produce nonresponse-adjusted weights separately for each of the three gender categories, and add up the weighted results.

Calculation of Variance Estimates Using the Bootstrap Weights

Standard weighting procedures in statistical analysis software packages may not be appropriate for sample survey analysis. The user should understand how the weight variable is used within the software package.

More specifically, the calculation of variance estimates and coefficients of variation requires detailed knowledge of the design of the survey. Such details cannot be given in the PUMF since confidentiality must be respected. To enable reliable variance estimation, bootstrap weights are provided that take account of the complex sample design information, while preserving respondent confidentiality. These bootstrap weights are provided in a file separate from the main data file.

The Rao-Wu-Yue bootstrap method is a popular method for the estimation of variances for surveys with complex sample designs. First, corresponding to the original survey weights wt_j , B bootstrap weights $wt_{(b)j}$, for $b=1, \dots, B$, are generated for every unit j in the sample. The

bootstrap weights are typically produced using a process that involves subsampling the original sample units (e.g., schools and students). This process is not explained here, but more information is available in the literature².

To estimate the variance of a statistic $\hat{\theta}$ that was produced using the survey weights wt_j , B bootstrap estimates of the same statistic ($\hat{\theta}_b$, b=1, ..., B) are generated by replacing the wt_j with bootstrap weights $wt_{(b)j}$. The bootstrap variance estimate for $\hat{\theta}$ is $var_B(\hat{\theta}) = \frac{\sum_{b=1}^B (\hat{\theta}_b - \hat{\theta}_{(B)})^2}{(B - 1)}$, where $\hat{\theta}_{(B)} = \frac{1}{B} \sum_{b=1}^B \hat{\theta}_b$ is the average of the bootstrap estimates. Note that $\sum_{b=1}^B (\hat{\theta}_b - \hat{\theta}_{(B)})^2$ is equivalent to $\sum_{b=1}^B \hat{\theta}_b^2 - B\hat{\theta}_{(B)}^2$.

Providing users with B sets of bootstrap weights $wt_{(b)j}$ allows them to generate variance estimates without the need for design information such as strata and cluster identifiers. The greater the B, the better the variance estimate.

A variation, used by CSTADS, is the mean bootstrap method. CSTADS generates 6,000 sets of bootstrap weights. But instead of using these to generate 6,000 bootstrap estimates, the sets of bootstrap weights $wt_{(b)j}$ are combined 12 at a time, with the mean of the 12 used as the bootstrap weight. This generates 500 sets of mean bootstrap weights. One advantage of the mean bootstrap method is that it admits fewer cases of $wt_{(b)j} = 0$, which can sometimes cause dividing by zero problems. When using mean bootstraps, the variance becomes $var_{BR}(\hat{\theta}) = \frac{R \sum_{b=1}^B (\hat{\theta}_b - \hat{\theta}_{(B)})^2}{(B - 1)}$, where B is the number of sets of mean bootstrap weights and R is the number of bootstraps per mean. With CSTADS B=500 and R=12.

The 500 sets of mean bootstrap weights accompanying the PUMF (bsw1-bsw500) incorporate the effect of weight perturbation (the wtpumf) on the variance. To generate the 500 bootstrap estimates $\hat{\theta}_b$, b=1, ..., 500, for an estimate $\hat{\theta}$ it is necessary to replicate *all* the steps that were used to generate the original estimate, including any adjustment for item nonresponse, except that the set of wtpumf values is successively replaced by each of the sets of bsw values. These estimates are then inserted into the formula for $var_{BR}(\hat{\theta})$.

For example, to generate the 15th bootstrap estimate of the total number of current smokers in grade 9, sum the nonresponse adjusted 15th bootstrap weights for all records having GRADE equal to 9 and DVTY1ST equal to 1. The nonresponse adjusted 15th bootstrap weights are the weights bsw15 multiplied by the ratio of the sum of bsw15 for all records in grade 9 divided by the sum of bsw15 for all grade 9 records with DVTY1ST < 99.

² Beaumont, J.F. & Émond, N. (2022). A Bootstrap Variance Estimation Method for Multistage Sampling and Two-Phase Sampling When Poisson Sampling Is Used at the Second Phase. *Stats* **2022**, 5, 339–357. <https://doi.org/10.3390/stats5020019>

2.5 Coefficient of Variation Release Guidelines

Before releasing and/or publishing any estimate from the CSTADS 2021-2022, users should first determine the quality level of the estimate. The quality levels are Acceptable, Marginal, and Unacceptable. Data quality is affected by both sampling and non-sampling errors as discussed in Section 2.1. However, for this purpose, the quality level of an estimate will be determined only on the basis of sampling error as reflected by the coefficient of variation (i.e., standard error divided by the estimate, multiplied by 100) as shown in table 2 below.

First, determine the number of respondents who contributed to the numerator in the calculation of the estimate. **If this number is less than 30, the weighted estimate must be considered to be of unacceptable quality and cannot be released.**

For weighted estimates based on sample sizes of 30 or more, users should determine the coefficient of variation of the estimate and follow the guidelines in Table 2. Apply these quality level guidelines to weighted rounded estimates. Unacceptable quality level estimates cannot be released, and marginal level estimates can only be released with the warning to caution subsequent users outlined in Table 2.

Table 2: Quality Level Guidelines for Weighted Estimates

Quality Level of Estimate	Guidelines
Acceptable	Estimates have a sample size of 30 or more and low coefficients of variation in the range of 0.0% to 16.5%. No warning is required.
Marginal	Estimates have a sample size of 30 or more and high coefficients of variation in the range of 16.6% to 33.3%. Estimates should be flagged with the letter M (or some similar identifier). They should be accompanied by a warning to caution subsequent users about the estimated levels of error associated with the estimates.
Unacceptable	Estimates have a sample size of less than 30, or very high coefficients of variation in excess of 33.3%. It is not recommended to release estimates of unacceptable quality. Such estimates should be replaced with the letter U (or some similar identifier) and the following statement: "Unreleasable due to low sample size or high sampling variability."

Section 3.0 Algorithms for the development of derived variables in CSTADS 2021-2022

The PUMF includes derived variables, created by combining questionnaire items, to facilitate data analysis and ensure consistency across users. The following describes the derived variables included in the CSTADS 2021-2022 PUMF.

Table 3: Algorithms for derived variables

VARIABLE NAME	Original survey questions used in derived variable	Derived Variable Response Options	Derived Variable Definition and Calculation
DVTY1ST	<p>SS_030 (Question 13): <i>Have you ever smoked a whole cigarette?</i> 1 (Yes) 2 (No) 96 (Valid Skip) 99 (Not Stated) Coverage: All Respondents where SS_010 = 1 or 99 (Ever tried smoking a cigarette, even a few puffs or not stated)</p> <p>SS_040 (Question 14): <i>Have you ever smoked 100 or more whole cigarettes in your life?</i> 1 (Yes) 2 (No) 96 (Valid Skip) 99 (Not Stated) Coverage: All Respondents where SS_030 = 1 or 99 (Ever smoked a whole cigarette or not stated)</p> <p>TP_001 (Question 18a): <i>In the last 30 days, how often did you use any of the following?</i> <i>a) Cigarettes?</i> 1 (Daily) 2 (Less than daily, but at least once a week) 3 (Less than weekly, but at least once in the last 30 days) 4 (Tried, but did not use in the last 30 days)</p>	1 = Current Smoker	<p>Definition: A current smoker is someone who has smoked at least 100 cigarettes in his or her lifetime, and who has smoked at least one whole cigarette during the past 30 days</p> <p>Calculation: SS_040 (Question 14): <i>Have you ever smoked 100 or more whole cigarettes in your life?</i> Valid response 1 (Yes) AND TP_001 (Question 18a): <i>In the last 30 days, how often did you use any of the following?</i> <i>a) Cigarettes?</i> Valid responses 1 (Daily) 2 (Less than daily, but at least once a week) 3 (Less than weekly, but at least once in the last 30 days)</p>
		2 = Former Smoker	<p>Definition: A former smoker is a person who reports having smoked 100 or more cigarettes but did not smoke in the last 30 days.</p>

	<p>5 (I have never tried) 99 (Not Stated)</p> <p>Coverage: Respondents where SS_010 = 1 or 99 (Ever tried smoking a cigarette, even a few puffs or not stated) Note: If SS_010 = 2 “No” then TP_001 is given a value of “96=Valid Skip”. If SS_010 = 1 “Yes” but respondent answered TP_001 = 5 “I have never tried”, then TP_001 is given a value of 99 “Not stated” (missing).</p>		<p>Calculation: SS_040 (Question 14): <i>Have you ever smoked 100 or more whole cigarettes in your life?</i> Valid response 1 (Yes) AND TP_001 (Question 18a): In the last 30 days, how often did you use any of the following? a) Cigarettes? Valid response 4 (Tried, but did not use in the last 30 days)</p>
		3 = Never Smoker	<p>Definition: A never smoker is a person who reports that he or she has not smoked 100 or more whole cigarettes in his or her lifetime but might have smoked a whole cigarette. Calculation: SS_040 (Question 14): <i>Have you ever smoked 100 or more whole cigarettes in your life?</i> Valid response 2 (No) OR SS_030 (Question 13): <i>Have you ever smoked a whole cigarette</i> Valid responses 2 (No) 96 (Valid Skip)</p>
		99 = Not Stated	Definition:

			Smoking status unknown. Respondents whose smoking status could not be determined due to missing responses in one or more contributing variable. Calculation: Remaining respondents who were not assigned a smoking status based on the logic above.
DVTY2ST	<p>SS_010 (Question 10): <i>Have you ever tried cigarette smoking, even just a few puffs?</i> 1 (Yes) 2 (No) 99 (Not Stated) Coverage: All Respondents</p> <p>SS_030 (Question 13): <i>Have you ever smoked a whole cigarette?</i> 1 (Yes) 2 (No) 96 (Valid Skip) 99 (Not Stated) Coverage: All Respondents where SS_010 = 1 or 99 (Ever tried smoking a cigarette, even a few puffs or not stated)</p> <p>SS_040 (Question 14): <i>Have you ever smoked 100 or more whole cigarettes in your life?</i> 1 (Yes) 2 (No) 96 (Valid Skip) 99 (Not Stated)</p>	1 = Current Daily Smoker	<p>Definition: A current daily smoker is a person who reports currently smoking cigarettes every day. Calculation: SS_040 (Question 14): <i>Have you ever smoked 100 or more whole cigarettes in your life?</i> Valid response 1 (Yes) AND TP_001 (Question 18a): <i>In the last 30 days, how often did you use any of the following?</i> <i>a) Cigarettes?</i> Valid responses 1 (Daily)</p>
		2 = Current Occasional Smoker	<p>Definition: A current occasional smoker is a person who currently smokes cigarettes but not every day. Calculation: SS_040 (Question 14): <i>Have you ever smoked 100 or more whole cigarettes in your life?</i></p>

	<p>Coverage: All Respondents where SS_030 = 1 or 99 (Ever smoked a whole cigarette or not stated).</p> <p>TP_001 (Question 18a): In the last 30 days, how often did you use any of the following? a) Cigarettes? 1 (Daily) 2 (Less than daily, but at least once a week) 3 (Less than weekly, but at least once in the last 30 days) 4 (Tried, but did not use in the last 30 days) 5 (I have never tried) 99 (Not Stated)</p> <p>Coverage: Respondents where SS_010 = 1 or 99 (Ever tried smoking a cigarette, even a few puffs or not stated) Note: If SS_010 = 2 “No” then TP_001 is given a value of “96=Valid Skip”. If SS_010 = 1 “Yes” but respondent answered TP_001 = 5 “I have never tried”, then TP_001 is given a value of 99 “Not stated” (missing).</p>		<p>Valid response 1 (Yes) AND TP_001 (Question 18a): <i>In the last 30 days, how often did you use any of the following?</i> a) Cigarettes? Valid responses 2 (Less than daily, but at least once a week) 3 (Less than weekly, but at least once in the last 30 days)</p>
		3 = Former Smoker	<p>Definition: A former smoker is a person who smoked at least 100 cigarettes in his/her lifetime but did not smoke at all in the last 30 days. Calculation: SS_040 (Question 14): <i>Have you ever smoked 100 or more whole cigarettes in your life?</i> Valid response 1 (Yes) AND TP_001 (Question 18a): <i>In the last 30 days, how often did you use any of the following?</i> a) Cigarettes? Valid response 4 (Tried, but did not use in the last 30 days)</p>
		4 = Experimental Smoker (Beginner)	<p>Definition: An experimental smoker is a person who has smoked in the last 30 days</p>

			<p>but has not smoked 100 or more cigarettes.</p> <p>Calculation: SS_030 (Question 13): <i>Have you ever smoked a whole cigarette?</i> Valid response 1 (Yes)</p> <p>AND SS_040 (Question 14): <i>Have you ever smoked 100 or more whole cigarettes in your life?</i> Valid response 2 (No)</p> <p>AND TP_001 (Question 18a): <i>In the last 30 days, how often did you use any of the following?</i> a) Cigarettes? 1 (Daily) 2 (Less than daily, but at least once a week) 3 (Less than weekly, but at least once in the last 30 days)</p>
		<p>5 = Past Experimental Smoker</p>	<p>Definition: A past experimental smoker is a person who has smoked a whole cigarette but did not smoke in the last 30 days and also did not smoke 100 cigarettes in his/her lifetime.</p> <p>Calculation: SS_030 (Question 13): <i>Have you ever smoked a <u>whole</u> cigarette?</i> Valid response 1 (Yes)</p>

		<p>AND SS_040 (Question 14): <i>Have you ever smoked 100 or more whole cigarettes in your life?</i> Valid response 2 (No)</p> <p>AND TP_001 (Question 18a): <i>In the last 30 days, how often did you use any of the following?</i> a) Cigarettes? 4 (Tried, but did not use in the last 30 days)</p>
	6 = Puffer	<p>Definition: A puffer is a person who has tried smoking, but has never smoked a whole cigarette.</p> <p>Calculation: SS_010 (Question 10): <i>Have you <u>ever</u> tried cigarette smoking, even just a few puffs?</i> Valid response 1 (Yes)</p> <p>AND SS_030 (Question 13): <i>Have you ever smoked a <u>whole</u> cigarette?</i> Valid response 2 (No)</p>
	7 = Never Tried	<p>Definition: A person classified as never tried, has never tried a cigarette, not even just a few puffs.</p> <p>Calculation:</p>

			<p>SS_010 (Question 7): <i>Have you ever tried cigarette smoking, even just a few puffs?</i> Valid response 2 (No)</p>
		99 = Not Stated	<p>Definition: Detailed smoking status unknown. Respondents whose detailed smoking status could not be determined due to missing responses in one or more contributing variable(s). Calculation: Remaining respondents who were not assigned a smoking status based on the logic above.</p>
<p>DVLAST30</p>	<p>Objective: To measure the rate of having smoked one or more cigarettes in the last 30 days out of all respondents.</p> <p>This variable includes students who reported current smoking or experimental smoking who have used a cigarette in the past 30 days. This variable does not include students who have tried smoking, but never smoked a whole cigarette. This variable enables consistency with the definition used in previous cycles of CSTADS.</p> <p>SS_030 (Question 13): <i>Have you ever smoked a whole cigarette?</i> 1 (Yes) 2 (No) 96 (Valid Skip)</p>	<p>1 = Yes 2 = No 99 = Not Stated</p>	<p>Notes:</p> <ul style="list-style-type: none"> • Code “Yes” if (SS_030 = 1 or 99) AND TP_001 = 1, 2, or 3 • Code “No” if (SS_030 = 1 or 99 AND TP_001 = 4) OR (SS_030 = 99 AND TP_001 = 5) OR (SS_030 = 2 or 96) • Code “Not Stated” for all remaining respondents who did not respond to question 18a (TP_001) OR (SS_030 = 1 AND TP_001 = 5)

	<p>99 (Not Stated)</p> <p>Coverage: All Respondents where SS_010 = 1 or 99 (Ever tried smoking a cigarette, even a few puffs or not stated)</p> <p>TP_001 (Question 18a): <i>In the last 30 days, how often did you use any of the following?</i></p> <p>a) Cigarettes?</p> <p>1 (Daily)</p> <p>2 (Less than daily, but at least once a week)</p> <p>3 (Less than weekly, but at least once in the last 30 days)</p> <p>4 (Tried, but did not use in the last 30 days)</p> <p>5 (I have never tried)</p> <p>99 (Not Stated)</p> <p>Coverage: Respondents where SS_010 = 1 or 99 (Ever tried smoking a cigarette, even a few puffs or not stated)</p> <p>Note: If SS_010 = 2 “No” then TP_001 is given a value of “96=Valid Skip”.</p> <p>If SS_010 = 1 “Yes” but respondent answered TP_001 = 5 “I have never tried”, then TP_001 is given a value of 99 “Not stated” (missing).</p>		
<p>DVAMTSMK</p>	<p>(All seven days from Question 15) <i>Thinking back over the last 7 days, how many whole cigarettes did you smoke each day?</i></p> <p>a) Sunday</p> <p>b) Monday</p> <p>c) Tuesday</p>	<p>0 = 0 whole cigarettes smoked</p> <p>1:36 = Range: 1 to 36 whole cigarettes smoked</p> <p>96 = Valid Skip</p> <p>99 = Not Stated</p>	<p>Definition: The average number of whole cigarettes smoked per day across all 7 days in the past week.</p> <p>Calculation of Responses:</p>

	<p>d) Wednesday e) Thursday f) Friday g) Saturday</p> <p>Component variables: WP_040A, WP_040B, WP_040C, WP_040D, WP_040E, WP_040F, WP_040G</p>		<p>(WP_040a + WP_040b + WP_040c + WP_040d + WP_040e + WP_040f + WP_040g)/7</p> <p>Coverage: Respondents where SS_030 = 1 or 99 (Ever smoked a whole cigarette or not stated)</p> <p>[Note within the data: All responses of 37 or greater should be set to "99=Not stated". Respondents who have not smoked a whole cigarette (SS_030=2 or 96) should be set to "96=Valid skip".]</p>
<p>DVCIGWK</p>	<p>(All seven days from Question 15) Thinking back over the <u>last 7 days</u>, how many <u>whole cigarettes</u> did you smoke each day?</p> <p>a) Sunday b) Monday c) Tuesday d) Wednesday e) Thursday f) Friday g) Saturday</p> <p>Component variables: WP_040A, WP_040B, WP_040C, WP_040D, WP_040E, WP_040F, WP_040G</p>	<p>0 = 0 whole cigarettes smoked</p> <hr/> <p>1:252 = Range: 1 to 252 whole cigarettes smoked</p> <hr/> <p>996 = Valid Skip</p> <hr/> <p>999 = Not Stated</p>	<p>Definition: Total number of whole cigarettes smoked in the last 7 days.</p> <p>Calculation of Responses: WP_040a + WP_040b + WP_040c + WP_040d + WP_040e + WP_040f + WP_040g</p> <p>Notes:</p> <ul style="list-style-type: none"> • Not necessary for all to have valid responses. • If all component variables have missing data then DVCIGWK = 999. • Values with a decimal of .5 or greater were rounded up. <p>Coverage: Respondents where SS_030 = 1 or 99 (Ever smoked a whole cigarette or not stated)</p>

<p>DVNDSMK</p>	<p>(All seven days from Question 15) Thinking back over the <u>last 7 days</u>, how many <u>whole cigarettes</u> did you smoke each day?</p> <p>a) Sunday b) Monday c) Tuesday d) Wednesday e) Thursday f) Friday g) Saturday</p> <p>Component variables: WP_040A, WP_040B, WP_040C, WP_040D, WP_040E, WP_040F, WP_040G</p>	<p>0 = Did not smoke in the last 7 days</p> <p>1 = Smoked 1 day in the last 7 days</p> <p>2 = Smoked 2 days in the last 7 days</p> <p>3 = Smoked 3 days in the last 7 days</p> <p>4 = Smoked 4 days in the last 7 days</p> <p>5 = Smoked 5 days in the last 7 days</p> <p>6 = Smoked 6 days in the last 7 days</p> <p>7 = Smoked every day in the last 7 days</p> <p>96 = Valid Skip</p> <p>99 = Not Stated</p>	<p>Definition: Number of days the respondent smoked at least one whole cigarette in the week prior to the survey.</p> <p>Calculation of Responses: A count of WP_040a, WP_040b, WP_040c, WP_040d, WP_040e, WP_040f, and WP_040g with valid responses excluding days with a missing or zero response.</p> <p>Notes:</p> <ul style="list-style-type: none"> • If all component variables are equal to the numeric value 0 or if some of the component variables are equal to the numeric value 0 and some are missing then DVNDSMK = 0. • If all component variables have missing data then DVNDSMK = 99. <p>Coverage: Respondents where SS_030 = 1 or 99 (Ever smoked a whole cigarette or not stated)</p>
<p>DVAVCIGD</p>	<p>Calculation of Responses: DVCIGWK / DVNDSMK</p>	<p>0 = 0 whole cigarettes smoked</p> <p>1:36 = Range: 1 to 36 whole cigarettes smoked</p> <p>96 = Valid Skip</p> <p>99 = Not Stated</p>	<p>Definition: Average number of whole cigarettes smoked on the days that the respondent smoked.</p> <p>Notes:</p> <ul style="list-style-type: none"> • If DVCIGWK and DVNDSMK = 0 then DVAVCIGD = 0. • If either DVCIGWK or DVNDSMK were missing, then DVAVCIGD = 99.

			<ul style="list-style-type: none"> Values with a decimal of .5 or greater were rounded up <p>Coverage: Respondents where SS_030 = 1 or 99 (Ever smoked a whole cigarette or not stated)</p>
DVURBAN	<p>Using information from Statistics Canada’s 2021 Census Population Profile, the school’s postal code was matched to its corresponding Census Dissemination Area (DA). Based on the Statistical Area Classification system variable SACTYPE obtained from Statistics Canada’s 2021 Census Geographic Attribute (GA) file, each respondent was then assigned a rural or urban status based on the DA of the school they attended at the time of their participation in the survey. The SACTYPE variable distinguishes among census metropolitan areas (all of which are tracted), tracted versus untracted census agglomerations, and the residual area not in any census metropolitan area or census agglomeration (“rural and small town Canada”), with the latter further classified by the relative importance of commuting flows to work in any census metropolitan area or census agglomeration (CMACA) --also known as “metropolitan influence zones” or MIZ.</p> <p>SACTYPE has the following categories: 1 = CENSUS METROPOLITAN AREA 2 = TRACTED CENSUS AGGLOMERATION 3 = NON-TRACTED CENSUS AGGLOMERATION 4 = NON-CMACA, STRONG CMACA INFLUENCE</p>	1 = Urban 2 = Rural	<p>Definition: To classify the respondent’s school location as urban or rural. The school’s postal code was used to calculate this variable.</p> <p>Coverage: All Respondents</p> <p>Categories 1 to 3 would be categorized as Urban (DVURBAN = 1) and categories 4 to 8 would be categorized as Rural (DVURBAN = 2).</p> <p>Among cases where multiple DA’s were associated with a school’s postal code, urban/rural status was based on whether more than 50% of the corresponding DA’s were classified as urban/rural according to the DVURBAN variable.</p>

	5 = NON-CMACA, MODERATE CMACA INFLUENCE 6 = NON-CMACA, WEAK CMACA INFLUENCE 7 = NON-CMACA, NO CMACA INFLUENCE 8 = NON-CMACA, TERRITORIES		
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