#### 1. Tobacco Products Use Variables for PATH Adult Data (Wave 4)

This dictionary includes variables of cigarette, e-products (e-products), traditional cigars, pipes, hookahs, filtered cigars, cigarillos and smokeless tobacco product use that can be used in multiproduct analysis; for example: transition analysis and LCA/LTA analysis.

**Note about missing values for all indicators:** In PATH, many of the questions depend on the ability to classify individuals by their tobacco product use status. Sometimes we are unable to make this classification due to the skip pattern of the instrument for one or more component variables, or because a "refused", "I don't know" or "improbable" response was provided or because the individual requested their data to be removed; therefore these cases were excluded from the calculation of the indicators below.

#### 1.1. Cigarette use variables

#### UM\_W4\_A\_100cigs: Adult established cigarette smoker

**Description:** Adults who have smoked at least 100 or more cigarettes (5 packs or more) in their lifetimes.

Numerator: Number of respondents who have smoked ≥ 100 cigarettes in their lifetimes

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	17,690	52.30
1 = Yes	16,062	47.49
Missing	70	0.21
Total	33,822	100.00

This variable has 33,752 valid cases out of 33,822 total cases.

Missing values: See note about missing values for all indicators.

#### UM\_W4\_A\_cigs\_everysome\_ESTD: Adult established cigarette smoker - every day or some days

**Description:** Adult respondents who have smoked at least 100 cigarettes in their lifetimes, and currently smoke every day or some days.

Numerator: Number of established cigarette smokers who currently smokes every day or some days

Denominator: Total number of respondents<sup>1</sup>.

Value	Unweighted frequency	%
0 = No	23,874	70.59
1 = Yes	9,915	29.32
Missing	33	0.10
Total	33,822	100.00

This variable has 33,789 valid cases out of 33,822 total cases.

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

#### UM\_W4\_A\_cigs\_30day: In the past 30 days, number of days smoked cigarettes

**Description**: Number of days a respondent smoked cigarettes in the past 30 days.

Numerator: Respondents who have smoked cigarettes in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Mean: 7.95Median: 0.00Mode: 0Minimum: 0Maximum: 30

• Standard deviation: 12.82

• Never smoked or did not smoke in the past 30 days: 23,034 (68.10%)

• Missing: 25 (0.07%)

This variable has 33,797 valid cases out of 33,822 total cases.

## UM\_W4\_A\_cigs1\_past30: Adult smoker - smoked at least 1 day in the past 30 days

**Description:** Respondents who smoked cigarettes at least 1 day in the past 30 days.

Numerator: Number of respondents who smoked cigarettes at least 1 day in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	23,034	68.10
1 = Yes	10,763	31.82
Missing	25	0.07
Total	33,822	100.00

This variable has 33,797 valid cases out of 33,822 total cases.

#### UM W4 A cigs1 past30 ESTD: Adult established smoker - smoked at least 1 day in the past 30 days

**Description:** Established smokers (smoked  $\geq$  100 cigarettes in their lifetimes) who smoked cigarettes at least 1 day in the past 30 days.

Numerator: Number of established smokers who smoked cigarettes at least 1 day in the past 30 days

Value	Unweighted frequency	%
0 = No	23,921	70.73
1 = Yes	9,819	29.03
Missing	82	0.24
Total	33,822	100.00

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

### UM\_W4\_A\_cigs10\_past30: Adult smoker - smoked at least 10 days in the past 30 days

**Description:** Respondents who smoked cigarettes at least 10 days in the past 30 days.

Numerator: Number of respondents who smoked cigarettes at least 10 days in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	24,508	72.46
1 = Yes	9,289	27.46
Missing	25	0.07
Total	33,822	100.00

This variable has 33,797 valid cases out of 33,822 total cases.

## UM\_W4\_A\_cigs10\_past30\_ESTD: Adult established smoker - smoked at least 10 days in the past 30 days

**Description:** Established smokers (smoked  $\geq$  100 cigarettes in their lifetimes) who smoked cigarettes at least 10 days in the past 30 days.

Numerator: Number of established smokers who smoked cigarettes at least 10 days in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	24,896	73.61
1 = Yes	8,844	26.15
Missing	82	0.24
Total	33,822	100.00

This variable has 33,740 valid cases out of 33,822 total cases.

## UM\_W4\_A\_cigs25\_past30: Adult smoker - smoked at least 25 days in the past 30 days

**Description:** Respondents who smoked cigarettes at least 25 days in the past 30 days.

Numerator: Number of respondents who smoked cigarettes at least 25 days in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	25,535	75.50
1 = Yes	8,262	24.43
Missing	25	0.07
Total	33,822	100.00

This variable has 33,797 valid cases out of 33,822 total cases.

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

# UM\_W4\_A\_cigs25\_past30\_ESTD: Adult established smoker - smoked at least 25 days in the past 30 days

**Description:** Established smokers (smoked  $\geq$  100 cigarettes in their lifetimes) who smoked cigarettes at least 25 days in the past 30 days.

Numerator: Number of established smokers who smoked cigarettes at least 25 days in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	25,804	76.29
1 = Yes	7,936	23.46
Missing	82	0.24
Total	33,822	100.00

This variable has 33,740 valid cases out of 33,822 total cases.

## UM\_W4\_A\_cigs\_perday: In past 30 days, average number of cigarettes smoked per day on days smoked

**Description**: Number of cigarettes a respondent usually smokes each day.

Numerator: Number of cigarettes smoked per day

**Denominator:** Total number of respondents<sup>1</sup>

Mean: 3.91
Median: 0.00
Mode: 0
Minimum: 0
Maximum: 155

• Standard deviation: 8.03

Never smoked or did not smoke in the past 30 days: 22,298 (65.93%)

Missing: 137 (0.41%)

This variable has 33,685 valid cases out of 33,822 total cases.

# UM\_W4\_A\_cigs\_perday\_cat: In past 30 days, average number of cigarettes smoked per day on days smoked – categorical variable.

**Description**: Number of cigarettes a respondent usually smokes each day.

Numerator: Number of cigarettes smoked per day

Value	Unweighted frequency	%

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

0 = None	22,298	65.93
1 = Less than 20	8,191	24.22
2 = Twenty or more	3,203	9.47
Missing	130	0.38
Total	33,822	100.00

This variable has 33,692 valid cases out of 33,822 total cases.

## UM\_W4\_A\_cig\_Menthol: Regular / last brand of cigarettes smoked flavored to taste like menthol or mint

**Description:** Indicator for respondents whose regular / last brand of manufactured cigarettes or roll-your-own cigarette tobacco was flavored to taste like menthol or mint.

**Numerator:** Number of current and former established smokers whose regular / last brand of manufactured cigarettes or roll-your-own cigarette tobacco was flavored to taste like menthol or mint

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
1 = Yes	5,233	15.47
Missing	28,589	84.53
Total	33,822	100

This variable has 5,233 valid cases out of 33,822 total cases.

#### 1.2. E-product use variables

**Note about missing values for all indicators:** In PATH, many of the questions depend on the ability to classify individuals by their tobacco product use status. Sometimes we are unable to make this classification due to the skip pattern of the instrument for one or more component variables, or because a "refused", "I don't know" or "improbable" response was provided or because the individual requested their data to be removed; therefore these cases were excluded from the calculation of the indicators below.

#### UM\_W4\_A\_eprods\_reg: Adult regular e-product user

**Description:** Respondents who have used e-products fairly regularly.

**Numerator:** Number of respondents who have used e-products fairly regularly

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	28,724	84.93
1 = Yes	4,989	14.75
Missing	109	0.32
Total	33,822	100.00

This variable has 33,713 valid cases out of 33,822 total cases.

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

Missing values: See note about missing values for all indicators.

## UM\_W4\_A\_eprod\_everysome: Adult e-product user - every day or some days

**Description:** Current user of e-products (used every day or some days) among all ever users.

Numerator: Number of e-product users who currently use every day or some days

Denominator: Total number of respondents<sup>1</sup>.

Value	Unweighted frequency	%
0 = No	30,818	91.12
1 = Yes	2,984	8.82
Missing	20	0.06
Total	33,822	100.00

This variable has 33,802 valid cases out of 33,822 total cases.

### UM\_W4\_A\_eprod\_everysome\_ESTD: Adult regular e-product user - every day or some days

**Description:** Current user of e-products (used every day or some days) among all regular users.

Numerator: Number of regular e-product users who currently use every day or some days

Denominator: Total number of respondents<sup>1</sup>.

Value	Unweighted frequency	%
0 = No	31,799	94.02
1 = Yes	2,005	5.93
Missing	18	0.05
Total	33,822	100.00

This variable has 33,804 valid cases out of 33,822 total cases.

#### UM\_W4\_A\_eprod\_30day: In the past 30 days, number of days used e-products

**Description:** Number of days a respondent used e-products in the past 30 days.

Numerator: Respondents who have used e-products in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Mean: 1.26Median: 0.00Mode: 0Minimum: 0Maximum: 30

Standard deviation: 5.57

<sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

Never used or did not use in the past 30 days: 31,247 (92.39%)

Missing: 30 (0.09%)

This variable has 33,792 valid cases out of 33,822 total cases.

## UM\_W4\_A\_eprod1\_past30: Adult e-product user - used at least 1 day in the past 30 days

**Description:** Respondents who used e-products at least 1 day in the past 30 days.

Numerator: Number of respondents who used e-products at least 1 day in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	31,247	92.39
1 = Yes	2,545	7.52
Missing	30	0.09
Total	33,822	100.00

This variable has 33,792 valid cases out of 33,822 total cases.

### UM\_W4\_A\_eprod10\_past30: Adult e-product user - used at least 10 days in the past 30 days

**Description:** Respondents who used e-products at least 10 days in the past 30 days.

Numerator: Number of respondents who used e-products at least 10 days in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	32,283	95.45
1 = Yes	1,509	4.46
Missing	30	0.09
Total	33,822	100.00

This variable has 33,792 valid cases out of 33,822 total cases.

#### UM\_W4\_A\_eprod25\_past30: Adult e-product user - used at least 25 days in the past 30 days

**Description:** Respondents who used e-products at least 25 days in the past 30 days.

**Numerator:** Number of respondents who used e-products at least 25 days in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	32,675	96.61
1 = Yes	1,117	3.30
Missing	30	0.09
Total	33,822	100.00

This variable has 33,792 valid cases out of 33,822 total cases.

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

#### 1.3. Other combustible tobacco products use variables

#### UM\_W4\_A\_cigar\_everysome: Adult traditional cigar user – every day or some days

**Description:** Current user of traditional cigars (smoked every day or some days) among all ever users.

Numerator: Number of traditional cigar users who currently smoke every day or some days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	32,210	95.23
1 = Yes	1,590	4.70
Missing	22	0.07
Total	33,822	100.00

This variable has 33,800 valid cases out of 33,822 total cases.

Missing values: See note about missing values for all indicators.

## UM\_W4\_A\_cigar\_everysome\_ESTD: Adult regular traditional cigar user – every day or some days

**Description**: Current user of traditional cigars (smoked every day or some days) among all regular users.

Numerator: Number of regular traditional cigar users who currently smoke every day or some days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	33,197	98.15
1 = Yes	605	1.79
Missing	20	0.06
Total	33,822	100.00

This variable has 33,802 valid cases out of 33,822 total cases.

#### UM\_W4 A\_cigar\_30day: In the past 30 days, number of days smoked traditional cigars

**Description:** Number of days a respondent smoked traditional cigars in the past 30 days.

Numerator: Respondents who have smoked traditional cigars in the past 30 days

Mean: 0.18Mode: 0Minimum: 0Maximum: 30

• Standard deviation: 1.91

• Never smoked or did not smoke in the past 30 days: 32,890 (97.24%)

• Missing: 10 (0.03%)

<sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

## UM\_W4\_A\_cigar1\_past30: Adult traditional cigar user - smoked at least 1 day in the past 30 days

**Description:** Respondents who have smoked traditional cigars at least 1 day in the past 30 days.

**Numerator:** Number of respondents who have smoked traditional cigars at least 1 day in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	32,890	97.24
1 = Yes	922	2.73
Missing	10	0.03
Total	33,822	100.00

This variable has 33,812 valid cases out of 33,822 total cases.

#### UM\_W4\_A\_cigar10\_past30: Adult traditional cigar user - smoked at least 10 days in the past 30 days

**Description:** Respondents who have smoked traditional cigars at least 10 days in the past 30 days.

**Numerator:** Number of respondents who have smoked traditional cigars at least 10 days in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	33,619	99.40
1 = Yes	193	0.57
Missing	10	0.03
Total	33,822	100.00

This variable has 33,812 valid cases out of 33,822 total cases.

## UM\_W4\_A\_cigar25\_past30: Adult traditional cigar user - smoked at least 25 days in the past 30 days

**Description:** Respondents who have smoked traditional cigars at least 25 days in the past 30 days.

**Numerator:** Number of respondents who have smoked traditional cigars at least 25 days in the past 30 days

Value	Unweighted frequency	%
0 = No	33,699	99.64
1 = Yes	113	0.33
Missing	10	0.03
Total	33,822	100.00

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

## UM\_W4\_A\_cigarillo\_everysome: Adult cigarillo user – every day or some days

Description: Current user of cigarillos (smoked every day or some days) among all ever users.

Numerator: Number of cigarillo users who currently smoke every day or some days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	31,967	94.52
1 = Yes	1,838	5.43
Missing	17	0.05
Total	33,822	100.00

This variable has 33,805 valid cases out of 33,822 total cases.

#### UM\_W4\_A\_cigarillo\_everysome\_ESTD: Adult regular cigarillo user - every day or some days

Description: Current user of cigarillos (smoked every day or some days) among all regular users.

Numerator: Number of regular cigarillo users who currently smoke every day or some days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	32,819	97.03
1 = Yes	992	2.93
Missing	11	0.03
Total	33,822	100.00

This variable has 33,811 valid cases out of 33,822 total cases.

#### UM\_W4\_A\_cigarillo\_30day: In the past 30 days, number of days smoked cigarillos

**Description:** Number of days a respondent smoked cigarillos in the past 30 days.

Numerator: Respondents who have smoked cigarillos in the past 30 days

Mean: 0.45Mode: 0Minimum: 0Maximum: 30

• Standard deviation: 3.15

Never smoked or did not smoke in the past 30 days: 32,401 (95.80%)

Missing: 17 (0.05%)

This variable has 33,805 valid cases out of 33,822 total cases.

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

#### UM\_W4\_A\_cigarillo1\_past30: Adult cigarillo user - smoked at least 1 day in the past 30 days

**Description:** Respondents who have smoked cigarillos at least 1 day in the past 30 days.

Numerator: Number of respondents who have smoked cigarillos at least 1 day in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	32,401	95.80
1 = Yes	1,404	4.15
Missing	17	0.05
Total	33,822	100.00

This variable has 33,805 valid cases out of 33,822 total cases.

#### UM\_W4\_A\_cigarillo10\_past30: Adult cigarillo user - smoked at least 10 days in the past 30 days

**Description:** Respondents who have smoked cigarillos at least 10 days in the past 30 days.

Numerator: Number of respondents who have smoked cigarillos at least 10 days in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	33,269	98.84
1 = Yes	536	1.13
Missing	17	0.05
Total	33,822	100.00

This variable has 33,805 valid cases out of 33,822 total cases.

## UM\_W4\_A\_cigarillo25\_past30: Adult cigarillo user - smoked at least 25 days in the past 30 days

**Description:** Respondents who have smoked cigarillos at least 25 days in the past 30 days.

Numerator: Number of respondents who have smoked cigarillos at least 25 days in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	33,480	99.27
1 = Yes	325	0.70
Missing	17	0.05
Total	33,822	100.00

This variable has 33,805 valid cases out of 33,822 total cases.

#### UM\_W4\_A\_filtcigar\_everysome: Adult filtered cigar user – every day or some days

**Description:** Current user of filtered cigars (smoked every day or some days) among all ever users.

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

Numerator: Number of filtered cigar users who currently smoke every day or some days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	33,841	97.10
1 = Yes	960	2.84
Missing	21	0.06
Total	33,822	100.00

This variable has 33,801 valid cases out of 33,822 total cases.

## UM\_W4\_A\_filtcigar\_everysome\_ESTD: Adult regular filtered cigar user – every day or some days

**Description**: Current user of filtered cigars (smoked every day or some days) among all regular users.

Numerator: Number of regular filtered cigar users who currently smoke every day or some days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	33,314	98.50
1 = Yes	486	1.44
Missing	22	0.07
Total	33,822	100.00

This variable has 33,800 valid cases out of 33,822 total cases.

#### UM W4 A filtcigar 30day: In the past 30 days, number of days smoked filtered cigars

**Description:** Number of days a respondent smoked filtered cigars in the past 30 days.

**Numerator:** Respondents who have smoked filtered cigars in the past 30 days

Mean: 0.30Mode: 0Minimum: 0Maximum: 30

• Standard deviation: 2.75

Never smoked or did not smoke in the past 30 days: 33,111 (97.90%)

Missing: 10 (0.03%)

This variable has 33,812 valid cases out of 33,822 total cases.

## UM\_W4\_A\_filtcigar1\_past30: Adult filtered cigar user - smoked at least 1 day in the past 30 days

**Description:** Respondents who have smoked filtered cigars at least 1 day in the past 30 days.

Numerator: Number of respondents who have smoked filtered cigars at least 1 day in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

<sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

Value	Unweighted frequency	%
0 = No	33,111	97.90
1 = Yes	701	2.07
Missing	10	0.03
Total	33,822	100.00

This variable has 33,812 valid cases out of 33,822 total cases.

#### UM\_W4\_A\_filtcigar10\_past30: Adult filtered cigar user - smoked at least 10 days in the past 30 days

**Description:** Respondents who have smoked filtered cigars at least 10 days in the past 30 days.

Numerator: Number of respondents who have smoked filtered cigars at least 10 days in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	33,461	98.93
1 = Yes	351	1.04
Missing	10	0.03
Total	33,822	100.00

This variable has 33,812 valid cases out of 33,822 total cases.

## UM\_W4\_A\_filtcigar25\_past30: Adult filtered cigar user - smoked at least 25 days in the past 30 days

**Description:** Respondents who have smoked filtered cigars at least 25 days in the past 30 days.

Numerator: Number of respondents who have smoked filtered cigars at least 25 days in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	33,552	99.20
1 = Yes	260	0.77
Missing	10	0.03
Total	33,822	100.00

This variable has 33,812 valid cases out of 33,822 total cases.

#### UM\_W4\_A\_pipe\_everysome: Adult pipe user – every day or some days

**Description:** Current user of pipes (smoked every day or some days) among all ever users.

Numerator: Number of pipe users who currently smoke every day or some days

Value	Unweighted frequency	%
0 = No	33,396	98.74
1 = Yes	416	1.23

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

Missing	10	0.03
Total	33,822	100.00

This variable has 33,812 valid cases out of 33,822 total cases.

#### UM\_W4\_A\_pipe\_everysome\_ESTD: Adult regular pipe user - every day or some days

**Description**: Current user of pipes (smoked every day or some days) among all regular users.

Numerator: Number of regular pipe users who currently smoke every day or some days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	33,604	99.36
1 = Yes	208	0.61
Missing	10	0.03
Total	33,822	100.00

This variable has 33,812 valid cases out of 33,822 total cases.

### UM\_W4\_A\_pipe\_30day: In the past 30 days, number of days smoked pipes

**Description:** Number of days a respondent smoked pipes in the past 30 days.

Numerator: Respondents who have smoked pipes in the past 30 days

Mean: 0.08Mode: 0Minimum: 0Maximum: 30

• Standard deviation: 1.41

• Never smoked or did not smoke in the past 30 days: 33,558 (99.22%)

• Missing: 10 (0.03%)

This variable has 33,812 valid cases out of 33,822 total cases.

## UM\_W4\_A\_pipe1\_past30: Adult pipe user - smoked at least 1 day in the past 30 days

Description: Respondents who have smoked pipes at least 1 day in the past 30 days.

Numerator: Number of respondents who have smoked pipes at least 1 day in the past 30 days

Value	Unweighted frequency	%
0 = No	33,558	99.22
1 = Yes	254	0.75
Missing	10	0.03
Total	33,822	100.00

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

## UM\_W4\_A\_pipe10\_past30: Adult pipe user - smoked at least 10 days in the past 30 days

**Description:** Respondents who have smoked pipes at least 10 days in the past 30 days.

Numerator: Number of respondents who have smoked pipes at least 10 days in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	33,724	99.71
1 = Yes	88	0.26
Missing	10	0.03
Total	33,822	100.00

This variable has 33,812 valid cases out of 33,822 total cases.

#### UM\_W4\_A\_pipe25\_past30: Adult pipe user - smoked at least 25 days in the past 30 days

Description: Respondents who have smoked pipes at least 25 days in the past 30 days.

Numerator: Number of respondents who have smoked pipes at least 25 days in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	33,743	99.77
1 = Yes	69	0.20
Missing	10	0.03
Total	33,822	100.00

This variable has 33,812 valid cases out of 33,822 total cases.

#### UM\_W4\_A\_hook\_everysome: Adult hookah user – every day or some days

**Description:** Current user of hookahs (smoked every day or some days) among all ever users.

Numerator: Number of hookah users who currently smoke hookah every day or some days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	32,587	96.35
1 = Yes	1,223	3.62
Missing	12	0.04
Total	33,822	100.00

This variable has 33,810 valid cases out of 33,822 total cases.

## UM\_W4\_A\_hook\_everysome\_ESTD: Adult regular hookah user – every day or some days

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

**Description**: Current user of hookahs (smoked every day or some days) among all regular users.

**Numerator:** Number of regular hookah users who currently smoke every day or some days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	33,280	98.40
1 = Yes	529	1.56
Missing	13	0.04
Total	33,822	100.00

This variable has 33,809 valid cases out of 33,822 total cases.

## UM\_W4\_A\_hook\_30day: In the past 30 days, number of times smoked hookahs

**Description:** Number of times a respondent smoked hookahs in the past 30 days.

**Numerator:** Respondents who have smoked hookahs in the past 30 days

Mean: 0.12Mode: 0Minimum: 0

• Maximum: 282.75

• Standard deviation: 2.15

Never smoked or did not smoke in the past 30 days: 32,994 (97.55%)

• Missing: 16 (0.05%)

This variable has 33,806 valid cases out of 33,822 total cases.

#### UM\_W4\_A\_ hook1\_past30: Adult hookah user - smoked at least 1 time in the past 30 days

**Description:** Respondents who have smoked hookahs at least 1 time in the past 30 days.

Numerator: Number of respondents who have smoked hookahs at least 1 time in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	32,994	97.55
1 = Yes	812	2.40
Missing	16	0.05
Total	33,822	100.00

This variable has 33,806 valid cases out of 33,822 total cases.

## UM\_W4\_A\_hook10\_past30: Adult hookah user - smoked at least 10 times in the past 30 days

Description: Respondents who have smoked hookahs at least 10 times in the past 30 days.

Numerator: Number of respondents who have smoked hookahs at least 10 times in the past 30 days

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	33,705	99.65
1 = Yes	101	0.30
Missing	16	0.05
Total	33,822	100.00

This variable has 33,806 valid cases out of 33,822 total cases.

#### UM\_W4\_A\_hook25\_past30: Adult hookah user - smoked at least 25 times in the past 30 days

**Description:** Respondents who have smoked hookahs at least 25 times in the past 30 days.

Numerator: Number of respondents who have smoked hookahs at least 25 times in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	33,757	99.81
1 = Yes	49	0.14
Missing	16	0.05
Total	33,822	100.00

This variable has 33,806 valid cases out of 33,822 total cases.

#### 1.4. Smokeless tobacco use variables

## UM\_W4\_A\_snus\_everysome: Adult snus pouch user – every day or some days

**Description:** Current user of snus pouches (used every day or some days) among all ever users.

Numerator: Number of snus pouch users who currently use every day or some days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	33,351	98.61
1 = Yes	462	1.37
Missing	9	0.03
Total	33,822	100.00

This variable has 33,813 valid cases out of 33,822 total cases.

Missing values: See note about missing values for all indicators

#### UM\_W4\_A\_snus\_everysome\_ESTD: Adult regular snus pouch user – every day or some days

**Description**: Current user of snus pouches (used every day or some days) among all regular users.

Numerator: Number of regular snus pouch users who currently use every day or some days

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	33,532	99.14
1 = Yes	281	0.83
Missing	9	0.03
Total	33,822	100.00

This variable has 33,813 valid cases out of 33,822 total cases.

#### UM\_W4\_A\_snus\_30day: In the past 30 days, number of days used snus pouches

**Description:** Number of days a respondent used snus pouches in the past 30 days.

Numerator: Respondents who have used snus pouches in the past 30 days

Mean: 0.17Mode: 0Minimum: 0Maximum: 30

• Standard deviation: 2.17

Never used or did not use in the past 30 days: 33,480 (98.99%)

Missing: 6 (0.02%)

This variable has 33,816 valid cases out of 33,822 total cases.

#### UM\_W4\_A\_ snus1\_past30: Adult snus pouch user - used at least 1 day in the past 30 days

**Description:** Respondents who have used snus pouches at least 1 day in the past 30 days.

Numerator: Number of respondents who have used snus pouches at least 1 day in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	33,480	98.99
1 = Yes	336	0.09
Missing	6	0.02
Total	33,822	100.00

This variable has 33,816 valid cases out of 33,822 total cases.

## UM\_W4\_A\_snus10\_past30: Adult snus pouch user - used at least 10 days in the past 30 days

Description: Respondents who have used snus pouches at least 10 days in the past 30 days.

Numerator: Number of respondents who have used snus pouches at least 10 days in the past 30 days

Value	Unweighted frequency	%

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

0 = No	33,616	99.39
1 = Yes	200	0.59
Missing	6	0.02
Total	33,822	100.00

This variable has 33,816 valid cases out of 33,822 total cases.

## UM\_W4\_A\_snus25\_past30: Adult snus pouch user - used at least 25 days in the past 30 days

**Description:** Respondents who have used snus pouches at least 25 days in the past 30 days.

**Numerator:** Number of respondents who have used snus pouches at least 25 days in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	33,648	99.75
1 = Yes	168	0.23
Missing	6	0.02
Total	33,822	100.00

This variable has 33,816 valid cases out of 33,822 total cases.

#### UM\_W4\_A\_sit\_everysome: Adult smokeless tobacco product user – every day or some days

**Description:** Current user of smokeless tobacco products such as loose snus, moist snuff, dip, spit or chewing tobacco (used every day or some days) among all ever users.

Numerator: Number of smokeless tobacco product users who currently use every day or some days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	32,337	95.61
1 = Yes	1,473	4.36
Missing	12	0.04
Total	28.362	100.00

This variable has 33,810 valid cases out of 33,822 total cases.

Missing values: See note about missing values for all indicators

# UM\_W4\_A\_slt\_everysome\_ESTD: Adult regular smokeless tobacco product user – every day or some days

**Description**: Current user of smokeless tobacco products such as loose snus, moist snuff, dip, spit or chewing tobacco (used every day or some days) among all regular users.

**Numerator:** Number of regular smokeless tobacco product users who currently use every day or some days

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	32,516	96.14
1 = Yes	1,293	3.82
Missing	13	0.04
Total	33,822	100.00

This variable has 33,809 valid cases out of 33,822 total cases.

#### UM\_W4\_A\_slt\_30day: In the past 30 days, number of days used smokeless tobacco products

**Description:** Number of days a respondent used smokeless tobacco products such as loose snus, moist snuff, dip, spit or chewing tobacco in the past 30 days.

Numerator: Respondents who have used smokeless tobacco products in the past 30 days

Mean: 0.87Mode: 0Minimum: 0Maximum: 30

Standard deviation: 4.85

• Never used or did not use in the past 30 days: 32,501 (96.09%)

Missing: 14 (0.04%)

This variable has 33,808 valid cases out of 33,822 total cases.

## UM\_W4\_A\_ slt1\_past30: Adult smokeless tobacco product user - used at least 1 day in the past 30 days

**Description:** Respondents who have used smokeless tobacco products such as loose snus, moist snuff, dip, spit or chewing tobacco at least 1 day in the past 30 days.

**Numerator:** Number of respondents who have used smokeless tobacco products at least 1 day in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	32,501	96.09
1 = Yes	1,307	3.86
Missing	14	0.04
Total	33,822	100.00

This variable has 33,808 valid cases out of 33,822 total cases.

# UM\_W4\_A\_slt10\_past30: Adult smokeless tobacco product user - used at least 10 days in the past 30 days

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

**Description:** Respondents who have used smokeless tobacco products such as loose snus, moist snuff, dip, spit or chewing tobacco at least 10 days in the past 30 days.

**Numerator:** Number of respondents who have used smokeless tobacco products at least 10 days in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	32,771	96.89
1 = Yes	1,037	3.07
Missing	14	0.04
Total	33,822	100.00

This variable has 33,808 valid cases out of 33,822 total cases.

## UM\_W4\_A\_slt25\_past30: Adult smokeless tobacco product user - used at least 25 days in the past 30 days

**Description:** Respondents who have used smokeless tobacco products such as loose snus, moist snuff, dip, spit or chewing tobacco at least 25 days in the past 30 days.

**Numerator:** Number of respondents who have used smokeless tobacco products at least 25 days in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No	32,946	97.41
1 = Yes	862	2.55
Missing	14	0.04
Total	33,822	100.00

This variable has 33,808 valid cases out of 33,822 total cases.

## UM\_W4\_A\_combust\_everysome: Adult other combustible tobacco products user - every day or some days

**Description:** Respondents who reported using traditional cigars, cigarillos, filtered cigars, pipes or hookahs every day or some days.

**Numerator:** Number of respondents who currently use traditional cigars, cigarillos, filtered cigars, pipes, or hookahs every day or some days

Value	Unweighted frequency	%
0 = No*	29,663	87.70
1 = Yes	4,158	12.29
Missing	1	0.00

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

Total	33,822	100.00

This variable has 33,821 valid cases out of 33,822 total cases. \* Including people with missing values in zero category as long as they responded 'NO' to at least one product.

## UM\_W4\_A\_sitgroup\_everysome: Adult multiple smokeless tobacco products user - every day or some days

**Description:** Respondents who reported using snus pouches or other smokeless tobacco products every day or some days.

**Numerator:** Number of respondents who currently use snus pouches or other smokeless tobacco products every day or some days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No*	32,248	95.35
1 = Yes	1,573	4.65
Missing	1	0.00
Total	33,822	100.00

This variable has 33,821 valid cases out of 33,822 total cases. \* Including people with missing values in zero category as long as they responded 'NO' to at least one product.

# UM\_W4\_A\_combust\_everysome\_ESTD: Adult regular other combustible tobacco products user - every day or some days

**Description:** Regular users who reported using traditional cigars, cigarillos, filtered cigars, pipes or hookahs every day or some days.

**Numerator:** Number of regular users who currently use traditional cigars, cigarillos, filtered cigars, pipes, or hookahs every day or some days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No*	31,599	93.43
1 = Yes	2,222	6.57
Missing	1	0.00
Total	33,822	100.00

This variable has 33,821 valid cases out of 33,822 total cases. \* Including people with missing values in zero category as long as they responded 'NO' to at least one product.

# UM\_W4\_A\_sitgroup\_everysome\_ESTD: Adult regular multiple smokeless tobacco products user - every day or some days

**Description:** Regular users who reported using snus pouches or other smokeless tobacco products every day or some days.

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

**Numerator:** Number of regular users who currently use snus pouches or other smokeless tobacco products every day or some days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No*	32,444	95.93
1 = Yes	1,376	4.07
Missing	2	0.01
Total	32,320	100.00

This variable has 33,820 valid cases out of 33,822 total cases. \* Including people with missing values in zero category as long as they responded 'NO' to at least one product.

## UM\_W4\_A\_combust1\_past30: Adult other combustible tobacco products user – used at least 1 day in the past 30 days

**Description:** Respondents who reported using traditional cigars, cigarillos, filtered cigars, pipes or hookahs at least 1 day in the past 30 days.

**Numerator:** Number of respondents who used traditional cigars, cigarillos, filtered cigars, pipes, or hookahs at least 1 day in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No*	30,758	90.94
1 = Yes	3,063	9.06
Missing	1	0.00
Total	33,822	100.00

This variable has 33,821 valid cases out of 33,822 total cases. \* Including people with missing values in zero category as long as they responded 'NO' to at least one product.

# UM\_W4\_A\_sltgroup1\_past30: Adult multiple smokeless tobacco products user – used at least 1 day in the past 30 days

**Description:** Respondents who reported using snus pouches or other smokeless tobacco products at least 1 day in the past 30 days.

**Numerator:** Number of respondents who used snus pouches or other smokeless tobacco products at least 1 day in the past 30 days

Value	Unweighted frequency	%
0 = No*	32,412	95.83
1 = Yes	1,408	4.16
Missing	2	0.01
Total	33,822	100.00

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

This variable has 33,820 valid cases out of 33,822 total cases. \* Including people with missing values in zero category as long as they responded 'NO' to at least one product.

## UM\_W4\_A\_combust10\_past30: Adult other combustible tobacco products user – used at least 10 days in the past 30 days

**Description:** Respondents who reported using traditional cigars, cigarillos, filtered cigars, pipes or hookahs at least 10 days in the past 30 days.

**Numerator:** Number of respondents who used traditional cigars, cigarillos, filtered cigars, pipes, or hookahs at least 10 days in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No*	32,771	96.89
1 = Yes	1,050	3.10
Missing	1	0.00
Total	33,822	100.00

This variable has 33,821 valid cases out of 33,822 total cases. \* Including people with missing values in zero category as long as they responded 'NO' to at least one product.

# UM\_W4\_A\_sltgroup10\_past30: Adult multiple smokeless tobacco products user – used at least 10 days in the past 30 days

**Description:** Respondents who reported using snus pouches or other smokeless tobacco products at least 10 days in the past 30 days.

**Numerator:** Number of respondents who used snus pouches or other smokeless tobacco products at least 10 days in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No*	32,728	96.77
1 = Yes	1,092	3.23
Missing	2	0.01
Total	33,822	100.00

This variable has 33,820 valid cases out of 33,822 total cases. \* Including people with missing values in zero category as long as they responded 'NO' to at least one product.

## UM\_W4\_A\_combust25\_past30: Adult other combustible tobacco products user – used at least 25 days in the past 30 days

**Description:** Respondents who reported using traditional cigars, cigarillos, filtered cigars, pipes or hookahs at least 25 days in the past 30 days.

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

**Numerator:** Number of respondents who used traditional cigars, cigarillos, filtered cigars, pipes, or hookahs at least 25 days in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No*	33,145	98.00
1 = Yes	676	2.00
Missing	1	0.00
Total	33,822	100.00

This variable has 33,821 valid cases out of 33,822 total cases. \* Including people with missing values in 0 category as long as they responded 'NO' to at least one product.

## UM\_W4\_A\_sitgroup25\_past30: Adult multiple smokeless tobacco products user - used at least 25 days in the past 30 days

**Description:** Respondents who reported using snus pouches or other smokeless tobacco products at least 25 days in the past 30 days.

**Numerator:** Number of respondents who used snus pouches or other smokeless tobacco products at least 25 days in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = No*	32,915	97.32
1 = Yes	905	2.68
Missing	2	0.01
Total	33,822	100.00

This variable has 33,820 valid cases out of 33,822 total cases. \* Including people with missing values in zero category as long as they responded 'NO' to at least one product.

#### 1.5. Population patterns of single, dual and poly-use

#### UM\_W4\_A\_pop\_poly\_everysome: Adult tobacco product user - every day or some days

**Description:** Population patterns of single, dual and poly-use among established cigarette users and users of e-products, other combustible tobacco products and multiple smokeless tobacco products who currently use every day or some days.

**Numerator:** Number of respondents who are [VALUE]

Value	Unweighted frequency	%
0 = Never user*	19,891	58.81
1 = Cigarettes only user	6,701	19.81
2 = E-products only user	922	2.73

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

3 = Other combustibles (OC) only user	1,690	5.00
4 = Smokeless (SLT) only user	777	2.30
5 = Cigarettes and e-products user	951	2.81
6 = Cigarettes and OC user	1,195	3.53
7 = Cigarettes and SLT user	271	0.80
8 = E-products and OC user	366	1.08
9 = E-products and SLT user	48	0.14
10 = OC and SLT user	126	0.37
11 = Cigarettes, e-products and OC user	488	1.44
12 = Cigarettes, e-products and SLT user	62	0.18
13 = Cigarettes, OC and SLT user	138	0.41
14 = E-products, OC and SLT user	42	0.12
15 = Cigarettes, e-products, OC and SLT user	105	0.31
Missing	49	0.14
Total	33,822	100.00

This variable has 33,773 valid cases out of 33,822 total cases. \* Never established cigarette users and never users of other tobacco products.

## UM\_W4\_A\_pop\_poly\_everysome\_ESTD: Adult regular tobacco product user - every day or some days

**Description:** Population patterns of single, dual and poly-use among established cigarette users and regular users of e-products, other combustible tobacco products and multiple smokeless tobacco products who currently use every day or some days.

Numerator: Number of respondents who are [VALUE]

Value	Unweighted frequency	%
0 = Never regular user	21,130	62.47
1 = Cigarettes only user	7,655	22.63
2 = E-products only user	777	2.30
3 = Other combustibles (OC) only user	945	2.79
4 = Smokeless (SLT) only user	801	2.37
5 = Cigarettes and e-products user	787	2.33
6 = Cigarettes and OC user	804	2.38
7 = Cigarettes and SLT user	320	0.95
8 = E-products and OC user	116	0.34
9 = E-products and SLT user	32	0.09
10 = OC and SLT user	47	0.14
11 = Cigarettes, e-products and OC user	186	0.55
12 = Cigarettes, e-products and SLT user	56	0.17
13 = Cigarettes, OC and SLT user	67	0.20
14 = E-products, OC and SLT user	16	0.05
15 = Cigarettes, e-products, OC and SLT user	35	0.10
Missing	48	0.14
Total	33,822	100.00

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

## UM\_W4\_A\_pop\_poly\_1\_past30: Adult tobacco product user – used at least 1 day in the past 30 days

**Description:** Population patterns of single, dual and poly-use among established cigarette users and users of e-products, other combustible tobacco products and multiple smokeless tobacco products who used at least 1 day in the past 30 days.

Numerator: Number of respondents who used [VALUE] at least 1 day in the past 30 days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted frequency	%
0 = Never user*	20,518	60.66
1 = Cigarettes only user	7,173	21.21
2 = E-products only user	919	2.72
3 = Other combustibles (OC) only user	1,269	3.75
4 = Smokeless (SLT) only user	799	2.36
5 = Cigarettes and e-products user	885	2.62
6 = Cigarettes and OC user	991	2.93
7 = Cigarettes and SLT user	269	0.80
8 = E-products and OC user	252	0.75
9 = E-products and SLT user	47	0.14
10 = OC and SLT user	75	0.22
11 = Cigarettes, e-products and OC user	305	0.90
12 = Cigarettes, e-products and SLT user	56	0.17
13 = Cigarettes, OC and SLT user	78	0.23
14 = E-products, OC and SLT user	27	0.08
15 = Cigarettes, e-products, OC and SLT user	51	0.15
Missing	108	0.32
Total	33,822	100.00

This variable has 33,714 valid cases out of 33,822 total cases. \* Never established cigarette users and never users of other tobacco products.

# UM\_W4\_A\_pop\_poly\_10\_past30: Adult tobacco product user – used at least 10 days in the past 30 days

**Description:** Population patterns of single, dual and poly-use among established cigarette users and users of e-products, other combustible tobacco products and multiple smokeless tobacco products who used at least 10 days in the past 30 days.

Numerator: Number of respondents who used [VALUE] at least 10 days in the past 30 days

Value	Unweighted frequency	%
0 = Never user*	22,588	66.78

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

1 = Cigarettes only user	7,692	22.74
2 = E-products only user	868	2.57
3 = Other combustibles (OC) only user	519	1.53
4 = Smokeless (SLT) only user	810	2.39
5 = Cigarettes and e-products user	483	1.43
6 = Cigarettes and OC user	383	1.13
7 = Cigarettes and SLT user	182	0.54
8 = E-products and OC user	45	0.13
9 = E-products and SLT user	31	0.09
10 = OC and SLT user	14	0.04
11 = Cigarettes, e-products and OC user	50	0.15
12 = Cigarettes, e-products and SLT user	15	0.04
13 = Cigarettes, OC and SLT user	20	0.06
14 = E-products, OC and SLT user	5	0.01
15 = Cigarettes, e-products, OC and SLT user	9	0.03
Missing	108	0.32
Total	33,822	100.00

This variable has 33,714 valid cases out of 33,822 total cases. \* Never established cigarette users and never users of other tobacco products.

# UM\_W4\_A\_pop\_poly\_25\_past30: Adult tobacco product user -used at least 25 days in the past 30 days

**Description:** Population patterns of single, dual and poly-use among established cigarette users and users of e-products, other combustible tobacco products and multiple smokeless tobacco products who used at least 25 days in the past 30 days.

Numerator: Number of respondents who used [VALUE] at least 25 days in the past 30 days

Value	Unweighted frequency	%
0 = Never user*	23,804	70.38
1 = Cigarettes only user	7,318	21.64
2 = E-products only user	825	2.44
3 = Other combustibles (OC) only user	347	1.03
4 = Smokeless (SLT) only user	758	2.24
5 = Cigarettes and e-products user	221	0.65
6 = Cigarettes and OC user	259	0.77
7 = Cigarettes and SLT user	97	0.29
8 = E-products and OC user	24	0.07
9 = E-products and SLT user	16	0.05
10 = OC and SLT user	8	0.02
11 = Cigarettes, e-products and OC user	17	0.05
12 = Cigarettes, e-products and SLT user	4	0.01
13 = Cigarettes, OC and SLT user	8	0.02
14 = E-products, OC and SLT user	3	0.01

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

15 = Cigarettes, e-products, OC and SLT user	5	0.01
Missing	108	0.32
Total	33,822	100.00

This variable has 33,714 valid cases out of 33,822 total cases. \* Never established cigarette users and never users of other tobacco products.

#### 1.6. States for transition analysis based on current use

#### UM\_W4\_A\_states\_everysome: Adult tobacco product user - every day or some days

**Description:** States for transition analysis of single, dual and poly-use among established cigarette users and users of e-products, other combustible tobacco products and multiple smokeless tobacco products who currently use every day or some days.

Numerator: Number of respondents who use [VALUE] every day or some days

**Denominator:** Total number of respondents<sup>1</sup>

Value	Unweighted	%
value	frequency	
0 = Never user*	7,838	23.17
1 = Former user of any product	12,053	35.64
2 = Cigarettes only user	6,701	19.81
3 = E-products only user	922	2.73
4 = Other combustibles (OC) only user	1,690	5.00
5 = Smokeless (SLT) only user	777	2.30
6 = Cigarettes and e-products user	951	2.81
7 = Cigarettes and OC user	1,195	3.53
8 = Cigarettes and SLT user	271	0.80
9 = Poly user with cigarettes (cigs, e-cigs and OC; cigs, e-cigs and SLT;	793	2.34
cigs, OC and SLT or cigs, e-cigs, OC and SLT)	793	
10 = Other dual/poly-user without cigarettes (e-cigs and OC; e-cigs and	582	1.72
SLT; OC and SLT; e-cigs, OC and SLT)	362	
Missing	49	0.14
Total	33,822	100.00

This variable has 2833,773 valid cases out of 33,822 total cases. \* Never established cigarette users and never users of other tobacco products.

#### UM\_W4\_A\_states\_everysome\_ESTD: Adult regular tobacco product user - every day or some days

**Description:** States for transition analysis of single, dual and poly-use among established cigarette users and regular users of e-products, other combustible tobacco products and multiple smokeless tobacco products who currently use every day or some days.

Numerator: Number of respondents who use [VALUE] every day or some days

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"

Value	Unweighted frequency	%
0 = Never regular user	14,646	43.30
1 = Former user of any product	6,484	19.17
2 = Cigarettes only user	7,655	22.63
3 = E-products only user	777	2.30
4 = Other combustibles (OC) only user	945	2.79
5 = Smokeless (SLT) only user	801	2.37
6 = Cigarettes and e-products user	787	2.33
7 = Cigarettes and OC user	804	2.38
8 = Cigarettes and SLT user	320	0.95
9 = Poly user with cigarettes (cigs, e-cigs and OC; cigs, e-cigs and SLT; cigs, OC and SLT or cigs, e-cigs, OC and SLT)	344	1.02
10 = Other dual/poly-user without cigarettes (e-cigs and OC; e-cigs and SLT; OC and SLT; e-cigs, OC and SLT)	211	0.62
Missing	48	0.14
Total	33,822	100.00

This variable has 33,774 valid cases out of 33,822 total cases.

## UM\_W4\_A\_TDS: Adult tobacco dependence score

**Description:** Standardized wave 4 adult dependence score based on 16 items.

**Numerator:** People who are current established users for at least one tobacco product (cigarettes, ecigarettes, cigars, hookah, smokeless tobacco or snus).

Denominator: Total number of respondents<sup>1</sup>

Mean: 0

Minimum: -1.411
1<sup>st</sup> quantile: -0.883
Median: -0.019
3<sup>rd</sup> quantile: 0.763
Maximum: 2.078
Standard deviation: 1
Missing: 22,116

This variable has 11,706 valid cases out of 33,822 total cases.

<sup>&</sup>lt;sup>1</sup>Those responses that are "not valid" are described for each indicator under "missing values"