

## Notes:

Supplemental Figure 1 shows the full Wave 1 sample respondents who have data at Waves 1, 2, and 3. There are 2,605 Wave 1 youth (ages 12-17) and 8,650 Wave 1 adult (ages 18 and older) respondents excluded at W2 and W3 because they do not have data at all three waves. The figure illustrates Wave 1 youth and young adults (ages 18-24) who aged-up at Wave 2 and Wave 2 youth and young adults who aged-up at Wave 3. The boxes at each wave show the total sample size for each age group at each wave.

Supplemental Table 1: Cross-sectional Prevalence Estimates of Individual and Polyproduct SLT Use Among SLT users.

	Ever SLT Use											
	W1 (2013/14)				W2 (2014/15)				W3 (2015/16)			
	Unweighted Sample Size	Weighted Sample Size	Weighted %	95% CI	Unweighted Sample Size	Weighted Sample Size	Weighted %	95% CI	Unweighted Sample Size	Weighted Sample Size	Weighted %	95% CI
<i>Youth</i>												
<b>SLT</b>	<b>629</b>	<b>1,176,661</b>	<b>4.8</b>	<b>(4.3-5.3)</b>	<b>525</b>	<b>1,132,634</b>	<b>4.7</b>	<b>(4.2-5.2)</b>	<b>474</b>	<b>1,064,112</b>	<b>4.5</b>	<b>(4.0-5.0)</b>
Exclusive snus	55	103,846	8.9	(7.1-11.1)	54	116,344	10.5	(8.1-13.4)	43	88,849	8.7	(6.6-11.5)
Exclusive other smokeless tobacco	408	757,602	64.7	(60.6-68.6)	332	717,896	64.6	(59.9-69.1)	275	602,613	59.3	(53.2-65.1)
Both SLT types	163	309,475	26.4	(22.7-30.5)	128	276,348	24.9 <sup>c</sup>	(20.6-29.7)	136	325,270	32.0 <sup>c</sup>	(26.6-38.0)
<i>Young Adults</i>												
<b>SLT</b>	<b>1,942</b>	<b>5,189,266</b>	<b>17.0</b>	<b>(15.9-18.0)</b>	<b>1,610</b>	<b>5,185,957</b>	<b>17.2</b>	<b>(16.3-18.2)</b>	<b>1,560</b>	<b>5,090,374</b>	<b>17.9</b>	<b>(16.9-18.9)</b>
Exclusive snus	309	827,695	16.0 <sup>a,b</sup>	(14.3-17.9)	220	715,757	13.9 <sup>a,c</sup>	(11.9-16.1)	172	580,535	11.8 <sup>b,c</sup>	(9.8-14.3)
Exclusive other smokeless tobacco	777	2,135,326	41.3 <sup>a,b</sup>	(38.7-44.0)	585	1,903,054	36.9 <sup>a</sup>	(34.1-39.8)	552	1,776,011	36.2 <sup>b</sup>	(33.7-38.9)
Both SLT types	847	2,205,107	42.7 <sup>a,b</sup>	(40.2-45.2)	795	2,540,045	49.2 <sup>a,c</sup>	(46.7-51.8)	777	2,544,108	51.9 <sup>b,c</sup>	(49.1-54.7)
<i>Adults 25+</i>												
<b>SLT</b>	<b>5,369</b>	<b>33,650,670</b>	<b>16.4<sup>a,b</sup></b>	<b>(15.7-17.2)</b>	<b>4,807</b>	<b>35,312,012</b>	<b>17.0<sup>a,c</sup></b>	<b>(16.2-17.9)</b>	<b>4,727</b>	<b>36,358,714</b>	<b>17.8<sup>b,c</sup></b>	<b>(16.9-18.7)</b>
Exclusive snus	391	1,817,402	5.4 <sup>b</sup>	(4.8-6.0)	370	1,954,842	5.6 <sup>c</sup>	(4.8-6.4)	390	2,207,755	6.3 <sup>b,c</sup>	(5.5-7.1)
Exclusive other smokeless tobacco	3,590	24,815,457	73.9 <sup>a,b</sup>	(72.6-75.3)	3,005	24,895,173	70.7 <sup>a,c</sup>	(69.0-72.4)	2,725	23,950,415	67.8 <sup>b,c</sup>	(66.1-69.5)
Both SLT types	1,370	6,926,224	20.6 <sup>a,b</sup>	(19.3-22.1)	1,410	8,343,507	23.7 <sup>a,c</sup>	(22.0-25.5)	1,484	9,154,640	25.9 <sup>b,c</sup>	(24.2-27.7)

	P12M SLT Use											
	W1 (2013/14)				W2 (2014/15)				W3 (2015/16)			
	Unweighted Sample Size	Weighted Sample Size	Weighted %	95% CI	Unweighted Sample Size	Weighted Sample Size	Weighted %	95% CI	Unweighted Sample Size	Weighted Sample Size	Weighted %	95% CI
<i>Youth</i>												
<b>SLT</b>	<b>407</b>	<b>777,408</b>	<b>3.2</b>	<b>(2.8-3.6)</b>	<b>324</b>	<b>709,936</b>	<b>2.9</b>	<b>(2.5-3.4)</b>	<b>294</b>	<b>668,720</b>	<b>2.7</b>	<b>(2.3-3.1)</b>
Exclusive snus	38	77,982	10.1	(7.5-13.5)	39	81,132	11.5	(8.5-15.4)	30	59,475	8.9	(6.6-12.1)
Exclusive other smokeless tobacco	265	498,782	64.5 <sup>b</sup>	(59.7-69.1)	202	444,744	63.0 <sup>c</sup>	(57.8-68.0)	155	344,735	51.8 <sup>b,c</sup>	(44.8-58.7)
Both SLT types	102	196,490	25.4 <sup>b</sup>	(21.3-30.0)	82	179,766	25.5 <sup>c</sup>	(20.7-30.9)	107	261,270	39.3 <sup>b,c</sup>	(33.1-45.8)
<i>Young Adults</i>												
<b>SLT</b>	<b>1,126</b>	<b>2,925,699</b>	<b>9.6<sup>a,b</sup></b>	<b>(8.9-10.3)</b>	<b>801</b>	<b>2,554,570</b>	<b>8.4<sup>a</sup></b>	<b>(7.9-9.0)</b>	<b>769</b>	<b>2,457,815</b>	<b>8.3<sup>b</sup></b>	<b>(7.8-8.9)</b>
Exclusive snus	138	359,874	12.7	(10.5-15.3)	83	272,236	10.7	(8.4-13.5)	91	308,318	12.5	(9.9-15.8)
Exclusive other smokeless tobacco	597	1,542,642	54.5 <sup>a</sup>	(50.8-58.1)	367	1,185,341	46.5 <sup>a,c</sup>	(42.8-50.4)	412	1,319,125	53.7 <sup>c</sup>	(50.2-57.1)
Both SLT types	357	929,444	32.8 <sup>a</sup>	(29.7-36.1)	348	1,089,171	42.8 <sup>a,c</sup>	(39.1-46.5)	266	830,372	33.8 <sup>c</sup>	(30.3-37.4)
<i>Adults 25+</i>												
<b>SLT</b>	<b>1,865</b>	<b>8,581,296</b>	<b>4.2<sup>a,b</sup></b>	<b>(3.9-4.5)</b>	<b>1,440</b>	<b>8,017,960</b>	<b>3.9<sup>a</sup></b>	<b>(3.6-4.1)</b>	<b>1,362</b>	<b>8,168,226</b>	<b>3.9<sup>b</sup></b>	<b>(3.6-4.2)</b>
Exclusive snus	206	963,897	11.6 <sup>a</sup>	(9.8-13.8)	98	535,893	6.7 <sup>a</sup>	(5.4-8.3)	132	780,686	9.6	(7.5-12.1)
Exclusive other smokeless tobacco	1,303	5,985,601	72.2	(69.4-74.8)	972	5,460,720	68.2	(64.9-71.2)	961	5,855,509	71.8	(69.0-74.5)
Both SLT types	299	1,343,447	16.2 <sup>a</sup>	(14.4-18.1)	368	2,016,082	25.2 <sup>a,c</sup>	(22.2-28.4)	265	1,518,769	18.6 <sup>c</sup>	(16.4-21.1)

	P30D SLT Use											
	W1 (2013/14)				W2 (2014/15)				W3 (2015/16)			
	Unweighted Sample Size	Weighted Sample Size	Weighted %	95% CI	Unweighted Sample Size	Weighted Sample Size	Weighted %	95% CI	Unweighted Sample Size	Weighted Sample Size	Weighted %	95% CI
<i>Youth</i>												
<b>SLT</b>	<b>198</b>	<b>384,162</b>	<b>1.6<sup>b</sup></b>	<b>(1.3-1.9)</b>	<b>141</b>	<b>311,622</b>	<b>1.3</b>	<b>(1.1-1.6)</b>	<b>124</b>	<b>280,895</b>	<b>1.1<sup>b</sup></b>	<b>(0.9-1.4)</b>
Exclusive snus	16	30,226	8.0	(5.0-12.4)	17	36,674	11.8	(7.3-18.4)	10	22,277	8.0 <sup>†</sup>	(4.3-14.6)
Exclusive other smokeless tobacco	137	263,388	69.3	(63.8-74.3)	102	222,889	71.5	(63.2-78.6)	87	197,668	71.2	(60.8-79.8)
Both SLT types	43	86,475	22.8	(17.5-29.0)	22	52,059	16.7	(10.3-26.0)	25	57,486	20.7	(13.9-29.7)
<i>Young Adults</i>												
<b>SLT</b>	<b>640</b>	<b>1,628,897</b>	<b>5.3</b>	<b>(4.8-5.9)</b>	<b>539</b>	<b>1,677,106</b>	<b>5.5</b>	<b>(5.1-6.1)</b>	<b>503</b>	<b>1,593,561</b>	<b>5.4</b>	<b>(4.9-5.9)</b>
Exclusive snus	57	148,173	9.4	(7.3-12.0)	36	112,872	6.7	(4.9-9.3)	50	152,161	9.5	(6.8-13.2)
Exclusive other smokeless tobacco	453	1,137,689	72.2 <sup>a,b</sup>	(67.8-76.1)	336	1,069,123	63.7 <sup>a</sup>	(58.9-68.3)	319	1,021,202	64.1 <sup>b</sup>	(59.8-68.2)
Both SLT types	112	290,454	18.4 <sup>a,b</sup>	(15.3-22.1)	167	495,111	29.5 <sup>a</sup>	(25.3-34.1)	134	420,197	26.4 <sup>b</sup>	(22.3-30.9)
<i>Adults 25+</i>												
<b>SLT</b>	<b>1,379</b>	<b>6,164,356</b>	<b>3.0</b>	<b>(2.8-3.2)</b>	<b>1,126</b>	<b>6,349,730</b>	<b>3.0</b>	<b>(2.8-3.3)</b>	<b>1,072</b>	<b>6,469,012</b>	<b>3.1</b>	<b>(2.8-3.3)</b>
Exclusive snus	98	442,930	7.3 <sup>a</sup>	(5.9-9.0)	53	286,712	4.5 <sup>a,c</sup>	(3.1-6.5)	85	506,547	7.8 <sup>c</sup>	(5.9-10.3)
Exclusive other smokeless tobacco	1,156	5,192,116	85.9 <sup>a,b</sup>	(83.6-87.9)	870	4,903,773	77.3 <sup>a</sup>	(73.9-80.3)	836	5,057,266	78.2 <sup>b</sup>	(74.8-81.3)
Both SLT types	97	409,397	6.8 <sup>a,b</sup>	(5.3-8.6)	202	1,156,660	18.2 <sup>a</sup>	(15.3-21.6)	150	901,972	13.9 <sup>b</sup>	(11.7-16.6)

	Daily P30D SLT Use											
	W1 (2013/14)				W2 (2014/15)				W3 (2015/16)			
	Unweighted Sample Size	Weighted Sample Size	Weighted %	95% CI	Unweighted Sample Size	Weighted Sample Size	Weighted %	95% CI	Unweighted Sample Size	Weighted Sample Size	Weighted %	95% CI
<i>Youth</i>												
<b>SLT</b>	<b>49</b>	<b>87,327</b>	<b>0.4</b>	<b>(0.3-0.5)</b>	<b>29</b>	<b>71,977</b>	<b>0.3</b>	<b>(0.2-0.4)</b>	<b>26</b>	<b>60,092</b>	<b>0.2</b>	<b>(0.2-0.4)</b>
Exclusive snus	2	3,842	4.4†	(1.1-16.6)	0	N/A	N/A	N/A	0	N/A	N/A	N/A
Exclusive other smokeless tobacco	41	71,415	81.8†	(67.5-90.7)	26	64,642	89.8†	(70.8-97.0)	25	56,993	94.8†	(67.4-99.4)
Both SLT types	6	12,071	13.8†	(6.4-27.3)	3	7,335	10.2†	(3.0-29.2)	1	3,099	5.2†	(0.6-32.6)
<i>Young Adults</i>												
<b>SLT</b>	<b>262</b>	<b>656,471</b>	<b>2.2</b>	<b>(1.8-2.6)</b>	<b>214</b>	<b>637,053</b>	<b>2.1</b>	<b>(1.8-2.4)</b>	<b>190</b>	<b>598,431</b>	<b>2.0</b>	<b>(1.7-2.3)</b>
Exclusive snus	8	18,447	3.0†	(1.5-5.9)	4	14,756	2.4†	(0.7-7.8)	4	14,275	2.5†	(0.9-6.9)
Exclusive other smokeless tobacco	232	576,106	93.5	(89.8-95.9)	186	554,704	90.8	(85.0-94.5)	165	527,290	92.9	(88.3-95.8)
Both SLT types	8	21,828	3.5†	(1.9-6.6)	15	41,777	6.8	(4.0-11.5)	10	26,056	4.6†	(2.4-8.5)
<i>Adults 25+</i>												
<b>SLT</b>	<b>818</b>	<b>3,657,562</b>	<b>1.8</b>	<b>(1.6-2.0)</b>	<b>642</b>	<b>3,505,647</b>	<b>1.7</b>	<b>(1.5-1.8)</b>	<b>601</b>	<b>3,593,263</b>	<b>1.7</b>	<b>(1.6-1.9)</b>
Exclusive snus	33	158,502	4.5	(3.1-6.5)	26	132,925	3.9	(2.4-6.4)	19	105,725	3.0	(1.9-4.7)
Exclusive other smokeless tobacco	741	3,310,461	93.8	(91.5-95.5)	580	3,161,195	93.3	(90.6-95.3)	550	3,256,652	92.4	(88.6-95.0)
Both SLT types	14	61,336	1.7 <sup>b</sup>	(1.0-3.0)	18	93,663	2.8	(1.8-4.3)	22	162,124	4.6 <sup>b</sup>	(2.7-7.6)

## Notes:

Abbreviations: W1 = Wave 1; SLT = smokeless tobacco; W2 = Wave 2; W3 = Wave 3; CI = confidence interval; P12M = past 12-month; P30D = past 30-day; N/A = not applicable

Analysis included W1, W2, and W3 youth (ages 12-17), young adults (ages 18-24), and adults 25+ (ages 25 and older) at each wave. All respondents with data at one wave are included in the sample for that wave's estimate and do not need to have complete data at all three waves. The PATH Study cross-sectional (W1) or single-wave weights (W2 and W3) were used to calculate estimates at each wave.

For exclusive product use, respondents could only use that specific product, and for “both SLT types” (polyproduct) use, respondents needed to use both products. For SLT use, respondents could use either of the products, exclusively or combined. The exclusive product Ns do not add up to the total SLT Ns due to missing data. It is possible for one respondent to have valid data for one product and missing data for another, making it impossible to determine exclusive or polyproduct use, but allowing them to be in the total SLT group.

Ever SLT use is defined as use snus pouches and/or other smokeless tobacco, even once or twice in lifetime. P12M SLT use is defined as use of snus pouches and/or other smokeless tobacco within the past 12 months. P30D SLT use is defined as use of snus pouches and/or other smokeless tobacco within the past 30 days. Daily P30D SLT use is defined as use of snus pouches and/or other smokeless tobacco on all 30 of the past 30 days.

<sup>a</sup>denotes significant difference at  $p < 0.0167$  (Bonferroni corrected for three comparisons) between W1 and W2

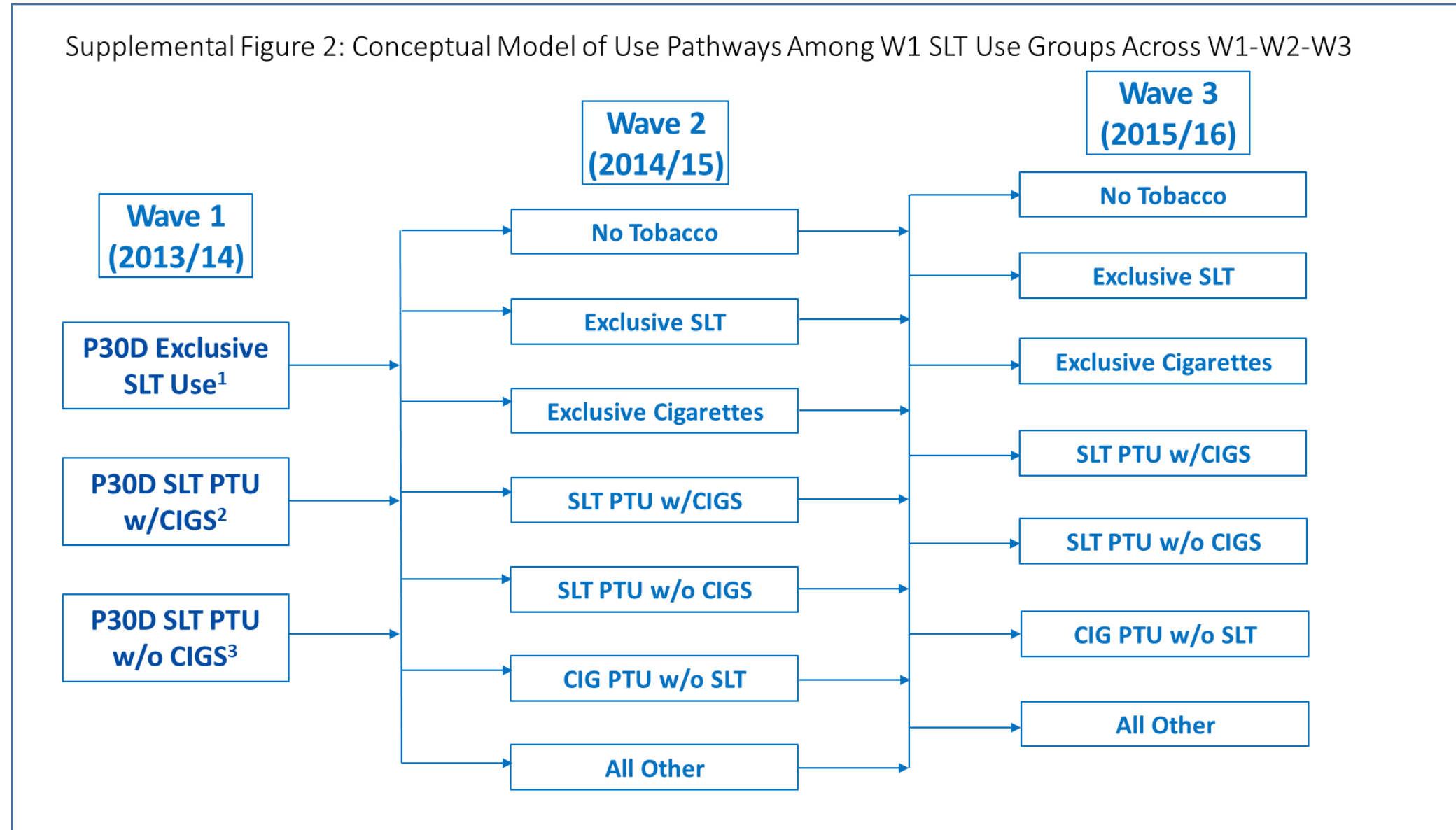
<sup>b</sup>denotes significant difference at  $p < 0.0167$  (Bonferroni corrected for three comparisons) between W1 and W3

<sup>c</sup>denotes significant difference at  $p < 0.0167$  (Bonferroni corrected for three comparisons) between W2 and W3

The logit-transformation method was used to calculate the 95% CIs.

† Estimate should be interpreted with caution because it has low statistical precision. It is based on a denominator sample size of less than 50, or the coefficient of variation of the estimate or its complement is larger than 30%.

Analyses were run on the W1, W2, and W3 Public Use Files (<https://doi.org/10.3886/ICPSR36498.v8>).



## Notes:

Abbreviations: W1 = Wave 1; SLT = smokeless tobacco; W2 = Wave 2; W3 = Wave 3; P30D = past 30-day; PTU = polytobacco use; w/ = with; CIG(S) = cigarette(s); w/o = without

<sup>1</sup>Weighted percentages (95% confidence interval) and unweighted sample sizes of W1 P30D exclusive SLT users among any P30D SLT users: youth (ages 12-17), 33.6% (25.7-42.6), N=47/139); young adults (ages 18-24), 21.9% (18.6-25.6), N=86/408); adults 25+ (ages 25 and older), 57.3% (54.2-60.5), N=516/934)

<sup>2</sup>Weighted percentages (95% confidence interval) and unweighted sample sizes of W1 P30D SLT PTU w/CIGS among any P30D SLT users: youth, 41.5% (33.2-50.3), N=62/139); young adults, 65.0% (61.0-68.9), N=269/408); adults 25+, 35.6% (32.5-38.8), N=350/934)

<sup>3</sup>Weighted percentages (95% confidence interval) and unweighted sample sizes of W1 P30D SLT PTU w/o CIGS among any P30D SLT users: youth, 24.9% (16.7-35.2), N=30/139); young adults, 13.0% (9.7-17.4), N=53/408); adults 25+, 7.1% (5.4-9.2), N=68/934)

1) No tobacco: Defined as no use of any tobacco products within the past 30 days.

2) Exclusive SLT: Defined as use of only SLT within the past 30 days.

3) Exclusive cigarettes: Defined as use of only cigarettes within the past 30 days.

4) SLT PTU w/CIGS: Defined as use of SLT and cigarettes within the past 30 days and possibly one or more of the following: traditional cigars, cigarillos, filtered cigars, hookah, pipe, or electronic nicotine delivery system (ENDS\*).

5) SLT PTU w/o CIGS: Defined as use of SLT and one or more of the following within the past 30 days: traditional cigars, cigarillos, filtered cigars, hookah, pipe, or ENDS, but not cigarettes.

6) CIG PTU w/o SLT: Defined as use of cigarettes and one or more of the following within the past 30 days: traditional cigars, cigarillos, filtered cigars, hookah, pipe, or ENDS, but not SLT.

7) All other: Use of one or more of the following in the past 30 days: traditional cigars, cigarillos, filtered cigars, hookah, pipe, or ENDS, but without cigarettes or SLT.

\*Respondents were asked about P30D use of “e-cigarettes” at W1 and W2 and “e-products” (e-cigarettes, e-cigars, e-pipes, and e-hookah) at W3.

These pathways have been enumerated in Supplemental Tables 2a-2c.

The logit-transformation method was used to calculate the 95% confidence intervals.

Analyses were run on the W1, W2, and W3 Public Use Files (<https://doi.org/10.3886/ICPSR36498.v8>).



Supplemental Table 2a: Transitions in P30D Product Use at W2 (2014/15) and W3 (2015/16) Among W1 (2013/14) P30D Exclusive SLT Users.

Rows	W1	W2	W3	Youth				Young Adults				Adults 25+			
				Unweighted N	Weighted N	Weighted %	95% CI	Unweighted N	Weighted N	Weighted %	95% CI	Unweighted N	Weighted N	Weighted %	95% CI
1	Exclusive SLT	No Tobacco	No Tobacco	5	10,706	9.2 <sup>†</sup>	(3.3-22.9)	5	26,808	8.0 <sup>†</sup>	(3.1-19.5)	26	197,175	6.1	(4.3-8.5)
2	Exclusive SLT	No Tobacco	Exclusive SLT	1	4,552	3.9 <sup>†</sup>	(0.5-23.2)	2	10,695	3.2 <sup>†</sup>	(0.8-12.5)	19	143,721	4.4	(2.6-7.4)
3	Exclusive SLT	No Tobacco	Exclusive Cigarettes	0	N/A	N/A	N/A	0	N/A	N/A	N/A	1	3,627	0.1 <sup>†</sup>	(0.0-0.7)
4	Exclusive SLT	No Tobacco	SLT PTU w/CIGS	0	N/A	N/A	N/A	1	1,498	0.4 <sup>†</sup>	(0.1-3.4)	1	5,812	0.2 <sup>†</sup>	(0.0-1.2)
5	Exclusive SLT	No Tobacco	SLT PTU w/o CIGS	2	4,762	4.1 <sup>†</sup>	(0.9-16.1)	1	2,599	0.8 <sup>†</sup>	(0.1-6.2)	2	9,064	0.3 <sup>†</sup>	(0.1-1.1)
6	Exclusive SLT	No Tobacco	CIG PTU w/o SLT	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
7	Exclusive SLT	No Tobacco	All Other	0	N/A	N/A	N/A	2	9,459	2.8 <sup>†</sup>	(0.7-11.2)	3	22,492	0.7 <sup>†</sup>	(0.2-2.3)
8	Exclusive SLT	Exclusive SLT	No Tobacco	1	2,878	2.5 <sup>†</sup>	(0.3-16.3)	6	19,220	5.8 <sup>†</sup>	(2.6-12.5)	23	123,202	3.8	(2.4-6.0)
9	Exclusive SLT	Exclusive SLT	Exclusive SLT	14	36,042	31.0	(19.3-45.8)	17	58,893	17.7	(11.7-25.8)	355	2,214,155	68.1	(64.2-71.8)
10	Exclusive SLT	Exclusive SLT	Exclusive Cigarettes	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
11	Exclusive SLT	Exclusive SLT	SLT PTU w/CIGS	5	13,175	11.3 <sup>†</sup>	(4.6-25.1)	5	17,475	5.2 <sup>†</sup>	(2.1-12.5)	9	58,788	1.8 <sup>†</sup>	(0.9-3.7)
12	Exclusive SLT	Exclusive SLT	SLT PTU w/o CIGS	0	N/A	N/A	N/A	3	16,714	5.0 <sup>†</sup>	(1.4-16.7)	9	66,712	2.1 <sup>†</sup>	(0.9-4.4)
13	Exclusive SLT	Exclusive SLT	CIG PTU w/o SLT	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
14	Exclusive SLT	Exclusive SLT	All Other	0	N/A	N/A	N/A	0	N/A	N/A	N/A	4	28,797	0.9 <sup>†</sup>	(0.3-2.5)
15	Exclusive SLT	Exclusive Cigarettes	No Tobacco	0	N/A	N/A	N/A	1	6,172	1.9 <sup>†</sup>	(0.2-13.2)	1	4,696	0.1 <sup>†</sup>	(0.0-1.0)
16	Exclusive SLT	Exclusive Cigarettes	Exclusive SLT	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
17	Exclusive SLT	Exclusive Cigarettes	Exclusive Cigarettes	0	N/A	N/A	N/A	2	7,556	2.3 <sup>†</sup>	(0.6-8.2)	0	N/A	N/A	N/A
18	Exclusive SLT	Exclusive Cigarettes	SLT PTU w/CIGS	0	N/A	N/A	N/A	0	N/A	N/A	N/A	1	6,938	0.2 <sup>†</sup>	(0.0-1.4)
19	Exclusive SLT	Exclusive Cigarettes	SLT PTU w/o CIGS	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
20	Exclusive SLT	Exclusive Cigarettes	CIG PTU w/o SLT	0	N/A	N/A	N/A	0	N/A	N/A	N/A	1	7,717	0.2 <sup>†</sup>	(0.0-1.6)
21	Exclusive SLT	Exclusive Cigarettes	All Other	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
22	Exclusive SLT	SLT PTU w/CIGS	No Tobacco	1	2,855	2.5 <sup>†</sup>	(0.3-16.7)	1	4,095	1.2 <sup>†</sup>	(0.2-8.9)	2	13,770	0.4 <sup>†</sup>	(0.1-1.9)
23	Exclusive SLT	SLT PTU w/CIGS	Exclusive SLT	0	N/A	N/A	N/A	7	32,400	9.7 <sup>†</sup>	(4.8-18.8)	12	49,829	1.5 <sup>†</sup>	(0.8-2.9)
24	Exclusive SLT	SLT PTU w/CIGS	Exclusive Cigarettes	0	N/A	N/A	N/A	0	N/A	N/A	N/A	1	9,010	0.3 <sup>†</sup>	(0.0-2.0)
25	Exclusive SLT	SLT PTU w/CIGS	SLT PTU w/CIGS	3	7,746	6.7 <sup>†</sup>	(2.0-19.9)	13	52,670	15.8	(9.9-24.3)	10	60,728	1.9 <sup>†</sup>	(1.0-3.6)
26	Exclusive SLT	SLT PTU w/CIGS	SLT PTU w/o CIGS	2	5,751	4.9 <sup>†</sup>	(1.2-18.8)	2	9,240	2.8 <sup>†</sup>	(0.7-10.8)	2	15,071	0.5 <sup>†</sup>	(0.1-1.9)
27	Exclusive SLT	SLT PTU w/CIGS	CIG PTU w/o SLT	2	7,071	6.1 <sup>†</sup>	(1.2-25.3)	1	2,306	0.7 <sup>†</sup>	(0.1-4.0)	1	8,016	0.2 <sup>†</sup>	(0.0-1.5)
28	Exclusive SLT	SLT PTU w/CIGS	All Other	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
29	Exclusive SLT	SLT PTU w/o CIGS	No Tobacco	0	N/A	N/A	N/A	0	N/A	N/A	N/A	2	12,347	0.4 <sup>†</sup>	(0.1-1.6)
30	Exclusive SLT	SLT PTU w/o CIGS	Exclusive SLT	0	N/A	N/A	N/A	6	23,391	7.0 <sup>†</sup>	(3.2-14.6)	13	83,836	2.6	(1.4-4.6)
31	Exclusive SLT	SLT PTU w/o CIGS	Exclusive Cigarettes	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
32	Exclusive SLT	SLT PTU w/o CIGS	SLT PTU w/CIGS	3	6,010	5.2 <sup>†</sup>	(1.6-15.3)	0	N/A	N/A	N/A	1	6,207	0.2 <sup>†</sup>	(0.0-1.4)
33	Exclusive SLT	SLT PTU w/o CIGS	SLT PTU w/o CIGS	3	6,911	5.9 <sup>†</sup>	(1.9-16.8)	5	15,350	4.6 <sup>†</sup>	(1.7-12.0)	6	51,187	1.6 <sup>†</sup>	(0.6-3.8)
34	Exclusive SLT	SLT PTU w/o CIGS	CIG PTU w/o SLT	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
35	Exclusive SLT	SLT PTU w/o CIGS	All Other	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
36	Exclusive SLT	CIG PTU w/o SLT	No Tobacco	0	N/A	N/A	N/A	2	5,004	1.5 <sup>†</sup>	(0.3-6.4)	0	N/A	N/A	N/A
37	Exclusive SLT	CIG PTU w/o SLT	Exclusive SLT	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	NA	NA
38	Exclusive SLT	CIG PTU w/o SLT	Exclusive Cigarettes	0	N/A	N/A	N/A	1	2,572	0.8 <sup>†</sup>	(0.1-5.6)	0	N/A	NA	NA
39	Exclusive SLT	CIG PTU w/o SLT	SLT PTU w/CIGS	0	N/A	N/A	N/A	0	N/A	N/A	N/A	1	5,672	0.2 <sup>†</sup>	(0.0-1.4)
40	Exclusive SLT	CIG PTU w/o SLT	SLT PTU w/o CIGS	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	NA	NA
41	Exclusive SLT	CIG PTU w/o SLT	CIG PTU w/o SLT	0	N/A	N/A	N/A	1	2,304	0.7 <sup>†</sup>	(0.1-5.0)	0	N/A	NA	NA
42	Exclusive SLT	CIG PTU w/o SLT	All Other	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	NA	NA
43	Exclusive SLT	All Other	No Tobacco	2	3,872	3.3 <sup>†</sup>	(0.8-13.3)	0	N/A	N/A	N/A	3	18,888	0.6 <sup>†</sup>	(0.2-2.0)
44	Exclusive SLT	All Other	Exclusive SLT	0	N/A	N/A	N/A	0	N/A	N/A	N/A	2	15,841	0.5 <sup>†</sup>	(0.1-2.0)
45	Exclusive SLT	All Other	Exclusive Cigarettes	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	NA	NA
46	Exclusive SLT	All Other	SLT PTU w/CIGS	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	NA	NA
47	Exclusive SLT	All Other	SLT PTU w/o CIGS	0	N/A	N/A	N/A	1	6,679	2.0 <sup>†</sup>	(0.2-15.0)	1	7,828	0.2 <sup>†</sup>	(0.0-1.8)
48	Exclusive SLT	All Other	CIG PTU w/o SLT	1	4,029	3.5 <sup>†</sup>	(0.5-21.1)	0	N/A	N/A	N/A	0	N/A	NA	NA
49	Exclusive SLT	All Other	All Other	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	NA	NA

## Notes:

Abbreviations: P30D = past 30-day; W1 = Wave 1; W2 = Wave 2; W3 = Wave 3; W1 = Wave 1; SLT = smokeless tobacco; P30D = past 30-day; CIs = confidence intervals; PTU = polytobacco use; w/ = with; CIG(S) = cigarette(s); w/o = without; N/A = not applicable

The analysis included youth (ages 12-17), young adult (ages 18-24), and adult 25+ (ages 25 and older) W1 P30D exclusive SLT users with data at all three waves. Age was calculated based on age at W1. W3 longitudinal (all-waves) weights were used to calculate estimates.

The weighted percentages for some constructs such as discontinued tobacco and persistent use in this table may not match exactly with those presented in Table 1. This is the result of different denominators. In this table there can be no missing values on tobacco use variables at any wave. Table 1 does not require this restriction since some outcomes reflect behaviors at W3 (e.g. discontinued use by W3), regardless of missing data at Wave 2.

## For transitions between waves:

- 1) No tobacco: Defined as no use of any tobacco products within the past 30 days.
- 2) Exclusive SLT: Defined as use of only SLT within the past 30 days.
- 3) Exclusive cigarettes: Defined as use of only cigarettes within the past 30 days.
- 4) SLT PTU w/CIGS: Defined as use of SLT and cigarettes within the past 30 days and possibly one or more of the following: traditional cigars, cigarillos, filtered cigars, hookah, pipe, or electronic nicotine delivery system (ENDS\*).
- 5) SLT PTU w/o CIGS: Defined as use of SLT and one or more of the following within the past 30 days: traditional cigars, cigarillos, filtered cigars, hookah, pipe, or ENDS, but not cigarettes.
- 6) CIG PTU w/o SLT: Defined as use of cigarettes and one or more of the following within the past 30 days: traditional cigars, cigarillos, filtered cigars, hookah, pipe, or ENDS, but not SLT.
- 7) All other: Use of one or more of the following in the past 30 days: traditional cigars, cigarillos, filtered cigars, hookah, pipe, or ENDS, but without cigarettes or SLT.

\*Respondents were asked about P30D use of "e-cigarettes" at W1 and W2 and "e-products" (e-cigarettes, e-cigars, e-pipes, and e-hookah) at W3.

The logit-transformation method was used to calculate the 95% CIs.

† Estimate should be interpreted with caution because it has low statistical precision. It is based on a denominator sample size of less than 50, or the coefficient of variation of the estimate or its complement is larger than 30%.

Analyses were run on the W1, W2, and W3 Public Use Files (<https://doi.org/10.3886/ICPSR36498.v8>).

Supplemental Table 2b: Transitions in P30D Product Use at W2 (2014/15) and W3 (2015/16) Among W1 (2013/14) P30D SLT PTU w/CIGS.

Rows	W1	W2	W3	Youth				Young Adults				Adults 25+			
				Unweighted N	Weighted N	Weighted %	95% CI	Unweighted N	Weighted N	Weighted %	95% CI	Unweighted N	Weighted N	Weighted %	95% CI
1	SLT PTU w/CIGS	No Tobacco	No Tobacco	3	5,110	3.5 <sup>†</sup>	(0.9-11.9)	2	12,120	1.2 <sup>†</sup>	(0.3-5.6)	8	47,875	2.4 <sup>†</sup>	(1.1-5.0)
2	SLT PTU w/CIGS	No Tobacco	Exclusive SLT	0	N/A	N/A	N/A	1	2,347	0.2 <sup>†</sup>	(0.0-1.7)	0	N/A	N/A	N/A
3	SLT PTU w/CIGS	No Tobacco	Exclusive Cigarettes	0	N/A	N/A	N/A	1	3,182	0.3 <sup>†</sup>	(0.0-2.2)	0	N/A	N/A	N/A
4	SLT PTU w/CIGS	No Tobacco	SLT PTU w/CIGS	1	4,400	3.0 <sup>†</sup>	(0.4-20.8)	1	5,942	0.6 <sup>†</sup>	(0.1-4.4)	0	N/A	N/A	N/A
5	SLT PTU w/CIGS	No Tobacco	SLT PTU w/o CIGS	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
6	SLT PTU w/CIGS	No Tobacco	CIG PTU w/o SLT	1	2,295	1.6 <sup>†</sup>	(0.2-11.3)	1	2,791	0.3 <sup>†</sup>	(0.0-2.1)	0	N/A	N/A	N/A
7	SLT PTU w/CIGS	No Tobacco	All Other	0	N/A	N/A	N/A	1	4,886	0.5 <sup>†</sup>	(0.1-3.6)	1	3,865	0.2 <sup>†</sup>	(0.0-1.6)
8	SLT PTU w/CIGS	Exclusive SLT	No Tobacco	0	N/A	N/A	N/A	2	5,832	0.6 <sup>†</sup>	(0.1-2.4)	3	18,482	0.9 <sup>†</sup>	(0.3-2.9)
9	SLT PTU w/CIGS	Exclusive SLT	Exclusive SLT	1	1,377	0.9 <sup>†</sup>	(0.1-6.7)	11	40,136	4.0 <sup>†</sup>	(2.2-7.2)	12	65,427	3.3 <sup>†</sup>	(1.7-6.1)
10	SLT PTU w/CIGS	Exclusive SLT	Exclusive Cigarettes	0	N/A	N/A	N/A	2	6,257	0.6 <sup>†</sup>	(0.1-2.8)	1	5,654	0.3 <sup>†</sup>	(0.0-2.1)
11	SLT PTU w/CIGS	Exclusive SLT	SLT PTU w/CIGS	0	N/A	N/A	N/A	4	15,864	1.6 <sup>†</sup>	(0.6-4.3)	2	10,219	0.5 <sup>†</sup>	(0.1-2.1)
12	SLT PTU w/CIGS	Exclusive SLT	SLT PTU w/o CIGS	0	N/A	N/A	N/A	5	14,127	1.4 <sup>†</sup>	(0.5-3.7)	0	N/A	N/A	N/A
13	SLT PTU w/CIGS	Exclusive SLT	CIG PTU w/o SLT	0	N/A	N/A	N/A	1	2,251	0.2 <sup>†</sup>	(0.0-1.5)	0	N/A	N/A	N/A
14	SLT PTU w/CIGS	Exclusive SLT	All Other	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
15	SLT PTU w/CIGS	Exclusive Cigarettes	No Tobacco	0	N/A	N/A	N/A	0	N/A	N/A	N/A	2	9,702	0.5 <sup>†</sup>	(0.1-2.1)
16	SLT PTU w/CIGS	Exclusive Cigarettes	Exclusive SLT	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
17	SLT PTU w/CIGS	Exclusive Cigarettes	Exclusive Cigarettes	0	N/A	N/A	N/A	12	40,880	4.1 <sup>†</sup>	(2.2-7.6)	32	200,735	10.1	(6.8-14.7)
18	SLT PTU w/CIGS	Exclusive Cigarettes	SLT PTU w/CIGS	1	1,433	1.0 <sup>†</sup>	(0.1-7.7)	3	11,805	1.2 <sup>†</sup>	(0.4-3.8)	8	42,618	2.1 <sup>†</sup>	(1.1-4.2)
19	SLT PTU w/CIGS	Exclusive Cigarettes	SLT PTU w/o CIGS	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
20	SLT PTU w/CIGS	Exclusive Cigarettes	CIG PTU w/o SLT	1	1,665	1.1 <sup>†</sup>	(0.2-7.7)	7	24,516	2.5 <sup>†</sup>	(1.1-5.5)	8	47,757	2.4 <sup>†</sup>	(1.1-5.0)
21	SLT PTU w/CIGS	Exclusive Cigarettes	All Other	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
22	SLT PTU w/CIGS	SLT PTU w/CIGS	No Tobacco	1	2,456	1.7 <sup>†</sup>	(0.2-11.8)	4	12,662	1.3 <sup>†</sup>	(0.4-3.5)	9	45,796	2.3	(1.3-3.9)
23	SLT PTU w/CIGS	SLT PTU w/CIGS	Exclusive SLT	2	4,258	2.9 <sup>†</sup>	(0.6-13.8)	9	34,812	3.5 <sup>†</sup>	(1.8-6.6)	12	81,358	4.1	(2.2-7.3)
24	SLT PTU w/CIGS	SLT PTU w/CIGS	Exclusive Cigarettes	0	N/A	N/A	N/A	10	43,208	4.3 <sup>†</sup>	(2.1-8.9)	27	147,401	7.4	(5.1-10.6)
25	SLT PTU w/CIGS	SLT PTU w/CIGS	SLT PTU w/CIGS	22	54,660	37.2	(24.2-52.2)	84	326,822	32.7	(26.8-39.3)	125	732,925	36.8	(30.7-43.3)
26	SLT PTU w/CIGS	SLT PTU w/CIGS	SLT PTU w/o CIGS	0	N/A	N/A	N/A	4	14,118	1.4 <sup>†</sup>	(0.4-5.0)	5	29,953	1.5 <sup>†</sup>	(0.6-3.6)
27	SLT PTU w/CIGS	SLT PTU w/CIGS	CIG PTU w/o SLT	7	17,193	11.7 <sup>†</sup>	(5.8-22.2)	21	79,657	8.0	(5.2-12.0)	15	97,280	4.9 <sup>†</sup>	(2.6-9.0)
28	SLT PTU w/CIGS	SLT PTU w/CIGS	All Other	0	N/A	N/A	N/A	4	18,809	1.9 <sup>†</sup>	(0.7-5.2)	1	6,272	0.3 <sup>†</sup>	(0.0-2.4)
29	SLT PTU w/CIGS	SLT PTU w/o CIGS	No Tobacco	0	N/A	N/A	N/A	1	3,383	0.3 <sup>†</sup>	(0.0-2.3)	0	N/A	N/A	N/A
30	SLT PTU w/CIGS	SLT PTU w/o CIGS	Exclusive SLT	0	N/A	N/A	N/A	3	12,314	1.2 <sup>†</sup>	(0.4-3.9)	1	6,450	0.3 <sup>†</sup>	(0.0-2.4)
31	SLT PTU w/CIGS	SLT PTU w/o CIGS	Exclusive Cigarettes	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
32	SLT PTU w/CIGS	SLT PTU w/o CIGS	SLT PTU w/CIGS	1	2,580	1.8 <sup>†</sup>	(0.2-13.4)	2	6,573	0.7 <sup>†</sup>	(0.2-2.6)	0	N/A	N/A	N/A
33	SLT PTU w/CIGS	SLT PTU w/o CIGS	SLT PTU w/o CIGS	0	N/A	N/A	N/A	1	5,508	0.6 <sup>†</sup>	(0.1-3.7)	2	19,173	1.0 <sup>†</sup>	(0.2-3.8)
34	SLT PTU w/CIGS	SLT PTU w/o CIGS	CIG PTU w/o SLT	1	2,754	1.9 <sup>†</sup>	(0.3-12.7)	0	N/A	N/A	N/A	0	N/A	N/A	N/A
35	SLT PTU w/CIGS	SLT PTU w/o CIGS	All Other	0	N/A	N/A	N/A	1	4,081	0.4 <sup>†</sup>	(0.1-3.2)	0	N/A	N/A	N/A
36	SLT PTU w/CIGS	CIG PTU w/o SLT	No Tobacco	2	6,134	4.2 <sup>†</sup>	(0.9-16.9)	3	9,162	0.9 <sup>†</sup>	(0.3-2.8)	2	12,148	0.6 <sup>†</sup>	(0.1-2.5)
37	SLT PTU w/CIGS	CIG PTU w/o SLT	Exclusive SLT	0	N/A	N/A	N/A	1	6,861	0.7 <sup>†</sup>	(0.1-4.6)	0	N/A	N/A	N/A
38	SLT PTU w/CIGS	CIG PTU w/o SLT	Exclusive Cigarettes	3	6,861	4.7 <sup>†</sup>	(2.1-10.2)	15	57,168	5.7	(3.2-10.0)	21	107,517	5.4	(3.6-8.0)
39	SLT PTU w/CIGS	CIG PTU w/o SLT	SLT PTU w/CIGS	4	9,752	6.6 <sup>†</sup>	(2.5-16.6)	8	27,619	2.8 <sup>†</sup>	(1.3-5.7)	18	103,133	5.2	(3.2-8.3)
40	SLT PTU w/CIGS	CIG PTU w/o SLT	SLT PTU w/o CIGS	0	N/A	N/A	N/A	0	N/A	N/A	N/A	1	8,308	0.4 <sup>†</sup>	(0.1-2.8)
41	SLT PTU w/CIGS	CIG PTU w/o SLT	CIG PTU w/o SLT	6	15,287	10.4 <sup>†</sup>	(4.7-21.3)	27	91,409	9.2	(6.2-13.3)	22	112,218	5.6	(3.5-8.8)
42	SLT PTU w/CIGS	CIG PTU w/o SLT	All Other	0	N/A	N/A	N/A	6	23,472	2.4 <sup>†</sup>	(0.9-5.9)	0	N/A	N/A	N/A
43	SLT PTU w/CIGS	All Other	No Tobacco	1	2,475	1.7 <sup>†</sup>	(0.2-12.4)	3	10,085	1.0 <sup>†</sup>	(0.3-3.2)	1	5,689	0.3 <sup>†</sup>	(0.0-2.2)
44	SLT PTU w/CIGS	All Other	Exclusive SLT	1	1,992	1.4 <sup>†</sup>	(0.2-10.5)	0	N/A	N/A	N/A	0	N/A	N/A	N/A
45	SLT PTU w/CIGS	All Other	Exclusive Cigarettes	0	N/A	N/A	N/A	0	N/A	N/A	N/A	1	6,236	0.3 <sup>†</sup>	(0.0-2.1)
46	SLT PTU w/CIGS	All Other	SLT PTU w/CIGS	0	N/A	N/A	N/A	1	4,163	0.4 <sup>†</sup>	(0.1-3.0)	0	N/A	N/A	N/A
47	SLT PTU w/CIGS	All Other	SLT PTU w/o CIGS	0	N/A	N/A	N/A	0	N/A	N/A	N/A	1	3,801	0.2 <sup>†</sup>	(0.0-1.4)
48	SLT PTU w/CIGS	All Other	CIG PTU w/o SLT	2	4,429	3.0 <sup>†</sup>	(0.7-12.5)	3	9,855	1.0 <sup>†</sup>	(0.3-3.1)	1	3,475	0.2 <sup>†</sup>	(0.0-1.3)
49	SLT PTU w/CIGS	All Other	All Other	0	N/A	N/A	N/A	2	3,981	0.4 <sup>†</sup>	(0.1-1.7)	2	12,117	0.6 <sup>†</sup>	(0.1-2.5)

## Notes:

Abbreviations: P30D = past 30-day; W1 = Wave 1; W2 = Wave 2; W3 = Wave 3; W1 = Wave 1; SLT = smokeless tobacco; P30D = past 30-day; w/ = with; CIG(S) = cigarette(s); CIs = confidence intervals; PTU = polytobacco use; w/o = without; N/A = not applicable

The analysis included youth (ages 12-17), young adult (ages 18-24), and adult 25+ (ages 25 and older) W1 P30D SLT polytobacco users w/CIGS with data at all three waves. Age was calculated based on age at W1. W3 longitudinal (all-waves) weights were used to calculate estimates.

The weighted percentages for some constructs such as discontinued tobacco and persistent use in this table may not match exactly with those presented in Table 1. This is the result of different denominators. In this table there can be no missing values on tobacco use variables at any wave. Table 1 does not require this restriction since some outcomes reflect behaviors at W3 (e.g. discontinued use by W3), regardless of missing data at Wave 2.

## For transitions between waves:

- 1) No tobacco: Defined as no use of any tobacco products within the past 30 days.
- 2) Exclusive SLT: Defined as use of only SLT within the past 30 days.
- 3) Exclusive cigarettes: Defined as use of only cigarettes within the past 30 days.
- 4) SLT PTU w/CIGS: Defined as use of SLT and cigarettes within the past 30 days and possibly one or more of the following: traditional cigars, cigarillos, filtered cigars, hookah, pipe, or electronic nicotine delivery system (ENDS\*).
- 5) SLT PTU w/o CIGS: Defined as use of SLT and one or more of the following within the past 30 days: traditional cigars, cigarillos, filtered cigars, hookah, pipe, or ENDS, but not cigarettes.
- 6) CIG PTU w/o SLT: Defined as use of cigarettes and one or more of the following within the past 30 days: traditional cigars, cigarillos, filtered cigars, hookah, pipe, or ENDS, but not SLT.
- 7) All other: Use of one or more of the following in the past 30 days: traditional cigars, cigarillos, filtered cigars, hookah, pipe, or ENDS, but without cigarettes or SLT.

\*Respondents were asked about P30D use of "e-cigarettes" at W1 and W2 and "e-products" (e-cigarettes, e-cigars, e-pipes, and e-hookah) at W3.

The logit-transformation method was used to calculate the 95% CIs.

† Estimate should be interpreted with caution because it has low statistical precision. It is based on a denominator sample size of less than 50, or the coefficient of variation of the estimate or its complement is larger than 30%.

Analyses were run on the W1, W2, and W3 Public Use Files (<https://doi.org/10.3886/ICPSR36498.v8>).

Supplemental Table 2c: Transitions in P30D Product Use at W2 (2014/15) and W3 (2015/16) Among W1 (2013/14) P30D SLT PTU w/o CIGS.

Rows	W1	W2	W3	Youth				Young Adults				Adults 25+			
				Unweighted N	Weighted N	Weighted %	95% CI	Unweighted N	Weighted N	Weighted %	95% CI	Unweighted N	Weighted N	Weighted %	95% CI
1	SLT PTU w/o CIGS	No Tobacco	No Tobacco	1	1,950	2.4 <sup>†</sup>	(0.3-16.3)	4	17,007	8.6 <sup>†</sup>	(3.1-21.8)	3	22,315	5.8 <sup>†</sup>	(1.8-17.2)
2	SLT PTU w/o CIGS	No Tobacco	Exclusive SLT	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
3	SLT PTU w/o CIGS	No Tobacco	Exclusive Cigarettes	0	N/A	N/A	N/A	0	N/A	N/A	N/A	1	4,905	1.3 <sup>†</sup>	(0.2-9.3)
4	SLT PTU w/o CIGS	No Tobacco	SLT PTU w/CIGS	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
5	SLT PTU w/o CIGS	No Tobacco	SLT PTU w/o CIGS	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
6	SLT PTU w/o CIGS	No Tobacco	CIG PTU w/o SLT	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
7	SLT PTU w/o CIGS	No Tobacco	All Other	3	8,351	10.1 <sup>†</sup>	(3.2-28.0)	1	6,225	3.1 <sup>†</sup>	(0.4-20.1)	0	N/A	N/A	N/A
8	SLT PTU w/o CIGS	Exclusive SLT	No Tobacco	0	N/A	N/A	N/A	1	4,407	2.2 <sup>†</sup>	(0.3-14.4)	4	24,099	6.3 <sup>†</sup>	(2.3-16.1)
9	SLT PTU w/o CIGS	Exclusive SLT	Exclusive SLT	1	1,478	1.8 <sup>†</sup>	(0.2-14.5)	6	20,813	10.5 <sup>†</sup>	(4.5-22.6)	16	98,715	25.7	(14.0-42.3)
10	SLT PTU w/o CIGS	Exclusive SLT	Exclusive Cigarettes	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
11	SLT PTU w/o CIGS	Exclusive SLT	SLT PTU w/CIGS	1	1,419	1.7 <sup>†</sup>	(0.2-15.0)	2	7,128	3.6 <sup>†</sup>	(0.7-15.6)	1	7,684	2.0 <sup>†</sup>	(0.2-14.3)
12	SLT PTU w/o CIGS	Exclusive SLT	SLT PTU w/o CIGS	1	2,892	3.5 <sup>†</sup>	(0.5-20.5)	3	16,318	8.2 <sup>†</sup>	(2.0-28.3)	6	44,863	11.7 <sup>†</sup>	(4.9-25.2)
13	SLT PTU w/o CIGS	Exclusive SLT	CIG PTU w/o SLT	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
14	SLT PTU w/o CIGS	Exclusive SLT	All Other	0	N/A	N/A	N/A	0	N/A	N/A	N/A	3	17,182	4.5 <sup>†</sup>	(1.4-13.7)
15	SLT PTU w/o CIGS	Exclusive Cigarettes	No Tobacco	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
16	SLT PTU w/o CIGS	Exclusive Cigarettes	Exclusive SLT	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
17	SLT PTU w/o CIGS	Exclusive Cigarettes	Exclusive Cigarettes	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
18	SLT PTU w/o CIGS	Exclusive Cigarettes	SLT PTU w/CIGS	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
19	SLT PTU w/o CIGS	Exclusive Cigarettes	SLT PTU w/o CIGS	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
20	SLT PTU w/o CIGS	Exclusive Cigarettes	CIG PTU w/o SLT	0	N/A	N/A	N/A	0	N/A	N/A	N/A	1	7,804	2.0 <sup>†</sup>	(0.3-14.1)
21	SLT PTU w/o CIGS	Exclusive Cigarettes	All Other	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
22	SLT PTU w/o CIGS	SLT PTU w/CIGS	No Tobacco	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
23	SLT PTU w/o CIGS	SLT PTU w/CIGS	Exclusive SLT	0	N/A	N/A	N/A	1	3,255	1.6 <sup>†</sup>	(0.2-11.0)	1	7,162	1.9 <sup>†</sup>	(0.2-12.9)
24	SLT PTU w/o CIGS	SLT PTU w/CIGS	Exclusive Cigarettes	0	N/A	N/A	N/A	2	8,119	4.1 <sup>†</sup>	(0.9-17.3)	1	6,534	1.7 <sup>†</sup>	(0.2-12.5)
25	SLT PTU w/o CIGS	SLT PTU w/CIGS	SLT PTU w/CIGS	3	9,806	11.9 <sup>†</sup>	(3.7-32.4)	5	18,349	9.3 <sup>†</sup>	(3.6-21.6)	0	N/A	N/A	N/A
26	SLT PTU w/o CIGS	SLT PTU w/CIGS	SLT PTU w/o CIGS	1	2,028	2.5 <sup>†</sup>	(0.3-16.8)	0	N/A	N/A	N/A	0	N/A	N/A	N/A
27	SLT PTU w/o CIGS	SLT PTU w/CIGS	CIG PTU w/o SLT	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
28	SLT PTU w/o CIGS	SLT PTU w/CIGS	All Other	1	4,163	5.0 <sup>†</sup>	(0.6-30.3)	1	3,156	1.6 <sup>†</sup>	(0.2-11.4)	0	N/A	N/A	N/A
29	SLT PTU w/o CIGS	SLT PTU w/o CIGS	No Tobacco	0	N/A	N/A	N/A	0	N/A	N/A	N/A	2	8,323	2.2 <sup>†</sup>	(0.6-8.1)
30	SLT PTU w/o CIGS	SLT PTU w/o CIGS	Exclusive SLT	2	5,466	6.6 <sup>†</sup>	(1.4-26.2)	1	2,319	1.2 <sup>†</sup>	(0.2-8.2)	5	19,782	5.2 <sup>†</sup>	(2.0-12.8)
31	SLT PTU w/o CIGS	SLT PTU w/o CIGS	Exclusive Cigarettes	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
32	SLT PTU w/o CIGS	SLT PTU w/o CIGS	SLT PTU w/CIGS	2	6,211	7.5 <sup>†</sup>	(2.0-24.8)	4	13,029	6.6 <sup>†</sup>	(2.4-16.5)	0	N/A	N/A	N/A
33	SLT PTU w/o CIGS	SLT PTU w/o CIGS	SLT PTU w/o CIGS	3	8,187	9.9 <sup>†</sup>	(2.3-34.0)	8	29,047	14.7 <sup>†</sup>	(7.4-27.0)	9	46,460	12.1	(6.7-20.9)
34	SLT PTU w/o CIGS	SLT PTU w/o CIGS	CIG PTU w/o SLT	0	N/A	N/A	N/A	0	N/A	N/A	N/A	1	2,977	0.8 <sup>†</sup>	(0.1-5.5)
35	SLT PTU w/o CIGS	SLT PTU w/o CIGS	All Other	0	N/A	N/A	N/A	4	16,743	8.5 <sup>†</sup>	(3.1-21.0)	2	6,792	1.8 <sup>†</sup>	(0.4-7.5)
36	SLT PTU w/o CIGS	CIG PTU w/o SLT	No Tobacco	0	N/A	N/A	N/A	1	3,572	1.8 <sup>†</sup>	(0.3-11.2)	0	N/A	N/A	N/A
37	SLT PTU w/o CIGS	CIG PTU w/o SLT	Exclusive SLT	1	1,389	1.7 <sup>†</sup>	(0.2-11.7)	0	N/A	N/A	N/A	0	N/A	N/A	N/A
38	SLT PTU w/o CIGS	CIG PTU w/o SLT	Exclusive Cigarettes	1	1,918	2.3 <sup>†</sup>	(0.3-14.1)	0	N/A	N/A	N/A	0	N/A	N/A	N/A
39	SLT PTU w/o CIGS	CIG PTU w/o SLT	SLT PTU w/CIGS	1	7,208	8.7 <sup>†</sup>	(1.2-42.5)	0	N/A	N/A	N/A	0	N/A	N/A	N/A
40	SLT PTU w/o CIGS	CIG PTU w/o SLT	SLT PTU w/o CIGS	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
41	SLT PTU w/o CIGS	CIG PTU w/o SLT	CIG PTU w/o SLT	2	5,506	6.7 <sup>†</sup>	(1.3-27.2)	3	8,923	4.5 <sup>†</sup>	(1.4-13.6)	0	N/A	N/A	N/A
42	SLT PTU w/o CIGS	CIG PTU w/o SLT	All Other	0	N/A	N/A	N/A	0	N/A	N/A	N/A	1	5,208	1.4 <sup>†</sup>	(0.2-9.6)
43	SLT PTU w/o CIGS	All Other	No Tobacco	1	2,490	3.0 <sup>†</sup>	(0.4-20.0)	3	14,508	7.3 <sup>†</sup>	(2.3-21.0)	4	22,678	5.9 <sup>†</sup>	(2.1-15.7)
44	SLT PTU w/o CIGS	All Other	Exclusive SLT	0	N/A	N/A	N/A	0	N/A	N/A	N/A	2	11,855	3.1 <sup>†</sup>	(0.7-13.0)
45	SLT PTU w/o CIGS	All Other	Exclusive Cigarettes	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	N/A	N/A	N/A
46	SLT PTU w/o CIGS	All Other	SLT PTU w/CIGS	1	1,908	2.3 <sup>†</sup>	(0.3-17.2)	0	N/A	N/A	N/A	0	N/A	N/A	N/A
47	SLT PTU w/o CIGS	All Other	SLT PTU w/o CIGS	0	N/A	N/A	N/A	0	N/A	N/A	N/A	1	8,892	2.3 <sup>†</sup>	(0.3-15.9)
48	SLT PTU w/o CIGS	All Other	CIG PTU w/o SLT	1	5,816	7.0 <sup>†</sup>	(0.9-39.6)	1	3,665	1.9 <sup>†</sup>	(0.2-13.5)	0	N/A	N/A	N/A
49	SLT PTU w/o CIGS	All Other	All Other	1	4,319	5.2 <sup>†</sup>	(0.7-30.6)	1	1,443	0.7 <sup>†</sup>	(0.1-5.8)	2	9,876	2.6 <sup>†</sup>	(0.6-10.4)

## Notes:

Abbreviations: P30D = past 30-day; W1 = Wave 1; W2 = Wave 2; W3 = Wave 3; W1 = Wave 1; SLT = smokeless tobacco; P30D = past 30-day; w/o = without; CIG(S) = cigarette(s); CIs = confidence intervals; PTU = polytobacco use; w/ = with; N/A = not applicable

The analysis included youth (ages 12-17), young adult (ages 18-24), and adult 25+ (ages 25 and older) W1 P30D SLT polytobacco users w/o CIGS with data at all three waves. Age was calculated based on age at W1. W3 longitudinal (all-waves) weights were used to calculate estimates.

The weighted percentages for some constructs such as discontinued tobacco and persistent use in this table may not match exactly with those presented in Table 1. This is the result of different denominators. In this table there can be no missing values on tobacco use variables at any wave. Table 1 does not require this restriction since some outcomes reflect behaviors at W3 (e.g. discontinued use by W3), regardless of missing data at Wave 2.

For transitions between waves:

- 1) No tobacco: Defined as no use of any tobacco products within the past 30 days.
- 2) Exclusive SLT: Defined as use of only SLT within the past 30 days.
- 3) Exclusive cigarettes: Defined as use of only cigarettes within the past 30 days.
- 4) SLT PTU w/CIGS: Defined as use of SLT and cigarettes within the past 30 days and possibly one or more of the following: traditional cigars, cigarillos, filtered cigars, hookah, pipe, or electronic nicotine delivery system (ENDS\*).
- 5) SLT PTU w/o CIGS: Defined as use of SLT and one or more of the following within the past 30 days: traditional cigars, cigarillos, filtered cigars, hookah, pipe, or ENDS, but not cigarettes.
- 6) CIG PTU w/o SLT: Defined as use of cigarettes and one or more of the following within the past 30 days: traditional cigars, cigarillos, filtered cigars, hookah, pipe, or ENDS, but not SLT.
- 7) All other: Use of one or more of the following in the past 30 days: traditional cigars, cigarillos, filtered cigars, hookah, pipe, or ENDS, but without cigarettes or SLT.

\*Respondents were asked about P30D use of “e-cigarettes” at W1 and W2 and “e-products” (e-cigarettes, e-cigars, e-pipes, and e-hookah) at W3.

The logit-transformation method was used to calculate the 95% CIs.

† Estimate should be interpreted with caution because it has low statistical precision. It is based on a denominator sample size of less than 50, or the coefficient of variation of the estimate or its complement is larger than 30%.

Analyses were run on the W1, W2, and W3 Public Use Files (<https://doi.org/10.3886/ICPSR36498.v8>).