

Appendix
Flavored Tobacco Product Use in Youth and Adults: Findings From the First Wave of the PATH Study (2013–2014)
Villanti et al.

Appendix Table 1. Current Product-specific Use and Current Flavored Use in the Full Sample by Age Group (12-17, 18-24, 25+); Population Assessment of Tobacco and Health, 2013-2014^a

Current tobacco use	Youth (unweighted N=13,651) ^b 12-17			Total			Adult (unweighted N=32,313; Missing=7) ^c 18-24 (n=9,112)			25+ (n=23,201)		
	Unweighted n	% ^d	95% CI	Unweighted n	% ^d	95% CI	Unweighted n	% ^d	95% CI	Unweighted n	% ^d	95% CI
Any current tobacco use ^e	1,152	8.5	(8.0, 9.1)	14,391	23.0	(22.4, 23.6)	3,572	28.8	(27.5, 30.2)	10,819	22.1	(21.5, 22.7)
Any flavored tobacco use	919	6.8	(6.3, 7.3)	7,535	11.4	(10.8, 11.9)	2,598	20.9	(19.4, 22.5)	4,937	9.9	(9.4, 10.5)
Flavored use/Current use		79.8	(77.2, 82.2)		39.5	(38.0, 40.9)		72.7	(70.8, 74.5)		44.8	(43.6, 46.1)
Exclusive cigarette use ^f	265	2.0	(1.7, 2.2)	8,679	14.2	(13.7, 14.7)	1,488	11.7	(11.0, 12.6)	7,191	14.6	(14.0, 15.1)
Mentholated cigarettes	149	1.1	(0.9, 1.3)	3,624	5.6	(5.2, 6.0)	892	6.9	(6.1, 7.8)	2,732	5.4	(5.0, 5.8)
Flavored use/Current use		56.5	(50.4, 62.4)		39.5	(38.0, 40.9)		59.0	(56.0, 61.9)		37.1	(35.6, 38.7)
Exclusive non-cigarette tobacco use ^g	515	3.9	(3.5, 4.4)	2,980	4.8	(4.5, 5.0)	1,093	9.1	(8.4, 9.9)	1,887	4.1	(3.9, 4.3)
Any flavored tobacco use	424	3.2	(2.8, 3.6)	1,849	2.8	(2.6, 3.0)	845	7.1	(6.3, 8.0)	1,004	2.1	(1.9, 2.4)
Flavored use/Current use		82.6	(78.9, 85.8)		58.7	(56.2, 61.1)		77.8	(75.1, 80.2)		52.3	(49.4, 55.3)
Poly use of cigarettes and other tobacco ^h	369	2.6	(2.4, 2.9)	2,722	4.0	(3.8, 4.2)	989	7.9	(7.3, 8.6)	1,733	3.4	(3.2, 3.6)
Any flavored tobacco use	345	2.5	(2.2, 2.7)	2,058	2.9	(2.7, 3.2)	859	6.9	(6.1, 7.7)	1,199	2.3	(2.1, 2.6)
Flavored use/Current use		93.4	(90.0, 95.7)		73.6	(71.2, 75.8)		87.0	(84.3, 89.3)		68.9	(66.1, 71.6)
Cigarettes ⁱ	634	4.6	(4.2, 5.0)	11,401	18.2	(17.7, 18.7)	2,477	19.6	(18.4, 20.8)	8,924	18.0	(17.4, 18.5)
Mentholated cigarettes ⁱ	383	2.7	(2.4, 3.1)	4,454	6.8	(6.3, 7.2)	1,201	9.2	(8.1, 10.3)	3,253	6.4	(6.0, 6.8)
Flavored use/Current use		59.5	(55.0, 63.9)		37.1	(35.8, 38.5)		46.8	(44.1, 49.6)		35.6	(34.2, 37.0)
E-cigarettes	418	3.1	(2.8, 3.5)	1,575	2.4	(2.2, 2.6)	467	3.8	(3.4, 4.3)	1,108	2.2	(2.0, 2.4)
Flavored e-cigarettes	354	2.7	(2.3, 3.0)	1,094	1.6	(1.4, 1.8)	389	3.2	(2.7, 3.7)	705	1.4	(1.2, 1.6)
Flavored use/Current use		85.3	(80.7, 89.0)		67.4	(64.4, 70.2)		83.4	(79.2, 86.9)		63.2	(60.0, 66.3)
Any cigar ^j	340	2.5	(2.2, 2.8)	2,064	3.1	(2.9, 3.2)	778	6.0	(5.5, 6.6)	1,286	2.6	(2.5, 2.8)
Any flavored cigars	245	1.8	(1.5, 2.0)	1,144	1.6	(1.4, 1.8)	508	3.9	(3.3, 4.6)	636	1.2	(1.1, 1.4)
Flavored use/Current use		71.7	(65.6, 77.1)		52.0	(49.6, 54.3)		65.1	(61.0, 69.0)		47.8	(44.6, 50.4)
Traditional cigars ^j	92	0.7	(0.6, 0.9)	890	1.5	(1.4, 1.6)	258	2.2	(1.9, 2.5)	632	1.3	(1.2, 1.5)
Flavored traditional cigars	-	-	-	329	0.5	(0.4, 0.6)	121	1.0	(0.7, 1.3)	208	0.4	(0.3, 0.5)
Flavored use/Current use					33.3	(29.8, 37.0)		44.3	(35.9, 53.1)		30.6	(27.0, 34.5)
Cigarillos ^j	293	2.1	(1.9, 2.4)	1,186	1.6	(1.5, 1.7)	586	4.4	(4.0, 4.9)	600	1.2	(1.1, 1.3)
Flavored cigarillos	217	1.6	(1.3, 1.8)	750	1.0	(0.8, 1.1)	393	3.0	(2.5, 3.5)	357	0.7	(0.5, 0.8)
Flavored use/Current use		74.1	(68.0, 79.5)		61.0	(57.5, 64.4)		68.0	(63.0, 72.7)		57.1	(52.1, 62.0)
Filtered cigars ^j	67	0.5	(0.4, 0.6)	551	0.9	(0.8, 0.9)	146	1.2	(0.9, 1.5)	405	0.8	(0.7, 0.9)
Flavored filtered cigars	-	-	-	341	0.5	(0.4, 0.6)	114	1.0	(0.6, 1.3)	227	0.4	(0.4, 0.5)
Flavored use/Current use					60.4	(56.2, 64.4)		79.3	(68.6, 87.0)		56.2	(51.7, 60.6)
Pipe tobacco	-	-	-	318	0.5	(0.4, 0.6)	101	0.8	(0.7, 1.0)	217	0.4	(0.4, 0.5)
Flavored pipe tobacco	-	-	-	119	0.2	(0.1, 0.2)	40	0.3	(0.2, 0.5)	79	0.1	(0.1, 0.2)
Flavored use/Current use					35.7	(29.6, 42.3)		36.6	(28.1, 46.1)		35.4	(27.7, 44.0)

Appendix
Flavored Tobacco Product Use in Youth and Adults: Findings From the First Wave of the PATH Study (2013–2014)
Villanti et al.

Hookah tobacco	226	1.7	(1.4, 2.0)	1,097	1.4	(1.3, 1.5)	813	6.9	(6.3, 7.6)	284	0.6	(0.5, 0.7)
Flavored hookah tobacco	198	1.5	(1.2, 1.8)	831	1.0	(0.9, 1.2)	625	5.3	(4.6, 6.1)	206	0.4	(0.3, 0.5)
Flavored use/Current use		89.0	(84.1, 92.5)		74.1	(71.0, 77.0)		77.1	(73.9, 80.0)		68.7	(62.3, 74.4)
Smokeless tobacco	180	1.4	(1.2, 1.7)	1,597	2.7	(2.5, 2.9)	451	3.7	(3.3, 4.2)	1,146	2.5	(2.3, 2.7)
Flavored smokeless tobacco	146	1.1	(1.0, 1.4)	839	1.4	(1.2, 1.6)	275	2.3	(1.8, 2.8)	564	1.2	(1.0, 1.4)
Flavored use/Current use		81.0	(75.1, 85.7)		51.1	(47.4, 54.7)		61.7	(55.4, 67.6)		48.7	(44.9, 52.5)
Snus	64	0.5	(0.4, 0.6)	276	0.4	(0.4, 0.5)	111	1.0	(0.8, 1.2)	165	0.4	(0.3, 0.4)
Flavored snus	54	0.4	(0.3, 0.5)	228	0.3	(0.3, 0.4)	94	0.8	(0.6, 1.1)	134	0.3	(0.2, 0.4)
Flavored use/Current use		80.4	(68.6, 88.6)		80.8	(75.7, 85.1)		83.0	(73.4, 89.5)		79.9	(73.2, 85.3)
Dissolvable tobacco*	-	-	-	-	-	-	-	-	-	-	-	-
Flavored dissolvable tobacco*	-	-	-	-	-	-	-	-	-	-	-	-
Flavored use/Current use												
Bidis	-	-	-		N/A	N/A		N/A	N/A		N/A	N/A
Flavored bidis	-	-	-		N/A	N/A		N/A	N/A		N/A	N/A
Flavored use/Current use												
Kreteks	-	-	-		N/A	N/A		N/A	N/A		N/A	N/A
Flavored kreteks	-	-	-		N/A	N/A		N/A	N/A		N/A	N/A
Flavored use/Current use												

Notes: - Suppressed due to $n < 50$ or coefficient of variation $> 30\%$.

^aPercentages are weighted to represent the U.S. population and CIs are estimated using the balanced repeated replication (BRR) method.

^bFor youth, current use is defined as past 30-day use. Individuals who reported “don’t know” or refused to answer any part of the definition of current use were excluded from the denominator.

^cFor adults, current use some days or every day and either (1): 100 lifetime units (for cigarettes); (2): or weekly or monthly use and ever fairly regular use (for hookah); (3): ever fairly regular use (for all other products). Individuals who reported “don’t know” or refused to answer any part of the definition of current use were excluded from the denominator. Adult respondents with missing ages (N=7) were excluded from Table 1.

^dColumn percentages presented.

^eAny current tobacco use is defined as reporting current use of any tobacco product using the “current use” definitions outlined in footnotes b and c above.

^fExclusive cigarette use is defined as current use of cigarettes and no current use of other tobacco products.

^gExclusive non-cigarette tobacco use is defined as no current use of cigarettes and current use of any other tobacco product.

^hPoly use of cigarettes and other tobacco is defined as current use of cigarettes and at least one other tobacco product.

ⁱManufactured cigarette or roll-your-own.

^jRespondents who indicated current use of a cigar were asked about use of traditional cigars, cigarillos, and filtered cigars separately. Respondents indicating use of two or more types of cigars (traditional, cigarillo, or filtered cigars) were asked about flavor use of each type of cigar separately. Any respondent who reported currently using 2 or more types of cigars had their responses aggregated, so that

Appendix
Flavored Tobacco Product Use in Youth and Adults: Findings From the First Wave of the PATH Study (2013–2014)
Villanti et al.

if any of the current traditional, cigarillo, or filtered cigars they use are flavored, they were included in the estimate of current cigar users reporting current flavored use.

N/A, not applicable

Appendix
Flavored Tobacco Product Use in Youth and Adults: Findings From the First Wave of the PATH Study (2013–2014)
Villanti et al.

Appendix Table 2. Current Product-specific Use and Current Flavored Use in the Full Adult Sample by Age Group; Population Assessment of Tobacco and Health, 2013-2014^a

Current tobacco use	Adult sample (unweighted N=32,313; Missing=7) ^b													
	Overall		18-24 (13.0% of sample)		25-29 (8.7% of sample)		30-34 (9.0% of sample)		35-44 (16.5% of sample)		45-64 (34.5% of sample)		65+ (18.2% of sample)	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Any current tobacco use ^c	23.0	(22.4, 23.6)	28.8	(27.5, 30.2)	32.8	(30.9, 34.7)	28.8	(27.2, 30.6)	25.7	(24.4, 27.0)	22.3	(21.4, 23.1)	10.0	(9.3, 10.8)
Any flavored tobacco use	11.4	(10.8, 11.9)	20.9	(19.4, 22.5)	20.8	(18.7, 22.9)	16.1	(14.4, 18.0)	11.3	(10.2, 12.5)	8.6	(7.9, 9.3)	2.8	(2.4, 3.4)
Exclusive cigarette use	14.2	(13.7, 14.7)	11.7	(11.0, 12.6)	18.6	(17.3, 20.0)	18.0	(16.7, 19.5)	16.4	(15.4, 17.5)	15.8	(15.1, 16.6)	6.8	(6.2, 7.5)
Mentholated cigarettes	5.6	(5.2, 6.0)	6.9	(6.1, 7.8)	10.0	(8.7, 11.5)	8.1	(6.9, 9.4)	5.7	(5.0, 6.5)	5.3	(4.8, 5.9)	1.8	(1.4, 2.2)
Exclusive non-cigarette tobacco use	4.8	(4.5, 5.0)	9.1	(8.4, 9.9)	6.3	(5.5, 7.2)	5.5	(4.9, 6.2)	4.6	(4.1, 5.2)	3.8	(3.5, 4.2)	2.4	(2.1, 2.7)
Any flavored tobacco use	2.8	(2.6, 3.0)	7.1	(6.3, 8.0)	4.2	(3.3, 5.2)	4.0	(3.2, 4.8)	2.4	(1.9, 3.0)	1.7	(1.5, 2.1)	0.8	(0.5, 1.1)
Poly use of cigarettes and other tobacco	4.0	(3.8, 4.2)	7.9	(7.3, 8.6)	7.9	(7.0, 8.9)	5.3	(4.7, 6.0)	4.7	(4.2, 5.3)	2.6	(2.4, 2.9)	0.8	(0.6, 1.0)
Any flavored tobacco use	2.9	(2.7, 3.2)	6.9	(6.1, 7.7)	6.5	(5.4, 7.7)	4.1	(3.4, 4.9)	3.3	(2.7, 4.0)	1.5	(1.2, 1.8)	0.3	(0.2, 0.6)
Cigarettes ^d	18.2	(17.7, 18.7)	19.6	(18.4, 20.8)	26.4	(24.9, 28.1)	23.3	(21.7, 24.9)	21.1	(19.9, 22.3)	18.4	(17.7, 19.2)	7.6	(7.0, 8.3)
Mentholated cigarettes ^d	6.8	(6.3, 7.2)	9.2	(8.1, 10.3)	12.4	(10.9, 14.0)	10.0	(8.6, 11.5)	7.0	(6.1, 8.0)	6.0	(5.4, 6.6)	1.9	(1.5, 2.4)
E-cigarettes	2.4	(2.2, 2.6)	3.8	(3.4, 4.3)	3.8	(3.3, 4.4)	3.8	(3.2, 4.6)	2.7	(2.3, 3.2)	1.9	(1.7, 2.1)	0.7	(0.5, 1.0)
Flavored e-cigarettes	1.6	(1.4, 1.8)	3.2	(2.7, 3.7)	2.9	(2.3, 3.6)	2.9	(2.2, 3.7)	1.6	(1.2, 2.0)	1.1	(0.8, 1.3)	-	-
Any cigar ^e	3.1	(2.9, 3.2)	6.0	(5.5, 6.6)	4.8	(4.0, 5.7)	3.6	(3.1, 4.2)	3.3	(2.9, 3.8)	2.4	(2.2, 2.6)	1.0	(0.8, 1.3)
Any flavored cigars	1.6	(1.4, 1.8)	3.9	(3.3, 4.6)	2.7	(2.0, 3.6)	2.0	(1.4, 2.6)	1.7	(1.3, 2.1)	1.1	(0.9, 1.3)	-	-
Traditional cigars	1.5	(1.4, 1.6)	2.2	(1.9, 2.5)	2.2	(1.7, 2.7)	1.9	(1.6, 2.3)	1.6	(1.4, 2.0)	1.3	(1.1, 1.5)	0.6	(0.4, 0.8)
Flavored traditional cigars	0.5	(0.4, 0.6)	1.0	(0.7, 1.3)	0.8	(0.5, 1.2)	0.8	(0.5, 1.2)	0.5	(0.3, 0.8)	0.4	(0.2, 0.5)	0.1	(0.0, 0.2)
Cigarillos	1.6	(1.5, 1.7)	4.4	(4.0, 4.9)	3.1	(2.5, 3.8)	2.1	(1.7, 2.6)	1.5	(1.2, 1.8)	0.8	(0.7, 1.0)	-	-
Flavored cigarillos	1.0	(0.8, 1.1)	3.0	(2.5, 3.5)	1.8	(1.3, 2.5)	1.3	(0.9, 1.8)	0.8	(0.6, 1.2)	0.4	(0.3, 0.6)	-	-
Filtered cigars	0.9	(0.8, 0.9)	1.2	(0.9, 1.5)	-	-	-	-	0.9	(0.7, 1.2)	1.0	(0.9, 1.2)	-	-
Flavored filtered cigars	0.5	(0.4, 0.6)	1.0	(0.6, 1.3)	-	-	-	-	0.5	(0.4, 0.9)	0.5	(0.4, 0.7)	-	-
Pipe tobacco	0.5	(0.4, 0.6)	0.8	(0.7, 1.0)	-	-	-	-	-	-	0.4	(0.3, 0.5)	-	-
Flavored pipe tobacco	0.2	(0.1, 0.2)	0.3	(0.2, 0.5)	-	-	-	-	-	-	-	-	-	-
Hookah tobacco	1.4	(1.3, 1.5)	6.9	(6.3, 7.6)	3.4	(2.8, 4.0)	1.0	(0.8, 1.4)	-	-	-	-	-	-
Flavored hookah tobacco	1.0	(0.9, 1.2)	5.3	(4.6, 6.1)	2.3	(2.0, 2.1)	-	-	-	-	-	-	-	-
Smokeless tobacco	2.7	(2.5, 2.9)	3.7	(3.3, 4.2)	3.9	(3.3, 4.7)	3.3	(2.8, 3.8)	3.5	(3.0, 4.0)	2.1	(1.8, 2.4)	1.3	(1.1, 1.5)
Flavored smokeless tobacco	1.4	(1.2, 1.6)	2.3	(1.8, 2.8)	2.3	(1.7, 3.1)	2.0	(1.4, 2.7)	1.8	(1.3, 2.3)	0.9	(0.7, 1.1)	0.4	(0.3, 0.7)
Snus	0.4	(0.4, 0.5)	1.0	(0.8, 1.2)	-	-	-	-	0.6	(0.5, 0.8)	0.2	(0.2, 0.3)	-	-
Flavored snus	0.3	(0.3, 0.4)	0.8	(0.6, 1.1)	-	-	-	-	-	-	0.1	(0.1, 0.2)	-	-
Dissolvable tobacco*	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix
Flavored Tobacco Product Use in Youth and Adults: Findings From the First Wave of the PATH Study (2013–2014)
Villanti et al.

Flavored dissolvable
tobacco*

Notes: - Suppressed due to $n < 50$ or coefficient of variation $> 30\%$.

^aPercentages are weighted to represent the U.S. adult population and CIs are estimated using the balanced repeated replication (BRR) method.

^bFor adults, current use some days or every day and either (1): 100 lifetime units (for cigarettes); (2): or weekly or monthly use and ever fairly regular use (for hookah); (3): ever fairly regular use (for all other products). Individuals who reported “don’t know” or refused to answer any part of the definition of current use were included in the denominator, but not classified as current users.

^cColumn percentages presented.

^dManufactured cigarette or roll-your-own.

^eRespondents who indicated current use of a cigar were asked about use of traditional cigars, cigarillos, and filtered cigars separately. Respondents indicating use of two or more types of cigars (traditional, cigarillo, or filtered cigars) were asked about flavor use of each type of cigar separately. Any respondent who reported currently using two or more types of cigars had their responses aggregated, so that if any of the current traditional, cigarillo, or filtered cigars they use are flavored, they were included in the estimate of current cigar users reporting current flavored use.

Appendix
Flavored Tobacco Product Use in Youth and Adults: Findings From the First Wave of the PATH Study (2013–2014)
Villanti et al.

Appendix Table 3. Reasons for Product Use by Product and Age Group (12-17, 18-24, 25+) Among Current Tobacco Users^a; Population Assessment of Tobacco and Health, 2013-2014

Product^{b,c}	Youth (ages 12-17)	Young adults (ages 18-24)	Adults (ages 25+)
Cigars	N=92 1. I like socializing while using them (67%) 2. Comes in flavors I like (65%) 3. Affordability (52%) 4. Less harmful to me than cigs (43%) 5. People in the media use them (39%)	N=258 1. I like socializing while using them (77%) 2. Comes in flavors I like (73%) 3. Affordability (47%) 4. Less harmful to me than cigs (27%) 5. People who are important to me use them (25%)	N=632 1. I like socializing while using them (67%) 2. Comes in flavors I like (54%) 3. Affordability (45%) 4. Less harmful to me than cigs (29%) 5. Feels like smoking a cig (17%)
Filtered cigars	N=67 1. Comes in flavors I like (73%) 2. Affordability (60%) 3. I like socializing while using them (47%) 4. The product doesn't smell (41% [^]) 5. People who are important to me use them (33%)	N=146 1. Comes in flavors I like (82%) 2. Affordability (67%) 3. I like socializing while using them (62%) 4. Feels like smoking a cig (45%) 5. People who are important to me use them (23%)	N=405 1. Affordability (83%) 2. Comes in flavors I like (67%) 3. Feels like smoking a cig (54%) 4. I like socializing while using them (47%) 5. Less harmful to me than cigs (30%)
Cigarillos	N=293 1. Comes in flavors I like (73%) 2. Affordability (58%) 3. I like socializing while using them (54%) 4. People in the media use them (27%) 5. People who are important to me use them (25%)	N=586 1. Comes in flavors I like (74%) 2. Affordability (71%) 3. I like socializing while using them (63%) 4. Feels like smoking a cig (23% [^]) 5. Less harmful to me than cigs (23% [^])	N=600 1. Affordability (72%) 2. Comes in flavors I like (71%) 3. I like socializing while using them (59%) 4. Feels like smoking a cig (27%) 5. Less harmful to me than cigs (25%)
E-cigarettes	N=418	N=467	N=1,108

Appendix
Flavored Tobacco Product Use in Youth and Adults: Findings From the First Wave of the PATH Study (2013–2014)
Villanti et al.

	<p>1. Comes in flavors I like (81%)</p> <p>2. Less harmful to me than cigs (79%)</p> <p>3. Less harmful to other people than cigs (78%)</p> <p>4. Using them helps people quit smoking (60%)</p> <p>5. Can use where you can't smoke cigs (59%)</p>	<p>1. Less harmful to me than cigs (89%)</p> <p>2. Less harmful to other people than cigs (88%)</p> <p>3. Can use where you can't smoke cigs (86%)</p> <p>4. Comes in flavors I like (83%)</p> <p>5. The product doesn't smell (79%)</p>	<p>1. Less harmful to me than cigs (90%^)</p> <p>2. Less harmful to other people than cigs (90%^)</p> <p>3. Can use where you can't smoke cigs (85%)</p> <p>4. Using them helps people quit smoking (83%)</p> <p>5. The product doesn't smell (83%^)</p>
Hookah	<p>N=226</p> <p>1. I like socializing while using them (80%)</p> <p>2. Comes in flavors I like (79%)</p> <p>3. Less harmful to me than cigs (61%)</p> <p>4. Affordability (44%)</p> <p>5. People who are important to me use them (36%)</p>	<p>N=813</p> <p>1. I like socializing while using them (95%)</p> <p>2. Comes in flavors I like (91%)</p> <p>3. Affordability (54%)</p> <p>4. Less harmful to me than cigs (45%)</p> <p>5. People who are important to me use them (34%)</p>	<p>N=284</p> <p>1. I like socializing while using them (91%)</p> <p>2. Comes in flavors I like (88%)</p> <p>3. Less harmful to me than cigs (56%)</p> <p>4. Affordability (49%)</p> <p>5. Can smoke where you can't smoke cigs (40%)</p>
Pipe	-	<p>N=101</p> <p>1. Comes in flavors I like (73%)</p> <p>2. I like socializing while using them (66%)</p> <p>3. Affordability (64%)</p> <p>4. Less harmful to me than cigs (32%)</p> <p>5. People who are important to me use them (26%)</p>	<p>N=217</p> <p>1. Comes in flavors I like (76%)</p> <p>2. Affordability (64%)</p> <p>3. I like socializing while using them (49%)</p> <p>4. Less harmful to me than cigs (38%)</p> <p>5. Using them helps people quit smoking (24%)</p>
Smokeless tobacco	N=180	N=451	N=1,146

Appendix
Flavored Tobacco Product Use in Youth and Adults: Findings From the First Wave of the PATH Study (2013–2014)
Villanti et al.

	1. Can use where you can't smoke cigs (70%) 2. Comes in flavors I like (69%) 3. Less harmful to other people than cigs (68%) 4. Affordability (61%) 5. Less harmful to me than cigs (51%)	1. Can use where you can't smoke cigs (84%) 2. Comes in flavors I like (75%) 3. Affordability (63%) 4. Less harmful to other people than cigs (58%) 5. It doesn't bother non-tobacco users (34%)	1. Can use where you can't smoke cigs (77%) 2. Comes in flavors I like (65%) 3. Less harmful to other people than cigs (62%) 4. Affordability (47%) 5. The product doesn't smell (40%)
Snus	N=64	N=111	N=165
	1. No one can tell when I am using it (72%) 2. Can use where you can't smoke cigs (71%) 3. Comes in flavors I like (67%) 4. Less harmful to other people than cigs (51%) 5. It doesn't bother non-tobacco users (50%)	1. Comes in flavors I like (86%) 2. Can use where you can't smoke cigs (85%) 3. No one can tell when I am using it (68%) 4. Less harmful to other people than cigs (66%) 5. Affordability (63%)	1. Can use where you can't smoke cigs (84%) 2. Comes in flavors I like (82%) 3. No one can tell when I am using it (66%) 4. Less harmful to other people than cigs (56%) 5. Affordability (53%)

- Suppressed due to n<50 or coefficient of variation >30%.

^Denotes ties in reasons used within a product and age group.

^aSample sizes reflected unweighted number of product users; Percentages are weighted to represent the U.S. adult population and CIs are estimated using the balanced repeated replication (BRR) method.

^bReasons for use were not assessed among current cigarette smokers.

^cReasons for use of bidis, kreteks, and dissolvable tobacco products not reported due to low sample size (<50).

Appendix
Flavored Tobacco Product Use in Youth and Adults: Findings From the First Wave of the PATH Study (2013–2014)
Villanti et al.

Appendix Table 4. Reasons for Flavored Tobacco Use and Association of Reason With Current Flavored Tobacco Product Use Among Current Tobacco Users, by Product and Age Group; Population Assessment of Tobacco and Health, 2013-2014^a

“Product comes in flavors that I like” ^d	Age 12-17 ^b				Age 18-24 ^c				Age 25 and older ^c			
	Total	95% CI	Current flavored product-specific use vs. no		Total	95% CI	Current flavored product-specific use vs. no		Total	95% CI	Current flavored product-specific use vs. no	
	(%) ^e	(%)	APR ^f	(95% CI)	(%) ^e	(%)	APR ^g	(95% CI)	(%) ^e	(%)	APR ^g	(95% CI)
Overall	79.2	(76.4, 81.7)	1.43	(1.26, 1.62)	88.6	(86.93, 90.24)	1.67	(1.43, 1.95)	71.2	(69.45, 73.05)	2.60	(2.33, 2.90)
E-cigarette	81.5	(77.6, 84.8)	1.35	(1.11, 1.64)	82.6	(78.41, 86.26)	1.56	(1.19, 2.04)	68.6	(65.78, 71.32)	2.12	(1.76, 2.55)
Pipe	-	-	-	-	73.2	(59.97, 83.32)	1.98	(0.74, 5.28)	75.9	(69.05, 81.65)	2.25	(1.05, 4.83)
Hookah	78.8	(72.9, 83.7)	1.32	(1.10, 1.59)	91.1	(88.66, 93.13)	1.38	(1.07, 1.78)	87.7	(82.66, 91.51)	3.29	(1.62, 6.69)
Any cigar	73.8	(67.9, 79.0)	1.97	(1.47, 2.65)	76.1	(72.70, 79.34)	2.00	(1.57, 2.56)	65.8	(62.72, 68.82)	3.48	(2.74, 4.41)
Cigar	65.1	(54.7, 74.2)	2.13	(0.84, 5.39)	72.9	(66.45, 78.51)	2.52	(1.44, 4.42)	54.4	(50.06, 58.67)	4.18	(2.57, 6.83)
Cigarillo	73.2	(67.2, 78.5)	1.62	(1.27, 2.07)	73.9	(69.95, 77.61)	1.82	(1.43, 2.32)	70.7	(66.50, 74.66)	2.86	(2.23, 3.68)
Filtered cigar	73.4	(62.6, 82.0)	2.00	(1.05, 3.80)	82.1	(73.06, 88.61)	1.52	(0.95, 2.45)	67.4	(63.02, 71.55)	3.60	(2.38, 5.44)
Snus	67.2	(54.9, 77.4)	1.96	(1.19, 3.21)	85.5	(78.00, 90.86)	1.26	(0.77, 2.07)	82.1	(75.14, 87.49)	1.52	(1.05, 2.20)
Smokeless	69.3	(62.3, 75.6)	1.3	(1.04, 1.63)	74.7	(70.45, 78.61)	1.53	(1.24, 1.90)	64.6	(61.66, 67.60)	2.10	(1.76, 2.50)
Dissolvable tobacco	-	-	-	-	-	-	-	-	-	-	-	-
Bidis	-	-	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kreteks	-	-	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Appendix
Flavored Tobacco Product Use in Youth and Adults: Findings From the First Wave of the PATH Study (2013–2014)
Villanti et al.

Flavored product easier to use than unflavored product ^b	Total	95% CI	Current flavored product-specific use vs. no use vs. no	
	(%) _e	(%)	APR _f	(95% CI)
Overall	72.8	(70.3, 75.2)	1.09	(1.00, 1.19)
Cigarette	27.4	(24.2, 30.8)	1.27	(1.11, 1.44)
E-cigarette	54.8	(49.5, 60.0)	1.13	(1.03, 1.23)
Pipe	-	-	-	-
Hookah	56.1	(49.2, 62.7)	1.03	(0.93, 1.14)
Any cigar	39.9	(34.2, 46.0)	1.32	(1.15, 1.51)
Cigar	29.3	(19.3, 41.7)	1.09	(0.64, 1.86)
Cigarillo	35.1	(29.3, 41.4)	1.31	(1.14, 1.50)
Filtered cigar	38.5	(27.2, 51.3)	1.36	(1.00, 1.84)
Smokeless	45.1	(38.6, 51.7)	1.03	(0.89, 1.20)
Dissolvable tobacco	-	-	-	-
Bidis	-	-	-	-
Kreteks	-	-	-	-

- Suppressed due to n<50 or coefficient of variation >30%.

^aPercentages are weighted to represent the U.S. population and CIs are estimated using the balanced repeated replication (BRR) method.

^bFor youth, current use is defined as past 30-day use. Individuals who reported “don’t know” or refused to answer any part of the definition of current use were excluded from the denominator.

Appendix
Flavored Tobacco Product Use in Youth and Adults: Findings From the First Wave of the PATH Study (2013–2014)
Villanti et al.

^cFor adults, current use some days or every day and either (1): 100 lifetime units (for cigarettes); (2): or weekly or monthly use and ever fairly regular use (for hookah); (3): ever fairly regular use (for all other products). Individuals who reported “don’t know” or refused to answer any part of the definition of current use were excluded from the denominator.

^dCigarettes were not included in the “product comes in flavors that I like” question.

^ePercentage of current users that endorse reason for use.

^fFor youth: aPR for current flavored pipe use adjusted for gender and Hispanic ethnicity; aPR for current flavored cigar use adjusted for gender, Hispanic ethnicity, and education; aPRs for current flavored bidi use (n=6) and current flavored kretek use (n=10) did not adjust for any demographics; aPR for all other products adjusted for gender, race, Hispanic ethnicity, and education.

^gFor adult: aPR for current flavored pipe use among age 25+ sample adjusted for gender, Hispanic ethnicity, and income; aPR for current flavored any cigar use and cigar use adjusted for gender and Hispanic ethnicity; aPR for all other products adjusted for gender, race, Hispanic ethnicity, income, and education.

^hSnus was not included in the “flavored product easier to use than unflavored” question.

APR, adjusted prevalence ratio; N/A not applicable

Appendix
Flavored Tobacco Product Use in Youth and Adults: Findings From the First Wave of the PATH Study (2013–2014)
Villanti et al.

Appendix Table 5. Adjusted Prevalence Ratios for Current Flavored Use Among Current Adult Tobacco Users, by Use Group; Population Assessment of Tobacco and Health, 2013-2014^a

Correlates	Exclusive cigarette smokers ^b (62%)		Exclusive non-cigarette tobacco users (21%)		Poly users of cigarettes and other tobacco (17%)	
	Unweighted N=7,542		Unweighted N=2,585		Unweighted N=2,436	
	APR	95% CI	APR	95% CI	APR	95% CI
Age						
18-24	1.30	(1.21, 1.39)	1.11	(1.04, 1.19)	1.14	(1.08, 1.19)
25+	Ref		Ref		Ref	
Gender						
Male	Ref		Ref		Ref	
Female	1.14	(1.08, 1.20)	1.27	(1.19, 1.36)	1.09	(1.02, 1.15)
Race						
White	Ref		Ref		Ref	
Black/African American	2.17	(2.03, 2.31)	1.06	(0.97, 1.16)	1.23	(1.16, 1.30)
American Indian/Alaskan Native	1.41	(1.19, 1.68)	0.89	(0.67, 1.18)	1.08	(0.90, 1.29)
Asian	1.08	(0.85, 1.36)	1.20	(1.01, 1.42)	1.21	(1.01, 1.45)
Native Hawaiian/Pacific Islander	1.54	(1.22, 1.96)	1.05	(0.87, 1.28)	1.10	(0.93, 1.30)
2+ races	1.22	(1.08, 1.38)	1.04	(0.91, 1.19)	1.03	(0.94, 1.12)
Hispanic						
No	Ref		Ref		Ref	
Yes	1.28	(1.17, 1.39)	1.11	(1.02, 1.21)	1.14	(1.07, 1.21)
Education						
<HS	1.09	(0.94, 1.26)	1.01	(0.87, 1.18)	0.96	(0.86, 1.06)
GED	1.12	(0.96, 1.30)	1.05	(0.90, 1.23)	0.99	(0.87, 1.11)
HS diploma	1.18	(1.03, 1.35)	1.10	(0.97, 1.25)	1.03	(0.94, 1.13)
Some college	1.22	(1.08, 1.37)	1.08	(0.97, 1.21)	1.03	(0.94, 1.13)

Appendix
Flavored Tobacco Product Use in Youth and Adults: Findings From the First Wave of the PATH Study (2013–2014)
Villanti et al.

College or greater	Ref		Ref		Ref	
Annual household income						
<\$15,000	1.08	(1.00, 1.17)	0.98	(0.89, 1.08)	0.93	(0.87, 1.00)
\$15,000 up to \$34,999	1.07	(0.98, 1.17)	0.94	(0.84, 1.05)	0.98	(0.91, 1.05)
\$35,000 up to \$74,999	Ref		Ref		Ref	
\$75,000+	0.96	(0.86, 1.08)	0.87	(0.79, 0.95)	0.95	(0.86, 1.05)
Number of tobacco products currently used	-	-	1.16	(1.11, 1.21)	1.09	(1.06, 1.12)
First tobacco use was flavored						
No	Ref		Ref		Ref	
Yes	2.10	(1.95, 2.28)	1.84	(1.69, 2.00)	1.44	(1.33, 1.55)
Age at tobacco trial						
<18	Ref		Ref		Ref	
18-24	1.06	(0.91, 1.24)	1.13	(0.89, 1.45)	0.88	(0.71, 1.09)
25+	1.04	(0.89, 1.21)	1.13	(0.87, 1.46)	0.90	(0.72, 1.12)
Past 30-day alcohol use						
No	Ref		Ref		Ref	
Yes	1.04	(0.98, 1.10)	1.01	(0.94, 1.09)	0.97	(0.92, 1.03)
Past 30-day marijuana use						
No	Ref		Ref		Ref	
Yes	1.00	(0.93, 1.07)	0.97	(0.90, 1.04)	1.02	(0.97, 1.07)
Substance use scale						
Low	Ref		Ref		Ref	
Moderate	1.03	(0.95, 1.11)	1.06	(0.97, 1.15)	1.05	(0.99, 1.12)
High	1.07	(0.97, 1.17)	0.99	(0.90, 1.10)	1.01	(0.94, 1.10)
Internalizing scale						
Low	Ref		Ref		Ref	
Moderate	1.00	(0.94, 1.07)	1.01	(0.92, 1.10)	1.02	(0.95, 1.09)
High	1.03	(0.94, 1.12)	1.06	(0.96, 1.18)	1.00	(0.92, 1.08)

Appendix
Flavored Tobacco Product Use in Youth and Adults: Findings From the First Wave of the PATH Study (2013–2014)
Villanti et al.

Externalizing scale						
Low	Ref		Ref		Ref	
Moderate	1.00	(0.93, 1.08)	1.05	(0.97, 1.14)	0.97	(0.91, 1.04)
High	1.00	(0.92, 1.09)	1.05	(0.97, 1.14)	1.05	(0.97, 1.13)

Notes: Boldface indicates statistical significance ($p < 0.05$). Respondents with missing outcome variables or missing covariates were excluded from the respective model's analytic sample. Missingness for exclusive cigarette smokers=Age (n=1; 0.0%), race (n=18; 0.2%), education (n=64; 0.8%), annual household income (n=772; 9.1%), age at tobacco trial (n=7; 0.1%), alcohol (n=10; 0.1%), marijuana (n=76; 0.9%), substance use scale (n=258; 3.1%), internalizing scale (n=116; 1.5%), and externalizing scale (n=205; 2.5%). Missingness for exclusive non-cigarette tobacco users=Race (n=6; 0.2%), education (n=21; 0.8%), annual household income (n=269; 9.0%), alcohol (n=5; 0.2%), marijuana (n=36; 1.2%), substance use scale (n=76; 2.8%), internalizing scale (n=35; 1.2%), and externalizing scale (n=57; 2.2%). Missingness for poly-tobacco users=Race (n=8; 0.2%), education (n=15; 0.5%), annual household income (n=175; 6.3%), alcohol (n=1; 0.0%), marijuana (n=34; 1.2%), substance use scale (n=61; 2.0%), internalizing scale (n=32; 1.3%), and externalizing scale (n=53; 2.1%).

^aCIs are estimated using the balanced repeated replication (BRR) method.

^bPrevalence ratios of current menthol cigarette use among exclusive cigarette smokers.

^cMissing data on age, gender, race, and Hispanic ethnicity were logically assigned from household screener data, as described in the PATH Restricted Use File User's Guide.³²

APR, adjusted prevalence ratio