

SUPPLEMENTAL TABLE 1: Unweighted sample sizes and weighted response rates^a for the PATH Study W1 Cohort by data collection wave

Wave	Youth Interview			Adult Interview		
	Aged-up youth (N)	Total n ^a	Response Rate ^{b,c}	Aged-up adults (N)	Total n ^a	Response Rate ^{b,c}
Wave 1^d (09/12/13–12/14/14)	---	13,651	78.4%	---	32,320	74.0%
Wave 2 (10/23/14–10/30/15)	2,091	12,172	87.3%	1,915	28,362	83.2%
Wave 3 (10/19/15–10/23/16)	2,045	11,814	83.3%	1,907	28,148	78.4%
Wave 4 (12/01/16-01/03/18)	1,694	11,059	79.5%	1,900	27,757	73.5%

^aTotal n includes aged-up youth (shadow youth who turned 12 and were eligible for the youth interview) and aged-up adults (youth who turned 18 and were eligible for the adult interview). (The age range for eligible youth was 12 to 17 years; the age range for eligible adults was 18 years and older. Note this table reports response rates for all adults, while the focus population of this manuscript is young adults 18 to 24 years old.

^bW1 weighted response rates are among households with completed screeners; W2-W4 response rates are conditional on participation at W1.

^cWeighted attrition rates for W2-W4 correspond to 100 minus the weighted response rate for each interview type (i.e., youth, adult).

^dAt W1, the weighted response rate for the household screener was 54.0%. Among households screened, the overall W1 weighted response rate was 74.0% for the adult interview and 78.4% for the youth interview. Future wave weighted response rates are conditional upon W1 participation.

SUPPLEMENTAL TABLE 2: Initiation by PATH Study W4 among W1 Never Users for Different Tobacco Products

		Tobacco product	Number of users (numerator)	Weighted Estimated number of users	Estimated percent (weighted)	95% CI	
Youth	Initiation at any point between W2-W4 since W1	Any tobacco	2,385	5,955,000	32.5	31.2	33.7
		Cigarette	1,326	3,368,000	15.8	15.0	16.6
		ENDS	2,278	5,835,000	26.7	25.5	27.9
		Any cigar	1,223	3,169,000	14.4	13.6	15.2
		Pipe	244	617,000	2.6	2.3	2.9
		Hookah	1,035	2,689,000	11.8	11.1	12.5
		Any smokeless tobacco	510	1,363,000	6.0	5.4	6.6
¹ A number of W1 youth never users of a product were missing item-level data for tobacco use status at W2-W4 (n=179 any tobacco, n=14 cigarette, n=48 ENDS, n=67 any cigar, n=44 pipe tobacco, n=26 hookah, n=181 any smokeless tobacco, n=42 dissolvable tobacco). A number of W1 young adult never users of a product were missing item-level data for tobacco use status at W2-W4 (n=7 any tobacco, n<5 cigarette, n=37 ENDS, n=0 any cigar, n<5 pipe tobacco, n<5 hookah, n=12 any smokeless tobacco, n=14 dissolvable tobacco)							
Young adults	Initiation at any point between W2-W4 since W1	Any tobacco	319	2,521,000	25.9	22.7	29.3
		Cigarette	329	1,917,000	13.5	11.9	15.3
		ENDS	979	5,030,000	25.0	23.1	26.9
		Any cigar	475	2,417,000	15.0	13.5	16.8
² This table rounds weighted numbers down to the nearest thousandth.		Pipe	208	892,000	3.4	2.9	4.0
		Hookah	488	2,684,000	16.0	14.2	18.0
³ This table includes youth (12-17 years) and young adults (18-24 years) who had never used the specific product in question but may have used other products in the past.		Any smokeless tobacco	175	837,000	3.3	2.8	4.0
		Dissolvable	48	210,000	0.7	0.5	1.0
⁴ Any cigar use = respondents who had ever used any of the three types of cigars (traditional cigars, cigarillos, and filtered cigars)							
⁵ Any smokeless tobacco use = respondents who had ever used either snus pouches or other smokeless tobacco, not including dissolvable tobacco (which was asked as a separate category)							

SUPPLEMENTAL TABLE 3: Initiation by W4 stratified by never-ever any tobacco use status at W1 in the PATH Study

		Tobacco product	W1 Ever Use Any Tobacco				W1 Never Use Any Tobacco			
			Number of users (numerator)	Estimated number of users	Estimated percent	95% CI	Number of users (numerator)	Estimated number of users	Estimated percent	95% CI
Youth	Past 12-month initiation at any point between W2-W4 since W1	Any tobacco	NA				2,385	5,955,000	32.5	(31.2-33.7)
		Cigarette	277	744,000	40.5	(36.7-44.5)	1,009	2,532,000	13.5	(12.8-14.3)
		ENDS	548	1,467,000	59.1	(54.8-63.3)	1,674	4,220,000	22.6	(21.5-23.8)
		Any cigar	425	1,135,000	35.7	(32.5-39.0)	784	1,994,000	10.7	(10.0-11.5)
		Pipe	140	359,000	7.8	(6.6-9.2)	99	243,000	1.3	(1.0-1.6)
		Hookah	370	986,000	29.6	(26.9-32.4)	644	1,647,000	8.8	(8.1-9.5)
		Any smokeless tobacco	202	575,000	15.0	(12.9-17.3)	299	765,000	4.2	(3.7-4.6)
		Dissolvable	25	61,000	1.2	(0.7-2.0)	16	38,000	0.2	(0.1-0.3)
Young adults	Past 12-month initiation at any point between W2-W4 since W1	Any tobacco	NA				319	2,521,000	25.9	(22.7-29.3)
		Cigarette	194	893,000	21.1	(17.7-24.8)	131	987,000	10.1	(8.5-11.9)
		ENDS	834	3,852,000	37.4	(35.0-39.8)	143	1,154,000	11.9	(9.8-14.4)
		Any cigar	350	1,479,000	23.7	(21.1-26.6)	124	932,000	9.5	(7.8-11.5)
		Pipe	198	809,000	5.0	(4.3-5.8)	10	83,000	0.9*	(0.4-1.6)
		Hookah	338	1,525,000	22.5	(19.8-25.3)	147	1,128,000	11.5	(9.4-14.0)
		Any smokeless tobacco	157	673,000	4.5	(3.8-5.3)	18	163,000	1.7	(1.0-2.7)

		Dissolvable	45	182,000	0.9	(0.7-1.3)	3	27,000	0.3*	(0.1-0.9)
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*Relative standard error is greater than 30%.

¹This table rounds weighted numbers down to the nearest thousandth.

²Any cigar use = respondents who had ever used any of the three types of cigars (traditional cigars, cigarillos, and filtered cigars).

³Any smokeless tobacco use = respondents who had ever used either snus pouches or other smokeless tobacco, not including dissolvable tobacco (which was asked as a separate category).

⁴The age range for eligible youth was 12 to 17 years; the age range for eligible adults was 18 to 24 years.

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Supplemental Table 4: Past 12-month Initiation by W4 among W3 Never Tobacco Users, by product

	Tobacco product	Number of users (numerator)	Weighted Estimated number of users	Estimated percent (weighted)	95% CI	
Youth	Cigarette	415	959,000	4.3	3.9	4.8
	ENDS	542	1,357,000	6.6	6.0	7.3
	Any cigar	337	822,000	3.6	3.2	4.0
	Pipe tobacco	56	135,000	0.6	0.4	0.7
	Hookah	159	387,000	1.7	1.4	2.0
	Any smokeless	136	329,000	1.4	1.2	1.7
	Dissolvable	13	25,000	0.1	0.06	0.2
Young adults	Cigarette	226	842,000	5.8	5.0	6.7
	ENDS	208	561,000	4.5	4.3	4.9
	Any cigar	247	781,000	5.0	4.3	5.8
	Pipe tobacco	75	264,000	1.0	0.8	1.4
	Hookah	170	625,000	3.9	3.2	4.8
	Any smokeless	103	388,000	1.6	1.2	2.1
	Dissolvable	15	55,000	0.2	0.1	0.3

¹A number of W3 youth never users of a product were missing item-level data for tobacco use status at W4 (n=9 cigarette, n=14 ENDS, n=30 any cigar, n=16 pipe tobacco, n=11 hookah, n=34 any smokeless tobacco, n=15 for dissolvable tobacco). A number of W3 young adult never users of a product were missing item-level data for tobacco use status at W4 (n=5 cigarette, n=5 ENDS, n=5 any cigar, n<5 pipe tobacco, n<5 hookah, n=6 any smokeless tobacco, n=8 for dissolvable tobacco)

²This table rounds weighted numbers down to the nearest thousandth.

³ Any cigar use = respondents who had ever used any of the three types of cigars (traditional cigars, cigarillos, and filtered cigars)

⁴ Any smokeless tobacco use = respondents who had ever used either snus pouches or other smokeless tobacco, not including dissolvable tobacco (which was asked as a separate category)

⁵ 95% CIs for new past 12-month use are represented in the table.

⁶ This table includes youth and young adults who had never used the specific product in question but may have used other products in the past.

Like the full sample, these respondents who participated through W1-W4, provided information about tobacco use at W3, had follow-up data for tobacco use at W4, and

whose age at W4 was no more than 2 years older than that at W3 (n=10,616 youth, n=7,141 young adults). The number of youth participants in W3-W4 is slightly higher than the total number of participants in W1-W4 due to youth under the age of 12 (shadow youth) becoming eligible to answer questions at age 12 and 13 in W3.

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