

Supplemental Online Content

Wang Y, Duan Z, Weaver SR, et al. Association of e-cigarette advertising, parental influence, and peer influence with US adolescent e-cigarette use. *JAMA Netw Open*. 2022;5(9):e2233938. doi:10.1001/jamanetworkopen.2022.33938

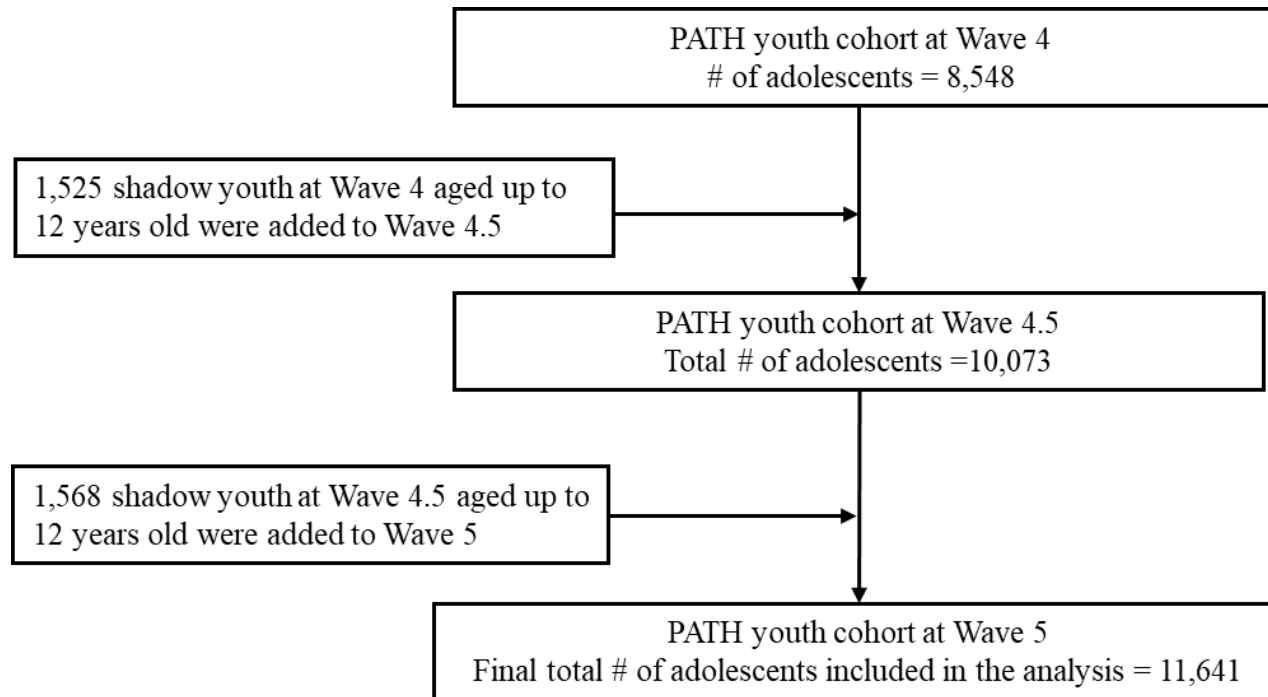
eFigure. Flowchart of Analytical Sample

eTable. Descriptive Statistics of Study Sample

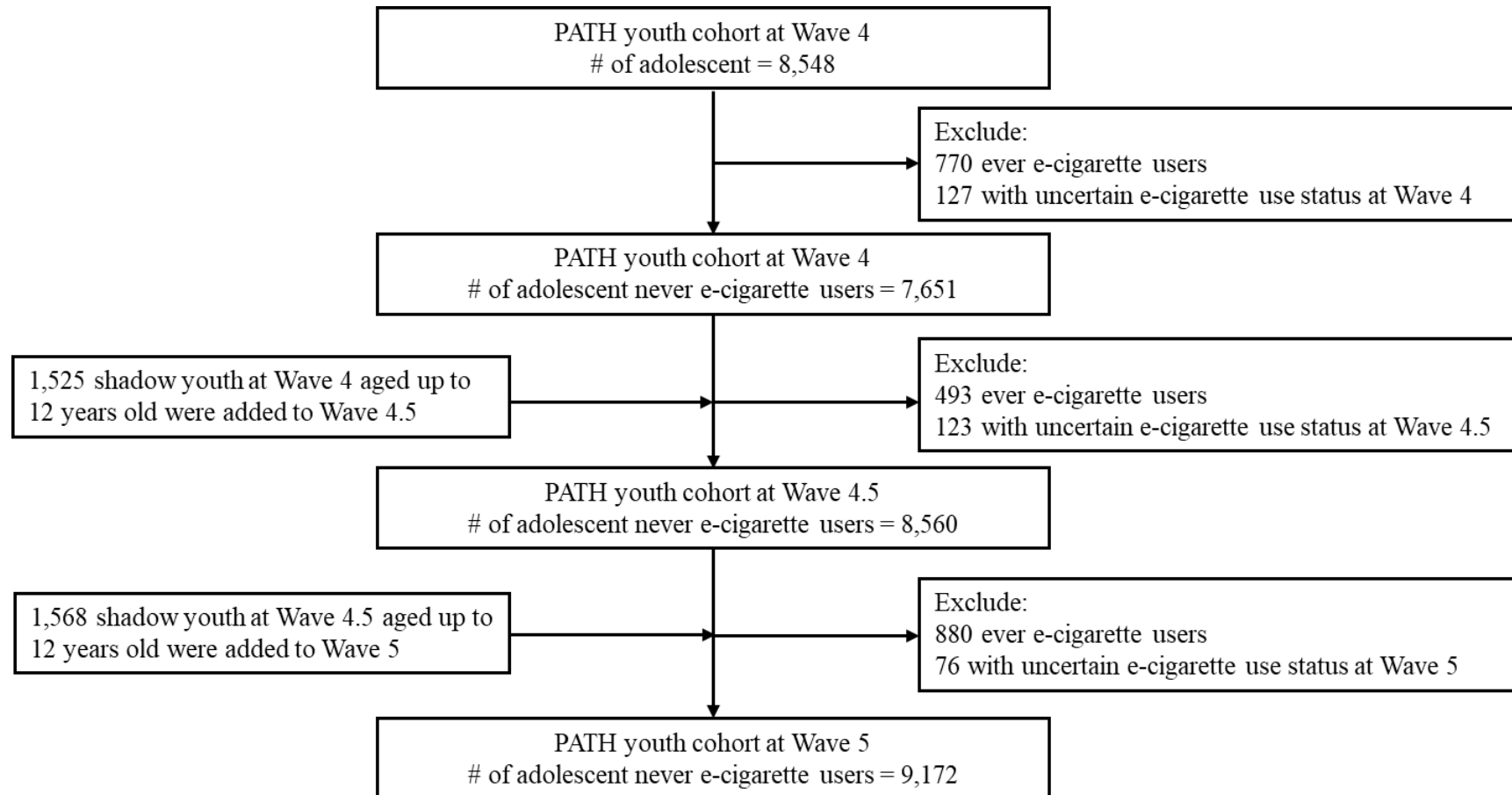
This supplemental material has been provided by the authors to give readers additional information about their work.

eFigure 1. Flowchart of Analytical Sample

eFigure 1a. Analytical sample that involves all adolescent participants across the PATH study Wave 4, 4.5 and 5



eFigure 1b. Analytical sample that involves adolescent never e-cigarette users across the PATH study Wave 4, 4.5, and 5



Note: Adolescent never e-cigarette users were used to estimate the prevalence of e-cigarette advertising exposure among this subgroup, and the contemporary association between exposures and curiosity in using e-cigarettes. Adolescent e-cigarette never users at baseline waves (Wave 4 for Wave 4-4.5 analysis, and Wave 4.5 for Wave 4.5-5 analysis) were used to examine the longitudinal associations between exposures and e-cigarette initiation at 1-year follow-up.

eTable 1. Descriptive Statistics of Study Sample

	Wave 4 (N = 8,548)		Wave 4.5 (N = 10,073)		Wave 5 (N = 11,641)	
	n (weighted %)	95% CI	n (weighted %)	95% CI	n (weighted %)	95% CI
Sex						
Boy	4,425 (51.1%)	50.0 - 52.2	5,225 (51.1%)	50.0 - 52.2	6,063 (51.1%)	50.1 - 52.1
Girl	4,090 (48.9%)	47.8 - 50.0	4,810 (48.9%)	47.8 - 50.0	5,531 (48.9%)	47.9 - 49.9
Age in years						
12	1,935 (24.9%)	23.9 - 25.9	1,523 (19.5%)	18.6 - 20.5	1,624 (17.3%)	16.5 - 18.1
13	2,179 (24.7%)	23.7 - 25.7	1,985 (20.5%)	19.7 - 21.4	1,474 (15.7%)	14.9 - 16.5
14	2,232 (24.8%)	23.8 - 25.8	2,196 (20.0%)	19.2 - 20.9	2,030 (17.5%)	16.7 - 18.2
15	2,074 (24.1%)	23.2 - 25.1	2,226 (19.8%)	19.0 - 20.7	2,181 (16.4%)	15.8 - 17.2
16	128 (1.5%)	1.3 - 1.9	2,067 (19.3%)	18.5 - 20.1	2,217 (16.6%)	15.9 - 17.3
17	-	-	76 (0.8%)	0.6 - 1.0	2,115 (16.5%)	15.8 - 17.2
Race/ethnicity						
Black	1,105 (13.0%)	12.2 - 13.8	1,245 (12.7%)	12.0 - 13.4	1,405 (12.7%)	12.1 - 13.5
Hispanic	2,515 (24.4%)	23.4 - 25.3	2,917 (24.7%)	23.8 - 25.5	3,375 (25.0%)	24.2 - 25.9
White	3,702 (52.3%)	51.2 - 53.5	4,453 (51.9%)	50.8 - 53.0	5,185 (51.4%)	50.4 - 52.5
Other ^a	817 (10.3%)	9.6 - 11.1	970 (10.7%)	10.0 - 11.4	1,111 (10.8%)	10.1 - 11.5
Parental education						
Less than high school	1,582 (15.9%)	15.1 - 16.7	1,724 (14.8%)	14.1 - 15.5	2,000 (15.2%)	14.6 - 15.9
High school graduate	1,506 (16.7%)	15.9 - 17.5	1,778 (17.0%)	16.3 - 17.9	2,040 (16.8%)	16.0 - 17.5
Some college or associate degree	2,665 (30.9%)	29.8 - 32.0	3,148 (31.0%)	30.0 - 32.0	3,617 (30.9%)	30.0 - 31.9
Bachelor's degree or above	2,727 (36.6%)	35.4 - 37.7	3,318 (37.2%)	36.1 - 38.2	3,907 (37.1%)	36.1 - 38.0
Severity of internalizing mental health problems						
Low	4,247 (49.9%)	48.7 - 51.0	4,885 (49.2%)	48.1 - 50.2	5,381 (47.3%)	46.3 - 48.3
Moderate	2,370 (28.6%)	27.6 - 29.7	2,746 (28.0%)	27.1 - 29.0	3,103 (28.0%)	27.1 - 28.9
High	1,834 (21.5%)	20.6 - 22.5	2,318 (22.8%)	21.9 - 23.7	2,840 (24.7%)	23.9 - 25.6
Severity of externalizing mental health problems						
Low	3,350 (38.9%)	37.8 - 40.0	4,108 (41.2%)	40.1 - 42.2	4,674 (41.2%)	40.3 - 42.2
Moderate	2,389 (29.3%)	28.3 - 30.4	2,707 (27.9%)	27.0 - 28.9	3,128 (27.8%)	26.9 - 28.7
High	2,648 (31.8%)	30.7 - 32.8	3,077 (30.9%)	29.9 - 31.9	3,454 (30.9%)	30.0 - 31.9
Parental e-cigarette use						
Yes	330 (3.9%)	3.5 - 4.4	353 (3.7%)	3.3 - 4.1	599 (5.2%)	4.8 - 5.6
No	8,159 (96.1%)	95.6 - 96.5	9,618 (96.3%)	95.9 - 96.7	10,970 (94.8%)	94.4 - 95.2
Friends using e-cigarettes						
None	7,165 (84.3%)	83.4 - 85.1	7,329 (73.3%)	72.4 - 74.2	7,270 (63.4%)	62.5 - 64.4

	Wave 4 (N = 8,548)		Wave 4.5 (N = 10,073)		Wave 5 (N = 11,641)	
	n (weighted %)	95% CI	n (weighted %)	95% CI	n (weighted %)	95% CI
A few	939 (11.0%)	10.3 - 11.7	1,652 (16.5%)	15.7 - 17.3	2,549 (21.8%)	21.0 - 22.6
Some	254 (3.1%)	2.7 - 3.6	609 (6.0%)	5.5 - 6.5	977 (8.2%)	7.7 - 8.8
Most	107 (1.3%)	1.1 - 1.6	332 (3.4%)	3.0 - 3.8	642 (5.4%)	5.0 - 5.9
All	30 (0.3%)	0.2 - 0.4	79 (0.8%)	0.7 - 1.1	142 (1.1%)	0.9 - 1.3
Perception of harm from e-cigarette use						
No harm	157 (1.8%)	1.5 - 2.1	213 (2.1%)	1.8 - 2.4	169 (1.4%)	1.2 - 1.6
Little harm	850 (10.2%)	9.5 - 10.9	1,020 (10.3%)	9.7 - 11.0	1,088 (9.3%)	8.7 - 9.9
Some harm	2,558 (30.3%)	29.3 - 31.4	3,112 (31.1%)	30.1 - 32.1	3,413 (29.0%)	28.1 - 29.9
A lot of harm	4,912 (57.6%)	56.5 - 58.8	5,626 (56.5%)	55.5 - 57.6	6,909 (60.3%)	59.3 - 61.3
Ever e-cigarette use						
Yes	770 (9.0%)	8.4 - 9.7	1,390 (13.5%)	12.8 - 14.2	2,393 (19.9%)	19.1 - 20.6
No	7,651 (91.0%)	90.3 - 91.6	8,560 (86.5%)	85.8 - 87.2	9,172 (80.1%)	79.4 - 80.9
Current e-cigarette use						
Yes	193 (2.4%)	2.0 - 2.7	528 (5.2%)	4.8 - 5.7	1,049 (8.7%)	8.1 - 9.2
No	8,324 (97.6%)	97.3 - 98.0	9,520 (94.8%)	94.3 - 95.2	10,549 (91.3%)	90.8 - 91.9
Current cigarette smoking						
Yes	115 (1.3%)	1.1 - 1.6	212 (2.0%)	1.7 - 2.3	288 (2.3%)	2.0 - 2.6
No	8,421 (98.7%)	98.4 - 98.9	9,844 (98.0%)	97.7 - 98.3	11,339 (97.7%)	97.4 - 98.0
Current use of other tobacco products						
Yes	94 (1.2%)	1.0 - 1.5	153 (1.5%)	1.3 - 1.8	199 (1.6%)	1.4 - 1.9
No	8,343 (98.8%)	98.5 - 99.0	9,787 (98.5%)	98.2 - 98.7	11,298 (98.4%)	98.1 - 98.6

^a Other included non-Hispanic American Indian or Alaska Native, Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese, other Asian, Native Hawaiian, Guamanian or Chamorro, Samoan, and other Pacific Islanders.