Supplemental Information

Sample Characteristics	n	Weighted N	Weighted % (95% CI)
Overall	889	1 271 000	100
Sex			
Male	415	620 000	49.2 (43.5–54.8)
Female	469	641 000	50.8 (45.2–56.5)
Grade			
Middle school	196	208 000	16.4 (11.6–21.3)
High school	688	1 058 000	83.6 (78.7–88.4)
Race/ethnicity			
NH white	578	880 000	70.1 (63.2–77)
NH Black	82	93 000	7.4 (4.5–10.4)
Hispanic	183	240 000	19.1 (14.4–23.9)
Others	36	42 000	3.3 (1.6–5.1)
Sexual minority			
Heterosexual	561	803 000	68.8 (68.8–77.1)
Gay/lesbian	33	60 000	3.3 (3.3–7.5)
Bisexual	132	176 000	12.6 (12.6–19.4)
Unsure	48	62 000	3.6 (3.6–7.7)
Frequency and duration of e-cigarette use			
Low frequency-low duration	214	279 000	22.1 (17.9–26.4)
Low frequency-high duration	194	304 000	24.1 (19.2–29.0)
High frequency-low duration	139	165 000	13.0 (10.1–15.9)
High frequency-high duration	333	515 000	40.8 (35.4-46.1)
Type of e-cigarette used in the past 30 days			
A disposable e-cigarette	476	693 000	54.7 (49.3–60.2)
An e-cigarette with prefilled pods or cartridges	260	359 000	28.3 (24.3–32.4)
An e-cigarette with a tank	68	90 000	7.1 (4.4–9.8)
I don't know the type	81	124 000	9.8 (7.1–12.6)
Multiple tobacco product use			
Sole e-cigarette	572	825 000	67.5 (62.7–72.4)
Dual/poly use	280	396 000	32.5 (27.6–37.3)
Flavor use in e-cigarette			
No	153	218 000	17.1 (13.4–20.9)
Yes	736	1 053 000	82.9 (79.1–86.6)
Perceived harmfulness of e-cigarette use			
No harm/little harm	307	414 000	36.6 (31.9-41.3)
Some harm/a lot of harm	494	717 000	63.4 (58.7–68.1)
Symptoms of nicotine dependence			
No	584	812 000	67.7 (63–72.4)
Yes	255	387 000	32.3 (27.6–37)
Tobacco use by household members			
None	311	439 000	41.3 (36.0–46.6)
Other tobacco products	210	309 000	29.1 (24.6–33.5)
E-cigarettes	231	315 000	29.6 (24.6–34.7)
Perceived peer use of e-cigarettes, median (IOR)			6.1 (4.1–8.0)

Overall	Friend Support		Internet		A Mobile App or Text Messaging		Parent Support	
	OR	Р	OR	Р	OR	P	OR	P
Sex								
Male	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Female	0.8 (0.5-1.4)	.46	1.1 (0.5–2.5)	.88	0.9 (0.4–1.8)	.78	0.3 (0.1–0.7)	.01
Grade								
Middle school	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
High school	0.5 (0.2–1.2)	0.12	0.9 (0.4-1.8)	0.69	2.9 (1.1–7.6)	.03	0.8 (0.3–2.0)	.65
Race/ethnicity								
NH white	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
NH Black	1.2 (0.3-4.1)	.81	1.1 (0.4–3.1)	.84	0.7 (0.3–1.9)	.48	1.5 (0.4–5.8)	.54
Hispanic	2.0 (1.0-4.2)	.06	1.0 (0.5–2.1)	.97	1.1 (0.5–2.5)	.88	2.7 (1.3–5.6)	.01
Others	1.2 (0.3-4.4)	.83	1.2 (0.3-4.5)	.80	1.3 (0.3–6.1)	.71	1.3 (0.3–6.2)	.70
Sexual minority								
Heterosexual	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Gay/lesbian	3.3 (1.4–7.9)	.01	3.0 (1.0–9.6)	.06	5.3 (1.8–15.5)	.003	1.7 (0.4–7.2)	.49
Bisexual	1.3 (0.6–3.0)	.51	3.3 (1–10.4)	.05	1.6 (0.6–4.3)	.31	1.6 (0.6–4.4)	.36
Unsure	0.4 (0.1–1.6)	.21	1.3 (0.3–5.2)	.75	1.1 (0.3–4.2)	.88	0.5 (0.1–3.7)	.48
Frequency and duration of e-cigarette use								
Low frequency-low duration	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Low frequency-high duration	1.2 (0.5–2.6)	.69	1.3 (0.5–2.9)	.58	7.7 (1.6–37.7)	.01	0.9 (0.2–5.0)	.91
High frequency-low duration	2.0 (0.9-4.6)	.09	1.6 (0.6–4.2)	.38	10 (2-49.8)	.006	1.1 (0.3–4.2)	.85
High frequency-high duration	1.4 (0.6–3.3)	.43	1.5 (0.5–4.2)	.47	26.9 (6.8–106)	<.0001	0.9 (0.3–2.5)	.89
Type of e-cigarette used in the past 30 days								
A disposable e-cigarette	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
An e-cigarette with prefilled pods or cartridges	1.4 (0.8–2.4)	.27	1.4 (0.6–3.2)	.37	1.0 (0.4–2.3)	.91	1.2 (0.5–3.3)	.69
An e-cigarette with a tank	0.7 (0.2–2.9)	.63	1.2 (0.2–7.7)	.82	0.5 (0.2–1.4)	.21	5.9 (1.7–20.9)	.006
I don't know the type	1.4 (0.7–3.1)	.34	1.8 (0.6–5.8)	.30	0.8 (0.2–3.1)	.75	8.6 (2.8–26.1)	.0002
Multiple tobacco product use								
Sole e-cigarette	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Dual use	1.6 (0.9–2.7)	.09	2.1 (1.0-4.4)	.05	1.2 (0.5–2.9)	.64	2.0 (0.8–4.8)	.11
Flavor use in e-cigarette								
No	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Yes	1.7 (0.9–3.3)	.13	1.3 (0.4–4.0)	.68	0.9 (0.4–2.3)	.90	0.8 (0.3–2.3)	.67
Perceived harmfulness of e-cigarette use								
No harm/little harm	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Some harm/a lot of harm	0.5 (0.3–0.8)	.01	0.8 (0.3–1.8)	.54	2.6 (1.1–6.5)	.04	1.0 (0.4—2.6)	.99
Symptoms of nicotine dependence								
No	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Yes	2.0 (1.2–3.1)	.01	2.9 (1.5–5.8)	.003	1.6 (0.7–4.0)	.27	1.4 (0.7–2.9)	.38
Tobacco use by household members								
None	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Other tobacco products	0.9 (0.4–1.8)	.68	1.2 (0.6–2.8)	.58	0.5 (0.2–1.4)	.20	0.9 (0.3–2.8)	.83
E-cigarettes	1.0 (0.5–2.0)	.96	1.8 (0.8–4.1)	.18	0.6 (0.2–1.6)	.35	1.8 (0.6–5.5)	.31
Perceived peer use of e-cigarettes	1.0 (0.9-1.1)	.98	1.0 (0.8–1.2)	.84	1.0 (0.9-1.1)	.33	1.1 (0.9–1.3)	.48

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