

## Supplementary Online Content

Cullen KA, Gentzke AS, Sawdey MD, et al. e-Cigarette use among youth in the United States, 2019. *JAMA*. doi:10.1001/jama.2019.18387

**eTable 1.** Estimated Percentage of Tobacco Use in the Past 30 Days, by Product and School, 2016-2019

**eTable 2.** Frequency of Use, Flavored Use, Flavor Types, and Usual Brand Among e-Cigarette Users, 2018-2019

**eTable 3.** Flavored e-Cigarette Use and Reported Flavor Types by Usual Brand of e-Cigarette Among Current Exclusive e-Cigarette Users, 2019

**eTable 4.** Flavor Types Reported Among Current Exclusive e-Cigarette Users Who Reported Flavored e-Cigarette Use, 2016-2019

**eAppendix.** 2019 NYTS Questions Used in This Study

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

**eTable 1. Estimated Percentage of Tobacco Use in the Past 30 Days, by Product and School, 2016-2019<sup>a</sup>**

Tobacco Product <sup>d</sup>	2016 <sup>b</sup>		2017 <sup>c</sup>		2018 <sup>2</sup>		2019	
	Unweighted n	% (95% CI)	Unweighted n	% (95% CI)	Unweighted n	% (95% CI)	Unweighted n	% (95% CI)
<b>High School Students</b>								
E-cigarettes <sup>e</sup>	1,109	11.3 (9.9, 12.9)	1,066	11.7 (9.7, 13.9)	2,227	20.8 (18.8, 22.9)	2,709	27.5 (25.3, 29.7)
Cigarettes <sup>f</sup>	772	8.0 (6.7, 9.6)	761	7.6 (6.5, 8.9)	912	8.1 (7.1, 9.3)	549	5.8 (4.6, 7.3)
Any Tobacco Product <sup>g</sup>	2,129	20.2 (18.4, 22.3)	1,963	19.6 (17.2, 22.3)	3,007	27.1 (25.3, 29.0)	3,091	31.2 (29.1, 33.5)
<b>Middle School Students</b>								
E-cigarettes <sup>e</sup>	392	4.3 (3.7, 4.9)	272	3.3 (2.8, 3.9)	454	4.9 (4.2, 5.8)	902	10.5 (9.4, 11.8)
Cigarettes <sup>f</sup>	193	2.2 (1.7, 2.7)	194	2.2 (1.8, 2.6)	169	1.8 (1.4, 2.2)	190	2.3 (1.8, 2.9)
Any Tobacco Product <sup>g</sup>	663	7.2 (6.1, 8.4)	503	5.6 (5.0, 6.4)	673	7.2 (6.3, 8.1)	1,085	12.5 (11.2, 13.9)

**Abbreviations:** CI = confidence interval

a Between 2018 and 2019, the National Youth Tobacco Survey changed from paper and pencil to electronic administration. Please see the methods for a complete description of changes. Due to changes in mode of survey administration and questionnaire improvements in 2019, statistical testing was not conducted for tobacco product use behaviors between 2018 and 2019.

b Jamal A, Gentzke A, Hu SS, et al. Tobacco Use Among Middle and High School Students — United States, 2011–2016. *MMWR Morb Mortal Wkly Rep* 2017;66:597–603.

c Wang TW, Gentzke A, Sharapova S, Cullen KA, Ambrose BK, Jamal A. Tobacco Product Use Among Middle and High School Students — United States, 2011–2017. *MMWR Morb Mortal Wkly Rep* 2018;67:629–633.

d In 2016, 0.27% (n=56) were missing data on any tobacco use, 2.13% (n=437) were missing data on cigarette smoking, and 1.81% (n=373) were missing data on e-cigarette use. In 2017, 0.24% (n=42) were missing data on any tobacco use, 2.20% (n=390) were missing data on cigarette smoking, and 1.54% (n=274) were missing data on e-cigarette use. In 2018, 0.37% (n=74) were missing data on any tobacco use, 2.35% (n=472) were missing data on cigarette smoking, and 1.95% (n=390) were missing data on e-cigarette use. In 2019, 0.10% (n=13) were missing data on any tobacco use, 0.20% (n=37) were missing data on cigarette smoking, and 0.51% (n=96) were missing data on e-cigarette use.

e Past 30-day use of e-cigarettes was determined by asking, “During the past 30 days, on how many days did you use e-cigarettes?” Those who reported using e-cigarettes on ≥1 days of the past 30-days were considered current (past-30 day) users.

f Past 30-day use of cigarettes was determined by asking, “During the past 30 days, on how many days did you smoke cigarettes?” Those who reported smoking cigarettes on ≥1 days of the past 30-days were considered current (past 30-day) users.

g Any tobacco product use was defined as use of any tobacco product (e-cigarettes, cigarettes, cigars, smokeless tobacco, hookahs, pipe tobacco, dissolvables, snus, and/or bidis) on ≥1 day in the past 30 days.

**eTable 2. Frequency of Use, Flavored Use, Flavor Types, and Usual Brand Among e-Cigarette Users, 2018-2019<sup>a</sup>**

	High School				Middle School			
	2018		2019		2018		2019	
	Unweighted n	% (95% CI)	Unweighted n	% (95% CI)	Unweighted n	% (95% CI)	Unweighted n	% (95% CI)
<b>Among past 30-day e-cigarette users<sup>b</sup></b>								
<b>Frequency of e-cigarette use in the past 30 days</b>								
<20 days	1,592	72.3 (69.1, 75.3)	1,792	65.8 (62.7, 68.8)	389	83.8 (79.7, 87.2)	749	82.0 (78.8, 84.8)
≥20 days	635	27.7 (24.7, 30.9)	917	34.2 (31.2, 37.3)	65	16.2 (12.8, 20.3)	153	18.0 (15.2, 21.2)
<b>Daily e-cigarette use<sup>c</sup></b>	424	18.3 (16.0, 21.0)	564	21.4 (19.0, 24.0)	51	12.5 (9.4, 16.5)	80	8.8 (6.9, 11.2)
<b>Usual brand<sup>d</sup></b>								
No usual brand	***	***	383	13.8 (12.0, 15.9)	***	***	138	16.8 (13.6, 20.7)
JUUL	***	***	1,520	59.1 (54.8, 63.2)	***	***	496	54.1 (49.1, 59.0)
SMOK	***	***	205	7.8 (6.0, 10.1)	***	***	40	4.1 (2.7, 6.1)
Suorin	***	***	110	3.1 (2.1, 4.5)	***	***	‡	‡
blu	***	***	77	2.6 (1.9, 3.6)	***	***	32	4.0 (2.4, 6.6)
Vuse	***	***	56	2.1 (1.4, 3.1)	***	***	43	4.6 (3.0, 7.0)
NJOY	***	***	32	1.2 (0.7, 2.1)	***	***	‡	‡
Logic	***	***	23	0.8 (0.5, 1.4)	***	***	‡	‡
Markten	***	***	20	0.8 (0.4, 1.4)	***	***	‡	‡
Some other brand	***	***	256	8.4 (7.2, 10.5)	***	***	90	10.5 (8.1, 13.5)
<b>Among past 30-day exclusive e-cigarette users<sup>e</sup></b>								
<b>Flavored e-cigarette use<sup>f</sup></b>								
Flavored	823	68.8 (65.6, 71.8)	1,257	72.2 (69.1, 75.1)	128	47.5 (40.6, 54.5)	376	59.2 (54.8, 63.4)
Unflavored	259	20.7 (18.0, 23.8)	440	25.4 (22.5, 28.5)	110	34.1 (27.1, 41.8)	216	38.1 (33.7, 42.8)
Unknown	118	10.5 (8.4, 13.0)	43	2.5 (1.7, 3.6)	51	18.4 (13.5, 24.6)	20	2.7 (1.6, 4.5)
<b>Flavor types reported used<sup>g</sup></b>								
Fruit	608	75.5 (71.0, 79.6)	832	66.1 (62.4, 69.5)	86	58.1 (46.6, 68.9)	248	67.7 (62.6, 72.5)
Menthol or Mint	314	38.1 (31.8, 44.9)	703	57.3 (53.3, 61.3)	28	20.6 (12.5, 32.2)	132	31.1 (25.6, 37.2)
Candy, dessert, or other sweets	368	42.4 (37.3, 47.6)	430	34.9 (31.3, 38.7)	62	46.0 (36.0, 56.3)	139	38.3 (32.6, 44.2)
Chocolate	31	4.2 (2.9, 6.1)	26	1.8 (1.2, 2.9)	‡	‡	30	8.1 (5.1, 12.7)
Alcoholic drink	32	5.0 (3.1, 8.0)	28	2.3 (1.5, 3.5)	‡	‡	14	4.4 (2.5, 7.7)
Clove/Spice	‡	‡	‡	‡	‡	‡	‡	‡
Other flavor not listed	176	21.3 (18.2, 24.7)	112	8.8 (7.2, 10.7)	22	22.3 (14.3, 33.1)	40	9.4 (6.7, 13.0)

**Abbreviations:** CI = confidence interval

a Between 2018 and 2019, the National Youth Tobacco Survey changed from paper and pencil to electronic administration. Please see the methods for a complete description of changes. Due to changes in mode of survey administration and questionnaire improvements in 2019, statistical testing was not conducted for tobacco product use behaviors between 2018 and 2019.

b Past 30-day use of e-cigarettes was determined by asking, "During the past 30 days, on how many days did you use e-cigarettes?". Current use was defined as use on  $\geq 1$  day in the past 30 days.

c Daily e-cigarette use is defined as reported use on all 30 of the past 30 days.

d For 2019, usual brand of e-cigarettes was determined by response to the question, "During the past 30 days, what brand of e-cigarettes did you usually use?". Participants could select from a list of options to designate their usual brand used including: "I did not use a usual brand", "blu", "JUUL", "Logic", "Markten", "NJOY", "Vuse", or "Some other brand not listed here (specify)". Those who selected "Some other brand not listed here" could specify with a write-in response. The write-in responses were examined (n=725) and recoded. Only recoded responses for "SMOK" and "Suorin" were included in this report. There were 38 respondents with missing data on brand.

e Exclusive e-cigarette use was defined as use of only e-cigarettes in the past 30-days.

f Flavored e-cigarette use was determined by the response to the question, "Which of the following tobacco products that you used in the past 30 days were flavored to taste like menthol (mint), alcohol (wine, cognac), candy, fruit, chocolate, or any other flavors? (Select one or more)". Participants could select from a list of options to designate the flavored tobacco product they used in the past 30 days including: "Cigars, cigarillos, or little cigars", "Chewing tobacco, snuff, or dip", "E-cigarettes", "Tobacco in a hookah or waterpipe", "Pipe filled with tobacco (not waterpipe)", "Snus", "Dissolvable tobacco products", "Bidis", "Roll-your-own cigarettes", or "I did not use any flavored tobacco products in the past 30 days". Among those who reported past 30-day e-cigarette use, those who selected "E-cigarettes" were defined as current flavored e-cigarette users. Respondents who were past 30-day e-cigarette users and did not select "E-cigarettes" or selected "I did not use any flavored tobacco products in the past 30 days" were classified as unflavored. Respondents missing a response were classified as unknown.

g Among past 30-day flavored e-cigarette users, flavor type was determined by responses to the question, "What flavors of tobacco products have you used in the past 30 days? (Select one or more)?" Participants could select from a list of options to designate the flavor they had used including: "menthol or mint", "clove or spice", "fruit", "chocolate", "alcoholic drink (such as wine, cognac, margarita, or other cocktails)", "candy, desserts, or other sweets", or "some other flavor not listed here (specify: \_\_\_)". Respondents could select one or more of the seven pre-specified flavors. Those who indicated "Some other flavor not listed here" could specify with a write-in response; the qualitative assessment of these responses (n=358) are not included in this report. Those who did not select any of the pre-specified flavors were set to missing.

\*\*\* Usual brand of e-cigarette was not asked in 2018.

‡ Data are statistically unreliable due to unweighted denominator <50 or relative standard error (RSE) >30%.

**eTable 3. Flavored e-Cigarette Use and Reported Flavor Types by Usual Brand of e-Cigarette Among Current<sup>a</sup> Exclusive<sup>b</sup> e-Cigarette Users, 2019**

	JUUL users <sup>c</sup>		Non-JUUL users <sup>c</sup>		Weighted absolute difference (95% CI) <sup>d</sup>	p-value <sup>e</sup>
	Unweighted n	Weighted % (95% CI)	Unweighted n	Weighted % (95% CI)		
<b>HIGH SCHOOL</b>	989	59.7 (55.0, 64.2)	733	40.3 (35.8, 45.0)	-	-
<b>Flavored e-cigarette use<sup>f</sup></b>						
Flavored	764	77.1 (73.5, 80.3)	486	65.8 (61.5, 69.9)	11.3 (6.6, 16.0)	<0.001
Unflavored	‡	‡	‡	‡	-	-
Unknown	‡	‡	‡	‡	-	-
<b>Flavor types reported by exclusive e-cigarette users<sup>g</sup></b>						
Fruit	478	63.6 (58.7, 68.2)	350	70.6 (65.3, 75.3)	-7.0 (-14.3, 0.3)	0.06
Menthol or Mint	507	67.5 (63.0, 71.6)	194	40.3 (34.8, 46.1)	27.1 (20.0, 34.3)	<0.001
Candy, dessert, or other sweets	243	30.6 (26.9, 34.5)	186	42.7 (36.6, 49.0)	-12.1 (-18.8, -5.4)	<0.001
Chocolate	19	2.1 (1.2, 3.6)	‡	‡	-	-
Alcoholic drink	14	2.0 (1.1, 3.8)	14	2.9 (1.7, 4.9)	-0.8 (-2.9, 1.2)	0.42
Clove/Spice	‡	‡	‡	‡	-	-
Other flavor not listed	60	7.2 (5.6, 9.4)	51	11.4 (8.5, 15.1)	-4.1 (-7.8, -0.5)	0.03
<b>MIDDLE SCHOOL</b>	335	54.6 (48.0, 61.0)	268	45.4 (39.0, 52.0)	-	-
<b>Flavored e-cigarette use<sup>f</sup></b>						
Flavored	218	64.5 (58.4, 70.2)	157	53.7 (46.5, 60.7)	10.9 (1.3, 20.4)	0.03
Unflavored	‡	‡	‡	‡	-	-
Unknown	‡	‡	‡	‡	-	-
<b>Flavor types reported by exclusive e-cigarette users<sup>g</sup></b>						
Fruit	148	71.5 (64.6, 77.6)	99	62.1 (53.0, 70.5)	9.4 (-2.3, 21.1)	0.11
Menthol or Mint	96	39.8 (30.8, 49.6)	36	18.6 (13.6, 24.8)	21.2 (9.6, 32.9)	<0.001
Candy, dessert, or other sweet	89	40.6 (33.1, 48.6)	50	35.0 (26.4, 44.7)	5.6 (-6.7, 17.9)	0.37
Chocolate	‡	‡	‡	‡	-	-
Alcoholic drink	‡	‡	‡	‡	-	-
Clove/Spice	‡	‡	‡	‡	-	-
Other flavor not listed	18	6.7 (4.2, 10.5)	22	13.4 (8.6, 20.2)	6.7 (-13.0, -0.4)	0.04

**Abbreviations:** CI = confidence interval

a Past 30-day use of e-cigarettes was determined by asking, "During the past 30 days, on how many days did you use e-cigarettes?". Current use was defined use on ≥1 day in the past 30 days.

b Exclusive e-cigarette use was defined as use of only e-cigarettes in the past 30-days.

c For 2019, usual brand of e-cigarettes was determined by respond to the question, "During the past 30 days, what brand of e-cigarettes did you usually use?". Participants could select from a list of options to designate their usual brand used including: "I did not use a usual brand", "blu", "JUUL", "Logic", "Markten", "NJOY", "Vuse", or "Some other brand not listed here (specify)". Those who selected "Some other brand not listed here" could specify with a write-in response. The write-in responses were examined (n=725) and recoded. Only recoded responses for "SMOK" and "Suorin" were statistically reliable and were included in this report.

d Weighted absolute difference is the weighted estimate among JUUL users minus the weighted estimate among non-JUUL users. Corresponding 95% confidence intervals were also calculated

e T-tests were used to test the difference in estimates among JUUL and non-JUUL current exclusive e-cigarette users

f Flavored e-cigarette use was determined by the response to the question, "Which of the following tobacco products that you used in the past 30 days were flavored to taste like menthol (mint), alcohol (wine, cognac), candy, fruit, chocolate, or any other flavors? (Select one or more)". Participants could select from a list of options to designate the flavored tobacco product they used in the past 30 days including: "Cigars, cigarillos, or little cigars", "Chewing tobacco, snuff, or dip", "E-cigarettes", "Tobacco in a hookah or waterpipe", "Pipe filled with tobacco (not waterpipe)", "Snus", "Dissolvable tobacco products", "Bidis", "Roll-your-own cigarettes", or "I did not use any flavored tobacco products in the past 30 days". Among those who reported past 30-day e-cigarette use, those who selected "E-cigarettes" were defined as current flavored e-cigarette users. Respondents who were past 30-day e-cigarette users and did not select "E-cigarettes" or selected "I did not use any flavored tobacco products in the past 30 days" were classified as unflavored. Respondents missing a response were classified as unknown.

g Among past 30-day flavored e-cigarette users, flavor type was determined by responses to the question, "What flavors of tobacco products have you used in the past 30 days? (Select one or more)?" Participants could select from a list of options to designate the flavor they had used including: "menthol or mint", "clove or spice", "fruit", "chocolate", "alcoholic drink (such as wine, cognac, margarita, or other cocktails)", "candy, desserts, or other sweets", or "some other flavor not listed here (specify: \_\_\_)". Respondents could select one or more of the seven pre-specified flavors. Those who indicated "Some other flavor not listed here" could specify with a write-in response; the qualitative assessment of these responses (n=358) are not included in this report. Those who did not select any of the pre-specified flavors were set to missing.

‡ Data are statistically unreliable due to unweighted denominator <50 or relative standard error (RSE) >30%.

‡‡ While the RSE for the estimate of unflavored e-cigarette use by high school non-JUUL users was <30%, we suppressed this estimate to prevent calculation of the complementary estimate for unknown flavor, which had an RSE>30%.

**eTable 4. Flavor Types Reported Among Current Exclusive e-Cigarette Users Who Reported Flavored e-Cigarette Use, 2016-2019<sup>a,b,c,d,e</sup>**

	2016		2017		2018		2019		APC	p-value
	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)	n	% (95% CI)	% (95% CI)	
<b>High School Students</b>										
Fruit	161	71.5 (63.1, 78.7)	191	69.1 (61.3, 76.0)	608	75.5 (71.0, 79.6)	832	66.1 (62.4, 69.5)	-2.9 (-17.6, 14.4)	0.52
Menthol or mint	35	16.0 (9.8, 25.0)	54	21.0 (13.7, 30.7)	314	38.1 (31.8, 44.9)	703	57.3 (53.3, 61.3)	55.2 (37.4, 75.2)	0.004
Candy, desserts, or other sweets	121	54.1 (46.0, 62.0)	137	46.5 (39.7, 53.5)	368	42.4 (37.3, 47.6)	430	34.9 (31.3, 38.7)	-13.3 (-18.4, -8.0)	0.009
Chocolate	‡	‡	‡	‡	31	4.2 (2.9, 6.1)	26	1.8 (1.2, 2.9)	-32.6 (-68.6, 44.5)	0.16
Alcoholic drink	‡	‡	‡	‡	‡	‡	28	2.3 (1.5, 3.5)	-22.6 (-60.4, 51.4)	0.24
Clove/spice	‡	‡	‡	‡	‡	‡	‡	‡	-	-
Other flavor	55	22.1 (16.7, 28.7)	66	25.7 (21.6, 30.4)	176	21.3 (18.2, 24.7)	112	8.8 (7.2, 10.7)	-28.1 (-68.2, 62.5)	0.22
<b>Middle school Students</b>										
Fruit	28	52.2 (38.6, 65.5)	33	66.3 (52.5, 77.8)	86	58.1 (46.6, 68.9)	248	67.7 (62.6, 72.5)	6.3 (-9.6, 25.0)	0.25
Menthol or mint	10	16.4 (9.4, 27.1)	9	14.3 (6.0, 30.6)	28	20.6 (12.5, 32.2)	132	31.1 (25.6, 37.2)	28.4 (-1.4, 67.2)	0.06
Candy, desserts, or other sweets	28	47.8 (31.4, 64.8)	25	58.1 (37.3, 76.5)	62	46.0 (36.0, 56.3)	139	38.3 (32.6, 44.2)	-11.0 (-29.2, 12.0)	0.16
Chocolate	‡	‡	‡	‡	‡	‡	30	8.1 (5.1, 12.7)	-	-
Alcoholic drink	‡	‡	‡	‡	‡	‡	14	4.4 (2.5, 7.7)	-	-
Clove/spice	‡	‡	‡	‡	‡	‡	‡	‡	-	-
Other flavor	‡	‡	‡	‡	22	22.3 (14.3, 33.1)	40	9.4 (6.7, 13.0)	-35.7 (-66.2, 22.4)	0.10

a Among past 30-day flavored e-cigarette users, flavor type was determined by responses to the question, "What flavors of tobacco products have you used in the past 30 days? (Select one or more)?" Participants could select from a list of options to designate the flavor they had used including: "menthol or mint", "clove or spice", "fruit", "chocolate", "alcoholic drink (such as wine, cognac, margarita, or other cocktails)", "candy, desserts, or other sweets", or "some other flavor not listed here (specify: \_\_\_)". Respondents could select one or more of the seven pre-specified flavors. Those who indicated "Some other flavor not listed here" could specify with a write-in response; the qualitative assessment of these responses (n=358) are not included in this report. Those who did not select any of the pre-specified flavors were set to missing.

b Past 30-day use of e-cigarettes was determined by asking, "During the past 30 days, on how many days did you use e-cigarettes?". Current use was defined use on ≥1 day in the past 30 days.

c Exclusive e-cigarette use was defined as use of only e-cigarettes in the past 30-days.

d Flavored e-cigarette use was determined by the response to the question, "Which of the following tobacco products that you used in the past 30 days were flavored to taste like menthol (mint), alcohol (wine, cognac), candy, fruit, chocolate, or any other flavors? (Select one or more)". Participants could select from a list of options to designate the flavored tobacco product they used in the past 30 days including: "Cigars, cigarillos, or little cigars", "Chewing tobacco, snuff, or dip", "E-cigarettes", "Tobacco in a hookah or waterpipe", "Pipe filled with tobacco (not waterpipe)", "Snus", "Dissolvable tobacco products", "Bidis", "Roll-your-own cigarettes", or "I did not use any flavored tobacco products in the past 30 days". Among those who reported past 30-day e-cigarette use, those who selected "E-cigarettes" were defined as current flavored e-cigarette users. Respondents who were past 30-day e-cigarette users and did not select "E-cigarettes" or selected "I did not use any flavored tobacco products in the past 30 days" were classified as unflavored. Respondents missing a response were classified as unknown.

e Between 2018 and 2019, the National Youth Tobacco Survey changed from paper and pencil to electronic administration. Please see the methods for a complete description of changes. Although direct comparisons between 2018 and 2019 are not conducted, trends using multiple years of data are not as effected by the mode change.

‡ Data are statistically unreliable due to unweighted denominator <50 or relative standard error (RSE) >30%. Among high school students, estimates of chocolate (2016-2017), alcohol (2016-2018), and clove/spice (2016-2019) were suppressed. Among middle school students, estimates of chocolate (2016-2018), alcohol (2016-2018), clove/spice (2016-2019), and other (2016-2017) were suppressed.

eAppendix. 2019 NYTS Questions Used in This Study

3. What grade are you in?
- A. 6th
  - B. 7th
  - C. 8th
  - D. 9th
  - E. 10th
  - F. 11th
  - G. 12<sup>th</sup>
  - H. Ungraded or other grade

***INSTRUCT 2:*** The next seven sections of questions ask about your use of particular kinds of tobacco products, such as cigars, cigars, smokeless tobacco, electronic cigarettes, hookahs, roll-your own- cigarettes, pipes, snus, dissolvable tobacco, bidis, and heated tobacco products.

***INSTRUCT 2a:*** The next several questions are about smoking cigarettes (ones that have to be lit and burned).

9. During the **past 30 days**, on how many days did you smoke cigarettes?

Specify: |\_| (Range: 0 – 30)

12. During the past 30 days, what brand of cigarettes did you usually smoke? (**Choose only one answer**)

- A. I did not smoke a usual brand
- B. American Spirit
- C. Camel
- D. GPC, Basic, or Doral
- E. Kool
- F. Marlboro
- G. Newport
- H. L&M
- I. Pall Mall
- J. Winston
- K. Some other brand not listed here (Please specify: \_\_\_\_\_)
- L. Not sure

13. Menthol cigarettes are cigarettes that taste like mint. During the past 30 days, were the cigarettes that you usually smoked menthol?

- A. Yes
- B. No
- C. Not sure

***INSTRUCT 3:*** The next several questions are about the use of cigars, cigarillos, or little cigars such as Swisher Sweets, Black and Mild, Garcia y Vega, Cheyenne, White Owl, or Dutch Masters.

20. During the **past 30 days**, on how many days did you smoke cigars, cigarillos, or little cigars?

Specify: |\_| (Range 0 – 30)

***INSTRUCT 4:*** The next several questions are about the use of chewing tobacco, snuff, or dip. **Do not think** about snus or dissolvable tobacco products when you answer these questions.

29. During the **past 30 days**, on how many days did you use chewing tobacco, snuff, or dip?

Specify: |\_| (Range 0 – 30)



***INSTRUCT 5:*** *The next several questions are about electronic cigarettes or e-cigarettes. Some brand examples include JUUL, Vuse, MarkTen, and blu.*

*E-cigarettes are battery powered devices that usually contain a nicotine-based liquid that is vaporized and inhaled. You may also know them as e-cigs, vape-pens, e-hookahs, vapes, or mods.*

**37.** During the **past 30 days**, on how many days did you use e-cigarettes?

Specify: |\_\_| (Range 0 – 30)

**40.** During the past 30 days, what brand of e-cigarettes did you usually use?

- A. I did not use a usual brand
- B. Blu
- C. JUUL
- D. Logic
- E. MarkTen
- F. NJOY
- G. Vuse
- H. Some other brand not listed here (specify): \_\_\_\_\_

***INSTRUCT 6:*** *The next several questions are about smoking tobacco in a hookah, which is a type of waterpipe. Shisha (or hookah tobacco) is smoked in a hookah.*

**49.** During the **past 30 days**, on how many days did you smoke tobacco in a hookah or waterpipe?

Specify: |\_\_| (Range 0 – 30)

***INSTRUCT 7:*** *The next section is about the use of other tobacco products, not described in the previous sections.*

**56.** In the **past 30 days**, which of the following products have you used on **at least one day**? (**Select one or more**)

- A. Roll-your-own cigarettes
- B. Pipes filled with tobacco (not hookah or waterpipe)
- C. Snus, such as Camel, Marlboro, or General Snus
- D. Dissolvable tobacco products such as Ariva, Stonewall, Camel orbs, Camel sticks, Marlboro sticks, or Camel strips
- E. Bidis (small brown cigarettes wrapped in a leaf)
- F. I have not used any of the products listed above in the past 30 days

***INSTRUCT 10:*** *The next few questions ask about flavors in tobacco products.*

**61.** Which of the following tobacco products that you used in the past 30 days were flavored to taste like menthol (mint), alcohol (wine, cognac), candy, fruit, chocolate, or any other flavors? (**Select one or more**)

- A. Cigars, cigarillos, or little cigars
- B. Chewing tobacco, snuff, or dip
- C. E-cigarettes
- D. Tobacco in a hookah or waterpipe
- E. Pipe filled with tobacco (not waterpipe)
- F. Snus
- G. Dissolvable tobacco products
- H. Bidis
- I. Roll-your-own cigarettes
- J. Heated tobacco products
- K. I did not use any flavored tobacco products in the past 30 days

**62.** What flavors of tobacco products have you used in the past 30 days? (**Select one or more**)

- A. Menthol or mint
- B. Clove or spice
- C. Fruit
- D. Chocolate

- E. Alcoholic drink (such as wine, cognac, margarita, or other cocktails)
- F. Candy, desserts or other sweets
- G. Some other flavor not listed here (Specify:\_\_\_\_\_)