

**2,110,150** is the estimated # of new nicotine vaping initiates in 8<sup>th</sup> through 12<sup>th</sup> grade for the 33 month period spanning September 2021 through May 2024.

Details on this estimate below.

Question text:

When (if ever) did you FIRST do each of the following things?

8="Never" 1="Grade 6 or below" 2="Grade 7" 3="Grade 8" 4="Grade 9" 5="Grade 10" 6="Grade 11" 7="Grade 12"

- a. Smoke your first cigarette
- b. Smoke cigarettes on a daily basis
- c. Try smokeless tobacco (snuff, plug, chewing tobacco, snus, dissolvable tobacco)
- d. Vape an e-liquid with nicotine (JUUL, e-cigarette, e-pen, etc.)

Students coded for having started vaping since start of school year if (a) in 12<sup>th</sup> grade and reported started in 12<sup>th</sup> grade, or (b) in 10<sup>th</sup> grade and reported starting in 10<sup>th</sup> grade, or (c) in 8<sup>th</sup> grade and reported started in 8<sup>th</sup> grade.

This question asked of a 5/6 randomly-selected sample in 8<sup>th</sup> grade and in 10<sup>th</sup> grade, and of a 2/3 randomly-selected sample in 12<sup>th</sup> grade.

The question on grade of first nicotine vaping added to the survey in 2020.

Table 1: Percentage of Student Population that Initiated Nicotine Vaping Since Start of School Year, by Time period and Grade

Year	2021	2022	2023	2024 <sup>a</sup>
Grade				
8th grade	5.1	5.1	4.1	2.9
9th grade <sup>b</sup>	4.3	4.9	4.15	2.6
10th grade	3.5	4.7	4.2	2.3
11th grade <sup>b</sup>	3.35	3.95	3.4	2.15
12th grade	3.2	3.2	2.6	2.0

<sup>a</sup> Estimates for 2024 based on surveys collected through April 2024 (total n=16,601)

<sup>b</sup> Estimate for this grade interpolated as average of estimates from adjoining grades.

Table 2: Number of Students that Initiated Nicotine Vaping Since Start of School Year in the 33 Month Period from September 2021 through May 2024, by Time period and Grade

	9/21 through 12/21	All of 2022	All of 2023	1/24 through 5/24 <sup>a</sup>
Time period				
Number of months	4	12	12	5
Grade				
8th grade	69180	209635	168530	49668
9th grade	59359	204975	173601	45318
10th grade	49155	200025	178745	40785
11th grade	44185	157875	135893	35805
12th grade	39472	119611	97184	31149

**Total = sum of blue cells = 2,110,150**

Source: Monitoring The Future

<sup>a</sup> Estimates for 2024 based on surveys collected through April 2024 (total n=16,601)

Notes:

- Estimates use sampling weights to take into account complex sampling design of Monitoring the Future.
- Number of new initiates (blue numbers in Table 2) is % new initiates (see Table 1) multiplied by population size. Total # of students in 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade are 4,110,489, 4,255,843, and 3,737,846, respectively. Number of students in 9<sup>th</sup> and 11<sup>th</sup> grade are interpolated (average of 8<sup>th</sup> and 10<sup>th</sup>, and 10<sup>th</sup> and 12<sup>th</sup>, respectively) and are 4,183,166 and 3,996,844.
- Analyses use MTF estimates collected from February through the end of May as an estimate for the whole year. This assumes average # of new initiates per month using estimates from February through May is a close approximation for average # of new estimates per month when using all 12 months (Colwell et al. 2006. "Variations in the Initiation of Smoking Among Adolescents" *Nicotine and Tobacco Research* 2006:239-43 doi: 10.1080/14622200600576503").