

## Tobacco Use and Academic Achievement



Montana Office of Public Instruction • Elsie Arntzen, Superintendent • [www.opi.mt.gov](http://www.opi.mt.gov)

### What is the relationship between tobacco-related behaviors and academic achievement?

Data presented below from the 2021 Montana Youth Risk Behavior Survey (YRBS) show a negative association between tobacco-related behaviors and academic achievement. This means that students with higher grades are less likely to engage in tobacco-related behaviors than their classmates with lower grades, and students who do not engage in tobacco-related behaviors receive higher grades than their classmates who do engage in tobacco-related behaviors. These associations do not prove causation. Further research is needed to determine whether low grades lead to behaviors related to tobacco use, behaviors related to tobacco use lead to low grades, or some other factors lead to both of these problems.

Percentage of high school students who engaged in tobacco-related behaviors, by type of grades earned – Montana Youth Risk Behavior Survey, 2021.

Tobacco-Related Behaviors	Percentage of Montana high school students who engaged in each risk behavior, by type of grades mostly earned				Significant Association*
	A's	B's	C's	D's/F's	
<b>Cigarettes</b>					
Ever tried cigarette smoking in their life	16	30	43	54	Yes
First tried cigarette smoking before age 13 years	4	9	16	24	Yes
Smoked a cigarette during the past 30 days	4	7	12	18	Yes
Smoked cigarettes on 20 or more of the past 30 days	1	8	2	4	Yes
Smoked a cigarette on each of the past 30 days	0	1	1	3	No
Smoked more than 10 cigarettes per day on the days they smoked, during the past 30 days, among current smokers	4	3	2	4	No
<b>Other Tobacco</b>					
Used smokeless tobacco (chewing tobacco, snuff, dip, snus, or dissolvable tobacco products) during the past 30 days	3	6	8	11	Yes
Smoked cigars, cigarillos, or little cigars during the past 30 days	2	4	8	12	Yes
Ever used electronic vapor products (e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods [such as JUUL, SMOK, Suorin, Vuse, and blu]) during their life	39	51	62	67	Yes
Used electronic vapor products during the past 30 days	18	28	38	44	Yes
Used electronic vapor products on 20 or more of the past 30 days	6	11	17	22	Yes
Used electronic vapor products on each of the past 30 days	3	8	11	15	Yes
Used an electronic vapor product on school property	8	15	21	24	Yes
Usually got their electronic vapor products by buying them in a store	2	3	2	4	No
Used electronic vapor products flavored to taste like an alcoholic drink, chocolate or other sweets, fruit, menthol, or mint as the product they used most often during the past 30 days	84	84	84	86	No
Smoked cigarettes or cigars during the past 30 days	5	8	15	21	Yes
Smoked cigarettes or cigars or used smokeless tobacco during the past 30 days	6	11	17	25	Yes
Smoked cigarettes or cigars or used smokeless tobacco or electronic vapor products during the past 30 days	19	30	41	46	Yes
Smoked cigarettes or used electronic vapor products during the past 30 days	18	29	39	44	Yes
Tried to quit using all tobacco products (including cigarettes, cigars, smokeless tobacco, shisha or hookah tobacco, and electronic vapor products during the past 12 months	58	61	59	60	No

\*Based on logistic regression analysis controlling for sex, race/ethnicity, and grade in school,  $p < 0.05$ .

Figure 1. Percentage of high school students, by tobacco-related behavior, by grades earned. Montana YRBS, 2021.

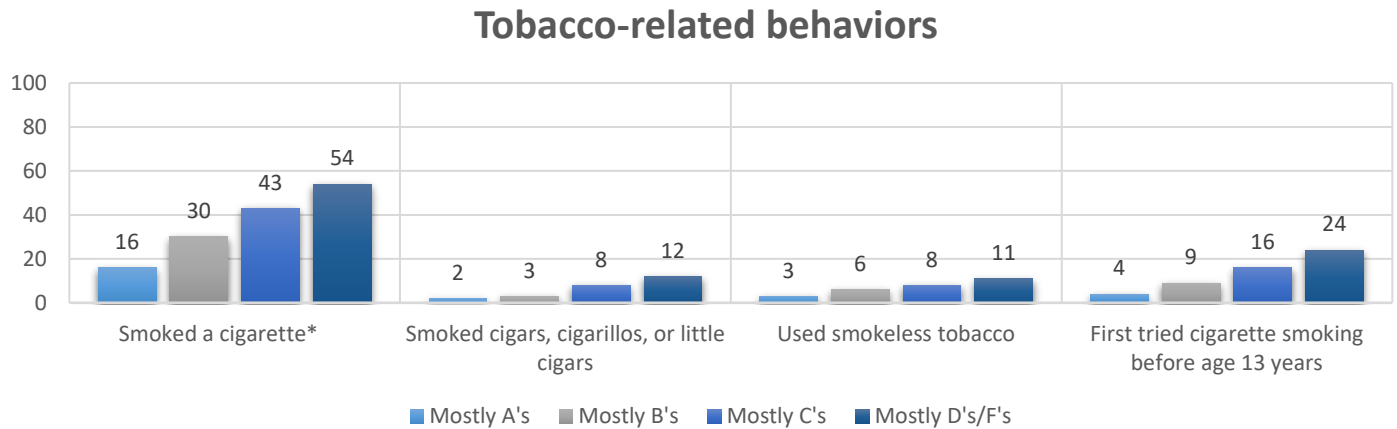
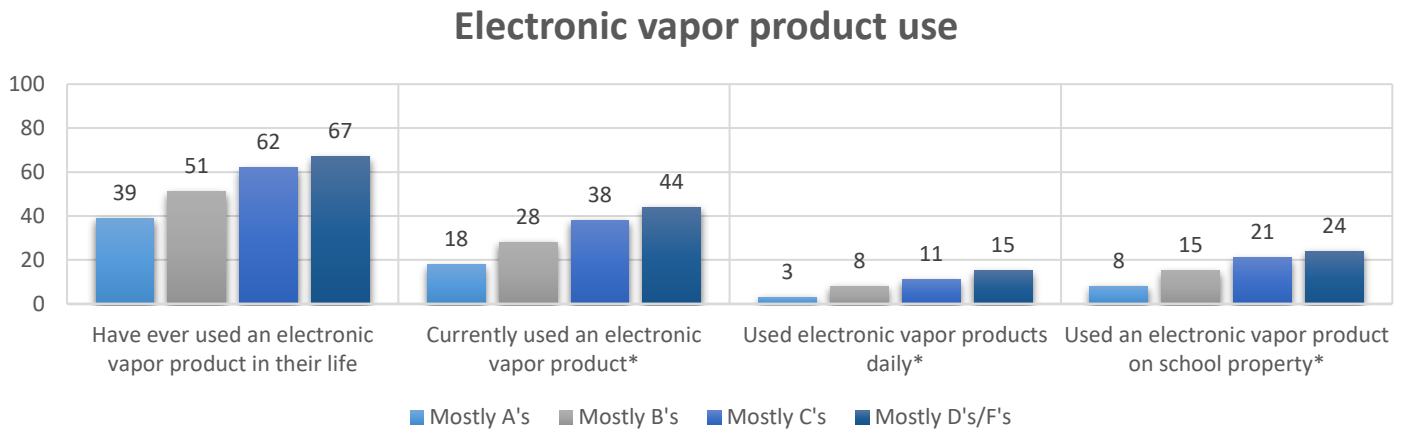


Figure 2. Percentage of high school students, by electronic vapor product use, by grades earned. Montana YRBS, 2019.



\* During the past 30 days.

The Montana YRBS monitors priority health-risk behaviors that contribute to the leading causes of death, disability, and social problems among youth and adults in the United States. It is conducted every 2 years during late winter and provides data representative of high school students in Montana. In 2021, students completing the YRBS were asked, “During the past 12 months, how would you describe your grades in school?” and given seven response options (Mostly A’s, Mostly B’s, Mostly C’s, Mostly D’s, Mostly F’s, None of these grades, Not sure). In 2021, 46% of students received mostly A’s, 27% received mostly B’s, 15% received mostly C’s, 7% received mostly D’s or F’s, and 5% reported receiving none of these grades or not sure. The YRBS has been administered by the Office of Public Instruction in collaboration with Montana schools since 1991. For more information on the YRBS please visit [www.opi.mt.gov/yrbs](http://www.opi.mt.gov/yrbs).

### Montana High School Students - Grades Earned

