

Tobacco Use and Academic Achievement



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

Data presented below from the 2015 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, 2015.

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	
Cigarettes					
Smoked a cigarette in their life	23	42	56	66	Yes
Smoked a whole cigarette before age 13 years	3	7	14	25	Yes
Smoked a cigarette during the past 30 days	7	12	21	34	Yes
Smoked cigarettes on 20 or more of the past 30 days	1	3	6	14	Yes
Smoked a cigarette on each of the past 30 days	1	2	4	12	Yes
Smoked more than 10 cigarettes per day on the days they smoked, during the past 30 days, among current smokers	3	4	3	21	Yes
Bought cigarettes in a store or gas station during the past 30 days	4	8	8	14	No
Tried to quit smoking cigarettes during the past 12 months	54	50	49	43	No
Smoked cigarettes on school property during the past 30 days	2	3	6	18	Yes
Other Tobacco					
Used smokeless tobacco (chewing tobacco, snuff, or dip) during the past 30 days	7	13	18	26	Yes
Used smokeless tobacco on school property during the past 30 days	3	7	11	23	Yes
Smoked cigars, cigarillos, or little cigars during the past 30 days	9	14	17	24	Yes
Used electronic vapor products (e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens such as blu, NJOY, or Starbuzz) during their life	39	56	66	70	Yes
Used electronic vapor products during the past 30 days	20	33	43	44	Yes
Used tobacco (cigarette, smokeless tobacco, cigar, or electronic vapor product) during the past 30 days	25	42	55	61	Yes
Used cigarettes, cigars, or smokeless tobacco during the past 30 days	16	26	36	51	Yes

*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 cigarette-related behavior, by grades earned. Montana YRBS, 2015.

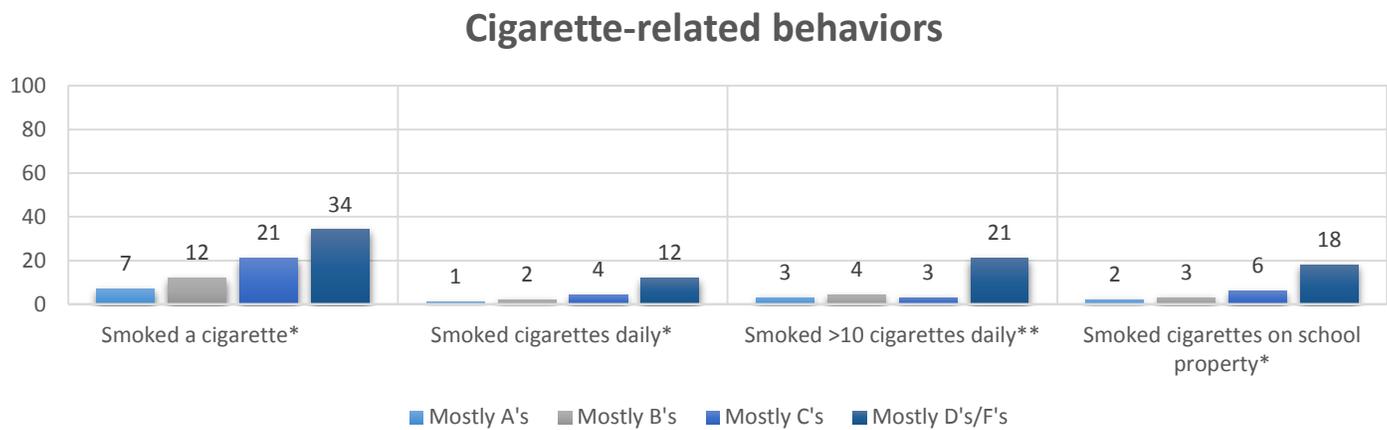
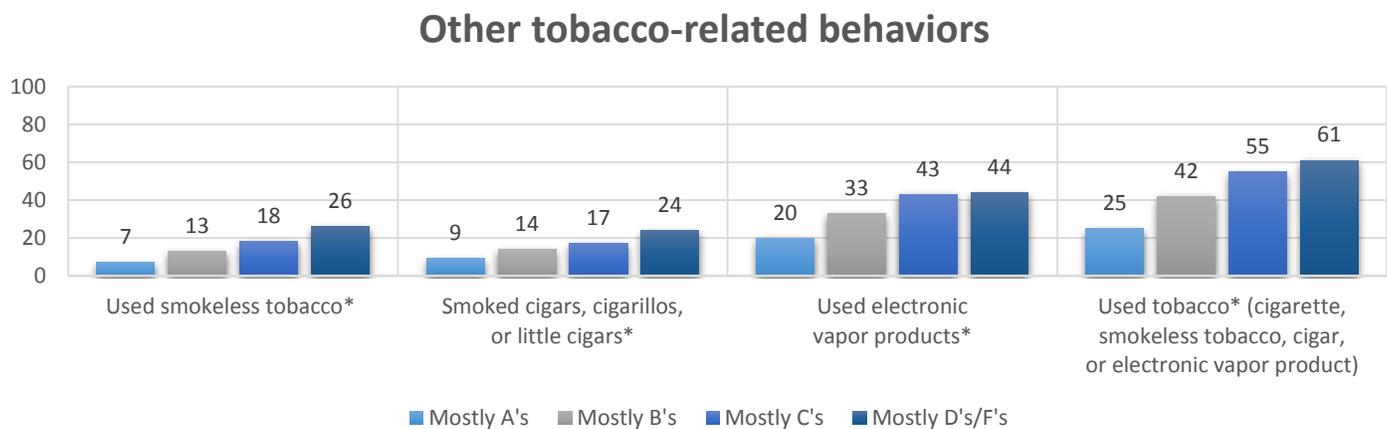


Figure 2. Percentage of high school students, by other tobacco-related behavior, by grades earned. Montana YRBS, 2015.



* During the past 30 days.

** Among current smokers, on the days they smoked.

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 2015, 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 2015, 40% of students received mostly A’s, 35% received mostly B’s, 16% received mostly C’s, 5% received mostly D’s or F’s, and 4% 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.