

Other Site-Added Behaviors and Academic Achievement



Montana Office of Public Instruction • Elsie Arntzen, Superintendent • www.opi.mt.gov

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

Data presented below from the 2019 Montana Youth Risk Behavior Survey (YRBS) show a negative association between physical activity-related behaviors and academic achievement. This means that students with higher grades are less likely to engage in physical inactivity-related behaviors than their classmates with lower grades, and students who do not engage in physical activity-related behaviors receive lower grades than their classmates who do engage in physical activity-related behaviors. These associations do not prove causation. Further research is needed to determine whether low grades lead to behaviors related to physical inactivity, behaviors related to physical inactivity lead to low grades, or some other factors lead to both of these problems.

Percentage of high school students who engaged in physical activity-related behaviors, by type of grades earned – Montana Youth Risk Behavior Survey, 2019.

Other Site-Added 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	
Saw a dentist (for a check-up, exam, teeth cleaning, or other dental work) during the past 12 months	83	77	70	58	Yes
Have never seen a dentist in their lifetime	1	1	2	4	Yes
Had ever been told by a doctor or nurse that they had asthma	21	20	26	25	No
Did not usually sleep in their parent's or guardian's home during the past 30 days	3	3	4	8	No
Used an indoor tanning device during the past 12 months	7	6	5	5	No
Received help from a resource teacher, speech therapist, or other special education teacher at school during the past 12 months	11	15	22	24	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 physical activity-related behavior, by grades earned. Montana YRBS, 2019.

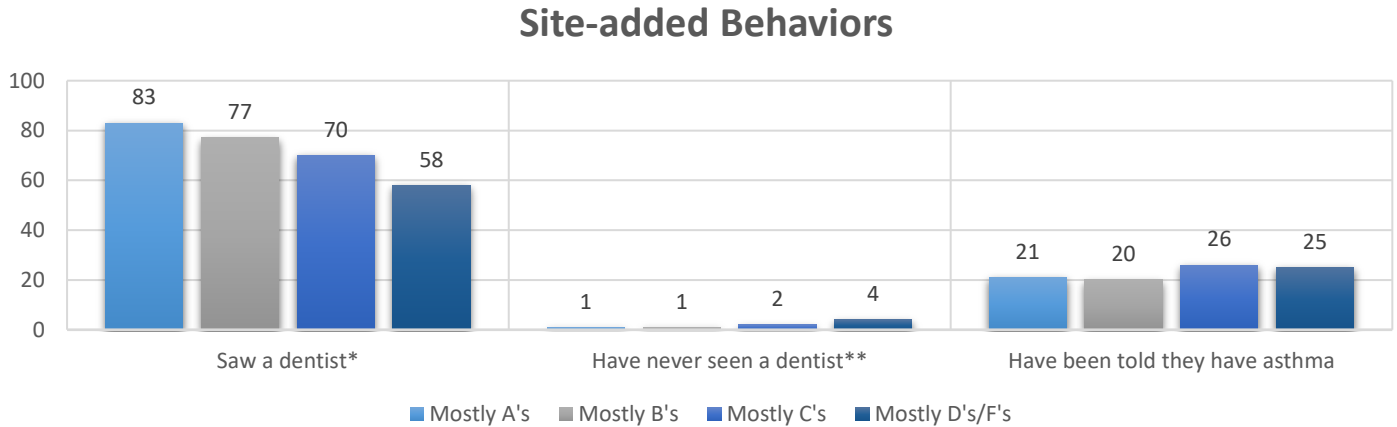
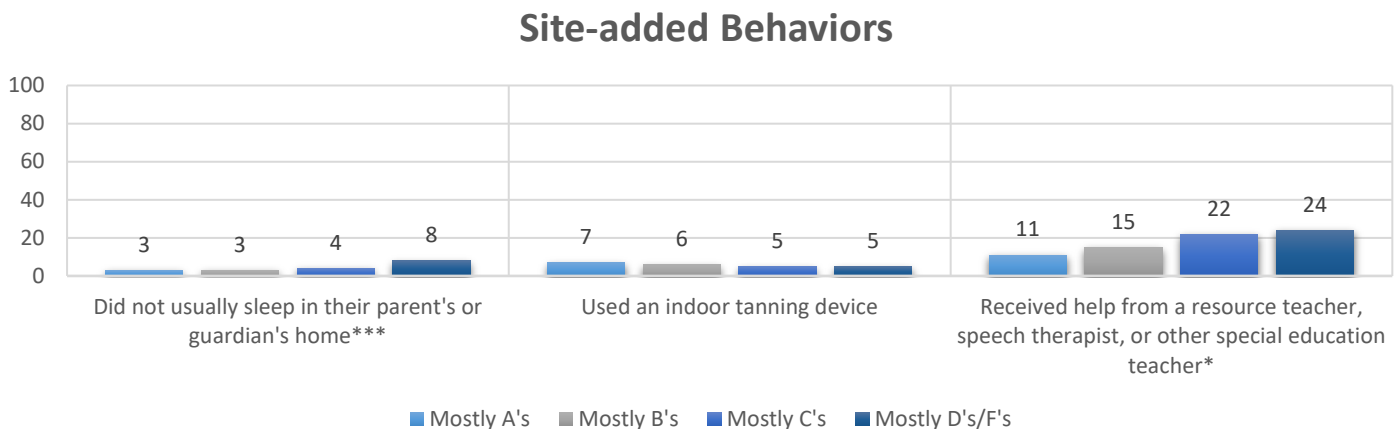


Figure 2. Percentage of high school students, by other physical activity-related behavior, by grades earned. Montana YRBS, 2019.



- * During the past 12 months.
- ** Lifetime.
- *** 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 2019, 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 2019, 46% of students received mostly A’s, 31% received mostly B’s, 15% 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.

Montana High School Students - Grades Earned

