

2021 Montana Youth Risk Behavior Survey



Sleep Deprivation Report

The Association Between Sleep
and Health Risk Behaviors of
Montana High School Students



Youth Risk Behavior Survey Program
Coordinated School Health Unit
January 2022

2021 Montana Youth Risk Behavior Survey – Sleep Deprivation Report

Montana Youth Risk Behavior Survey

The Montana Youth Risk Behavior Survey (YRBS) is administered by the Montana Office of Public Instruction every two years to students in grades 7 through 12. The purpose of the survey is to help monitor the prevalence of behaviors that not only influence youth health, but also put youth at risk for the most significant health and social problems that can occur during adolescence. While all schools in Montana can participate in the survey on a volunteer basis, approximately 50 high schools are randomly selected to be included to provide the Montana statewide data to be used in other national YRBS reports.

The 2021 YRBS was conducted in February-March 2021. Schools administering the survey were provided with detailed written instructions on conducting a random survey in their schools. To encourage accurate responses to sensitive questions, a strict protocol was implemented to protect the privacy and confidentiality of all participating students. The questionnaire was designed without skip patterns to ensure survey completion by students in a similar period of time.

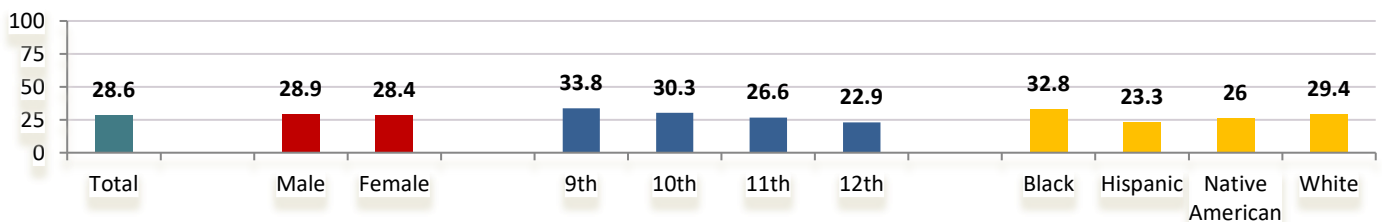
Survey Validity, Limitations and Results

Data used in this report from the 2021 YRBS are based on a random sample survey of Montana high school students. The weighted data results contained in this report can be used to make inferences about the priority health-risk behaviors of all high school students in grades 9 through 12 in all schools in Montana. However, users should be careful in using the data since respondents in self-reported surveys may tend to underreport behaviors that are socially undesirable, unhealthy, or illegal (alcohol consumption, drug use, seat belt nonuse, etc.) and overreport behaviors that are socially desirable (amount of exercise, etc.).

For the purpose of this report, youth that are classified as sleep deprived are those Montana youth that reported getting less than 8 hours of sleep on an average school night. Fifty-four separate risk behaviors were queried for association with sleep deprivation. These findings are presented in bullet, table, and graph forms in the following report.

8 HOURS OF SLEEP

Statewide, 28.6 percent of students got 8 or more hours of sleep on an average school night.



For more on the Montana YRBS go to www.opi.mt.gov/yrbs.

2021 Montana Youth Risk Behavior Survey – Sleep Deprivation Report

Findings

Montana high school students who got less than 8 hours of sleep are ***more likely*** than those students who got 8 or more hours of sleep to have:

- Not always worn a seat belt when riding in a car driven by someone else (40% of students who got less than 8 hours of sleep compared to 48% of students who got 8 or more hours of sleep).
- Never or rarely wore a seat belt when driving a vehicle (8% of students who got less than 8 hours of sleep compared to 4% of students who got 8 or more hours of sleep).
- Drove when drinking alcohol during the past 30 days (9% of students who got less than 8 hours of sleep compared to 5% of students who got 8 or more hours of sleep).
- Experienced sexual dating violence, such as unwanted kissing, touching, or sexual intercourse, by someone they were dating, during the past 12 months (9% of students who got less than 8 hours of sleep compared to 5% of students who got 8 or more hours of sleep).
- Been bullied on school property on school property during the past 12 months (17% of students who got less than 8 hours of sleep compared to 12% of students who got 8 or more hours of sleep).
- Been electronically bullied during the past 12 months (18% of students who got less than 8 hours of sleep compared to 12% of students who got 8 or more hours of sleep).
- Been the victim of teasing or name calling because someone thought they were gay, lesbian, or bisexual during the past 12 months (15% of students who got less than 8 hours of sleep compared to 10% of students who got 8 or more hours of sleep).
- Felt sad or hopeless almost every day for 2 or more weeks in a row during the past 12 months (48% of students who got less than 8 hours of sleep compared to 26% of students who got 8 or more hours of sleep).
- Made a plan about how they would attempt suicide during the past 12 months (21% of students who got less than 8 hours of sleep compared to 11% of students who got 8 or more hours of sleep).
- Attempted suicide during the past 12 months (12% of students who got less than 8 hours of sleep compared to 7% of students who got 8 or more hours of sleep).
- Ever tried cigarette smoking (30% of students who got less than 8 hours of sleep compared to 21% of students who got 8 or more hours of sleep).
- Ever used electronic vapor products (51% of students who got less than 8 hours of sleep compared to 41% of students who got 8 or more hours of sleep).
- Used electronic vapor products during the past 30 days (28% of students who got less than 8 hours of sleep compared to 19% of students who got 8 or more hours of sleep).
- Used smokeless tobacco during the past 30 days (6% of students who got less than 8 hours of sleep compared to 3% of students who got 8 or more hours of sleep).
- Had a drink of alcohol during the past 30 days (34% of students who got less than 8 hours of sleep compared to 26% of students who got 8 or more hours of sleep).
- Had 4 or more drinks, if female, 5 or more drinks, if male, of alcohol within a couple hours during the past 30 days [binge drink] (18% of students who got less than 8 hours of sleep compared to 13% of students who got 8 or more hours of sleep).
- Ever used marijuana in their lifetime (40% of students who got less than 8 hours of sleep compared to 30% of students who got 8 or more hours of sleep).
- Used marijuana during the past 30 days (21% of students who got less than 8 hours of sleep compared to 16% of students who got 8 or more hours of sleep).
- Ever took prescription pain medication without a doctor's prescription or differently than how a doctor told them to use it (such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet) (13% of students who got less than 8 hours of sleep compared to 9% of students who got 8 or more hours of sleep).
- Ever had sexual intercourse in their lifetime (44% of students who got less than 8 hours of sleep compared to 34% of students who got 8 or more hours of sleep).

2021 Montana Youth Risk Behavior Survey – Sleep Deprivation Report













Montana high school students who got less than 8 hours of sleep are ***more likely*** than those students who got 8 or more hours of sleep to have:

- Had sexual intercourse during the past 3 months (32% of students who got less than 8 hours of sleep compared to 24% of students who got 8 or more hours of sleep).
- Tried (were trying to) losing weight (43% of students who got less than 8 hours of sleep compared to 37% of students who got 8 or more hours of sleep).
- Not eaten fruit during the past 7 days (11% of students who got less than 8 hours of sleep compared to 8% of students who got 8 or more hours of sleep).
- Not eaten vegetables during the past 7 days (6% of students who got less than 8 hours of sleep compared to 4% of students who got 8 or more hours of sleep).
- Not eaten breakfast during the past 7 days (20% of students who got less than 8 hours of sleep compared to 10% of students who got 8 or more hours of sleep).
- Drank a can, bottle, or glass of soda or pop daily during the past 7 days (14% of students who got less than 8 hours of sleep compared to 8% of students who got 8 or more hours of sleep).
- Not been physically active at least 60 minutes per day on any of the past 7 days (13% of students who got less than 8 hours of sleep compared to 7% of students who got 8 or more hours of sleep).
- Spent 3 or more hours per day on screen time (TV, computer, smart phone, or other electronic device watching shows or videos, playing games, accessing the Internet, or using social media, not counting time doing school work) on an average school day (74% of students who got less than 8 hours of sleep compared to 67% of students who got 8 or more hours of sleep).
- Experienced homelessness - not usually slept in their parent's or guardian's home during the past 30 days (4% of students who got less than 8 hours of sleep compared to 2% of students who got 8 or more hours of sleep).
- Slept away from their parents or guardians because they were kicked out, ran away, or were abandoned, during the past 30 days (5% of students who got less than 8 hours of sleep compared to 2% of students who got 8 or more hours of sleep).
- Received help from a resource teacher, speech therapist, or other special education teacher during the past 12 months (16% of students who got less than 8 hours of sleep compared to 13% of students who got 8 or more hours of sleep).














Montana high school students who got less than 8 hours of sleep are ***less likely*** than those students who got 8 or more hours of sleep to have:

- Eaten breakfast on all of the past 7 days (24% of students who got less than 8 hours of sleep compared to 45% of students who got 8 or more hours of sleep).
- Been physically active for at least 60 minutes per day on 5 or more of the past 7 days (47% of students who got less than 8 hours of sleep compared to 62% of students who got 8 or more hours of sleep).
- Been physically active for at least 60 minutes per day on all of the past 7 days (24% of students who got less than 8 hours of sleep compared to 31% of students who got 8 or more hours of sleep).
- Played on at least one sports team during the past 12 months (55% of students who got less than 8 hours of sleep compared to 68% of students who got 8 or more hours of sleep).
- Made mostly A's or B's in school during the past 12 months (71% of students who got less than 8 hours of sleep compared to 81% of students who got 8 or more hours of sleep).












2021 Montana Youth Risk Behavior Survey – Sleep Deprivation Report

Health Risk Behavior by percentage of students	Students Who Got 8 or More Hours Sleep per Night	Students Who Got Less Than 8 Hours of Sleep per Night	Statistical Difference
Did not always wear a seat belt when riding in a car driven by someone else	40.0% (35.9-44.1)	48.3% (45.7-51.0)	
Never or rarely wore a seat belt when driving	3.7% (2.3-5.2)	8.2% (7.0-9.4)	
Rode with a driver who had been drinking during the past 30 days	18.2% (16.0-20.5)	21.6% (19.7-23.5)	
Drove when drinking alcohol during the past 30 days	5.1% (3.3-6.9)	8.5% (7.4-9.6)	
Texted or e-mailed while driving a car or other vehicle during the past 30 days	52.7% (48.4-56.9)	58.9% (56.0-61.8)	
Used the Internet or apps on their cell phone while driving during the past 30 days	46.7% (42.5-50.9)	53.2% (50.6-55.8)	
Carried a weapon such as a gun, knife, or club on school property, past 30 days	7.5% (5.8-9.2)	9.6% (8.2-10.9)	
Did not go to school because they felt unsafe at school or on their way to or from school during the past 30 days	5.1% (3.8-6.4)	7.0% (5.9-8.1)	
Were threatened or injured with a weapon on school property during the past 12 months	4.4% (3.1-5.7)	6.6% (5.4-7.8)	
Ever physically forced to have sexual intercourse when they did not want to	9.3% (7.7-11.0)	11.6% (10.1-13.1)	
Experienced sexual dating violence (unwanted kissing, touching, or sexual intercourse by someone they were dating), past 12 months	5.4% (3.6-7.1)	9.1% (7.8-10.5)	
Were bullied on school property during the past 12 months	12.4% (10.4-14.5)	16.7% (14.7-18.6)	
Were electronically bullied (texting, Instagram, Facebook, or other social media) during the past 12 months	11.6% (9.5-13.7)	18.4% (16.9-19.8)	
Were the victim of teasing or name calling because someone thought they were gay, lesbian, or bisexual during the past 12 months	9.8% (8.1-11.5)	15.1% (13.6-16.5)	
Felt sad or hopeless almost every day for 2 or more weeks in a row during the past 12 months	26.4% (23.8-29.0)	47.6% (44.8-50.4)	
Made a plan about how they would attempt suicide during the past 12 months	10.7% (8.7-12.7)	20.9% (19.2-22.6)	
Attempted suicide during the past 12 months	6.7% (5.1-8.4)	11.6% (9.9-13.3)	
Ever tried cigarette smoking	20.9% (17.5-24.4)	30.4% (27.8-33.1)	
Currently smoked cigarettes, past 30 days	4.8% (2.9-6.8)	7.8% (6.3-9.3)	
Ever used an electronic vapor product	40.5% (37.1-43.9)	51.3% (48.8-53.8)	

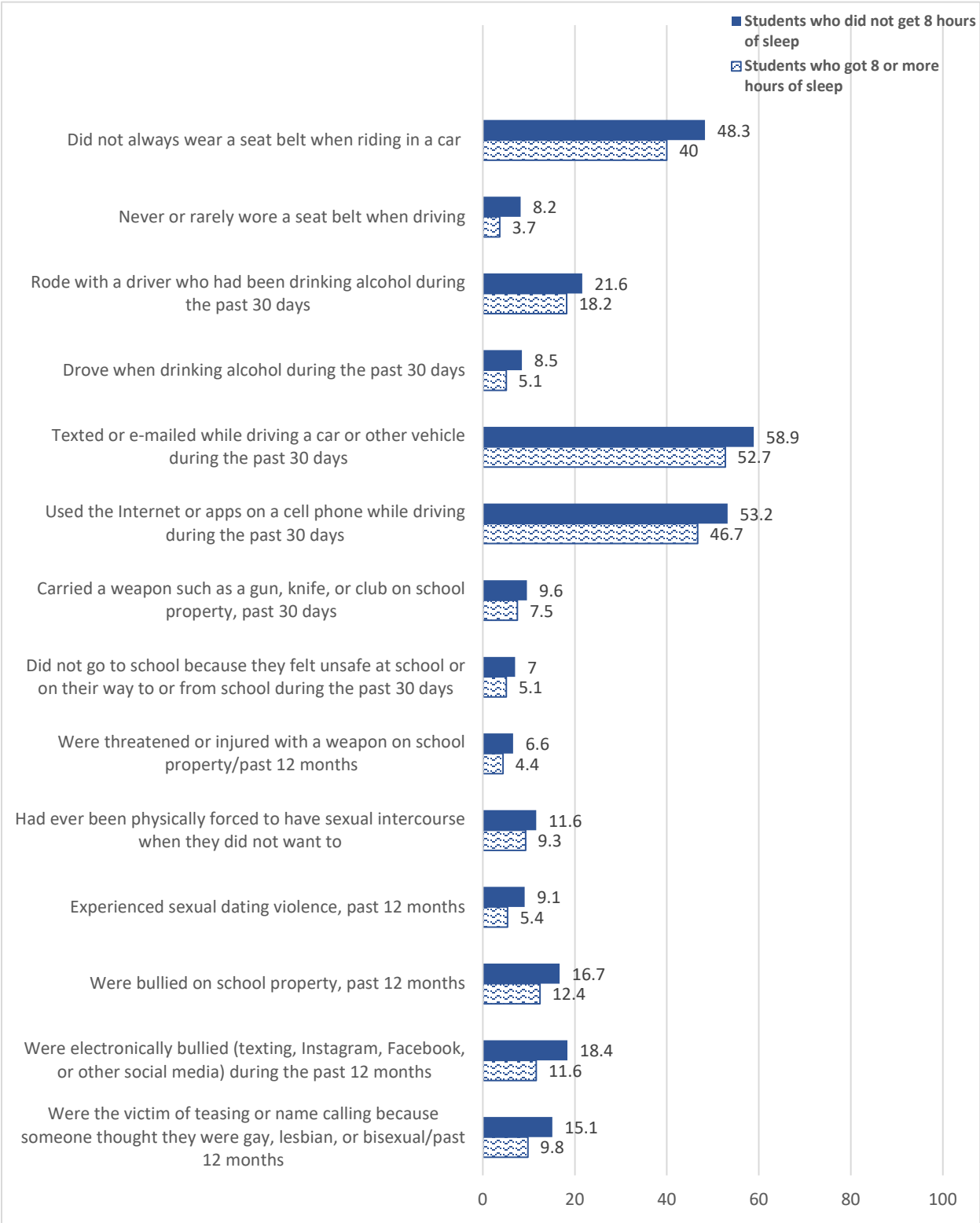
2021 Montana Youth Risk Behavior Survey – Sleep Deprivation Report

Health Risk Behavior by percentage of students	Students Who Got 8 or More Hours of Sleep per Night	Students Who Got Less Than 8 Hours of Sleep per Night	Statistical Difference
Currently used an electronic vapor product, past 30 days	18.5% (16.1-21.0)	28.3% (26.1-30.6)	
Currently used smokeless tobacco (chewing tobacco, snuff, or dip), past 30 days	3.1% (2.0-4.2)	5.9% (4.7-7.1)	
Currently smoked cigars, cigarillos, or little cigars, past 30 days	3.5% (2.3-4.8)	5.0% (3.9-6.1)	
Currently drank alcohol, past 30 days	25.5% (22.1-28.8)	34.0% (31.8-36.2)	
Had 4 or more drinks, if female, 5 or more drinks, if male, of alcohol within a couple hours during the past 30 days	13.4% (10.8-16.0)	17.7% (16.0-19.4)	
Ever used marijuana in their lifetime	29.8% (26.3-33.2)	39.8% (37.1-42.6)	
Currently used marijuana, past 30 days	16.0% (13.0-18.9)	21.1% (19.1-23.1)	
Ever took prescription pain medicine without a doctor's prescription or differently than how a doctor told them to use it (codeine, Vicodin, OxyContin, Hydrocodone and Percocet)	8.5% (6.9-10.0)	13.3% (11.8-14.7)	
Ever used methamphetamines in their lifetime	1.6% (1.0-2.3)	2.0% (1.3-2.8)	
Ever used ecstasy in their lifetime	2.9% (2.0-3.9)	4.7% (3.8-5.5)	
Ever had sexual intercourse in their lifetime	34.3% (30.8-37.8)	44.4% (41.5-47.2)	
Had sexual intercourse with four or more persons during their life	9.7% (7.6-11.7)	11.1% (9.7-12.4)	
Currently sexually active (sexual intercourse during the past 3 months)	24.4% (21.1-27.8)	32.3% (29.9-34.7)	
Drank alcohol or used drugs before last sexual intercourse	13.7% (9.6-17.7)	19.1% (16.3-21.8)	
Used a condom during last sexual intercourse	54.6% (47.4-61.7)	50.2% (46.9-53.4)	
Have obesity (at or above the 95 th percentile for body mass index)	11.2% (8.7-13.6)	12.0% (10.7-13.4)	
Were overweight (at or above the 85 th percentile but below the 95 th percentile for body mass index)	13.0% (11.2-14.9)	14.3% (12.9-15.7)	
Were trying to lose weight	36.7% (33.8-39.6)	43.1% (40.9-45.3)	
Did not drink 100% fruit juice during the past 7 days	33.7% (31.2-36.3)	34.6% (32.5-36.6)	
Did not eat fruit during the past 7 days	8.2% (6.7-9.6)	11.4% (10.2-12.5)	
Did not eat vegetables during the past 7 days	3.6% (2.5-4.6)	5.9% (5.0-6.8)	
Drank a can, bottle, or glass of soda or pop daily during the past 7 days	8.3% (6.7-9.9)	13.6% (12.2-15.0)	

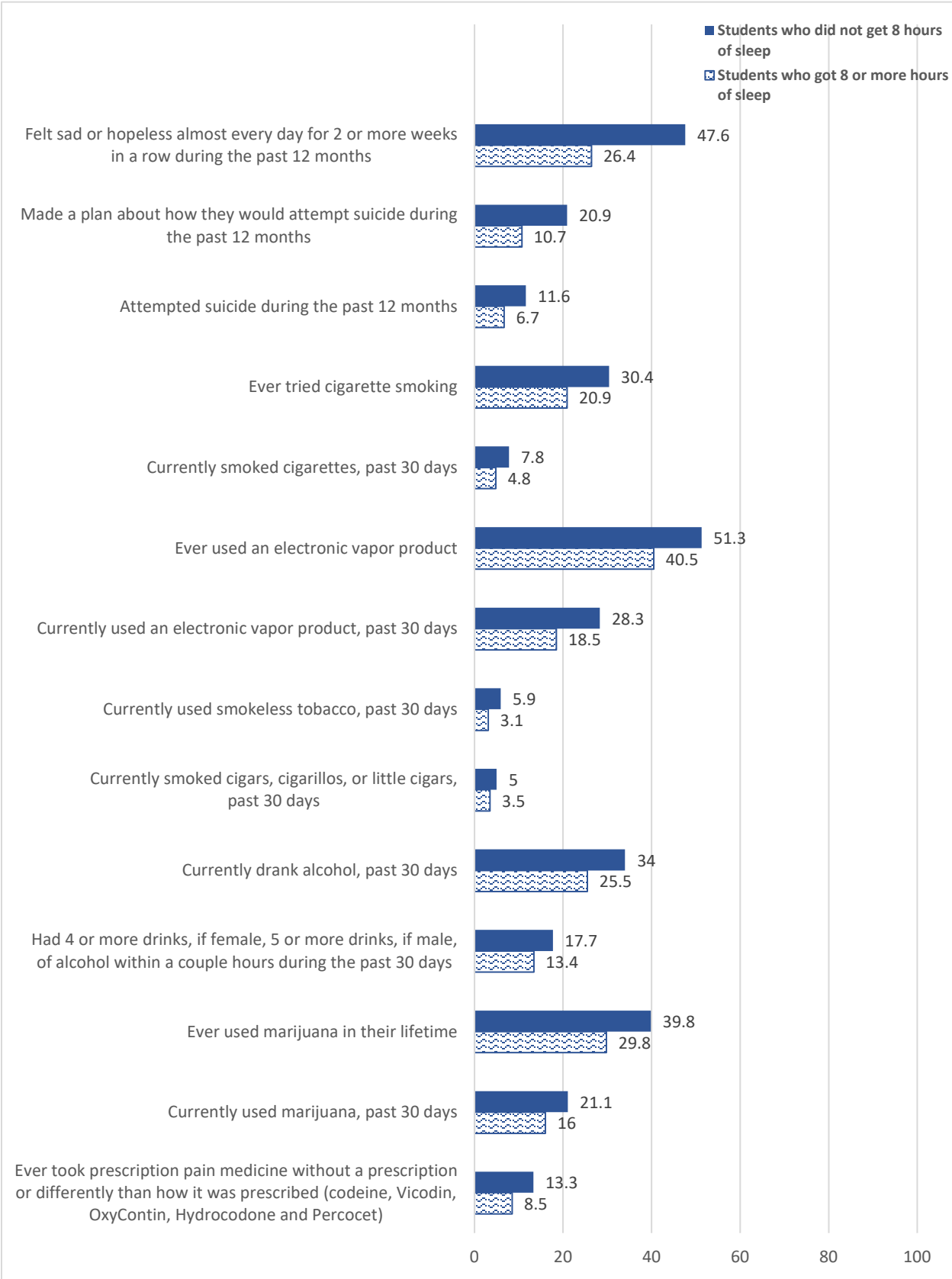
2021 Montana Youth Risk Behavior Survey – Sleep Deprivation Report

Health Risk Behavior by percentage of students	Students Who Got 8 or More Hours of Sleep per Night	Students Who Got Less Than 8 Hours of Sleep per Night	Statistical Difference
Did not drink milk during the past 7 days	24.2% (21.7-26.8)	27.6% (25.7-29.5)	
Did not eat breakfast during the past 7 days	10.0% (8.2-11.8)	19.8% (18.1-21.4)	
Ate breakfast on all of the past 7 days	45.1% (42.2-47.9)	24.3% (22.4-26.3)	
Were physically active at least 60 minutes per day on 5 or more of the past 7 days	62.3% (59.1-65.6)	47.4% (44.9-50.0)	
Were not physically active at least 60 minutes per day on any of the past 7 days	7.3% (5.7-8.9)	13.0% (11.7-14.3)	
Were physically active at least 60 minutes per day on all of the past 7 days	31.0% (27.9-34.1)	23.8% (22.1-25.4)	
Spent 3 or more hours per day on screen time (TV, computer, smart phone, or other electronic device watching shows or videos, playing games, accessing the Internet, or using social media, <i>not counting time doing schoolwork</i>) on an average school day	67.4% (64.8-70.0)	73.7% (72.1-75.4)	
Played on at least one sports team during the past 12 months	67.6% (64.5-70.6)	55.2% (53.1-57.4)	
Experienced homelessness (not usually sleeping in their parent's or guardian's home) during the past 30 days	1.5% (0.8-2.1)	4.0% (3.1-4.9)	
Slept away from their parents or guardians because they were kicked out, ran away, or were abandoned, during the past 30 days	2.1% (1.2-2.9)	5.1% (4.3-6.0)	
Made mostly A's or B's in school during the past 12 months	81.3% (78.0-84.6)	70.8% (67.8-73.7)	
Received help from a resource teacher, speech therapist, or other special education teacher during the past 12 months	12.8% (10.7-14.9)	15.5% (14.0-17.0)	

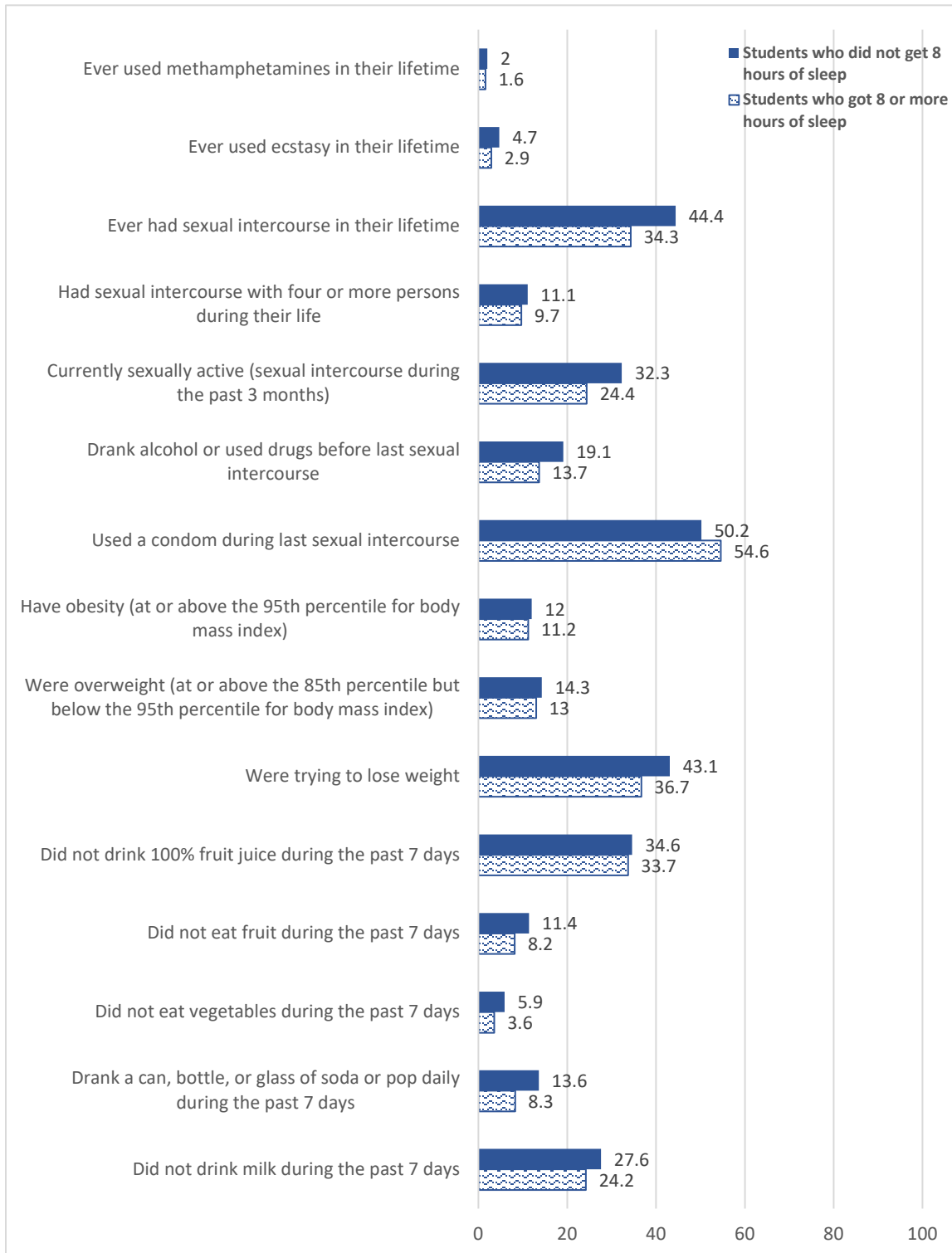
2021 Montana Youth Risk Behavior Survey – Sleep Deprivation Report



2021 Montana Youth Risk Behavior Survey – Sleep Deprivation Report



2021 Montana Youth Risk Behavior Survey – Sleep Deprivation Report



2021 Montana Youth Risk Behavior Survey – Sleep Deprivation Report

