

**Nevada Middle School
Youth Risk Behavior Survey (YRBS)
Comparison Report, 2019-2021**



School of Public Health

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Additional Resources

Nevada YRBS Statewide and Special Reports

<https://www.unr.edu/public-health/research-activities/nevada-youth-risk-behavior-survey>

YRBS Adolescent and School Health

<http://www.cdc.gov/HealthyYouth/yrbs/index.htm>

Nevada Division of Public and Behavioral Health

<http://dpbh.nv.gov/>

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INTRODUCTION

Priority health risk behaviors (i.e. preventable behaviors that contribute to the leading causes of morbidity and mortality) are often established during childhood and adolescence and extend into adulthood. Ongoing surveillance of youth risk behaviors is critical for the design, implementation, and evaluation of public health interventions to improve adolescent health. The Youth Risk Behavior Survey (YRBS) is a national surveillance system that was established in 1991 by the Centers for Disease Control and Prevention (CDC) to monitor the prevalence of health risk behaviors among youth. YRBS data are routinely collected on high school students, but only a few states collect data in middle schools. The Nevada Middle School YRBS is biennial, anonymous and voluntary survey of students in 6th through 8th grade in regular public, charter, and alternative schools. Students self-report their behaviors in five major areas of health that directly lead to morbidity and mortality, these include:

- 1) Behaviors that contribute to unintentional injuries and violence;
- 2) Tobacco use;
- 3) Alcohol and other drug use;
- 4) Unhealthy dietary behaviors; and
- 5) Physical inactivity.

The Nevada Middle School YRBS provides prevalence estimates for priority risk behaviors and can be used to monitor trends over time.

METHODS

The 2019 and 2021 Nevada YRBS sampling plans were designed to ensure that every eligible student in regular public, charter, and alternative middle schools had an equal chance of selection. A random sample of students in grades 6–8 was selected in every school district. For the 2019 Middle School YRBS, 5,341 youth from 113 schools completed the survey. For the 2021 Middle School YRBS, 5,777 youth from 115 schools completed the survey. Please see the 2019 and 2021 Nevada Youth Risk Behavior reports for more information.

The 2019 and 2021 Nevada YRBS data in this report were weighted at the state level and regional level based on the sex, race/ethnicity, grade level, and age of students in each region (see Table 1). The weighting process ensured that the estimates accurately represent the entire student population in each region and the state as a whole. Non-response or poor sampling procedures can result in a sample that is not a representative subset of the population; therefore un-weighted results from these samples may not accurately reflect student behaviors and could be misleading. This report only displays weighted results. Differences in risk behaviors from 2019 to 2021 were assessed with weighted chi-square tests.

NOTE: The CDC typically does not include age in the YRBS weighting process. To account for differences in age between spring (2019) and fall (2021) survey administrations, age was added as a variable in the weighting process. Comparisons between 2021 and prior years should not be made outside of UNR reports that account for age differences. Estimates may differ from statewide and CDC reports.

DEMOGRAPHICS

Demographic characteristics of participating students — Nevada, Youth Risk Behavior Survey, 2019 & 2021

		2019 Student Participants ^a	2021 Student Participants ^a	2019 Weighted %	2021 Weighted %
Total		5341	5777	100.0%	100.0%
Sex	Female	2825	2737	49.9%	49.2%
	Male	2478	2902	50.1%	50.8%
Age Groups	11 years old or younger	697	1452	30.4%	28.1%
	12 years old	1735	1880	32.8%	32.8%
	13 years old	1920	2065	32.0%	34.1%
	14 years old or older	977	362	4.8%	5.1%
Race/Ethnicity	American Indian/Alaska Native^b	170	183	0.9%	0.8%
	Asian^b	190	253	5.6%	6.0%
	Black^b	254	340	11.2%	14.7%
	Native Hawaiian/Pacific Islander^b	91	91	1.4%	1.1%
	White^b	1890	1991	31.5%	29.0%
	Hispanic/Latino	2208	2260	43.2%	43.6%
	Other/Multiple^b	328	281	6.1%	4.9%
Region	1: Carson City	268	259	1.9%	1.9%
	2: Douglas	223	254	1.3%	1.3%
	3: Elko, White Pine, and Eureka	350	334	2.7%	2.7%
	4: Churchill, Humboldt, Pershing, and Lander	369	289	1.8%	2.1%
	5: Lyon, Mineral, and Storey	342	248	2.3%	2.4%
	6: Nye, Lincoln, and Esmeralda	432	275	1.4%	1.5%
	7: Washoe	1373	2149	15.4%	15.2%
	8: Clark	1984	1969	73.2%	73.0%

^a The sample size in the total and subgroups may differ due to missing data

^b Non-Hispanic

2019 to 2021 Comparison

Weighted prevalence of participant characteristics and health risk behaviors — Nevada, Youth Risk Behavior Survey, 2019 to 2021

PARTICIPANT CHARACTERISTICS

	2019 Percentage and 95% Confidence Interval	2021 Percentage and 95% Confidence Interval	CHANGE Direction and <i>p</i> value
Percentage of middle school students who had parents or other adults in their home serving on active duty in the military	8.0% (6.7-9.3)	7.3% (6.2-8.4)	<i>p</i> = 0.429
Percentage of middle school students who qualified for or received free or reduced price lunches at school	39.9% (36.2-43.7)	44.6% (41.4-47.7)	<i>p</i> = 0.068

VIOLENCE-RELATED BEHAVIORS

	2019 Percentage and 95% Confidence Interval	2021 Percentage and 95% Confidence Interval	CHANGE Direction and <i>p</i> value
Percentage of middle school students who were electronically bullied during the 12 months before the survey (including being bullied through texting, Instagram, Facebook, or other social media)	11.9% (10.7-13.1)	17.8% (16.2-19.4)	↑ <i>p</i> < 0.001
Percentage of middle school students who did not go to school because they felt unsafe at school or on their way to or from school during the 30 days before the survey	5.1% (4.1-6.0)	5.5% (4.6-6.5)	<i>p</i> = 0.509

ADVERSE CHILDHOOD EXPERIENCES

	2019 Percentage and 95% Confidence Interval	2021 Percentage and 95% Confidence Interval	CHANGE Direction and <i>p</i> value
Percentage of middle school students who have ever been hit, beaten, kicked, or physically hurt in any way by an adult (not including spanking for bad behavior)	11.9% (10.7-13.2)	10.9% (9.7-12.0)	<i>p</i> = 0.201
Percentage of middle school students who have ever been physically forced to have sexual intercourse when they did not want to	4.0% (3.2-4.8)	3.9% (3.2-4.6)	<i>p</i> = 0.915
Percentage of middle school students who have ever been sworn at, insulted by, or put down by an adult in their home	32.5% (30.5-34.5)	32.2% (29.8-34.7)	<i>p</i> = 0.866
Percentage of middle school students who have seen or heard adults in their home slap, hit, kick, punch, or beat each other up	14.8% (13.4-16.2)	14.2% (12.8-15.6)	<i>p</i> = 0.379
Percentage of middle school students who have ever lived with someone who was depressed, mentally ill, or suicidal	20.5% (18.8-22.1)	26.3% (24.4-28.3)	↑ <i>p</i> < 0.001
Percentage of middle school students who have ever lived with someone who was a problem drinker, alcoholic, or abused street or prescription drugs	21.2% (19.5-23.0)	19.8% (18.3-21.3)	<i>p</i> = 0.235

EMOTIONAL HEALTH

	2019 Percentage and 95% Confidence Interval	2021 Percentage and 95% Confidence Interval	CHANGE Direction and p value
Percentage of middle school students who felt sad or hopeless almost every day for two or more weeks in a row during the 12 months before the survey (so that they stopped doing some usual activities)	32.5% (30.3-34.7)	34.4% (32.4-36.4)	$p = 0.206$
Percentage of middle school students who seriously considered attempting suicide during the 12 months before the survey	20.7% (18.7-22.6)	20.0% (18.2-21.8)	$p = 0.610$
Percentage of middle school students who made a plan about how they would attempt suicide during the 12 months before the survey	11.3% (9.9-12.7)	13.3% (11.9-14.7)	↑ $p = 0.043$
Percentage of middle school students who attempted suicide during the 12 months before the survey	7.4% (6.3-8.5)	7.6% (6.5-8.7)	$p = 0.790$
Percentage of middle school students who did something to purposely hurt themselves without wanted to die, such as cutting or burning themselves on purpose during the 12 months before the survey	18.2% (16.3-20.1)	19.0% (17.3-20.7)	$p = 0.540$
Percentage of middle school students who <u>Never/Rarely</u> got the kind of help they need when they felt sad, empty, hopeless, angry, or anxious (among those who felt sad, empty, hopeless, angry, or anxious)	49.1% (46.6-51.6)	46.9% (44.6-49.2)	$p = 0.208$

TOBACCO USE

	2019 Percentage and 95% Confidence Interval	2021 Percentage and 95% Confidence Interval	CHANGE Direction and <i>p</i> value
Percentage of middle school students who ever smoked cigarettes (even one or two puffs)	8.2% (7.0-9.4)	7.2% (6.2-8.1)	<i>p</i> = 0.197
Percentage of middle school students who smoked cigarettes for the first time before age 11 years (even one or two puffs)	3.9% (3.0-4.7)	3.9% (3.1-4.6)	<i>p</i> = 0.997
Percentage of middle school students who smoked cigarettes during the 30 days before the survey	2.1% (1.6-2.7)	1.7% (1.3-2.2)	<i>p</i> = 0.289
Percentage of middle school students who smoked cigarettes on 20 or more days during the 30 days before the survey (among those who smoked cigarettes during the 30 days before the survey)	7.0% (2.5-11.4)	9.7% (3.0-16.5)	<i>p</i> = 0.490
Percentage of middle school students who used smokeless tobacco during the 30 days before the survey	2.3% (1.7-2.9)	1.4% (1.0-1.8)	↓ <i>p</i> = 0.008

ELECTRONIC VAPOR PRODUCT USE

	2019 Percentage and 95% Confidence Interval	2021 Percentage and 95% Confidence Interval	CHANGE Direction and <i>p</i> value
Percentage of middle school students who ever used electronic vapor products (including e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods)	18.7% (16.8-20.5)	12.6% (10.9-14.2)	↓ <i>p</i> < 0.001
Percentage of middle school students who tried electronic vapor products for the first time before age 11 years (including e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods)	3.6% (2.8-4.4)	3.5% (2.8-4.2)	<i>p</i> = 0.852
Percentage of middle school students who used electronic vapor products during the 30 days before the survey (including e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods)	8.0% (5.0-11.1)	13.4% (8.9-17.8)	↑ <i>p</i> = 0.042
Percentage of middle school students who used electronic vapor products on 20 or more days during the 30 days before the survey (including e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods; among those who used electronic vapor products during the 30 days before the survey)	8.1% (5.0-11.2)	12.3% (8.6-16.1)	<i>p</i> = 0.085

ALCOHOL USE

	2019 Percentage and 95% Confidence Interval	2021 Percentage and 95% Confidence Interval	CHANGE Direction and p value
Percentage of middle school students who ever drank alcohol (other than a few sips)	25.0% (22.6-27.5)	21.3% (19.1-23.6)	↓ $p = 0.031$
Percentage of middle school students who drank alcohol for the first time before age 11 years (other than a few sips)	13.0% (11.6-14.4)	12.6% (10.6-14.5)	$p = 0.711$
Percentage of middle school students who had at least one drink of alcohol during the 30 days before the survey	9.4% (8.1-10.8)	6.2% (5.3-7.2)	↓ $p < 0.001$
Percentage of middle school students who had at least one drink of alcohol on 20 or more days during the 30 days before the survey (among those who drank alcohol during the 30 days before the survey)	2.1% (0.9-3.2)	5.0% (2.2-7.8)	↑ $p = 0.024$
Percentage of middle school students who have ever rode with a driver who had been drinking alcohol	22.8% (21.1-24.6)	18.5% (16.8-20.2)	↓ $p < 0.001$

MARIJUANA USE

	2019 Percentage and 95% Confidence Interval	2021 Percentage and 95% Confidence Interval	CHANGE Direction and <i>p</i> value
Percentage of middle school students who ever used marijuana	10.2% (8.6-11.8)	7.5% (6.1-9.0)	↓ <i>p</i> = 0.017
Percentage of middle school students who tried marijuana for the first time before age 11 years	3.1% (2.4-3.8)	2.1% (1.5-2.6)	↓ <i>p</i> = 0.020
Percentage of middle school students who used marijuana during the 30 days before the survey	5.8% (4.7-7.0)	3.8% (2.8-4.8)	↓ <i>p</i> = 0.008
Percentage of middle school students who usually used marijuana by different methods during the past 30 days before the survey (among those who used marijuana in the past 30 days):			
Smoked it in a joint, bong, pipe or blunt	72.2% (65.2-79.2)	57.3% (46.0-68.6)	
Consumed it using food or drink	10.2% (5.3-15.0)	13.0% (6.5-19.5)	
Vaporized it	10.5% (4.5-16.4)	17.9% (10.5-25.4)	
Dabbed it	7.1% (3.3-11.0)	6.5% (2.0-11.0)	
Used it in some other way	0.0% (0.0-0.0)	5.2% (1.4-9.0)	
Percentage of middle school students who have ever rode with a driver who had been using marijuana	15.8% (14.0-17.6)	13.8% (12.1-15.5)	<i>p</i> = 0.110

NON-MEDICAL PRESCRIPTION PAIN MEDICINE USE

	2019 Percentage and 95% Confidence Interval	2021 Percentage and 95% Confidence Interval	CHANGE Direction and <i>p</i> value
Percentage of middle school students who ever took prescription pain medicine without a doctor's prescription or differently than prescribed	9.6% (8.2-11.0)	8.3% (7.2-9.4)	<i>p</i> = 0.164
Percentage of middle school students who took prescription pain medicine without a doctor's prescription or differently than prescribed during the 30 days before the survey	4.0% (3.2-4.9)	3.9% (3.2-4.6)	<i>p</i> = 0.744

OTHER DRUG USE

	2019 Percentage and 95% Confidence Interval	2021 Percentage and 95% Confidence Interval	CHANGE Direction and <i>p</i> value
Percentage of middle school students who ever used cocaine (any form of cocaine including powder, crack, or freebase)	1.3% (0.9-1.7)	1.1% (0.7-1.5)	<i>p</i> = 0.654
Percentage of middle school students who ever used heroin	0.6% (0.3-0.8)	0.9% (0.5-1.2)	<i>p</i> = 0.195
Percentage of middle school students who ever used methamphetamines	1.0% (0.6-1.4)	1.1% (0.7-1.5)	<i>p</i> = 0.772
Percentage of middle school students who ever used ecstasy	1.2% (0.9-1.6)	1.4% (1.0-1.8)	<i>p</i> = 0.499
Percentage of middle school students who ever used synthetic marijuana	4.0% (3.2-4.7)	4.1% (3.4-4.9)	<i>p</i> = 0.762

SUBSTANCE USE – PERCEPTION OF RISK

	2019 Percentage and 95% Confidence Interval	2021 Percentage and 95% Confidence Interval	CHANGE Direction and <i>p</i> value
Percentage of middle school students who reported that they think people are at <u>No/ Slight risk</u> of harming themselves physically or in other ways when they have five or more drinks of an alcoholic beverage once or twice a week	38.3% (35.9-40.6)	39.9% (37.3-42.5)	<i>p</i> = 0.352
Percentage of middle school students who reported that they think people are at <u>No/ Slight risk</u> of harming themselves physically or in other ways if they smoke one or more packs of cigarettes per day	36.9% (34.5-39.4)	37.6% (35.1-40.0)	<i>p</i> = 0.711
Percentage of middle school students who reported that they think people are at <u>No/ Slight risk</u> of harming themselves physically or in other ways if they smoke marijuana once or twice a week	44.9% (42.2-47.5)	45.6% (43.0-48.2)	<i>p</i> = 0.677
Percentage of middle school students who reported that they think people are at <u>No/ Slight risk</u> of harming themselves physically or in other ways if they use prescription drugs that are not prescribed to them	27.4% (25.0-29.8)	27.0% (24.7-29.3)	<i>p</i> = 0.800

SUBSTANCE USE – PERCEPTION OF PARENTAL DISAPPROVAL

	2019 Percentage and 95% Confidence Interval	2021 Percentage and 95% Confidence Interval	CHANGE Direction and <i>p</i> value
Percentage of middle school students who reported that their parents feel it would be <u>Not at all/ A little bit wrong</u> for them to have one or two drinks of an alcoholic beverage nearly every day	8.9% (7.5-10.3)	8.6% (7.5-9.6)	<i>p</i> = 0.687
Percentage of middle school students who reported that their parents feel it would be <u>Not at all/ A little bit wrong</u> for them to smoke tobacco	5.2% (4.2-6.3)	4.4% (3.6-5.2)	<i>p</i> = 0.167
Percentage of middle school students who reported that their parents feel it would be <u>Not at all/ A little bit wrong</u> for them to smoke marijuana	7.5% (6.2-8.8)	6.9% (5.8-7.9)	<i>p</i> = 0.462
Percentage of middle school students who reported that their parents feel it would be <u>Not at all/ A little bit wrong</u> for them to use prescription drugs not prescribed to them	6.8% (5.6-8.0)	5.6% (4.6-6.6)	<i>p</i> = 0.129

SUBSTANCE USE – PERCEPTION OF PEER DISAPPROVAL

	2019 Percentage and 95% Confidence Interval	2021 Percentage and 95% Confidence Interval	CHANGE Direction and <i>p</i> value
Percentage of middle school students who reported that their friends feel it would be <u>Not at all/ A little bit wrong</u> for them to have one or two drinks of an alcoholic beverage nearly every day	20.5% (18.3-22.6)	16.7% (15.1-18.3)	↓ <i>p</i> = 0.006
Percentage of middle school students who reported that their friends feel it would be <u>Not at all/ A little bit wrong</u> for them to smoke tobacco	15.9% (14.1-17.7)	13.4% (11.9-14.9)	↓ <i>p</i> = 0.034
Percentage of middle school students who reported that their friends feel it would be <u>Not at all/ A little bit wrong</u> for them to smoke marijuana	23.5% (21.0-26.0)	17.4% (15.4-19.4)	↓ <i>p</i> < 0.001
Percentage of middle school students who reported that their friends feel it would be <u>Not at all/ A little bit wrong</u> for them to use prescription drugs not prescribed to them	13.4% (11.8-15.0)	11.3% (9.9-12.6)	↓ <i>p</i> = 0.048

PHYSICAL ACTIVITY

	2019 Percentage and 95% Confidence Interval	2021 Percentage and 95% Confidence Interval	CHANGE Direction and <i>p</i> value
Percentage of middle school students who <u>did not</u> participate in at least 60 minutes of physical activity on any day during the 7 days before the survey (doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time)	19.3% (17.2-21.5)	24.0% (21.7-26.2)	↑ <i>p</i> = 0.003
Percentage of middle school students who were physically active at least 60 minutes per day on 5 or more days during the 7 days before the survey (doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time)	41.6% (39.2-44.1)	36.7% (34.4-39.0)	↓ <i>p</i> = 0.003
Percentage of middle school students who were physically active at least 60 minutes per day on all 7 days during the 7 days before the survey (doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time)	22.0% (20.2-23.8)	17.9% (16.2-19.6)	↓ <i>p</i> < 0.001
Percentage of middle school students who attended physical education classes on one or more days in an average school week	56.9% (52.1-61.6)	50.4% (45.6-55.3)	<i>p</i> = 0.061
Percentage of middle school students who attended physical education classes daily (5 days in an average week when they were in school)	36.9% (32.0-41.8)	22.4% (18.4-26.3)	↓ <i>p</i> < 0.001
Percentage of middle school students who had 9 or more hours of sleep on an average school night	24.8% (22.3-27.3)	19.1% (17.1-21.1)	↓ <i>p</i> < 0.001

RESILIENCY FACTORS

	2019 Percentage and 95% Confidence Interval	2021 Percentage and 95% Confidence Interval	CHANGE Direction and <i>p</i> value
Percentage of middle school students who <u>Most of the time/Always</u> talked to their parents or other adults in their home about their problems	31.7% (29.3-34.1)	28.9% (26.9-30.9)	<i>p</i> = 0.081
Percentage of middle school students who <u>Most of the time/Always</u> talked to their parents about what is right and wrong	33.4% (31.2-35.6)	31.1% (29.2-32.9)	<i>p</i> = 0.113
Percentage of middle school students who <u>Most of the time/Always</u> felt comfortable talking to their parents about personal matters	37.0% (34.4-39.6)	37.0% (35.0-39.0)	<i>p</i> = 0.993
Percentage of middle school students who <u>Most of the time/Always</u> felt close to people at their school	46.3% (43.9-48.8)	44.1% (42.1-46.2)	<i>p</i> = 0.176
Percentage of middle school students who <u>Most of the time/Always</u> were happy to be at their school	47.5% (46.0-49.9)	48.3% (46.0-50.6)	<i>p</i> = 0.635
Percentage of middle school students who reported that the teachers at their school <u>Most of the time/Always</u> treated students fairly	65.0% (62.1-67.9)	68.9% (66.3-71.4)	↑ <i>p</i> = 0.044

OTHER

	2019 Percentage and 95% Confidence Interval	2021 Percentage and 95% Confidence Interval	CHANGE Direction and <i>p</i> value
Percentage of middle school students who <u>Most of the time/Always</u> went hungry because there was not enough food in their home during the 30 days before the survey	3.8% (3.2-4.5)	2.6% (1.9-3.2)	↓ <i>p</i> = 0.009
Percentage of middle school students who visited a dentist during the 12 months before the survey (for a check-up, exam, teeth cleaning, or other dental work)	66.2% (63.3-69.1)	63.9% (61.4-66.4)	<i>p</i> = 0.231