

2019 Nevada Middle School Youth Risk Behavior Survey (YRBS)

Adverse Childhood Experiences (ACEs) Special Report



**School of Community
Health Sciences**

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Acknowledgements

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Additional Resources

[UNR YRBS Statewide and Special Reports](#)

[YRBS Adolescent and School Health](#)

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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 middle 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. This special report compares the 2019 Nevada YRBS prevalence estimates of behavioral health outcomes for students with different levels of exposure to adverse childhood experiences (ACEs).

Methods

The 2019 Nevada YRBS sampling plan was designed to ensure that every eligible student in regular public, charter, and alternative middle schools had an equal chance of selection. For the 2019 Middle School YRBS, a random sample of 5,341 youth from 113 schools completed the survey. Please see the 2019 Nevada Middle School Youth Risk Behavior report for detailed information on the random cluster sampling design used.

The 2019 Nevada YRBS data were weighted at the state and regional level based on the sex, race/ethnicity, and grade level of students in each region. 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.

In the 2019 Nevada Middle School YRBS, one CDC core measure and five state-added questions assessed lifetime prevalence of ACEs: 1) forced sex; 2) physical abuse by an adult; 3) verbal abuse by an adult; 4) household domestic violence; 5) household mental illness; and 6) household substance abuse (please see the 2019 Nevada Youth Risk Behavior reports for more information). The ACE questions were summed to create a total ACE score (range 0-6). ACE scores were only calculated for youth with complete ACE question data (n=5,305). The weighted chi-square test was used to assess differences in risk behaviors by ACE score (0 ACE, 1 ACE, 2 ACE, or 3+ ACE). The Cochran-Armitage test for trend was used to assess the relationship between ACEs and risk behaviors.

This report focuses on the relationship between ACE exposure and important violence and victimization, emotional health, and substance use outcomes. Weighted prevalence estimates are displayed in bar charts for each outcome. Indicators for which any prevalence estimates exceed 25% are displayed on charts with a vertical axis ranging from 0 to 100%; indicators for which no prevalence estimates exceed 25% are displayed on charts with a vertical axis ranging from 0 to 50%. Lines on the bars

represent 95% confidence intervals. Corresponding p-values are also included for every comparison.

Participant Characteristics

Table 1: Demographic characteristics of students* — Nevada, Youth Risk Behavior Survey, 2019

		Student Participants ^a	Unweighted %	Weighted %
Total		5305	100.0%	100.0%
Sex	Female	2814	53.4%	48.7%
	Male	2458	46.6%	51.3%
Age Groups	11 years old or younger	691	13.1%	14.7%
	12 years old	1729	32.7%	33.2%
	13 years old	1905	36.0%	33.1%
	14 years old or older	970	18.3%	19.0%
Grade	6th	1451	27.6%	30.9%
	7th	2103	40.0%	34.7%
	8th	1704	32.4%	34.4%
Race/Ethnicity	American Indian/Alaska Native^b	170	3.3%	0.8%
	Asian^b	189	3.7%	5.5%
	Black^b	252	4.9%	11.5%
	Native Hawaiian/Pacific Islander^b	91	1.8%	1.5%
	White^b	1881	36.8%	29.5%
	Hispanic/Latino	2197	43.0%	44.9%
	Other/Multiple^b	327	6.4%	6.2%
Region	Urban	3496	65.9%	91.4%
	Rural/Frontier	1809	34.1%	8.6%

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

^b Non-Hispanic

***Note: Youth missing all ACE data were excluded. Prevalence estimates differ slightly from statewide report.**

Prevalence of Individual Adverse Childhood Experiences (ACEs) and ACE Score

Table 2: Prevalence of individual ACE questions and ACE score* — Nevada, Youth Risk Behavior Survey, 2019

		N	% ^a
Ever physically forced to have sex			
	Yes	254	4.6%
	No	4965	95.4%
Ever been hit, beaten, kicked, or physically hurt in any way by an adult			
	Yes	738	13.1%
	No	4517	86.9%
Sometimes, mostly, or always have been sworn at, insulted by, or put down by an adult			
	Yes	1749	34.3%
	No	3438	65.7%
Ever seen adults in their home slap, hit, kick, punch, or beat each other up			
	Yes	886	16.2%
	No	4356	83.8%
Ever lived with someone who was depressed, mentally ill, or suicidal			
	Yes	1269	22.2%
	No	3915	77.8%
Ever lived with someone who was a problem drinker, alcoholic, or abused street or prescription drugs			
	Yes	1298	23.2%
	No	3894	76.8%
ACE Score			
	0	2345	44.4%
	1	1258	24.8%
	2	813	15.9%
	3+	889	15.0%

^a Weighted row percent

*Note: Youth missing all ACE data were excluded. Prevalence estimates differ slightly from statewide report.

Table 3: Participant characteristics*, by ACE score — Nevada, Youth Risk Behavior Survey, 2019

		0 ACE		1 ACE		2 ACE		3+ ACE		P-Value
		N ^a	% ^b	N ^a	% ^b	N ^a	% ^b	N ^a	% ^b	---
Overall Total	Total	2345	44.4%	1258	24.8%	813	15.9%	889	15.0%	
Sex	Female	11389	40.1%	651	24.2%	441	15.9%	441	15.9%	<0.001
	Male	1198	48.5%	599	25.3%	366	15.9%	295	10.3%	
Age	11 years old or younger	378	55.5%	171	24.7%	77	11.2%	65	8.5%	<0.001
	12 years old	819	47.2%	403	24.7%	278	16.4%	358	17.6%	
	13 years old	768	38.7%	475	26.4%	304	17.6%	358	17.3%	
	14 years old or older	375	40.0%	207	23.1%	154	15.6%	234	21.3%	
Grade	6th grade	750	52.3%	353	24.0%	185	13.3%	163	10.5%	<0.001
	7th grade	925	43.2%	486	25.6%	355	17.9%	337	13.2%	
	8th grade	651	38.6%	411	24.9%	262	15.9%	380	20.6%	
Race/Ethnicity	American Indian/Alaska Native	79	47.2%	36	23.6%	25	12.7%	30	16.4%	0.009
	Asian	87	47.1%	58	30.5%	27	13.6%	17	8.7%	
	Black or African American	122	48.7%	51	20.1%	45	19.9%	34	11.2%	
	Native Hawaiian/Pacific Islander	39	44.9%	23	23.4%	16	18.0%	13	13.7%	
	White	828	46.5%	413	22.1%	281	14.5%	359	16.9%	
	Hispanic/Latino	962	42.3%	554	26.6%	340	16.1%	341	15.1%	
	Other/Multiple	111	37.5%	87	28.7%	56	15.9%	73	17.9%	
Region	Urban	1553	44.6%	843	25.0%	548	15.9%	552	14.4%	0.686
	Rural/Frontier	792	41.2%	415	22.9%	265	15.5%	337	20.4%	
Qualify for Free or Reduced Lunch	Yes	773	39.1%	476	25.6%	336	18.1%	419	17.2%	0.009
	No	1554	48.2%	777	24.2%	471	14.3%	467	13.3%	
Military Family	Yes	150	35.7%	101	22.9%	82	22.8%	81	18.6%	0.016
	No	2157	45.2%	1140	25.0%	713	15.2%	791	14.6%	
Mostly A's or B's in School	Yes	1582	46.5%	796	25.6%	490	15.0%	478	12.9%	<0.001
	No	668	40.2%	409	23.6%	279	17.0%	385	19.3%	

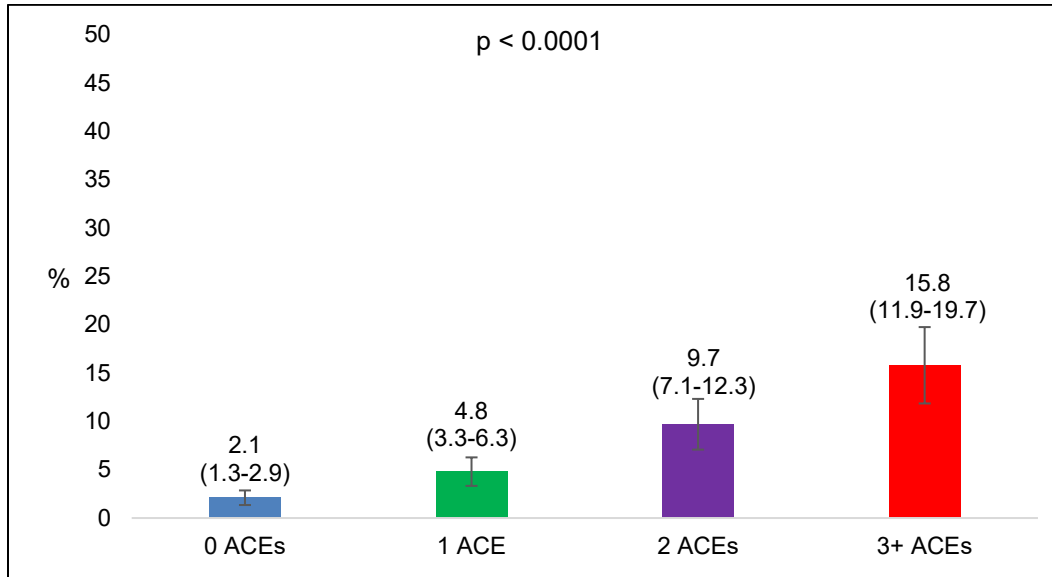
^a The sample size in the total and subgroups may differ due to missing data

^b Weighted row percent

***Note: Youth missing all ACE data were excluded. Prevalence estimates differ slightly from statewide report.**

Select Behavioral Health Outcomes by ACE Score Violence and Victimization

Figure 1: Percentage of middle school students who were threatened or injured by someone with a weapon on school property during the 12 months before the survey*, by ACE score — Nevada, Youth Risk Behavior Survey, 2019



*Such as a gun, knife, or club

Figure 2: Percentage of middle school students who were in a physical fight on school property during the 12 months before the survey, by ACE score — Nevada, Youth Risk Behavior Survey, 2019

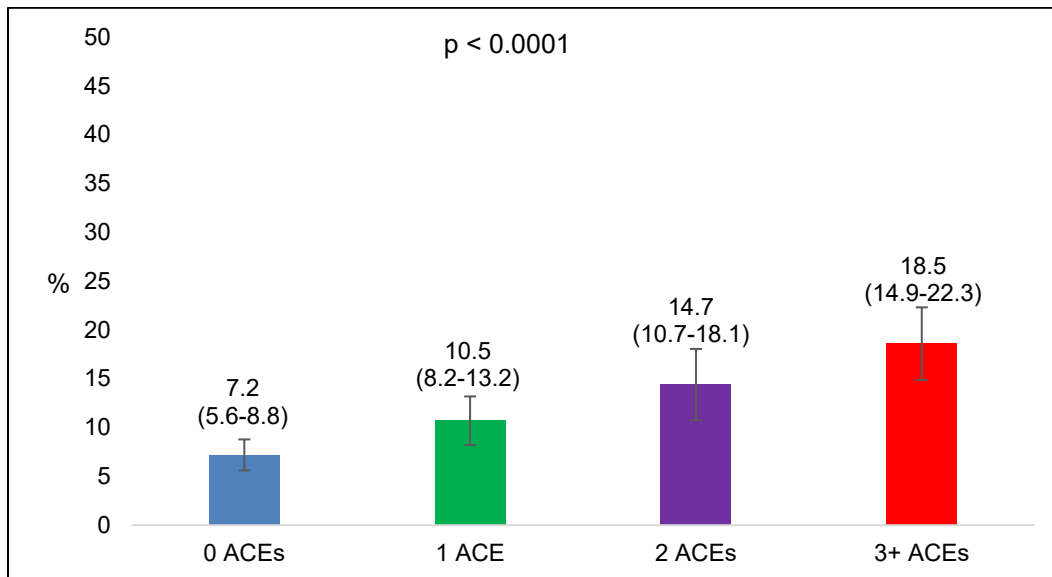


Figure 3: Percentage of middle school students who were bullied on school property during the 12 months before the survey, by ACE score — Nevada, Youth Risk Behavior Survey, 2019

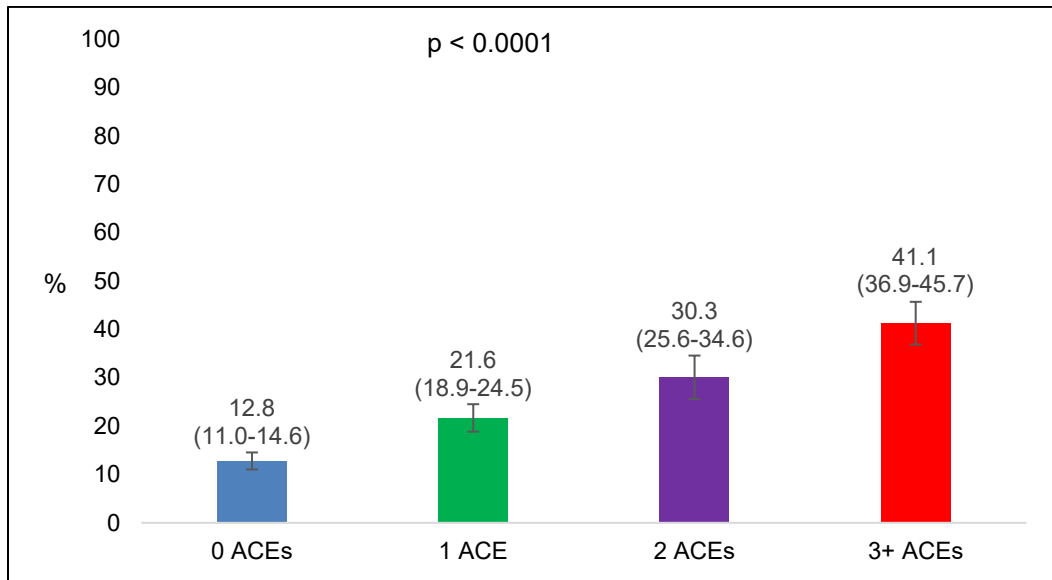
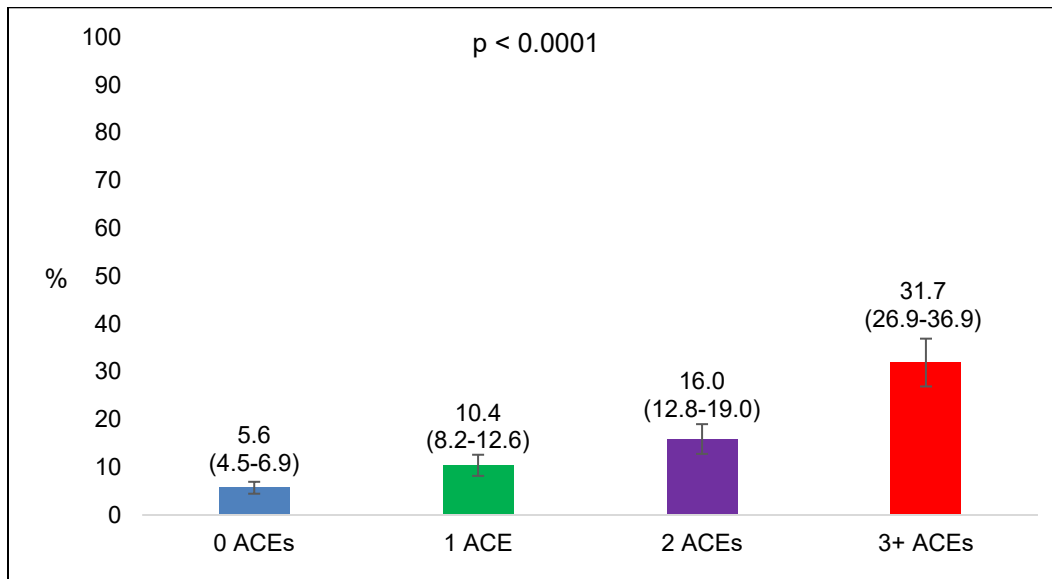
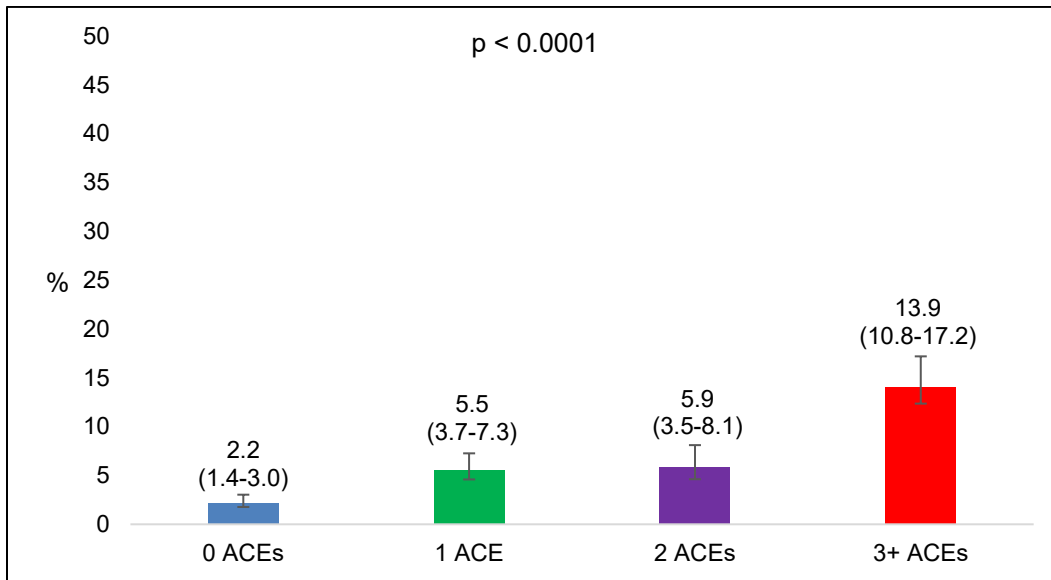


Figure 4: Percentage of middle school students who were electronically bullied during the 12 months before the survey*, by ACE score — Nevada, Youth Risk Behavior Survey, 2019



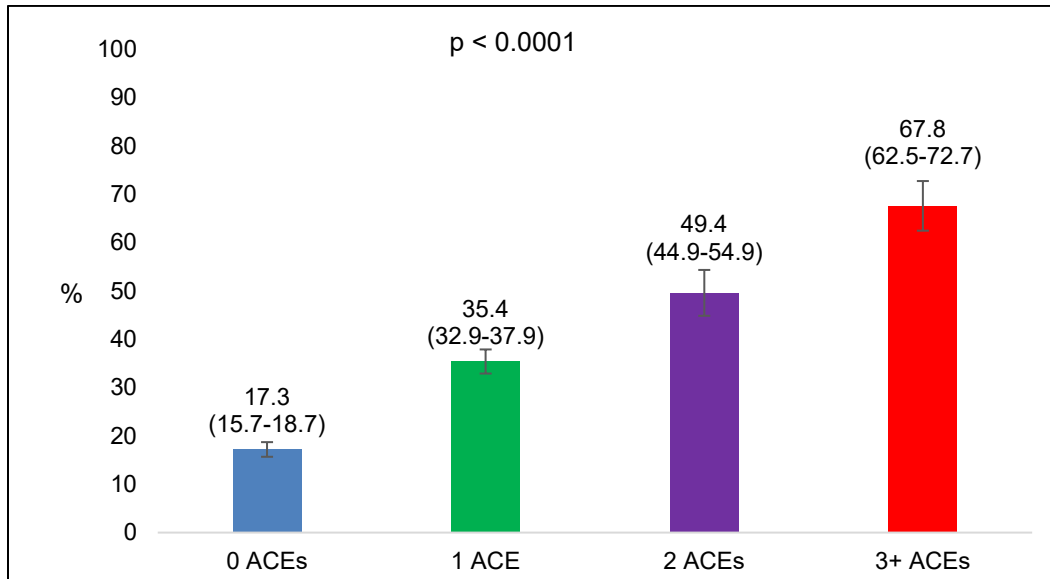
*Including being bullied through texting, Instagram, Facebook, or other social media

Figure 5: 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, by ACE score — Nevada, Youth Risk Behavior Survey, 2019



Emotional Health

Figure 6: 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*, by ACE score — Nevada, Youth Risk Behavior Survey, 2019



*So that they stopped doing some usual activities

Figure 7: Percentage of middle school students who ever seriously considered killing themselves during the 12 months before the survey, by ACE score — Nevada, Youth Risk Behavior Survey, 2019

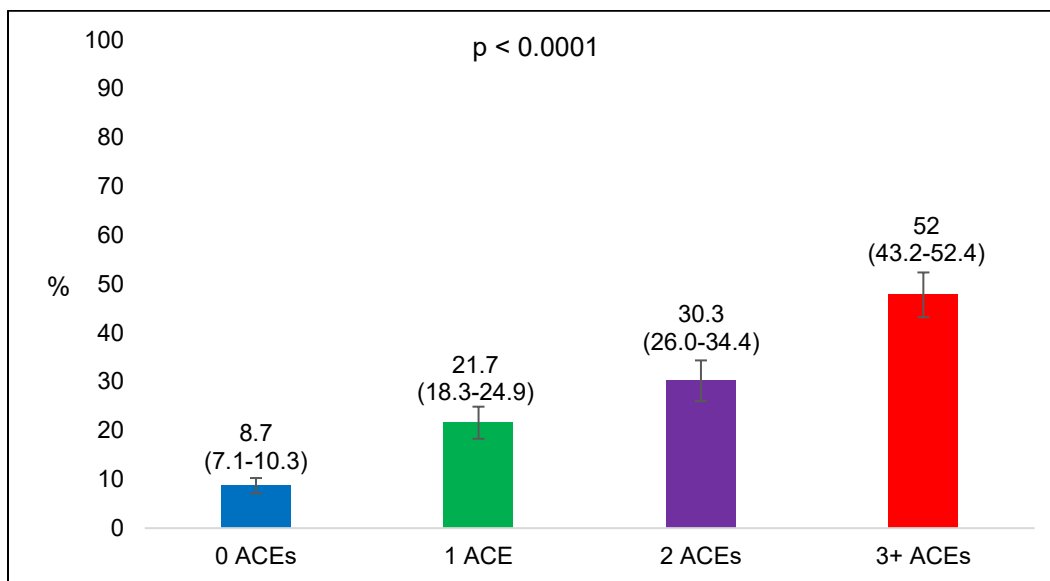


Figure 8: Percentage of middle school students who ever made a plan about how they would kill themselves during the 12 months before the survey, by ACE score — Nevada, Youth Risk Behavior Survey, 2019

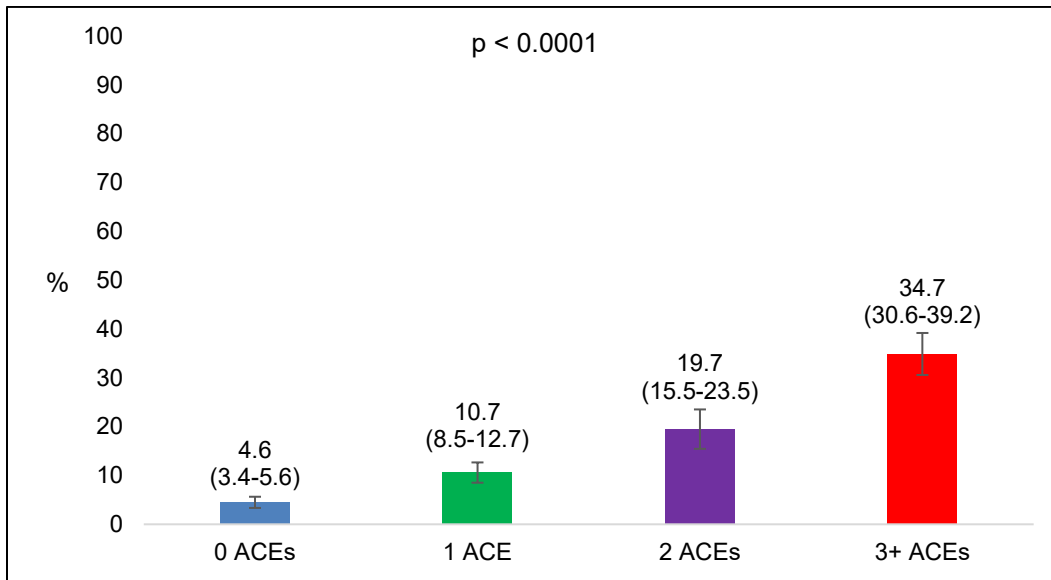


Figure 9: Percentage of middle school students who tried killing themselves during the 12 months before the survey, by ACE score — Nevada, Youth Risk Behavior Survey, 2019

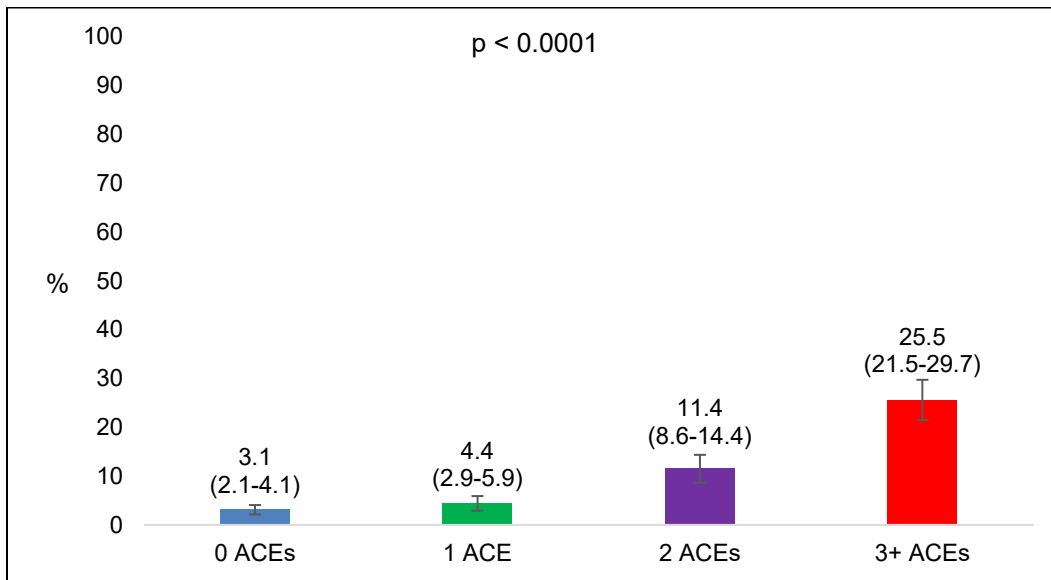


Figure 10: Percentage of middle school students who have ever done something to purposely hurt themselves without wanting to die, such as cutting or burning themselves on purpose during the 12 months before the survey, by ACE score — Nevada, Youth Risk Behavior Survey, 2019

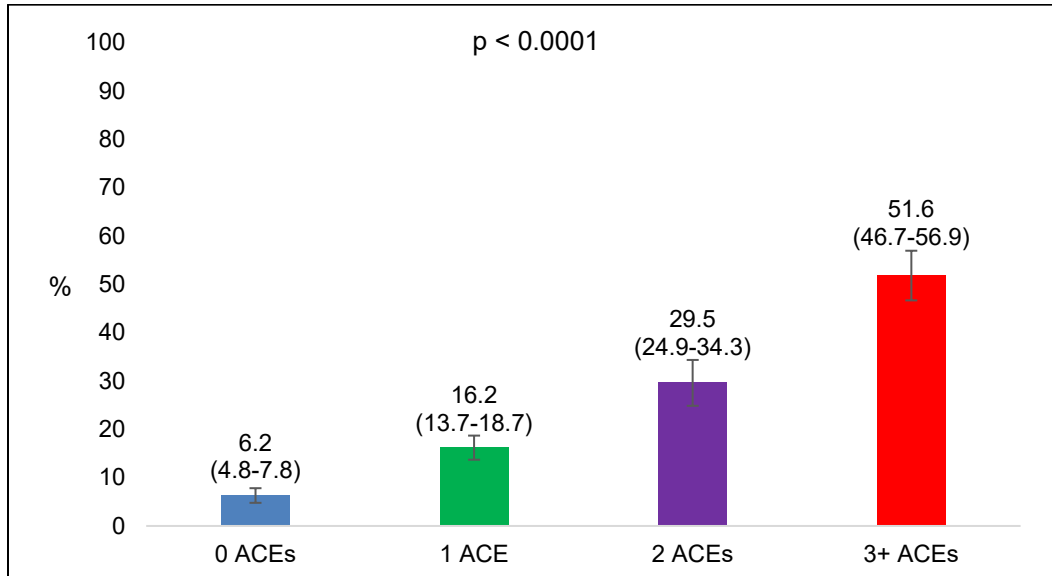
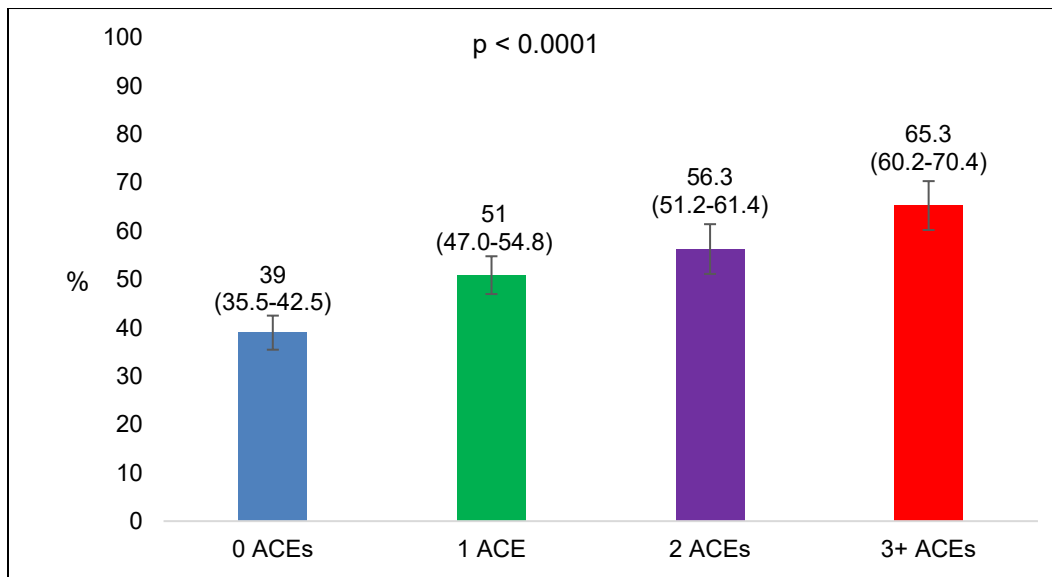


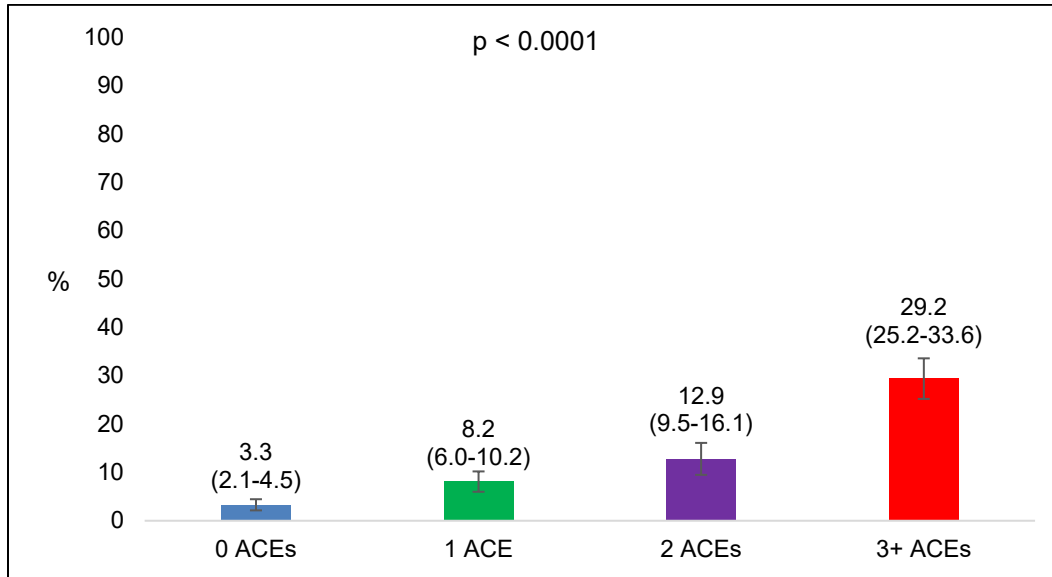
Figure 11: Percentage of middle school students who never/rarely got the kind of help they need when they felt sad, empty, hopeless, angry, or anxious*, by ACE score — Nevada, Youth Risk Behavior Survey, 2019



*Among those who feel sad, empty, hopeless, angry, or anxious

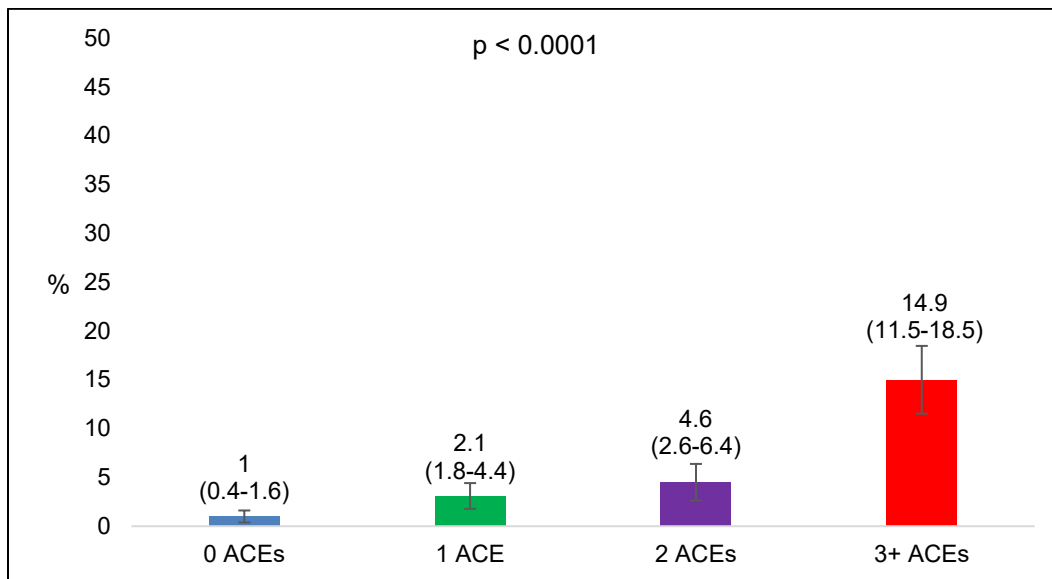
Tobacco Use

Figure 12: Percentage of middle school students who ever smoked cigarettes*, by ACE score — Nevada, Youth Risk Behavior Survey, 2019



*Even one or two puffs

Figure 13: Percentage of middle school students who smoked cigarettes for the first time before age 11 years*, by ACE score — Nevada, Youth Risk Behavior Survey, 2019



*Even one or two puffs

Figure 14: Percentage of middle school students who smoked cigarettes during the 30 days before the survey, by ACE score — Nevada, Youth Risk Behavior Survey, 2019

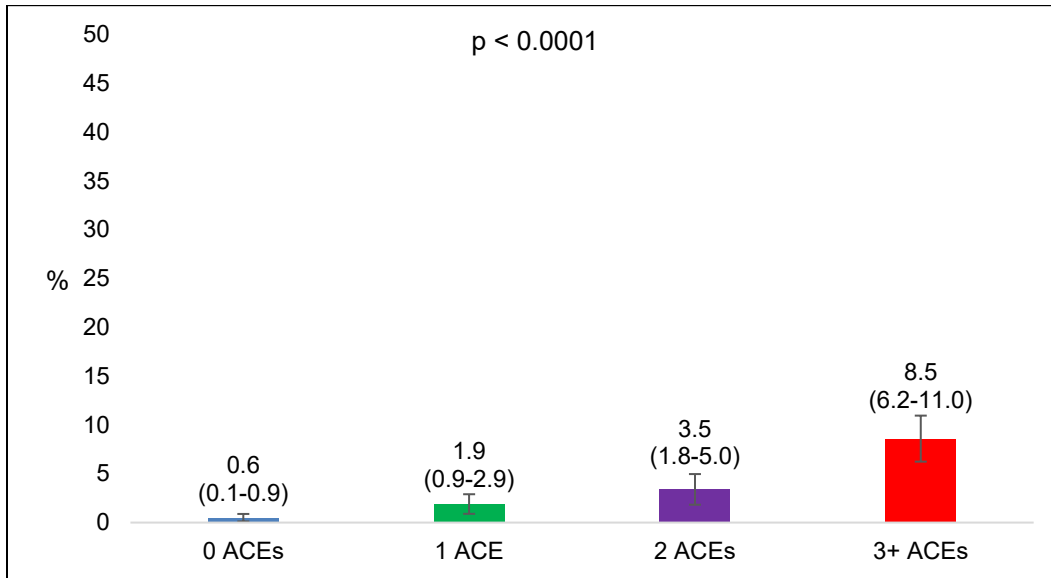
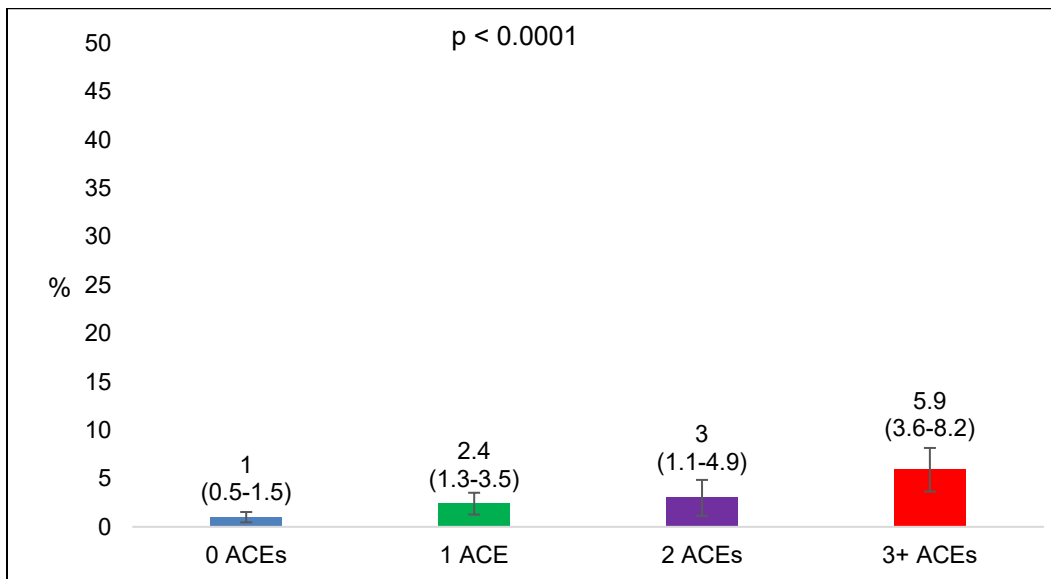


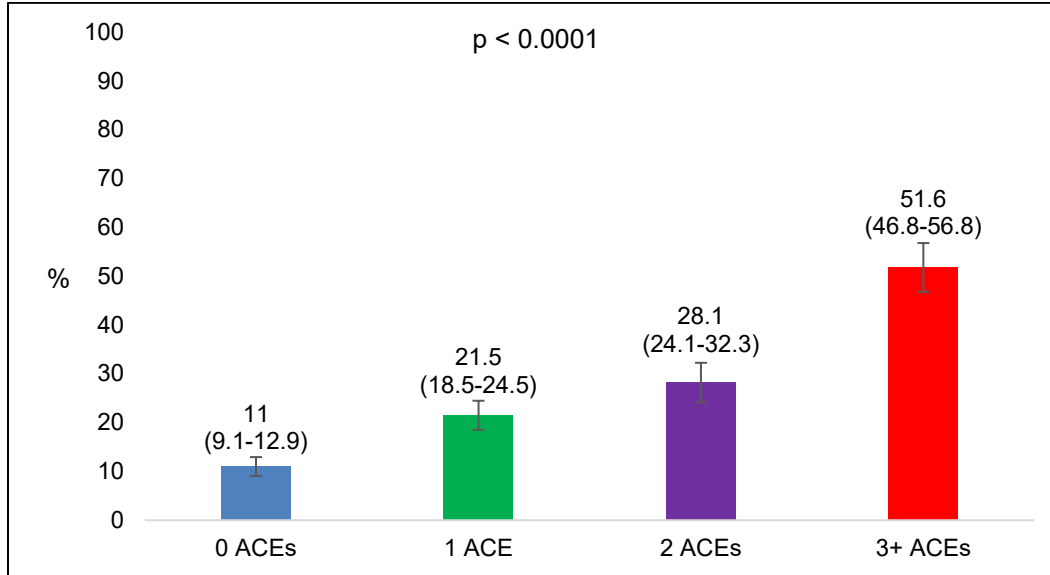
Figure 15: Percentage of middle school students who used smokeless tobacco during the 30 days before the survey*, by ACE score — Nevada, Youth Risk Behavior Survey, 2019



*Chewing tobacco, snuff, dip, snus, or dissolvable tobacco products such as: Copenhagen, Grizzly, Skoal, or Camel Snus

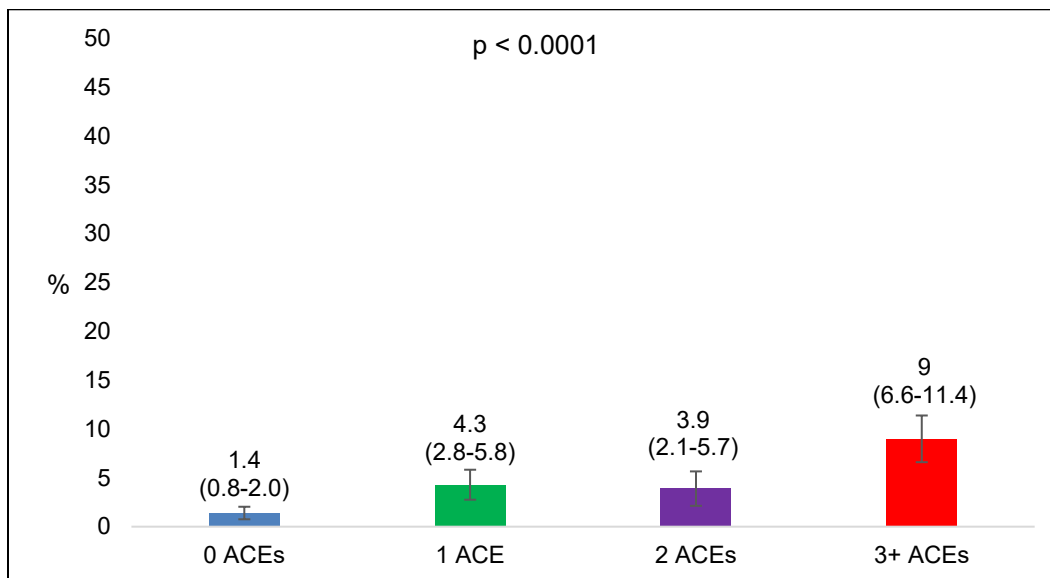
Electronic Vapor Product Use

Figure 16: Percentage of students who ever used electronic vapor products*, by ACE score — Nevada, Youth Risk Behavior Survey, 2019



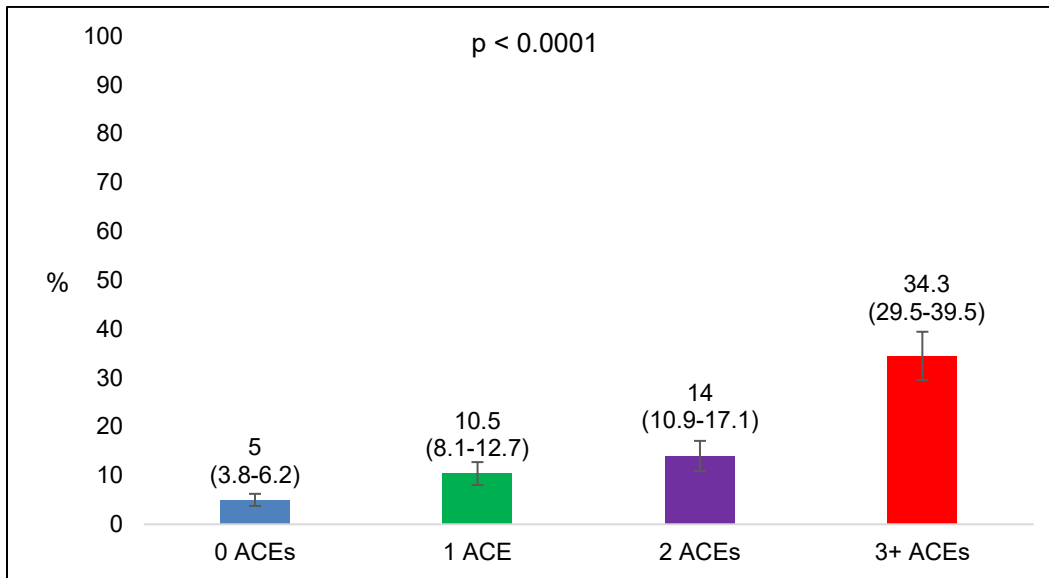
*Including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens and mods such as JUUL, Vuse, MarkTen, and blu

Figure 17: Percentage of middle school students who tried their first electronic vapor product before age 11 years*, by ACE score — Nevada, Youth Risk Behavior Survey, 2019



*Including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens and mods such as JUUL, Vuse, MarkTen, and blu

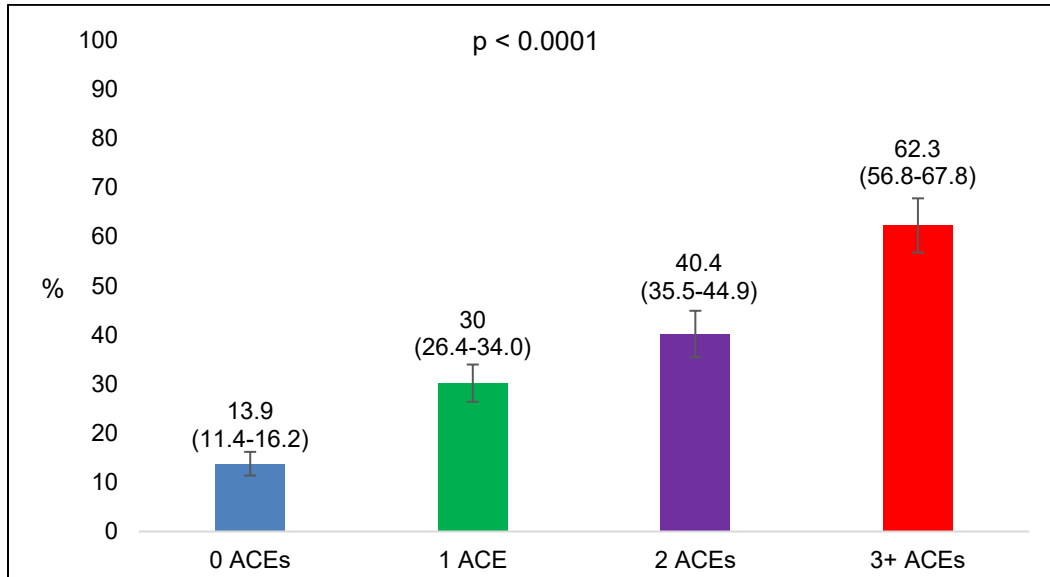
Figure 18: Percentage of middle school students who used electronic vapor products during the 30 days before the survey*, by ACE score — Nevada, Youth Risk Behavior Survey, 2019



*Including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens, and mods such as JUUL, Vuse, MarkTen, and blu on one or more days during the 30 days before the survey

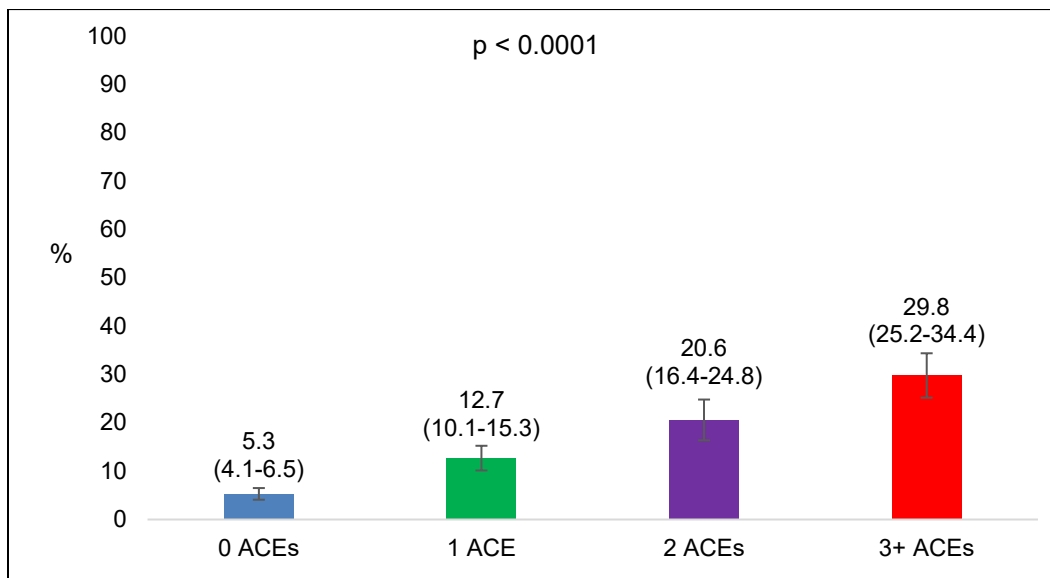
Alcohol Use

Figure 19: Percentage of middle school students who ever drank alcohol*, by ACE score — Nevada, Youth Risk Behavior Survey, 2019



*Not including for religious purposes

Figure 20: Percentage of middle school students who drank alcohol for the first time before age 11 years*, by ACE score — Nevada, Youth Risk Behavior Survey, 2019



*Other than a few sips

Figure 21: Percentage of middle school students who had at least one drink of alcohol during the 30 days before the survey, by ACE score — Nevada, Youth Risk Behavior Survey, 2019

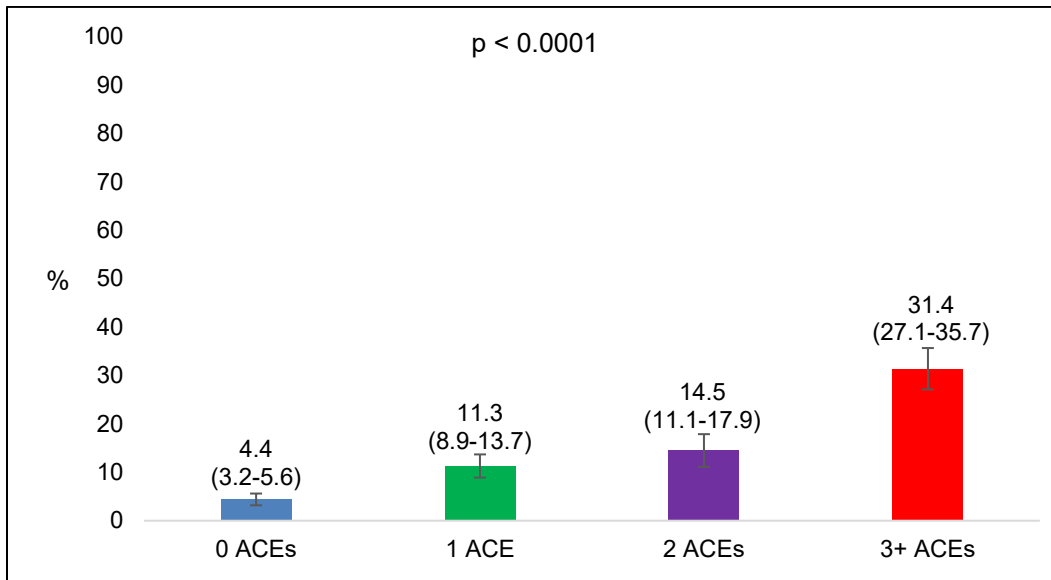
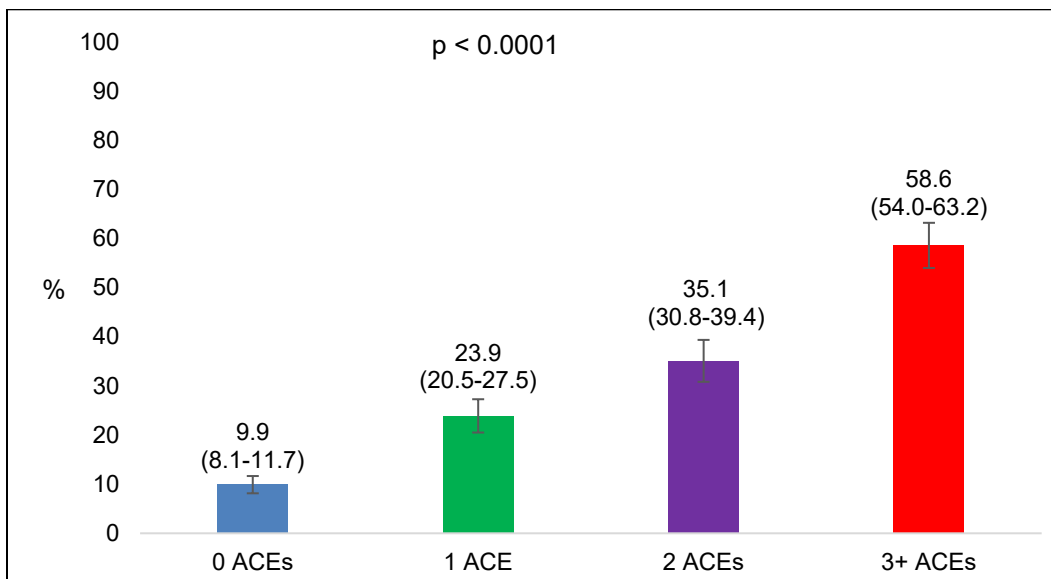


Figure 22: Percentage of middle school students who ever rode in a car or other vehicle driven by someone who had been drinking alcohol, by ACE score — Nevada, Youth Risk Behavior Survey, 2019



Marijuana Use

Figure 23: Percentage of students who ever used marijuana*, by ACE score — Nevada, Youth Risk Behavior Survey, 2019

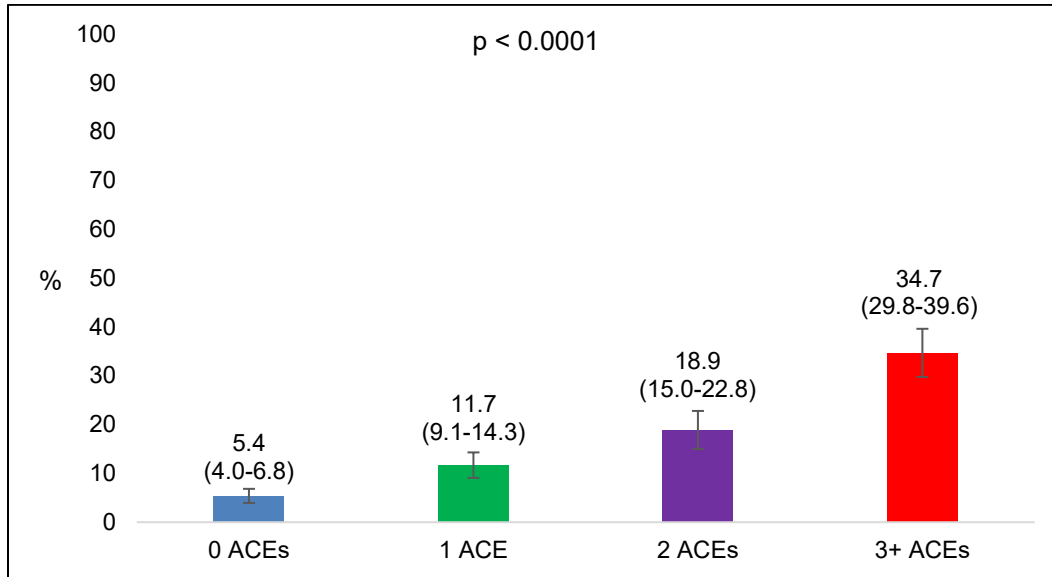


Figure 24: Percentage of middle school students who tried marijuana for the first time before age 11 years*, by ACE score — Nevada, Youth Risk Behavior Survey, 2019

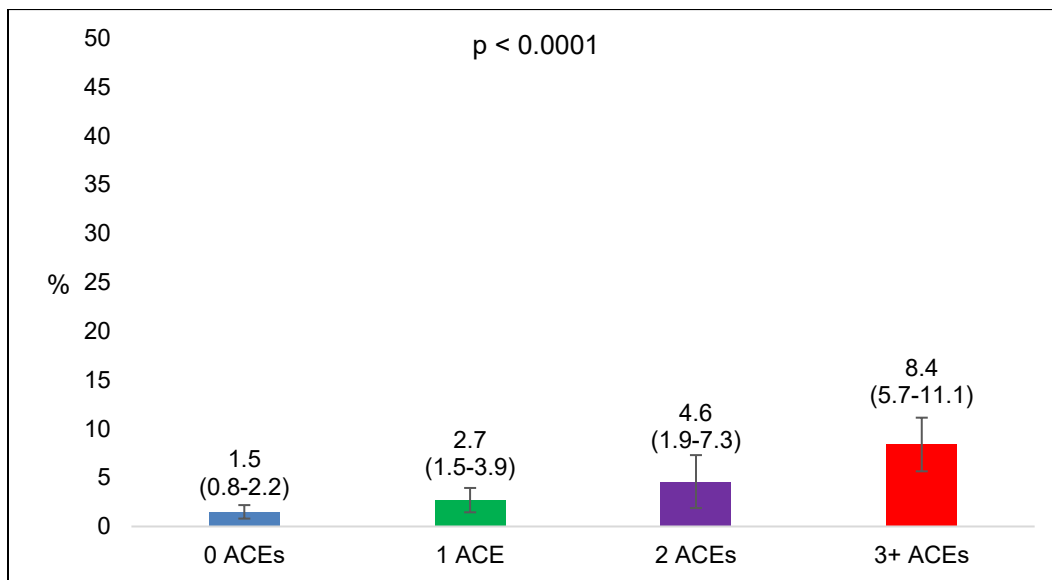
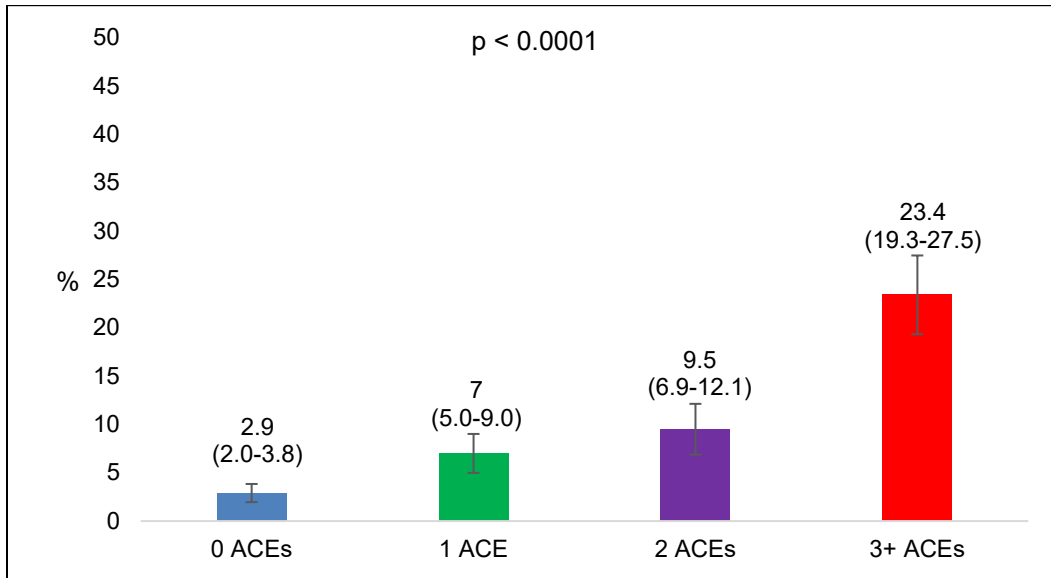
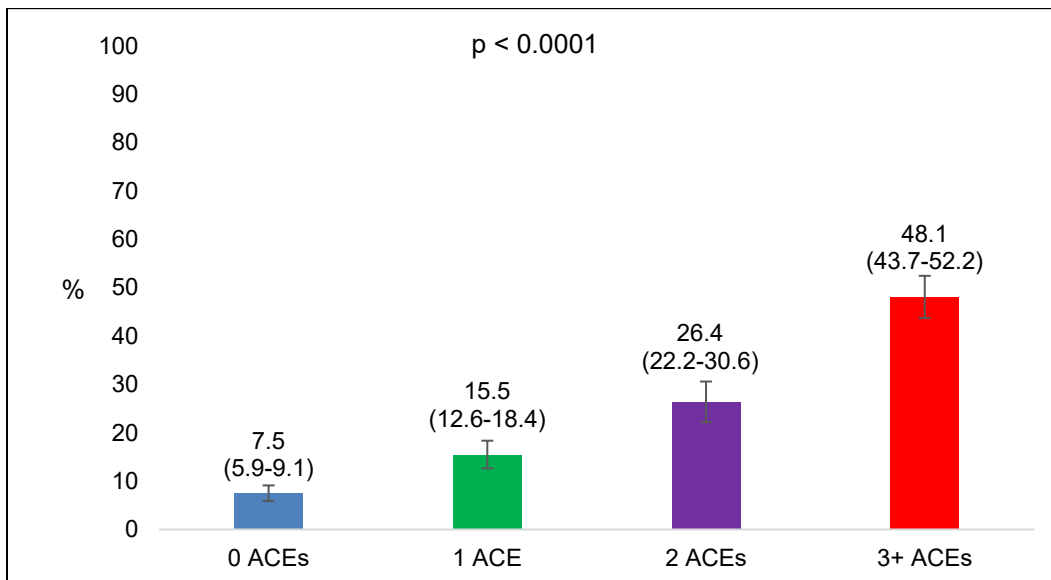


Figure 25: Percentage of middle school students who used marijuana during the 30 days before the survey*, by ACE score — Nevada, Youth Risk Behavior Survey, 2019



*Also called “pot”, “weed”, or “cannabis”

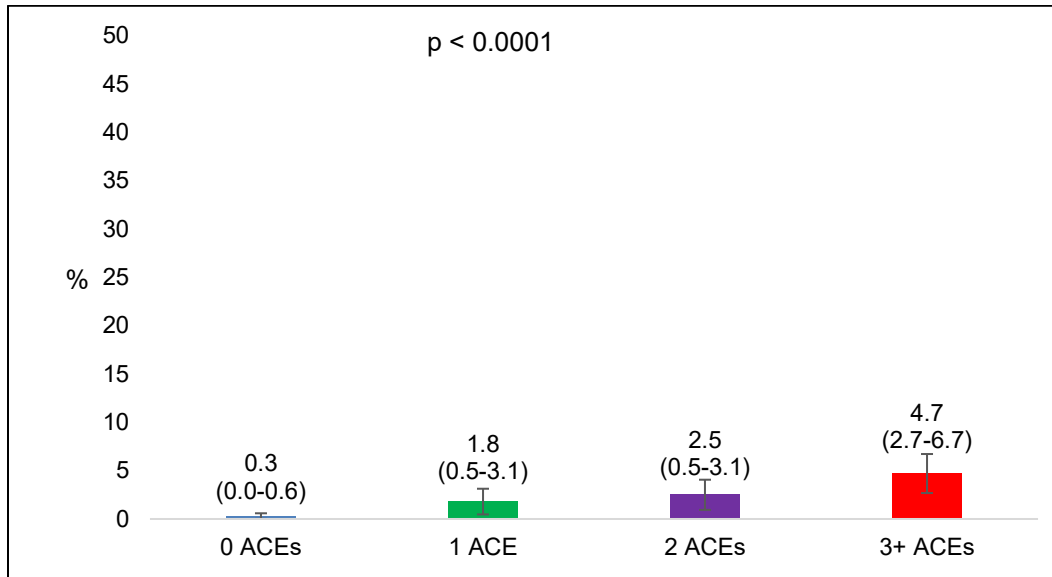
Figure 26: Percentage of middle school students who ever rode in a car or other vehicle driven by someone using marijuana*, by ACE score — Nevada, Youth Risk Behavior Survey, 2017



*Also called “pot”, “weed”, or “cannabis”

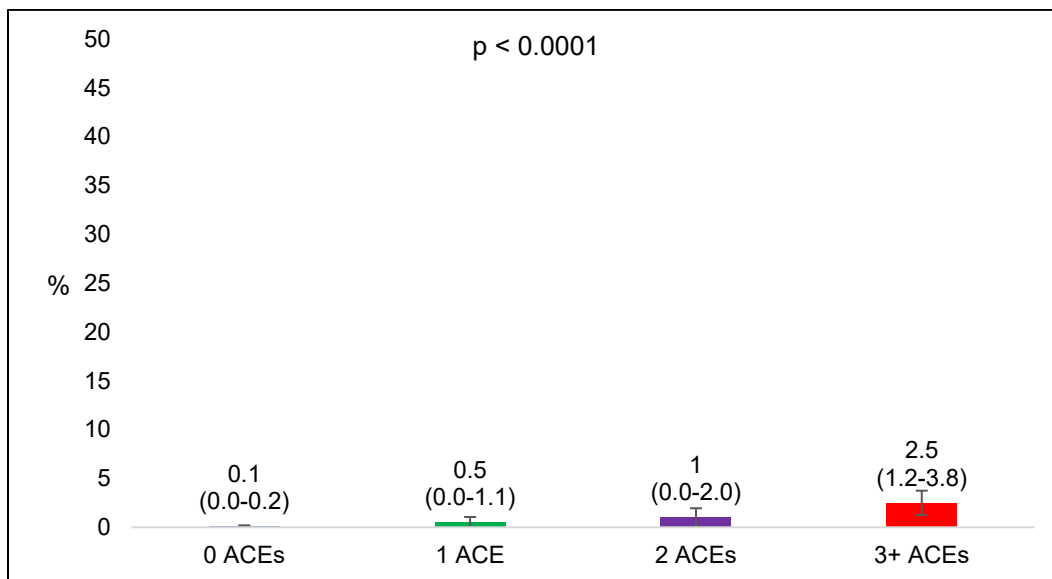
Other Substance Use

Figure 27: Percentage of middle school students who ever used cocaine*, by ACE score — Nevada, Youth Risk Behavior Survey, 2019



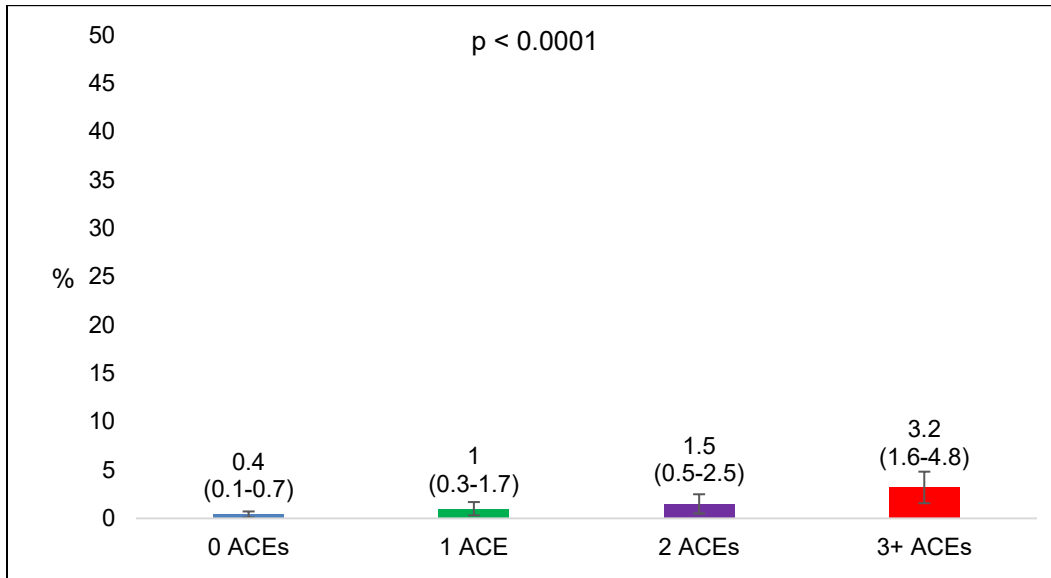
*Used any form of cocaine (e.g., powder, crack, or freebase)

Figure 28: Percentage of middle school students who ever used heroin*, by ACE score — Nevada, Youth Risk Behavior Survey, 2019



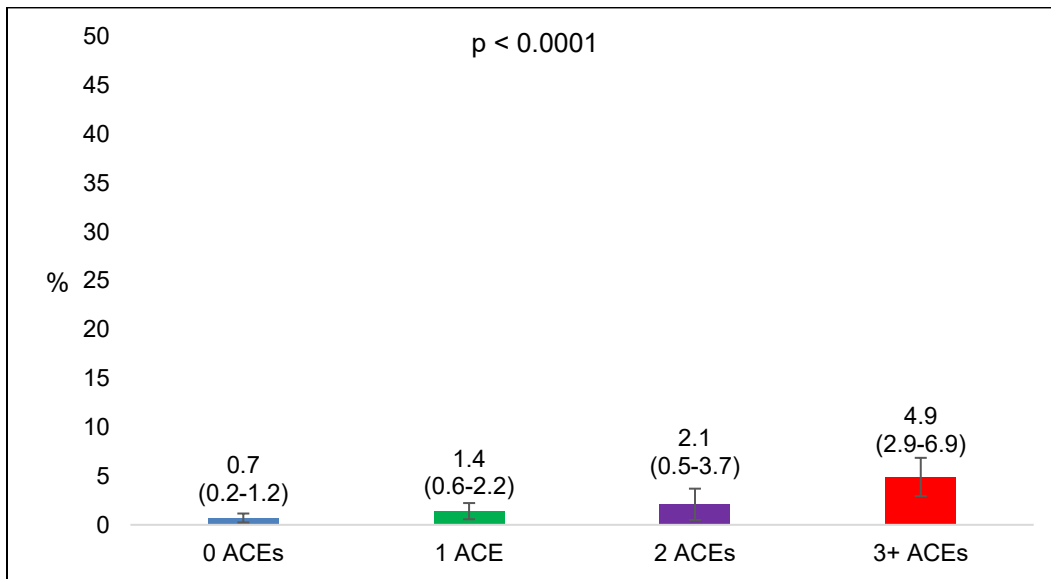
*Used heroin (also called "smack," "junk," or "China white")

Figure 29: Percentage of middle school students who ever used methamphetamines*, by ACE score — Nevada, Youth Risk Behavior Survey, 2019



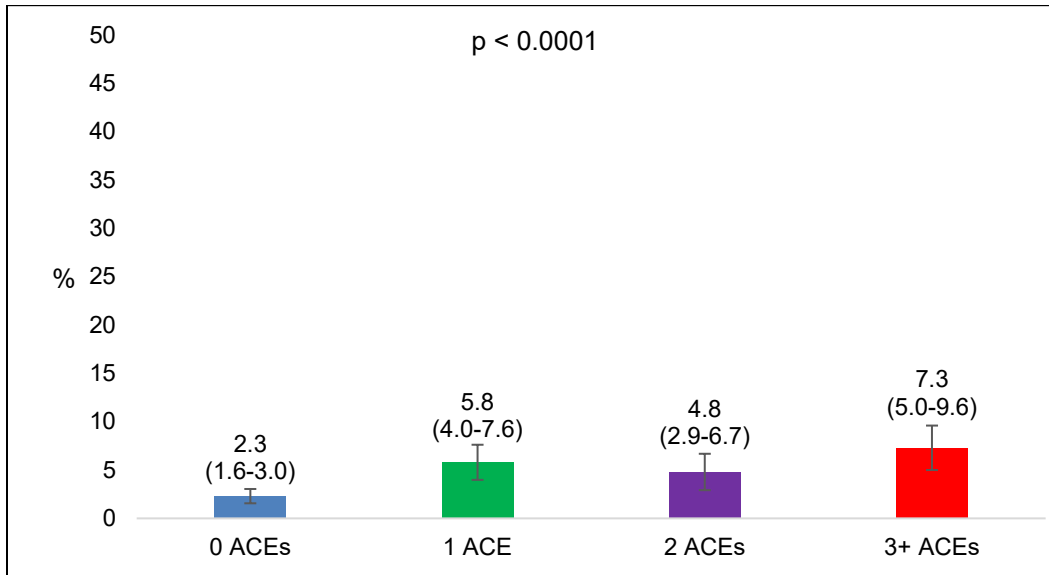
*Used methamphetamines (also called “speed”, “crystal meth”, “crank”, “ice”, or “meth”)

Figure 30: Percentage of middle school students who used ecstasy*, by ACE score — Nevada, Youth Risk Behavior Survey, 2019



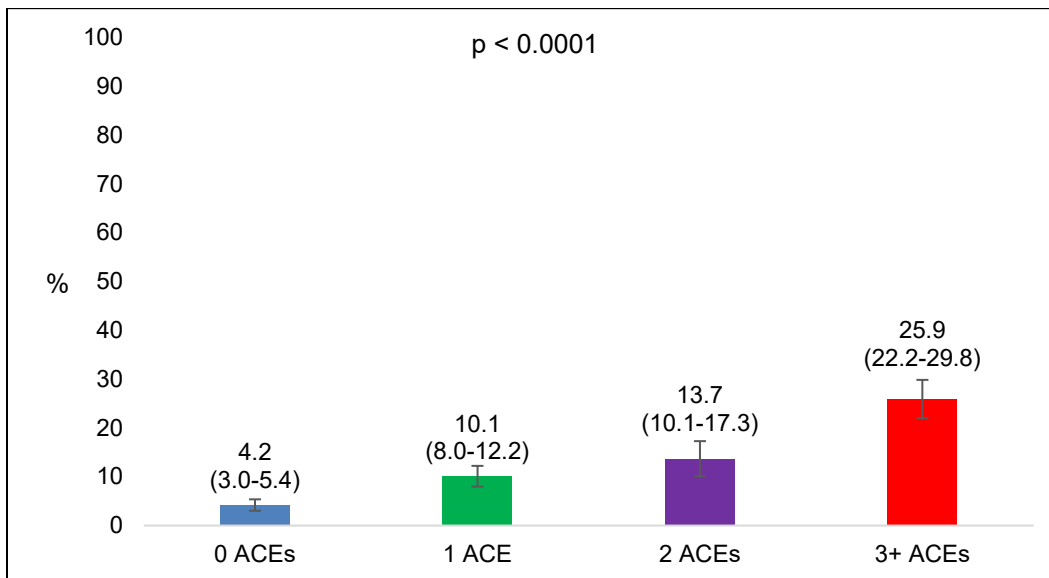
*Used ecstasy (also called “MDMA”)

Figure 31: Percentage of middle school students who ever used synthetic marijuana*, by ACE score — Nevada, Youth Risk Behavior Survey, 2019



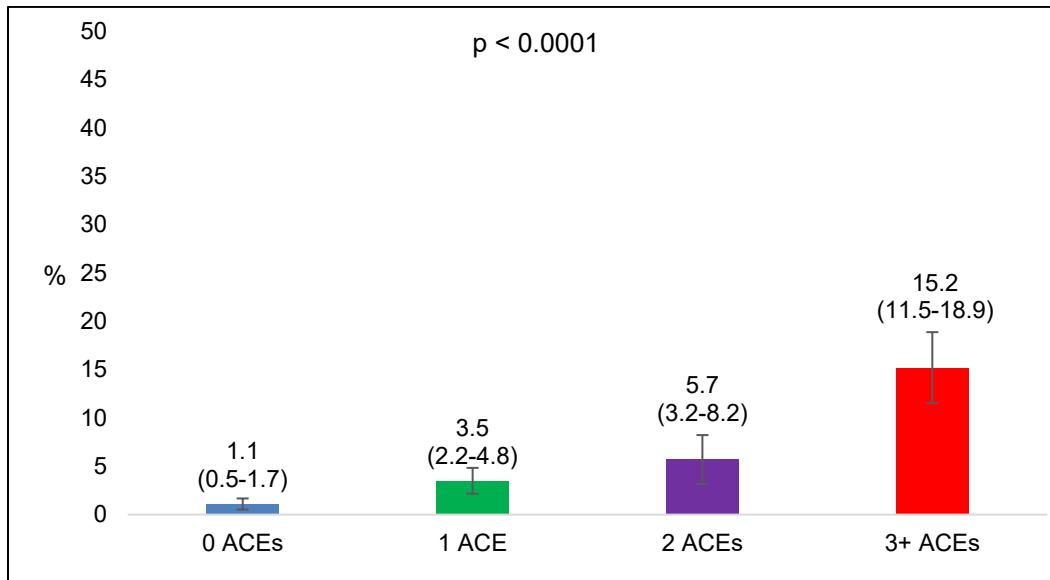
*Used synthetic marijuana (also called “Spice”, “fake weed”, “K2”, “King Kong”, “Yukatan Fire”, or “Skunk”)

Figure 32: Percentage of middle school students who ever took prescription pain medicine without a doctor’s prescription or differently than prescribed*, by ACE score — Nevada, Youth Risk Behavior Survey, 2019



*Took prescription pain medicine (e.g., codeine, Vicodin, OxyContin, Hydrocodone, and Percocet)

Figure 33: 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*, by ACE score — Nevada, Youth Risk Behavior Survey, 2019



*Took prescription pain medicine (e.g., codeine, Vicodin, OxyContin, Hydrocodone, and Percocet)

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