# **Montana High School Survey** 10-year Trend Analysis Report

-	<b>ce</b> ]	Health Risk Behav	rior and Percentag	es	Linear Change*	Quadratic Change <sup>*</sup>	Change from 2019-2021 †	
2011	2013	2015	2017	2019	2021			
		•				•		
QN8: Percentago	ge of students who d	id not always wear	a seat belt (when ric	ding in a car driven	by someone else)			
QN8: Percentage 57.3	ge of students who d	id not always wear 49.3	a seat belt (when rid 48.5	ding in a car driven 47.7	by someone else) 46.0	Decreased, 2011-2021	No quadratic change	No change
57.3  QN9: Percentage		49.3  ode with a driver wl	48.5	47.7	46.0	Decreased, 2011-2021	No quadratic change	No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

# **Montana High School Survey** 10-year Trend Analysis Report

		Health Risk Behavi	or and Percentage	es		Linear Change*	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021			
nore times duri		drove a car or other re the survey, among						
	12.6	10.9	7.6	7.1	7.5	Decreased, 2013-2021	Not available <sup>§</sup>	No change
	ays before the surve	texted or e-mailed w y, among students wl	no had driven a car	or other vehicle du	ring the 30 days	No linear shores	Not available	N. J.
efore the surve	55.8	54.6	54.2	53.3	57.1	No linear change	ivot avanable	No change
N12: Percent	55.8	carried a weapon on				No linear change	not available	No chang

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

al iry and Violen		Health Risk Behav	Linear Change <sup>*</sup>	Quadratic Change <sup>*</sup>	Change from 2019-2021 †			
2011	2013	2015	2017	2019	2021			
		carried a gun (not c						
unting or for a	enort cuch as target							
unting or for a	sport such as target	shooting, on at leas	7.7	7.7	8.9	No linear change	Not available <sup>§</sup>	No change
2N14: Percentarom school (on	age of students who at least 1 day durin	did not go to school g the 30 days before	7.7  I because they felt use the survey)	7.7	8.9		Not available <sup>§</sup>	No chang
N14: Percenta	age of students who	did not go to school	7.7  I because they felt u	7.7	8.9		Not available <sup>§</sup> No change, 2011-2017  No change, 2017-2021	No chang
2N14: Percenta from school (on 4.2 2N15: Percenta	age of students who at least 1 day durin 8.8  age of students who	did not go to school g the 30 days before	7.7  I because they felt use the survey)  8.0  injured with a weap	7.7 unsafe at school or o 9.3 on on school proper	8.9 on their way to or 6.6		No change, 2011-2017	

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

# **Montana High School Survey** 10-year Trend Analysis Report

jury and Violen		Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021			
QN16: Percenta	age of students who	were in a physical f	ight (one or more to	imes during the 12	months before the			
25.4	22.8	22.4	20.1	23.3	19.7	Decreased, 2011-2021	No quadratic change	Decreased
QN17: Percenta 12 months befor	age of students who e the survey)	were in a physical f	ight on school prop	perty (one or more t	imes during the			
9.1	7.3	7.6	6.3	8.0	5.2	Decreased, 2011-2021	No quadratic change	Decreased
QN19: Percenta want to)	age of students who	were ever physicall	y forced to have sex	xual intercourse (w	hen they did not			
9.8	8.7	8.7	9.3	9.8	11.0	No linear change	No change, 2011-2015 Increased, 2015-2021	No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

ury and Violen	ce	Health Risk Behav	ior and Percentag	Linear Change <sup>*</sup>	Quadratic Change*	Change from 2019-2021		
2011	2013	2015	2017	2019	2021			
		experienced sexual uching, or being phy						
		uring the 12 months			,			
			9.8	11.1	13.5	Increased, 2017-2021	Not available§	Increased

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

Not enough years of data to calculate.

		Health Risk Behavior and Percentages				Linear Change*	Quadratic Change <sup>*</sup>	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021			
someone they w	vere dating or going	experienced physica out with [counting some or more times during some during s	uch things as being	hit, slammed into before the survey,	something, or			
	ent out with someon	e during the 12 mon			7.2	Decreased, 2013-2021	Not available <sup>§</sup>	No change
			ths before the surve	7.8	7.2	Decreased, 2013-2021	Not available <sup>§</sup>	No change
No dated or we	ent out with someon	e during the 12 mon	7.2	7.8		Decreased, 2013-2021	Not available <sup>§</sup>	No change
who dated or we will also a single particles or who dated or we will also a single particles or who dated or we will also a single particles or who dated or we will also a single particles or who dated or we will also a single particles or who dated or who date	ent out with someon	e during the 12 mon 8.2	7.2	7.8		Decreased, 2013-2021  Decreased, 2011-2021	Not available <sup>§</sup> No change, 2011-2015 Decreased, 2015-2021	No change  Decreased
QN23: Percentaurvey) 26.0 QN24: Percenta	8.8  age of students who  26.3  age of students who	8.2 were bullied on scho	7.2  pool property (ever of 21.6  bullied (counting b	7.8  during the 12 month 22.0  eing bullied throug	is before the		No change, 2011-2015	

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

# **Montana High School Survey** 10-year Trend Analysis Report

		Health Risk Behavi	or and Percentag	es		Linear Change <sup>*</sup>	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021			
		felt sad or hopeless, ever during the 12 i			row so that they			
25.2	26.4	29.3	31.0	36.7	41.4	Increased, 2011-2021	Increased, 2011-2017 Increased, 2017-2021	Increased
QN26: Percenta urvey)	ge of students who	seriously considered	attempting suicide	e (during the 12 mo	nths before the			
15.2	16.8	18.8	20.8	23.4	21.7	Increased, 2011-2021	Increased, 2011-2017 No change, 2017-2021	No change
		made a plan about h	ow they would atte	empt suicide (during	g the 12 months			
efore the survey		15.5	16.6	19.5	18.0	Increased, 2011-2021	Increased, 2011-2017 No change, 2017-2021	No change
efore the survey	13.6	10.0					140 change, 2017-2021	
12.3		actually attempted s	uicide (one or more	e times during the 1	2 months before		140 Change, 2017-2021	

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

'otal njury and Violenc		Health Risk Behav	vior and Percentag	Linear Change*	Quadratic Change*	Change from 2019-2021 †		
2011	2013	2015	2017	2019	2021			
			apt that resulted in a conths before the sur		or overdose that			
2.4	2.6	3.1	3.1	3.7	3.2	Increased, 2011-2021	No quadratic change	No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

# **Montana High School Survey** 10-year Trend Analysis Report

		Health Risk Behav	ior and Percentag	Linear Change*	Quadratic Change <sup>*</sup>	Change from 2019-2021		
2011	2013	2015	2017	2019	2021			
QN30: Percenta	ge of students who	ever tried cigarette	smoking (even one	or two puffs)	-	,		
44.0	41.1	39.1	33.9	31.0	27.8	Decreased, 2011-2021	No quadratic change	No change
QN31: Percenta	ge of students who	first tried cigarette s	smoking before age	13 years (even one	e or two puffs)			
QN32: Percenta		first tried cigarette s	10.6	10.0	9.6	No linear change	Not available <sup>§</sup>	No change
			10.6	10.0	9.6	No linear change  Decreased, 2011-2021	Not available <sup>§</sup> No quadratic change	No change
QN32: Percenta survey) 16.5	ge of students who 15.2 centage of students	currently smoked ci	10.6 garettes (on at least	10.0 t 1 day during the 3	9.6 0 days before the 7.0			

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

# Montana High School Survey 10-year Trend Analysis Report

Total Tobacco Use

		Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change <sup>*</sup>	Change from 2019-2021
2011	2013	2015	2017	2019	2021			
QNDAYCIG: P before the survey		nts who currently sm	oked cigarettes dail	ly (on all 30 days d	uring the 30 days	,		
4.7	3.7	2.2	2.1	1.2	0.8	Decreased, 2011-2021	No quadratic change	No change
		smoked more than 1 ng students who currents			smoked during 3.5	Decreased, 2011-2021	No quadratic change	No change
he 30 days before 6.9  QN34: Percenta	5.7  ge of students who	ng students who curr	4.6 nic vapor product (	ettes) 5.5 (including e-cigaret	3.5 tes, vapes, vape	Decreased, 2011-2021	No quadratic change	No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

# **Montana High School Survey** 10-year Trend Analysis Report

		Health Risk Behav	ior and Percentag	es		Linear Change <sup>*</sup>	Quadratic Change <sup>*</sup>	Change from 2019-2021
2011	2013	2015	2017	2019	2021	<del>_</del>		
ape pens, e-cig		o currently used an el okah pens, and mods re the survey)				,		
		29.5	22.5	30.2	25.5	No linear change	Not available§	Decreased
	ercentage of students 30 days before the	s who currently used survey)	electronic vapor pr	roducts frequently (	on 20 or more			
			electronic vapor pr	roducts frequently (	on 20 or more	Increased, 2015-2021	Not available	Decreased
ays during the	30 days before the	survey) 4.6	3.7	12.7	10.4		Not available	Decreased
ays during the  ONDAYEVP:	30 days before the	survey)	3.7	12.7	10.4		Not available	Decreased
ays during the  ONDAYEVP:	30 days before the Percentage of stude	survey) 4.6	3.7	12.7	10.4		Not available Not available	Decreased
ays during the  ONDAYEVP:	30 days before the Percentage of stude	4.6 ants who currently use	3.7	12.7 products daily (on	10.4 all 30 days during			
NDAYEVP: ne 30 days before NTB5: Perce	30 days before the Percentage of stude ore the survey)	4.6  onts who currently use 3.0  ho currently smoked	3.7 ed electronic vapor 2.4	12.7 products daily (on 8.7	10.4 all 30 days during 6.7	Increased, 2015-2021		

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

		Health Risk Behav	ior and Percentag		Linear Change*	Quadratic Change*	Change from 2019-2021	
2011	2013	2015	2017	2019	2021			
dissolvable tob	tage of students who acco products [such , on at least 1 day du	as Copenhagen, Gri	zzly, Skoal, or Cam					
			9.8	6.3	5.2	Decreased, 2017-2021	Not available <sup>§</sup>	No change
dip, snus, or dis	ercentage of students ssolvable tobacco provapor products, on 2	oducts [such as Cop	enhagen, Grizzly, S	koal, or Camel Snu				
			3.2	1.6	1.8	Decreased, 2017-2021	Not available	No change
dip, snus, or dis	Percentage of stude ssolvable tobacco provapor products, on all	oducts [such as Cop	enhagen, Grizzly, S	koal, or Camel Snu				

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

# Montana High School Survey 10-year Trend Analysis Report

								Change from 2019-2021
2011	2013	2015	2017	2019	2021			
	age of students who		gars (cigars, cigaril	los, or little cigars,	on at least 1 day	,		
16.1	15.8	12.6	12.9	7.5	4.6	Decreased, 2011-2021	Decreased, 2011-2017	Decreased
					0		Decreased, 2017-2021	
		no currently smoked st 1 day during the 3	cigarettes or cigars				Decreased, 2017-2021	
			cigarettes or cigars			Decreased, 2017-2021	Decreased, 2017-2021  Not available <sup>§</sup>	Decreased
DNFRCGR: Pe	products (on at lease		cigarettes or cigars 0 days before the su 30.2 ked cigars frequent	32.1	tobacco or 27.0	Decreased, 2017-2021		Decreased

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

Not enough years of data to calculate.

# **Montana High School Survey** 10-year Trend Analysis Report

		Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021			
	tage of students wh g the 30 days befor	no currently smoked the survey)	cigarettes or cigars	or used smokeless	tobacco (on at			
			20.5	13.9	10.9	Decreased, 2017-2021	Not available <sup>§</sup>	Decreased
QNTB2: Percenbefore the survey		no currently smoked	cigarettes or cigars	(on at least 1 day d	uring the 30 days			,
23.7	22.3	19.0	17.2	11.1	8.5	Decreased, 2011-2021	Decreased, 2011-2017 Decreased, 2017-2021	Decreased
	Percentage of stude g the 30 days before	nts who currently sn e the survey)	noked cigars daily (	cigars, cigarillos, o	r little cigars, on			•
all 30 days durin								

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

### Montana High School Survey 10-year Trend Analysis Report

**Alcohol and Other Drug Use Health Risk Behavior and Percentages** Linear Change\* Quadratic Change\* Change from 2019-2021 † 2011 2013 2015 2017 2019 2021 QN40: Percentage of students who had their first drink of alcohol before age 13 years (other than a few sips) 21.4 19.9 19.6 19.1 17.6 18.2 Decreased, 2011-2021 No quadratic change No change QN41: Percentage of students who currently drank alcohol (at least one drink of alcohol, on at least 1 day during the 30 days before the survey)

31.4

16.4

Decreased, 2011-2021

No linear change

No quadratic change

Not available§

No change

No change

33.4

17.5

34.2

QN42: Percentage of students who currently were binge drinking (had four or more drinks of alcohol in a row if they were female or five or more drinks of alcohol in a row if they were male, within a couple of hours, on at

33.1

17.6

38.3

37.1

least 1 day during the 30 days before the survey)

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

### Montana High School Survey 10-year Trend Analysis Report

**Total Alcohol and Other Drug Use Health Risk Behavior and Percentages** Linear Change\* Quadratic Change\* Change from 2019-2021 † 2011 2013 2015 2017 2019 2021 QN43: Percentage of students who reported that the largest number of drinks they had in a row was 10 or more (within a couple of hours, during the 30 days before the survey) 5.6 4.5 No linear change Not available§ No change QN44: Percentage of students who usually got the alcohol they drank by someone giving it to them (during the 30 days before the survey, among students who currently drank alcohol) 34.1 36.3 34.9 40.1 39.3 38.4 Increased, 2011-2021 No quadratic change No change ON45: Percentage of students who ever used marijuana (one or more times during their life) 39.2 37.6 37.5 36.7 40.0 37.0 No linear change No quadratic change No change QN46: Percentage of students who tried marijuana for the first time before age 13 years 8.0 7.9 8.0 7.0 7.5 7.3 No quadratic change Decreased, 2011-2021 No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

### Montana High School Survey 10-year Trend Analysis Report

**Total Alcohol and Other Drug Use Health Risk Behavior and Percentages** Linear Change\* Quadratic Change\* Change from 2019-2021 † 2011 2013 2015 2017 2019 2021 QN47: Percentage of students who currently used marijuana (one or more times during the 30 days before the survey) 19.8 21.1 21.2 21.0 19.5 19.7 No linear change No quadratic change No change QN48: Percentage of students who ever used synthetic marijuana (one or more times during their life) 9.6 7.3 6.5 Decreased, 2015-2021 Not available§ No change 6.6 QN49: Percentage of students who ever took prescription pain medicine without a doctor's prescription or differently than how a doctor told them to use it (counting drugs such as codeine, Vicodin, OxyContin,

12.8

12.0

Decreased, 2017-2021

Not available

13.7

Hydrocodone, and Percocet, one or more times during their life)

No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. Based on t-test analysis, p < 0.05.

Not enough years of data to calculate.

### Montana High School Survey 10-year Trend Analysis Report

**Total Alcohol and Other Drug Use Health Risk Behavior and Percentages** Linear Change\* Quadratic Change\* Change from 2019-2021 † 2011 2013 2015 2017 2019 2021 QN50: Percentage of students who ever used cocaine (any form of cocaine, including powder, crack, or freebase, one or more times during their life) 6.1 5.2 4.1 6.4 4.4 4.0 Decreased, 2011-2021 No quadratic change No change QN51: Percentage of students who ever used inhalants (sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high, one or more times during their life) 11.6 9.9 8.0 8.0 8.6 6.4 Decreased, 2011-2017 No change Decreased, 2011-2021 Increased, 2017-2021 QN52: Percentage of students who ever used heroin (also called "smack," "junk," or "China White," one or more times during their life)

1.7

1.5

Decreased, 2011-2021

No quadratic change

2.1

2.6

1.7

2.6

No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

# **Montana High School Survey** 10-year Trend Analysis Report

		Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change fron 2019-2021
2011	2013	2015	2017	2019	2021			
	ge of students who one or more times	ever used methampl during their life)	hetamines (also cal	led "speed," "crysta	al meth," "crank,"			
3.1	3.6	3.0	2.2	2.4	1.9	Decreased, 2011-2021	No quadratic change	No change
QN54: Percenta luring their life)		ever used ecstasy (a	lso called "MDMA	" or "Molly," one o	or more times			
8.2	8.2	6.1	4.5	4.3	4.2	Decreased, 2011-2021	No quadratic change	No chang
	ge of students who	ever injected any ill g their life)	egal drug (used a n	eedle to inject any	illegal drug into			
2.0	2.4	1.7	1.8	1.0	1.4	Decreased, 2011-2021	No quadratic change	No change
N56: Percenta 2 months before		were offered, sold,	or given an illegal o	lrug on school prop	perty (during the			
25.2	22.8	21.7	21.7	22.5	22.3	Decreased, 2011-2021	Decreased, 2011-2015 No change, 2015-2021	No chang

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

# Montana High School Survey 10-year Trend Analysis Report

	:	Health Risk Behav	ior and Percentag	es		Linear Change*	Linear Change <sup>*</sup> Quadratic Change <sup>*</sup>	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021			
QN57: Percenta	ge of students who	ever had sexual inte	rcourse	<del>.</del>				
47.9	46.0	44.0	43.2	43.8	41.5	Decreased, 2011-2021	No quadratic change	No change
QN58: Percenta	ge of students who	had sexual intercour	rse for the first time	e before age 13 year	rs			1
4.4	4.3	3.1	2.9	3.6	2.8	Decreased, 2011-2021	No quadratic change	Decreased
QN59: Percenta	ge of students who	had sexual intercour	rse with four or mo	re persons during the	neir life			
15.0	14.7	13.4	12.4	12.1	10.7	Decreased, 2011-2021	No quadratic change	No change
	ge of students who e 3 months before	were currently sexual	ally active (had sex	tual intercourse wit	h at least one			
34.7	34.1	32.3	31.6	31.8	30.1	Decreased, 2011-2021	No quadratic change	No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

# Montana High School Survey 10-year Trend Analysis Report

Total
Savual Rabayiors

xual Behaviors		Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021			
	ge of students who tly sexually active)	drank alcohol or use	ed drugs before last	sexual intercourse	(among students			
21.1	21.7	19.7	17.8	18.3	17.8	Decreased, 2011-2021	No quadratic change	No change
		used a condom duri	ng last sexual interc	course (among stude	ents who were			,
currently sexually	y detrye)							

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

		Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021			
QN66: Percenta	ge of students who	described themselve	es as slightly or ver	y overweight	:	,		
26.3	27.7	29.5	30.5	30.5	28.4	Increased, 2011-2021	Increased, 2011-2017 Decreased, 2017-2021	No change
		ho were overweight c reference data from			ile for body mass			
					ile for body mass	No linear change	No quadratic change	No chang
ndex, based on s  12.9  QNOBESE: Per	sex- and age-specification 12.9	c reference data from	14.6  = 95th percentile for	owth charts)§	14.0		No quadratic change	No chang
ndex, based on s  12.9  QNOBESE: Per	sex- and age-specification 12.9	c reference data from 15.0 who had obesity (>	14.6  = 95th percentile for	owth charts)§	14.0		No quadratic change  No quadratic change	No chang
ndex, based on s  12.9  QNOBESE: Per and age-specific 8.5	12.9 centage of students reference data from 9.4	to reference data from 15.0 who had obesity (> in the 2000 CDC grow	14.6  = 95th percentile fowth charts)§  11.7	owth charts)§  13.0  or body mass index,	14.0 based on sex-	No linear change		

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

<sup>§</sup>Overweight and obese prevalence estimates for 1999 differ slightly from previously published results because different BMI cut points were used in 1999 than in subsequent years. To make these prevalence estimates comparable, the 1999 prevalence estimates were recalculated using the updated BMI cut points. In addition, beginning in 2017, new, slightly different ranges were used to calculate biologically implausible responses to height and weight questions.

2013	2015	2017	2019	2021			
students who d	lid not drink fruit ju	lice (100% fruit jui	ces one or more tim	nes during the 7			
22.1	24.2	26.9	32.4	34.3	Increased, 2011-2021	No quadratic change	No change
students who	lid not eat fruit (one	e or more times dui	ring the 7 days before	re the survey)			
8.8	9.7	9.8	10.9	10.4	No linear change	No quadratic change	No change
	22.1 students who d	22.1 24.2 students who did not eat fruit (one	22.1 24.2 26.9 students who did not eat fruit (one or more times dur	22.1 24.2 26.9 32.4 students who did not eat fruit (one or more times during the 7 days before	22.1 24.2 26.9 32.4 34.3 students who did not eat fruit (one or more times during the 7 days before the survey)	22.1 24.2 26.9 32.4 34.3 Increased, 2011-2021 students who did not eat fruit (one or more times during the 7 days before the survey)	22.1 24.2 26.9 32.4 34.3 Increased, 2011-2021 No quadratic change students who did not eat fruit (one or more times during the 7 days before the survey)

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

tal eight Manageme	ent and Dietary Be	haviors Health Risk Behav	or and Percentage	es		Linear Change*	Quadratic Change <sup>*</sup>	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021			
		o ate fruit or drank itice, during the 7 da			er day (such as			
61.6	61.0	60.0	58.4	54.8	52.4	Decreased, 2011-2021	No quadratic change	No change
		o ate fruit or drank ince, during the 7 day			er day (such as			
					er day (such as	Decreased, 2011-2021	No change, 2011-2015 Decreased, 2015-2021	No change
orange juice, app 26.9	le juice, or grape ju 28.2	tice, during the 7 day	25.2	23.9	23.0	Decreased, 2011-2021		No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

# Montana High School Survey 10-year Trend Analysis Report

**Total Weight Management and Dietary Behaviors Health Risk Behavior and Percentages** Linear Change\* Quadratic Change\* Change from 2019-2021 † 2011 2013 2015 2017 2019 2021 QN71: Percentage of students who did not eat potatoes (one or more times during the 7 days before the survey) 25.5 27.6 26.7 29.1 32.1 33.6 Increased, 2011-2021 No quadratic change No change QN72: Percentage of students who did not eat carrots (one or more times during the 7 days before the survey) 42.8 41.5 43.2 44.7 43.9 44.6 No linear change No quadratic change No change QN73: Percentage of students who did not eat other vegetables (one or more times during the 7 days before the survey) 14.1 13.7 15.3 16.3 17.1 16.1 Increased, 2011-2021 No quadratic change No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

		Health Risk Behavi	ior and Percentag	es		Linear Change <sup>*</sup>	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021	<u> </u>		
		who did not eat vegetots, or other vegetab						
3.5	3.9	5.1	4.7	5.5	5.3	Increased, 2011-2021	No quadratic change	No change
ONVEG1: Perc	entage of students v	vho ate vegetables o						
	h fries, fried potato	es, or potato chips],	,					
[excluding frenc survey)	h fries, fried potatoo	es, or potato chips], 66.0	62.7	62.3	60.0	Decreased, 2011-2021	No quadratic change	No ch
(excluding frencesurvey) 66.5  QNVEG2: Perc	66.8 entage of students v		62.7	er day (green salad,	potatoes	Decreased, 2011-2021	No quadratic change	No chan

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

		Health Risk Behav	or and Percentage	es		Linear Change <sup>*</sup>	Quadratic Change*	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021	<u> </u>		
		who ate vegetables thes, or potato chips],						
11.9	13.2	13.3	11.6	11.7	11.1	Decreased, 2011-2021	No quadratic change	No change
		did not drink a can, t pop, one or more ti						
			25.1	28.5	30.7	Increased, 2011-2021	No quadratic change	No change
19.3	26.3	25.7	25.1	20.5		,	1	110 0110
QNSODA1: Pe	rcentage of students	who drank a can, be counting diet soda o	ottle, or glass of soc	da or pop one or mo	ore times per day	,	4	

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

		Health Risk Behavi	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021			
		s who drank a can, be counting diet soda o						
14.6	10.7	10.7	8.6	6.7	6.0	Decreased, 2011-2021	No quadratic change	No change
								Ü
N75: Percenta	age of students who	did not drink milk (o	during the 7 days b	efore the survey)				
QN75: Percenta	age of students who 13.9	did not drink milk (o	during the 7 days b	efore the survey) 23.5	26.6	Increased, 2013-2021	Not available <sup>§</sup>	
NMILK1: Per	13.9	who drank one or mon, or with cereal and	19.0	23.5	the milk they		Not available <sup>§</sup>	Increased

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

		Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021	_		
rank in a glass	or cup, from a carto	2015 2017 2019 2021  udents who drank three or more glasses per day of milk (counting the milk they a carton, or with cereal and counting the half pint of milk served at school as equal s before the survey)						
	14.5	13.2	11.5	8.9	8.4	Decreased, 2013-2021	Not available <sup>§</sup>	No change
N76: Percenta	ge of students who	did not eat breakfas	t (during the 7 days	s before the survey)				
11.2	11.7	12.5	11.3	14.2	17.0	Increased, 2011-2021	No change, 2011-2017 Increased, 2017-2021	Increased
NBK7DAY: I	Percentage of studer	nts who ate breakfas	t on all 7 days (dur	ing the 7 days befor	e the survey)			
39.5	40.3	38.2	37.0	32.9	30.3	Decreased, 2011-2021	Decreased, 2011-2017	No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

# **Montana High School Survey** 10-year Trend Analysis Report

2015  who were physically acreased their heart rate a						
reased their heart rate a						`
			ie unie daring me			
54.0	53.4	51.0	51.7	Decreased, 2011-2021	No quadratic change	No change
cal activity that increas				No linear change	No quadratic change	No change
i	ical activity that increase the survey) 10.7	ical activity that increased their heart rate are the survey)  10.7  11.1	ical activity that increased their heart rate and made them breate the survey)  10.7 11.1 12.0	•	ical activity that increased their heart rate and made them breathe hard some of the the survey)  10.7 11.1 12.0 11.3 No linear change	ical activity that increased their heart rate and made them breathe hard some of the the survey)  10.7 11.1 12.0 11.3 No linear change No quadratic change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

# Montana High School Survey 10-year Trend Analysis Report

Total Physical Activity

Health Risk Behavior and Percentages						Linear Change <sup>*</sup>	Quadratic Change <sup>*</sup>	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021	_		
	age of students who a	attended physical ed	lucation (PE) classe	es on 1 or more day	s (in an average			
56.0	54.4	54.9	55.9	56.6	52.2	No linear change	No quadratic change	No change
33.1	were in school) 34.9	32.7	34.7	32.8	22.2	Decreased, 2011-2021	No change, 2011-2017 Decreased, 2017-2021	Decreased
N80: Percents	age of students who	nlaved on at least or	ne sports team (cou	nting any teams rur	hy their school		Decreased, 2017-2021	,
	roups, during the 12				i ey men seneer			
r community g						D 1 2011 2021		
or community gr	63.7	62.4	61.3	60.8	58.8	Decreased, 2011-2021	No quadratic change	No change
63.2 N81: Percenta	63.7  age of students who leng the 12 months between the students who length are the s	had a concussion fro				Decreased, 2011-2021	No quadratic change	No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

Not enough years of data to calculate.

# **Montana High School Survey** 10-year Trend Analysis Report

tal ther		Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021	<del></del>		
	age of students who	saw a dentist (for a vey)	check-up, exam, tec	eth cleaning, or oth	er dental work,			
		74.9	78.5	76.9	76.3	No linear change	Not available§	No change
QNNODNT: Pedental work)	ercentage of student	ts who never saw a d	entist (for a check-	up, exam, teeth clea	aning, or other			
		1.5	1.0	1.2	1.0	No linear change	Not available	No change
QN86: Percenta	age of students who	got 8 or more hours	of sleep (on an ave	erage school night)				
		32.6	32.8	29.9	28.6	Decreased, 2015-2021	Not available	No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

# **Montana High School Survey** 10-year Trend Analysis Report

		Health Risk Behav	ior and Percentag	es		Linear Change <sup>*</sup>	Quadratic Change*	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021	<del></del>		
QN87: Percent days before the	tage of students who	usually did not slee	p in their parent's o	r guardian's home (	during the 30			
			3.9	3.6	3.3	No linear change	Not available§	No change
	tage of students who	did not always wear	a seat belt when d	riving (among stude	ents who drive a			,
car)				29.5	28.7	Decreased, 2013-2021	Not available	No change
car)	37.0	40.0	30.6	29.3	20.7		Tiot williams	
QN89: Percent	37.0 tage of students who phone to get driving	used the Internet or	apps on their cell p	ohone while driving	(not counting		1.00 4.4.4.4.0	
QN89: Percent using their cell	tage of students who	used the Internet or instructions or to do	apps on their cell petermine their locat	ohone while driving	(not counting			

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

# **Montana High School Survey** 10-year Trend Analysis Report

		Health Risk Behavi	Linear Change*	Quadratic Change <sup>*</sup>	Change from 2019-2021 †			
2011	2013	2015	2017	2019	2021	<del></del>		
		have been the victin (during the 12 month			omeone thought			
			10.6	13.3	13.6	Increased, 2017-2021	Not available§	No change
		currently used an ele		luct on school prop	erty (during the			
0 days before t	he survey)		ectronic vapor prod	18.9	13.4	Decreased, 2019-2021	Not available	Decreased
0 days before t	he survey)	currently used an element of the have ever been told 22.2	ectronic vapor prod	18.9	13.4	Decreased, 2019-2021  No linear change	Not available  Increased, 2011-2015 No change, 2015-2021	Decreased No chang
0 days before to 2N96: Percenta 20.3	age of students who  19.8  Itage of students who	have ever been told	by a doctor or a nu	18.9 rse that they have a 21.8	13.4 sthma 20.8	, 	Increased, 2011-2015	

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

# **Montana High School Survey** 10-year Trend Analysis Report

			Linear Change*	Quadratic Change <sup>*</sup>	Change from 2019-2021			
2011	2013	2015	2017	2019	2021	<del></del>		
	2013 2015 2017 2019 2021  : Percentage of students who used an indoor tanning device (such as a sunlamp, sunbed, or tanning not counting getting a spray-on tan], one or more times during the 12 months before the survey)							
	13.4	11.8	7.4	6.2	5.7	Decreased, 2013-2021	Not available§	No chang

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

# **Montana High School Survey** 10-year Trend Analysis Report

Male

ury and Violend		Health Risk Behav	Linear Change*	Quadratic Change*	Change from 2019-2021 †			
2011	2013	2015	2017	2019	2021			
QN8: Percentag	e of students who d	id not always wear a	a seat belt (when ri	ding in a car driven	by someone else)			
60.2	54.7	48.6	48.5	48.1	48.2	Decreased, 2011-2021	Decreased, 2011-2015 No change, 2015-2021	No change
		ode with a driver where survey)		g alcohol (in a car	or other vehicle,			
25.7	24.5	23.1	19.5	17.7	19.4	Decreased, 2011-2021	No quadratic change	No change
	ng the 30 days befor	drove a car or other re the survey, among						
,	15.1	12.3	8.4	8.6	8.1	Decreased, 2013-2021	Not available§	No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

		Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021			
	s before the surve	texted or e-mailed v y, among students w						
	55.7	53.8	51.9	50.8	53.3	No linear change	Not available§	No change
	ge of students who g the 30 days befor	carried a weapon on the the survey)	school property (s	uch as a gun, knife	or club, on at			1
icasi i day dulliliş		15.5	11.9	10.4	13.4	Decreased, 2011-2021	No quadratic change	Increased
14.7	15.0	13.5						

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

### Montana High School Survey 10-year Trend Analysis Report

Male **Injury and Violence Health Risk Behavior and Percentages** Linear Change\* Quadratic Change\* Change from 2019-2021 † 2011 2013 2015 2017 2019 2021 QN14: Percentage of students who did not go to school because they felt unsafe at school or on their way to or from school (on at least 1 day during the 30 days before the survey) 4.2 6.5 8.0 4.6 6.3 5.6 Increased, 2011-2021 No quadratic change Decreased QN15: Percentage of students who were threatened or injured with a weapon on school property (such as a gun, knife, or club, one or more times during the 12 months before the survey) 9.7 7.6 8.4 10.1 7.1 6.6 No linear change No quadratic change Decreased QN16: Percentage of students who were in a physical fight (one or more times during the 12 months before the survey) 29.6 28.1 25.2 29.0 31.0 25.7 Decreased, 2011-2021 No quadratic change Decreased

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

# **Montana High School Survey** 10-year Trend Analysis Report

jury and Violenc		Health Risk Behav	ior and Percentag	es		Linear Change <sup>*</sup>	Quadratic Change*	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021	<u> </u>		
QN17: Percentag		were in a physical f	ight on school prop	perty (one or more t	imes during the	,		
11.7	10.2	10.2	8.5	11.0	7.5	Decreased, 2011-2021	No quadratic change	Decreased
QN19: Percentage want to)	ge of students who	were ever physicall	y forced to have sex	xual intercourse (wl	hen they did not			
6.6	5.7	5.0	4.8	5.4	6.6	No linear change	Decreased, 2011-2017 Increased, 2017-2021	No change
[counting such th	nings as kissing, tou	experienced sexual aching, or being phy uring the 12 months	sically forced to ha	ve sexual intercour				
			4.7	5.2	7.2	Increased, 2017-2021	Not available§	Increased

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

		Health Risk Behav	or and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021			
dating or going forced to have s	out with to do sexua exual intercourse] th	experienced sexual all things [counting support they did not want and or went out with	ich things as kissin to do, one or more	g, touching, or being times during the 1	ng physically 2 months before			
	6.4	5.6	2.9	1.8	2.9	Decreased, 2013-2021	Not available§	No change
someone they w njured with an	ere dating or going object or weapon] o	experienced physica out with [counting s ne or more times dur e during the 12 mon 5.5	uch things as being ring the 12 months	hit, slammed into s before the survey, a	something, or	No linear change	Not available	No chang
someone they winjured with an who dated or we	ere dating or going object or weapon] o ent out with someon 6.6	out with [counting s ne or more times du e during the 12 mon	uch things as being ring the 12 months ths before the surve 5.4	hit, slammed into sbefore the survey, a bey) 7.0	something, or among students 5.8	No linear change	Not available	No chang

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

### Montana High School Survey 10-year Trend Analysis Report

Male **Injury and Violence Health Risk Behavior and Percentages** Linear Change\* Quadratic Change\* Change from 2019-2021 † 2011 2013 2015 2017 2019 2021 QN24: Percentage of students who were electronically bullied (counting being bullied through texting, Instagram, Facebook, or other social media, ever during the 12 months before the survey) 10.9 11.4 10.6 10.8 12.5 10.9 No linear change No quadratic change No change QN25: Percentage of students who felt sad or hopeless (almost every day for >=2 weeks in a row so that they stopped doing some usual activities, ever during the 12 months before the survey) 19.9 18.0 20.4 22.8 27.5 30.2 Increased, 2011-2021 No change, 2011-2015 No change Increased, 2015-2021 QN26: Percentage of students who seriously considered attempting suicide (during the 12 months before the survey) 13.4 12.7 12.7 15.4 18.8 15.8 No quadratic change Decreased Increased, 2011-2021

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

### Montana High School Survey 10-year Trend Analysis Report

Male **Injury and Violence Health Risk Behavior and Percentages** Linear Change\* Quadratic Change\* Change from 2019-2021 † 2011 2013 2015 2017 2019 2021 QN27: Percentage of students who made a plan about how they would attempt suicide (during the 12 months before the survey) 11.4 11.0 13.6 11.5 15.3 14.1 Increased, 2011-2021 No quadratic change No change QN28: Percentage of students who actually attempted suicide (one or more times during the 12 months before the survey) 6.0 6.4 6.3 7.3 7.9 8.1 Increased, 2011-2021 No quadratic change No change QN29: Percentage of students who had a suicide attempt that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse (during the 12 months before the survey) 2.2 2.7 2.4 2.2 2.7 2.3 No linear change No quadratic change No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

# **Montana High School Survey** 10-year Trend Analysis Report

	]	Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021			
QN30: Percenta	age of students who	ever tried cigarette	smoking (even one	or two puffs)				
47.2	43.4	39.6	33.6	31.7	28.3	Decreased, 2011-2021	No quadratic change	No change
QN31: Percenta	age of students who	first tried cigarette s		•	•	No linear change	Not available <sup>§</sup>	No change
QN32: Percenta	age of students who		10.5	9.8	9.6	No linear change	Not available <sup>§</sup>	No change
			10.5	9.8	9.6	No linear change  Decreased, 2011-2021	Not available <sup>§</sup> No quadratic change	
QN32: Percenta survey) 18.1	age of students who 16.0  centage of students	currently smoked ci	10.5 Igarettes (on at least	9.8 1 day during the 3 7.7	9.6 0 days before the 7.4			No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

# **Montana High School Survey** 10-year Trend Analysis Report

		Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021			
QNDAYCIG: Poefore the survey		its who currently sm	oked cigarettes dail	ly (on all 30 days d	uring the 30 days			
5.0	4.1	2.5	2.2	1.1	0.9	Decreased, 2011-2021	No quadratic change	No change
		smoked more than 1 g students who curr			smoked during			

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

# **Montana High School Survey** 10-year Trend Analysis Report

		Health Risk Behav	ior and Percentag	es		Linear Change <sup>*</sup>	Quadratic Change*	Change fron 2019-2021
2011	2013	2015	2017	2019	2021			
ape pens, e-cig		currently used an el- kah pens, and mods te the survey)						
		31.8	24.0	30.3	23.2	Decreased, 2015-2021	Not available§	Decreased
		s who currently used	electronic vapor pr	oducts frequently (	on 20 or more			
	rcentage of students 30 days before the		electronic vapor pr	roducts frequently (	on 20 or more 8.7	Increased, 2015-2021	Not available	Decreased
ays during the QNDAYEVP:	30 days before the	survey)	5.1	14.1	8.7	,	Not available	Decreased
ays during the NDAYEVP:	30 days before the s	survey) 6.4	5.1	14.1	8.7	,	Not available  Not available	Decrease
NDAYEVP: ne 30 days before NTB5: Percent	Percentage of stude ore the survey)	6.4  nts who currently use 4.4  no currently smoked	5.1 ed electronic vapor 3.6	products daily (on 10.2	8.7 all 30 days during 5.7			

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

		iicaiui Risk Dellav	ior and Percentag	es		Linear Change <sup>*</sup>	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021	_		
olvable tobacco	o products [such	currently used smo as Copenhagen, Gri ring the 30 days bef	zzly, Skoal, or Cam					
			13.8	9.7	7.8	Decreased, 2017-2021	Not available§	No change
snus, or dissolv	vable tobacco pro	s who currently used oducts [such as Cop 0 or more days durin	enhagen, Grizzly, S	koal, or Camel Snu				
			5.5	2.8	2.9	Decreased, 2017-2021	Not available	No change
			5.5		2.9  obacco, snuff,	Decreased, 2017-2021	Not	available

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

# Montana High School Survey 10-year Trend Analysis Report

Male Tobacco Use

		Health Risk Behav	ior and Percentag	es		Linear Change <sup>*</sup>	Quadratic Change <sup>*</sup>	Change from 2019-2021
2011	2013	2015	2017	2019	2021	<del></del>		
	age of students who	currently smoked ci	gars (cigars, cigaril	los, or little cigars,	on at least 1 day			
22.1	20.7	16.8	16.1	9.9	6.0	Decreased, 2011-2021	Decreased, 2011-2017 Decreased, 2017-2021	Decreased
							Decreased, 2017-2021	
~	•	no currently smoked st 1 day during the 3			tobacco or		Decreased, 2017-2021	
~	•	•			tobacco or 25.6	Decreased, 2017-2021	Not available <sup>§</sup>	Decreased
DNFRCGR: Pe	products (on at lease	•	32.5  ked cigars frequent	33.0	25.6	Decreased, 2017-2021		Decreased

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

# **Montana High School Survey** 10-year Trend Analysis Report

		Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021			
	ntage of students what the students what the students who are the students where the stud	no currently smoked te the survey)	cigarettes or cigars	or used smokeless	tobacco (on at			
			23.7	17.3	12.9	Decreased, 2017-2021	Not available <sup>§</sup>	Decreased
QNTB2: Percer before the surve		no currently smoked	cigarettes or cigars	(on at least 1 day d	luring the 30 days			,
20.5	25.8	21.2	19.3	12.9	9.6	Decreased, 2011-2021	Decreased, 2011-2017 Decreased, 2017-2021	Decreased
28.5								
QNDAYCGR:	Percentage of stude ag the 30 days befor	nts who currently sn re the survey)	noked cigars daily (	cigars, cigarillos, o	r little cigars, on			,

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

### Montana High School Survey 10-year Trend Analysis Report

Male **Alcohol and Other Drug Use Health Risk Behavior and Percentages** Linear Change\* Quadratic Change\* Change from 2019-2021 † 2011 2013 2015 2017 2019 2021 QN40: Percentage of students who had their first drink of alcohol before age 13 years (other than a few sips) 22.9 25.4 21.8 20.7 19.5 20.0 Decreased, 2011-2021 No quadratic change No change QN41: Percentage of students who currently drank alcohol (at least one drink of alcohol, on at least 1 day during the 30 days before the survey) 39.7 37.2 33.4 31.5 31.4 28.1 Decreased, 2011-2021 No quadratic change No change QN42: Percentage of students who currently were binge drinking (had four or more drinks of alcohol in a row if they were female or five or more drinks of alcohol in a row if they were male, within a couple of hours, on at least 1 day during the 30 days before the survey) 17.9 16.9 15.3 No linear change Not available§ No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

### Montana High School Survey 10-year Trend Analysis Report

Male **Alcohol and Other Drug Use Health Risk Behavior and Percentages** Linear Change\* Quadratic Change\* Change from 2019-2021 † 2011 2013 2015 2017 2019 2021 QN43: Percentage of students who reported that the largest number of drinks they had in a row was 10 or more (within a couple of hours, during the 30 days before the survey) 7.8 6.5 No linear change Not available§ No change QN44: Percentage of students who usually got the alcohol they drank by someone giving it to them (during the 30 days before the survey, among students who currently drank alcohol) 29.6 30.0 32.0 36.3 33.6 35.0 Increased, 2011-2021 No quadratic change No change ON45: Percentage of students who ever used marijuana (one or more times during their life) 42.2 38.4 37.1 34.2 38.8 34.5 Decreased, 2011-2021 No quadratic change No change QN46: Percentage of students who tried marijuana for the first time before age 13 years 10.0 9.0 8.8 7.2 7.2 No quadratic change 7.6 Decreased, 2011-2021 No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

### Montana High School Survey 10-year Trend Analysis Report

Male **Alcohol and Other Drug Use Health Risk Behavior and Percentages** Linear Change\* Quadratic Change\* Change from 2019-2021 † 2011 2013 2015 2017 2019 2021 QN47: Percentage of students who currently used marijuana (one or more times during the 30 days before the survey) 22.1 18.9 20.7 18.3 23.0 19.6 Decreased, 2011-2021 No quadratic change No change QN48: Percentage of students who ever used synthetic marijuana (one or more times during their life) 10.1 7.2 6.6 5.8 Decreased, 2015-2021 Not available§ No change QN49: Percentage of students who ever took prescription pain medicine without a doctor's prescription or differently than how a doctor told them to use it (counting drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet, one or more times during their life) 12.6 10.9 10.3 Decreased, 2017-2021 Not available No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

### Montana High School Survey 10-year Trend Analysis Report

Male **Alcohol and Other Drug Use Health Risk Behavior and Percentages** Linear Change\* Quadratic Change\* Change from 2019-2021 † 2011 2013 2015 2017 2019 2021 QN50: Percentage of students who ever used cocaine (any form of cocaine, including powder, crack, or freebase, one or more times during their life) 7.5 7.7 5.7 4.7 3.8 4.5 Decreased, 2011-2021 No quadratic change No change QN51: Percentage of students who ever used inhalants (sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high, one or more times during their life) 11.0 9.4 8.2 5.9 7.6 8.1 Decreased, 2011-2017 No change Decreased, 2011-2021 Increased, 2017-2021 QN52: Percentage of students who ever used heroin (also called "smack," "junk," or "China White," one or more times during their life) 3.3 3.3 3.0 1.8 2.2 2.0 Decreased, 2011-2021 No quadratic change No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

# **Montana High School Survey** 10-year Trend Analysis Report

		Health Risk Behav	ior and Percentag	es		Linear Change <sup>*</sup>	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021			
	ge of students who one or more times	ever used methamp during their life)	hetamines (also cal	led "speed," "crysta	ıl meth," "crank,"			
3.8	4.4	3.8	2.3	2.4	2.2	Decreased, 2011-2021	No quadratic change	No change
QN54: Percenta luring their life)		ever used ecstasy (a	ulso called "MDMA	a" or "Molly," one o	or more times			
10.1	9.4	7.4	4.9	4.7	4.4	Decreased, 2011-2021	No quadratic change	No change
	ge of students who	ever injected any ill g their life)	legal drug (used a n	eedle to inject any	illegal drug into			
2.4	3.0	2.1	2.0	1.5	1.8	Decreased, 2011-2021	No quadratic change	No change
2N56: Percenta 2 months before		were offered, sold,	or given an illegal o	drug on school prop	erty (during the			
28.7	24.9	23.6	23.5	23.3	23.2	Decreased, 2011-2021	Decreased, 2011-2015 No change, 2015-2021	No chang

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

# Montana High School Survey 10-year Trend Analysis Report

Male Sexual Behaviors

	j	Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change <sup>*</sup>	Change from 2019-2021 <sup>†</sup>
2011	2013	2015	2017	2019	2021			
QN57: Percentag	ge of students who	ever had sexual inte	rcourse	•	,			
49.1	46.0	43.6	41.6	43.3	40.1	Decreased, 2011-2021	No quadratic change	No change
QN58: Percentag	ge of students who	had sexual intercoun	rse for the first time	e before age 13 year	rs			
6.3	5.7	3.6	3.4	4.5	3.5	Decreased, 2011-2021	Decreased, 2011-2015 No change, 2015-2021	No change
QN59: Percenta	ge of students who	had sexual intercou	rse with four or mo	re persons during the	neir life			,
15.5	15.3	14.6	11.9	12.7	10.8	Decreased, 2011-2021	No quadratic change	No change
	ge of students who e 3 months before t	were currently sexu	ally active (had sex	ual intercourse wit	h at least one			
32.6	32.8	30.0	28.9	29.8	28.3	Decreased, 2011-2021	No quadratic change	No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

# **Montana High School Survey** 10-year Trend Analysis Report

	1	Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021			
						÷		
		drank alcohol or use	ed drugs before last	sexual intercourse	(among students			
	ge of students who tly sexually active) 23.5	drank alcohol or use 22.5	ed drugs before last 20.5	sexual intercourse	(among students	Decreased, 2011-2021	No quadratic change	No change
who were current 24.4	tly sexually active) 23.5 ge of students who		20.5	17.7	17.8	Decreased, 2011-2021	No quadratic change	No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

	]	Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021			
QN66: Percenta	ge of students who	described themselv	es as slightly or ver	y overweight	•			
21.6	21.5	23.8	25.2	23.7	25.3	Increased, 2011-2021	No quadratic change	No change
	ntage of students w				ile for body mass			
					tile for body mass	No linear change	No quadratic change	No change
index, based on s 14.0 QNOBESE: Per	sex- and age-specifi	c reference data fro  15.1  who had obesity (>	m the 2000 CDC gr 14.9 = 95th percentile for	rowth charts) <sup>§</sup> 12.2	13.7	No linear change	No quadratic change	No change
14.0  QNOBESE: Per	sex- and age-specifi  14.6  centage of students	c reference data fro  15.1  who had obesity (>	m the 2000 CDC gr 14.9 = 95th percentile for	rowth charts) <sup>§</sup> 12.2	13.7	No linear change  Increased, 2011-2021	No quadratic change  No quadratic change	No change
14.0  QNOBESE: Per and age-specific 11.4	14.6 centage of students reference data from	the 2000 CDC gro	m the 2000 CDC gr  14.9  = 95th percentile for wth charts)  14.5	rowth charts) <sup>§</sup> 12.2  or body mass index,	13.7			

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

<sup>§</sup>Overweight and obese prevalence estimates for 1999 differ slightly from previously published results because different BMI cut points were used in 1999 than in subsequent years. To make these prevalence estimates comparable, the 1999 prevalence estimates were recalculated using the updated BMI cut points. In addition, beginning in 2017, new, slightly different ranges were used to calculate biologically implausible responses to height and weight questions.

		Health Risk Behav	ior and Percentag	es		Linear Change <sup>*</sup>	Quadratic Change*	Change fron 2019-2021
2011	2013	2015	2017	2019	2021			
QN68: Percental	age of students who survey)	did not drink fruit ju	uice (100% fruit jui	ces one or more tin	nes during the 7			
17.1	19.7	23.1	23.8	30.0	31.3	Increased, 2011-2021	No quadratic change	No change
QN69: Percenta	age of students who	did not eat fruit (on	e or more times du	ring the 7 days befo	re the survey)			,
		11.2	11.1	12.8	11.4	No linear change	No quadratic change	No change
12.1	10.2	11.3	11.1	12.0		Tio mineur change	1 to quadratic change	
QNFR0: Percen	10.2  ntage of students wh uice, during the 7 da	o did not eat fruit or	· drink 100% fruit j	,			The quantum change	

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

Iale ∕eight Manageme	nt and Dietary Be	haviors Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021 <sup>†</sup>
2011	2013	2015	2017	2019	2021			
		o ate fruit or drank ince, during the 7 da			er day (such as			
61.0	61.1	61.7	59.7	55.5	53.5	Decreased, 2011-2021	No change, 2011-2015 Decreased, 2015-2021	No change
		o ate fruit or drank nice, during the 7 da			er day (such as			
27.8	28.5	28.8	25.3	24.4	23.5	Decreased, 2011-2021	No quadratic change	No change
QN70: Percentag	ge of students who	did not eat green sa	lad (one or more tir	nes during the 7 da	ys before the			
31.9	35.1	35.8	34.9	39.1	40.3	Increased, 2011-2021	No quadratic change	No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

# Montana High School Survey 10-year Trend Analysis Report

Male **Weight Management and Dietary Behaviors Health Risk Behavior and Percentages** Linear Change\* Quadratic Change\* Change from 2019-2021 † 2011 2013 2015 2017 2019 2021 QN71: Percentage of students who did not eat potatoes (one or more times during the 7 days before the survey) 24.2 23.6 31.0 26.4 26.7 30.7 Increased, 2011-2021 No quadratic change No change QN72: Percentage of students who did not eat carrots (one or more times during the 7 days before the survey) 42.3 40.7 43.0 44.8 44.8 44.7 Increased, 2011-2021 No quadratic change No change QN73: Percentage of students who did not eat other vegetables (one or more times during the 7 days before the survey) 16.3 15.8 18.0 18.4 19.6 18.1 Increased, 2011-2021 No quadratic change No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

		Health Risk Behavi	ior and Percentag	es		Linear Change <sup>*</sup>	Quadratic Change <sup>*</sup>	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021			
		who did not eat vege ots, or other vegetab						
4.5	4.8	6.3	5.3	6.6	6.3	Increased, 2011-2021	No quadratic change	No change
		who ate vegetables of es, or potato chips],				3		
66.1	66.1	66.3	63.0	61.9	59.7	Decreased, 2011-2021	No quadratic change	No change
00.1								:
QNVEG2: Perc		who ate vegetables twees, or potato chips],				2		

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

		Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021	<u> </u>		
		who ate vegetables thes, or potato chips],						
13.8	13.9	14.8	12.3	12.0	10.9	Decreased, 2011-2021	No quadratic change	No change
Sprite, not count		did not drink a can, t pop, one or more ti 20.6				Increased, 2011-2021	No quadratic change	Increased
14.9								
QNSODA1: Pe		who drank a can, be counting diet soda o						

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

		Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021			
		who drank a can, be						
such as cone, i	epsi, or spirite, not	counting aret soud o	r diet pop, daring ti	ne , days serore the	survey)			
19.3	14.0	14.4	10.7	9.3	7.8	Decreased, 2011-2021	No quadratic change	No chang
					7.8	Decreased, 2011-2021	No quadratic change	No chang
	ge of students who	did not drink milk (	during the 7 days b	efore the survey)		, 		No change
					7.8	Decreased, 2011-2021  Increased, 2013-2021	No quadratic change  Not available <sup>§</sup>	
N75: Percenta	ge of students who 10.5	did not drink milk (o	during the 7 days b 13.1  nore glasses per day	efore the survey) 16.3  v of milk (counting)	17.0	Increased, 2013-2021		No chang
QN75: Percenta QNMILK1: Perd drank in a glass of	ge of students who 10.5	did not drink milk (o 11.9 who drank one or m	during the 7 days b 13.1 nore glasses per day	efore the survey) 16.3  v of milk (counting)	17.0	Increased, 2013-2021		

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

		Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021	_		
drank in a glass		who drank three or on, or with cereal and re the survey)						
	18.4	17.5	15.5	12.4	11.9	Decreased, 2013-2021	Not available <sup>§</sup>	No change
QN76: Percenta	age of students who	did not eat breakfas	t (during the 7 days	before the survey)				•
11.0	11.7	13.4	11.2	14.1	16.4	Increased, 2011-2021	No quadratic change	No change
	Percentage of studer	nts who ate breakfas	t on all 7 days (duri	ng the 7 days before	re the survey)	,		
QNBK7DAY:	· ·							

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

Not enough years of data to calculate.

### Montana High School Survey 10-year Trend Analysis Report

Male **Physical Activity Health Risk Behavior and Percentages** Linear Change\* Quadratic Change\* Change from 2019-2021 † 2011 2013 2015 2017 2019 2021 QN77: Percentage of students who were physically active at least 60 minutes per day on 5 or more days (in any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey) 61.4 61.4 60.1 62.0 58.1 57.6 Decreased, 2011-2021 No quadratic change No change QNPA0DAY: Percentage of students who did not participate in at least 60 minutes of physical activity on at least 1 day (in any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey) 8.8 9.0 8.9 9.2 10.0 9.6 No linear change No quadratic change No change QNPA7DAY: Percentage of students who were physically active at least 60 minutes per day on all 7 days (in any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey) 36.1 35.4 36.3 37.0 31.1 33.7 Decreased, 2011-2021 No quadratic change No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

# Montana High School Survey 10-year Trend Analysis Report

Male Physical Activity

ysical Activity	1	Health Risk Behavi	ior and Percentag	es		Linear Change <sup>*</sup>	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021			
QN79: Percenta week when they		attended physical ed	lucation (PE) classe	es on 1 or more day	rs (in an average			
60.8	59.5	59.5	61.2	62.0	57.2	No linear change	No quadratic change	No change
week when they	were in school)	who attended physi		•	_	D 1 2011 2021	N. 1. 2011 2017	D 1
37.0	38.7	36.8	38.8	37.7	24.2	Decreased, 2011-2021	No change, 2011-2017 Decreased, 2017-2021	Decreased
		played on at least or months before the s		nting any teams rur	by their school			
64.7	65.7	64.1	63.8	62.1	59.5	Decreased, 2011-2021	No quadratic change	No change
	ge of students who	had a concussion fro fore the survey)	om playing a sport	or being physically	active (one or			

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

	Health Risk Behav	ior and Percentag	es		Linear Change <sup>*</sup>	Quadratic Change*	Change from 2019-2021 <sup>†</sup>
2013	2015	2017	2019	2021			
		check-up, exam, tee	eth cleaning, or oth	er dental work,			
	73.0	77.2	76.1	74.6	No linear change	Not available§	No change
rcentage of student	s who never saw a d	entist (for a check-	up, exam, teeth clea	aning, or other			
	1.9	1.1	1.6	1.4	No linear change	Not available	No change
ge of students who	got 8 or more hours	of sleep (on an ave	erage school night)				
	35.8	34.8	30.8	28.9	Decreased, 2015-2021	Not available	No change
r	ge of students who nths before the sur	ge of students who saw a dentist (for a conths before the survey)  73.0  recentage of students who never saw a dentist (for a conths before the survey)  1.9  ge of students who got 8 or more hours	ge of students who saw a dentist (for a check-up, exam, teenths before the survey)  73.0  77.2  recentage of students who never saw a dentist (for a check-  1.9  1.1  ge of students who got 8 or more hours of sleep (on an average of s	ge of students who saw a dentist (for a check-up, exam, teeth cleaning, or other other the survey)  73.0  77.2  76.1  recentage of students who never saw a dentist (for a check-up, exam, teeth cleaning)  1.9  1.1  1.6  ge of students who got 8 or more hours of sleep (on an average school night)	ge of students who saw a dentist (for a check-up, exam, teeth cleaning, or other dental work, nths before the survey)  73.0  77.2  76.1  74.6  recentage of students who never saw a dentist (for a check-up, exam, teeth cleaning, or other  1.9  1.1  1.6  1.4  ge of students who got 8 or more hours of sleep (on an average school night)	ge of students who saw a dentist (for a check-up, exam, teeth cleaning, or other dental work, nths before the survey)  73.0  77.2  76.1  74.6  No linear change recentage of students who never saw a dentist (for a check-up, exam, teeth cleaning, or other  1.9  1.1  1.6  1.4  No linear change ge of students who got 8 or more hours of sleep (on an average school night)	ge of students who saw a dentist (for a check-up, exam, teeth cleaning, or other dental work, niths before the survey)  73.0 77.2 76.1 74.6 No linear change Not available recentage of students who never saw a dentist (for a check-up, exam, teeth cleaning, or other  1.9 1.1 1.6 1.4 No linear change Not available ge of students who got 8 or more hours of sleep (on an average school night)

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

# **Montana High School Survey** 10-year Trend Analysis Report

2013	2015	2017	2019	2021			
of students who wey)	usually did not slee	p in their parent's o	r guardian's home (	during the 30			
		4.5	4.2	4.2	No linear change	Not available§	No change
of students who	did not always wear	a seat belt when d	riving (among stude	ents who drive a			1
43.0	43.3	35.9	34.4	34.6	Decreased, 2013-2021	Not available	No change
,	of students who deep) of students who deep	of students who usually did not slee eyey) of students who did not always wear 43.0 43.3	of students who usually did not sleep in their parent's or vey)  4.5  of students who did not always wear a seat belt when d  43.0  43.3  35.9	of students who usually did not sleep in their parent's or guardian's home (vey)  4.5  4.2  of students who did not always wear a seat belt when driving (among students)  43.0  43.3  35.9  34.4	of students who usually did not sleep in their parent's or guardian's home (during the 30 rey)  4.5  4.2  4.2  of students who did not always wear a seat belt when driving (among students who drive a 43.0  43.0  43.3  35.9  34.4  34.6	of students who usually did not sleep in their parent's or guardian's home (during the 30 rey)  4.5 4.2 4.2 No linear change of students who did not always wear a seat belt when driving (among students who drive a	of students who usually did not sleep in their parent's or guardian's home (during the 30 yey)  4.5  4.2  No linear change  Not available students who did not always wear a seat belt when driving (among students who drive a  43.0  43.3  35.9  34.4  34.6  Decreased, 2013-2021  Not available

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

ale e-Added		Health Risk Behav	ior and Percentag	es		Linear Change <sup>*</sup>	Quadratic Change*	Change from
								2019-2021 †
2011	2013	2015	2017	2019	2021	<u> </u>		
		have been the victin (during the 12 month			omeone thought			
			10.4	13.3	11.5	No linear change	Not available <sup>§</sup>	No change
QN91: Percenta 30 days before t	age of students who he survey)	currently used an ele	ectronic vapor prod	luct on school prop	erty (during the	1		
				21.1	12.9	Decreased, 2019-2021	Not available	Decreased
QN96: Percenta	age of students who	have ever been told	by a doctor or a nu	rse that they have a	sthma			
20.3	19.2	21.3	21.0	22.2	20.5	No linear change	No quadratic change	No change
QN101: Percen		o described their gra	des in school as mo	ostly A's or B's (dur	ing the 12	+ +		
		69.6	73.1	71.9	68.5	No linear change	Not available	No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

# **Montana High School Survey** 10-year Trend Analysis Report

		Health Risk Behav	vior and Percentag	es		Linear Change <sup>*</sup>	Quadratic Change*	Change from 2019-202
2011	2013	2015	2017	2019	2021			
	ntage of students who							
	ntage of students who							
ooth [not coun	nting getting a spray-	on tan], one or mor	e times during the 1 4.6	2 months before the	e survey) 4.5	Decreased, 2013-2021	Not available <sup>§</sup>	No chan
ooth [not coun	nting getting a spray-	on tan], one or mor 6.8  o received help from	4.6  a resource teacher	2 months before the	e survey) 4.5	Decreased, 2013-2021	Not available <sup>§</sup>	No chan

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

# Montana High School Survey 10-year Trend Analysis Report

male jury and Violence		Health Risk Behav	Linear Change <sup>*</sup>	Quadratic Change*	Change from 2019-2021 †			
2011	2013	2015	2017	2019	2021	_		
QN8: Percentage	e of students who d	id not always wear	a seat belt (when ric	ding in a car driven	by someone else)			
54.1	49.4	50.0	48.3	47.0	43.6	Decreased, 2011-2021	No quadratic change	No change
	e of students who re	ode with a driver wh	no had been drinkin	g alcohol (in a car	or other vehicle,			
		s before the survey)	)					

5.5

6.9

Decreased, 2013-2021

Not available§

9.3

6.7

the 30 days before the survey)

9.6

No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

ury and Violend		Health Risk Behav	ior and Percentag	Linear Change*	Quadratic Change <sup>*</sup>	Change from 2019-2021 †		
2011	2013	2015	2017	2019	2021	_		
	age of students who ays before the survey							
	55.8	55.6	56.6	56.0	61.3	Increased, 2013-2021	Not available <sup>§</sup>	No change
				1 1 10				
	age of students who		school property (s	uch as a gun, knife,	or club, on at			
			school property (s	uch as a gun, knife,	4.2	No linear change	Increased, 2011-2015 Decreased, 2015-2021	No change
ast 1 day durin 3.5  QN13: Percenta	ng the 30 days before	5.4 carried a gun (not co	4.7	3.3	4.2 un only for	No linear change		No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

### Montana High School Survey 10-year Trend Analysis Report

**Female Injury and Violence Health Risk Behavior and Percentages** Linear Change\* Quadratic Change\* Change from 2019-2021 † 2011 2013 2015 2017 2019 2021 QN14: Percentage of students who did not go to school because they felt unsafe at school or on their way to or from school (on at least 1 day during the 30 days before the survey) 4.2 5.3 9.5 11.1 10.5 7.4 Increased, 2011-2021 No change, 2011-2017 Decreased No change, 2017-2021 QN15: Percentage of students who were threatened or injured with a weapon on school property (such as a gun, knife, or club, one or more times during the 12 months before the survey) 5.0 4.8 4.3 5.2 5.2 4.9 No linear change No change No quadratic change QN16: Percentage of students who were in a physical fight (one or more times during the 12 months before the survey) 14.5 13.2 19.3 15.4 16.4 16.9 Decreased, 2011-2021 No quadratic change Decreased

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

## Montana High School Survey 10-year Trend Analysis Report

**Female Injury and Violence Health Risk Behavior and Percentages** Linear Change\* Quadratic Change\* Change from 2019-2021 † 2011 2013 2015 2017 2019 2021 QN17: Percentage of students who were in a physical fight on school property (one or more times during the 12 months before the survey) 6.3 3.8 4.1 4.8 4.7 2.7 Decreased, 2011-2021 No quadratic change Decreased QN19: Percentage of students who were ever physically forced to have sexual intercourse (when they did not want to) 13.2 11.9 12.7 14.0 14.2 15.3 No linear change No quadratic change No change QN20: Percentage of students who experienced sexual violence (being forced by anyone to do sexual things

17.1

20.1

Increased, 2017-2021

Not available§

[counting such things as kissing, touching, or being physically forced to have sexual intercourse] that they did

15.2

not want to do, one or more times during the 12 months before the survey)

Increased

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

		Health Risk Behavi	ior and Percentag	es		Linear Change <sup>*</sup>	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021			
lating or going of forced to have so	out with to do sexual exual intercourse] the	experienced sexual all things [counting sunt they did not want they did not with	ich things as kissin to do, one or more	g, touching, or being times during the 1	ng physically 2 months before			
	15.6	14.4	10.0	10.9	13.2	Decreased, 2013-2021	Not available <sup>§</sup>	No chang
someone they winjured with an o	ere dating or going object or weapon] o	experienced physica out with [counting s ne or more times dur e during the 12 mon	uch things as being ring the 12 months	hit, slammed into before the survey,	something, or	Decreased, 2013-2021	Not available	No change
NOS Parconte	ga of students who	were bullied on scho	ool property (ever	Juring the 12 month	as before the	, ,		
gives: Percenta survey)	ige of students who	were burned on scho	ooi property (ever t	iurnig tile 12 mont	is delote the			
28.4	30.5	29.0	26.8	25.8	17.8	Decreased, 2011-2021	No change, 2011-2017 Decreased, 2017-2021	Decreased

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

Not enough years of data to calculate.

Semale njury and Violend		Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change <sup>*</sup>	Change from
								2019-2021 <sup>†</sup>
2011	2013	2015	2017	2019	2021			
		were electronically l media, ever during			th texting,			
27.3	25.9	26.6	24.9	23.3	21.8	Decreased, 2011-2021	No quadratic change	No change
		felt sad or hopeless ever during the 12 38.8			row so that they 52.6	Increased, 2011-2021	No quadratic change	Increased
QN26: Percenta survey)	ge of students who	seriously considered	l attempting suicid	e (during the 12 mo	onths before the	····		
17.1	21.1	25.5	26.8	28.0	27.4	Increased, 2011-2021	Increased, 2011-2015 No change, 2015-2021	No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

## **Montana High School Survey** 10-year Trend Analysis Report

**Female** 

		Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021	<u> </u>		
QN27: Percenta		made a plan about l	now they would atte	empt suicide (durin	g the 12 months			
13.1	16.4	19.8	19.9	23.5	21.5	Increased, 2011-2021	Increased, 2011-2015 No change, 2015-2021	No change
QN28: Percenta the survey)	age of students who	actually attempted s	suicide (one or more	e times during the	12 months before			,
6.9	9.3	11.5	11.7	11.9	11.9	Increased, 2011-2021	Increased, 2011-2015 No change, 2015-2021	No change
		had a suicide attempe (during the 12 mo			, or overdose that			
2.4	2.5	4.0	3.9	4.4	3.9	Increased, 2011-2021	Increased, 2011-2015 No change, 2015-2021	No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

## Montana High School Survey 10-year Trend Analysis Report

Female Tobacco Use

	]	Health Risk Behav	ior and Percentage	es		Linear Change*	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021	<del></del>		
N30: Percenta	ge of students who	ever tried cigarette s	smoking (even one	or two puffs)	· ·			
40.6	38.6	38.7	34.1	30.4	27.0	Decreased, 2011-2021	No quadratic change	No change
N31: Percenta	ge of students who	first tried cigarette s	moking before age	13 years (even one	or two puffs)			
N31: Percenta	ge of students who	first tried cigarette s	smoking before age	13 years (even one 9.9	e or two puffs) 9.2	No linear change	Not available <sup>§</sup>	No change
		first tried cigarette s	10.5	9.9	9.2	No linear change	Not available <sup>§</sup>	No change
N32: Percenta			10.5	9.9	9.2	No linear change  Decreased, 2011-2021	Not available <sup>§</sup> No change, 2011-2015 Decreased, 2015-2021	No change
N32: Percenta urvey) 14.8	ge of students who 14.4 centage of students	currently smoked ci	10.5 garettes (on at least	9.9 1 day during the 3 7.6	9.2 0 days before the 6.5		No change, 2011-2015	

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

## **Montana High School Survey** 10-year Trend Analysis Report

Female

		Health Risk Behav	ior and Percentag	es		Linear Change <sup>*</sup>	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021	<u> </u>		
QNDAYCIG: Per perfore the survey)		its who currently sm	oked cigarettes dai	ly (on all 30 days d	uring the 30 days			
4.4	3.2	1.9	1.9	1.2	0.7	Decreased, 2011-2021	No quadratic change	No change
		smoked more than 1 ag students who curr			smoked during 2.7	No linear change	No quadratic change	No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

## **Montana High School Survey** 10-year Trend Analysis Report

Female

		Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021			
ape pens, e-cig		o currently used an elokah pens, and mods re the survey)						
		27.2	20.7	30.0	27.9	Increased, 2015-2021	Not available§	No change
								-
	ercentage of students 30 days before the	s who currently used survey)	electronic vapor pr	roducts frequently (	on 20 or more			
			electronic vapor pr	roducts frequently (	on 20 or more	Increased, 2015-2021	Not available	No chang
ays during the NDAYEVP:	30 days before the	survey)	2.1	11.0	12.2	, 	Not available	No chang
ays during the QNDAYEVP:	30 days before the  Percentage of stude	survey) 2.7	2.1	11.0	12.2	, 	Not available  Not available	No chang
NDAYEVP: 2000 days before 30 days before 200 TB5: Percei	30 days before the Percentage of stude ore the survey)	2.7  onts who currently use  1.5  ho currently smoked	2.1 ed electronic vapor	11.0 products daily (on 7.1	12.2 all 30 days during 7.7	,		

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

		Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021	_		
dissolvable tob	acco products [such	currently used smol as Copenhagen, Gri ring the 30 days bef	zzly, Skoal, or Cam					
			5.3	2.5	2.5	Decreased, 2017-2021	Not available <sup>§</sup>	No change
dip, snus, or dis	ssolvable tobacco pr	s who currently used oducts [such as Cop 0 or more days durin	enhagen, Grizzly, S	koal, or Camel Snu				
			0.8	0.4	0.6	No linear change	Not available	No change
			ed smokeless tobac					,
dip, snus, or dis		oducts [such as Cop ll 30 days during the	enhagen, Grizzly, S		s], not counting			

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

Female	
Tobacco	Use

2015 urrently smoked ci	2017 gars (cigars, cigari	2019	2021 on at least 1 day			
		_	on at least 1 day			
8.2	9.2					
		4.8	2.9	Decreased, 2011-2021	No change, 2011-2017 Decreased, 2017-2021	Decreased
			tobacco or			,
	27.8	31.2	28.4	No linear change	Not available§	No change
	1 day during the 3	1 day during the 30 days before the s 27.8	1 day during the 30 days before the survey)  27.8 31.2	<b>,</b> ,	1 day during the 30 days before the survey)  27.8 31.2 28.4 No linear change	1 day during the 30 days before the survey)  27.8 31.2 28.4 No linear change Not available§

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

## Montana High School Survey 10-year Trend Analysis Report

Tobacco Use **Health Risk Behavior and Percentages** Linear Change\* Quadratic Change\* Change from 2019-2021 † 2011 2013 2015 2017 2019 2021 QNTB3: Percentage of students who currently smoked cigarettes or cigars or used smokeless tobacco (on at least 1 day during the 30 days before the survey) 16.9 10.4 8.6 Decreased, 2017-2021 Not available§ No change

7.2

0.3

Decreased, 2011-2021

No linear change

Decreased, 2011-2017

Decreased, 2017-2021

No quadratic change

9.3

0.3

QNTB2: Percentage of students who currently smoked cigarettes or cigars (on at least 1 day during the 30 days

QNDAYCGR: Percentage of students who currently smoked cigars daily (cigars, cigarillos, or little cigars, on

14.7

0.4

16.7

0.3

Female

before the survey)
18.6

0.5

18.8

0.4

all 30 days during the 30 days before the survey)

No change

No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

## Montana High School Survey 10-year Trend Analysis Report

**Female Alcohol and Other Drug Use Health Risk Behavior and Percentages** Linear Change\* Quadratic Change\* Change from 2019-2021 † 2011 2013 2015 2017 2019 2021 QN40: Percentage of students who had their first drink of alcohol before age 13 years (other than a few sips) 16.9 16.6 17.1 17.3 15.3 16.3 No linear change No quadratic change No change QN41: Percentage of students who currently drank alcohol (at least one drink of alcohol, on at least 1 day during the 30 days before the survey) 36.9 36.9 35.0 34.8 35.5 34.9 No linear change No quadratic change No change QN42: Percentage of students who currently were binge drinking (had four or more drinks of alcohol in a row if they were female or five or more drinks of alcohol in a row if they were male, within a couple of hours, on at least 1 day during the 30 days before the survey) 17.2 18.3 17.6 No linear change Not available§ No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. Based on t-test analysis, p < 0.05.

<sup>\*</sup>Not enough years of data to calculate.

cohol and Other	_	Health Risk Behav	ior and Percentag	es		Linear Change <sup>*</sup>	Quadratic Change <sup>*</sup>	Change from 2019-2021
2011	2013	2015	2017	2019	2021	<del>_</del>		
		reported that the lar		nks they had in a ro	w was 10 or more			
				3.5	2.5	No linear change	Not available§	No change
		usually got the alcol		omeone giving it to	them (during the			
				omeone giving it to	them (during the 41.0	No linear change	No quadratic change	No change
30 days before to	the survey, among st	tudents who currentl	y drank alcohol) 43.8	44.8	_	No linear change	No quadratic change	No change
30 days before to	the survey, among st	tudents who currentl 37.8	y drank alcohol) 43.8	44.8	_	No linear change	No quadratic change  No quadratic change	No change
30 days before to 39.3  QN45: Percenta 36.0	he survey, among st 42.9 age of students who 36.9	37.8 ever used marijuana	y drank alcohol) 43.8  (one or more time 39.2	44.8 s during their life) 41.5	41.0			

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

		Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021
2011	2013	2015	2017	2019	2021			
QN47: Percenta survey)	age of students who	currently used mari	juana (one or more	times during the 30	) days before the			
19.4	19.9	19.5	20.5	21.8	21.1	No linear change	No quadratic change	No change
QN48: Percenta	age of students who	ever used synthetic	marijuana (one or r	nore times during t	heir life)			
		8.9	7.3	6.4	7.2	Decreased, 2015-2021	Not available <sup>§</sup>	No change
lifferently than	how a doctor told th	ever took prescription to use it (counting the more times during the	ng drugs such as co					,

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

## Montana High School Survey 10-year Trend Analysis Report

**Female Alcohol and Other Drug Use Health Risk Behavior and Percentages** Linear Change\* Quadratic Change\* Change from 2019-2021 † 2011 2013 2015 2017 2019 2021 QN50: Percentage of students who ever used cocaine (any form of cocaine, including powder, crack, or freebase, one or more times during their life) 4.6 4.9 3.8 4.2 4.5 3.4 Decreased, 2011-2021 No quadratic change No change QN51: Percentage of students who ever used inhalants (sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high, one or more times during their life) 12.1 7.9 6.5 8.3 9.0 10.4 Decreased, 2011-2017 No change Decreased, 2011-2021 Increased, 2017-2021 QN52: Percentage of students who ever used heroin (also called "smack," "junk," or "China White," one or more times during their life) 1.8 1.1 1.2 0.9 0.9 1.7 Decreased, 2011-2021 No quadratic change No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

## Montana High School Survey 10-year Trend Analysis Report

**Female Alcohol and Other Drug Use Health Risk Behavior and Percentages** Linear Change\* Quadratic Change\* Change from 2019-2021 † 2011 2013 2015 2017 2019 2021 QN53: Percentage of students who ever used methamphetamines (also called "speed," "crystal meth," "crank," "ice," or "meth," one or more times during their life) 2.4 2.7 2.2 1.9 2.1 1.6 Decreased, 2011-2021 No quadratic change No change QN54: Percentage of students who ever used ecstasy (also called "MDMA" or "Molly," one or more times during their life) 6.2 6.6 4.6 3.9 3.7 4.0 Decreased, 2011-2021 No quadratic change No change QN55: Percentage of students who ever injected any illegal drug (used a needle to inject any illegal drug into their body, one or more times during their life) 1.5 1.7 1.3 1.5 0.4 1.0 No quadratic change Decreased, 2011-2021 Increased QN56: Percentage of students who were offered, sold, or given an illegal drug on school property (during the 12 months before the survey) 21.3 20.6 19.8 19.9 21.5 21.2 No linear change No quadratic change No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. Based on t-test analysis, p < 0.05.

## Montana High School Survey 10-year Trend Analysis Report

Female Sexual Behaviors

	1	Health Risk Behav	ior and Percentag	es		Linear Change <sup>*</sup>	Quadratic Change*	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021	<del></del>		
QN57: Percentag	ge of students who	ever had sexual inte	rcourse	•	•			
46.6	46.0	44.5	44.8	44.6	42.8	Decreased, 2011-2021	No quadratic change	No change
QN58: Percentag	ge of students who	had sexual intercou	rse for the first time	e before age 13 year	rs			
2.4	2.8	2.5	2.3	2.8	1.9	No linear change	No quadratic change	No change
QN59: Percentag	ge of students who	had sexual intercou	rse with four or mo	re persons during the	neir life			
14.5	13.9	12.3	12.8	11.6	10.4	Decreased, 2011-2021	No quadratic change	No change
	ge of students who e 3 months before t	were currently sexu	ally active (had sex	ual intercourse wit	h at least one			
36.8	35.4	34.9	34.2	34.0	31.8	Decreased, 2011-2021	No quadratic change	No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

## Montana High School Survey 10-year Trend Analysis Report

**Female Sexual Behaviors Linear Change**\* **Health Risk Behavior and Percentages** Quadratic Change\* Change from 2019-2021 † 2011 2013 2015 2017 2019 2021 QN61: Percentage of students who drank alcohol or used drugs before last sexual intercourse (among students who were currently sexually active) 18.2 20.0 17.3 15.4 18.6 17.9 No linear change No quadratic change No change QN62: Percentage of students who used a condom during last sexual intercourse (among students who were currently sexually active) 58.6 57.2 55.4 50.7 51.9 46.6 Decreased, 2011-2021 No quadratic change No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

	]	Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change <sup>*</sup>	Change from 2019-2021
2011	2013	2015	2017	2019	2021			
QN66: Percenta	ge of students who	described themselve	es as slightly or ver	y overweight	•			
31.5	34.3	35.6	36.2	37.1	31.6	No linear change	Increased, 2011-2017 Decreased, 2017-2021	Decreased
		ho were overweight			ile for body mass			
					ile for body mass	Increased, 2011-2021	No quadratic change	No change
ndex, based on s	sex- and age-specifi 11.2 centage of students	c reference data fro	m the 2000 CDC gr 14.2 = 95th percentile for	owth charts) <sup>§</sup> 13.8	14.4	Increased, 2011-2021	No quadratic change	No change
11.6  QNOBESE: Per	sex- and age-specifi 11.2 centage of students	c reference data fro  14.9  who had obesity (>	m the 2000 CDC gr 14.2 = 95th percentile for	owth charts) <sup>§</sup> 13.8	14.4	Increased, 2011-2021 Increased, 2011-2021	No quadratic change  Increased, 2011-2017 No change, 2017-2021	No change
11.6  QNOBESE: Per and age-specific 5.4	sex- and age-specification 11.2  The contage of students reference data from 5.6	who had obesity (> a the 2000 CDC gro	m the 2000 CDC gr 14.2  = 95th percentile for wth charts)§  8.7	owth charts)§  13.8  or body mass index,	14.4 , based on sex-		Increased, 2011-2017	

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

<sup>§</sup>Overweight and obese prevalence estimates for 1999 differ slightly from previously published results because different BMI cut points were used in 1999 than in subsequent years. To make these prevalence estimates comparable, the 1999 prevalence estimates were recalculated using the updated BMI cut points. In addition, beginning in 2017, new, slightly different ranges were used to calculate biologically implausible responses to height and weight questions.

		Health Risk Behav	ior and Percentag	res		Linear Change*	Quadratic Change*	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021			
QN68: Percenta days before the	nge of students who survey)	did not drink fruit j	uice (100% fruit jui	ices one or more tin	nes during the 7			
18.3	24.4	25.5	30.1	34.9	37.5	Increased, 2011-2021	No quadratic change	No change
QN69: Percenta	age of students who	did not eat fruit (on	e or more times du	ring the 7 days before	ore the survey)			
8.0	7.1	8.1	8.1	9.0	9.2	No linear change	No quadratic change	No change
	ntage of students whaice, during the 7 da			uices (such as oran	ge juice, apple			
2.9	3.5	3.6	4.6	3.8	4.9	Increased, 2011-2021	No quadratic change	No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

Female Weight Manageme	ent and Dietary Be	haviors						
	]	Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021			
		o ate fruit or drank nice, during the 7 da			er day (such as			
62.1	61.2	58.1	57.0	54.1	51.4	Decreased, 2011-2021	No quadratic change	No change
-	•	o ate fruit or drank nice, during the 7 da			er day (such as			
25.9	28.0	26.1	25.2	23.5	22.6	Decreased, 2011-2021	No quadratic change	No change
QN70: Percenta survey)	ge of students who	did not eat green sa	lad (one or more tir	mes during the 7 da	ys before the			
25.2	24.1	28.9	28.6	29.2	32.3	Increased, 2011-2021	No quadratic change	No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

eight Manageme	nt and Dietary Be	haviors Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021			
QN71: Percenta	ge of students who	did not eat potatoes	(one or more times	s during the 7 days	before the survey)	)		
26.9	30.0	28.9	31.6	33.8	36.1	Increased, 2011-2021	No quadratic change	No change
QN72: Percenta	ge of students who	did not eat carrots (	one or more times	during the 7 days be	efore the survey)			
43.2	42.3	43.4	44.5	43.1	44.4	No linear change	No quadratic change	No change
QN73: Percenta survey)	ge of students who	did not eat other veg	getables (one or mo	ore times during the	7 days before the			
	11.4	12.5	14.0	14.5	14.2	Increased, 2011-2021	No quadratic change	No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

		Health Risk Behav	ior and Percentag	es		Linear Change <sup>*</sup>	Quadratic Change*	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021			
		who did not eat vege ots, or other vegetab						
2.3	2.9	3.9	3.9	4.3	4.2	Increased, 2011-2021	No quadratic change	No change
		who ate vegetables o es, or potato chips],				2		
66.9	67.6	65.5	62.5	62.5	60.5	Decreased, 2011-2021	No quadratic change	No change
				er day (green salad	potatoes			
		who ate vegetables to es, or potato chips],				2		

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

	]	Health Risk Behavi	or and Percentage	es		Linear Change*	Quadratic Change*	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021	<u> </u>		
		who ate vegetables thes, or potato chips], or						
9.8	12.5	11.9	10.8	11.4	11.4	No linear change	No quadratic change	No change
		did not drink a can, lt pop, one or more ti						
23.9	33.1	31.1	29.9	35.2	36.5	Increased, 2011-2021	No quadratic change	No change
23.9 QNSODA1: Pe	rcentage of students	31.1 who drank a can, be counting diet soda or	ottle, or glass of soc	la or pop one or mo	ore times per day	Increased, 2011-2021	No quadratic change	No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

		Health Risk Behav	ior and Percentag	es		Linear Change* Quadratic Change	Quadratic Change*	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021			
	ercentage of students Pepsi, or Sprite, not							
9.5			6.2	3.8	3.9	Danis 2011 2021	No and destination	N. 1
7.3	7.1	6.7	0.2	3.6	3.9	Decreased, 2011-2021	No quadratic change	No chang
	age of students who				3.9	Decreased, 2011-2021	No quadrane enange	No chang
	,				36.5	Increased, 2011-2021	Not available <sup>§</sup>	No chang
QN75: Percenta QNMILK1: Per Irank in a glass	age of students who	did not drink milk (or 20.0)  who drank one or mon, or with cereal and	during the 7 days b 25.1 nore glasses per day	efore the survey) 30.9  v of milk (counting)	36.5	Increased, 2013-2021		

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

emale Veight Manageme	ent and Dietary Be							
		Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change*	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021	_		
drank in a glass		who drank three or on, or with cereal and re the survey)						
	10.5	8.5	7.3	5.3	4.8	Decreased, 2013-2021	Not available <sup>§</sup>	No change
QN76: Percenta	ge of students who	did not eat breakfas	t (during the 7 days	s before the survey)				:
11.3	11.6	11.5	11.3	14.2	17.7	Increased, 2011-2021	No change, 2011-2017 Increased, 2017-2021	Increased
QNBK7DAY: F	Percentage of studer	nts who ate breakfas	t on all 7 days (dur	ing the 7 days befo	re the survey)			
36.4	38.6	36.0	32.7	28.8	26.3	Decreased, 2011-2021	No change, 2011-2015 Decreased, 2015-2021	No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

	]	Health Risk Behavi	or and Percentage	es		Linear Change*	Quadratic Change*	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021	_		
	activity that increas	were physically acti sed their heart rate ar						
47.5	47.7	47.6	44.5	43.9	45.9	No linear change	No quadratic change	No chang
	Damantaga of studen	ts who did not partic	cipate in at least 60					,
east 1 day (in a		activity that increase	ed their heart rate ar	id made them breat	ne nard some of			
east 1 day (in a	ny kind of physical	activity that increase	ed their heart rate ar	13.9	12.8	No linear change	No quadratic change	No chan
east 1 day (in an the time during the time dur	ny kind of physical at the 7 days before the 12.3  Percentage of studen sical activity that inc	activity that increase e survey)	13.2	13.9 0 minutes per day o	12.8 on all 7 days (in	No linear change	No quadratic change	No chang

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. †Based on t-test analysis, p < 0.05.

## **Montana High School Survey** 10-year Trend Analysis Report

**Female** 

	1	Health Risk Behav	Risk Behavior and Percentages Linear Change* Quadratic Change* Ch					
2011	2013	2015	2017	2019	2021			
	ge of students who were in school)	attended physical ed	lucation (PE) classo	es on 1 or more day	rs (in an average			
51.0	49.1	49.9	50.4	51.0	46.8	No linear change	No quadratic change	No change
	rcentage of students were in school) 30.8	who attended physical 28.3	30.5	classes on all 5 day 27.9	vs (in an average 20.2	Decreased, 2011-2021	No change, 2011-2017 Decreased, 2017-2021	Decreased
	ge of students who coups, during the 12			nting any teams rur	by their school			
61.6	61.4	60.4	58.8	59.4	58.6	No linear change	No quadratic change	No change
	ge of students who		om playing a sport	or being physically	active (one or			
nore times durin								

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

## **Montana High School Survey** 10-year Trend Analysis Report

Famala

ther		Health Risk Behav	ior and Percentag	es		Linear Change*	Quadratic Change <sup>*</sup>	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021	_		
	age of students who	saw a dentist (for a	check-up, exam, te	eth cleaning, or oth	er dental work,			
		77.0	79.8	77.7	78.4	No linear change	Not available§	No change
QNNODNT: Podental work)	ercentage of studen	ts who never saw a d	entist (for a check-	up, exam, teeth clea	aning, or other			,
		1.0	0.9	0.7	0.6	No linear change	Not available	No change
QN86: Percenta	age of students who	got 8 or more hours	of sleep (on an ave	erage school night)				
		29.3	30.7	29.1	28.4	No linear change	Not available	No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

## **Montana High School Survey** 10-year Trend Analysis Report

Female

		Health Risk Behav	ior and Percentag	es		Linear Change <sup>*</sup>	Quadratic Change*	Change from 2019-2021 †
2011	2013	2015	2017	2019	2021			
QN87: Percent days before the		usually did not slee	p in their parent's o	r guardian's home (	luring the 30			
			3.1	2.8	2.3	No linear change	Not available <sup>§</sup>	No change
QN88: Percent car)	age of students who	did not always wear	r a seat belt when d	riving (among stude	ents who drive a			
	30.6	36.4	25.1	23.9	22.5	Decreased, 2013-2021	Not available	No change
	50.0							
using their cell	age of students who	used the Internet or s instructions or to de ents who drove a car	etermine their locati	hone while driving on, on at least 1 da	(not counting y during the 30	, ,		

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

### Montana High School Survey 10-year Trend Analysis Report

**Female** Site-Added **Health Risk Behavior and Percentages** Linear Change\* Quadratic Change\* Change from 2019-2021 † 2011 2013 2015 2017 2019 2021 QN90: Percentage of students who have been the victim of teasing or name calling because someone thought they were gay, lesbian, or bisexual (during the 12 months before the survey) 10.7 13.1 15.1 Increased, 2017-2021 Not available§ No change QN91: Percentage of students who currently used an electronic vapor product on school property (during the 30 days before the survey) 16.7 14.0 No linear change Not available No change QN96: Percentage of students who have ever been told by a doctor or a nurse that they have asthma 20.3 20.9 Increased, 2011-2015 No change 20.5 23.2 22.0 21.3 No linear change Decreased, 2015-2021 QN101: Percentage of students who described their grades in school as mostly A's or B's (during the 12

82.1

79.1

No linear change

Not available

80.8

82.8

months before the survey)

No change

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05.

 $<sup>^{\</sup>dagger}$ Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.

	]	Health Risk Behavior and Percentages				Linear Change <sup>*</sup>	Quadratic Change*	Change from 2019-202
2011	2013	2015	2017	2019	2021			
	ntage of students who							
	ntage of students who ting getting a spray-					Decreased, 2013-2021	Not available <sup>§</sup>	No chang
	ting getting a spray-	on tan], one or more	e times during the 1	2 months before the	e survey)	Decreased, 2013-2021	Not available <sup>§</sup>	No chang
ooth [not coun	ting getting a spray-	on tan], one or more  17.1  o received help from	10.4  a resource teacher	2 months before the 8.7	6.9	Decreased, 2013-2021	Not available <sup>§</sup>	No chang

<sup>\*</sup>Based on trend analyses using a logistic regression model controlling for sex, race/ethnicity, and grade, p < 0.05. \*Based on t-test analysis, p < 0.05.

<sup>§</sup>Not enough years of data to calculate.