



# 2018 Bias Analysis

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**Sponsoring Washington State Agencies:**  
**Health Care Authority - Division of Behavioral Health and Recovery**  
**Department of Health**  
**Office of Superintendent of Public Instruction**  
**Liquor and Cannabis Board**

Prepared by:  
**Looking Glass Analytics, Inc.**

**March 2020**

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# Washington State Healthy Youth Survey 2018

## **Analytic Report**

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**March 2020**

In collaboration with members of the Healthy Youth Survey Planning Committee

This report is available online at:

<http://www.AskHYS.net>

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## Background

The Healthy Youth Survey (HYS) is Washington State’s biennial survey of public school students in grades 6, 8, 10 and 12. Since 2002, HYS has been administered in the fall of even numbered years since 2002. Schools are randomly selected into a state sample, but all schools with grades 6, 8, 10 or 12 can volunteer to participate, except for those operated in correctional facilities. In this report, the total of all state sample and volunteer schools is called the census.

A simple random sample is generally considered the best method for generating accurate estimates for a larger population, in this case, students attending public schools in Washington State. However, a random sample does not guarantee a representative sample and because not all schools and students invited to participate in the state sample take the survey, we need to check if the participants do, in fact, represent the larger group.

This bias analysis aims to evaluate representativeness by comparing: 1) characteristics of the 2018 HYS state sample and census participants to the 2018 state public school population, 2) differences among participating schools which choose to ask additional optional questions and those that do not, and 3) characteristics and survey results for the participants of the state sample to the census to evaluate alignment of the two.

## Methods

To assess possible bias in the state sample or census results related to differences in which schools participate, we compared enrollment characteristics of:

- Participating and non-participating schools (school-level bias in overall representation).
- Schools that did and did not administer the extra questions (school-level bias in results of the extra questions).

To assess possible bias in individual student responses and results, we compared HYS demographic and behavioral item responses for:

- Students who finished the survey and those who did not (student-level completion bias).
- Students who answered the extra questions and those that completed the survey but were not asked the extra questions (student-level bias in results of the extra questions).

Statistical analyses were done using t-tests, Fisher’s exact test, Chi-square tests, and logistic regression. State sample analysis includes clustering at the school building level, but census results do not include clustering. Each section of this report includes its own detailed method section. Any finding described as being different, higher, lower, more likely or less likely are significant and have a p-value less than 0.05.

## Conclusions

These findings are limited, generalizable only to Washington State as a whole. They do not apply to smaller geographic areas such as counties or school districts. The smaller sample sizes for smaller geographic areas may be subject to different bias due to nonparticipating schools and students.

### *School Participation*

Participation in the 2018 HYS state sample was high among schools (from 85% to 91% across grade levels), but we identified a couple of differences between state sampled schools and non-participating schools:

- Schools in the state sample underrepresent students attending small public schools with lower grade-level enrollment and lower on-time graduation rates.

**Student Completion**

Rates of student completion of all survey items were 47% to 69% for the state sample, with 8<sup>th</sup> grade having the lowest completion rates. Results for questions near the end of the survey may not adequately represent students with:

- Lower grades in school and feeling unsafe at school.
- Variables indicating low economic status: mother didn’t graduate high school, living situations due to finance, food insecurity, no dental visits in past year, and receive free/reduced price lunch.
- Current cigarette smoking, current e-cig/vape use, and marijuana use.
- Non-English spoken at home.
- Being American Indian/Alaska Native and Black/African American.

Completion rates for the census were similar to the state sample, 49% to 71%. Census results may not adequately represent the same students as the state sample, with the addition of current alcohol drinking and binge drinking, and being Hispanic and Pacific Islander.

Caution should be exercised when interpreting the results from questions at the end of the survey for these groups of students. See a list of the last 30 questions on each survey form in Appendix B.

**Table 1: Summary of Differences between Non-Completers and Completers in the State Sample and Census, 2018**

Student Responses	State Sample				Census			
	Grade 6	Grade 8	Grade 10	Grade 12	Grade 6	Grade 8	Grade 10	Grade 12
Low grades	NC	NC	NC	NC	NC	NC	NC	NC
Feeling unsafe at school		NC	NC		NC	NC	NC	NC
Mother didn't graduate high school	-	NC				NC	NC	NC
Living situation due to finances				NC	-	NC	NC	NC
Food insecurity	-	NC		NC	-	NC	NC	NC
No dental visit in last year	-	NC	NC	NC	-	NC	NC	NC
Receive free/reduced price lunch				NC	-	NC	NC	NC
Current cigarette smoking		NC		NC	NC	NC	NC	NC
Current e-cig/vape use	NC				NC			
Current marijuana use		NC			NC	NC	NC	NC
Binge drinking					NC	NC	NC	NC
Current alcohol drinking					NC	NC	NC	
Non-English spoken at home		NC	NC	NC	NC	NC	NC	NC
White	C	C	C	C	C	C	C	C
Hispanic					NC	NC	NC	NC
American Indian/Alaska Native	NC			NC	NC	NC	NC	NC
Asian					C	C	C	C
Black/African American	NC	NC	NC		NC	NC	NC	NC
Pacific Islander						NC		NC

Significant differences are based on 95% confidence intervals; highlighted squares are statistically significant at the p <0.05 level

## Extra Questions

Questions about sexual orientation, gender identity, sexual behavior and abuse were optional in 2018. In the state sample, 74% to 87% of schools administered the extra questions, which was higher than the 2016 administration (around 65%) and much higher than 2012 and 2014 (around 40%). Schools in the state sample that administered the extra questions had similar characteristics to state sample schools that did not ask them.

The extra questions are located at the end of the 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade survey forms and are subject to non-completion bias. We also identified additional differences in student characteristics among those who answered extra questions and those who completed the survey but were not asked the extra questions.

Results for the extra questions may not adequately represent students with:

- Lower grades in school and feeling unsafe at school.
- Experiencing food insecurity.

Extra questions administration rates for the census were similar to the state sample, 78% to 83%. Compared to the state sample, census results showed more response differences between extra question answerers and not, including:

- Variables indicating low economic status: mother didn't graduate high school, living situations due to finance, and receive free/reduced price lunch.
- Current cigarette smoking, alcohol use, and binge drinking.
- Being White, American Indian/Alaska Native, and Black/African American.

**Table 2: Summary of Differences Between Extra Question Answerers and Non-extra Completers in the State Sample and Census, 2018**

Student Response	State Sample			Census		
	Grade 8	Grade 10	Grade 12	Grade 8	Grade 10	Grade 12
Low grades	Non			Non	Non	Non
Feeling unsafe at school	Non				Non	Non
Mother didn't graduate high school				Non		
Living situation due to finances				Non		
Food insecurity	Non	Non				
No dental visit in last year						
Receive free/reduced price lunch				Non	Non	
Current cigarette smoking						Non
Current e-cig/vape use						
Current marijuana use						
Binge drinking						Non
Current alcohol drinking				Non		Non
Non-English spoken at home				Extra	Extra	Extra
White				Non	Non	Non
Hispanic				Non	Non	
American Indian/Alaska Native				Non		Non
Asian				Extra	Extra	Extra
Black/African American				Extra	Extra	
Pacific Islander						

Significant differences are based on 95% confidence intervals; highlighted squares are statistically significant at the  $p < 0.05$  level. Results do not include students from schools that did not ask the extra questions and did not complete the survey, students from schools that were asked the extra questions but did not answer any of them.

### Race and Ethnicity

The way HYS reports race/ethnicity is different from how schools report race/ethnicity. In the state sample, HYS reports higher proportions of American Indian/Alaska Native, Asian, and Native Hawaiian or other Pacific Islander students compared to schools.

There were minimal differences in how students reported race/ethnicity in the state sample schools compared to the census. Only a few differences in race/ethnic groups were identified by comparing state sample and census student characteristics. Similar to the 2016 bias analysis, the census race/ethnicity results appear to be as representative of the state overall and of race/ethnicity groups as the state sample schools, and either could be used for statewide analysis. Caution should be exercised when looking at Asian students, as they had the greatest number of differences.

**Table 3: Summary of Differences by Racial/Ethnic Groups when Comparing State Sample Results to Census Results, 2018**

S State Sample w/higher rate    
 C Census w/higher rate    
   No difference    
 - Not measured

Student Response	Grade 6										Grade 8										Grade 10										Grade 12										Total											
	All	White	Hispanic	Ai/AN	Asian	Black	Island	Other	Multi		All	White	Hispanic	Ai/AN	Asian	Black	Island	Other	Multi		All	White	Hispanic	Ai/AN	Asian	Black	Island	Other	Multi		All	White	Hispanic	Ai/AN	Asian	Black	Island	Other	Multi													
Mother didn't graduate high school	-	-	-	-	-	-	-	-	-																																										3	
Living situation due to finances	-	-	-	-	-	-	-	-	-																																										1	
Food insecurity	-	-	-	-	-	-	-	-	-																																										1	
No dental visit in last year	-	-	-	-	-	-	-	-	-																																										0	
Receive free/reduced price lunch	-	-	-	-	-	-	-	-	-																																										0	
Low grades																																																			0	
Feeling unsafe at school																																																			1	
Bullied at school																																																			1	
Carried weapon at school																																																			3	
Current cigarette smoking																																																			2	
Current e-cig/vape use																																																			2	
Current marijuana use																																																			2	
Current alcohol drinking																																																			1	
Binge drinking																																																			2	
Ever had sex	-	-	-	-	-	-	-	-	-																																										0	
Sex before 13	-	-	-	-	-	-	-	-	-																																										1	
Four or more sexual partners	-	-	-	-	-	-	-	-	-																																										0	
Non-English spoken at home																																																			2	
Gay, lesbian, bisexual, not sure	-	-	-	-	-	-	-	-	-																																										0	
Gender identity other than male or fe	-	-	-	-	-	-	-	-	-																																										0	
Total Differences	0	0	0	0	2	0	0	0	0		0	1	0	0	2	1	0	1	0		0	0	1	1	2	2	1	0	1	1		0	1	0	0	4	0	1	0	0		0	0	0	0	4	0	1	0	0		22

Significant differences are based on 95% confidence intervals; highlighted squares are statistically significant at the  $p < 0.05$  level.

# 1. Introduction

---

This bias analysis was conducted to determine if the 2018 Healthy Youth Survey results can be generalized to Washington State Public School students.

The 2018 administration of the Healthy Youth Survey (2018 HYS) represents a collaborative effort among the Health Care Authority - Division of Behavioral Health and Recovery; the Department of Health; the Office of Superintendent of Public Instruction; the Liquor and Cannabis Board, and the contractor, Looking Glass Analytics, Inc. Representatives of these agencies served as members of the Healthy Youth Survey Planning Committee, which guided every aspect of the survey development and implementation.

Since 2002, it has been administered in the fall of even numbered years. All Washington State public schools with grades 6, 8, 10 or 12 that were not based in a correctional institution and were able to administer the survey in a classroom setting were eligible to participate in the HYS (e.g., schools where students don't attend classes like online schools or home school support programs were not included). A simple random sample of schools is selected into a state sample. Schools that were not selected for the state sample are termed "not drawn for the state sample." Schools that participate but were not selected into the state sample are termed "volunteer" schools. The combination of the state sampled schools and the volunteer non-sampled schools that participated are termed the "census".

The Washington State Department of Health mailed a letter in March 2018 inviting all eligible schools to participate in the 2018 HYS. Schools registered for the survey online. Sponsoring agencies called state sample schools that did not register to solicit participation. Schools not drawn for the state sample were not called.

For the state sample, the Washington State Department of Health drew three random samples: schools with grade 6, schools with grade 8, and schools with grades 10, 12 or both. Within selected schools, all of the students in the target grades were invited to participate. This method assured that each eligible student in Washington State had an equal chance of being asked to participate in the state sample. These selection methods maximize the likelihood that students taking the survey as part of the state sample represent students in the specified grades as a whole. However, because a random sample cannot guarantee a representative sample and because not all schools and students invited to participate in the state sample took the survey, we need to check if the participants do in fact represent the larger group.

The 2018 HYS included three survey forms. Schools with students in grade 6 received Form C; schools with students in grades 8, 10 and 12 received both Form A and Form B. Forms A were interleaved or collated with Forms B, such that half of students would receive a Form A survey and half would receive a Form B survey. Schools that did not want to ask the extra questions on survey forms A and B, could remove them by tearing off the survey page with those questions. The extra questions asked about sexual orientation, behavior and abuse.

Schools, parents and students could each choose not to participate in the survey. School participation in the survey is voluntary. Schools not wanting to ask students about gender identity, sexual orientation, sexual behavior or sexual abuse removed those questions from their Form A and Form B surveys. Parents could opt their students out of the survey by notifying the school. Students could also opt out of the survey before it was administered, and they could skip any question they did not want to answer. Apart from those extra exclusions, some students did not finish the survey in the allotted time.



The factors outlined—non-participation, schools opting out of extra questions, and students not finishing the survey—can introduce bias into the survey such that the findings would not represent public school students in grades 6, 8, 10 and 12 in Washington. Bias occurs if findings are affected by differences between students who answered survey questions and those who did not. This bias analysis aims to assess bias by describing differences between participating and non-participating schools and students that might affect overall findings and testing whether any such differences would impact results.

## Sources of Bias

Potential sources of bias addressed in this report include:

- **School participation bias:** School participation bias could occur if findings were affected by differences between students in schools that participated and students in schools that chose not to participate in the HYS.
- **Survey completion bias:** Some students did not complete the survey in the allotted amount of time. Bias could occur for questions toward the end of the survey if students who did not complete the survey would have given different answers than students who completed the survey.
- **Extra question administration bias:** Some schools opted to remove the extra survey questions about sexual orientation, behaviors and abuse. Bias for the extra questions could occur if findings were affected by differences between students who answered the extra questions and those who did not. The two most likely sources of differences are:
  - Differences among students in schools that administered the extra questions, and students in schools that removed them.
  - Differences among students who finished the survey and students who did not, since the extra questions are at the end of the survey.

In addition to bias, we'd like to know about the differences between the results students in the state sample and results from students in census schools to determine if the census results can be used instead of the state sample results. Using the census provides more power to look at measures with low prevalence (i.e., heroin use) and small subpopulations (i.e., Pacific Islanders).

## 2. Methods

In order to assess bias, we must look at it indirectly. We cannot simply look to see if participating and non-participating schools and students gave different survey responses, because we do not have responses from non-participants.

First, we assessed school characteristics by comparing schools that participated in all or parts of the survey and schools that did not. For this comparison, we assessed school-level information provided by the Office of Superintendent of Public Instruction (OSPI). To assess possible bias at the **school level**, we compared the characteristics of:

- Participating and non-participating schools.
- Schools that did and did not administer the extra questions. Schools that did not participate in HYS were categorized as not administering extra questions.

Second, we assessed possible bias at the **individual student level** by comparing the characteristics of students who finished the survey and those who did not. For 8<sup>th</sup> grade students and older, HYS has extra questions at the end of the surveys that schools can choose to ask or not. We also assessed possible bias among students who answered the extra questions and those who did not take them.

Then finally, we looked at race/ethnic groups to determine if:

- Percentages of race/ethnic groups reported by students in HYS were similar to those reported by all schools.
- Students in the state sample and the census had similar characteristics.

Table 1 summarizes the analysis conducted to assess potential bias at the school and individual student level.

**Table 4: Sources of potential bias and the level of analysis at which they were assessed in 2018**

Source of potential bias	Description	Base population*	Level of Analysis	
			School	Student
School participation	Participating schools compared to non-participating schools	State sample	X	
		Census	X	
School-level extra question administration	Schools administering extra questions compared to schools not administering extra questions	State sample	X	
		Census	X	
Student-level survey completion	Students who finish the survey compared to students who did not finish the survey	State sample		X
		Census		X
Student-level extra behavior question completion	Students who answered the extra questions compared to students who did not take them.	State sample		X
		Census		X
Student-level race/ethnicity	Student characteristics in specific race/ethnic groups in the census compared to the state sample.	State sample		X
		Census		X

\* Base population for the comparison:

“State sample” means schools that were randomly selected for the representative state sample.

“Census” means all schools that participated in the 2016 HYS (state sample schools plus non-sampled schools).

All analyses were conducted using STATA statistical software package, version 16.0.

### 3. HYS School Eligibility and Participation

#### HYS Eligibility and Sampling

Figure 1: School Eligibility for HYS 2018

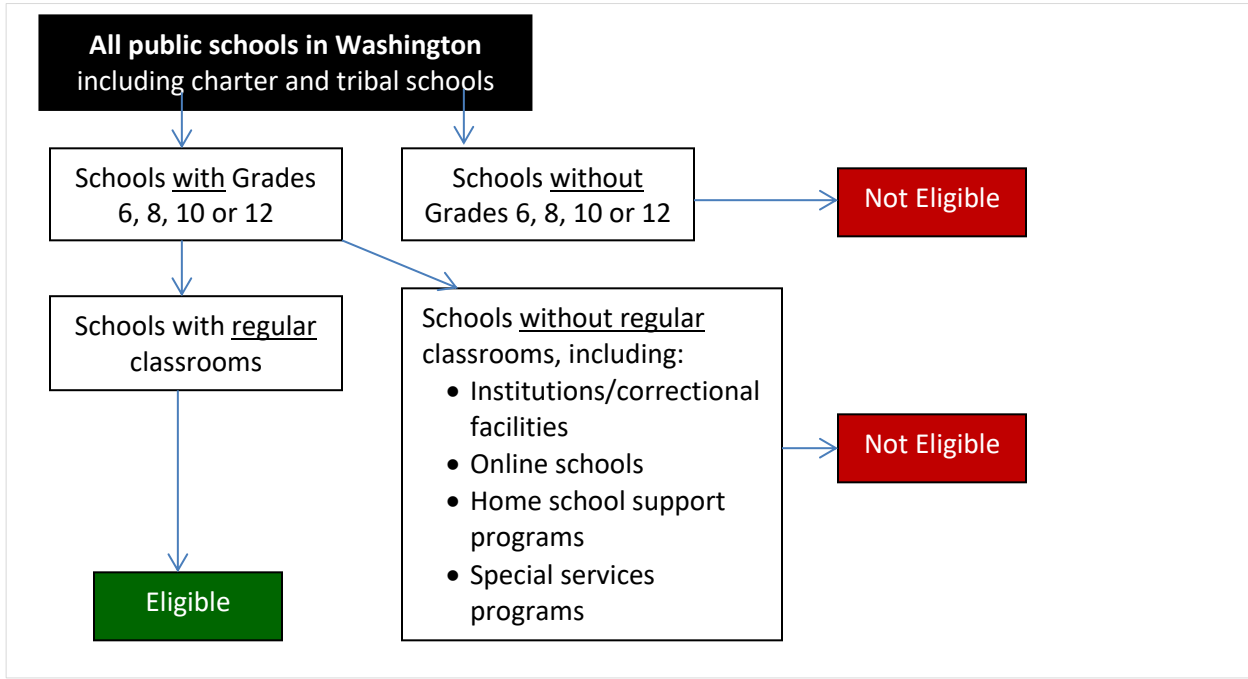
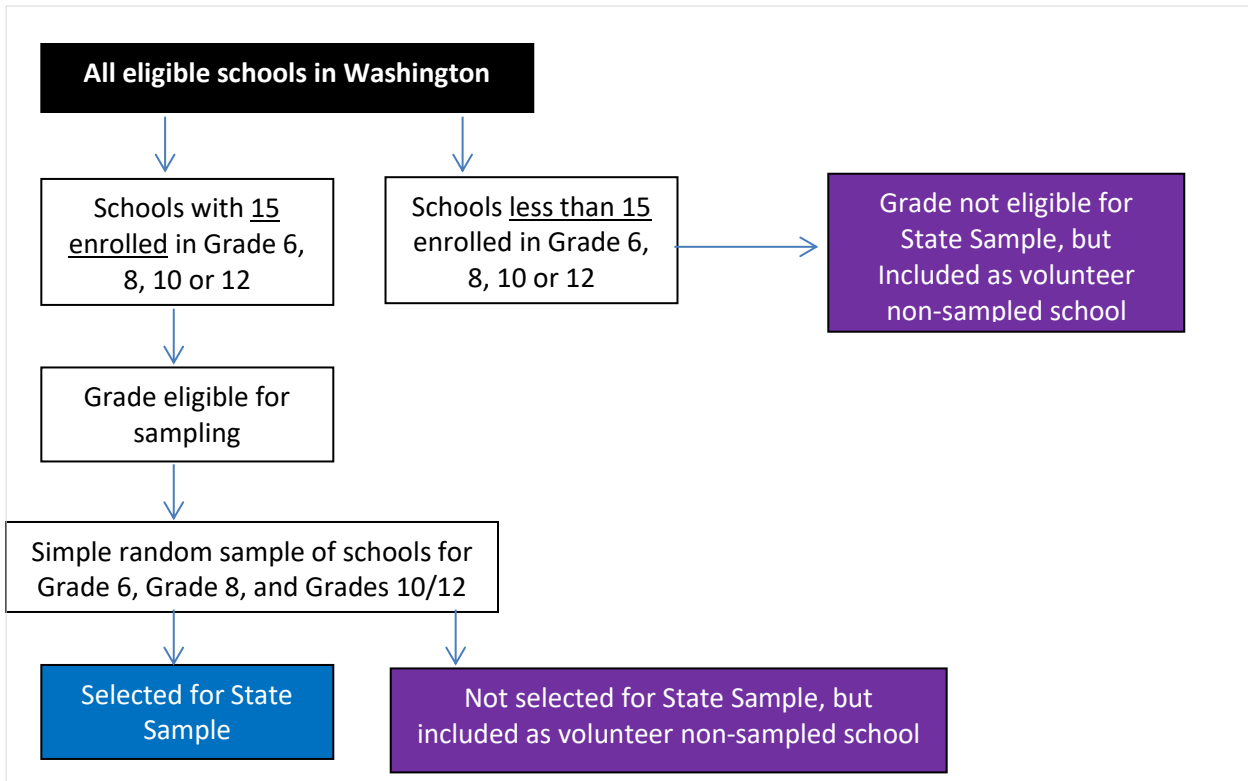
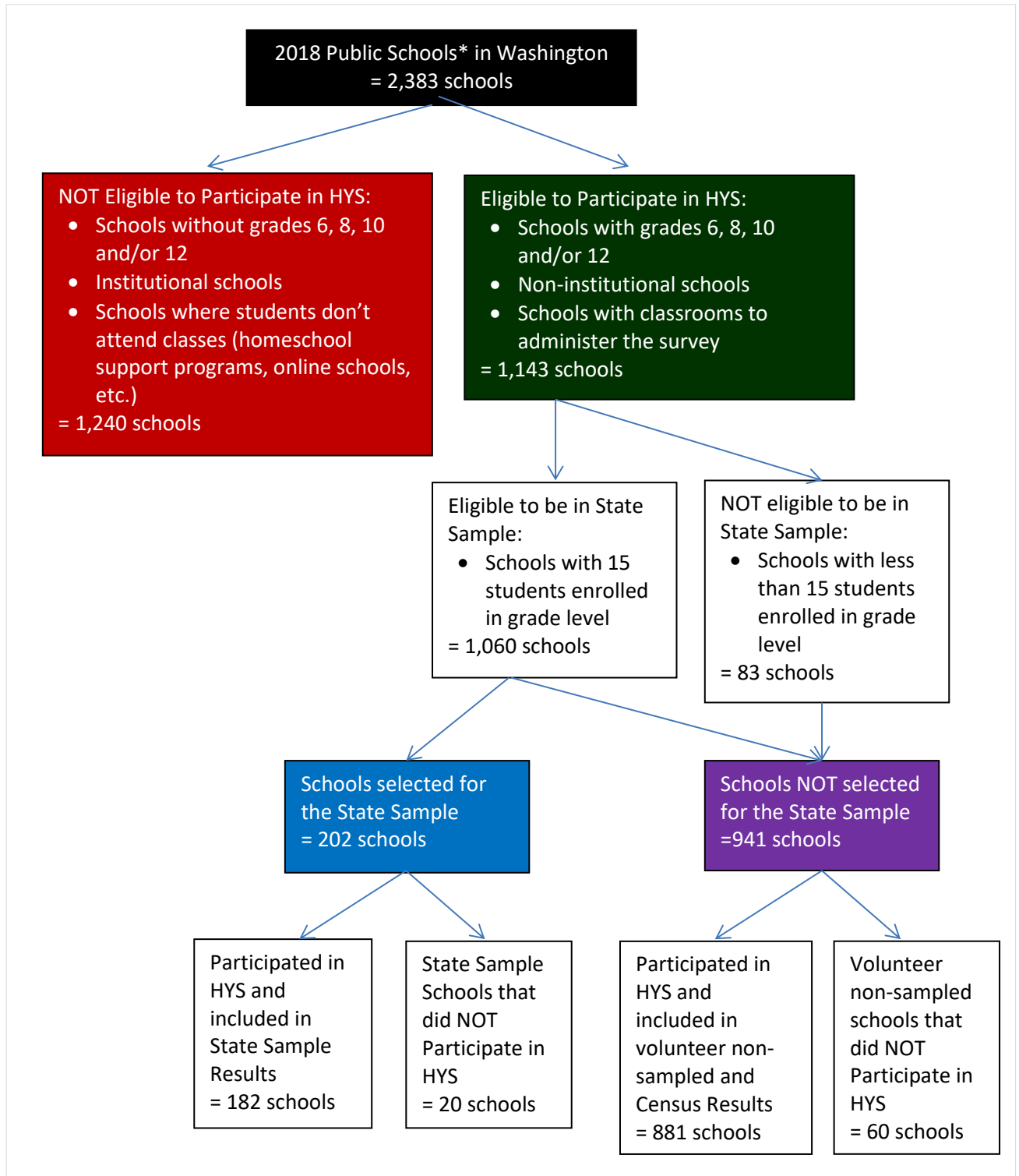


Figure 2: School Sampling for HYS 2018



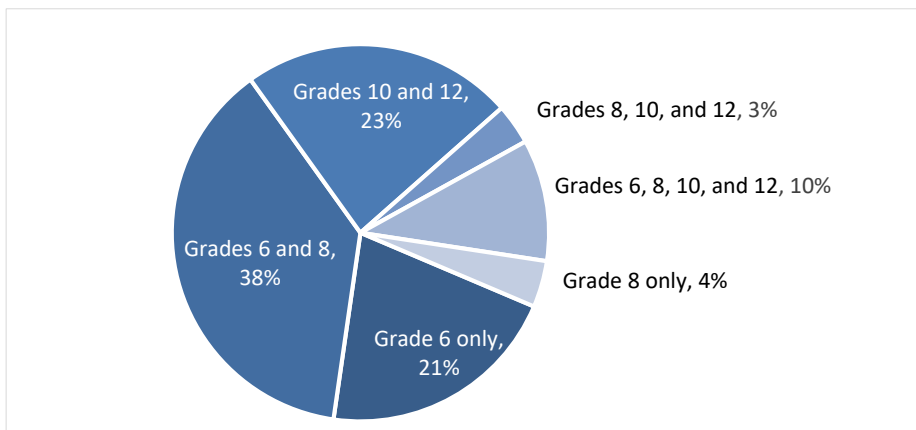
**Figure 3: Description of schools included in the 2018 HYS State Sample and Census**



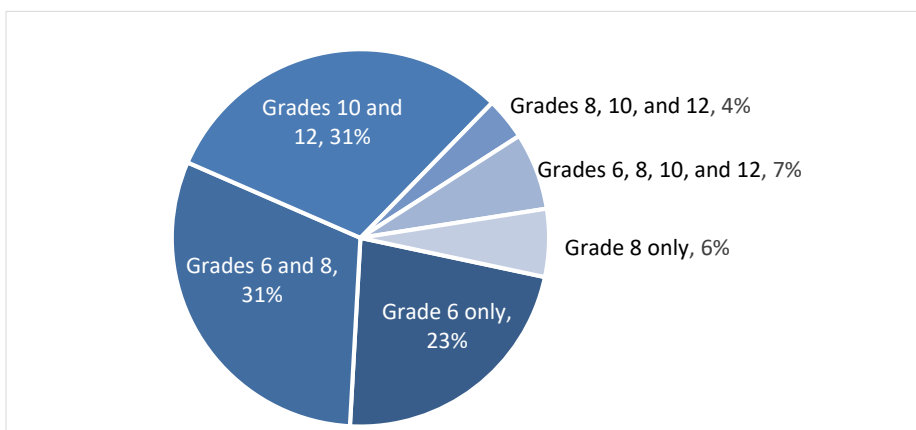
\*Note: Private schools in Washington can participate in HYS, but they are not actively recruited, and their results are not aggregated into district, county, ESD or state results. In 2018, one private school participated in HYS. Neither that school nor their results are included in this bias analysis.

The grade levels of public schools in Washington vary across the state. Some districts have elementary schools that are grades kindergarten through 6<sup>th</sup>, so that district's 6<sup>th</sup> graders are elementary students. Other districts have elementary schools that are kindergarten through 5<sup>th</sup> and their 6<sup>th</sup> graders are at a middle school, so that district's 6<sup>th</sup> graders are middle school students. The following figures (Figures 4a-c) show how grade levels in schools are configured for all schools eligible to participate in the 2018 HYS, schools that participated in the census, and those in the state sample that participated.

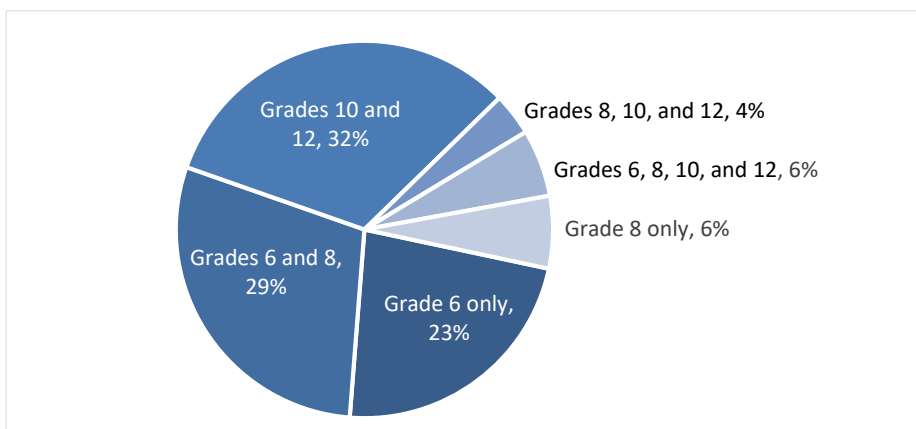
**Figure 4a: Grade levels of all schools eligible for 2018 HYS**



**Figure 4b: Grade levels in census schools that participated in 2018 HYS**



**Figure 4c: Grade levels in schools in the state sample that participated in 2018 HYS**



## 4. School-Level Participation Bias

### Methods

To assess bias related to differences among schools that participated or did not participate in the survey, we assessed the following school characteristics, available from the Office of Superintendent of Public Instruction: [www.k12.wa.us/dataadmin](http://www.k12.wa.us/dataadmin):

- School participation rates by sampling status
- School type - Alternative school status
- School Demographics
  - School enrollment by grade
  - Percent minority enrollment
  - Percent of students receiving free or reduced-price lunch
  - Percent meeting English Assessment (grades 6 and 8), meeting Math Assessment (grades 6 and 8), meeting Science Assessment (grade 8), and meeting Science Assessment (grade 10)
  - On-time graduation rate (for schools with grades 10 and 12)
  - School rural or urban designation based on geographic setting codes

We compared the above characteristics for schools that participated in HYS and schools that did not participate in the state sample and in the census.

For these analyses, we used t-test, Fisher’s exact and Chi-square to compare schools by participation status. We used Chi-square and Fisher’s exact test to compare schools by alternative status. Fisher’s exact was used if cell sizes were five or fewer and Chi-square used otherwise. We used t-test to compare schools on percent minority enrollment, percent of students receiving free or reduced-price lunch, meeting school assessment requirements (English, math, science, and biology), on-time graduation rate, and grade-level school enrollment. Comparisons were considered statistically significant if the p-value was less than 0.05.

### Results

#### ***School Participation Rates by Sampling Status***

A total of 182 schools and 32,271 students contributed data to the statewide sample. In addition, 202,423 students in 881 schools participated in the survey as volunteer non-sampled schools.

Sixth grade schools in the state sample were the most likely to participate (Tables 5a-b). State sample participation rates were higher than census for grades 6, 8, and 10. Higher participation rates for state sampled schools are expected, because state sample schools received additional phone calls to recruit their participation. Table 5b shows participation rate for all census schools (state sample plus volunteer non-sampled schools).

Among schools drawn for the state sample, participation rates varied from 91% among 6<sup>th</sup> grades to 85% among 12<sup>th</sup> grades (Table 5a).

**Table 5a: School participation rate by grade for schools drawn for the state sample, 2018**

Grade	Participated	Eligible	Participation Rate (%)
6	82	90	91.1%
8	60	68	88.2%
10	47	54	87.0%
12	51	60	85.0%

Table 2b provides participation rates by grade for census schools. Participation ranged from 79% among 6<sup>th</sup> grades to 85% among 12<sup>th</sup> grades.

**Table 5b: School participation rate by grade for the census, 2018**

Grade	Participated	Eligible	Participation Rate (%)
6	548	691	79.3%
8	442	537	82.3%
10	392	467	83.9%
12	394	466	84.5%

### ***School Participation Rates by School Type, Alternative and Non-Alternative***

OSPI assigns each public school a school type code. For this analysis schools were considered to be alternative schools if they had a school type code of “A”, “C”, “I”, “Q”, “R”, “S”, “T”, “V”, or “Z”. Some of these alternative schools were not considered eligible for participation in HYS because they do not have an environment where students can anonymously take the survey, e.g., online schools.

Alternative schools in this analysis included 124 type “A”, seven type “C”, three type “Q”, three type “T”, and nine type “S”. Schools were considered to be non-alternative schools if they had the school type “P”. This analysis included 995 type “P” schools. A Demographic Information by School file with these codes is available on OSPI’s website at: <http://reportcard.ospi.k12.wa.us/DataDownload.aspx>.

Schools with less than 15 students per grade were not included in the state sampling frame but were considered eligible to participate in the survey. Often alternative schools have small school enrollments, so they may be less likely to be included in the state sample.

There are too few alternative schools in the state sample to produce stable estimates. Among census schools, alternative schools were just as likely to administer the extra questions (Table 6).

Among census schools, alternative schools were significantly less likely to participate in HYS for all grades (Table 6). Some alternative schools may be less likely to participate because students are in the classroom less often or at different times, making it harder to administer the survey. They might also be less likely to participate if they aren’t eligible to receive survey results due to having less than 15 students per grade.

**Table 6: Participation by alternative school status for the census, 2018**

Grade	School Type	Did Not Participate %, (n)	Participated %, (n)	Difference (p-value)
6	Non-Alternative	19.1% (n=123)	80.9% (n=520)	<b>0.0060</b>
	Alternative	41.7% (n=20)	58.3% (n=28)	
8	Non-Alternative	14.6% (n=70)	85.4% (n=408)	<b>0.0000</b>
	Alternative	42.4% (n=25)	57.6% (n=34)	
10	Non-Alternative	11.6% (n=41)	88.4% (n=313)	<b>0.0000</b>
	Alternative	30.1% (n=34)	69.9% (n=79)	
12	Non-Alternative	10.9% (n=38)	89.1% (n=311)	<b>0.0000</b>
	Alternative	29.1% (n=34)	70.9% (n=83)	

## School Participation Rates by School Demographics

For a breakdown of school types and the grade levels they include, see the charts on page 23, for state sampled schools and for census schools.

### Grade 6

Among 6<sup>th</sup> grades drawn for the state sample, there were no differences between participating and non-participating schools (Table 7a).

**Table 7a: Mean school and grade-level variables by participation for 6<sup>th</sup> grade state sample schools, 2018**

School/Grade-level Variables	School Participated Mean, ±95% CI, (n)	School Did Not Participate Mean, ±95% CI, (n)	Overall Mean, ±95% CI, (n)	Difference ( <i>p</i> -value)
Grade-level enrollment	144.4 ±22.0 (n=82)	92.4 ±42.4 (n=8)	139.8 ±20.6 (n=90)	0.160
% Minority enrollment	47.8 ±5.5 (n=82)	48.5 ±20.9 (n=8)	47.9 ±5.3 (n=90)	0.944
% Free/reduced lunch	48.1 ±5.9 (n=81)	62.5 ±16.0 (n=8)	49.4 ±5.6 (n=89)	0.148
Met English Assessment	57.8 ±3.4 (n=70)	51.9 ±9.7 (n=7)	57.3 ±3.2 (n=77)	0.305
Met Math Assessment	48.8 ±4.1 (n=71)	43.0 ±9.6 (n=7)	48.3 ±3.9 (n=78)	0.405

Among census schools, participating schools had a significantly higher grade-level enrollment, percentage of free or reduced-price lunch, and higher percentage of students meeting the English and Math Assessments than schools that did not participate (Table 7b).

**Table 7b: Mean school and grade-level variables by participation for census 6<sup>th</sup> grade schools, 2018**

School/Grade-level Variables	School Participated Mean, ±95% CI, (n)	School Did Not Participate Mean, ±95% CI, (n)	Overall Mean, ±95% CI, (n)	Difference ( <i>p</i> -value)
Grade-level enrollment	144.5 ±9.0 (n=548)	42.8 ±7.6 (n=143)	123.4 ±7.9 (n=691)	<b>0.000</b>
% Minority enrollment	45.9 ±2.0 (n=546)	41.9 ±5.3 (n=142)	45.0 ±1.9 (n=688)	0.098
% Free/reduced lunch	47.5 ±0.0 (n=527)	59.1 ±0.0 (n=126)	49.8 ±0.0 (n=653)	<b>0.000</b>
Met English Assessment	55.9 ±1.5 (n=468)	50.2 ±4.0 (n=91)	54.9 ±1.4 (n=559)	<b>0.004</b>
Met Math Assessment	47.6 ±1.6 (n=468)	40.1 ±3.7 (n=89)	46.4 ±1.5 (n=557)	<b>0.000</b>

### Grade 8

Among 8<sup>th</sup> grades drawn for the state sample, participating schools had significantly higher grade-level enrollment than schools that did not participate (Table 8a).

**Table 8a: Mean school and grade-level variables by participation for the 8<sup>th</sup> grade state sample schools, 2018**

School/Grade-level Variables	School Participated Mean, ±95% CI, (n)	School Did Not Participate Mean, ±95% CI, (n)	Overall Mean, ±95% CI, (n)	Difference ( <i>p</i> -value)
Grade-level enrollment	182.5 ±28.4 (n=60)	90.8 ±93.6 (n=8)	171.7 ±28.0 (n=68)	<b>0.038</b>
% Minority enrollment	40.8 ±5.8 (n=60)	35.4 ±20.6 (n=8)	40.1 ±5.6 (n=68)	0.551
% Free/reduced lunch	42.8 ±0.1 (n=60)	45.8 ±0.1 (n=7)	43.1 ±0.1 (n=67)	0.732
Met English Assessment	59.4 ±4.2 (n=51)	57.0 ±15.8 (n=6)	59.2 ±4.0 (n=57)	0.722
Met Science Assessment	52.3 ±4.4 (n=51)	52.5 ±16.6 (n=6)	52.4 ±4.2 (n=57)	0.981
Met Math Assessment	46.9 ±4.8 (n=51)	49.9 ±5.4 (n=5)	47.2 ±4.4 (n=56)	0.704

Census 8<sup>th</sup> grade participating schools had a significantly higher grade-level enrollment, higher percentage of minority enrollment, percentage of free or reduced-price lunch, and higher percentage of students meeting the English and Math Assessments than schools that did not participate (Table 8b).



**Table 8b: Mean school and grade-level variables by participation for census 8<sup>th</sup> grade schools, 2018**

School/Grade-level Variables	School Participated Mean, ±95% CI, (n)	School Did Not Participate Mean, ±95% CI, (n)	Overall Mean, ±95% CI, (n)	Difference ( <i>p-value</i> )
Grade-level enrollment	174.9 ±11.0 (n=442)	36.3 ±14.6 (n=95)	150.4 ±10.5 (n=537)	<b>0.000</b>
% Minority enrollment	42.8 ±2.2 (n=439)	34.7 ±7.0 (n=93)	41.4 ±2.2 (n=532)	<b>0.007</b>
% Free/reduced lunch	46.1 ±0.0 (n=420)	55.4 ±0.0 (n=81)	47.6 ±0.0 (n=501)	<b>0.001</b>
Met English Assessment	58.5 ±1.8 (n=368)	52.1 ±5.0 (n=42)	57.9 ±1.7 (n=410)	<b>0.022</b>
Met Science Assessment	52.2 ±1.8 (n=367)	47.3 ±5.9 (n=41)	51.7 ±1.7 (n=408)	0.102
Met Math Assessment	46.2 ±1.9 (n=365)	40.0 ±6.0 (n=40)	45.6 ±1.8 (n=405)	<b>0.048</b>

**Grade 10**

Among 10<sup>th</sup> grades drawn for the state sample, there were no differences between participation and non-participating schools (Table 9a).

**Table 9a: Mean school and grade-level variables by participation for 10<sup>th</sup> grade state sample schools, 2018**

School/Grade-level Variables	School Participated Mean, ±95% CI, (n)	School Did Not Participate Mean, ±95% CI, (n)	Overall Mean, ±95% CI, (n)	Difference ( <i>p-value</i> )
Grade-level enrollment	240.7 ±46.3 (n=47)	143.4 ±112.8 (n=7)	228.1 ±43.4 (n=54)	0.142
% Minority enrollment	45.7 ±6.5 (n=47)	61.2 ±24.3 (n=6)	47.4 ±6.4 (n=53)	0.133
% Free/reduced lunch	41.9 ±0.1 (n=43)	46.8 ±0.2 (n=5)	42.4 ±0.1 (n=48)	0.564
Met Science Assessment (11th Grade)	36.1 ±5.9 (n=40)	26.7 ±10.7 (n=6)	34.9 ±5.3 (n=46)	0.248
Met Math Assessment	40.1 ±6.2 (n=39)	37.8 ±12.7 (n=4)	39.9 ±5.8 (n=43)	0.817
On-time Graduation	83.3 ±0.0 (n=46)	89.5 ±0.1 (n=6)	84.0 ±0.0 (n=52)	0.394

Census 10<sup>th</sup> grade participating schools had a significantly higher grade-level enrollment, lower percentage of free or reduced-price lunch, and higher on-time graduation rates than schools that did not participate (Table 9b).

**Table 9b: Mean school and grade-level variables by participation for census 10<sup>th</sup> grade schools, 2018**

School/Grade-level Variables	School Participated Mean, ±95% CI, (n)	School Did Not Participate Mean, ±95% CI, (n)	Overall Mean, ±95% CI, (n)	Difference ( <i>p-value</i> )
Grade-level enrollment	200.1 ±18.3 (n=392)	38.0 ±17.7 (n=75)	174.0 ±16.6 (n=467)	<b>0.000</b>
% Minority enrollment	41.4 ±2.5 (n=386)	37.0 ±7.3 (n=73)	40.7 ±2.4 (n=459)	0.184
% Free/reduced lunch	44.9 ±0.0 (n=367)	55.7 ±0.1 (n=59)	46.4 ±0.0 (n=426)	<b>0.001</b>
Met Science Assessment (11th Grade)	34.4 ±2.0 (n=304)	30.9 ±5.4 (n=38)	34.0 ±1.9 (n=342)	0.262
Met Math Assessment	39.9 ±2.3 (n=278)	29.0 ±70.0 (n=29)	39.5 ±2.2 (n=307)	0.266
On-time Graduation	79.9 ±0.0 (n=370)	69.7 ±0.1 (n=51)	78.7 ±0.0 (n=421)	<b>0.002</b>

**Grade 12**

Among 12<sup>th</sup> grades drawn for the state sample, participating schools had significantly higher on-time graduation rate than schools that did not participate (Table 10a).

**Table 10a: Mean school and grade-level variables by participation for 12<sup>th</sup> grade state sample schools, 2018**

School/Grade-level Variables	School Participated Mean, ±95% CI, (n)	School Did Not Participate Mean, ±95% CI, (n)	Overall Mean, ±95% CI, (n)	Difference ( <i>p-value</i> )
Grade-level enrollment	224.2 ±45.3 (n=51)	109.2 ±84.7 (n=9)	207.0 ±41.6 (n=60)	0.052
% Minority enrollment	45.5 ±6.2 (n=51)	44.7 ±18.5 (n=8)	45.4 ±5.8 (n=59)	0.925
% Free/reduced lunch	44.7 ±0.1 (n=48)	41.9 ±0.1 (n=5)	44.4 ±0.0 (n=53)	0.087
On-time Graduation	84.0 ±0.0 (n=51)	69.7 ±0.2 (n=8)	82.1 ±0.0 (n=59)	<b>0.041</b>

Census 12<sup>th</sup> grade participating schools had a significantly higher grade-level enrollment lower percentage of free or reduced-price lunch, and higher on-time graduation rates than schools that did not participate (Table 10b).

**Table 10b: Mean school and grade-level variables by participation for census 12<sup>th</sup> grade schools, 2018**

School/Grade-level Variables	School Participated	School Did Not Participate	Overall	Difference
	Mean, ±95% CI, (n)	Mean, ±95% CI, (n)	Mean, ±95% CI, (n)	( <i>p-value</i> )
Grade-level enrollment	201.9 ±17.2 (n=394)	46.8 ±17.9 (n=72)	177.9 ±15.6 (n=466)	<b>0.000</b>
% Minority enrollment	40.7 ±2.4 (n=386)	37.8 ±6.9 (n=71)	40.2 ±2.3 (n=457)	0.375
% Free/reduced lunch	45.2 ±0.0 (n=368)	55.0 ±0.1 (n=52)	46.4 ±0.0 (n=420)	<b>0.003</b>
On-time Graduation	79.4 ±0.0 (n=373)	70.3 ±0.1 (n=52)	78.3 ±0.0 (n=425)	<b>0.005</b>

### **School Participation Rates by Community Demographics**

Schools were designated as urban and non-urban based on the school building zip code and the associated rural-urban commuting area codes (RUCA), provided by the Washington State Department of Social and Health Services’ Research and Data Analysis Division. This bias analysis looked at four rural-urban classifications:

- Urban
- Sub-urban
- Small Town
- Isolated/Rural

For more information on how these classifications are defined, please see the Washington State Department of Health’s Rural-Urban Classification Guidelines:

<https://www.doh.wa.gov/Portals/1/Documents/1500/RUCAGuide.pdf>

There are too few small town and isolated/rural schools in the state sample to produce stable estimates. Among census 6<sup>th</sup>, 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> grade schools, small town schools and isolated rural schools were less likely to participate than urban schools. Eighth grade sub-urban schools were also less likely to participate than urban schools (Table 11).

**Table 11: Participation by rural/urban designation for the census, 2018**

Grade	School Type	School Participated	School Did Not Participate	Difference
		%, (n)	%, (n)	( <i>p-value</i> )*
6	Urban	85.6% (n=369)	14.4% (n=62)	-
	Sub-Urban	82.7% (n=67)	17.3% (n=14)	0.5010
	Small Town	68.3% (n=43)	31.7% (n=20)	<b>0.0010</b>
	Isolated/Rural	59.5% (n=69)	40.5% (n=47)	<b>0.0000</b>
8	Urban	90.6% (n=270)	9.4% (n=28)	-
	Sub-Urban	75.9% (n=60)	24.1% (n=19)	<b>0.0010</b>
	Small Town	69.2% (n=36)	30.8% (n=16)	<b>0.0000</b>
	Isolated/Rural	70.4% (n=76)	29.6% (n=32)	<b>0.0000</b>
10	Urban	88.5% (n=215)	11.5% (n=28)	-
	Sub-Urban	88.4% (n=61)	11.6% (n=8)	0.9870
	Small Town	72.0% (n=36)	28.0% (n=14)	<b>0.0030</b>
	Isolated/Rural	76.2% (n=80)	23.8% (n=25)	<b>0.0040</b>
12	Urban	89.5% (n=213)	10.5% (n=25)	-
	Sub-Urban	89.9% (n=62)	10.1% (n=7)	0.9310
	Small Town	75.5% (n=37)	24.5% (n=12)	<b>0.0100</b>
	Isolated/Rural	74.5% (n=82)	25.5% (n=28)	<b>0.0000</b>

## 5. School-Level Extra Question Bias

### Methods

To assess bias related to differences among secondary schools that did or did not administer the extra survey questions, we assessed the following school characteristics, available from the Office of Superintendent of Public Instruction at [www.k12.wa.us/dataadmin](http://www.k12.wa.us/dataadmin) and <http://reportcard.ospi.k12.wa.us/DataDownload.aspx>:

- School participation rates by sampling status
- School type - Alternative school status
- School Demographics
  - School enrollment by grade
  - Percent minority enrollment
  - Percent of students receiving free or reduced-price lunch
  - Percent meeting English Assessment (grade 8), meeting Math Assessment (grade 8), meeting Science Assessment (grade 8), and meeting Science Assessment (grade 10)
  - On-time graduation rate (for schools with grades 10 and 12)
  - School rural or urban designation based on geographic setting codes

We compared the above characteristics for schools that administered the extra questions in the state sample and in the census to those that did not ask extra questions.

For these analyses we used t-test, Fisher's exact and Chi-square to compare schools by participation status. We used Chi-square and Fisher's exact test to compare schools by alternative status. Fisher's exact was used if cell sizes were five or fewer and Chi-square used otherwise. We used t-test to compare schools on percent minority enrollment, percent of students receiving free or reduced-price lunch, school assessment requirements (English, math, science, and biology), on-time graduation rate, and grade-level school enrollment. Comparisons were considered statistically significant if the p-value was less than 0.05.

Secondary schools were considered to have administered the extra questions if their students completed responses from the extra survey questions.

### Results

#### ***Extra Question Participation Rates by Sampling Status***

Among state sample schools, 74% of 8<sup>th</sup> grade participating schools administered the extra questions, while for grades 10 and 12, 85% and 87% respectively, of participating schools administered these questions (Table 12a). The percent of state sample schools was similar to the percent of census schools administering extra questions (Table 12b).

**Table 12a: Extra question administration status by grade state sample schools, 2018**

Grade	Participated	School Asked Extra Questions	
		n	%
8	61	45	73.8%
10	48	41	85.4%
12	52	45	86.5%

**Table 12b: Extra question administration status by grade for census schools, 2018**

Grade	Participated	School Asked Extra Questions	
		n	%
8	447	348	77.9%
10	397	328	82.6%
12	397	331	83.4%

**Extra Questions by School Type – Alternative and Non-Alternative Schools**

There are too few alternative schools in the state sample to produce stable estimates. Among census schools, alternative schools were just as likely to administer the extra questions (Table 13).

**Table 13: Extra question administration by alternative school status for census schools, 2018**

Grade	School Type	School Asked Extra Questions	School Did Not Ask Extra Questions	Difference ( <i>p-value</i> )
		%, (n)	%, (n)	
8	Traditional	78.9% (n=321)	21.1% (n=86)	0.9410
	Alternative	79.4% (n=27)	20.6% (n=7)	
10	Traditional	84.7% (n=265)	15.3% (n=48)	0.2910
	Alternative	79.7% (n=63)	20.3% (n=16)	
12	Traditional	84.6% (n=263)	15.4% (n=48)	0.5600
	Alternative	81.9% (n=68)	18.1% (n=15)	

**Extra Questions by School Demographics**

Among schools in the state sample, schools that administered the extra questions were similar to schools that did not administer them (Tables 14a, 15a, and 16a).

Among census schools, schools that administered the extra questions were similar to schools that did not administer them (Tables 14b, 15b, and 16b), except schools with 8<sup>th</sup> graders had higher minority enrollment than non-administering schools.

**Among Schools with Grade 8 Students**

Among schools with grade 8 students drawn for the state sample, schools administering the extra questions were similar to schools that did not (Table 14a).

**Table 14a: Mean school and grade-level variables by extra question participation for state sample schools with grade 8 students, 2018**

School/Grade-level Variables	School Asked Extra Questions	School Did Not Ask Extra Questions	Overall	Difference ( <i>p-value</i> )
	Mean, ±95% CI, (n)	Mean, ±95% CI, (n)	Mean, ±95% CI, (n)	
Grade-level enrollment	177.6 ±35.4 (n=44)	195.8 ±43.7 (n=16)	182.5 ±28.4 (n=60)	0.583
% Minority enrollment	42.1 ±7.1 (n=44)	37.0 ±9.7 (n=16)	40.8 ±5.8 (n=60)	0.446
% Free/reduced lunch	43.1 ±6.8 (n=44)	42.0 ±9.5 (n=16)	42.8 ±5.6 (n=60)	0.865
Met English Assessment	61.2 ±4.9 (n=36)	55.1 ±7.7 (n=15)	59.4 ±4.2 (n=51)	0.196
Met Science Assessment	53.5 ±5.4 (n=36)	49.5 ±7.5 (n=15)	52.3 ±4.4 (n=51)	0.424
Met Math Assessment	35.6 ±18.1 (n=7)	67.0 ±31.4 (n=2)	42.6 ±17.3 (n=9)	0.149

Among census grades, schools administering the extra surveys had a higher percentage of minority enrollment than schools that did not (Table 11b).

**Table 14b: Mean school and grade-level variables by extra question participation for census schools with grade 8 students, 2018**

School/Grade-level Variables	School Asked Extra Questions	School Did Not Ask Extra Questions	Overall	Difference
	Mean, $\pm$ 95% CI, (n)	Mean, $\pm$ 95% CI, (n)	Mean, $\pm$ 95% CI, (n)	( <i>p-value</i> )
Grade-level enrollment	176.8 $\pm$ 13.0 (n=348)	167.9 $\pm$ 19.7 (n=93)	175.0 $\pm$ 11.1 (n=441)	0.519
% Minority enrollment	44.6 $\pm$ 2.5 (n=345)	36.5 $\pm$ 4.7 (n=93)	42.9 $\pm$ 2.2 (n=438)	<b>0.004</b>
% Free/reduced lunch	46.8 $\pm$ 2.6 (n=329)	43.5 $\pm$ 4.5 (n=90)	46.1 $\pm$ 2.2 (n=419)	0.239
Met English Assessment	58.4 $\pm$ 2.0 (n=289)	59.1 $\pm$ 3.8 (n=78)	58.5 $\pm$ 1.8 (n=367)	0.738
Met Science Assessment	52.4 $\pm$ 2.1 (n=289)	51.5 $\pm$ 3.4 (n=77)	52.2 $\pm$ 1.8 (n=366)	0.689
Met Math Assessment	34.7 $\pm$ 7.8 (n=34)	44.9 $\pm$ 14.3 (n=10)	37.0 $\pm$ 6.9 (n=44)	0.228

**Among Schools with Grade 10 Students**

Among 10<sup>th</sup> grade schools drawn for the state sample and among census 10<sup>th</sup> grade schools, schools administering the extra questions were similar to schools that did not (Tables 15a and 15b).

**Table 15a: Mean school and grade-level variables by extra question participation for state sample schools with grade 10 students, 2018**

School/Grade-level Variables	School Asked Extra Questions	School Did Not Ask Extra Questions	Overall	Difference
	Mean, $\pm$ 95% CI, (n)	Mean, $\pm$ 95% CI, (n)	Mean, $\pm$ 95% CI, (n)	( <i>p-value</i> )
Grade-level enrollment	249.2 $\pm$ 50.5 (n=40)	191.9 $\pm$ 117.0 (n=7)	240.7 $\pm$ 46.3 (n=47)	0.393
% Minority enrollment	46.9 $\pm$ 7.1 (n=40)	38.5 $\pm$ 16.3 (n=7)	45.7 $\pm$ 6.5 (n=47)	0.372
% Free/reduced lunch	42.7 $\pm$ 5.7 (n=37)	36.8 $\pm$ 12.2 (n=6)	41.9 $\pm$ 5.2 (n=43)	0.451
Met Science Assessment	36.0 $\pm$ 6.9 (n=33)	36.6 $\pm$ 8.7 (n=7)	36.1 $\pm$ 5.9 (n=40)	0.943
Met Math Assessment	40.1 $\pm$ 7.1 (n=33)	40.3 $\pm$ 13.2 (n=6)	40.1 $\pm$ 6.2 (n=39)	0.979

**Table 15b: Mean school and grade-level variables by extra question participation for census schools with grade 10 students, 2018**

School/Grade-level Variables	School Asked Extra Questions	School Did Not Ask Extra Questions	Overall	Difference
	Mean, $\pm$ 95% CI, (n)	Mean, $\pm$ 95% CI, (n)	Mean, $\pm$ 95% CI, (n)	( <i>p-value</i> )
Grade-level enrollment	199.2 $\pm$ 20.1 (n=328)	204.5 $\pm$ 45.4 (n=64)	200.1 $\pm$ 18.3 (n=392)	0.835
% Minority enrollment	42.2 $\pm$ 2.7 (n=324)	37.4 $\pm$ 6.0 (n=62)	41.4 $\pm$ 2.5 (n=386)	0.163
% Free/reduced lunch	45.4 $\pm$ 2.5 (n=308)	42.5 $\pm$ 5.2 (n=59)	44.9 $\pm$ 2.3 (n=367)	0.352
Met Science Assessment	33.9 $\pm$ 2.2 (n=255)	36.6 $\pm$ 5.3 (n=49)	34.4 $\pm$ 2.0 (n=304)	0.338
Met Math Assessment	40.1 $\pm$ 2.5 (n=228)	39.1 $\pm$ 5.9 (n=50)	39.9 $\pm$ 2.3 (n=278)	0.756

**Among Schools with Grade 12 Students**

Among 12<sup>th</sup> grade schools drawn for the state sample and among census 12<sup>th</sup> grade schools, schools administering the extra questions were similar to schools that did not (Tables 16a and 16b).

**Table 16a: Mean school and grade-level variables by extra question participation for state sample schools with grade 12 students, 2018**

School/Grade-level Variables	School Asked Extra Questions	School Did Not Ask Extra Questions	Overall	Difference
	Mean, $\pm$ 95% CI, (n)	Mean, $\pm$ 95% CI, (n)	Mean, $\pm$ 95% CI, (n)	( <i>p-value</i> )
% Minority enrollment	227.9 $\pm$ 49.5 (n=44)	201.3 $\pm$ 116.8 (n=7)	224.2 $\pm$ 45.3 (n=51)	0.696
% Free/reduced lunch	46.3 $\pm$ 6.8 (n=44)	40.9 $\pm$ 14.7 (n=7)	45.5 $\pm$ 6.2 (n=51)	0.564
Grade-level enrollment	46.3 $\pm$ 5.8 (n=41)	35.2 $\pm$ 10.8 (n=7)	44.7 $\pm$ 5.3 (n=48)	0.151
On-time Graduation	84.6 $\pm$ 4.6 (n=44)	80.6 $\pm$ 15.0 (n=7)	84.0 $\pm$ 4.4 (n=51)	0.556

**Table 16b: Mean school and grade-level variables by extra question participation for census schools with grade 12 students, 2018**

School/Grade-level Variables	School Asked Extra Questions	School Did Not Ask Extra Questions	Overall	Difference
	Mean, $\pm$ 95% CI, (n)	Mean, $\pm$ 95% CI, (n)	Mean, $\pm$ 95% CI, (n)	( <i>p-value</i> )
% Minority enrollment	199.7 $\pm$ 18.8 (n=331)	213.6 $\pm$ 41.7 (n=63)	201.9 $\pm$ 17.2 (n=394)	0.560
% Free/reduced lunch	41.4 $\pm$ 2.6 (n=325)	37.1 $\pm$ 5.8 (n=61)	40.7 $\pm$ 2.4 (n=386)	0.208
Grade-level enrollment	45.7 $\pm$ 2.5 (n=309)	42.5 $\pm$ 5.2 (n=59)	45.2 $\pm$ 2.3 (n=368)	0.303
On-time Graduation	79.7 $\pm$ 2.3 (n=311)	77.9 $\pm$ 6.1 (n=62)	79.4 $\pm$ 2.1 (n=373)	0.521

### ***Extra Questions by Community Demographics***

There are too few small town and isolated rural schools in the state sample to produce stable estimates.

Among 8<sup>th</sup> grade census schools, sub-urban schools were less likely to ask the extra questions than urban schools (Table 17).

**Table 17: Extra question participation by rural/urban designation for census schools, 2018**

Grade	School Type	School Asked Extra Questions	School Did Not Ask Extra Questions	Difference
		%, (n)	%, (n)	( <i>p-value</i> )*
8	Urban	79.2% (n=213)	20.8% (n=56)	-
	Sub-Urban	66.7% (n=40)	33.3% (n=20)	<b>0.0400</b>
	Small Town	86.1% (n=31)	13.9% (n=5)	0.3330
	Isolated/Rural	84.2% (n=64)	15.8% (n=12)	0.3320
10	Urban	81.9% (n=176)	18.1% (n=39)	-
	Sub-Urban	83.6% (n=51)	16.4% (n=10)	0.7530
	Small Town	86.1% (n=31)	13.9% (n=5)	0.5360
	Isolated/Rural	87.5% (n=70)	12.5% (n=10)	0.2500
12	Urban	82.2% (n=175)	17.8% (n=38)	-
	Sub-Urban	83.9% (n=52)	16.1% (n=10)	0.7550
	Small Town	86.5% (n=32)	13.5% (n=5)	0.5210
	Isolated/Rural	87.8% (n=72)	12.2% (n=10)	0.2420

## 6. Student-level Completion Bias

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### Methods

Student-level survey completion bias attempts to determine if results for questions at the end of the survey are biased due to non-completion and looks at:

- The percent of students completed the survey.
- Respondent characteristics among those that completed the survey and those that did not.

Student-level survey completion was categorized as:

- “Completers” – Grade 8, 10, and 12 completers answered all of the last 30 questions. Grade 6 completers answered all of the last 20 questions.
- “Non-completers” – Grade 8, 10, and 12 non-completers did not answer three or more of the last 30 questions. Grade 6 non-completers did not answer three or more of the last 20 questions. The last 30 or 20 questions were selected because a student might try to finish by skipping items; we reasoned that missing 3 or more items would be more likely to reflect non-completion than missing one or two items, which might be skipped for other reasons such as unwillingness to report.
- Grade 8, 10, and 12 students that did not answer one or two of the last 30 questions are not included in the comparisons. Grade 6 students that did not answer one or two of the last 20 questions are not included in comparisons.

### Comparing Completers and Non-completers

We developed rate ratios to assess differences between survey completers to non-completers. A rate ratio compares rates among the two groups. For example, if 15% of survey completers and 30% of survey non-completers reported getting low grades, we would report a rate ratio of 0.5, meaning that completers were half as likely as non-completers to have low grades.

We compared students based on questions assessing personal characteristics found early in the survey according to their completion status by grade. Systematic differences in responses to these questions increase the likelihood of bias for questions toward the end of the survey. The characteristics for student-level comparisons include:

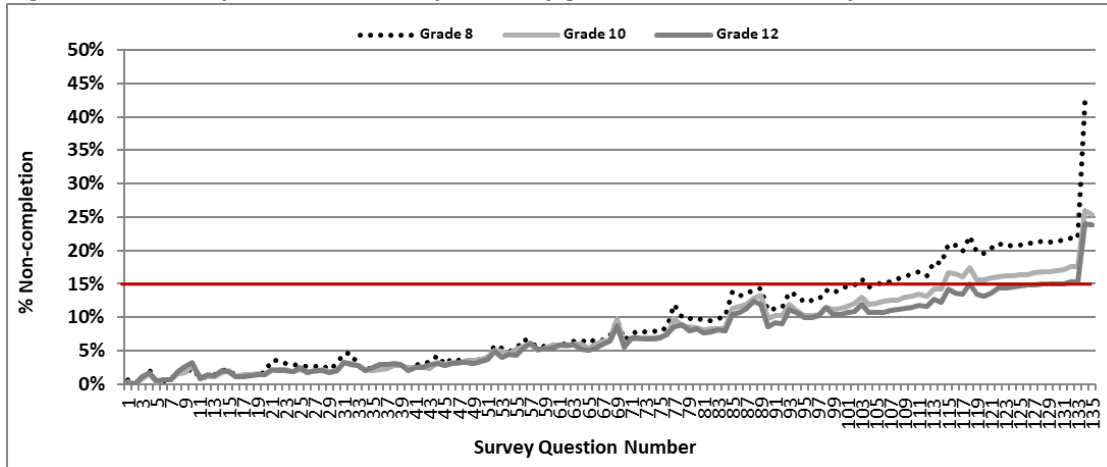
- School factors
  - Low self-report grades (mostly Cs, Ds or Fs at school)
  - Feeling unsafe at school (answers of “definitely no” or “mostly no” to a question about feeling safe at school)
- Indicators of low socioeconomic status
  - Mother not completing high school
  - Housing situation due to finances
  - Food insecurity (family cutting meal size or skipping meals in past 12 months due of lack of money)
  - No recent dental visit (not visiting dentist for a check-up in the past year)
  - Receives free or reduced-price lunch at school
- Behavioral factors
  - Cigarette smoking (any cigarette smoking in the past 30 days)
  - Marijuana smoking (having ever smoked marijuana)
  - Binge drinking (drinking 5 or more drinks on any one occasion in the past two weeks)
  - Drinking alcohol (drinking any alcohol in the past 30 days)
- Race and ethnicity
  - Race and Hispanic ethnicity

- Non-English language spoken at home

These same analyses were completed for census completers and non-completers.

Figure 5 shows the state sample non-completion rates for each survey question on Form A by grade. Non-completion increases over the length of the survey.

**Figure 5: Form A question non-completion by grade for the state sample, 2018**



## Results

### Survey Completion for State Sample

Table 18 shows the percent of completers and non-completers in each grade. Grade 8 has the highest percentage of survey non-completion (37%).

**Table 18: Survey completion by grade for state sample schools, 2018**

Grade	n	Survey Completion <sup>i</sup> : Answered All Last Questions (%)	Survey Non-completion <sup>ii</sup> : Missing 3 or more Questions (%)	Not Included in Analysis <sup>iii</sup> : Missing 1 or 2 Questions (%)
6	9,604	69.1%	22.0%	8.9%
8	8,895	47.2%	37.0%	16.4%
10	8,096	63.9%	24.8%	11.3%
12	5,676	66.6%	22.3%	11.1%

- i. Completion: Number of students who answered all of the last 30 questions for grades 8, 10 and 12 (last 20 questions for grade 6).
- ii. Non-Completion: Number of students who did not answer 3 or more questions of the last 30 questions for grades 8, 10 and 12 (last 20 questions for grade 6).
- iii. Number of students who did not answer 1 to 2 of the last 30 questions for grades 8, 10 and 12 (last 20 questions for grade 6). These students were dropped from the analysis, so that completion could be compared to non-completion.

For more information about survey non-completion for each individual survey question by grade level and form type, see Appendix A: Non-completion by Form Type and Grade and Appendix B: Questions at the End of the Survey.



## Comparing Completers to Non-completers in the State Sample

Table 19 displays rate ratios for respondent characteristics among completers to non-completers.

Of the 71 comparison tests conducted, 30 showed statistically significant differences. These results indicate that students who completed the survey are different from students who did not complete the survey for the characteristics assessed.

Comparing students from state sample schools, survey non-completers were more likely than completers to report:

- Lower self-report grades in school (grades 6, 8, 10, and 12) and feeling unsafe at school (grades 8 and 10).
- Variables indicating low economic status: mother didn't graduate high school (grade 8), living situation due to finances (grade 12), food insecurity (grade 8), no dental visits in past year (grades 8, 10, and 12), receive free/reduced price lunch (grade 12).
- Substance use – current cigarettes (grades 8 and 12), e-cig/vape (grade 6), and marijuana (grade 8).
- Non-English spoken at home (grades 8, 10, and 12).
- Being Hispanic (grade 8), American Indian/Alaska Native (grades 6 and 12), and Black/African American (grades 6, 8, and 10).

Comparing students from state sample schools, survey completers were more likely than non-completers to report:

- Being white (grades 6, 8, 10, and 12).

**Table 19: Rate ratios for student characteristics of completers compared to non-completers in the state sample, 2018 risk ratio (95% confidence interval)**

Variable	State Completers Compared to Non-completers by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
<b>School factors</b>				
Low grades	<b>0.6 (0.5-0.7)</b>	<b>0.5 (0.4-0.6)</b>	<b>0.7 (0.6-0.8)</b>	<b>0.7 (0.5-0.8)</b>
Feeling unsafe at school	0.9 (0.8-1.0)	<b>0.8 (0.7-0.9)</b>	<b>0.7 (0.6-0.9)</b>	0.9 (0.7-1.1)
<b>Indicators of low socioeconomic status</b>				
Mother didn't graduate high school	na	<b>0.7 (0.5-0.9)</b>	0.8 (0.6-1.0)	0.8 (0.6-1.0)
Living situation due to finances	na	0.9 (0.7-1.2)	0.8 (0.6-1.1)	<b>0.7 (0.6-1.0)</b>
Food insecurity	na	<b>0.8 (0.7-1.0)</b>	0.8 (0.7-1.0)	<b>0.7 (0.6-0.9)</b>
No dental visit in last year	na	<b>0.6 (0.4-0.7)</b>	<b>0.7 (0.5-0.8)</b>	<b>0.7 (0.5-0.9)</b>
Receive free/reduced price lunch	na	0.8 (0.6-1.1)	1.0 (0.8-1.3)	<b>0.7 (0.6-1.0)</b>
<b>Substance use factors</b>				
Current cigarette smoking	0.6 (0.4-1.1)	<b>0.6 (0.4-0.9)</b>	0.7 (0.5-1.0)	<b>0.6 (0.5-0.8)</b>
Current e-cig/vape use	<b>0.7 (0.5-1.0)</b>	0.9 (0.6-1.2)	1.0 (0.8-1.2)	0.8 (0.6-1.1)
Current marijuana use	0.6 (0.4-1.1)	<b>0.6 (0.5-0.8)</b>	0.9 (0.7-1.0)	0.9 (0.7-1.1)
Binge drinking	0.7 (0.4-1.0)	0.8 (0.6-1.0)	0.9 (0.7-1.1)	0.8 (0.6-1.1)
Current alcohol drinking	0.8 (0.6-1.1)	1.1 (0.9-1.3)	0.9 (0.8-1.1)	1.1 (0.8-1.4)
<b>Race/ethnicity and language</b>				
Non-English spoken at home	0.9 (0.7-1.1)	<b>0.7 (0.5-1.0)</b>	<b>0.8 (0.6-0.9)</b>	<b>0.7 (0.5-0.9)</b>
White	<b>1.5 (1.2-1.8)</b>	<b>1.9 (1.4-2.5)</b>	<b>1.6 (1.3-2.0)</b>	<b>1.5 (1.1-2.0)</b>
Hispanic	1.0 (0.8-1.3)	0.8 (0.6-1.1)	0.8 (0.6-1.1)	0.8 (0.6-1.2)
American Indian/Alaska Native	<b>0.7 (0.5-0.8)</b>	0.7 (0.5-1.2)	0.9 (0.6-1.4)	<b>0.5 (0.3-0.8)</b>
Asian	1.1 (0.9-1.4)	0.9 (0.5-1.7)	1.0 (0.7-1.6)	1.1 (0.8-1.6)
Black/African American	<b>0.7 (0.5-0.9)</b>	<b>0.4 (0.3-0.5)</b>	<b>0.4 (0.3-0.6)</b>	1.1 (0.8-1.6)
Pacific Islander	0.7 (0.5-1.1)	0.7 (0.4-1.0)	1.1 (0.7-1.7)	0.8 (0.5-1.5)

\* RR: rate ratio; 95% CI: 95% confidence interval; bolded values are statistically significant at the  $p < 0.05$  level. A rate ratio less than 1 indicates that the characteristic is more common among students who did not complete the survey.

To see the specific percentages of the characteristics reported above by completion status and grade, see Appendix C: Student Characteristics by Completion.

## Survey Completion in Census Schools

Table 20 shows the percent of students with survey completion and non-completion in each grade. Grade 8 has the highest percentage of survey non-completion (37%).

**Table 20: Survey completion by grade for census schools, 2018**

Grade	n	Survey Completion <sup>i</sup> : Answered All Last Questions (%)	Survey Non-completion <sup>ii</sup> : Missing 3 or more 3 questions (%)	Not Included in Analysis <sup>iii</sup> : Missing 1 or 2 questions (%)
6	65,514	71.4%	19.0%	9.6%
8	62,119	49.3%	36.5%	14.2%
10	55,761	61.0%	26.1%	12.9%
12	39,135	64.3%	23.6%	12.1%

i. Completion: Number of students who answered all of the last 30 questions for grades 8, 10 and 12 (last 20 questions for grade 6).

ii. Non-Completion: Number of students who did not answer 3 or more questions of the last 30 questions for grades 8, 10 and 12 (last 20 questions for grade 6).

iii. Number of students who did not answer 1 to 2 of the last 30 questions for grades 8, 10 and 12 (last 20 questions for grade 6). These students were dropped from the analysis, so that completion could be compared to non-completion.

For more information about survey non-completion for each individual survey question by grade level and form type, see Appendix A: Non-completion by Form Type and Grade.

## Comparing Completers to Non-Completers in the Census

Table 21 displays rate ratios for respondent characteristics among completers to non-completers.

Of the 71 comparison tests conducted, 64 showed statistically significant differences. These results indicate that students who completed the survey are different from students who did not complete the survey for the characteristics assessed.

Comparing students from census schools, survey non-completers were more likely than completers to report:

- Lower self-report grades in school (grades 6, 8, 10, and 12) and feeling unsafe at school (grades 6, 8, 10, and 12).
- Variables indicating low economic status: mother didn't graduate high school (grades 8, 10, and 12), living situation due to finances (grades 10 and 12), food insecurity (grades 8, 10, and 12), no dental visits in past year (grades 8, 10, and 12), and receive free/reduced price lunch (grades 8, 10, and 12).
- Substance use – current cigarettes (grades 6, 8, 10, and 12), e-cig/vape (grade 6), marijuana (grades 6, 8, 10, and 12), current drinking (grades 6, 8, and 10), and binge drinking (grades 6, 8, 10, and 12).
- Non-English spoken at home (grades 6, 8, 10, and 12).
- Being Hispanic (grades 6, 8, 10, and 12), American Indian/Alaska Native (grades 6, 8, 10, and 12), Black/African American (grades 6, 8, 10, and 12), and Pacific Islander (grades 8 and 12).

Comparing students from census schools, survey completers were more likely than non-completers to report:

- Being white (grades 6, 8, 10, and 12) and Asian (grades 6, 8, 10, and 12).

**Table 21: Rate ratios for student characteristics of completers compared to non-completers in the census, 2018 risk ratio (95% confidence interval)**

Variable	Census Completers Compared to Non-completers by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
<b>School factors</b>				
Low grades	<b>0.5 (0.5-0.6)</b>	<b>0.5 (0.5-0.6)</b>	<b>0.6 (0.5-0.6)</b>	<b>0.6 (0.6-0.7)</b>
Feeling unsafe at school	<b>0.8 (0.7-0.8)</b>	<b>0.8 (0.8-0.8)</b>	<b>0.8 (0.7-0.8)</b>	<b>0.8 (0.7-0.8)</b>
<b>Indicators of low socioeconomic status</b>				
Mother didn't graduate high school	na	<b>0.6 (0.6-0.6)</b>	<b>0.6 (0.6-0.7)</b>	<b>0.7 (0.6-0.8)</b>
Living situation due to finances	na	0.9 (0.8-1.0)	<b>0.8 (0.7-0.8)</b>	<b>0.8 (0.7-0.9)</b>
Food insecurity	na	<b>0.8 (0.7-0.8)</b>	<b>0.8 (0.7-0.8)</b>	<b>0.8 (0.7-0.8)</b>
No dental visit in last year	na	<b>0.6 (0.5-0.6)</b>	<b>0.6 (0.6-0.7)</b>	<b>0.7 (0.6-0.8)</b>
Receive free/reduced price lunch	na	<b>0.8 (0.7-0.8)</b>	<b>0.7 (0.6-0.7)</b>	<b>0.7 (0.6-0.7)</b>
<b>Substance use factors</b>				
Current cigarette smoking	<b>0.5 (0.4-0.6)</b>	<b>0.6 (0.6-0.7)</b>	<b>0.6 (0.5-0.7)</b>	<b>0.7 (0.6-0.7)</b>
Current e-cig/vape use	<b>0.7 (0.7-0.8)</b>	0.9 (0.8-1.0)	0.9 (0.9-1.0)	1.0 (0.9-1.1)
Current marijuana use	<b>0.6 (0.5-0.8)</b>	<b>0.8 (0.7-0.8)</b>	<b>0.8 (0.7-0.8)</b>	<b>0.8 (0.8-0.9)</b>
Binge drinking	<b>0.6 (0.5-0.7)</b>	<b>0.8 (0.7-0.8)</b>	<b>0.8 (0.7-0.8)</b>	<b>0.9 (0.8-0.9)</b>
Current alcohol drinking	<b>0.8 (0.7-0.9)</b>	<b>0.9 (0.9-1.0)</b>	<b>0.9 (0.8-1.0)</b>	1.1 (1.0-1.1)
<b>Race/ethnicity and language</b>				
Non-English spoken at home	<b>0.7 (0.7-0.8)</b>	<b>0.7 (0.7-0.7)</b>	<b>0.7 (0.7-0.8)</b>	<b>0.7 (0.7-0.8)</b>
White	<b>1.6 (1.5-1.7)</b>	<b>1.7 (1.7-1.8)</b>	<b>1.6 (1.5-1.7)</b>	<b>1.6 (1.5-1.7)</b>
Hispanic	<b>0.8 (0.8-0.9)</b>	<b>0.7 (0.7-0.7)</b>	<b>0.7 (0.6-0.7)</b>	<b>0.8 (0.7-0.8)</b>
American Indian/Alaska Native	<b>0.8 (0.8-0.9)</b>	<b>0.7 (0.7-0.8)</b>	<b>0.7 (0.7-0.9)</b>	<b>0.6 (0.5-0.7)</b>
Asian	<b>1.3 (1.2-1.4)</b>	<b>1.3 (1.2-1.4)</b>	<b>1.4 (1.3-1.5)</b>	<b>1.2 (1.1-1.4)</b>
Black/African American	<b>0.5 (0.5-0.6)</b>	<b>0.5 (0.5-0.6)</b>	<b>0.5 (0.5-0.6)</b>	<b>0.5 (0.4-0.5)</b>
Pacific Islander	0.9 (0.8-1.0)	<b>0.8 (0.7-0.9)</b>	0.9 (0.8-1.0)	<b>0.6 (0.5-0.7)</b>

To see the specific percentages of the characteristics reported above by completion status and grade, see Appendix C: Student Characteristics by Completion.

## 7. Additional Bias in Extra Question

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### Methods

Student-level extra question bias attempts to determine if results for the extra questions at the end of the survey are biased in addition to any bias from survey non-completion. HYS 2018 asked optional questions at ends of both Forms A and B. Form A had two optional questions and Form B had eight optional questions. The bias for extra questions attempts to look at:

- The percent of students who completed the extra questions.
- Bias in the extra questions, in addition to any bias found for non-completion.

Earlier in this report, we looked to see if schools that asked the extra questions were different from schools that did not ask them. Now we are looking at the characteristics of students who answered the extra questions to see if they were different from the characteristics of students in schools that did not ask them. In order to assess additional bias not caused by non-completion, we're only looking at students who completed the survey in schools that did not ask the extra questions.

- "Extra answerers" are students who answered at least one extra question from schools that asked the extra questions.
- "Non-extra completers" are students who completed the last 30 questions of the survey from schools that did not ask the extra questions.

Similar to the non-completion bias, for the extra question bias we compared students based on questions assessing personal characteristics found early in the main body of the survey. The characteristics for student-level comparisons include student reports of:

- School factors
  - Low self-report grades (mostly Cs, Ds or Fs at school)
  - Feeling unsafe at school (answers of "definitely no" or "mostly no" to a question about feeling safe at school)
- Indicators of low socioeconomic status
  - Mother not completing high school
  - Living situation due to family finances
  - Food insecurity (family cutting meal size or skipping meals in past 12 months due of lack of money)
  - No recent dental visit (not visiting dentist for a check-up in the past year)
  - Receive free or reduced-price lunch at school
- Behavioral factors
  - Cigarette smoking (any in the past 30 days)
  - E-cigarette or vaping (any in the past 30 days)
  - Marijuana smoking (any in the past 30 days)
  - Binge drinking (drinking 5 or more drinks in a row in the past two weeks)
  - Drinking alcohol (any in the past 30 days)
- Race and ethnicity
  - Race and Hispanic ethnicity
  - Non-English language spoken at home

We conducted separate analyses by grade. We developed rate ratios to assess differences between categories of participants. Comparisons are of students who answered extra questions compared to those who were not given the extra questions.

## Results

### ***Extra Question Answering in the State Sample***

In the state sample, Table 22a shows the percent of schools that took the survey forms that had extra questions and those that did not. In the state sample, Table 22b shows the percent of students in the schools that did not ask the extra questions and if they completed the survey or not and the students in schools that asked the extra questions and if they answered the questions or not. “Extra question answerers” are students that were asked the extra questions and answered at least one extra question (sexual orientation, gender identity, sexual behavior and/or sexual abuse).

**Table 22a: School-level extra question participation rates for state sample schools, 2018**

Grade	n	Not Given Extra Questions %, (N)	Asked Extra Questions %, (N)
8	61	26.2%, (16)	73.8%, (45)
10	48	14.6%, (7)	85.4%, (41)
12	52	13.5%, (7)	86.5%, (45)

**Table 22b: Student-level extra question takers by completion in state sample schools, 2018**

Grade	n	Not Asked Extra Questions		Asked Extra Question	
		& Did Not Complete Survey %	& Did Complete Survey%	& Did Not Answer Questions %	& Answered 1 or More Question %
8	8,895	33.3%	66.7%	41.7%	58.3%
10	8,096	27.1%	72.9%	12.7%	75.5%
12	5,676	23.5%	76.5%	11.3%	76.8%

For more information about survey non-completion for each individual survey question by grade level and form type, see Appendix A: Non-completion by Form Type and Grade.

### ***Extra Question Answerers Compared to Non-Extra Completers in the State Sample***

Table 23 gives rate ratios for characteristics listed in the methods, comparing students in the state sample who answered at least one extra question to those who completed the survey (completed all of the last 30 questions) but were not asked the extra questions.

Of the 54 comparison tests conducted, four showed statistically significant differences. The results were mixed, with extra answers sometimes having more risk and sometimes having less risk than students who completed the survey but did not take the extra questions.

Extra question answerers in the state sample were less likely than students who completed the survey but did not take the extra questions to report:

- Lower self-report grades in school (grade 8) and feeling unsafe at school (grade 8).
- Socioeconomic indicators –food insecurity (grade 8)

Extra question answerers in the state sample were more likely than students who completed the survey but did not take the extra questions to report:

- Socioeconomic indicators –food insecurity (grade 10)

**Table 23: State sample characteristics of students that answered extra questions compared to students who completed the survey but were not asked extra questions, 2018 risk ratio (95% confidence interval)**

Variable	State Sample Extra Answerers Compared to Non-extra Completers		
	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
<b>School factors</b>			
Low grades	<b>0.6 (0.4-0.8)</b>	1.2 (0.8-1.7)	1.0 (0.7-1.3)
Feeling unsafe at school	<b>0.8 (0.6-1.0)</b>	0.9 (0.5-1.5)	0.9 (0.7-1.1)
<b>Indicators of low socioeconomic status</b>			
Mother didn't graduate high school	0.6 (0.4-1.1)	1.2 (0.8-1.7)	1.2 (0.7-1.9)
Living situation due to finances	0.8 (0.6-1.1)	0.9 (0.7-1.1)	1.0 (0.7-1.4)
Food insecurity	<b>0.7 (0.5-0.9)</b>	<b>1.4 (1.0-1.8)</b>	1.0 (0.7-1.3)
No dental visit in last year	1.0 (0.6-1.5)	0.9 (0.7-1.2)	1.1 (0.8-1.7)
Receive free/reduced price lunch	0.7 (0.4-1.3)	1.1 (0.6-1.9)	1.1 (0.6-2.0)
<b>Substance use factors</b>			
Current cigarette smoking	0.6 (0.4-1.0)	1.2 (0.7-2.2)	1.2 (0.6-2.5)
Current e-cig/vape use	1.0 (0.7-1.4)	1.5 (0.8-2.5)	0.9 (0.6-1.2)
Current marijuana use	1.0 (0.7-1.4)	0.9 (0.7-1.2)	1.0 (0.8-1.2)
Binge drinking	1.0 (0.6-1.4)	1.3 (0.9-2.1)	1.3 (0.9-2.0)
Current alcohol drinking	1.0 (0.7-1.3)	1.2 (0.9-1.7)	1.1 (0.9-1.4)
<b>Race/ethnicity and language</b>			
Non-English spoken at home	0.8 (0.4-1.4)	1.3 (0.5-3.2)	1.1 (0.5-2.7)
White	1.0 (0.7-1.6)	0.8 (0.3-2.1)	0.8 (0.3-2.0)
Hispanic	0.7 (0.4-1.5)	1.5 (0.9-2.4)	1.5 (0.8-2.9)
American Indian/Alaska Native	1.2 (0.7-1.9)	1.8 (0.7-4.4)	1.0 (0.4-3.0)
Asian	1.2 (0.7-1.9)	1.0 (0.4-2.7)	0.8 (0.4-2.1)
Black/African American	1.2 (0.7-2.2)	0.9 (0.4-2.4)	0.8 (0.3-2.3)
Pacific Islander	0.7 (0.4-1.2)	0.8 (0.3-2.3)	1.0 (0.4-2.2)

Results do not include students from schools that did not ask the extra questions and did not complete the survey, students from schools that were asked the extra questions but did not answer any of them.

\* RR: rate ratio; 95% CI: 95% confidence interval; bolded values are statistically significant at the  $p < 0.05$  level (that is, the 95% CI does not include 1.0). A rate ratio less than 1 indicates that the characteristic is less common among students completing the survey.

\*\*Race/ethnic groups only include students who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic, then they are reported as Hispanic.

Ratio rates in bold are a significantly higher or lower for completers compared to non-completers.

### ***Extra Question Answering in the Census***

In the census, Table 24a shows the percent of schools that took the survey forms that had extra questions and those that did not. In the census, Table 24b shows the percent of students in the schools that did not ask the extra questions and if they completed the survey or not and the students in schools that asked the extra questions and if they answered the questions or not. “Extra Answerers” are students that were asked the extra questions and answered at least one extra question (sexual orientation, gender identity, sexual behavior and/or sexual abuse).

**Table 24a: School-level extra question participation rates for census schools, 2018**

Grade	n	Not Asked Extra Questions %, (N)	Asked Extra Questions %, (N)
8	61	26.2%, (16)	73.8%, (45)
10	48	14.6%, (7)	85.4%, (41)
12	52	13.5%, (7)	86.5%, (45)

**Table 24b: Student-level extra question takers by completion in census schools, 2018**

Grade	n	Not Asked Extra Questions		Asked Extra Question	
		& Did Not Complete Survey %	& Did Complete Survey %	& Did Not Answer Questions %	& Answered 1 or More Question %
8	62119	35.0%	65.0%	39.1%	60.9%
10	55761	25.7%	74.3%	28.4%	71.6%
12	39135	22.4%	77.6%	26.4%	73.6%

For more information about survey non-completion for each individual survey question by grade level and form type, see Appendix A: Non-completion by Form Type and Grade.

### ***Extra Question Answerers Compared to Non-Extra Completers in the Census***

Table 25 gives rate ratios for characteristics listed in the methods, comparing students in the census who answered at least one extra question to those who completed the survey (completed all of the last 30 questions) but were not asked the extra questions.

Of the 54 comparison tests conducted, 23 showed statistically significant differences. The results were mixed, with extra answers sometimes having more risk and sometimes having less risk than students who completed the survey but did not take the extra questions.

Extra question answerers in the census were less likely than students who completed the survey but did not take the extra questions to report:

- Lower self-report grades in school (grades 8, 10, and 12) and feeling unsafe at school (grades 10 and 12).
- Socioeconomic indicators – mother didn’t graduate high school (grade 8), living situation due to finances (grade 8), food insecurity (grade 8), receives free/reduced lunch (grades 8 and 10).
- Substance use – current cigarette smoking (grade 12), current drinking (grades 8 and 12), and binge drinking (grade 12).
- Being white (grades 8, 10, and 12), Hispanic (grades 8, 10, and 12), and American Indian/Alaska Native (grades 8 and 12).

Extra question answerers in the census were more likely than students who completed the survey but did not take the extra questions to report:

- Non-English spoken at home (grades 8, 10, and 12).
- Being Asian (grades 8, 10, and 12) and Black/African American (grades 8 and 10).

**Table 25: Census characteristics of students that answered extra questions compared to students who completed the survey but were not asked extra questions, 2018 risk ratio (95% confidence interval)**

Variable	Census Extra Answerers Compared to Non-extra Completers		
	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
<b>School factors</b>			
Low grades	<b>0.8 (0.8-0.9)</b>	<b>0.9 (0.8-0.9)</b>	<b>0.9 (0.9-1.0)</b>
Feeling unsafe at school	1.0 (0.9-1.1)	<b>0.9 (0.8-1.0)</b>	<b>0.8 (0.7-0.9)</b>
<b>Indicators of low socioeconomic status</b>			
Mother didn't graduate high school	<b>0.9 (0.8-1.0)</b>	0.9 (0.9-1.0)	0.9 (0.8-1.0)
Living situation due to finances	<b>0.9 (0.8-1.0)</b>	0.9 (0.8-1.1)	1.0 (0.9-1.1)
Food insecurity	<b>0.9 (0.9-1.0)</b>	1.0 (0.9-1.0)	1.0 (0.9-1.1)
No dental visit in last year	1.0 (0.9-1.1)	1.0 (0.9-1.1)	0.9 (0.8-1.0)
Receive free/reduced price lunch	<b>0.9 (0.8-0.9)</b>	<b>0.8 (0.8-0.9)</b>	1.0 (0.9-1.1)
<b>Substance use factors</b>			
Current cigarette smoking	1.0 (0.9-1.2)	1.0 (0.9-1.1)	<b>0.9 (0.8-1.0)</b>
Current e-cig/vape use	1.0 (0.9-1.1)	1.0 (0.9-1.1)	0.9 (0.8-1.0)
Current marijuana use	0.9 (0.9-1.0)	1.0 (0.9-1.0)	1.0 (1.0-1.1)
Binge drinking	0.9 (0.8-1.0)	1.0 (0.9-1.1)	<b>1.1 (1.0-1.3)</b>
Current alcohol drinking	<b>0.9 (0.8-1.0)</b>	1.0 (0.9-1.1)	<b>1.2 (1.1-1.2)</b>
<b>Race/ethnicity and language</b>			
Non-English spoken at home	<b>1.2 (1.1-1.3)</b>	<b>1.1 (1.0-1.2)</b>	<b>1.1 (1.0-1.2)</b>
White	<b>0.9 (0.8-0.9)</b>	<b>0.8 (0.8-0.9)</b>	<b>0.8 (0.8-0.9)</b>
Hispanic	<b>0.9 (0.8-1.0)</b>	<b>0.9 (0.9-1.0)</b>	1.0 (0.9-1.1)
American Indian/Alaska Native	<b>0.8 (0.7-1.0)</b>	1.0 (0.8-1.2)	<b>0.7 (0.6-0.9)</b>
Asian	<b>1.7 (1.6-1.9)</b>	<b>1.7 (1.6-1.9)</b>	<b>1.8 (1.6-2.0)</b>
Black/African American	<b>1.5 (1.3-1.7)</b>	<b>1.2 (1.0-1.4)</b>	1.2 (1.0-1.4)
Pacific Islander	1.2 (1.0-1.4)	0.9 (0.8-1.2)	1.2 (0.9-1.5)

Results do not include students from schools that did not ask the extra questions and did not complete the survey, students from schools that were asked the extra questions but did not answer any of them.

\* RR: rate ratio; 95% CI: 95% confidence interval; bolded values are statistically significant at the  $p < 0.05$  level (that is, the 95% CI does not include 1.0). A rate ratio less than 1 indicates that the characteristic is less common among students completing the survey.

\*\*Race/ethnic groups only include students who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic, then they are reported as Hispanic.

Ratio rates in bold are a significantly higher or lower for completers compared to non-completers.



## 8. Race/Ethnicity Comparisons

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### Methods

On the HYS, students select the race(s) and or ethnicity that best describes them. They can select multiple responses. These responses are collapsed into the following categories:

- White non-Hispanic
- Hispanic
- American Indian/Alaska Native non-Hispanic
- Asian non-Hispanic
- Black/African American non-Hispanic
- Pacific Islander non-Hispanic
- Other race non-Hispanic
- Multiracial non-Hispanic (if student selected two or more race groups)

The Office of Superintendent of Public Instruction collects similar data on race and ethnicity from school districts. Districts ask if parents two questions; if their student is Hispanic and then asks a question about race. The race question does not include an option for “Other”. To compare HYS and school reported race/ethnicity, “Other” was dropped from the HYS responses.

We also compared students based on questions assessing personal characteristics found early in the main body of the survey. The characteristics for student-level comparisons include student reports of:

- School factors
  - Low self-report grades (mostly Cs, Ds or Fs at school)
  - Feeling unsafe at school (answers of “definitely no” or “mostly no” to a question about feeling safe at school)
  - Being bullied at school
  - Carrying a weapon at school
- Indicators of low socioeconomic status
  - Mother not completing high school
  - Living situation due to family finances
  - Food insecurity (family cutting meal size or skipping meals in past 12 months due of lack of money)
  - No recent dental visit (not visiting dentist for a check-up in the past year)
- Behavioral factors
  - Cigarette smoking (any in the past 30 days)
  - E-cigarette/vape use (any in the past 30 days)
  - Marijuana use (any in the past 30 days)
  - Drinking alcohol (any in the past 30 days)
  - Binge drinking (drinking 5 or more drinks on any one occasion in the past two weeks)
- Race and ethnicity
  - Race and Hispanic ethnicity
  - Non-English language spoken at home
- Sexual behavior and sexual orientation
  - Ever had sex
  - Sex before age 13
  - Four or more sexual partners
  - Describe themselves as gay, lesbian, bisexual, or questioning
  - Gender identity as something other than male or female

We conducted separate analyses by grade. We developed rate ratios to assess differences between categories of participants. Comparisons are of students in the state sample schools compared to census school students.

## Results

### ***Comparing Student and School Reported Race/Ethnicity***

Table 26a-f is the average difference between how students' self-reported race in HYS and race is reported to schools through OSPI's data collection system. Comparing OSPI state race/ethnicity results to those reported on HYS for state sample, HYS reported:

- Mixed proportions of Hispanic or Latino students – higher in grades 8 and 10, but lower in grades 6 and 12.
- Lower proportions of White non-Hispanic students.
- Higher proportions of American Indian/Alaska Native students.
- Higher proportions of Asian students.
- Similar proportions of Black or African American students.
- Higher proportions of Native Hawaiian or other Pacific Islander students.
- Lower proportions of multi-racial students.

**Table 26a-f. State sample student HYS report and school\* reported race/ethnicity comparisons, 2018**

#### **a. Hispanic or Latino**

Grade	HYS %	OSPI %	Difference
6	25%	25%	0%
8	19%	24%	5%
10	21%	23%	2%
12	23%	21%	-2%

#### **e. Black or African American non-Hispanic**

Grade	HYS %	OSPI %	Difference
6	5%	5%	0%
8	5%	5%	0%
10	6%	6%	0%
12	6%	6%	0%

#### **b. White non-Hispanic**

Grade	HYS %	OSPI %	Difference
6	44%	52%	8%
8	52%	54%	2%
10	46%	55%	9%
12	46%	55%	9%

#### **f. Native Hawaiian or other Pacific Islander non-Hispanic**

Grade	HYS %	OSPI %	Difference
6	2%	1%	-1%
8	2%	1%	-1%
10	2%	1%	-1%
12	2%	1%	-1%

#### **c. American Indian/Alaska Native non-Hispanic**

Grade	HYS %	OSPI %	Difference
6	7%	1%	-6%
8	4%	1%	-3%
10	2%	1%	-1%
12	2%	1%	-1%

#### **g. Multi-racial, Two or More Races**

Grade	HYS %	OSPI %	Difference
6	7%	9%	2%
8	8%	8%	0%
10	7%	7%	0%
12	6%	7%	1%

#### **d. Asian non-Hispanic**

Grade	HYS %	OSPI %	Difference
6	9%	8%	-1%
8	10%	8%	-2%
10	15%	8%	-7%
12	12%	8%	-4%

\*School reported race/ethnicity provided by OSPI, <http://www.k12.wa.us/DataAdmin/enrollment.aspx>.

**Table 27a-f. Census student HYS report and school\* reported race/ethnicity comparisons, 2018**

**a. Hispanic or Latino**

Grade	HYS %	OSPI &	% Difference
6	23%	25%	2%
8	23%	24%	1%
10	21%	23%	2%
12	22%	21%	-1%

**g. Black or African American non-Hispanic**

Grade	HYS %	OSPI &	% Difference
6	6%	5%	-1%
8	5%	5%	0%
10	4%	6%	2%
12	4%	6%	2%

**b. White non-Hispanic**

Grade	HYS %	OSPI &	% Difference
6	40%	52%	12%
8	48%	54%	6%
10	53%	55%	2%
10	55%	57%	2%

**e. Native Hawaiian or other Pacific Islander non-Hispanic**

Grade	HYS %	OSPI &	% Difference
6	2%	1%	-1%
8	2%	1%	-1%
10	2%	1%	-1%
12	2%	1%	-1%

**c. American Indian/Alaska Native non-Hispanic**

Grade	HYS %	OSPI &	% Difference
6	7%	1%	-6%
8	4%	1%	-3%
10	2%	1%	-1%
12	2%	1%	-1%

**f. Multi-racial, Two or More Races**

Grade	HYS %	OSPI &	% Difference
6	9%	9%	0%
8	7%	8%	1%
10	6%	7%	1%
12	6%	7%	1%

**d. Asian non-Hispanic**

Grade	HYS %	OSPI &	% Difference
6	12%	8%	-4%
8	11%	8%	-3%
10	10%	8%	-2%
12	9%	8%	-1%

\*School reported race/ethnicity provided by OSPI, <http://www.k12.wa.us/DataAdmin/enrollment.aspx>

See Appendix E: Comparing Student Characteristics in the State Sample and Census among Race/Ethnicity Groups

***State Sample Students Compared to Census Students***

Tables 28a gives rate ratios for characteristics listed above comparing students in the state sample to students in census schools, first for all students and then by each race/ethnic group.

Of the 603 comparison tests conducted, 23 showed statistically significant differences:

- Three among white non-Hispanic students
- One among Hispanic students
- Three among American Indian/Alaska Native non-Hispanic students
- Ten among Asian non-Hispanic students
- Two among Black/African American non-Hispanic students
- One among Pacific Islander non-Hispanic students
- Two among other race non-Hispanic students
- One among multi-racial non-Hispanic students

### All Students

Of the 66 comparison tests conducted, none showed statistically significant differences. Census students reported similar to state sample students.

**Table 28a: Student characteristics in the state sample compared to the census among all students, 2018 rate ratio (95% confidence interval)**

Variable	State Sample Compared to Census by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
<b>Indicators of low socioeconomic status</b>				
Mother didn't graduate high school	na	1.2 (0.9, 1.5)	0.9 (0.7, 1.1)	0.9 (0.7, 1.1)
Living situation due to finances	na	0.9 (0.8, 1.0)	1.0 (0.9, 1.1)	1.0 (0.9, 1.1)
Food insecurity	na	1.0 (0.9, 1.2)	1.0 (0.9, 1.1)	0.9 (0.8, 1.1)
No dental visit in last year	na	1.1 (1.0, 1.2)	0.9 (0.8, 1.0)	0.9 (0.8, 1.1)
<b>School, related measures</b>				
Low self, report grades in school	1.0 (0.9, 1.1)	1.1 (0.9, 1.2)	1.0 (0.8, 1.1)	1.0 (0.8, 1.1)
Unsafe at school	1.0 (0.9, 1.1)	1.0 (0.9, 1.1)	1.0 (0.8, 1.2)	0.9 (0.8, 1.1)
Bullied at school	1.0 (0.9, 1.1)	1.0 (0.9, 1.1)	1.0 (1.0, 1.1)	1.0 (0.9, 1.1)
Carried weapons at school	0.9 (0.8, 1.1)	1.0 (0.9, 1.1)	0.9 (0.8, 1.1)	0.9 (0.8, 1.1)
<b>Substance use factors</b>				
Current cigarette smoking	0.9 (0.7, 1.2)	1.1 (0.9, 1.4)	1.1 (0.9, 1.3)	1.1 (0.9, 1.3)
Current e-cig/vape use	1.0 (0.8, 1.1)	1.0 (0.9, 1.2)	1.0 (0.9, 1.2)	1.0 (0.9, 1.2)
Current marijuana use	0.9 (0.8, 1.2)	1.1 (0.9, 1.2)	1.0 (0.9, 1.1)	1.0 (0.9, 1.1)
Current alcohol drinking	0.9 (0.8, 1.1)	1.0 (0.9, 1.2)	1.0 (0.9, 1.1)	1.1 (1.0, 1.2)
Binge drinking	1.0 (0.8, 1.1)	1.0 (0.9, 1.2)	1.0 (0.9, 1.2)	1.1 (1.0, 1.2)
<b>Sexual behavior</b>				
Ever had sex	na	1.0 (0.8, 1.2)	0.9 (0.8, 1.0)	1.0 (0.9, 1.2)
Sex before age 13	na	0.7 (0.5, 1.1)	0.9 (0.8, 1.1)	1.1 (0.9, 1.3)
4 or more sexual partners	na	1.0 (0.7, 1.4)	0.9 (0.8, 1.1)	1.0 (0.9, 1.1)
<b>Demographics</b>				
Non- English spoken at home	1.1 (0.9, 1.4)	1.2 (0.9, 1.5)	0.8 (0.7, 1.0)	0.9 (0.7, 1.2)
Gay, lesbian, bisexual, questioning	na	1.0 (0.9, 1.1)	1.0 (0.9, 1.1)	1.0 (0.9, 1.2)
Gender – not male or female	na	1.0 (0.8, 1.2)	1.0 (0.9, 1.1)	1.1 (0.9, 1.3)

\* RR: rate ratio; 95% CI: 95% confidence interval; **bolded values are statistically significant at the  $p < 0.05$  level (that is, the 95% CI does not include 1.0).** A rate ratio less than 1 indicates that the characteristic is less common among students completing the survey.

Ratio rates in bold are a significantly higher or lower for completers compared to non-completers.

### White non-Hispanic Students

Of the 66 comparison tests conducted, three showed statistically significant differences. Census white students were less likely than state sample students to report:

- Mother didn't graduate from high school (grade 10)
- Carrying a weapon at school (grade 12)
- Sex before age 13 (grade 8)

**Table 28b: Student characteristics in the state sample compared to the census among White non-Hispanics, 2018 rate ratio (95% confidence interval)**

Variable	State Sample Compared to Census by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
<b>Indicators of low socioeconomic status</b>				
Mother didn't graduate high school	na	1.2 (1.0, 1.4)	<b>0.8 (0.6, 1.0)</b>	0.8 (0.7, 1.0)
Living situation due to finances	na	0.9 (0.8, 1.1)	1.0 (0.9, 1.2)	1.0 (0.9, 1.2)
Food insecurity	na	1.0 (0.9, 1.2)	1.0 (0.8, 1.1)	0.9 (0.8, 1.0)
No dental visit in last year	na	1.1 (0.9, 1.3)	0.9 (0.7, 1.0)	0.9 (0.8, 1.1)
<b>School, related measures</b>				
Low self, report grades in school	1.1 (0.9, 1.2)	1.0 (0.9, 1.2)	1.0 (0.8, 1.1)	1.0 (0.8, 1.1)
Unsafe at school	1.0 (0.8, 1.2)	1.0 (0.9, 1.2)	1.0 (0.8, 1.2)	0.9 (0.7, 1.1)
Bullied at school	1.0 (0.9, 1.1)	1.0 (0.9, 1.1)	1.0 (0.9, 1.1)	0.9 (0.8, 1.0)
Carried weapons at school	1.0 (0.7, 1.3)	1.1 (0.9, 1.3)	0.8 (0.7, 1.0)	<b>0.8 (0.7, 1.0)</b>
<b>Substance use factors</b>				
Current cigarette smoking	0.9 (0.6, 1.2)	1.2 (0.9, 1.5)	1.1 (0.9, 1.4)	1.0 (0.8, 1.2)
Current e-cig/vape use	0.9 (0.7, 1.1)	1.1 (1.0, 1.4)	1.0 (0.9, 1.1)	1.0 (0.9, 1.2)
Current marijuana use	0.8 (0.6, 1.2)	1.1 (0.9, 1.3)	0.9 (0.8, 1.0)	1.0 (0.9, 1.1)
Current alcohol drinking	1.0 (0.7, 1.3)	1.0 (0.9, 1.1)	1.0 (0.9, 1.1)	1.1 (1.0, 1.2)
Binge drinking	1.0 (0.7, 1.4)	1.0 (0.8, 1.2)	1.0 (0.9, 1.1)	1.0 (0.9, 1.2)
<b>Sexual behavior</b>				
Ever had sex	na	1.1 (0.9, 1.3)	0.9 (0.8, 1.0)	1.0 (0.9, 1.1)
Sex before age 13	na	<b>0.5 (0.2, 1.0)</b>	0.9 (0.7, 1.1)	0.8 (0.7, 1.0)
4 or more sexual partners	na	0.8 (0.5, 1.2)	0.9 (0.6, 1.1)	0.9 (0.7, 1.0)
<b>Demographics</b>				
Non- English spoken at home	1.2 (0.9, 1.5)	1.2 (0.9, 1.4)	0.9 (0.7, 1.2)	0.9 (0.7, 1.2)
Gay, lesbian, bisexual, questioning	na	1.0 (0.8, 1.1)	0.9 (0.8, 1.0)	1.1 (0.9, 1.3)
Gender , not male or female	na	1.1 (0.9, 1.3)	0.9 (0.8, 1.1)	1.0 (0.8, 1.3)

\* RR: rate ratio; 95% CI: 95% confidence interval; bolded values are statistically significant at the  $p < 0.05$  level (that is, the 95% CI does not include 1.0). A rate ratio less than 1 indicates that the characteristic is less common among students completing the survey.

\*\*Race/ethnic groups only include students who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic, then they are reported as Hispanic. Ratio rates in bold are a significantly higher or lower for completers compared to non-completers.

### Hispanic Students

Of the 66 comparison tests conducted, one showed statistically significant differences. Census Hispanic students were less likely than state sample students to report:

- Current marijuana use (grade 10)

**Table 28c: Hispanic student characteristics for state sample compared to census schools, 2018 rate ratio (95% confidence interval)**

Variable	State Sample Compared to Census by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
<b>Indicators of low socioeconomic status</b>				
Mother didn't graduate high school	na	1.0 (0.8, 1.3)	1.0 (0.8, 1.2)	0.9 (0.7, 1.2)
Living situation due to finances	na	0.9 (0.7, 1.1)	1.1 (0.9, 1.3)	0.9 (0.7, 1.1)
Food insecurity	na	1.0 (0.8, 1.1)	1.1 (0.9, 1.2)	1.0 (0.9, 1.1)
No dental visit in last year	na	1.1 (0.9, 1.3)	1.1 (0.9, 1.3)	0.9 (0.8, 1.1)
<b>School, related measures</b>				
Low self, report grades in school	1.0 (0.9, 1.1)	1.1 (1.0, 1.2)	0.9 (0.8, 1.1)	1.0 (0.8, 1.2)
Unsafe at school	1.1 (0.9, 1.2)	0.9 (0.8, 1.1)	1.0 (0.8, 1.2)	1.1 (0.9, 1.2)
Bullied at school	1.0 (0.8, 1.1)	1.0 (0.9, 1.1)	1.1 (0.9, 1.2)	1.1 (0.9, 1.2)
Carried weapons at school	1.0 (0.7, 1.4)	0.9 (0.7, 1.2)	1.0 (0.7, 1.3)	1.1 (0.8, 1.4)
<b>Substance use factors</b>				
Current cigarette smoking	1.0 (0.7, 1.6)	1.0 (0.8, 1.3)	0.8 (0.7, 1.0)	1.1 (0.8, 1.5)
Current e-cig/vape use	1.0 (0.8, 1.3)	0.9 (0.7, 1.1)	0.8 (0.7, 1.0)	0.9 (0.7, 1.1)
Current marijuana use	1.0 (0.7, 1.5)	1.1 (0.9, 1.3)	<b>0.9 (0.8, 1.0)</b>	0.9 (0.8, 1.0)
Current alcohol drinking	1.1 (0.8, 1.4)	1.1 (0.9, 1.3)	0.9 (0.8, 1.0)	1.0 (0.8, 1.1)
Binge drinking	1.1 (0.8, 1.5)	1.0 (0.9, 1.3)	0.9 (0.8, 1.1)	1.0 (0.8, 1.2)
<b>Sexual behavior</b>				
Ever had sex	na	0.9 (0.7, 1.3)	0.9 (0.7, 1.0)	1.1 (0.9, 1.3)
Sex before age 13	na	0.6 (0.3, 1.3)	0.9 (0.7, 1.1)	1.2 (0.8, 1.9)
4 or more sexual partners	na	0.9 (0.4, 1.8)	0.8 (0.6, 1.1)	1.0 (0.8, 1.2)
<b>Demographics</b>				
Non- English spoken at home	1.1 (0.9, 1.3)	1.0 (0.8, 1.3)	0.9 (0.8, 1.1)	1.1 (0.8, 1.3)
Gay, lesbian, bisexual, questioning	na	1.0 (0.8, 1.2)	1.0 (0.9, 1.2)	1.1 (0.8, 1.3)
Gender , not male or female	na	1.0 (0.7, 1.3)	1.0 (0.8, 1.3)	1.5 (0.9, 2.3)

\* RR: rate ratio; 95% CI: 95% confidence interval; **bolded values are statistically significant at the  $p < 0.05$  level (that is, the 95% CI does not include 1.0).** A rate ratio less than 1 indicates that the characteristic is less common among students completing the survey.

\*\*Race/ethnic groups only include students who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic, then they are reported as Hispanic. Ratio rates in bold are a significantly higher or lower for completers compared to non-completers.

### American Indian/Alaska Native non-Hispanic Students

Of the 66 comparison tests conducted, two showed statistically significant differences. Census AI/AN students were more likely than state sample students to report:

- Living situation due to finances (grade 10)
- Current cigarette smoking (grade 10)

**Table 28d: Student characteristics in the state sample compared to the census among American Indian/Alaska Native non-Hispanics, 2018 rate ratio (95% confidence interval)**

Variable	State Sample Compared to Census by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
<b>Indicators of low socioeconomic status</b>				
Mother didn't graduate high school	na	0.8 (0.6, 1.1)	1.1 (0.8, 1.6)	0.7 (0.5, 1.0)
Living situation due to finances	na	1.2 (0.8, 1.8)	<b>1.6 (1.0, 2.5)</b>	1.0 (0.5, 1.8)
Food insecurity	na	1.1 (0.9, 1.4)	1.1 (0.8, 1.5)	1.1 (0.8, 1.6)
No dental visit in last year	na	1.2 (0.9, 1.6)	0.9 (0.6, 1.2)	1.0 (0.7, 1.5)
<b>School, related measures</b>				
Low self, report grades in school	1.1 (0.9, 1.3)	1.0 (0.8, 1.4)	1.2 (0.9, 1.6)	1.1 (0.7, 1.5)
Unsafe at school	1.1 (0.9, 1.3)	0.9 (0.7, 1.2)	1.0 (0.7, 1.3)	0.9 (0.7, 1.2)
Bullied at school	0.9 (0.8, 1.0)	1.2 (0.9, 1.4)	1.0 (0.8, 1.3)	1.1 (0.7, 1.6)
Carried weapons at school	0.8 (0.6, 1.2)	1.0 (0.7, 1.5)	0.9 (0.6, 1.3)	1.5 (0.9, 2.6)
<b>Substance use factors</b>				
Current cigarette smoking	2.1 (0.9, 4.6)	0.9 (0.6, 1.3)	<b>1.7 (1.1, 2.8)</b>	1.5 (0.9, 2.5)
Current e-cig/vape use	1.2 (0.8, 1.8)	0.9 (0.6, 1.3)	0.8 (0.5, 1.1)	0.9 (0.6, 1.5)
Current marijuana use	1.5 (0.8, 3.0)	0.8 (0.6, 1.2)	0.9 (0.6, 1.2)	0.8 (0.6, 1.0)
Current alcohol drinking	1.3 (0.8, 2.0)	0.9 (0.6, 1.2)	0.9 (0.6, 1.2)	1.2 (0.8, 1.7)
Binge drinking	1.1 (0.7, 1.7)	0.9 (0.6, 1.5)	1.2 (0.7, 1.9)	1.0 (0.6, 1.5)
<b>Sexual behavior</b>				
Ever had sex	na	1.1 (0.6, 2.0)	1.0 (0.7, 1.4)	0.8 (0.4, 1.7)
Sex before age 13	na	0.9 (0.3, 3.3)	2.3 (1.0, 5.5)	1.4 (0.6, 3.1)
4 or more sexual partners	na	0.5 (0.2, 1.1)	0.7 (0.3, 1.5)	1.7 (0.7, 4.3)
<b>Demographics</b>				
Non- English spoken at home	1.0 (0.7, 1.3)	1.3 (0.9, 1.8)	0.9 (0.6, 1.4)	1.2 (0.7, 2.0)
Gay, lesbian, bisexual, questioning	na	1.0 (0.8, 1.4)	1.0 (0.7, 1.3)	1.2 (0.8, 1.7)
Gender , not male or female	na	1.1 (0.6, 2.0)	1.2 (0.8, 2.0)	1.2 (0.6, 2.4)

\* RR: rate ratio; 95% CI: 95% confidence interval; bolded values are statistically significant at the  $p < 0.05$  level (that is, the 95% CI does not include 1.0). A rate ratio less than 1 indicates that the characteristic is less common among students completing the survey.

\*\*Race/ethnic groups only include students who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic, then they are reported as Hispanic. Ratio rates in bold are a significantly higher or lower for completers compared to non-completers.

### Asian non-Hispanic Students

Of the 66 comparison tests conducted, 11 showed statistically significant differences Census Asian students were more likely than state sample students to report:

- Non- English language spoken at home (grade 10)
- Current cigarette smoking (grade 12), current alcohol drinking (grade 12), and binge drinking (grade 12)

Census Asian students were less likely than state sample students to report:

- Mother didn't graduation high school (grades 10 and 12)
- Feeling unsafe at school (grade 8)
- Current e-cig/vape use (grade 6), current marijuana use (grade 6), and binge drinking (grade 8)
- Non- English language spoken at home (grade 10)

**Table 28e: Student characteristics in the state sample compared to the census among Asian non-Hispanics, 2018 rate ratio (95% confidence interval)**

Variable	State Sample Compared to Census by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
<b>Indicators of low socioeconomic status</b>				
Mother didn't graduate HS	na	0.9 (0.6, 1.3)	<b>0.7 (0.5, 1.0)</b>	<b>0.6 (0.4, 0.9)</b>
Living situation due to finances	na	0.9 (0.7, 1.2)	0.9 (0.7, 1.2)	0.9 (0.7, 1.3)
Food insecurity	na	1.0 (0.7, 1.4)	1.0 (0.8, 1.2)	0.9 (0.7, 1.2)
No dental visit in last year	na	1.2 (0.9, 1.5)	1.0 (0.8, 1.3)	1.0 (0.7, 1.4)
<b>School, related measures</b>				
Low self, report grades in school	0.9 (0.8, 1.2)	1.1 (0.8, 1.4)	0.9 (0.7, 1.1)	1.1 (0.9, 1.3)
Unsafe at school	1.2 (0.9, 1.4)	<b>0.8 (0.6, 0.9)</b>	1.0 (0.8, 1.3)	1.1 (0.9, 1.5)
Bullied at school	0.9 (0.8, 1.1)	1.0 (0.8, 1.1)	1.0 (0.9, 1.2)	1.1 (0.9, 1.3)
Carried weapons at school	0.9 (0.5, 1.5)	0.8 (0.6, 1.2)	1.0 (0.7, 1.4)	1.2 (0.8, 1.7)
<b>Substance use factors</b>				
Current cigarette smoking	0.9 (0.5, 1.6)	1.1 (0.7, 1.9)	1.1 (0.7, 1.7)	<b>1.9 (1.1, 3.2)</b>
Current e-cig/vape use	<b>0.7 (0.5, 1.0)</b>	1.0 (0.6, 1.4)	1.0 (0.8, 1.3)	1.3 (1.0, 1.7)
Current marijuana use	<b>0.5 (0.3, 0.9)</b>	0.8 (0.6, 1.2)	0.9 (0.7, 1.1)	1.2 (0.9, 1.5)
Current alcohol drinking	0.8 (0.5, 1.2)	1.0 (0.7, 1.4)	0.9 (0.8, 1.1)	<b>1.3 (1.1, 1.6)</b>
Binge drinking	1.0 (0.6, 1.6)	<b>0.7 (0.5, 1.0)</b>	1.1 (0.8, 1.6)	<b>1.5 (1.1, 2.0)</b>
<b>Sexual behavior</b>				
Ever had sex	na	1.3 (0.7, 2.3)	0.8 (0.6, 1.1)	1.3 (0.9, 1.8)
Sex before age 13	na	1.6 (0.5, 5.5)	1.0 (0.6, 1.5)	1.7 (0.8, 3.5)
4 or more sexual partners	na	0.5 (0.1, 1.9)	0.8 (0.4, 1.5)	1.3 (0.7, 2.7)
<b>Demographics</b>				
Non- English spoken at home	1.3 (1.0, 1.7)	1.1 (0.8, 1.5)	<b>0.8 (0.7, 0.9)</b>	0.9 (0.7, 1.1)
Gay, lesbian, bisexual, questioning	na	1.0 (0.8, 1.2)	1.1 (0.9, 1.3)	1.0 (0.8, 1.2)
Gender , not male or female	na	0.8 (0.6, 1.1)	1.0 (0.7, 1.4)	0.9 (0.7, 1.4)

\* RR: rate ratio; 95% CI: 95% confidence interval; bolded values are statistically significant at the  $p < 0.05$  level (that is, the 95% CI does not include 1.0). A rate ratio less than 1 indicates that the characteristic is less common among students completing the survey.

\*\*Race/ethnic groups only include students who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic, then they are reported as Hispanic. Ratio rates in bold are a significantly higher or lower for completers compared to non-completers.



### Black/African American non-Hispanic Students

Of the 66 comparison tests conducted, two showed statistically significant differences. Census Black/African American students were more likely than state sample students to report:

- Being bullied at school (grade 10)

Census Black/African American students were less likely than state sample students to report:

- Carrying a weapon at school (grade 8)

**Table 28f: Student characteristics in the state sample compared to the census among Black/African American non-Hispanics, 2018 rate ratio (95% confidence interval)**

Variable	State Sample Compared to Census by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
<b>Indicators of low socioeconomic status</b>				
Mother didn't graduate high school	na	1.0 (0.7, 1.4)	0.8 (0.6, 1.0)	1.2 (0.8, 1.6)
Living situation due to finances	na	0.8 (0.6, 1.1)	1.2 (0.8, 1.6)	1.1 (0.7, 1.6)
Food insecurity	na	1.3 (1.0, 1.7)	1.0 (0.8, 1.2)	1.0 (0.7, 1.3)
No dental visit in last year	na	1.0 (0.8, 1.4)	0.9 (0.7, 1.2)	1.1 (0.8, 1.6)
<b>School, related measures</b>				
Low self, report grades in school	1.1 (0.9, 1.3)	1.0 (0.8, 1.2)	0.9 (0.8, 1.1)	0.9 (0.7, 1.1)
Unsafe at school	1.0 (0.8, 1.3)	0.9 (0.8, 1.2)	1.0 (0.8, 1.2)	1.1 (0.9, 1.5)
Bullied at school	0.9 (0.8, 1.0)	1.2 (0.9, 1.5)	<b>1.2 (1.0, 1.5)</b>	0.9 (0.7, 1.1)
Carried weapons at school	1.0 (0.6, 1.5)	<b>0.7 (0.5, 0.9)</b>	1.1 (0.8, 1.5)	1.3 (0.8, 2.1)
<b>Substance use factors</b>				
Current cigarette smoking	1.2 (0.7, 2.1)	1.0 (0.6, 1.6)	1.2 (0.9, 1.7)	1.4 (0.9, 2.2)
Current e-cig/vape use	0.9 (0.6, 1.4)	0.9 (0.6, 1.2)	1.0 (0.7, 1.4)	1.3 (0.9, 1.8)
Current marijuana use	0.9 (0.5, 1.6)	1.1 (0.8, 1.5)	1.0 (0.8, 1.2)	1.0 (0.8, 1.3)
Current alcohol drinking	1.0 (0.7, 1.5)	1.2 (0.9, 1.7)	1.1 (0.8, 1.4)	1.1 (0.8, 1.4)
Binge drinking	1.3 (0.7, 2.2)	1.1 (0.8, 1.7)	1.1 (0.8, 1.6)	1.2 (0.8, 1.7)
<b>Sexual behavior</b>				
Ever had sex	na	0.9 (0.6, 1.4)	1.0 (0.8, 1.3)	1.0 (0.7, 1.5)
Sex before age 13	na	0.4 (0.1, 2.6)	0.9 (0.5, 1.5)	1.9 (0.8, 4.2)
4 or more sexual partners	na	1.3 (0.4, 4.1)	0.9 (0.5, 1.6)	1.4 (0.8, 2.5)
<b>Demographics</b>				
Non- English spoken at home	1.2 (0.9, 1.6)	0.9 (0.6, 1.2)	1.0 (0.7, 1.4)	1.0 (0.7, 1.5)
Gay, lesbian, bisexual, questioning	na	0.8 (0.7, 1.1)	1.1 (0.9, 1.4)	1.0 (0.7, 1.3)
Gender, not male or female	na	0.9 (0.6, 1.5)	1.2 (0.8, 1.8)	1.4 (0.8, 2.3)

\* RR: rate ratio; 95% CI: 95% confidence interval; bolded values are statistically significant at the  $p < 0.05$  level (that is, the 95% CI does not include 1.0). A rate ratio less than 1 indicates that the characteristic is less common among students completing the survey.

\*\*Race/ethnic groups only include students who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic, then they are reported as Hispanic. Ratio rates in bold are a significantly higher or lower for completers compared to non-completers.

### Pacific Islander non-Hispanic Students

Of the 66 comparison tests conducted, one showed statistically significant differences. Census Pacific Islander students were more likely than state sample students to report:

- Non- English spoken at home (Grade 12)

**Table 28g: Student characteristics in the state sample compared to the census among Pacific Islander non-Hispanics, 2018 rate ratio (95% confidence interval)**

Variable	State Sample Compared to Census by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
<b>Indicators of low socioeconomic status</b>				
Mother didn't graduate high school	na	1.1 (0.7, 1.6)	0.8 (0.6, 1.1)	0.8 (0.5, 1.3)
Living situation due to finances	na	0.7 (0.5, 1.2)	1.4 (0.8, 2.5)	1.2 (0.7, 2.2)
Food insecurity	na	1.1 (0.8, 1.5)	1.0 (0.8, 1.3)	1.2 (0.9, 1.6)
No dental visit in last year	na	1.1 (0.7, 1.5)	0.8 (0.5, 1.3)	1.4 (1.0, 1.9)
<b>School, related measures</b>				
Low self, report grades in school	1.0 (0.9, 1.3)	0.9 (0.7, 1.1)	1.0 (0.8, 1.3)	1.1 (0.8, 1.4)
Unsafe at school	1.0 (0.8, 1.2)	0.8 (0.6, 1.1)	1.0 (0.7, 1.4)	0.9 (0.6, 1.3)
Bullied at school	0.9 (0.8, 1.0)	1.2 (0.9, 1.6)	1.0 (0.8, 1.3)	1.1 (0.8, 1.5)
Carried weapons at school	1.3 (0.7, 2.5)	0.8 (0.5, 1.3)	1.1 (0.6, 1.9)	1.2 (0.6, 2.2)
<b>Substance use factors</b>				
Current cigarette smoking	1.4 (0.6, 3.1)	1.0 (0.5, 1.9)	0.9 (0.6, 1.5)	1.4 (0.9, 2.2)
Current e-cig/vape use	0.9 (0.6, 1.3)	1.2 (0.7, 1.9)	0.9 (0.6, 1.3)	1.0 (0.7, 1.4)
Current marijuana use	0.9 (0.5, 1.4)	1.1 (0.7, 1.7)	1.0 (0.7, 1.4)	1.0 (0.7, 1.5)
Current alcohol drinking	0.9 (0.6, 1.5)	1.0 (0.7, 1.5)	1.0 (0.7, 1.5)	1.1 (0.8, 1.6)
Binge drinking	1.0 (0.5, 1.7)	0.8 (0.5, 1.2)	1.4 (0.8, 2.2)	1.3 (0.8, 2.2)
<b>Sexual behavior</b>				
Ever had sex	na	0.6 (0.3, 1.1)	0.7 (0.5, 1.1)	1.2 (0.7, 2.1)
Sex before age 13	na	1.4 (0.4, 5.3)	1.1 (0.6, 2.0)	1.6 (0.6, 4.3)
4 or more sexual partners	na	0.8 (0.2, 2.8)	0.9 (0.4, 2.3)	1.5 (0.6, 4.3)
<b>Demographics</b>				
Non- English spoken at home	1.2 (0.9, 1.6)	1.0 (0.7, 1.4)	1.2 (0.9, 1.7)	<b>1.5 (1.0, 2.2)</b>
Gay, lesbian, bisexual, questioning	na	1.0 (0.7, 1.4)	0.9 (0.6, 1.2)	1.1 (0.8, 1.6)
Gender , not male or female	na	1.6 (0.7, 3.7)	1.1 (0.7, 2.0)	1.1 (0.9, 1.3)

\* RR: rate ratio; 95% CI: 95% confidence interval; **bolded values are statistically significant at the  $p < 0.05$  level (that is, the 95% CI does not include 1.0).** A rate ratio less than 1 indicates that the characteristic is less common among students completing the survey.

\*\*Race/ethnic groups only include students who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic, then they are reported as Hispanic. Ratio rates in bold are a significantly higher or lower for completers compared to non-completers.

### Other Race non-Hispanic Students

Of the 66 comparison tests conducted, two showed statistically significant differences. Census other race students were more likely than state sample students to report:

- Food insecurity (grade 8)
- Carried weapon at school (grade 10)

**Table 28h: Student characteristics in the state sample compared to the census among Other race non-Hispanics, 2018 rate ratio (95% confidence interval)**

Variable	State Sample Compared to Census by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
<b>Indicators of low socioeconomic status</b>				
Mother didn't graduate high school	na	1.1 (0.9, 1.5)	1.1 (0.8, 1.4)	1.0 (0.7, 1.5)
Living situation due to finances	na	1.0 (0.8, 1.3)	1.4 (1.0, 2.1)	0.9 (0.6, 1.4)
Food insecurity	na	<b>1.3 (1.0, 1.7)</b>	0.9 (0.7, 1.2)	1.0 (0.8, 1.4)
No dental visit in last year	na	1.1 (0.9, 1.4)	1.1 (0.8, 1.6)	1.0 (0.7, 1.4)
<b>School, related measures</b>				
Low self, report grades in school	1.0 (0.9, 1.2)	1.0 (0.8, 1.2)	1.2 (1.0, 1.4)	1.1 (0.8, 1.5)
Unsafe at school	1.0 (0.9, 1.1)	0.9 (0.8, 1.1)	0.8 (0.6, 1.0)	1.2 (0.9, 1.6)
Bullied at school	1.0 (0.9, 1.1)	1.0 (0.9, 1.2)	1.1 (0.9, 1.2)	0.8 (0.6, 1.1)
Carried weapons at school	1.0 (0.7, 1.4)	0.8 (0.6, 1.1)	<b>1.9 (1.2, 3.0)</b>	1.1 (0.7, 1.6)
<b>Substance use factors</b>				
Current cigarette smoking	0.9 (0.6, 1.3)	1.2 (0.8, 1.8)	1.0 (0.7, 1.3)	0.8 (0.6, 1.2)
Current e-cig/vape use	1.0 (0.8, 1.3)	1.0 (0.7, 1.4)	0.9 (0.7, 1.2)	1.0 (0.7, 1.5)
Current marijuana use	0.9 (0.6, 1.3)	0.9 (0.7, 1.3)	0.9 (0.7, 1.2)	1.2 (0.9, 1.6)
Current alcohol drinking	1.0 (0.8, 1.3)	1.3 (0.9, 1.8)	0.9 (0.7, 1.2)	1.0 (0.8, 1.4)
Binge drinking	1.0 (0.8, 1.4)	1.2 (0.9, 1.7)	0.9 (0.7, 1.3)	1.1 (0.7, 1.6)
<b>Sexual behavior</b>				
Ever had sex	na	0.8 (0.6, 1.2)	1.0 (0.7, 1.6)	1.0 (0.7, 1.5)
Sex before age 13	na	0.4 (0.1, 1.4)	1.3 (0.7, 2.4)	1.9 (0.8, 4.4)
4 or more sexual partners	na	1.0 (0.5, 1.9)	0.7 (0.4, 1.4)	0.8 (0.5, 1.4)
<b>Demographics</b>				
Non- English spoken at home	1.1 (0.9, 1.3)	1.1 (0.8, 1.4)	1.0 (0.7, 1.4)	1.0 (0.7, 1.4)
Gay, lesbian, bisexual, questioning	na	0.9 (0.7, 1.1)	1.2 (0.9, 1.5)	1.0 (0.7, 1.4)
Gender , not male or female	na	0.9 (0.6, 1.2)	1.0 (0.7, 1.6)	1.4 (0.7, 2.5)

\* RR: rate ratio; 95% CI: 95% confidence interval; bolded values are statistically significant at the  $p < 0.05$  level (that is, the 95% CI does not include 1.0). A rate ratio less than 1 indicates that the characteristic is less common among students completing the survey.

\*\*Race/ethnic groups only include students who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic, then they are reported as Hispanic. Ratio rates in bold are a significantly higher or lower for completers compared to non-completers.

### Multi-racial non-Hispanic Students

Of the 66 comparison tests conducted, one showed statistically significant differences. Census multi-racial students were less likely than state sample students to report:

- Current e-cig/vape use (grade 10)

**Table 28i: Student characteristics in the state sample compared to the census among multi, racial non-Hispanics, 2018 rate ratio (95% confidence interval)**

Variable	State Sample Compared to Census by Grade			
	6 RR (95% CI)*	8 RR (95% CI)*	10 RR (95% CI)*	12 RR (95% CI)*
<b>Indicators of low socioeconomic status</b>				
Mother didn't graduate high school	na	1.1 (0.8, 1.5)	1.0 (0.7, 1.3)	0.8 (0.6, 1.1)
Living situation due to finances	na	0.8 (0.6, 1.0)	1.2 (0.8, 1.8)	0.8 (0.6, 1.1)
Food insecurity	na	0.9 (0.7, 1.1)	0.9 (0.7, 1.1)	0.9 (0.7, 1.2)
No dental visit in last year	na	0.9 (0.7, 1.2)	0.9 (0.7, 1.1)	1.1 (0.8, 1.5)
<b>School, related measures</b>				
Low self, report grades in school	1.0 (0.8, 1.2)	1.2 (0.9, 1.5)	0.9 (0.7, 1.1)	0.9 (0.7, 1.2)
Unsafe at school	1.0 (0.8, 1.1)	0.9 (0.8, 1.1)	1.1 (0.8, 1.3)	0.8 (0.6, 1.1)
Bullied at school	0.9 (0.8, 1.1)	1.0 (0.8, 1.2)	1.0 (0.9, 1.2)	1.0 (0.8, 1.3)
Carried weapons at school	1.5 (0.8, 2.5)	1.0 (0.7, 1.4)	1.1 (0.8, 1.5)	1.1 (0.7, 1.7)
<b>Substance use factors</b>				
Current cigarette smoking	0.8 (0.5, 1.2)	1.2 (0.7, 2.2)	1.1 (0.8, 1.6)	1.0 (0.7, 1.4)
Current e-cig/vape use	0.9 (0.7, 1.4)	0.8 (0.6, 1.1)	<b>0.7 (0.6, 0.9)</b>	0.8 (0.6, 1.1)
Current marijuana use	1.2 (0.6, 2.1)	0.8 (0.6, 1.1)	1.0 (0.8, 1.2)	0.9 (0.7, 1.1)
Current alcohol drinking	0.8 (0.6, 1.1)	0.8 (0.7, 1.1)	1.1 (0.9, 1.3)	1.0 (0.9, 1.3)
Binge drinking	0.8 (0.5, 1.3)	0.9 (0.7, 1.3)	1.1 (0.9, 1.4)	1.3 (0.9, 1.9)
<b>Sexual behavior</b>				
Ever had sex	na	0.8 (0.5, 1.2)	0.9 (0.6, 1.2)	0.9 (0.6, 1.3)
Sex before age 13	na	0.6 (0.1, 2.3)	1.2 (0.8, 1.9)	1.3 (0.7, 2.5)
4 or more sexual partners	na	0.9 (0.3, 2.3)	1.2 (0.7, 2.0)	1.0 (0.6, 1.7)
<b>Demographics</b>				
Non- English spoken at home	1.1 (0.9, 1.5)	1.1 (0.9, 1.4)	1.0 (0.7, 1.3)	1.1 (0.8, 1.5)
Gay, lesbian, bisexual, questioning	na	1.0 (0.8, 1.2)	0.9 (0.8, 1.2)	1.0 (0.7, 1.3)
Gender, neither male or female	na	1.2 (0.8, 1.7)	1.1 (0.8, 1.5)	1.0 (0.6, 1.5)

\* RR: rate ratio; 95% CI: 95% confidence interval; bolded values are statistically significant at the  $p < 0.05$  level (that is, the 95% CI does not include 1.0). A rate ratio less than 1 indicates that the characteristic is less common among students completing the survey.

\*\*Race/ethnic groups only include students who selected a single race, except for Hispanic. For example, if a respondent only selected Asian then they are reported as Asian. If a respondent selected Asian and Hispanic, then they are reported as Hispanic. Ratio rates in bold are a significantly higher or lower for completers compared to non-completers.

While students and school report race/ethnicity differently, there were no differences between the state sample schools compared to census schools in how students reported race/ethnicity.

# Appendix A: Non-Completion by Form Type and Grade

The analysis of student-level characteristics showed survey non-completion as the primary potential source of bias among schools in the state sample. The analysis showed that students finishing the survey are different in some respects from students who stopped earlier in the survey. If the students differ in a characteristic that influences how they would answer survey questions at the end of the survey, then percentages derived from those questions might not accurately reflect the true percentage.

An important consideration for determining the potential impact of non-completion bias is what percentage of students did not complete the survey, and where in the survey they stopped answering questions. For each administration of HYS, the Healthy Youth Survey Planning Committee tries to adjust the length of the survey to try to keep non-completion under 15%.

**Table A1: Number of questions on each survey form, 2018**

Survey Form	Number of Survey Questions	
	Core Survey	Extra Questions
Form A	133	2
Form B	116	8
Form C	91	0

Figures A1a, e gives the proportion of students who answered each question on each survey form. The dropout rate is the highest for 8<sup>th</sup> graders taking A.

**Figure A1a: Form C question non-completion, grade 6 for the state sample, 2018**

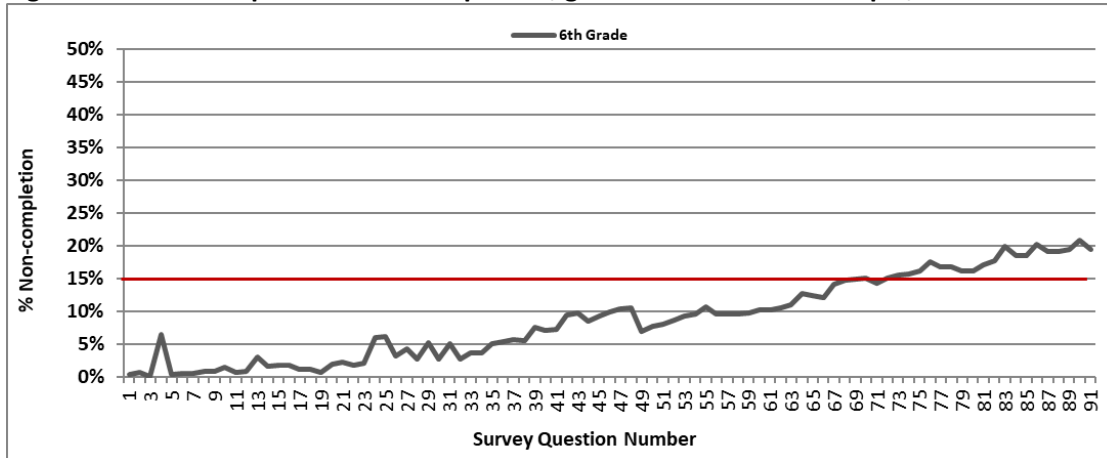


Figure A1b: Form C question non-completion, grade 6 in census, 2018

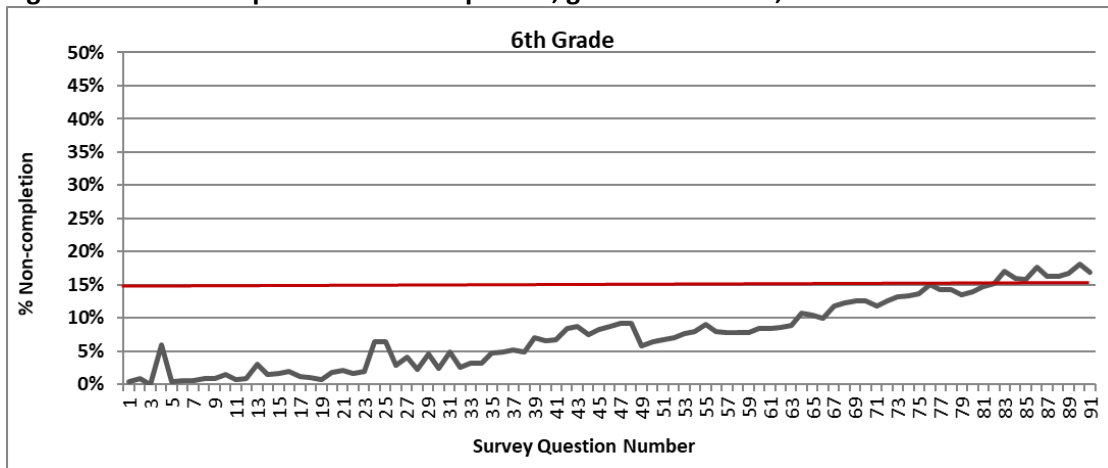


Figure A1c: Form A question non-completion, grades 8, 10, and 12 for the state sample, 2018

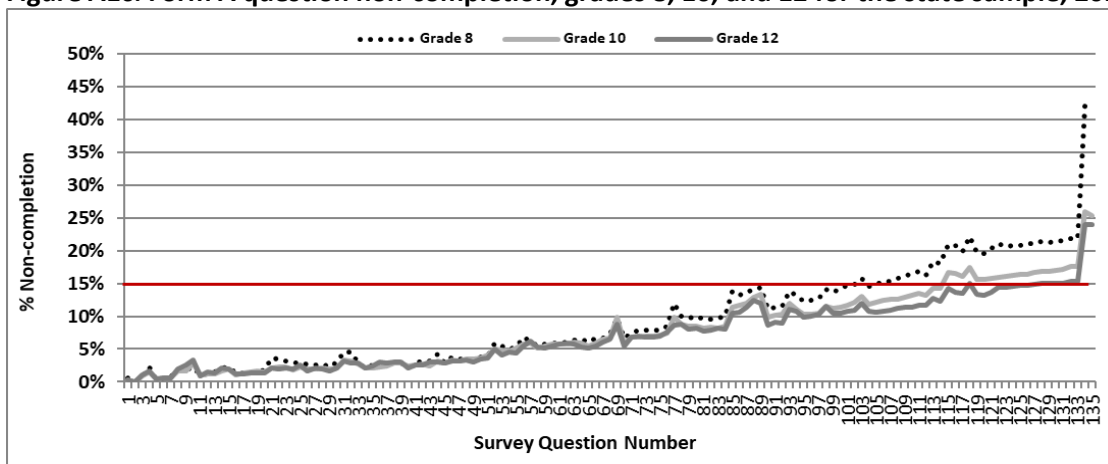


Figure A1d: Form A question non-completion, grades 8, 10, and 12 for census, 2018

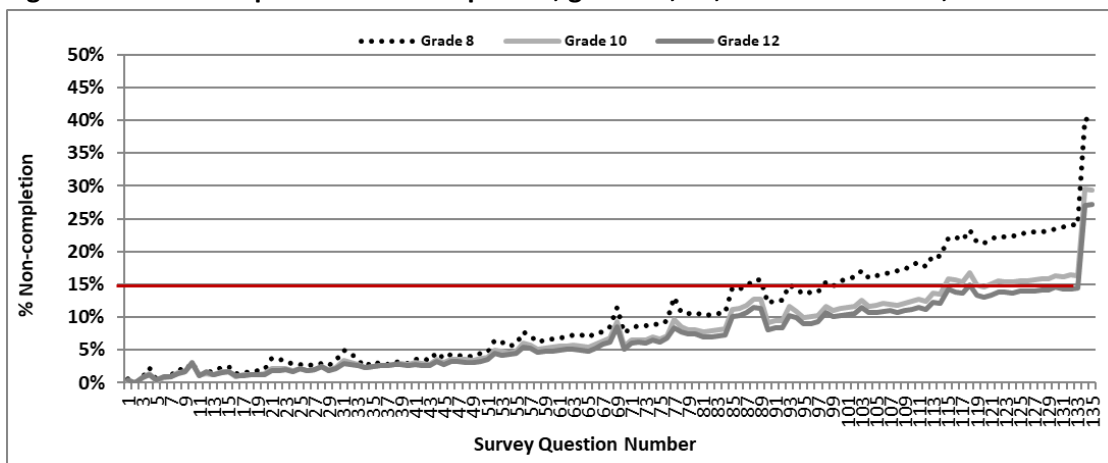


Figure A1e: Form B question non-completion, grades 8, 10, and 12 for the state sample, 2018

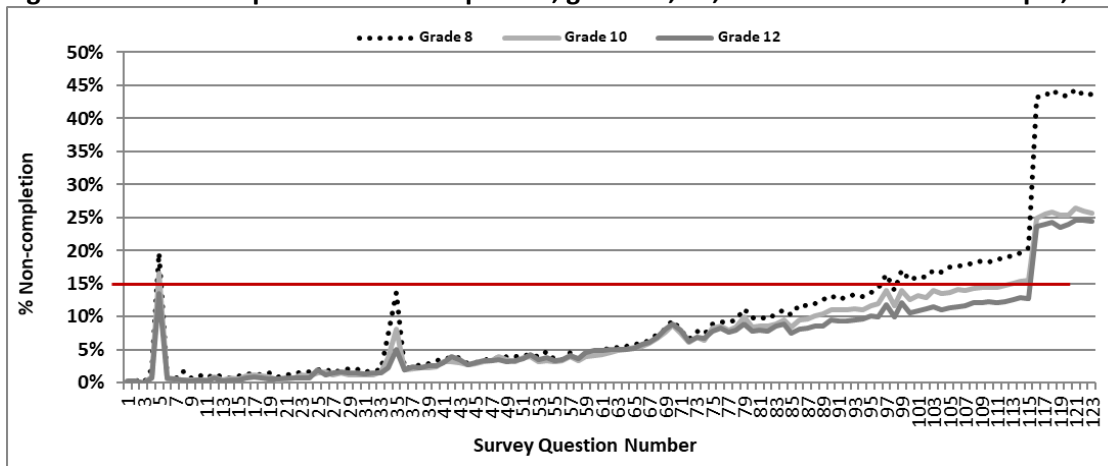
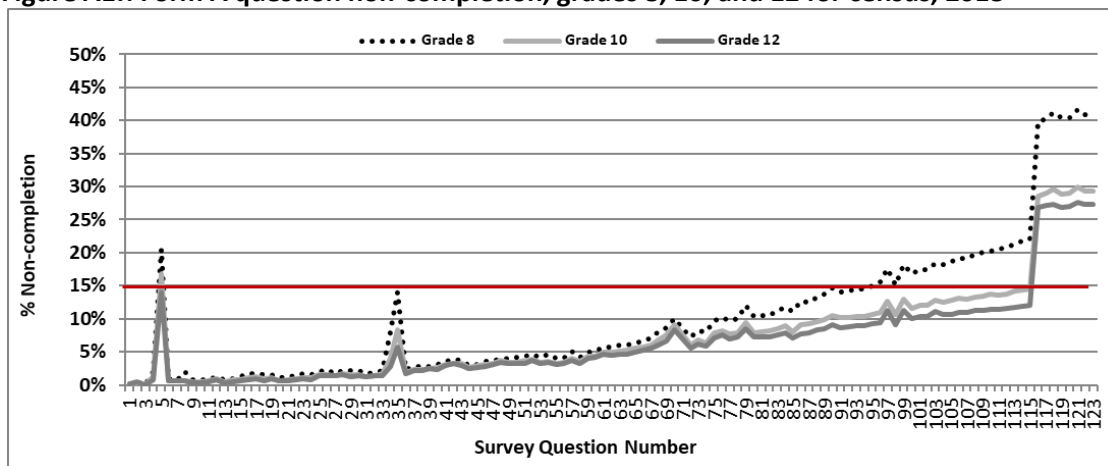


Figure A1f: Form A question non-completion, grades 8, 10, and 12 for census, 2018



## Appendix B: Questions at the End of the Survey

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Students who answered all the last 30 questions at the end of Form A or Form B, not including the extra questions, were considered to have “completed” the survey. The following is a list of topics that were asked about at the end of both forms.

**The last 30 questions asked of 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders included the following topics:**

- Abuse
- Alcohol and marijuana use and consequences
- Behaviors related to injury
- Cigarettes and electronic cigarettes/vape
- Demographics
- Family protective factor – opportunities for prosocial involvement
- Family risk factor, poor family management
- Food insecurity
- Gambling
- Peer, individual risk and protective factors, interaction with prosocial peers and friends use of drugs, and social skills
- Physical, emotional and sexual abuse (sexual abuse questions were extra)
- Quality of life
- School support and counseling
- Secondhand smoke exposure
- Sexual behavior (extra questions)
- Sexuality education
- Social and emotional learning
- Substance use on school property
- Suicide education
- Worrying and anxiousness

An 85% completion rate is desired for all HYS questions. The following questions were not completed by 85% of 8<sup>th</sup> graders. If certain types of 8<sup>th</sup> graders don’t complete the survey, the results from these questions may not be representative of 8<sup>th</sup> graders.

**8<sup>th</sup> Grader non-completion rate fell below the desired 85% mark for the following questions:**

- Demographics
  - If you are of Asian or Pacific Islander background, which groups best describe you? Mark all that apply.
  - How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn’t enough money for food?
- Abuse
  - Not counting TV, movies, video games, and sporting events, have you seen an adult hit, slap, punch, shove, kick, or otherwise physically hurt another adult more than one time?
  - How often does a parent or adult in your home swear at you, insult you, put you down or humiliate you?
  - Has an adult ever physically hurt you on purpose (like pushed, slapped, hit, kicked or punched you), leaving a mark, bruise or injury?
  - During the past 12 months, did someone you were dating or going out with ever limit your activities, threaten you, or make you feel unsafe in any other way?



- In the past 12 months, how many times did someone you were dating or going out with physically hurt you on purpose? (Count such things as being hit, slammed into something, or injured with an object or weapon.)
- Alcohol drinking
  - During the past 30 days, how did you get alcohol (beer, wine or hard liquor)? Choose all that apply.
  - During the past 30 days, what type of alcohol did you usually drink?
- Electronic cigarettes/vape use
  - During the past 30 days, what type of substances did you use in an electronic cigarette, also called e-cigs, or vape pens? Select all that apply.
  - During the past 30 days, how did you usually get your own electronic vapor products? (Choose only one answer.)
  - How much do you think people risk harming themselves if they use electronic cigarettes, also called e-cigs or vape pens regularly (almost daily)?
- Family risk factor , poor family management
  - Would your parents know if you did not come home on time?
  - The rules in my family are clear.
  - My family has clear rules about alcohol and drug use.
  - If you drank some beer, wine, or liquor (for example vodka, whiskey, or gin) without your parent's permission, would you be caught by them?
  - If you carried a handgun without your parent's permission, would you be caught by them?
  - If you skipped school, would you be caught by your parents?
- Family protective factor , opportunities for prosocial involvement
  - If I had a personal problem, I could ask my mom or dad for help.
  - My parents give me lots of chances to do fun things with them.
  - My parents ask me what I think before most family decisions affecting me are made.
- Distracted driving
  - During the past 30 days, how many days did you text or email while driving a car or other vehicle?
- Marijuana
  - During the past 30 days, how did you get marijuana? Choose all that apply.
  - During the past 30 days, if you used marijuana, how did you usually use it?
  - If you use marijuana or hashish (weed, hash, pot) how long do you usually stay high?
  - Does anyone who lives with you now use marijuana?
- Mental health
  - How often over the last 2 weeks were you bothered by: Feeling nervous, anxious or on edge?
  - How often over the last 2 weeks were you bothered by: Not being able to stop or control worrying?
- Peer, individual risk factor , friends use of drugs
  - Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have:
    - Smoked cigarettes?
    - Tried beer, wine, or hard liquor (for example vodka, whiskey, or gin) when their parents didn't know about it?
    - Used marijuana?
    - Used LSD, cocaine, amphetamines, or other illegal drugs?
- Peer norms around substance use
  - How wrong do your friends feel it would be for you to:
    - Have one or two drinks of an alcoholic beverage nearly every day?
    - Use tobacco?

- Use marijuana?
  - Use prescription drugs not prescribed to you?
- Peer, individual protective factor , social skills
  - You're looking at shirts in a store with a friend. You look up and see her slip a shirt under her coat. She smiles and says, "Which one do you want? Go ahead, take it while nobody's around." There are no security cameras, no employees, and no other customers. What would you do now?
  - You are visiting another part of town and you don't know any of the people your age there. You are walking down the street and some teenager you don't know is walking toward you. He is about your size. As he is about to pass you, he deliberately bumps into you and you almost lose your balance. What would you say or do?
  - You are at a party at someone's house and one of your friends offers you a drink containing alcohol. What would you say or do?
- School support and counseling
  - In the last year, did you have any contact with a school counselor?
  - There are people in this school who will help me if I need it.
- Sexuality education
  - Last year in school, were you taught about abstinence (not having sex) to prevent sexually transmitted diseases (STDs) and pregnancy?
  - Last year in school, were you taught about ways other than abstinence to prevent sexually transmitted diseases (STDs) and pregnancy?
- Substance use on school property
  - During the past 30 days, which of the following did you use on school property? Select all that apply. (Tobacco, E, cig/vape, Marijuana, Alcohol)
- Suicide education
  - Last year, did you hear or see information at your school about the warning signs of suicide and how to get help for yourself or a friend?

An 85% completion rate is desired for all HYS questions. The following questions were not completed by 85% of 10<sup>th</sup> graders. If certain types of 10<sup>th</sup> graders don't complete the survey, the results from these questions may not be representative of 10<sup>th</sup> graders.

**10<sup>th</sup> Grader non-completion rate fell below the desired 85% mark for the following questions:**

- Demographics
  - If you are of Asian or Pacific Islander background, which groups best describe you? Mark all that apply.
- Alcohol drinking
  - During the past 30 days, how did you get alcohol (beer, wine or hard liquor)? Choose all that apply.
  - During the past 30 days, what type of alcohol did you usually drink?
- Marijuana
  - During the past 30 days, how did you get marijuana? Choose all that apply.
  - During the past 30 days, if you used marijuana, how did you usually use it?
  - If you use marijuana or hashish (weed, hash, pot) how long do you usually stay high?
  - Does anyone who lives with you now use marijuana?
- Mental health
  - How often over the last 2 weeks were you bothered by: Feeling nervous, anxious or on edge?
  - How often over the last 2 weeks were you bothered by: Not being able to stop or control worrying?
- Peer, individual risk factor , friends use of drugs

- Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have:
  - Smoked cigarettes?
  - Tried beer, wine, or hard liquor (for example vodka, whiskey, or gin) when their parents didn't know about it?
  - Used marijuana?
  - Used LSD, cocaine, amphetamines, or other illegal drugs?
- Peer norms around substance use
  - How wrong do your friends feel it would be for you to:
    - Have one or two drinks of an alcoholic beverage nearly every day?
    - Use tobacco?
    - Use marijuana?
    - Use prescription drugs not prescribed to you?
- Peer, individual protective factor , social skills
  - You're looking at shirts in a store with a friend. You look up and see her slip a shirt under her coat. She smiles and says, "Which one do you want? Go ahead, take it while nobody's around." There are no security cameras, no employees, and no other customers. What would you do now?
  - You are visiting another part of town and you don't know any of the people your age there. You are walking down the street and some teenager you don't know is walking toward you. He is about your size. As he is about to pass you, he deliberately bumps into you and you almost lose your balance. What would you say or do?
  - You are at a party at someone's house and one of your friends offers you a drink containing alcohol. What would you say or do?
- Substance use on school property
  - During the past 30 days, which of the following did you use on school property? Select all that apply. (Tobacco, E, cig/vape, Marijuana, Alcohol)

An 85% completion rate is desired for all HYS questions. All Form A and Form B questions were completed by 85% of 12<sup>th</sup> graders.

**12<sup>th</sup> Grader non-completion rate fell below the desired 85% mark for the following questions:**

- Peer norms around substance use
  - How wrong do your friends feel it would be for you to use marijuana?
- Peer, individual protective factor , social skills
  - You're looking at shirts in a store with a friend. You look up and see her slip a shirt under her coat. She smiles and says, "Which one do you want? Go ahead, take it while nobody's around." There are no security cameras, no employees, and no other customers. What would you do now?
  - You are visiting another part of town and you don't know any of the people your age there. You are walking down the street and some teenager you don't know is walking toward you. He is about your size. As he is about to pass you, he deliberately bumps into you and you almost lose your balance. What would you say or do?
  - You are at a party at someone's house and one of your friends offers you a drink containing alcohol. What would you say or do?

The following is a list of the extra questions on the "tear, off" portion of the survey forms. Since 67% of 8<sup>th</sup>, 71% of 10<sup>th</sup> and 70% of 12<sup>th</sup> grade state sampled schools selected to ask these questions, the results

from these questions may not be representable. See Section 8. Student, Level Extra Question Bias for more details.

**8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> Grader only completed the following questions if their school chose to take the extra survey questions.**

- Gender identity
  - How do you currently identify yourself? Select all that apply. (Male, Female, Transgender, Questioning/not sure of my gender identity, Something else fits better, I do not know what this question is asking.)
- Sexual orientation
  - Which of the following best describes you? (Heterosexual, Gay or Lesbian, Bisexual, Questioning/not sure, Something else fits better, I don't know what this question is asking)
- Sexual behavior
  - How old were you when you had sex for the first time?
  - With how many people have you ever had sex?
  - During your life, with whom have you had sexual contact? Select all that apply.
  - The last time you had sex, what method(s) did you or your partner use to prevent pregnancy and/or sexually transmitted infections? Select all that you used.
- Physical, emotional and sexual abuse
  - Have you ever been in a situation where someone made you engage in kissing, sexual touch or intercourse when you did not want to?
  - Have you ever seen someone about your age pressure someone else to kiss, touch, or have sex when they did not want to?

## Appendix C: Student Characteristics by Completion

Rate ratio tables comparing all survey students to completers are also provided in Section 7. Student, level Completion Bias. Comparing all students to completers shows the potential magnitude of the non-completion bias on the actual survey results.

Instead of presenting rate ratios, Tables 1a to 4c show the differences in prevalence for student characteristic questions by grade for:

- Non-completers versus completers in the state sample
- Non-completers versus completers in census schools

### Results

#### *Non-completion among 6<sup>th</sup> Grade*

**Table C1a: Comparison of student characteristics among 6<sup>th</sup> grade non-completers to completers in the state sample, 2018, percent (confidence interval)**

Question	Options	Non-completers % (±CI)	Completers % (±CI)	Difference p, value
Putting them all together, what were your grades like last year?	Mostly A's or B's	76.6 (3.7)	85.5 (1.7)	<b>0.0000</b>
	Mostly Cs, Ds or Fs	23.4 (3.7)	14.5 (1.7)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	84.2 (2.2)	85.7 (1.5)	0.1112
	no/mostly & NO/def not true	15.8 (2.2)	14.3 (1.5)	
During the past 30 days, on how many days did you smoke cigarettes?	None	98.6 (0.7)	99.1 (0.2)	0.0802
	At least 1 day	1.4 (0.7)	0.9 (0.2)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	96.2 (1.1)	97.3 (0.5)	<b>0.0381</b>
	At least 1 day	3.8 (1.1)	2.8 (0.5)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	98.1 (0.8)	98.8 (0.4)	0.1003
	At least 1 day	1.9 (0.8)	1.2 (0.4)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	97.4 (0.9)	98.2 (0.4)	0.0522
	At least once	2.6 (0.9)	1.8 (0.4)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	97.1 (0.9)	97.7 (0.5)	0.2158
	At least 1 day	2.9 (0.9)	2.3 (0.5)	
What language is usually spoken at home?	English	77.8 (4.4)	80.0 (4.1)	0.1982
	Other language	22.2 (4.4)	20.0 (4.1)	
How do you describe yourself? (Select one or more responses.)	White	29.1 (5.3)	37.7 (4.4)	<b>0.0003</b>
	Hispanic	19.6 (5.2)	20.3 (4.5)	0.7072
	American Indian/Alaska Native	7.5 (1.7)	5.1 (0.8)	<b>0.0004</b>
	Asian	6.9 (2.1)	7.6 (1.8)	0.4213
	Black/African American	5.4 (1.6)	3.8 (0.9)	<b>0.0052</b>
	Pacific Islander	2.1 (0.8)	1.5 (0.4)	0.1016

\* 95% confidence interval, p, value significant if less than 0.05

**Table C1b: Comparison of student characteristics among 6<sup>th</sup> grade non-completers to completers in census, 2018, percent (confidence interval)**

Question	Options	Non-completers % (±CI)	Completers % (±CI)	Difference p, value
Putting them all together, what were your grades like last year?	Mostly A's or B's	75.5 (0.8)	85.3 (0.3)	<b>0.0000</b>
	Mostly Cs, Ds of Fs	24.5 (0.8)	14.7 (0.3)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	82.9 (0.7)	86.0 (0.3)	<b>0.0000</b>
	no/mostly & NO/def not true	17.1 (0.7)	14.0 (0.3)	
During the past 30 days, on how many days did you smoke cigarettes?	None	98.4 (0.3)	99.2 (0.1)	<b>0.0000</b>
	At least 1 day	1.6 (0.3)	0.8 (0.1)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	96.4 (0.4)	97.3 (0.1)	<b>0.0000</b>
	At least 1 day	3.6 (0.4)	2.7 (0.1)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	98.3 (0.3)	98.9 (0.1)	<b>0.0000</b>
	At least 1 day	1.8 (0.3)	1.1 (0.1)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	97.2 (0.4)	98.4 (0.1)	<b>0.0000</b>
	At least once	2.8 (0.4)	1.7 (0.1)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	97.3 (0.4)	97.9 (0.1)	<b>0.0007</b>
	At least 1 day	2.7 (0.4)	2.1 (0.1)	
What language is usually spoken at home?	English	73.9 (0.8)	79.3 (0.4)	<b>0.0000</b>
	Other language	26.1 (0.8)	20.7 (0.4)	
How do you describe yourself? (Select one or more responses.)	White	24.9 (0.8)	34.9 (0.5)	<b>0.0000</b>
	Hispanic	21.7 (0.8)	18.4 (0.4)	<b>0.0000</b>
	American Indian/Alaska Native	6.9 (0.5)	5.8 (0.2)	<b>0.0000</b>
	Asian	7.9 (0.5)	10.2 (0.3)	<b>0.0000</b>
	Black/African American	7.6 (0.5)	4.3 (0.2)	<b>0.0000</b>
	Pacific Islander	2.1 (0.3)	1.8 (0.1)	0.0598

\* 95% confidence interval, p, value significant if less than 0.05

## Non-completion among 8<sup>th</sup> Grade

Table C2a: Comparison of student characteristics among 8<sup>th</sup> grade non-completers to completers in the state sample, 2018, percent (confidence interval)

Question	Options	Non-completers % (±CI)	Completers % (±CI)	Difference p, value
Putting them all together, what were your grades like last year?	Mostly A's or B's	70.1 (5.0)	81.9 (2.5)	<b>0.0000</b>
	Mostly Cs, Ds of Fs	30.0 (5.0)	18.1 (2.5)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	77.3 (2.9)	80.9 (2.0)	<b>0.0047</b>
	no/mostly & NO/def not true	22.7 (2.9)	19.1 (2.0)	
How far did your mother get in school?	Graduated HS or more	84.2 (3.1)	88.8 (2.9)	<b>0.0041</b>
	Didn't graduate HS	15.8 (3.1)	11.2 (2.9)	
Living situation due to finances	No	93.9 (1.2)	94.4 (0.7)	0.4461
	Yes	6.1 (1.2)	5.6 (0.7)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	89.5 (1.5)	91.2 (1.0)	<b>0.0209</b>
	At least once	10.5 (1.5)	8.8 (1.0)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	71.0 (3.1)	81.6 (2.7)	<b>0.0000</b>
	More than a year ago	29.0 (3.1)	18.4 (2.7)	
Do you receive free or reduced price lunches at school?	No	68.3 (6.0)	72.3 (5.3)	0.1730
	Yes	31.7 (6.0)	27.7 (5.3)	
During the past 30 days, on how many days did you smoke cigarettes?	None	96.4 (0.9)	97.7 (0.5)	<b>0.0068</b>
	At least 1 day	3.6 (0.9)	2.3 (0.5)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	88.6 (2.6)	90.0 (1.6)	0.3379
	At least 1 day	11.4 (2.6)	10.0 (1.6)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	90.6 (1.9)	93.9 (1.0)	<b>0.0001</b>
	At least 1 day	9.4 (1.9)	6.1 (1.0)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	94.7 (1.4)	95.9 (0.6)	0.0811
	At least once	5.3 (1.4)	4.1 (0.6)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	92.3 (1.6)	91.8 (1.0)	0.5369
	At least 1 day	7.8 (1.6)	8.2 (1.0)	
What language is usually spoken at home?	English	76.2 (5.9)	81.5 (4.4)	<b>0.0419</b>
	Other language	23.8 (5.9)	18.5 (4.4)	
How do you describe yourself? (Select one or more responses.)	White	36.2 (7.1)	51.4 (5.3)	<b>0.0000</b>
	Hispanic	19.6 (3.7)	16.8 (5.6)	0.2072
	American Indian/Alaska Native	4.1 (1.7)	3.1 (0.7)	0.2007
	Asian	9.7 (5.7)	9.0 (2.6)	0.8022
	Black/African American	8.0 (3.2)	3.2 (1.0)	<b>0.0000</b>
	Pacific Islander	2.5 (0.8)	1.7 (0.5)	0.0523

\* 95% confidence interval, p, value significant if less than 0.05

**Table C2b: Comparison of student characteristics among 8<sup>th</sup> grade non-completers to completers in census, 2018, percent (confidence interval)**

Question	Options	Non-completers % (±CI)	Completers % (±CI)	Difference p, value
Putting them all together, what were your grades like last year?	Mostly A's or B's	69.8 (0.8)	80.8 (0.4)	<b>0.0000</b>
	Mostly Cs, Ds or Fs	30.2 (0.8)	19.2 (0.4)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	77.9 (0.7)	81.4 (0.4)	<b>0.0000</b>
	no/mostly & NO/def not true	22.1 (0.7)	18.6 (0.4)	
How far did your mother get in school?	Graduated HS or more	80.5 (0.9)	87.4 (0.4)	<b>0.0000</b>
	Didn't graduate HS	19.5 (0.9)	12.6 (0.4)	
Living situation due to finances	No	94.1 (0.4)	94.6 (0.2)	0.0672
	Yes	5.9 (0.4)	5.4 (0.2)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	88.4 (0.6)	90.9 (0.3)	<b>0.0000</b>
	At least once	11.7 (0.6)	9.1 (0.3)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	70.2 (1.1)	80.2 (0.5)	<b>0.0000</b>
	More than a year ago	29.8 (1.1)	19.8 (0.5)	
Do you receive free or reduced price lunches at school?	No	66.1 (1.3)	71.6 (0.6)	<b>0.0000</b>
	Yes	33.9 (1.3)	28.4 (0.6)	
During the past 30 days, on how many days did you smoke cigarettes?	None	96.0 (0.3)	97.5 (0.2)	<b>0.0000</b>
	At least 1 day	4.0 (0.3)	2.6 (0.2)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	89.0 (0.7)	89.7 (0.4)	0.0820
	At least 1 day	11.0 (0.7)	10.3 (0.4)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	91.2 (0.5)	93.1 (0.3)	<b>0.0000</b>
	At least 1 day	8.8 (0.5)	6.9 (0.3)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	94.5 (0.4)	95.8 (0.2)	<b>0.0000</b>
	At least once	5.5 (0.4)	4.2 (0.2)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	91.1 (0.5)	91.6 (0.3)	<b>0.0414</b>
	At least 1 day	8.9 (0.5)	8.4 (0.3)	
What language is usually spoken at home?	English	72.7 (0.7)	79.4 (0.4)	<b>0.0000</b>
	Other language	27.3 (0.7)	20.6 (0.4)	
How do you describe yourself? (Select one or more responses.)	White	34.4 (0.7)	47.6 (0.5)	<b>0.0000</b>
	Hispanic	25.2 (0.7)	19.3 (0.4)	<b>0.0000</b>
	American Indian/Alaska Native	4.2 (0.3)	3.2 (0.2)	<b>0.0000</b>
	Asian	8.2 (0.4)	10.4 (0.3)	<b>0.0000</b>
	Black/African American	7.1 (0.4)	3.8 (0.2)	<b>0.0000</b>
	Pacific Islander	2.4 (0.2)	1.9 (0.1)	<b>0.0001</b>

\* 95% confidence interval, p, value significant if less than 0.05



## Non-completion among 10<sup>th</sup> Grade

Table C3a: Comparison of student characteristics among 10<sup>th</sup> grade non-completers to completers in the state sample, 2018, percent (confidence interval)

Question	Options	Non-completers % (±CI)	Completers % (±CI)	Difference p, value
Putting them all together, what were your grades like last year?	Mostly A's or B's	69.4 (3.3)	76.8 (3.0)	<b>0.0003</b>
	Mostly Cs, Ds of Fs	30.6 (3.3)	23.2 (3.0)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	69.4 (3.3)	76.8 (3.0)	<b>0.0022</b>
	no/mostly & NO/def not true	30.6 (3.3)	23.2 (3.0)	
How far did your mother get in school?	Graduated HS or more	80.8 (4.4)	84.4 (3.4)	0.0868
	Didn't graduate HS	19.2 (4.4)	15.6 (3.4)	
Living situation due to finances	No	93.3 (1.3)	94.5 (0.7)	0.1485
	Yes	6.7 (1.3)	5.5 (0.7)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	86.3 (2.1)	88.5 (1.4)	0.0655
	At least once	13.8 (2.1)	11.5 (1.4)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	71.3 (5.0)	79.1 (2.3)	<b>0.0018</b>
	More than a year ago	28.7 (5.0)	21.0 (2.3)	
Do you receive free or reduced price lunches at school?	No	68.6 (6.6)	68.5 (5.5)	0.9923
	Yes	31.5 (6.6)	31.5 (5.5)	
During the past 30 days, on how many days did you smoke cigarettes?	None	93.9 (2.2)	95.7 (0.6)	0.0631
	At least 1 day	6.2 (2.2)	4.3 (0.6)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	79.4 (3.6)	79.3 (2.7)	0.9536
	At least 1 day	20.7 (3.6)	20.7 (2.7)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	80.9 (2.7)	83.2 (1.8)	0.1295
	At least 1 day	19.1 (2.7)	16.8 (1.8)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	89.5 (2.0)	90.9 (1.2)	0.1309
	At least once	10.5 (2.0)	9.1 (1.2)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	80.7 (2.5)	82.0 (1.7)	0.3073
	At least 1 day	19.4 (2.5)	18.0 (1.7)	
What language is usually spoken at home?	English	71.0 (5.4)	76.4 (4.7)	<b>0.0057</b>
	Other language	29.0 (5.4)	23.6 (4.7)	
How do you describe yourself? (Select one or more responses.)	White	35.1 (6.5)	46.2 (6.2)	<b>0.0000</b>
	Hispanic	22.7 (4.4)	19.3 (5.5)	0.1189
	American Indian/Alaska Native	2.4 (1.0)	2.2 (0.7)	0.7441
	Asian	14.1 (5.5)	14.6 (4.7)	0.8228
	Black/African American	10.6 (3.4)	4.9 (1.5)	<b>0.0000</b>
	Pacific Islander	1.9 (0.9)	2.0 (0.7)	0.7942

\* 95% confidence interval, p, value significant if less than 0.05

**Table C3b: Comparison of student characteristics among 10<sup>th</sup> grade non-completers to completers in census , 2018, percent (confidence interval)**

Question	Options	Non-completers % (±CI)	Completers % (±CI)	Difference p, value
Putting them all together, what were your grades like last year?	Mostly A's or B's	66.1 (1.1)	77.8 (0.4)	<b>0.0000</b>
	Mostly Cs, Ds or Fs	33.9 (1.1)	22.2 (0.4)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	75.8 (0.9)	80.5 (0.4)	<b>0.0000</b>
	no/mostly & NO/def not true	24.2 (0.9)	19.5 (0.4)	
How far did your mother get in school?	Graduated HS or more	79.5 (1.1)	86.4 (0.4)	<b>0.0000</b>
	Didn't graduate HS	20.6 (1.1)	13.6 (0.4)	
Living situation due to finances	No	92.6 (0.6)	94.3 (0.2)	<b>0.0000</b>
	Yes	7.4 (0.6)	5.7 (0.2)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	92.6 (0.6)	94.3 (0.2)	<b>0.0000</b>
	At least once	7.4 (0.6)	5.7 (0.2)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	71.2 (1.5)	80.3 (0.5)	<b>0.0000</b>
	More than a year ago	28.9 (1.5)	19.7 (0.5)	
Do you receive free or reduced price lunches at school?	No	63.8 (1.8)	72.2 (0.6)	<b>0.0000</b>
	Yes	36.2 (1.8)	27.8 (0.6)	
During the past 30 days, on how many days did you smoke cigarettes?	None	92.4 (0.6)	95.3 (0.2)	<b>0.0000</b>
	At least 1 day	7.6 (0.6)	4.7 (0.2)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	78.0 (1.2)	79.1 (0.5)	0.1034
	At least 1 day	22.0 (1.2)	20.9 (0.5)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	79.3 (0.9)	83.6 (0.4)	<b>0.0000</b>
	At least 1 day	20.7 (0.9)	16.4 (0.4)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	88.1 (0.7)	90.8 (0.3)	<b>0.0000</b>
	At least once	11.9 (0.7)	9.2 (0.3)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	79.9 (0.9)	81.6 (0.4)	<b>0.0003</b>
	At least 1 day	20.1 (0.9)	18.4 (0.4)	
What language is usually spoken at home?	English	74.1 (0.9)	80.0 (0.4)	<b>0.0000</b>
	Other language	25.9 (0.9)	20.0 (0.4)	
How do you describe yourself? (Select one or more responses.)	White	41.5 (1.0)	53.3 (0.5)	<b>0.0000</b>
	Hispanic	26.1 (0.9)	18.9 (0.4)	<b>0.0000</b>
	American Indian/Alaska Native	2.9 (0.3)	2.2 (0.1)	<b>0.0000</b>
	Asian	7.7 (0.5)	10.3 (0.3)	<b>0.0000</b>
	Black/African American	6.8 (0.5)	3.6 (0.2)	<b>0.0000</b>
	Pacific Islander	2.0 (0.3)	1.8 (0.1)	0.1257

\* 95% confidence interval, p, value significant if less than 0.05

## Non-completion among 12<sup>th</sup> Grade

**Table C4a: Comparison of student characteristics among 12<sup>th</sup> grade non-completers to completers in the state sample, 2018, percent (confidence interval)**

Question	Options	Non-completers % (±CI)	Completers % (±CI)	Difference p, value
Putting them all together, what were your grades like last year?	Mostly A's or B's	62.8 (5.1)	71.9 (3.9)	<b>0.0003</b>
	Mostly Cs, Ds or Fs	37.2 (5.1)	28.1 (3.9)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	79.0 (4.0)	80.8 (3.0)	0.3219
	no/mostly & NO/def not true	21.1 (4.0)	19.2 (3.0)	
How far did your mother get in school?	Graduated HS or more	79.0 (4.0)	80.8 (3.0)	0.0771
	Didn't graduate HS	21.1 (4.0)	19.2 (3.0)	
Living situation due to finances	No	91.8 (1.7)	93.8 (0.9)	<b>0.0211</b>
	Yes	8.2 (1.7)	6.2 (0.9)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	80.8 (3.7)	85.3 (1.7)	<b>0.0112</b>
	At least once	19.2 (3.7)	14.7 (1.7)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	68.4 (5.9)	75.6 (2.8)	<b>0.0132</b>
	More than a year ago	31.6 (5.9)	24.4 (2.8)	
Do you receive free or reduced price lunches at school?	No	56.9 (7.2)	64.2 (8.1)	<b>0.0253</b>
	Yes	43.1 (7.2)	35.8 (8.1)	
During the past 30 days, on how many days did you smoke cigarettes?	None	88.8 (2.6)	92.8 (1.3)	<b>0.0014</b>
	At least 1 day	11.2 (2.6)	7.3 (1.3)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	66.8 (6.7)	71.1 (3.3)	0.2196
	At least 1 day	33.3 (6.7)	28.9 (3.3)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	66.8 (6.7)	71.1 (3.3)	0.2135
	At least 1 day	33.3 (6.7)	28.9 (3.3)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	82.8 (4.1)	85.2 (1.6)	0.2153
	At least once	17.2 (4.1)	14.8 (1.6)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	73.4 (5.2)	71.9 (2.5)	0.5772
	At least 1 day	26.6 (5.2)	28.2 (2.5)	
What language is usually spoken at home?	English	71.0 (6.5)	78.3 (5.5)	<b>0.0119</b>
	Other language	29.0 (6.5)	21.7 (5.5)	
How do you describe yourself? (Select one or more responses.)	White	39.5 (7.0)	49.6 (7.5)	<b>0.0072</b>
	Hispanic	24.3 (5.0)	21.4 (7.8)	0.3403
	American Indian/Alaska Native	3.2 (1.5)	1.5 (0.5)	<b>0.0032</b>
	Asian	10.6 (4.3)	11.6 (4.0)	0.5895
	Black/African American	9.2 (3.6)	4.5 (1.6)	<b>0.0004</b>
	Pacific Islander	2.4 (1.1)	2.0 (0.9)	0.5379

\* 95% confidence interval, p, value significant if less than 0.05

**Table C4b: Comparison of student characteristics among 12<sup>th</sup> grade non-completers to completers in census, 2018, percent (confidence interval)**

Question	Options	Non-completers % (±CI)	Completers % (±CI)	Difference p, value
Putting them all together, what were your grades like last year?	Mostly A's or B's	63.1 (1.5)	72.7 (0.5)	<b>0.0000</b>
	Mostly Cs, Ds or Fs	36.9 (1.5)	27.3 (0.5)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	78.5 (1.1)	82.3 (0.4)	<b>0.0000</b>
	no/mostly & NO/def not true	21.5 (1.1)	17.8 (0.4)	
How far did your mother get in school?	Graduated HS or more	79.1 (1.4)	84.6 (0.4)	<b>0.0000</b>
	Didn't graduate HS	20.9 (1.4)	15.4 (0.4)	
Living situation due to finances	No	92.0 (0.8)	93.7 (0.3)	<b>0.0000</b>
	Yes	8.0 (0.8)	6.3 (0.3)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	82.6 (1.2)	86.2 (0.4)	<b>0.0000</b>
	At least once	17.4 (1.2)	13.8 (0.4)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	69.0 (2.1)	76.7 (0.7)	<b>0.0000</b>
	More than a year ago	31.0 (2.1)	23.3 (0.7)	
Do you receive free or reduced price lunches at school?	No	64.2 (2.5)	68.3 (0.7)	<b>0.0013</b>
	Yes	35.9 (2.5)	31.7 (0.7)	
During the past 30 days, on how many days did you smoke cigarettes?	None	88.9 (0.9)	92.2 (0.3)	<b>0.0000</b>
	At least 1 day	11.1 (0.9)	7.8 (0.3)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	69.9 (1.8)	69.9 (0.7)	0.9961
	At least 1 day	30.1 (1.8)	30.1 (0.7)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	71.2 (1.3)	74.7 (0.5)	<b>0.0000</b>
	At least 1 day	28.8 (1.3)	25.3 (0.5)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	81.8 (1.1)	84.0 (0.4)	<b>0.0002</b>
	At least once	18.3 (1.1)	16.0 (0.4)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	70.9 (1.3)	69.9 (0.5)	0.1557
	At least 1 day	29.1 (1.3)	30.1 (0.5)	
What language is usually spoken at home?	English	74.2 (1.2)	80.4 (0.5)	<b>0.0000</b>
	Other language	25.8 (1.2)	19.6 (0.5)	
How do you describe yourself? (Select one or more responses.)	White	44.1 (1.3)	55.2 (0.6)	<b>0.0000</b>
	Hispanic	25.0 (1.1)	20.2 (0.5)	<b>0.0000</b>
	American Indian/Alaska Native	2.8 (0.4)	1.6 (0.1)	<b>0.0000</b>
	Asian	7.5 (0.7)	9.0 (0.3)	<b>0.0001</b>
	Black/African American	7.5 (0.7)	3.5 (0.2)	<b>0.0000</b>
	Pacific Islander	2.7 (0.4)	1.6 (0.1)	<b>0.0000</b>

\* 95% confidence interval, p, value significant if less than 0.05

## Appendix D: Student Characteristics by Extra Question Answering

Rate ratio tables comparing all survey students to extra question takers are also provided in Section 7. Additional Bias in Extra Questions.

Instead of presenting rate ratios, Tables D1a to D4b show the differences in prevalence for student characteristic questions by grade for:

- a. Extra question answerers versus non-extra question takers that completed the survey in the state sample.
- b. Extra question answerers versus non-extra question takers that completed the survey in the census.

### Extra Question Answering among 8<sup>th</sup> Grade

**Table D1a: Comparing characteristics of 8<sup>th</sup> graders who answered extra questions compared to students who completed the survey but were not asked extra questions in the state sample, percent (95% confidence interval)**

Question	Options	Extra Answerers % (±CI)	Non-extra Completers % (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	75.7 (3.5)	84.0 (2.7)	0.0005
	Mostly Cs, Ds or Fs	24.3 (3.5)	16.0 (2.7)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	78.0 (3.1)	82.0 (2.4)	0.0471
	no/mostly & NO/def not true	22.0 (3.1)	18.0 (2.4)	
How far did your mother get in school?	Graduated HS or more	84.9 (4.6)	90.2 (3.5)	0.0745
	Didn't graduate HS	15.2 (4.6)	9.8 (3.5)	
Living situation due to finances	No	93.7 (1.3)	94.6 (0.8)	0.2236
	Yes	6.3 (1.3)	5.4 (0.8)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	88.9 (1.7)	92.1 (1.0)	0.0015
	At least once	11.1 (1.7)	7.9 (1.0)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	81.4 (5.2)	81.7 (3.2)	0.9224
	More than a year ago	18.6 (5.2)	18.3 (3.2)	
Do you receive free or reduced price lunches at school?	No	68.1 (9.0)	74.2 (6.2)	0.2701
	Yes	31.9 (9.0)	25.8 (6.2)	
During the past 30 days, on how many days did you smoke cigarettes?	None	96.9 (1.2)	98.0 (0.6)	0.0588
	At least 1 day	3.2 (1.2)	2.0 (0.6)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	89.9 (2.8)	90.0 (2.0)	0.9140
	At least 1 day	10.2 (2.8)	10.0 (2.0)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	93.7 (2.1)	94.0 (1.1)	0.8210
	At least 1 day	6.3 (2.1)	6.0 (1.1)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	95.8 (1.4)	95.9 (0.7)	0.8395
	At least once	4.3 (1.4)	4.1 (0.7)	
	None	91.5 (1.7)	91.8 (1.2)	0.7775

Question	Options	Extra Answerers % (±CI)	Non-extra Completers % (±CI)	Difference p-value
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	At least 1 day	8.5 (1.7)	8.2 (1.2)	
What language is usually spoken at home?	English	78.7 (7.4)	82.4 (5.4)	0.4169
	Other language	21.3 (7.4)	17.6 (5.4)	
How do you describe yourself? (Select one or more responses.)	White	50.5 (7.1)	51.7 (6.8)	0.8250
	Hispanic	20.0 (7.3)	15.6 (7.2)	0.4140
	American Indian/Alaska Native	2.7 (1.0)	3.1 (0.9)	0.5410
	Asian	6.8 (2.2)	9.8 (3.4)	0.1316
	Black/African American	2.8 (1.2)	3.4 (1.3)	0.5002
	Pacific Islander	2.2 (0.8)	1.5 (0.6)	0.1654

95% confidence interval, p, value significant if less than 0.05

**Table D1b: Comparing characteristics of 8<sup>th</sup> graders who answered extra questions compared to students who completed the survey but were not asked extra questions in the census, percent (95% confidence interval)**

Question	Options	Extra Answerers % (±CI)	Non-extra Completers % (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	78.5 (0.9)	81.5 (0.4)	<b>0.8046</b>
	Mostly Cs, Ds or Fs	21.6 (0.9)	18.5 (0.4)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	81.4 (0.8)	81.4 (0.4)	0.9883
	no/mostly & NO/def not true	18.6 (0.8)	18.6 (0.4)	
How far did your mother get in school?	Graduated HS or more	86.4 (0.8)	87.8 (0.4)	<b>0.0024</b>
	Didn't graduate HS	13.6 (0.8)	12.2 (0.4)	
Living situation due to finances	No	94.1 (0.5)	94.7 (0.3)	<b>0.0450</b>
	Yes	5.9 (0.5)	5.3 (0.3)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	90.5 (0.6)	91.0 (0.3)	0.1821
	At least once	9.5 (0.6)	9.0 (0.3)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	80.5 (1.2)	80.2 (0.6)	0.6821
	More than a year ago	19.5 (1.2)	19.8 (0.6)	
Do you receive free or reduced price lunches at school?	No	69.6 (1.4)	72.5 (0.7)	<b>0.0002</b>
	Yes	30.4 (1.4)	27.6 (0.7)	
During the past 30 days, on how many days did you smoke cigarettes?	None	97.5 (0.3)	97.4 (0.2)	0.6550
	At least 1 day	2.5 (0.3)	2.6 (0.2)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	89.3 (0.9)	89.8 (0.5)	0.4056
	At least 1 day	10.7 (0.9)	10.2 (0.5)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	92.8 (0.6)	93.2 (0.3)	0.1833
	At least 1 day	7.2 (0.6)	6.8 (0.3)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	95.5 (0.5)	95.8 (0.2)	0.1369
	At least once	4.5 (0.5)	4.2 (0.2)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	90.8 (0.6)	91.8 (0.3)	<b>0.0018</b>
	At least 1 day	9.2 (0.6)	8.2 (0.3)	
What language is usually spoken at home?	English	82.0 (0.8)	79.0 (0.5)	<b>0.0000</b>
	Other language	18.0 (0.8)	21.0 (0.5)	
How do you describe yourself? (Select one or more responses.)	White	50.7 (1.1)	47.1 (0.5)	<b>0.0000</b>
	Hispanic	20.3 (0.9)	18.6 (0.4)	<b>0.0006</b>
	American Indian/Alaska Native	3.6 (0.4)	3.1 (0.2)	<b>0.0120</b>
	Asian	6.8 (0.5)	11.3 (0.4)	<b>0.0000</b>
	Black/African American	2.8 (0.4)	4.1 (0.2)	<b>0.0000</b>
	Pacific Islander	1.6 (0.3)	1.9 (0.2)	0.0796

95% confidence interval, p, value significant if less than 0.05

## Extra Question Answering among 10<sup>th</sup> Grade

Table D2a: Comparing characteristics of 10<sup>th</sup> graders who answered extra questions compared to students who completed the survey but were not asked extra questions in the state sample, percent (95% confidence interval)

Question	Options	Extra Answerers % ( $\pm$ CI)	Non-extra Completers % ( $\pm$ CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	79.1 (5.5)	76.5 (3.3)	0.4467
	Mostly Cs, Ds or Fs	20.9 (5.5)	23.5 (3.3)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	78.8 (7.2)	80.4 (3.9)	0.6885
	no/mostly & NO/def not true	21.3 (7.2)	19.6 (3.9)	
How far did your mother get in school?	Graduated HS or more	86.1 (2.5)	84.2 (3.8)	0.3991
	Didn't graduate HS	13.9 (2.5)	15.8 (3.8)	
Living situation due to finances	No	93.8 (1.0)	94.6 (0.8)	0.2320
	Yes	6.2 (1.0)	5.4 (0.8)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	91.1 (1.7)	88.2 (1.6)	<b>0.0217</b>
	At least once	8.9 (1.7)	11.8 (1.6)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	69.7 (10.4)	68.4 (6.0)	0.8370
	More than a year ago	30.3 (10.4)	31.6 (6.0)	
Do you receive free or reduced price lunches at school?	No	77.3 (3.7)	79.4 (2.5)	0.3742
	Yes	22.7 (3.7)	20.6 (2.5)	
During the past 30 days, on how many days did you smoke cigarettes?	None	96.4 (1.9)	95.5 (0.7)	0.4598
	At least 1 day	3.6 (1.9)	4.5 (0.7)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	84.4 (6.8)	78.7 (2.8)	0.1744
	At least 1 day	15.7 (6.8)	21.3 (2.8)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	82.2 (3.5)	83.3 (2.0)	0.5898
	At least 1 day	17.8 (3.5)	16.7 (2.0)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	92.9 (2.7)	90.7 (1.2)	0.1874
	At least once	7.1 (2.7)	9.3 (1.2)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	84.5 (3.6)	81.8 (1.9)	0.2093
	At least 1 day	15.5 (3.6)	18.3 (1.9)	
What language is usually spoken at home?	English	80.2 (13.3)	75.9 (5.0)	0.5757
	Other language	19.8 (13.3)	24.1 (5.0)	
How do you describe yourself? (Select one or more responses.)	White	50.3 (21.7)	45.6 (6.5)	0.6856
	Hispanic	14.3 (3.0)	19.9 (6.1)	0.0896
	American Indian/Alaska Native	1.3 (1.1)	2.3 (0.7)	0.2123
	Asian	14.6 (11.0)	14.8 (5.1)	0.9803
	Black/African American	5.2 (4.2)	4.8 (1.6)	0.8851
	Pacific Islander	2.5 (2.4)	1.9 (0.7)	0.6267

95% confidence interval, p, value significant if less than 0.05



**Table D2b: Comparing characteristics of 10<sup>th</sup> graders who answered extra questions compared to students who completed the survey but were not asked extra questions in the census, percent (95% confidence interval)**

Question	Options	Extra Answerers % (±CI)	Non-extra Completers % (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	75.6 (1.0)	78.3 (0.4)	<b>0.8046</b>
	Mostly Cs, Ds or Fs	24.4 (1.0)	21.7 (0.4)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	79.0 (1.0)	80.7 (0.4)	<b>0.0017</b>
	no/mostly & NO/def not true	21.0 (1.0)	19.3 (0.4)	
How far did your mother get in school?	Graduated HS or more	85.7 (0.9)	86.6 (0.4)	0.0728
	Didn't graduate HS	14.3 (0.9)	13.4 (0.4)	
Living situation due to finances	No	94.1 (0.6)	94.3 (0.3)	0.3771
	Yes	6.0 (0.6)	5.7 (0.3)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	88.3 (0.8)	88.7 (0.3)	0.3356
	At least once	11.7 (0.8)	11.3 (0.3)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	69.1 (1.6)	72.8 (0.7)	<b>0.0000</b>
	More than a year ago	30.9 (1.6)	27.2 (0.7)	
Do you receive free or reduced price lunches at school?	No	80.8 (1.3)	80.3 (0.6)	0.4581
	Yes	19.2 (1.3)	19.8 (0.6)	
During the past 30 days, on how many days did you smoke cigarettes?	None	95.3 (0.5)	95.3 (0.2)	0.8312
	At least 1 day	4.7 (0.5)	4.7 (0.2)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	78.8 (1.4)	79.1 (0.6)	0.7005
	At least 1 day	21.2 (1.4)	20.9 (0.6)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	83.3 (0.9)	83.7 (0.4)	0.4953
	At least 1 day	16.7 (0.9)	16.3 (0.4)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	90.7 (0.7)	90.8 (0.3)	0.8705
	At least once	9.3 (0.7)	9.2 (0.3)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	81.6 (0.9)	81.7 (0.4)	0.9342
	At least 1 day	18.4 (0.9)	18.4 (0.4)	
What language is usually spoken at home?	English	81.3 (0.9)	79.7 (0.4)	<b>0.0045</b>
	Other language	18.7 (0.9)	20.3 (0.4)	
How do you describe yourself? (Select one or more responses.)	White	56.9 (1.2)	52.5 (0.5)	<b>0.0000</b>
	Hispanic	19.8 (1.0)	18.8 (0.4)	<b>0.0464</b>
	American Indian/Alaska Native	2.3 (0.4)	2.2 (0.2)	0.7027
	Asian	6.7 (0.6)	11.0 (0.3)	<b>0.0000</b>
	Black/African American	3.0 (0.4)	3.6 (0.2)	<b>0.0113</b>
	Pacific Islander	1.8 (0.3)	1.7 (0.1)	0.5809

95% confidence interval, p, value significant if less than 0.05

## Extra Question Answering among 12<sup>th</sup> Grade

**Table D3a: Comparing characteristics of 12<sup>th</sup> graders who answered extra questions compared to students who completed the survey but were not asked extra questions in the state sample, percent (95% confidence interval)**

Question	Options	Extra Answerers % ( $\pm$ CI)	Non-extra Completers % ( $\pm$ CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	71.2 (5.0)	72.1 (4.4)	0.8046
	Mostly Cs, Ds or Fs	28.8 (5.0)	27.9 (4.4)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	79.0 (1.7)	81.0 (3.4)	0.3264
	no/mostly & NO/def not true	21.0 (1.7)	19.0 (3.4)	
How far did your mother get in school?	Graduated HS or more	84.3 (4.1)	82.3 (5.4)	0.5621
	Didn't graduate HS	15.7 (4.1)	17.7 (5.4)	
Living situation due to finances	No	93.9 (1.5)	93.9 (1.0)	0.9798
	Yes	6.1 (1.5)	6.1 (1.0)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	85.1 (2.7)	85.4 (1.9)	0.8756
	At least once	14.9 (2.7)	14.6 (1.9)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	77.3 (6.1)	75.3 (3.0)	0.5694
	More than a year ago	22.7 (6.1)	24.7 (3.0)	
Do you receive free or reduced price lunches at school?	No	65.6 (9.9)	64.0 (9.2)	0.8184
	Yes	34.4 (9.9)	36.0 (9.2)	
During the past 30 days, on how many days did you smoke cigarettes?	None	93.9 (3.7)	92.6 (1.4)	0.5614
	At least 1 day	6.1 (3.7)	7.4 (1.4)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	69.0 (5.6)	71.4 (3.6)	0.4935
	At least 1 day	31.0 (5.6)	28.7 (3.6)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	74.3 (2.2)	74.0 (2.6)	0.8786
	At least 1 day	25.7 (2.2)	26.0 (2.6)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	88.2 (4.0)	84.9 (1.7)	0.1677
	At least once	11.8 (4.0)	15.2 (1.7)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	73.6 (3.7)	71.6 (2.7)	0.4127
	At least 1 day	26.4 (3.7)	28.4 (2.7)	
What language is usually spoken at home?	English	80.1 (12.7)	78.1 (6.0)	0.7884
	Other language	19.9 (12.7)	21.9 (6.0)	
How do you describe yourself? (Select one or more responses.)	White	53.5 (19.8)	49.1 (8.0)	0.6905
	Hispanic	15.6 (4.7)	22.2 (8.8)	0.1754
	American Indian/Alaska Native	1.4 (1.3)	1.5 (0.6)	0.9270
	Asian	13.1 (8.5)	11.3 (4.4)	0.7084
	Black/African American	5.5 (5.2)	4.4 (1.6)	0.6435
	Pacific Islander	2.1 (1.2)	2.0 (1.0)	0.9562

95% confidence interval, p, value significant if less than 0.05

**Table D3b: Comparing characteristics of 12<sup>th</sup> graders who answered extra questions compared to students who completed the survey but were not asked extra questions in the census, percent (95% confidence interval)**

Question	Options	Extra Answerers % (±CI)	Non-extra Completers % (±CI)	Difference p-value
Putting them all together, what were your grades like last year?	Mostly A's or B's	71.4 (1.3)	72.9 (0.5)	<b>0.8046</b>
	Mostly Cs, Ds or Fs	28.6 (1.3)	27.1 (0.5)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	79.2 (1.2)	82.8 (0.5)	<b>0.0000</b>
	no/mostly & NO/def not true	20.8 (1.2)	17.2 (0.5)	
How far did your mother get in school?	Graduated HS or more	83.6 (1.1)	84.8 (0.5)	0.0516
	Didn't graduate HS	16.4 (1.1)	15.2 (0.5)	
Living situation due to finances	No	93.7 (0.7)	93.7 (0.3)	0.9199
	Yes	6.3 (0.7)	6.3 (0.3)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	85.8 (1.0)	86.3 (0.4)	0.4395
	At least once	14.2 (1.0)	13.8 (0.4)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	75.4 (1.7)	77.0 (0.7)	0.0832
	More than a year ago	24.6 (1.7)	23.0 (0.7)	
Do you receive free or reduced price lunches at school?	No	69.0 (1.8)	68.1 (0.8)	0.4060
	Yes	31.0 (1.8)	31.9 (0.8)	
During the past 30 days, on how many days did you smoke cigarettes?	None	91.2 (0.8)	92.4 (0.3)	<b>0.0055</b>
	At least 1 day	8.8 (0.8)	7.6 (0.3)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	68.7 (1.8)	70.2 (0.8)	0.1234
	At least 1 day	31.3 (1.8)	29.8 (0.8)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	75.2 (1.2)	74.6 (0.5)	0.4392
	At least 1 day	24.8 (1.2)	25.4 (0.5)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	85.5 (1.0)	83.7 (0.5)	<b>0.0024</b>
	At least once	14.5 (1.0)	16.3 (0.5)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	72.4 (1.3)	69.4 (0.6)	<b>0.0001</b>
	At least 1 day	27.6 (1.3)	30.6 (0.6)	
What language is usually spoken at home?	English	81.7 (1.1)	80.2 (0.5)	<b>0.0164</b>
	Other language	18.3 (1.1)	19.9 (0.5)	
How do you describe yourself? (Select one or more responses.)	White	59.4 (1.4)	54.4 (0.6)	<b>0.0000</b>
	Hispanic	20.6 (1.2)	20.2 (0.5)	0.5615
	American Indian/Alaska Native	2.1 (0.4)	1.5 (0.1)	<b>0.0012</b>
	Asian	5.7 (0.7)	9.7 (0.4)	<b>0.0000</b>
	Black/African American	3.1 (0.5)	3.6 (0.2)	0.1221
	Pacific Islander	1.4 (0.4)	1.7 (0.2)	0.2469

95% confidence interval, p, value significant if less than 0.05

## Appendix E: Comparing Student Characteristics in the State Sample and Census among Race/Ethnicity Groups

Rate ratio tables comparing student characteristics for race/ethnic groups in the state sample to the census are also provided in Section 8. Race/Ethnicity Comparisons.

Instead of presenting rate ratios, Tables E1a to E9d show the differences in prevalence for student characteristic questions by grade by race/ethnic group and grade in the state sample and the census.

\*School reported race/ethnicity provided by OSPI, <http://www.k12.wa.us/DataAdmin/enrollment.aspx>

### All Students

**Table E1a: Comparison of all student characteristics among 6th graders in the state sample to census, 2018, percent (confidence interval)**

Question	Options	State Sample	Census	Difference
		%(±CI)	%(±CI)	p, value
What language is usually spoken at home?	English	79.7 (3.8)	78.3 (1.5)	0.4511
	Other language	20.3 (3.8)	21.7 (1.5)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	83.0 (1.8)	83.1 (0.7)	0.8614
	Mostly Cs, Ds or Fs	17.0 (1.8)	16.9 (0.7)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	85.3 (1.5)	85.3 (0.6)	0.9871
	no/mostly & NO/def not true	14.7 (1.5)	14.7 (0.6)	
In the last 30 days, how often have you been bullied?	None	68.8 (1.8)	69.3 (0.7)	0.6009
	At least 1 day	31.2 (1.8)	30.7 (0.7)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	98.5 (0.3)	98.6 (0.1)	0.5013
	At least 1 day	1.5 (0.3)	1.4 (0.1)	
During the past 30 days, on how many days did you smoke cigarettes?	None	99.0 (0.3)	99.1 (0.1)	0.4832
	At least 1 day	1.0 (0.3)	1.0 (0.1)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	97.0 (0.5)	97.1 (0.2)	0.6062
	At least 1 day	3.0 (0.5)	2.9 (0.2)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	98.7 (0.3)	98.8 (0.1)	0.6565
	At least 1 day	1.3 (0.3)	1.2 (0.1)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	97.6 (0.4)	97.8 (0.2)	0.3521
	At least 1 day	2.4 (0.4)	2.3 (0.2)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	98.1 (0.4)	98.2 (0.1)	0.5733
	At least once	1.9 (0.4)	1.8 (0.1)	

95% confidence interval, p, value significant if less than 0.05

**Table E1b: Comparison of all student characteristics among 8th graders in the state sample to census, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	80.2 (4.2)	77.6 (1.8)	0.2179
	Other language	19.8 (4.2)	22.4 (1.8)	
How far did your mother get in school?	Graduated HS or more	87.4 (2.7)	85.7 (1.3)	0.2188
	Didn't graduate HS	12.6 (2.7)	14.3 (1.3)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	94.0 (0.6)	94.4 (0.2)	0.2772
	Yes	6.0 (0.6)	5.6 (0.2)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	90.4 (1.0)	90.1 (0.4)	0.5086
	At least once	9.6 (1.0)	10.0 (0.4)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	79.0 (2.3)	77.6 (1.0)	0.2012
	More than a year ago	21.0 (2.3)	22.4 (1.0)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	79.0 (2.7)	77.9 (1.1)	0.4005
	Mostly Cs, Ds or Fs	21.0 (2.7)	22.1 (1.1)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	79.8 (2.1)	80.2 (0.8)	0.6642
	no/mostly & NO/def not true	20.2 (2.1)	19.8 (0.8)	
In the last 30 days, how often have you been bullied?	None	72.6 (1.7)	73.0 (0.7)	0.6126
	At least 1 day	27.4 (1.7)	27.0 (0.7)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	96.6 (0.5)	96.6 (0.2)	0.8996
	At least 1 day	3.4 (0.5)	3.4 (0.2)	
During the past 30 days, on how many days did you smoke cigarettes?	None	97.3 (0.5)	96.9 (0.2)	0.1835
	At least 1 day	2.7 (0.5)	3.1 (0.2)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	96.6 (0.5)	96.6 (0.2)	0.7360
	At least 1 day	3.4 (0.5)	3.4 (0.2)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	92.8 (1.0)	92.5 (0.5)	0.4294
	At least 1 day	7.2 (1.0)	7.6 (0.5)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	91.6 (0.9)	91.3 (0.4)	0.4850
	At least 1 day	8.4 (0.9)	8.7 (0.4)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	95.4 (0.6)	95.3 (0.3)	0.8443
	At least 1 day	4.6 (0.6)	4.7 (0.3)	
Have you ever had sexual intercourse?	No	91.2 (1.4)	91.4 (0.7)	0.7822
	Yes	8.8 (1.4)	8.6 (0.7)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	12.7 (4.0)	17.1 (3.5)	0.0907
	Age 13 or younger	87.3 (4.0)	83.0 (3.5)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	78.8 (5.3)	79.0 (2.9)	0.9275
	4 or more partners	21.2 (5.3)	21.0 (2.9)	
Sexual orientation, which of the following best describes you?	Straight (heterosexual)	81.1 (2.0)	81.7 (0.7)	0.5460
	Gay, lesbian, or not sure	18.9 (2.0)	18.3 (0.7)	
Gender identity, how do you currently identify yourself?	Male or female	94.7 (0.8)	94.7 (0.5)	0.9830
	Transgender, questioning/not sure, something else	5.3 (0.8)	5.3 (0.5)	

95% confidence interval, p, value significant if less than 0.05

**Table E1c: Comparison of all student characteristics among 10th graders in the state sample to census, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	75.2 (4.4)	78.7 (2.0)	0.0956
	Other language	24.8 (4.4)	21.3 (2.0)	
How far did your mother get in school?	Graduated HS or more	83.3 (3.2)	85.2 (1.5)	0.2223
	Didn't graduate HS	16.7 (3.2)	14.9 (1.5)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	94.0 (0.5)	93.9 (0.3)	0.8976
	Yes	6.1 (0.5)	6.1 (0.3)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	87.6 (1.4)	87.8 (0.6)	0.7396
	At least once	12.4 (1.4)	12.2 (0.6)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	77.2 (2.3)	78.5 (1.0)	0.2219
	More than a year ago	22.9 (2.3)	21.5 (1.0)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	75.1 (2.6)	75.6 (1.2)	0.6671
	Mostly Cs, Ds or Fs	24.9 (2.6)	24.4 (1.2)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	79.0 (3.2)	79.4 (0.9)	0.7867
	no/mostly & NO/def not true	21.0 (3.2)	20.6 (0.9)	
In the last 30 days, how often have you been bullied?	None	80.7 (1.3)	80.0 (0.6)	0.2917
	At least 1 day	19.3 (1.3)	20.0 (0.6)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	94.9 (0.8)	95.3 (0.3)	0.2724
	At least 1 day	5.1 (0.8)	4.7 (0.3)	
During the past 30 days, on how many days did you smoke cigarettes?	None	95.0 (0.7)	94.6 (0.4)	0.2219
	At least 1 day	21.2 (2.6)	21.4 (0.9)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	78.8 (2.6)	78.6 (0.9)	0.8439
	At least 1 day	21.2 (2.6)	21.4 (0.9)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	82.1 (1.6)	82.6 (0.7)	0.5368
	At least 1 day	17.9 (1.6)	17.4 (0.7)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	81.5 (1.6)	81.2 (0.7)	0.6673
	At least 1 day	18.5 (1.6)	18.8 (0.7)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	90.5 (1.1)	90.1 (0.5)	0.5413
	At least 1 day	9.6 (1.1)	9.9 (0.5)	
Have you ever had sexual intercourse?	No	74.2 (2.6)	75.7 (1.0)	0.2162
	Yes	25.8 (2.6)	24.3 (1.0)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	71.1 (3.4)	72.4 (1.4)	0.4174
	Age 13 or younger	28.9 (3.4)	27.6 (1.4)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	80.6 (3.2)	82.0 (1.2)	0.3272
	4 or more partners	19.5 (3.2)	18.1 (1.2)	
Which of the following best describes you?	Straight (heterosexual)	80.6 (1.7)	80.9 (0.7)	0.7139
	Gay, lesbian, or not sure	19.5 (1.7)	19.2 (0.7)	
Gender identity, how do you currently identify yourself?	Male or female	94.8 (0.5)	94.7 (0.4)	0.8789
	Transgender, questioning/not sure, something else	5.2 (0.5)	5.3 (0.4)	

95% confidence interval, p, value significant if less than 0.05

**Table E1d: Comparison of all student characteristics among 12th graders in the state sample to census, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	76.9 (5.3)	79.2 (2.0)	0.3312
	Other language	23.2 (5.3)	20.8 (2.0)	
How far did your mother get in school?	Graduated HS or more	81.4 (4.4)	83.6 (1.7)	0.2545
	Didn't graduate HS	18.7 (4.4)	16.4 (1.7)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	93.3 (0.8)	93.4 (0.3)	0.9536
	Yes	6.7 (0.8)	6.6 (0.3)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	84.5 (1.6)	85.3 (0.8)	0.2825
	At least once	15.6 (1.6)	14.7 (0.8)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	74.0 (2.6)	75.4 (1.0)	0.2498
	More than a year ago	26.0 (2.6)	24.6 (1.0)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	70.6 (3.6)	71.2 (1.4)	0.7408
	Mostly Cs, Ds or Fs	29.4 (3.6)	28.8 (1.4)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	80.5 (2.9)	81.5 (0.9)	0.4232
	no/mostly & NO/def not true	19.5 (2.9)	18.5 (0.9)	
In the last 30 days, how often have you been bullied?	None	83.1 (1.4)	83.5 (0.6)	0.5265
	At least 1 day	16.9 (1.4)	16.5 (0.6)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	93.5 (1.0)	93.9 (0.4)	0.3648
	At least 1 day	6.5 (1.0)	6.1 (0.4)	
During the past 30 days, on how many days did you smoke cigarettes?	None	92.0 (1.2)	91.5 (0.6)	0.3914
	At least 1 day	8.0 (1.2)	8.5 (0.6)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	70.4 (2.8)	70.0 (1.3)	0.7418
	At least 1 day	29.6 (2.8)	30.0 (1.3)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	73.8 (2.1)	74.1 (0.9)	0.7731
	At least 1 day	26.2 (2.1)	25.9 (0.9)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	72.1 (2.3)	70.0 (1.0)	0.0620
	At least 1 day	27.9 (2.3)	30.0 (1.0)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	84.8 (1.6)	83.5 (0.7)	0.1173
	At least 1 day	15.2 (1.6)	16.5 (0.7)	
Have you ever had sexual intercourse?	No	52.6 (4.2)	51.7 (1.5)	0.6421
	Yes	47.4 (4.2)	48.3 (1.5)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	87.7 (2.1)	87.0 (0.9)	0.5151
	Age 13 or younger	12.3 (2.1)	13.0 (0.9)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	74.6 (2.7)	74.7 (1.3)	0.9360
	4 or more partners	25.4 (2.7)	25.3 (1.3)	
Which of the following best describes you?	Straight (heterosexual)	80.6 (2.1)	80.0 (0.8)	0.5807
	Gay, lesbian, or not sure	19.4 (2.1)	20.0 (0.8)	
Gender identity, how do you currently identify yourself?	Male or female	95.5 (1.0)	95.3 (0.4)	0.5233
	Transgender, questioning/not sure, something else	4.5 (1.0)	4.8 (0.4)	

95% confidence interval, p, value significant if less than 0.05

**White non-Hispanic Students**

**Table E2a: Comparison of white non-Hispanic student characteristics among 6th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	79.7 (3.8)	78.3 (1.5)	0.4511
	Other language	20.3 (3.8)	21.7 (1.5)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	88.4 (1.8)	87.8 (0.7)	0.4658
	Mostly Cs, Ds or Fs	11.6 (1.8)	12.2 (0.7)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	87.6 (1.9)	87.8 (0.6)	0.8777
	no/mostly & NO/def not true	12.4 (1.9)	12.3 (0.6)	
In the last 30 days, how often have you been bullied?	None	71.0 (2.9)	70.8 (1.0)	0.8622
	At least 1 day	29.0 (2.9)	29.2 (1.0)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	98.9 (0.3)	99.0 (0.1)	0.9018
	At least 1 day	1.1 (0.3)	1.1 (0.1)	
During the past 30 days, on how many days did you smoke cigarettes?	None	99.3 (0.3)	99.4 (0.1)	0.4090
	At least 1 day	0.7 (0.3)	0.6 (0.1)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	97.7 (0.5)	97.9 (0.2)	0.3376
	At least 1 day	2.3 (0.5)	2.1 (0.2)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	99.1 (0.4)	99.3 (0.1)	0.3688
	At least 1 day	0.9 (0.4)	0.7 (0.1)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	98.4 (0.5)	98.4 (0.2)	0.8556
	At least 1 day	1.6 (0.5)	1.6 (0.2)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	98.8 (0.4)	98.8 (0.1)	0.9721
	At least once	1.2 (0.4)	1.2 (0.1)	

95% confidence interval, p, value significant if less than 0.05



**Table E2b: Comparison of white non-Hispanic student characteristics among 8th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	80.2 (4.2)	77.6 (1.8)	0.2179
	Other language	19.8 (4.2)	22.4 (1.8)	
How far did your mother get in school?	Graduated HS or more	94.5 (1.1)	93.6 (0.5)	0.1275
	Didn't graduate HS	5.5 (1.1)	6.4 (0.5)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	94.7 (0.8)	95.1 (0.3)	0.2938
	Yes	5.3 (0.8)	4.9 (0.3)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	92.6 (1.1)	92.2 (0.5)	0.5323
	At least once	7.5 (1.1)	7.8 (0.5)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	84.2 (2.5)	83.0 (0.9)	0.2938
	More than a year ago	15.8 (2.5)	17.0 (0.9)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	82.7 (2.6)	82.3 (0.9)	0.7577
	Mostly Cs, Ds or Fs	17.3 (2.6)	17.7 (0.9)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	82.9 (2.1)	82.8 (0.8)	0.9004
	no/mostly & NO/def not true	17.1 (2.1)	17.2 (0.8)	
In the last 30 days, how often have you been bullied?	None	71.7 (2.1)	71.6 (0.8)	0.9034
	At least 1 day	28.3 (2.1)	28.4 (0.8)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	97.4 (0.5)	97.2 (0.2)	0.4208
	At least 1 day	2.6 (0.5)	2.8 (0.2)	
During the past 30 days, on how many days did you smoke cigarettes?	None	97.8 (0.6)	97.3 (0.2)	0.2007
	At least 1 day	2.3 (0.6)	2.7 (0.2)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	97.4 (0.5)	97.2 (0.2)	0.1109
	At least 1 day	2.6 (0.5)	2.8 (0.2)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	94.5 (0.9)	94.2 (0.4)	0.4396
	At least 1 day	5.5 (0.9)	5.8 (0.4)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	92.6 (0.9)	92.5 (0.4)	0.7973
	At least 1 day	7.4 (0.9)	7.5 (0.4)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	96.5 (0.6)	96.6 (0.3)	0.8443
	At least 1 day	3.5 (0.6)	3.4 (0.3)	
Have you ever had sexual intercourse?	No	93.0 (1.4)	92.6 (0.8)	0.5944
	Yes	7.0 (1.4)	7.4 (0.8)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	8.8 (5.4)	16.4 (4.1)	<b>0.0415</b>
	Age 13 or younger	91.2 (5.4)	83.7 (4.1)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	77.0 (7.7)	80.9 (3.0)	0.2540
	4 or more partners	23.0 (7.7)	19.1 (3.0)	
Sexual orientation, which of the following best describes you?	Straight (heterosexual)	80.6 (2.8)	81.3 (0.9)	0.5998
	Gay, lesbian, or not sure	19.4 (2.8)	18.7 (0.9)	
Gender identity, how do you currently identify yourself?	Male or female	95.1 (0.9)	94.6 (0.6)	0.3734
	Transgender, questioning/not sure, something else	5.0 (0.9)	5.4 (0.6)	

95% confidence interval, p, value significant if less than 0.05

**Table E2c: Comparison of white non-Hispanic student characteristics among 10th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	, 0.5 (4.4)	, 0.3 (2.0)	0.0956
	Other language	24.8 (4.4)	21.3 (2.0)	
How far did your mother get in school?	Graduated HS or more	91.7 (1.6)	93.3 (0.6)	<b>0.0270</b>
	Didn't graduate HS	8.3 (1.6)	6.7 (0.6)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	94.7 (0.8)	94.7 (0.3)	0.9959
	Yes	5.3 (0.8)	5.3 (0.3)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	89.6 (1.5)	89.9 (0.6)	0.6432
	At least once	10.5 (1.5)	10.1 (0.6)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	79.8 (2.9)	82.3 (0.9)	0.0539
	More than a year ago	20.2 (2.9)	17.7 (0.9)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	78.5 (2.7)	79.1 (1.0)	0.6072
	Mostly Cs, Ds or Fs	21.5 (2.7)	20.9 (1.0)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	80.7 (3.5)	81.0 (0.9)	0.8408
	no/mostly & NO/def not true	19.3 (3.5)	19.0 (0.9)	
In the last 30 days, how often have you been bullied?	None	78.8 (1.6)	78.5 (0.7)	0.6765
	At least 1 day	21.2 (1.6)	21.5 (0.7)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	94.8 (1.1)	95.6 (0.4)	0.0935
	At least 1 day	5.2 (1.1)	4.4 (0.4)	
During the past 30 days, on how many days did you smoke cigarettes?	None	95.3 (0.8)	94.7 (0.4)	0.1715
	At least 1 day	4.8 (0.8)	5.3 (0.4)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	78.8 (1.6)	78.5 (0.7)	0.3376
	At least 1 day	21.2 (1.6)	21.5 (0.7)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	82.5 (1.6)	83.4 (0.7)	0.2463
	At least 1 day	17.6 (1.6)	16.6 (0.7)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	80.4 (1.5)	80.7 (0.8)	0.7464
	At least 1 day	19.6 (1.5)	19.4 (0.8)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	90.7 (0.7)	90.7 (0.5)	0.9836
	At least 1 day	9.3 (0.7)	9.3 (0.5)	
Have you ever had sexual intercourse?	No	74.1 (2.3)	76.2 (1.0)	0.0587
	Yes	25.9 (2.3)	23.8 (1.0)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	74.5 (4.4)	76.4 (1.7)	0.3491
	Age 13 or younger	25.5 (4.4)	23.6 (1.7)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	81.3 (4.8)	83.5 (1.6)	0.2973
	4 or more partners	18.7 (4.8)	16.5 (1.6)	
Which of the following best describes you?	Straight (heterosexual)	79.1 (2.4)	81.0 (0.9)	0.0924
	Gay, lesbian, or not sure	20.9 (2.4)	19.0 (0.9)	
Gender identity, how do you currently identify yourself?	Male or female	94.6 (0.9)	94.8 (0.5)	0.5677
	Transgender, questioning/not sure, something else	5.4 (0.9)	5.2 (0.5)	

95% confidence interval, p, value significant if less than 0.05

**Table E2d: Comparison of white non-Hispanic student characteristics among 12th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	76.9 (5.3)	79.2 (2.0)	0.3312
	Other language	23.2 (5.3)	20.8 (2.0)	
How far did your mother get in school?	Graduated HS or more	91.0 (1.8)	92.3 (0.7)	0.1108
	Didn't graduate HS	9.0 (1.8)	7.7 (0.7)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	94.4 (0.9)	94.2 (0.4)	0.7411
	Yes	5.7 (0.9)	5.8 (0.4)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	86.5 (1.8)	87.7 (0.8)	0.1597
	At least once	13.5 (1.8)	12.3 (0.8)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	77.4 (3.1)	78.7 (1.2)	0.3811
	More than a year ago	22.6 (3.1)	21.4 (1.2)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	73.6 (3.2)	74.3 (1.3)	0.6515
	Mostly Cs, Ds or Fs	26.4 (3.2)	25.7 (1.3)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	81.6 (3.2)	83.0 (1.0)	0.3043
	no/mostly & NO/def not true	18.4 (3.2)	17.0 (1.0)	
In the last 30 days, how often have you been bullied?	None	81.0 (1.7)	82.3 (0.7)	0.1001
	At least 1 day	19.0 (1.7)	17.7 (0.7)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	92.3 (1.2)	93.5 (0.5)	<b>0.0301</b>
	At least 1 day	7.7 (1.2)	6.6 (0.5)	
During the past 30 days, on how many days did you smoke cigarettes?	None	90.6 (1.7)	90.6 (0.7)	0.9547
	At least 1 day	9.4 (1.7)	9.4 (0.7)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	81.6 (3.2)	83.0 (1.0)	0.3376
	At least 1 day	18.4 (3.2)	17.0 (1.0)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	72.9 (2.2)	73.4 (1.1)	0.6685
	At least 1 day	27.1 (2.2)	26.6 (1.1)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	69.0 (2.6)	67.0 (1.2)	0.1284
	At least 1 day	31.0 (2.6)	33.0 (1.2)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	83.0 (1.6)	82.5 (1.0)	0.5358
	At least 1 day	17.0 (1.6)	17.5 (1.0)	
Have you ever had sexual intercourse?	No	49.7 (3.8)	49.8 (1.6)	0.9459
	Yes	50.3 (3.8)	50.2 (1.6)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	87.8 (2.5)	89.6 (1.0)	0.1121
	Age 13 or younger	12.2 (2.5)	10.4 (1.0)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	72.2 (3.3)	75.1 (1.6)	0.0752
	4 or more partners	27.8 (3.3)	24.9 (1.6)	
Which of the following best describes you?	Straight (heterosexual)	81.2 (2.6)	79.5 (1.1)	0.1925
	Gay, lesbian, or not sure	18.8 (2.6)	20.5 (1.1)	
Gender identity, how do you currently identify yourself?	Male or female	95.2 (1.3)	95.3 (0.4)	0.9612
	Transgender, questioning/not sure, something else	4.8 (1.3)	4.7 (0.4)	

95% confidence interval, p, value significant if less than 0.05

**All Students**

**Hispanic or Latino Students**

**Table E3a: Comparison of Hispanic student characteristics among 6th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	55.6 (5.7)	54.3 (2.4)	0.6182
	Other language	44.4 (5.7)	45.7 (2.4)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	78.4 (2.3)	78.3 (0.9)	0.9033
	Mostly Cs, Ds or Fs	21.6 (2.3)	21.7 (0.9)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	85.8 (1.8)	84.8 (0.8)	0.2844
	no/mostly & NO/def not true	14.2 (1.8)	15.2 (0.8)	
In the last 30 days, how often have you been bullied?	None	70.0 (2.7)	71.0 (1.0)	0.4008
	At least 1 day	30.0 (2.7)	29.0 (1.0)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	98.4 (0.6)	98.5 (0.2)	0.7908
	At least 1 day	1.6 (0.6)	1.5 (0.2)	
During the past 30 days, on how many days did you smoke cigarettes?	None	99.0 (0.5)	98.9 (0.2)	0.8193
	At least 1 day	1.0 (0.5)	1.1 (0.2)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	96.1 (1.1)	96.0 (0.4)	0.8996
	At least 1 day	3.9 (1.1)	4.0 (0.4)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	98.3 (0.6)	98.3 (0.3)	0.8426
	At least 1 day	1.7 (0.6)	1.7 (0.3)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	97.3 (0.8)	97.1 (0.4)	0.8556
	At least 1 day	2.7 (0.8)	2.9 (0.4)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	97.7 (0.7)	97.5 (0.3)	0.5154
	At least once	2.3 (0.7)	2.5 (0.3)	

95% confidence interval, p, value significant if less than 0.05

**Table E3b: Comparison of Hispanic student characteristics among 8th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	48.6 (6.4)	47.5 (2.5)	0.7159
	Other language	51.4 (6.4)	52.5 (2.5)	
How far did your mother get in school?	Graduated HS or more	63.1 (5.7)	62.3 (2.3)	0.7798
	Didn't graduate HS	36.9 (5.7)	37.7 (2.3)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	93.1 (1.6)	93.8 (0.5)	0.3163
	Yes	6.9 (1.6)	6.2 (0.5)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	87.7 (1.6)	87.9 (0.6)	0.7983
	At least once	12.3 (1.6)	12.1 (0.6)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	73.3 (3.4)	71.7 (1.2)	0.3302
	More than a year ago	26.7 (3.4)	28.3 (1.2)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	70.5 (2.7)	68.6 (1.4)	0.1721
	Mostly Cs, Ds or Fs	29.5 (2.7)	31.4 (1.4)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	76.1 (2.6)	77.1 (1.1)	0.4091
	no/mostly & NO/def not true	23.9 (2.6)	22.9 (1.1)	
In the last 30 days, how often have you been bullied?	None	74.8 (2.1)	75.5 (0.9)	0.4895
	At least 1 day	25.2 (2.1)	24.5 (0.9)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	95.7 (1.1)	96.1 (0.4)	0.4116
	At least 1 day	4.3 (1.1)	3.9 (0.4)	
During the past 30 days, on how many days did you smoke cigarettes?	None	96.5 (0.9)	96.5 (0.4)	0.9991
	At least 1 day	3.5 (0.9)	3.5 (0.4)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	84.6 (2.9)	85.7 (0.9)	0.3928
	At least 1 day	15.4 (2.9)	14.3 (0.9)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	89.2 (2.0)	88.6 (0.7)	0.5108
	At least 1 day	10.8 (2.0)	11.5 (0.7)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	88.2 (1.8)	87.2 (0.8)	0.2543
	At least 1 day	11.8 (1.8)	12.8 (0.8)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	92.3 (1.4)	92.0 (0.6)	0.6320
	At least 1 day	7.7 (1.4)	8.0 (0.6)	
Have you ever had sexual intercourse?	No	87.9 (3.4)	88.6 (1.5)	0.6614
	Yes	12.1 (3.4)	11.4 (1.5)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	13.2 (7.7)	20.1 (7.8)	0.2016
	Age 13 or younger	86.8 (7.7)	79.9 (7.8)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	77.6 (10.7)	79.5 (7.3)	0.7456
	4 or more partners	22.5 (10.7)	20.5 (7.3)	
Sexual orientation, which of the following best describes you?	Straight (heterosexual)	83.8 (3.2)	83.8 (0.9)	0.9880
	Gay, lesbian, or not sure	16.2 (3.2)	16.2 (0.9)	
Gender identity, how do you currently identify yourself?	Male or female	95.3 (1.4)	95.4 (0.5)	0.8241
	Transgender, questioning/not sure, something else	4.7 (, 95.3)	4.6 (, 93.0)	

95% confidence interval, p, value significant if less than 0.05

**Table E3c: Comparison of Hispanic student characteristics among 10th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	48.6 (6.4)	47.5 (2.5)	0.7159
	Other language	51.4 (6.4)	52.5 (2.5)	
How far did your mother get in school?	Graduated HS or more	59.8 (4.8)	60.3 (2.4)	0.8074
	Didn't graduate HS	40.3 (4.8)	39.7 (2.4)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	93.4 (1.0)	92.9 (0.5)	0.4085
	Yes	6.6 (1.0)	7.1 (0.5)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	85.7 (1.7)	84.7 (0.9)	0.2404
	At least once	14.3 (1.7)	15.3 (0.9)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	75.0 (3.4)	73.4 (1.4)	0.3176
	More than a year ago	25.0 (3.4)	26.6 (1.4)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	63.6 (4.5)	64.8 (1.4)	0.5572
	Mostly Cs, Ds or Fs	36.4 (4.5)	35.2 (1.4)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	77.3 (3.3)	77.2 (1.2)	0.9572
	no/mostly & NO/def not true	22.7 (3.3)	22.8 (1.2)	
In the last 30 days, how often have you been bullied?	None	83.4 (2.2)	82.7 (1.0)	0.4853
	At least 1 day	16.6 (2.2)	17.3 (1.0)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	94.7 (1.8)	95.0 (0.5)	0.7691
	At least 1 day	5.3 (1.8)	5.0 (0.5)	
During the past 30 days, on how many days did you smoke cigarettes?	None	93.9 (1.0)	94.8 (0.5)	0.0667
	At least 1 day	6.1 (1.0)	5.2 (0.5)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	75.9 (4.3)	79.0 (1.5)	0.0950
	At least 1 day	24.1 (4.3)	21.0 (1.5)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	76.7 (2.1)	78.8 (1.0)	<b>0.0355</b>
	At least 1 day	23.3 (2.1)	21.2 (1.0)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	76.7 (2.2)	78.4 (0.9)	0.0898
	At least 1 day	23.3 (2.2)	21.6 (0.9)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	86.6 (2.0)	87.2 (0.8)	0.4526
	At least 1 day	13.4 (2.0)	12.8 (0.8)	
Have you ever had sexual intercourse?	No	66.7 (4.3)	69.7 (1.6)	0.1082
	Yes	33.3 (4.3)	30.3 (1.6)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	67.7 (4.9)	69.5 (2.6)	0.4706
	Age 13 or younger	32.3 (4.9)	30.5 (2.6)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	78.0 (5.3)	81.3 (2.3)	0.1732
	4 or more partners	22.0 (5.3)	18.7 (2.3)	
Which of the following best describes you?	Straight (heterosexual)	81.7 (2.2)	81.6 (1.1)	0.8978
	Gay, lesbian, or not sure	18.3 (2.2)	18.4 (1.1)	
Gender identity, how do you currently identify yourself?	Male or female	94.8 (1.3)	94.7 (0.7)	0.8526
	Transgender, questioning/not sure, something else	5.2 (1.3)	5.3 (0.7)	

95% confidence interval, p, value significant if less than 0.05

**Table E3d: Comparison of Hispanic student characteristics among 12th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	46.1 (6.5)	44.9 (2.7)	0.6923
	Other language	53.9 (6.5)	55.1 (2.7)	
How far did your mother get in school?	Graduated HS or more	54.9 (6.8)	56.4 (2.6)	0.6303
	Didn't graduate HS	45.1 (6.8)	43.6 (2.6)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	91.5 (2.0)	92.3 (0.6)	0.3364
	Yes	8.5 (2.0)	7.7 (0.6)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	81.7 (1.6)	81.6 (0.9)	0.8310
	At least once	18.3 (1.6)	18.5 (0.9)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	71.3 (3.4)	73.6 (1.6)	0.1704
	More than a year ago	28.7 (3.4)	26.4 (1.6)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	59.9 (6.0)	60.8 (1.8)	0.7201
	Mostly Cs, Ds or Fs	40.1 (6.0)	39.2 (1.8)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	80.2 (2.1)	78.8 (1.3)	0.2440
	no/mostly & NO/def not true	19.8 (2.1)	21.2 (1.3)	
In the last 30 days, how often have you been bullied?	None	85.5 (2.0)	84.8 (0.9)	0.4914
	At least 1 day	14.5 (2.0)	15.2 (0.9)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	95.0 (1.5)	94.6 (0.5)	0.5955
	At least 1 day	5.0 (1.5)	5.4 (0.5)	
During the past 30 days, on how many days did you smoke cigarettes?	None	93.3 (2.1)	92.8 (0.7)	0.6032
	At least 1 day	6.7 (2.1)	7.2 (0.7)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	71.4 (4.8)	74.4 (2.1)	0.1957
	At least 1 day	28.6 (4.8)	25.6 (2.1)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	71.3 (2.6)	73.5 (1.3)	0.0866
	At least 1 day	28.7 (2.6)	26.5 (1.3)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	70.9 (3.2)	71.5 (1.3)	0.7041
	At least 1 day	29.1 (3.2)	28.5 (1.3)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	82.9 (2.6)	83.3 (0.9)	0.7602
	At least 1 day	17.1 (2.6)	16.7 (0.9)	
Have you ever had sexual intercourse?	No	49.8 (5.3)	48.5 (2.2)	0.5999
	Yes	50.2 (5.3)	51.5 (2.2)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	86.7 (5.9)	84.4 (1.9)	0.4127
	Age 13 or younger	13.3 (5.9)	15.6 (1.9)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	75.3 (4.3)	75.3 (2.2)	0.9883
	4 or more partners	24.7 (4.3)	24.7 (2.2)	
Which of the following best describes you?	Straight (heterosexual)	82.9 (4.0)	82.2 (1.3)	0.6776
	Gay, lesbian, or not sure	17.1 (4.0)	17.9 (1.3)	
Gender identity, how do you currently identify yourself?	Male or female	97.2 (1.4)	96.0 (0.7)	0.1124
	Transgender, questioning/not sure, something else	2.8 (1.4)	4.0 (0.7)	

95% confidence interval, p, value significant if less than 0.05

**American Indian/Alaska Native non-Hispanic Students**

**Table E4a: Comparison of American Indian/Alaska Native non-Hispanic student characteristics among 6th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	90.4 (2.7)	90.6 (1.2)	0.9343
	Other language	9.6 (2.7)	9.5 (1.2)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	80.0 (2.8)	78.9 (1.2)	0.4323
	Mostly Cs, Ds or Fs	20.0 (2.8)	21.1 (1.2)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	85.5 (2.4)	84.6 (1.0)	0.4655
	no/mostly & NO/def not true	14.5 (2.4)	15.4 (1.0)	
In the last 30 days, how often have you been bullied?	None	63.8 (3.5)	66.6 (1.2)	0.0743
	At least 1 day	36.2 (3.5)	33.4 (1.2)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	98.1 (0.7)	98.5 (0.3)	0.2707
	At least 1 day	1.9 (0.7)	1.5 (0.3)	
During the past 30 days, on how many days did you smoke cigarettes?	None	99.5 (0.4)	99.0 (0.3)	0.0711
	At least 1 day	0.5 (0.4)	1.0 (0.3)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	97.8 (0.9)	97.3 (0.4)	0.3051
	At least 1 day	2.2 (0.9)	2.7 (0.4)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	99.3 (0.5)	98.9 (0.3)	0.2016
	At least 1 day	0.7 (0.5)	1.1 (0.3)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	98.5 (0.7)	98.0 (0.4)	0.2966
	At least 1 day	1.6 (0.7)	2.0 (0.4)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	98.4 (0.8)	98.3 (0.3)	0.7551
	At least once	1.6 (0.8)	1.7 (0.3)	

95% confidence interval, p, value significant if less than 0.05



**Table E4b: Comparison of American Indian/Alaska Native non-Hispanic student characteristics among 8th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	90.7 (3.1)	88.3 (1.5)	0.1559
	Other language	9.3 (3.1)	11.7 (1.5)	
How far did your mother get in school?	Graduated HS or more	80.2 (5.6)	83.4 (2.0)	0.1902
	Didn't graduate HS	19.9 (5.6)	16.6 (2.0)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	94.8 (2.2)	94.0 (0.9)	0.4851
	Yes	5.2 (2.2)	6.0 (0.9)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	88.1 (2.7)	86.9 (1.2)	0.3597
	At least once	11.9 (2.7)	13.1 (1.2)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	75.5 (5.2)	71.5 (2.4)	0.1394
	More than a year ago	24.6 (5.2)	28.5 (2.4)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	68.3 (6.0)	67.3 (2.1)	0.7239
	Mostly Cs, Ds or Fs	31.7 (6.0)	32.7 (2.1)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	77.8 (4.1)	79.0 (1.5)	0.5042
	no/mostly & NO/def not true	22.2 (4.1)	21.0 (1.5)	
In the last 30 days, how often have you been bullied?	None	72.8 (4.6)	69.7 (1.8)	0.1697
	At least 1 day	27.3 (4.6)	30.4 (1.8)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	95.3 (2.0)	95.3 (0.8)	0.9364
	At least 1 day	4.7 (2.0)	4.7 (0.8)	
During the past 30 days, on how many days did you smoke cigarettes?	None	95.4 (1.8)	95.9 (0.7)	0.5911
	At least 1 day	4.6 (1.8)	4.1 (0.7)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	87.3 (4.0)	88.4 (1.6)	0.5583
	At least 1 day	12.7 (4.0)	11.6 (1.6)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	90.1 (3.4)	91.7 (1.1)	0.2588
	At least 1 day	9.9 (3.4)	8.3 (1.1)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	91.1 (2.9)	92.0 (1.0)	0.4759
	At least 1 day	8.9 (2.9)	8.0 (1.0)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	94.6 (2.4)	94.9 (0.8)	0.7899
	At least 1 day	5.4 (2.4)	5.1 (0.8)	
Have you ever had sexual intercourse?	No	90.8 (5.6)	90.3 (2.0)	0.8336
	Yes	9.2 (5.6)	9.7 (2.0)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	18.2 (19.3)	19.5 (8.0)	0.8885
	Age 13 or younger	81.8 (19.3)	80.5 (8.0)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	, 9.9 (22.6)	, 4.1 (8.5)	0.0805
	4 or more partners	35.3 (22.6)	20.7 (8.5)	
Sexual orientation, which of the following best describes you?	Straight (heterosexual)	79.3 (4.9)	78.7 (2.2)	0.8143
	Gay, lesbian, or not sure	20.7 (4.9)	21.3 (2.2)	
Gender identity, how do you currently identify yourself?	Male or female	94.3 (3.4)	93.6 (1.2)	0.6818
	Transgender, questioning/not sure, something else	5.7 (3.4)	6.4 (1.2)	

95% confidence interval, p, value significant if less than 0.05

**Table E4c: Comparison of American Indian/Alaska Native non-Hispanic student characteristics among 10th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	87.4 (4.8)	88.2 (1.8)	0.6881
	Other language	12.6 (4.8)	11.8 (1.8)	
How far did your mother get in school?	Graduated HS or more	83.0 (5.2)	81.6 (2.2)	0.5911
	Didn't graduate HS	17.0 (5.2)	18.4 (2.2)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	94.9 (2.3)	92.0 (1.2)	<b>0.0429</b>
	Yes	5.1 (2.3)	8.0 (1.2)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	82.9 (5.4)	81.9 (1.9)	0.7110
	At least once	17.1 (5.4)	18.1 (1.9)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	66.1 (7.8)	69.0 (3.0)	0.4235
	More than a year ago	33.9 (7.8)	31.0 (3.0)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	66.7 (7.1)	63.3 (2.8)	0.3238
	Mostly Cs, Ds or Fs	33.3 (7.1)	36.7 (2.8)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	74.7 (5.8)	75.6 (2.0)	0.7581
	no/mostly & NO/def not true	25.3 (5.8)	24.5 (2.0)	
In the last 30 days, how often have you been bullied?	None	72.2 (5.8)	72.1 (2.1)	0.9700
	At least 1 day	27.8 (5.8)	27.9 (2.1)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	92.5 (2.8)	93.2 (1.2)	0.5940
	At least 1 day	7.6 (2.8)	6.8 (1.2)	
During the past 30 days, on how many days did you smoke cigarettes?	None	94.9 (2.5)	91.5 (1.2)	<b>0.0246</b>
	At least 1 day	5.1 (2.5)	8.5 (1.2)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	70.8 (7.5)	76.4 (2.8)	0.1019
	At least 1 day	29.2 (7.5)	23.6 (2.8)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	76.8 (6.0)	79.1 (2.0)	0.3820
	At least 1 day	23.2 (6.0)	20.9 (2.0)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	79.0 (5.8)	81.1 (2.0)	0.4008
	At least 1 day	21.0 (5.8)	18.9 (2.0)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	90.3 (4.7)	88.8 (1.6)	0.5011
	At least 1 day	9.7 (4.7)	11.2 (1.6)	
Have you ever had sexual intercourse?	No	66.7 (9.2)	67.5 (3.6)	0.8405
	Yes	33.3 (9.2)	32.5 (3.6)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	83.9 (11.6)	69.1 (6.9)	<b>0.0469</b>
	Age 13 or younger	16.1 (11.6)	31.0 (6.9)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	74.2 (15.0)	80.0 (5.4)	0.3623
	4 or more partners	25.8 (15.0)	20.0 (5.4)	
Which of the following best describes you?	Straight (heterosexual)	76.8 (5.9)	77.7 (2.4)	0.7431
	Gay, lesbian, or not sure	23.2 (5.9)	22.3 (2.4)	
Gender identity, how do you currently identify yourself?	Male or female	93.6 (2.7)	92.2 (1.8)	0.3509
	Transgender, questioning/not sure, something else	6.4 (2.7)	7.8 (1.8)	

95% confidence interval, p, value significant if less than 0.05

**Table E4d: Comparison of American Indian/Alaska Native non-Hispanic student characteristics among 12th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	90.7 (4.7)	88.9 (1.9)	0.4550
	Other language	9.3 (4.7)	11.1 (1.9)	
How far did your mother get in school?	Graduated HS or more	74.4 (7.5)	80.3 (2.8)	0.0642
	Didn't graduate HS	25.6 (7.5)	19.7 (2.8)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	91.3 (5.6)	91.6 (1.9)	0.9177
	Yes	8.7 (5.6)	8.4 (1.9)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	78.2 (6.4)	76.6 (2.8)	0.5945
	At least once	21.8 (6.4)	23.4 (2.8)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	66.7 (9.4)	67.0 (4.2)	0.9401
	More than a year ago	33.3 (9.4)	33.0 (4.2)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	65.0 (8.7)	63.6 (3.7)	0.7514
	Mostly Cs, Ds or Fs	35.0 (8.7)	36.4 (3.7)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	76.9 (5.6)	78.4 (2.5)	0.5656
	no/mostly & NO/def not true	23.1 (5.6)	21.6 (2.5)	
In the last 30 days, how often have you been bullied?	None	81.7 (6.0)	80.4 (2.5)	0.6716
	At least 1 day	18.3 (6.0)	19.6 (2.5)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	93.8 (3.1)	90.7 (1.8)	0.0970
	At least 1 day	6.2 (3.1)	9.3 (1.8)	
During the past 30 days, on how many days did you smoke cigarettes?	None	91.1 (4.3)	87.3 (2.2)	0.1172
	At least 1 day	8.9 (4.3)	12.7 (2.2)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	63.2 (11.6)	65.2 (4.6)	0.7212
	At least 1 day	36.8 (11.6)	34.8 (4.6)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	63.4 (6.3)	69.0 (2.9)	0.0536
	At least 1 day	36.7 (6.3)	31.1 (2.9)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	75.0 (7.5)	71.6 (3.0)	0.3505
	At least 1 day	25.0 (7.5)	28.4 (3.0)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	83.8 (6.1)	84.1 (2.4)	0.9005
	At least 1 day	16.3 (6.1)	15.9 (2.4)	
Have you ever had sexual intercourse?	No	37.0 (18.4)	41.7 (5.9)	0.5848
	Yes	63.0 (18.4)	58.3 (5.9)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	82.8 (11.7)	77.5 (6.4)	0.4074
	Age 13 or younger	17.2 (11.7)	22.5 (6.4)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	78.6 (16.5)	67.9 (6.6)	0.2308
	4 or more partners	21.4 (16.5)	32.1 (6.6)	
Which of the following best describes you?	Straight (heterosexual)	80.3 (6.3)	78.0 (3.0)	0.4491
	Gay, lesbian, or not sure	19.7 (6.3)	22.0 (3.0)	
Gender identity, how do you currently identify yourself?	Male or female	95.0 (3.5)	94.1 (1.8)	0.6336
	Gay, lesbian, or not sure	21.4 (16.5)	32.1 (6.6)	

95% confidence interval, p, value significant if less than 0.05

**Asian non-Hispanic Students**

**Table E5a: Comparison of Asian non-Hispanic student characteristics among 6th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	75.8 (5.3)	70.9 (2.4)	0.0762
	Other language	24.2 (5.3)	29.2 (2.4)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	87.0 (2.5)	87.6 (1.1)	0.6123
	Mostly Cs, Ds or Fs	13.0 (2.5)	12.4 (1.1)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	88.5 (2.1)	86.9 (1.0)	0.1709
	no/mostly & NO/def not true	11.6 (2.1)	13.1 (1.0)	
In the last 30 days, how often have you been bullied?	None	72.3 (2.8)	73.4 (1.1)	0.4326
	At least 1 day	27.7 (2.8)	26.7 (1.1)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	98.9 (0.6)	99.0 (0.2)	0.7086
	At least 1 day	1.1 (0.6)	1.0 (0.2)	
During the past 30 days, on how many days did you smoke cigarettes?	None	99.3 (0.5)	99.4 (0.2)	0.6947
	At least 1 day	0.7 (0.5)	0.6 (0.2)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	97.8 (0.9)	98.5 (0.3)	<b>0.0461</b>
	At least 1 day	2.2 (0.9)	1.5 (0.3)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	98.9 (0.5)	99.4 (0.2)	<b>0.0097</b>
	At least 1 day	1.1 (0.5)	0.6 (0.2)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	98.3 (0.7)	98.6 (0.3)	0.3127
	At least 1 day	1.7 (0.7)	1.4 (0.3)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	98.7 (0.7)	98.7 (0.2)	0.8728
	At least once	1.3 (0.7)	1.3 (0.2)	

95% confidence interval, p, value significant if less than 0.05

**Table E5b: Comparison of Asian non-Hispanic student characteristics among 8th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	63.1 (7.2)	60.4 (2.5)	0.4262
	Other language	36.9 (7.2)	39.6 (2.5)	
How far did your mother get in school?	Graduated HS or more	88.9 (4.3)	90.3 (1.5)	0.4901
	Didn't graduate HS	11.1 (4.3)	9.8 (1.5)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	95.0 (1.5)	95.4 (0.5)	0.5596
	Yes	5.0 (1.5)	4.6 (0.5)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	93.4 (2.1)	93.2 (0.8)	0.8521
	At least once	6.6 (2.1)	6.8 (0.8)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	82.3 (3.5)	79.9 (1.9)	0.1998
	More than a year ago	17.7 (3.5)	20.1 (1.9)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	89.1 (3.1)	88.3 (1.3)	0.6320
	Mostly Cs, Ds or Fs	11.0 (3.1)	11.7 (1.3)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	78.5 (3.8)	82.8 (1.5)	<b>0.0105</b>
	no/mostly & NO/def not true	21.5 (3.8)	17.2 (1.5)	
In the last 30 days, how often have you been bullied?	None	78.2 (3.5)	79.0 (1.2)	0.5929
	At least 1 day	21.8 (3.5)	21.0 (1.2)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	97.1 (1.2)	97.6 (0.4)	0.3325
	At least 1 day	3.0 (1.2)	2.5 (0.4)	
During the past 30 days, on how many days did you smoke cigarettes?	None	98.3 (0.9)	98.1 (0.4)	0.6888
	At least 1 day	1.7 (0.9)	1.9 (0.4)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	94.2 (2.4)	94.4 (0.8)	0.8478
	At least 1 day	5.9 (2.4)	5.6 (0.8)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	96.5 (1.4)	97.0 (0.5)	0.3560
	At least 1 day	3.6 (1.4)	3.0 (0.5)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	95.8 (1.3)	95.7 (0.6)	0.8896
	At least 1 day	4.2 (1.3)	4.3 (0.6)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	96.5 (1.2)	97.5 (0.4)	<b>0.0364</b>
	At least 1 day	3.5 (1.2)	2.5 (0.4)	
Have you ever had sexual intercourse?	No	96.5 (2.1)	95.6 (0.9)	0.4453
	Yes	3.5 (2.1)	4.4 (0.9)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	30.0 (26.8)	21.0 (7.4)	0.4284
	Age 13 or younger	70.0 (26.8)	79.1 (7.4)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	, 13.7 (31.7)	, 3.8 (8.8)	0.2938
	4 or more partners	36.4 (31.7)	22.8 (8.8)	
Sexual orientation, which of the following best describes you?	Straight (heterosexual)	82.0 (3.4)	82.7 (1.3)	0.6561
	Gay, lesbian, or not sure	18.0 (3.4)	17.3 (1.3)	
Gender identity, how do you currently identify yourself?	Male or female	94.5 (1.6)	95.7 (0.6)	0.1016
	Transgender, questioning/not sure, something else	5.5 (1.6)	4.3 (0.6)	

95% confidence interval, p, value significant if less than 0.05

**Table E5c: Comparison of Asian non-Hispanic student characteristics among 10th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	52.2 (4.4)	57.6 (2.3)	<b>0.0060</b>
	Other language	47.8 (4.4)	42.4 (2.3)	
How far did your mother get in school?	Graduated HS or more	85.2 (5.1)	89.4 (1.8)	<b>0.0263</b>
	Didn't graduate HS	14.8 (5.1)	10.6 (1.8)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	94.5 (1.2)	94.9 (0.6)	0.5099
	Yes	5.5 (1.2)	5.1 (0.6)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	92.4 (1.7)	92.5 (1.0)	0.8839
	At least once	7.7 (1.7)	7.5 (1.0)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	79.9 (4.2)	80.0 (1.8)	0.9609
	More than a year ago	20.1 (4.2)	20.0 (1.8)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	88.0 (2.1)	89.2 (1.3)	0.2510
	Mostly Cs, Ds or Fs	12.0 (2.1)	10.8 (1.3)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	82.6 (4.4)	82.2 (1.6)	0.8573
	no/mostly & NO/def not true	17.4 (4.4)	17.8 (1.6)	
In the last 30 days, how often have you been bullied?	None	85.3 (2.1)	85.3 (1.1)	0.9608
	At least 1 day	14.7 (2.1)	14.8 (1.1)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	96.7 (1.3)	96.8 (0.5)	0.8070
	At least 1 day	3.3 (1.3)	3.2 (0.5)	
During the past 30 days, on how many days did you smoke cigarettes?	None	97.4 (1.3)	97.2 (0.5)	0.7011
	At least 1 day	2.6 (1.3)	2.8 (0.5)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	88.3 (2.9)	88.4 (1.3)	0.9421
	At least 1 day	11.7 (2.9)	11.6 (1.3)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	90.8 (1.9)	91.5 (1.1)	0.4556
	At least 1 day	9.2 (1.9)	8.5 (1.1)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	88.1 (1.8)	89.0 (1.1)	0.3092
	At least 1 day	12.0 (1.8)	11.0 (1.1)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	95.2 (1.6)	94.5 (0.8)	0.3951
	At least 1 day	4.8 (1.6)	5.5 (0.8)	
Have you ever had sexual intercourse?	No	85.0 (4.0)	87.2 (1.7)	0.2127
	Yes	15.0 (4.0)	12.8 (1.7)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	70.0 (9.7)	70.8 (4.9)	0.8610
	Age 13 or younger	30.0 (9.7)	29.2 (4.9)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	83.6 (9.5)	86.2 (4.4)	0.5054
	4 or more partners	16.4 (9.5)	13.8 (4.4)	
Which of the following best describes you?	Straight (heterosexual)	84.4 (2.3)	83.6 (1.4)	0.4721
	Gay, lesbian, or not sure	15.6 (2.3)	16.4 (1.4)	
Gender identity, how do you currently identify yourself?	Male or female	96.1 (1.4)	96.3 (0.6)	0.8146
	Transgender, questioning/not sure, something else	0.0 (, 7.6)	0.0 (, 7.4)	

95% confidence interval, p, value significant if less than 0.05

\*Not significant when adjusted for gender

**Table E5d: Comparison of Asian non-Hispanic student characteristics among 12th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	52.3 (6.7)	55.0 (2.4)	0.3455
	Other language	47.7 (6.7)	45.0 (2.4)	
How far did your mother get in school?	Graduated HS or more	80.9 (6.8)	86.8 (2.4)	<b>0.0208</b>
	Didn't graduate HS	19.1 (6.8)	13.2 (2.4)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	94.3 (1.7)	94.6 (0.8)	0.6674
	Yes	5.7 (1.7)	5.4 (0.8)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	88.8 (3.0)	89.7 (1.4)	0.5280
	At least once	11.2 (3.0)	10.3 (1.4)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	75.5 (6.9)	75.4 (2.4)	0.9684
	More than a year ago	24.5 (6.9)	24.6 (2.4)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	84.5 (2.7)	83.8 (1.7)	0.6313
	Mostly Cs, Ds or Fs	15.5 (2.7)	16.2 (1.7)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	86.0 (3.8)	84.4 (1.7)	0.3937
	no/mostly & NO/def not true	14.0 (3.8)	15.6 (1.7)	
In the last 30 days, how often have you been bullied?	None	88.6 (1.9)	87.8 (1.0)	0.4250
	At least 1 day	11.4 (1.9)	12.2 (1.0)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	97.1 (1.0)	96.5 (0.6)	0.3176
	At least 1 day	2.9 (1.0)	3.5 (0.6)	
During the past 30 days, on how many days did you smoke cigarettes?	None	97.7 (1.3)	95.7 (0.7)	<b>0.0131</b>
	At least 1 day	2.3 (1.3)	4.3 (0.7)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	85.2 (3.7)	81.8 (2.1)	0.0854
	At least 1 day	14.9 (3.7)	18.2 (2.1)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	87.7 (3.0)	85.8 (1.4)	0.1910
	At least 1 day	12.3 (3.0)	14.2 (1.4)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	83.2 (2.6)	78.8 (1.6)	<b>0.0016</b>
	At least 1 day	16.8 (2.6)	21.2 (1.6)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	92.7 (2.2)	89.7 (1.2)	<b>0.0141</b>
	At least 1 day	7.3 (2.2)	10.3 (1.2)	
Have you ever had sexual intercourse?	No	75.1 (6.8)	70.1 (3.3)	0.1404
	Yes	24.9 (6.8)	29.9 (3.3)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	90.6 (6.3)	84.8 (3.2)	0.1224
	Age 13 or younger	9.4 (6.3)	15.2 (3.2)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	81.3 (11.6)	76.3 (4.2)	0.3947
	4 or more partners	18.8 (11.6)	23.7 (4.2)	
Which of the following best describes you?	Straight (heterosexual)	83.2 (3.0)	83.2 (1.6)	0.9984
	Gay, lesbian, or not sure	16.8 (3.0)	16.8 (1.6)	
Gender identity, how do you currently identify yourself?	Male or female	95.9 (1.6)	96.1 (0.7)	0.7630
	Transgender, questioning/not sure, something else	4.2 (1.6)	3.9 (0.7)	

95% confidence interval, p, value significant if less than 0.05

**Black/African American non-Hispanic Students**

**Table E6a: Comparison of Black/African American non-Hispanic student characteristics among 6th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	87.3 (3.4)	85.5 (1.6)	0.3246
	Other language	12.7 (3.4)	14.5 (1.6)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	81.7 (2.9)	80.2 (1.2)	0.3188
	Mostly Cs, Ds or Fs	18.3 (2.9)	19.8 (1.2)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	85.0 (2.9)	84.7 (1.1)	0.8581
	no/mostly & NO/def not true	15.1 (2.9)	15.3 (1.1)	
In the last 30 days, how often have you been bullied?	None	69.1 (3.2)	71.7 (1.3)	0.0845
	At least 1 day	30.9 (3.2)	28.3 (1.3)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	98.4 (0.8)	98.4 (0.3)	0.8674
	At least 1 day	1.6 (0.8)	1.6 (0.3)	
During the past 30 days, on how many days did you smoke cigarettes?	None	99.1 (0.5)	98.9 (0.3)	0.5767
	At least 1 day	0.9 (0.5)	1.1 (0.3)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	97.1 (1.2)	97.3 (0.5)	0.7877
	At least 1 day	2.9 (1.2)	2.7 (0.5)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	98.5 (1.0)	98.6 (0.3)	0.7469
	At least 1 day	1.5 (1.0)	1.4 (0.3)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	97.8 (0.9)	97.7 (0.4)	0.8685
	At least 1 day	2.2 (0.9)	2.3 (0.4)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	98.5 (0.9)	98.1 (0.4)	0.3565
	At least once	1.5 (0.9)	2.0 (0.4)	

95% confidence interval, p, value significant if less than 0.05



**Table E6b: Comparison of Black/African American non-Hispanic student characteristics among 8th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	78.0 (6.0)	80.2 (2.1)	0.4116
	Other language	22.0 (6.0)	19.8 (2.1)	
How far did your mother get in school?	Graduated HS or more	85.1 (4.3)	85.3 (1.6)	0.9560
	Didn't graduate HS	14.9 (4.3)	14.8 (1.6)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	93.2 (2.4)	94.6 (0.8)	0.1606
	Yes	6.8 (2.4)	5.5 (0.8)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	89.6 (2.7)	87.2 (1.2)	0.0974
	At least once	10.4 (2.7)	12.8 (1.2)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	70.5 (5.8)	69.5 (2.3)	0.7307
	More than a year ago	29.5 (5.8)	30.5 (2.3)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	72.2 (3.7)	72.0 (1.7)	0.8694
	Mostly Cs, Ds or Fs	27.8 (3.7)	28.1 (1.7)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	75.3 (4.3)	76.3 (1.6)	0.6231
	no/mostly & NO/def not true	24.7 (4.3)	23.7 (1.6)	
In the last 30 days, how often have you been bullied?	None	78.5 (4.2)	76.0 (1.5)	0.2113
	At least 1 day	21.5 (4.2)	24.0 (1.5)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	93.7 (1.6)	95.5 (0.7)	<b>0.0117</b>
	At least 1 day	6.3 (1.6)	4.5 (0.7)	
During the past 30 days, on how many days did you smoke cigarettes?	None	95.8 (2.0)	95.8 (0.7)	0.9784
	At least 1 day	4.2 (2.0)	4.2 (0.7)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	87.7 (3.8)	89.1 (1.5)	0.4156
	At least 1 day	12.3 (3.8)	10.9 (1.5)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	92.2 (2.3)	91.1 (1.0)	0.3804
	At least 1 day	7.8 (2.3)	8.9 (1.0)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	93.6 (2.0)	92.2 (0.9)	0.1991
	At least 1 day	6.4 (2.0)	7.8 (0.9)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	95.0 (2.0)	94.4 (0.8)	0.5576
	At least 1 day	5.0 (2.0)	5.6 (0.8)	
Have you ever had sexual intercourse?	No	87.7 (4.7)	88.5 (2.0)	0.7235
	Yes	12.3 (4.7)	11.5 (2.0)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	6.3 (11.3)	14.8 (6.4)	0.3017
	Age 13 or younger	93.8 (11.3)	85.2 (6.4)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	, 5.8 (18.8)	, 3.3 (7.0)	0.6253
	4 or more partners	19.1 (18.8)	23.7 (7.0)	
Sexual orientation, which of the following best describes you?	Straight (heterosexual)	79.0 (4.6)	81.6 (1.7)	0.2102
	Gay, lesbian, or not sure	21.0 (4.6)	18.4 (1.7)	
Gender identity, how do you currently identify yourself?	Male or female	93.9 (3.0)	94.2 (1.0)	0.8203
	Transgender, questioning/not sure, something else	6.2 (3.0)	5.8 (1.0)	

95% confidence interval, p, value significant if less than 0.05

**Table E6c: Comparison of Black/African American non-Hispanic student characteristics among 10th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	78.3 (5.5)	78.2 (2.6)	0.9790
	Other language	21.7 (5.5)	21.8 (2.6)	
How far did your mother get in school?	Graduated HS or more	79.9 (5.3)	83.5 (1.9)	0.0869
	Didn't graduate HS	20.2 (5.3)	16.5 (1.9)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	92.5 (2.4)	91.4 (1.2)	0.3510
	Yes	7.5 (2.4)	8.6 (1.2)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	82.4 (2.3)	82.5 (1.5)	0.9148
	At least once	17.6 (2.3)	17.5 (1.5)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	68.3 (5.3)	69.8 (2.6)	0.5378
	More than a year ago	31.7 (5.3)	30.2 (2.6)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	67.2 (4.7)	68.7 (1.9)	0.4676
	Mostly Cs, Ds or Fs	32.8 (4.7)	31.3 (1.9)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	74.6 (4.5)	75.0 (1.8)	0.8622
	no/mostly & NO/def not true	25.4 (4.5)	25.0 (1.8)	
In the last 30 days, how often have you been bullied?	None	83.8 (2.4)	80.7 (1.6)	<b>0.0154</b>
	At least 1 day	16.3 (2.4)	19.3 (1.6)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	93.7 (2.1)	93.4 (1.0)	0.7634
	At least 1 day	6.3 (2.1)	6.6 (1.0)	
During the past 30 days, on how many days did you smoke cigarettes?	None	93.9 (1.9)	92.6 (1.1)	0.1999
	At least 1 day	6.1 (1.9)	7.4 (1.1)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	81.8 (5.6)	81.7 (2.2)	0.9591
	At least 1 day	18.2 (5.6)	18.3 (2.2)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	80.3 (4.3)	80.6 (1.8)	0.8607
	At least 1 day	19.7 (4.3)	19.4 (1.8)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	86.4 (3.7)	85.6 (1.4)	0.6680
	At least 1 day	13.6 (3.7)	14.4 (1.4)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	91.6 (3.0)	90.6 (1.3)	0.4800
	At least 1 day	8.4 (3.0)	9.4 (1.3)	
Have you ever had sexual intercourse?	No	73.7 (5.5)	73.4 (2.9)	0.9319
	Yes	26.3 (5.5)	26.6 (2.9)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	55.1 (13.9)	58.5 (6.3)	0.5923
	Age 13 or younger	44.9 (13.9)	41.5 (6.3)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	72.6 (12.2)	73.9 (5.3)	0.8047
	4 or more partners	27.5 (12.2)	26.1 (5.3)	
Which of the following best describes you?	Straight (heterosexual)	81.5 (3.7)	79.7 (2.0)	0.3031
	Gay, lesbian, or not sure	18.5 (3.7)	20.3 (2.0)	
Gender identity, how do you currently identify yourself?	Male or female	94.2 (2.3)	93.1 (1.3)	0.3730
	Transgender, questioning/not sure, something else	0.0 (, 11.4)	0.0 (, 13.5)	

95% confidence interval, p, value significant if less than 0.05

**Table E6d: Comparison of Black/African American non-Hispanic student characteristics among 12th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	79.4 (7.4)	79.4 (2.7)	0.9890
	Other language	20.6 (7.4)	20.6 (2.7)	
How far did your mother get in school?	Graduated HS or more	84.6 (4.7)	82.5 (2.2)	0.3716
	Didn't graduate HS	15.4 (4.7)	17.5 (2.2)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	91.0 (3.4)	90.3 (1.4)	0.6688
	Yes	9.0 (3.4)	9.7 (1.4)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	77.5 (5.5)	77.6 (2.2)	0.9663
	At least once	22.5 (5.5)	22.4 (2.2)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	68.8 (7.9)	66.1 (3.2)	0.4774
	More than a year ago	31.2 (7.9)	33.9 (3.2)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	63.0 (5.3)	65.6 (2.6)	0.2864
	Mostly Cs, Ds or Fs	37.0 (5.3)	34.4 (2.6)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	78.4 (4.9)	76.1 (2.1)	0.3315
	no/mostly & NO/def not true	21.6 (4.9)	23.9 (2.1)	
In the last 30 days, how often have you been bullied?	None	82.9 (3.4)	84.3 (1.8)	0.3929
	At least 1 day	17.1 (3.4)	15.8 (1.8)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	94.3 (2.6)	92.6 (1.3)	0.2135
	At least 1 day	5.7 (2.6)	7.5 (1.3)	
During the past 30 days, on how many days did you smoke cigarettes?	None	93.3 (2.9)	90.7 (1.5)	0.1054
	At least 1 day	6.7 (2.9)	9.3 (1.5)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	77.3 (6.9)	72.8 (3.2)	0.1911
	At least 1 day	22.7 (6.9)	27.2 (3.2)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	71.4 (5.6)	70.4 (2.4)	0.7119
	At least 1 day	28.6 (5.6)	29.6 (2.4)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	77.3 (5.8)	76.2 (2.2)	0.7020
	At least 1 day	22.8 (5.8)	23.8 (2.2)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	87.0 (4.6)	84.7 (1.9)	0.3022
	At least 1 day	13.0 (4.6)	15.3 (1.9)	
Have you ever had sexual intercourse?	No	53.9 (11.0)	53.1 (4.3)	0.8770
	Yes	46.1 (11.0)	46.9 (4.3)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	86.8 (9.7)	77.9 (4.9)	0.1252
	Age 13 or younger	13.2 (9.7)	22.1 (4.9)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	75.9 (10.4)	68.7 (4.9)	0.1781
	4 or more partners	24.1 (10.4)	31.4 (4.9)	
Which of the following best describes you?	Straight (heterosexual)	77.9 (6.5)	78.6 (2.5)	0.8154
	Gay, lesbian, or not sure	22.1 (6.5)	21.5 (2.5)	
Gender identity, how do you currently identify yourself?	Male or female	95.4 (2.4)	93.7 (1.4)	0.2193
	Transgender, questioning/not sure, something else	4.6 (2.4)	6.3 (1.4)	

95% confidence interval, p, value significant if less than 0.05

**Native Hawaiian or other Pacific Islander non-Hispanic Students**

**Table E7a: Comparison of Pacific Islander non-Hispanic student characteristics among 6th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	All Eligible Schools (census) % (±CI)	Difference p, value
What language is usually spoken at home?	English	87.7 (3.3)	85.7 (1.7)	0.2529
	Other language	12.3 (3.3)	14.3 (1.7)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	81.4 (3.2)	80.8 (1.3)	0.6850
	Mostly Cs, Ds or Fs	18.6 (3.2)	19.2 (1.3)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	85.5 (3.2)	86.0 (1.2)	0.7363
	no/mostly & NO/def not true	14.5 (3.2)	14.0 (1.2)	
In the last 30 days, how often have you been bullied?	None	68.4 (3.5)	71.0 (1.5)	0.1154
	At least 1 day	31.6 (3.5)	29.0 (1.5)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	98.9 (0.7)	98.6 (0.4)	0.4072
	At least 1 day	1.1 (0.7)	1.4 (0.4)	
During the past 30 days, on how many days did you smoke cigarettes?	None	99.1 (0.7)	98.8 (0.3)	0.4095
	At least 1 day	0.9 (0.7)	1.2 (0.3)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	97.0 (1.1)	97.3 (0.5)	0.6567
	At least 1 day	3.0 (1.1)	2.7 (0.5)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	98.5 (0.8)	98.7 (0.3)	0.5614
	At least 1 day	1.5 (0.8)	1.3 (0.3)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	98.0 (1.0)	98.2 (0.4)	0.7781
	At least 1 day	2.0 (1.0)	1.8 (0.4)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	98.2 (1.1)	98.2 (0.4)	0.9272
	At least once	1.9 (1.1)	1.8 (0.4)	

95% confidence interval, p, value significant if less than 0.05

**Table E7b: Comparison of Pacific Islander non-Hispanic student characteristics among 8th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	All Eligible Schools (census) % (±CI)	Difference p, value
What language is usually spoken at home?	English	74.1 (7.1)	74.8 (2.8)	0.8393
	Other language	25.9 (7.1)	25.2 (2.8)	
How far did your mother get in school?	Graduated HS or more	84.7 (5.6)	83.6 (2.0)	0.6675
	Didn't graduate HS	15.3 (5.6)	16.4 (2.0)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	92.3 (3.7)	94.1 (1.1)	0.2142
	Yes	7.7 (3.7)	5.9 (1.1)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	87.3 (3.7)	86.4 (1.6)	0.6477
	At least once	12.8 (3.7)	13.6 (1.6)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	67.1 (8.5)	65.8 (3.5)	0.7624
	More than a year ago	32.9 (8.5)	34.2 (3.5)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	71.0 (5.7)	73.7 (2.2)	0.3115
	Mostly Cs, Ds or Fs	29.0 (5.7)	26.3 (2.2)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	77.1 (5.2)	80.5 (1.6)	0.1216
	no/mostly & NO/def not true	22.9 (5.2)	19.5 (1.6)	
In the last 30 days, how often have you been bullied?	None	79.2 (5.2)	76.5 (1.8)	0.2870
	At least 1 day	20.8 (5.2)	23.5 (1.8)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	96.1 (1.9)	96.7 (0.7)	0.4702
	At least 1 day	4.0 (1.9)	3.3 (0.7)	
During the past 30 days, on how many days did you smoke cigarettes?	None	96.7 (2.1)	96.7 (0.7)	0.9739
	At least 1 day	3.3 (2.1)	3.3 (0.7)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	89.9 (4.7)	88.3 (2.0)	0.5192
	At least 1 day	10.1 (4.7)	11.7 (2.0)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	93.4 (2.8)	92.7 (1.2)	0.6134
	At least 1 day	6.6 (2.8)	7.3 (1.2)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	93.6 (2.5)	93.5 (1.0)	0.9908
	At least 1 day	6.5 (2.5)	6.5 (1.0)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	94.9 (2.2)	95.8 (0.8)	0.3293
	At least 1 day	5.2 (2.2)	4.2 (0.8)	
Have you ever had sexual intercourse?	No	83.3 (8.9)	89.3 (2.4)	0.0790
	Yes	16.7 (8.9)	10.7 (2.4)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	21.4 (26.3)	16.4 (8.9)	0.6224
	Age 13 or younger	78.6 (26.3)	83.6 (8.9)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	, 13.4 (25.1)	, 4.5 (9.7)	0.7115
	4 or more partners	23.1 (25.1)	19.2 (9.7)	
Sexual orientation, which of the following best describes you?	Straight (heterosexual)	80.7 (5.9)	80.7 (2.3)	0.9867
	Gay, lesbian, or not sure	19.3 (5.9)	19.3 (2.3)	
Gender identity, how do you currently identify yourself?	Male or female	96.5 (2.9)	94.5 (1.2)	0.2566
	Transgender, questioning/not sure, something else	3.5 (2.9)	5.5 (1.2)	

95% confidence interval, p, value significant if less than 0.05

**Table E7c: Comparison of Pacific Islander non-Hispanic student characteristics among 10th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	75.6 (5.7)	71.5 (3.1)	0.1686
	Other language	24.4 (5.7)	28.5 (3.1)	
How far did your mother get in school?	Graduated HS or more	80.2 (5.3)	83.9 (2.3)	0.1117
	Didn't graduate HS	19.8 (5.3)	16.1 (2.3)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	94.3 (3.3)	92.1 (1.5)	0.2313
	Yes	5.7 (3.3)	7.9 (1.5)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	81.4 (4.5)	81.2 (2.2)	0.9346
	At least once	18.6 (4.5)	18.8 (2.2)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	63.1 (11.2)	67.8 (4.0)	0.3555
	More than a year ago	36.9 (11.2)	32.2 (4.0)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	70.5 (5.3)	70.4 (2.5)	0.9489
	Mostly Cs, Ds or Fs	29.5 (5.3)	29.7 (2.5)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	77.4 (6.7)	78.0 (2.3)	0.8482
	no/mostly & NO/def not true	22.6 (6.7)	22.0 (2.3)	
In the last 30 days, how often have you been bullied?	None	79.9 (4.9)	79.9 (2.1)	0.9972
	At least 1 day	20.1 (4.9)	20.1 (2.1)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	94.9 (2.8)	94.4 (1.1)	0.6997
	At least 1 day	5.1 (2.8)	5.6 (1.1)	
During the past 30 days, on how many days did you smoke cigarettes?	None	92.3 (3.5)	92.8 (1.3)	0.7761
	At least 1 day	7.7 (3.5)	7.2 (1.3)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	80.4 (6.1)	81.8 (2.6)	0.6167
	At least 1 day	19.6 (6.1)	18.2 (2.6)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	81.7 (5.8)	81.8 (1.8)	0.9716
	At least 1 day	18.3 (5.8)	18.2 (1.8)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	84.8 (5.4)	84.7 (2.0)	0.9729
	At least 1 day	15.2 (5.4)	15.3 (2.0)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	92.2 (3.7)	89.6 (1.7)	0.2107
	At least 1 day	7.8 (3.7)	10.4 (1.7)	
Have you ever had sexual intercourse?	No	70.0 (9.0)	76.1 (3.7)	0.1270
	Yes	30.0 (9.0)	23.9 (3.7)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	66.7 (13.3)	64.6 (7.5)	0.7530
	Age 13 or younger	33.3 (13.3)	35.4 (7.5)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	78.3 (17.0)	80.0 (7.3)	0.8212
	4 or more partners	21.7 (17.0)	20.0 (7.3)	
Which of the following best describes you?	Straight (heterosexual)	78.2 (6.3)	80.5 (2.4)	0.4288
	Gay, lesbian, or not sure	21.8 (6.3)	19.5 (2.4)	
Gender identity, how do you currently identify yourself?	Male or female	93.6 (3.3)	92.8 (1.6)	0.6253
	Transgender, questioning/not sure, something else	6.4 (3.3)	7.2 (1.6)	

95% confidence interval, p, value significant if less than 0.05

**Table E7d: Comparison of Pacific Islander non-Hispanic student characteristics among 12th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	All Eligible Schools (census) % (±CI)	Difference p, value
What language is usually spoken at home?	English	80.6 (6.3)	73.5 (3.7)	<b>0.0413</b>
	Other language	19.4 (6.3)	26.5 (3.7)	
How far did your mother get in school?	Graduated HS or more	79.1 (7.8)	81.9 (2.8)	0.4056
	Didn't graduate HS	20.9 (7.8)	18.1 (2.8)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	91.9 (4.6)	90.2 (1.9)	0.4793
	Yes	8.1 (4.6)	9.8 (1.9)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	78.3 (5.5)	75.5 (2.9)	0.3233
	At least once	21.7 (5.5)	24.6 (2.9)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	71.2 (6.4)	64.3 (4.2)	0.0531
	More than a year ago	28.8 (6.4)	35.7 (4.2)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	65.0 (7.2)	63.6 (3.3)	0.6817
	Mostly Cs, Ds or Fs	35.0 (7.2)	36.4 (3.3)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	74.7 (8.0)	77.3 (2.8)	0.4527
	no/mostly & NO/def not true	25.3 (8.0)	22.7 (2.8)	
In the last 30 days, how often have you been bullied?	None	84.3 (4.5)	83.5 (2.2)	0.7211
	At least 1 day	15.7 (4.5)	16.5 (2.2)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	93.3 (4.4)	92.4 (1.6)	0.6594
	At least 1 day	6.7 (4.4)	7.6 (1.6)	
During the past 30 days, on how many days did you smoke cigarettes?	None	92.9 (3.3)	90.5 (1.8)	0.1864
	At least 1 day	7.1 (3.3)	9.5 (1.8)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	68.5 (7.5)	69.3 (4.2)	0.8275
	At least 1 day	31.5 (7.5)	30.7 (4.2)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	72.1 (7.5)	71.2 (2.9)	0.7985
	At least 1 day	27.9 (7.5)	28.8 (2.9)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	76.5 (7.1)	74.4 (2.8)	0.5257
	At least 1 day	23.5 (7.1)	25.6 (2.8)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	87.7 (6.1)	84.6 (2.3)	0.3285
	At least 1 day	12.4 (6.1)	15.4 (2.3)	
Have you ever had sexual intercourse?	No	54.9 (14.6)	50.0 (6.0)	0.4791
	Yes	45.1 (14.6)	50.0 (6.0)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	na	na	na
	Age 13 or younger	na	na	na
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	na	na	na
	4 or more partners	na	na	na
Which of the following best describes you?	Straight (heterosexual)	80.8 (6.0)	79.1 (2.7)	0.5702
	Gay, lesbian, or not sure	19.2 (6.0)	20.9 (2.7)	
Gender identity, how do you currently identify yourself?	Male or female	94.3 (3.5)	93.3 (1.9)	0.5703
	Transgender, questioning/not sure, something else	5.7 (3.5)	6.8 (1.9)	

95% confidence interval, p, value significant if less than 0.05

**Other Race non-Hispanic Students**

**Table E8a: Comparison of other race non-Hispanic student characteristics among 6th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	81.9 (3.3)	81.0 (1.5)	0.5850
	Other language	18.2 (3.3)	19.0 (1.5)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	79.7 (2.3)	79.5 (0.9)	0.8520
	Mostly Cs, Ds or Fs	20.3 (2.3)	20.5 (0.9)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	84.2 (1.8)	84.1 (0.8)	0.8484
	no/mostly & NO/def not true	15.8 (1.8)	15.9 (0.8)	
In the last 30 days, how often have you been bullied?	None	66.5 (2.3)	67.2 (0.9)	0.5028
	At least 1 day	33.5 (2.3)	32.8 (0.9)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	98.4 (0.5)	98.4 (0.2)	0.9697
	At least 1 day	1.6 (0.5)	1.6 (0.2)	
During the past 30 days, on how many days did you smoke cigarettes?	None	98.9 (0.5)	99.0 (0.2)	0.5238
	At least 1 day	1.2 (0.5)	1.0 (0.2)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	97.4 (0.7)	97.4 (0.3)	0.8797
	At least 1 day	2.6 (0.7)	2.6 (0.3)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	98.6 (0.5)	98.7 (0.2)	0.5502
	At least 1 day	1.4 (0.5)	1.3 (0.2)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	97.9 (0.6)	97.9 (0.3)	0.9112
	At least 1 day	2.1 (0.6)	2.1 (0.3)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	98.2 (0.5)	98.2 (0.2)	0.8286
	At least once	1.8 (0.5)	1.9 (0.2)	

95% confidence interval, p, value significant if less than 0.05



**Table E8b: Comparison of other race non-Hispanic student characteristics among 8th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	76.6 (4.6)	75.5 (2.0)	0.6114
	Other language	23.4 (4.6)	24.6 (2.0)	
How far did your mother get in school?	Graduated HS or more	86.5 (3.3)	85.2 (1.4)	0.4162
	Didn't graduate HS	13.5 (3.3)	14.9 (1.4)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	93.4 (1.6)	93.5 (0.7)	0.9448
	Yes	6.6 (1.6)	6.5 (0.7)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	90.7 (2.4)	88.0 (0.9)	<b>0.0303</b>
	At least once	9.3 (2.4)	12.0 (0.9)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	71.8 (5.1)	70.2 (1.8)	0.5193
	More than a year ago	28.2 (5.1)	29.8 (1.8)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	72.6 (3.9)	72.8 (1.5)	0.9368
	Mostly Cs, Ds or Fs	27.4 (3.9)	27.2 (1.5)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	77.1 (5.2)	80.5 (1.6)	0.1216
	no/mostly & NO/def not true	22.9 (5.2)	19.5 (1.6)	
In the last 30 days, how often have you been bullied?	None	70.1 (3.2)	69.7 (1.3)	0.8363
	At least 1 day	30.0 (3.2)	30.3 (1.3)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	95.2 (1.4)	96.1 (0.5)	0.1227
	At least 1 day	4.8 (1.4)	3.9 (0.5)	
During the past 30 days, on how many days did you smoke cigarettes?	None	97.1 (1.2)	96.6 (0.5)	0.3880
	At least 1 day	2.9 (1.2)	3.4 (0.5)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	90.3 (2.9)	90.2 (1.1)	0.9048
	At least 1 day	9.7 (2.9)	9.8 (1.1)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	92.7 (2.1)	93.1 (0.7)	0.7007
	At least 1 day	7.3 (2.1)	6.9 (0.7)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	94.4 (2.0)	93.0 (0.7)	0.1767
	At least 1 day	5.6 (2.0)	7.0 (0.7)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	96.1 (1.4)	95.3 (0.5)	0.2852
	At least 1 day	4.0 (1.4)	4.7 (0.5)	
Have you ever had sexual intercourse?	No	88.8 (4.1)	90.6 (1.5)	0.3321
	Yes	11.2 (4.1)	9.4 (1.5)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	8.3 (10.9)	20.6 (6.3)	0.1228
	Age 13 or younger	91.7 (10.9)	79.4 (6.3)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	70.8 (13.7)	71.4 (6.5)	0.9399
	4 or more partners	29.2 (13.7)	28.7 (6.5)	
Sexual orientation, which of the following best describes you?	Straight (heterosexual)	74.9 (4.5)	76.9 (1.7)	0.3370
	Gay, lesbian, or not sure	25.1 (4.5)	23.1 (1.7)	
Gender identity, how do you currently identify yourself?	Male or female	91.3 (2.7)	92.4 (1.0)	0.3892
	Transgender, questioning/not sure, something else	8.7 (2.7)	7.6 (1.0)	

95% confidence interval, p, value significant if less than 0.05

**Table E8c: Comparison of other race non-Hispanic student characteristics among 10th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	All Eligible Schools (census) % (±CI)	Difference p, value
What language is usually spoken at home?	English	73.8 (6.6)	73.7 (2.6)	0.9908
	Other language	26.2 (6.6)	26.3 (2.6)	
How far did your mother get in school?	Graduated HS or more	82.6 (4.6)	81.8 (2.0)	0.7096
	Didn't graduate HS	17.4 (4.6)	18.2 (2.0)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	93.6 (2.5)	91.1 (1.2)	0.0739
	Yes	6.4 (2.5)	8.9 (1.2)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	82.1 (4.1)	83.3 (1.5)	0.5107
	At least once	17.9 (4.1)	16.7 (1.5)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	70.6 (8.2)	68.3 (2.6)	0.5574
	More than a year ago	29.4 (8.2)	31.7 (2.6)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	72.0 (3.6)	69.0 (1.9)	0.0979
	Mostly Cs, Ds or Fs	28.0 (3.6)	31.0 (1.9)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	69.3 (5.9)	73.7 (1.9)	0.0806
	no/mostly & NO/def not true	30.7 (5.9)	26.3 (1.9)	
In the last 30 days, how often have you been bullied?	None	76.7 (2.6)	75.6 (1.7)	0.4372
	At least 1 day	23.3 (2.6)	24.4 (1.7)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	96.7 (1.5)	93.8 (0.9)	<b>0.0034</b>
	At least 1 day	3.3 (1.5)	6.2 (0.9)	
During the past 30 days, on how many days did you smoke cigarettes?	None	92.6 (2.3)	92.8 (1.0)	0.8103
	At least 1 day	7.4 (2.3)	7.2 (1.0)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	79.7 (4.4)	80.7 (2.0)	0.6406
	At least 1 day	20.3 (4.4)	19.3 (2.0)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	79.7 (4.5)	81.4 (1.5)	0.3848
	At least 1 day	20.3 (4.5)	18.6 (1.5)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	80.5 (5.0)	82.5 (1.5)	0.3588
	At least 1 day	19.5 (5.0)	17.5 (1.5)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	89.1 (3.5)	89.8 (1.2)	0.6546
	At least 1 day	10.9 (3.5)	10.2 (1.2)	
Have you ever had sexual intercourse?	No	76.4 (8.8)	75.8 (3.1)	0.8819
	Yes	23.6 (8.8)	24.2 (3.1)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	73.5 (12.7)	68.2 (5.7)	0.4153
	Age 13 or younger	26.5 (12.7)	31.8 (5.7)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	71.4 (14.3)	77.0 (5.2)	0.3746
	4 or more partners	28.6 (14.3)	23.0 (5.2)	
Which of the following best describes you?	Straight (heterosexual)	79.7 (4.4)	76.9 (2.1)	0.1972
	Gay, lesbian, or not sure	20.3 (4.4)	23.1 (2.1)	
Gender identity, how do you currently identify yourself?	Male or female	93.1 (2.8)	92.9 (1.2)	0.8494
	Transgender, questioning/not sure, something else	6.9 (2.8)	7.2 (1.2)	

95% confidence interval, p, value significant if less than 0.05

**Table E8d: Comparison of other race non-Hispanic student characteristics among 12th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	All Eligible Schools (census) % (±CI)	Difference p, value
What language is usually spoken at home?	English	76.6 (6.2)	76.1 (2.9)	0.8776
	Other language	23.4 (6.2)	23.9 (2.9)	
How far did your mother get in school?	Graduated HS or more	84.4 (5.5)	83.9 (2.3)	0.8318
	Didn't graduate HS	15.6 (5.5)	16.2 (2.3)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	90.9 (3.9)	91.7 (1.4)	0.6497
	Yes	9.1 (3.9)	8.4 (1.4)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	79.0 (5.2)	78.8 (2.2)	0.9369
	At least once	21.1 (5.2)	21.3 (2.2)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	65.8 (7.7)	66.3 (3.6)	0.8824
	More than a year ago	34.2 (7.7)	33.7 (3.6)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	66.8 (7.2)	65.1 (2.7)	0.6158
	Mostly Cs, Ds or Fs	33.2 (7.2)	34.9 (2.7)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	78.6 (5.3)	75.0 (2.2)	0.1753
	no/mostly & NO/def not true	21.4 (5.3)	25.0 (2.2)	
In the last 30 days, how often have you been bullied?	None	78.1 (5.2)	81.1 (1.9)	0.1802
	At least 1 day	22.0 (5.2)	18.9 (1.9)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	91.4 (3.5)	90.9 (1.5)	0.7632
	At least 1 day	8.6 (3.5)	9.1 (1.5)	
During the past 30 days, on how many days did you smoke cigarettes?	None	86.3 (5.1)	88.2 (1.6)	0.3876
	At least 1 day	13.7 (5.1)	11.8 (1.6)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	68.3 (8.7)	67.8 (3.5)	0.8939
	At least 1 day	31.7 (8.7)	32.2 (3.5)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	77.1 (6.0)	74.3 (2.2)	0.3357
	At least 1 day	22.9 (6.0)	25.7 (2.2)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	73.7 (6.0)	73.4 (2.4)	0.9151
	At least 1 day	26.3 (6.0)	26.6 (2.4)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	84.9 (5.8)	83.9 (1.9)	0.3285
	At least 1 day	15.2 (5.8)	16.1 (1.9)	
Have you ever had sexual intercourse?	No	52.2 (9.1)	51.0 (4.4)	0.7874
	Yes	47.8 (9.1)	49.0 (4.4)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	88.6 (9.0)	80.5 (4.9)	0.1321
	Age 13 or younger	11.4 (9.0)	19.5 (4.9)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	60.0 (13.8)	64.2 (5.7)	0.4961
	4 or more partners	40.0 (13.8)	35.8 (5.7)	
Which of the following best describes you?	Straight (heterosexual)	74.3 (7.2)	74.9 (3.0)	0.8449
	Gay, lesbian, or not sure	25.8 (7.2)	25.1 (3.0)	
Gender identity, how do you currently identify yourself?	Male or female	94.8 (3.1)	93.1 (1.7)	0.3222
	Transgender, questioning/not sure, something else	5.2 (3.1)	7.0 (1.7)	

95% confidence interval, p, value significant if less than 0.05

**Multi-racial non-Hispanic Students**

**Table E9a: Comparison of multi-racial non-Hispanic student characteristics among 6th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	90.8 (2.3)	89.7 (1.0)	0.3604
	Other language	9.2 (2.3)	10.3 (1.0)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	82.4 (2.6)	82.4 (1.1)	0.9609
	Mostly Cs, Ds or Fs	17.6 (2.6)	17.6 (1.1)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	84.4 (2.5)	85.0 (0.9)	0.6297
	no/mostly & NO/def not true	15.6 (2.5)	15.1 (0.9)	
In the last 30 days, how often have you been bullied?	None	65.5 (3.1)	67.2 (1.3)	0.2540
	At least 1 day	34.5 (3.1)	32.8 (1.3)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	99.0 (0.6)	98.5 (0.3)	0.1751
	At least 1 day	1.0 (0.6)	1.5 (0.3)	
During the past 30 days, on how many days did you smoke cigarettes?	None	98.8 (0.6)	99.1 (0.2)	0.2149
	At least 1 day	1.3 (0.6)	1.0 (0.2)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	97.2 (1.1)	97.3 (0.4)	0.7588
	At least 1 day	2.8 (1.1)	2.7 (0.4)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	99.0 (0.6)	98.9 (0.3)	0.6142
	At least 1 day	1.0 (0.6)	1.2 (0.3)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	97.3 (0.8)	97.9 (0.3)	0.1178
	At least 1 day	2.7 (0.8)	2.1 (0.3)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	98.0 (1.0)	98.3 (0.3)	0.4330
	At least once	2.0 (1.0)	1.7 (0.3)	

95% confidence interval, p, value significant if less than 0.05

**Table E9b: Comparison of multi, racial non-Hispanic student characteristics among 8th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	88.3 (2.7)	87.2 (1.2)	0.4411
	Other language	11.8 (2.7)	12.8 (1.2)	
How far did your mother get in school?	Graduated HS or more	89.2 (3.2)	88.4 (1.3)	0.6193
	Didn't graduate HS	10.8 (3.2)	11.6 (1.3)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	92.4 (2.0)	93.8 (0.8)	0.0904
	Yes	7.6 (2.0)	6.2 (0.8)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	87.4 (2.7)	88.8 (1.0)	0.2662
	At least once	12.6 (2.7)	11.3 (1.0)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	73.7 (5.0)	75.3 (1.9)	0.4723
	More than a year ago	26.3 (5.0)	24.7 (1.9)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	81.1 (4.0)	78.4 (1.5)	0.1725
	Mostly Cs, Ds or Fs	19.0 (4.0)	21.6 (1.5)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	78.3 (3.9)	79.6 (1.4)	0.4539
	no/mostly & NO/def not true	21.7 (3.9)	20.4 (1.4)	
In the last 30 days, how often have you been bullied?	None	71.3 (3.6)	71.7 (1.4)	0.8300
	At least 1 day	28.7 (3.6)	28.3 (1.4)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	96.7 (1.2)	96.6 (0.5)	0.9477
	At least 1 day	3.3 (1.2)	3.4 (0.5)	
During the past 30 days, on how many days did you smoke cigarettes?	None	97.3 (1.6)	96.7 (0.6)	0.4440
	At least 1 day	2.7 (1.6)	3.3 (0.6)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	86.6 (4.0)	89.1 (1.4)	0.1306
	At least 1 day	13.4 (4.0)	10.9 (1.4)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	91.2 (2.6)	92.4 (0.9)	0.2594
	At least 1 day	8.8 (2.6)	7.6 (0.9)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	90.6 (2.4)	91.9 (0.8)	0.1827
	At least 1 day	9.4 (2.4)	8.1 (0.8)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	95.8 (1.4)	96.1 (0.5)	0.6417
	At least 1 day	4.3 (1.4)	4.0 (0.5)	
Have you ever had sexual intercourse?	No	89.6 (4.1)	91.7 (1.6)	0.2353
	Yes	10.4 (4.1)	8.3 (1.6)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	8.7 (11.4)	14.1 (6.3)	0.4264
	Age 13 or younger	91.3 (11.4)	86.0 (6.3)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	, 5.8 (18.1)	, 3.2 (7.4)	0.7448
	4 or more partners	20.8 (18.1)	18.3 (7.4)	
Sexual orientation, which of the following best describes you?	Straight (heterosexual)	77.7 (4.5)	78.0 (1.6)	0.8925
	Gay, lesbian, or not sure	22.3 (4.5)	22.0 (1.6)	
Gender identity, how do you currently identify yourself?	Male or female	94.3 (2.1)	93.2 (1.0)	0.3100
	Transgender, questioning/not sure, something else	5.8 (2.1)	6.9 (1.0)	

95% confidence interval, p, value significant if less than 0.05

**Table E9c: Comparison of multi, racial non-Hispanic student characteristics among 10th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	90.3 (2.8)	90.3 (1.1)	0.9882
	Other language	9.7 (2.8)	9.7 (1.1)	
How far did your mother get in school?	Graduated HS or more	90.2 (2.9)	90.7 (1.2)	0.7437
	Didn't graduate HS	9.8 (2.9)	9.3 (1.2)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	94.5 (2.2)	93.4 (0.8)	0.3308
	Yes	5.5 (2.2)	6.6 (0.8)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	84.2 (3.6)	86.0 (1.4)	0.2508
	At least once	15.8 (3.6)	14.0 (1.4)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	75.3 (4.9)	77.7 (2.2)	0.2976
	More than a year ago	24.7 (4.9)	22.3 (2.2)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	75.1 (3.7)	77.7 (1.8)	0.1523
	Mostly Cs, Ds or Fs	24.9 (3.7)	22.3 (1.8)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	80.1 (4.2)	79.2 (1.6)	0.6587
	no/mostly & NO/def not true	19.9 (4.2)	20.8 (1.6)	
In the last 30 days, how often have you been bullied?	None	78.7 (3.3)	78.2 (1.4)	0.7570
	At least 1 day	21.3 (3.3)	21.8 (1.4)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	95.0 (1.7)	94.7 (0.7)	0.6931
	At least 1 day	5.0 (1.7)	5.3 (0.7)	
During the past 30 days, on how many days did you smoke cigarettes?	None	94.5 (1.9)	94.0 (0.8)	0.5845
	At least 1 day	5.5 (1.9)	6.0 (0.8)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	73.5 (5.4)	79.1 (1.7)	<b>0.0148</b>
	At least 1 day	26.5 (5.4)	20.9 (1.7)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	81.3 (3.2)	81.9 (1.3)	0.7148
	At least 1 day	18.7 (3.2)	18.1 (1.3)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	82.5 (3.3)	81.4 (1.4)	0.5092
	At least 1 day	17.5 (3.3)	18.6 (1.4)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	91.7 (2.0)	91.0 (1.0)	0.4553
	At least 1 day	8.3 (2.0)	9.0 (1.0)	
Have you ever had sexual intercourse?	No	73.4 (6.5)	75.9 (2.4)	0.3985
	Yes	26.6 (6.5)	24.1 (2.4)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	74.6 (7.6)	70.4 (4.8)	0.3215
	Age 13 or younger	25.4 (7.6)	29.6 (4.8)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	83.6 (7.8)	81.5 (3.8)	0.5967
	4 or more partners	16.4 (7.8)	18.5 (3.8)	
Which of the following best describes you?	Straight (heterosexual)	73.0 (4.4)	74.3 (1.8)	0.5287
	Gay, lesbian, or not sure	27.0 (4.4)	25.7 (1.8)	
Gender identity, how do you currently identify yourself?	Male or female	93.4 (2.3)	93.0 (1.1)	0.6826
	Transgender, questioning/not sure, something else	6.6 (2.3)	7.0 (1.1)	

95% confidence interval, p, value significant if less than 0.05

**Table E9d: Comparison of multi, racial non-Hispanic student characteristics among 12th graders in the state sample to census schools, 2018, percent (confidence interval)**

Question	Options	State Sample % (±CI)	Census % (±CI)	Difference p, value
What language is usually spoken at home?	English	91.4 (2.8)	90.9 (1.2)	0.6939
	Other language	8.6 (2.8)	9.1 (1.2)	
How far did your mother get in school?	Graduated HS or more	88.2 (3.4)	90.6 (1.3)	0.1033
	Didn't graduate HS	11.8 (3.4)	9.4 (1.3)	
Are your current living arrangements the result of losing your home because your family cannot afford housing?	No	92.0 (2.3)	93.5 (1.0)	0.1497
	Yes	8.0 (2.3)	6.5 (1.0)	
How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	None	81.7 (4.6)	83.4 (2.0)	0.4016
	At least once	18.4 (4.6)	16.6 (2.0)	
When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?	In the past year	71.7 (7.2)	70.1 (3.1)	0.6480
	More than a year ago	28.3 (7.2)	29.9 (3.1)	
Putting them all together, what were your grades like last year?	Mostly A's or B's	72.0 (6.2)	74.6 (2.1)	0.3533
	Mostly Cs, Ds or Fs	28.0 (6.2)	25.4 (2.1)	
I feel safe at my school.	Yes!/Mostly & yes/def. true	78.3 (4.9)	81.1 (1.9)	0.1899
	no/mostly & NO/def not true	21.7 (4.9)	18.9 (1.9)	
In the last 30 days, how often have you been bullied?	None	83.7 (3.2)	83.2 (1.5)	0.7338
	At least 1 day	16.3 (3.2)	16.8 (1.5)	
During the past 30 days, on how many days did you: Carry a weapon such as a gun, knife, or club on school property?	None	95.0 (2.6)	94.7 (0.9)	0.8049
	At least 1 day	5.0 (2.6)	5.3 (0.9)	
During the past 30 days, on how many days did you smoke cigarettes?	None	92.1 (3.0)	92.4 (1.2)	0.8530
	At least 1 day	7.9 (3.0)	7.7 (1.2)	
During the past 30 days, on how many days did you: Use an electronic cigarette, also called e-cigs, or vape pens?	None	64.9 (7.6)	70.1 (2.9)	0.1229
	At least 1 day	35.2 (7.6)	30.0 (2.9)	
During the past 30 days, on how many days did you: Use marijuana or hashish (weed, hash, pot)?	None	70.1 (4.9)	72.6 (2.0)	0.2598
	At least 1 day	29.9 (4.9)	27.4 (2.0)	
During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol (beer, wine, wine coolers, hard liquor)?	None	72.1 (4.2)	71.2 (1.8)	0.6651
	At least 1 day	27.9 (4.2)	28.8 (1.8)	
Think back over the last 2 weeks. How many times have you had five or more drinks in a row? (A drink is a glass of wine, a bottle of beer, a shot glass of liquor, or a mixed drink.)	None	89.2 (3.7)	86.3 (1.4)	0.1366
	At least 1 day	10.8 (3.7)	13.7 (1.4)	
Have you ever had sexual intercourse?	No	48.1 (9.6)	50.3 (3.4)	0.6161
	Yes	52.0 (9.6)	49.7 (3.4)	
How old were you when you had sexual intercourse for the first time? (among those who've had sex)	Age 14 or older	90.0 (5.9)	87.2 (2.9)	0.3760
	Age 13 or younger	10.0 (5.9)	12.8 (2.9)	
With how many people have you ever had sexual intercourse? (among those who've had sex)	Less than 4 partners	75.6 (9.6)	75.1 (4.0)	0.9058
	4 or more partners	24.4 (9.6)	24.9 (4.0)	
Sexual orientation, which of the following best describes you?	Straight (heterosexual)	75.2 (5.7)	75.7 (2.1)	0.8649
	Gay, lesbian, or not sure	24.8 (5.7)	24.3 (2.1)	
Gender identity, how do you currently identify yourself?	Male or female	93.0 (3.1)	93.3 (1.1)	0.8587
	Transgender, questioning/not sure, something else	7.0 (3.1)	6.8 (1.1)	

95% confidence interval, p, value significant if less than 0.05