



Larry Hogan, Governor · Boyd K. Rutherford, Lt. Governor · Dennis R. Schrader, Secretary

February 4, 2022

Maryland Partners,

The enclosed 2021 Maryland Youth Pandemic Behavior Survey (YPBS-21) Detailed Report summarizes data related to youth risk behaviors among high school students in Maryland during the COVID-19 pandemic.

Due to safety concerns and remote learning, the traditional classroom-based biennial Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS) was not able to be administered during the 2020-2021 school year. The Maryland Department of Health recognized the pandemic would have an impact on students and their families, making it as important to collect data on youth risk behaviors. The YPBS-21 was created to close the gap in youth risk behavior surveillance in Maryland.

The YPBS-21 was an online survey that combined a subset of questions from previous Maryland YRBS/YTS instruments, CDC optional YRBS questions, and the CDC Adolescent Behavior and Experiences Survey (ABES). Topics included physical health, safety, substance use, mental health, food insecurity, sexual behaviors, adverse childhood experiences (ACEs) and positive childhood experiences (PCEs).

A total of 608 validated and completed surveys from high school students recruited through social media ads were submitted between May and June of 2021. The YPBS-21 Detailed Report contains the results of the responses to the survey questions that were analyzed and weighted to match the profile of high school students in Maryland based on their age, gender, grade level and race/ethnicity. Due to methodological differences, results from the YPBS-21 cannot be compared to results from the Maryland YRBS/YTS.

The YPBS-21 Detailed Report is structured around 12 main topics: physical activity and wellbeing, emotional support, vehicle safety, tobacco products, secondhand smoke, alcohol and marijuana, other drugs, sexual behavior, home life, mental health and bullying, violence, and COVID-19 impacts. This report presents summary results for each of the 70 measured questions and data are broken down by race/ethnicity, region, age, and sexual orientation. The data results are preceded by a key findings section and demographic and methodology information can be found at the end of this detailed report. Accompanying infographics are also available.

Survey participants were sampled from non-probability samples and were not randomly generated. Due to the use of a non-probability sample, **it is important to use caution when assessing significant differences between subgroups in the survey.**

If you have questions about this report, please email mdh.tobaccocontrol@maryland.gov.

Sincerely,

Dana T. Moncrief

Dana Moncrief, MHS, CHES
Director, Center for Tobacco Prevention and Control
MDH, Prevention and Health Promotion Administration



2021 Maryland Youth Pandemic Behavior Survey YPBS-21

Detailed Report

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October 2021



Acknowledgements

The Maryland Department of Health (MDH) funded this research to learn more about risk behaviors among Maryland high school students during the COVID-19 pandemic in 2020 and 2021.



Suggested Citation

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The report was prepared by the research team at Market Decisions Research of Portland, Maine.

Table of Contents

- About This Report
- How to Read This Report
- Key Findings
- Detailed Findings
- Demographics
- Methodology
- Data Quality Checks
- Social Media Ads



About This Report

Background	<p>Due to the COVID-19 pandemic and virtual school schedules, the Maryland Department of Health (MDH) was not able to administer the traditional classroom-based Maryland YRBS/YTS during the 2020-2021 school year. In place of the YRBS/YTS survey, MDH opted to conduct a smaller web survey for Maryland high school students in the Spring of 2021 that focused on how teens are coping with the COVID-19 pandemic. MDH and Market Decisions Research (MDR) worked together to develop the MD YPBS-21 survey, conduct data collection, and complete a thorough analysis of the results. This report describes the detailed findings from the survey.</p>
Sample	<p>The sample for the survey consisted of youth from ages 14-19 living in Maryland who attend a public or private high school. Survey participants were recruited via interest-based targeted Facebook/Instagram ads.</p>
Questionnaire	<p>The YPBS-21 contained 70 total questions based on previous Maryland YRBS/YTS survey instruments, the CDC YRBS, and the CDC Adolescent Behavior and Experiences Survey (ABEs). Additional questions related to COVID-19 were also developed for the survey. 9 items assessed demographics, 10 items assessed exercise and vehicle safety, 16 items assessed tobacco and electronic vapor products, 8 items assessed alcohol, marijuana, and other drugs, 3 items assessed sexual behavior, 4 items assessed home life, 3 items assessed mental health and bullying, 3 items assessed violence, and 14 questions assessed COVID-19. The survey was programmed in Qualtrics.</p>
Data Collection	<p>Data collection launched on May 10th, 2021 and ran until June 13th, 2021. A total of 608 students completed the survey.</p>

How to Read This Report

To simplify reporting, certain phrases or standard responses may be abbreviated in reports as follows:

Abbreviation	Meaning
YPBS	Youth Pandemic Behavior Survey
MDH	Maryland Department of Health
MDR	Market Decisions Research
ESDs	Electronic Smoking Devices (e.g., e-cigarettes, vapes, etc.)

Data Breakdowns and Significant Differences

“Recent use” is defined within the past 30 days of a respondent completing the survey.

Survey results are broken down by race/ethnicity, region, age, or sexual orientation. If any data is significantly higher or lower than the overall percentage (at 95% confidence), there will be this symbol: †.

Additionally, some slides show significant differences between sub-groups. In this case there will be a call out box such as this one:

“This group has experienced this event significantly more than this group.”

Maryland Regions

Capital: Frederick, Montgomery, and Prince George’s counties.

Central: Anne Arundel, Baltimore, Carroll, Harford, and Howard counties; and Baltimore City.

Eastern Shore: Caroline, Cecil, Dorchester, Kent, Queen Anne’s, Somerset, Talbot, Wicomico, and Worcester counties.

Western: Allegany, Garrett, and Washington counties.

Southern: Calvert, Charles and St. Mary’s counties.



For more data, please refer to the data compendium.



Key Findings



Key Findings

Physical Activity and Wellbeing

Maryland high school students need more physical activity, better sleep schedules, and less screen time.

- ❖ 73% of Maryland teens are not physically active for at least one hour per day for more than five days.
- ❖ 67% of Maryland high school students spend three or more hours per day in front of a screen unrelated to schoolwork.
- ❖ Less than half (47%) of high schoolers in Maryland get 8 or more hours of sleep per night.

Emotional Support

Overall support from friends, parents, and other adults are generally high among Maryland high school students; however, LGBT students are significantly less likely to feel like they have support from adult family members.

- ❖ 73% of Maryland teens feel like they can share their feelings with an adult in their family.
- ❖ 47% of LGBT students feel like they can confide in an

adult from their family about their feelings.

- ❖ Overall, 82% of teens in Maryland have a friend they can talk to about their lives.
- ❖ 84% of teens have at least one adult besides their parents they can seek help from.

Vehicle Safety

Most Maryland high school students take vehicle safety seriously, but some need additional outreach about the dangers of drinking and driving and using their cellphone while driving.

- ❖ Almost all high students (96%) in Maryland wear their seatbelt when riding in a car driven by someone else.
- ❖ 86% of Maryland high school students have not driven a vehicle while drinking alcohol and 85% of students have not been in a car with someone who is intoxicated in the past week.
- ❖ 27% of Maryland teens have texted or e-mailed while driving a car.

Key Findings (cont'd)

Tobacco Products - Cigarettes, cigars, smokeless tobacco and electronic smoking devices (ESDs)

ESDs are more common and accessible among Maryland teens compared to other tobacco products, especially when there are sweet flavors available and if a close friend or family member uses an ESD.

- ❖ Less than 10% of Maryland high schoolers have recently smoked cigarettes, cigars, or used smokeless tobacco.
- ❖ 14% of Maryland high school students have tried a tobacco product (including ESDs).
- ❖ 37% of Maryland teens who used tobacco products were able to completely quit the past 12 months.
- ❖ 19% of Maryland high schoolers have used an ESD at some point in their life.
- ❖ 11% of teens have recently used an ESD.
- ❖ Maryland teens mainly use ESDs out of curiosity (39%) or because a friend or family member used them (19%).
- ❖ Maryland teens that use ESDs are more attracted to sweet vaping flavors such as fruit and candy.
- ❖ 94% of teens use flavored ESDs other than the conventional tobacco flavor.

(25%) followed closely by Vuse (23%).

- ❖ 75% of teens use just four brands of ESDs (Puff Bar, Vuse, JUUL, and blu).
- ❖ 57% of Maryland high school students who use ESDs have tried to quit the past year.
- ❖ Southern Maryland teens are more likely to have tried an ESD (39%) and have the highest ESD quit rates by far (92%).
- ❖ 18-year-old teens are significantly more likely to smoke cigarettes (24%), cigars (16%), and use smokeless tobacco (15%) compared to younger teens.
- ❖ Males (18%) are more likely than females (9%) to use any type of tobacco.

Secondhand Smoke

Secondhand smoke is a serious issue for some Maryland high school students.

- ❖ 31% of Maryland teens live with someone who currently smokes cigarettes or cigars.
- ❖ More than one-third (35%) of Maryland high school students were exposed to second-hand smoke in the past week.
- ❖ Hispanic/Latino high school student households (46%) are less likely to disallow smoking anywhere in their home compared to the general population (63%).

Key Findings (cont'd)

Alcohol and Marijuana

Maryland high school students are more likely to drink alcohol than use marijuana.

- ❖ 20% of high school students from Maryland recently drank alcohol and 10% of students recently used marijuana.
- ❖ Hispanic/Latino high school students have been more likely to binge drink the past 30 days (22%).
- ❖ Students from the Eastern Shore region (Caroline, Cecil, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester) have been drinking alcohol significantly more compared to the statewide average (40%).

Other Drugs

Prescription pain medicine, cocaine, methamphetamines, and heroin are less of an issue compared to alcohol or marijuana for Maryland high school students.

- ❖ Less than 10% of Maryland teens have used drugs such as prescription pain medicine, cocaine, methamphetamines, and heroin in their life.

- ❖ Prescription pain medicine is more common compared to cocaine, methamphetamines, and heroin.
- ❖ Eastern Shore teens are significantly more likely to have tried cocaine, methamphetamines, and heroin.
- ❖ 18-year-old teens are more likely to try these types of drugs.

Sexual Behavior

Sexually active teens in Maryland may benefit from more sex education regarding condoms, other types of birth control, and having sex while intoxicated.

- ❖ 21% of Maryland high school students have been sexually active.
- ❖ Students from the Eastern Shore region (Caroline, Cecil, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester) have been more sexually active (44%).
- ❖ Out of those students who have been sexually active, 20% used alcohol or drugs before their recent sexual intercourse experience.
- ❖ 67% of students who are sexually active used a condom during the last time they had sexual intercourse.

Key Findings (cont'd)

Home Life

Many Maryland high school students need additional mental health support to help them cope with their lives at home.

- ❖ 96% of Maryland high school students have an adult in their household that takes care of their basic needs.
- ❖ 19% of students have lived with someone who has a problem with alcohol or drugs.
- ❖ 28% of Maryland teens have lived with someone who was depressed, mentally ill, or suicidal.
- ❖ LGBT students are significantly more likely to live with someone who is mentally ill or suicidal (54%).

Mental Health and Bullying

Depression, suicidal ideation, and other mental health issues are high among Maryland teens. Mental health resources should be a top priority, especially within the LGBT community and for Black and Hispanic/Latino students.

- ❖ 36% of Maryland high school students have felt sad or hopeless every day for two weeks in a row the past year.

- ❖ Black or African American students (52%) and LGBT students (75%) have felt significantly sadder and more hopeless the past year compared to the statewide average (36%).
- ❖ Approximately 1 out of 5 Maryland teens have seriously considered attempting suicide the past year.
- ❖ 14% of Maryland teens have been electronically bullied the past year.
- ❖ Females (48%) were more likely to feel sad or hopeless compared to males (25%) the past year.

Violence

Violence such as physical fights and abuse among Maryland high school students is a cause for concern.

- ❖ 21% of Maryland high school students were in a physical fight this past year.
- ❖ 29% of Maryland high school students who have been dating someone experienced physical abuse such as being hit, slammed into something, or injured with an object or weapon.
- ❖ Most Maryland high school students have not carried a gun to school the past year (84%).

Key Findings (cont'd)

COVID-19

COVID-19 has significantly affected Maryland high school students in many ways including struggles with mental health, tobacco use, alcohol and drug use, trouble with schoolwork, and verbal or physical abuse at home.

- ❖ 18% of Maryland teens have either tested positive for COVID-19 or someone in their household has tested positive.
- ❖ 77% of students have been able to virtually socialize during the pandemic and 40% have used telemedicine.
- ❖ 67% of Maryland high schoolers describe their grades as mostly As or Bs during the pandemic but, 70% of Maryland high school students report that schoolwork was more difficult during the pandemic.
- ❖ 17% of Maryland teens went hungry because there was not enough food in their home during the pandemic.
- ❖ 58% students struggled with their mental health during the pandemic.
- ❖ Black or African American students (53%) and LGBT students (75%) struggled significantly more with their mental health during the pandemic compared to the general population (36%).
- ❖ 48% of Maryland teens experienced an adult at home swear at, insult, or put them down to some degree during the pandemic.
- ❖ LGBT students and Black or African American students were more likely to have a parent insult them or put them down the past year.
- ❖ 23% of Maryland teens experienced a parent or adult at home hit beat, kick, or physically hurt them at least once during the pandemic.
- ❖ 27% of Maryland teens that use tobacco used more tobacco during the pandemic.
- ❖ There has been an increase in alcohol (30%) and drug use for some Maryland high school students (37%).

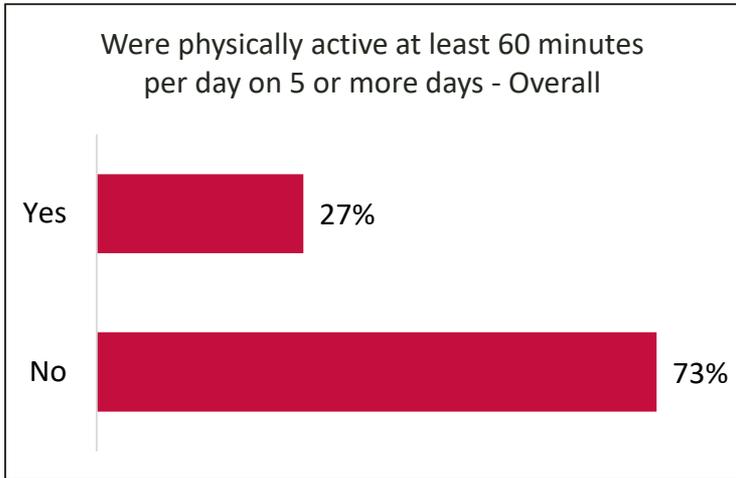


Detailed Findings



Physical Activity and Wellbeing

Q10: During the past 7 days, on how many days were you physically active for a total of at least 60 minutes per day? (Add up all the time you spent in any kind of physical activity that increased your heart rate and made you breathe hard some of the time.) (n=607)



Physically Active by LGBT	% Yes
LGBT	20%
Non-LGBT	28%

Physically Active by Race/Ethnicity	% Yes
Asian	32%
Black or African American	22%
White	33%
Hispanic/Latino	17%
Other/Multiple races	26%

Physically Active by Region	% Yes
Capital	24%
Central	27%
Eastern Shore	22%
Southern	41%
Western	34%

Summary

27% of Maryland high school students were physically active for at least one hour per day for more than five days.

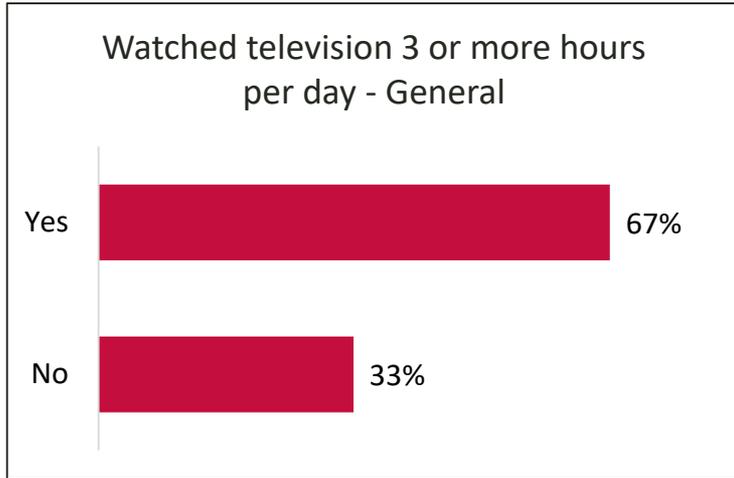
Students in the Southern region (Calvert, Charles and St. Mary's counties) were more likely to be physically active (41%).

Bottom Line

Many high school students in Maryland need more physical activity throughout their day.

Physical Activity and Wellbeing

Q11: On an average school day, how many hours do you spend in front of a TV, computer, smart phone, or other electronic device watching shows or videos, playing games, accessing the Internet, or using social media (also called "screen time")? (Do not count time spent doing schoolwork.) (n=608)



More Than 3 Hours of TV Per Day by LGBT	% Yes
LGBT	76%
Non-LGBT	65%

More Than 3 Hours of TV Per Day by Age	% Yes
15 years old or younger	73%
16 or 17 years old	69%
18 years old or older	† 54%

More Than 3 Hours of TV Per Day by Race/Ethnicity	% Yes
Asian	78%
Black or African American	75%
White	63%
Hispanic/Latino	† 52%
Other/Multiple races	74%

More Than 3 Hours of TV Per Day by Region	% Yes
Capital	63%
Central	75%
Eastern Shore	† 40%
Southern	61%
Western	70%

† Data is significantly lower than the overall percentage

Summary

More than two-thirds (67%) of Maryland high school students spend three or more hours per day in front of a screen.

Hispanic/Latino students are significantly less likely to have more than three hours of screen time per day (52%).

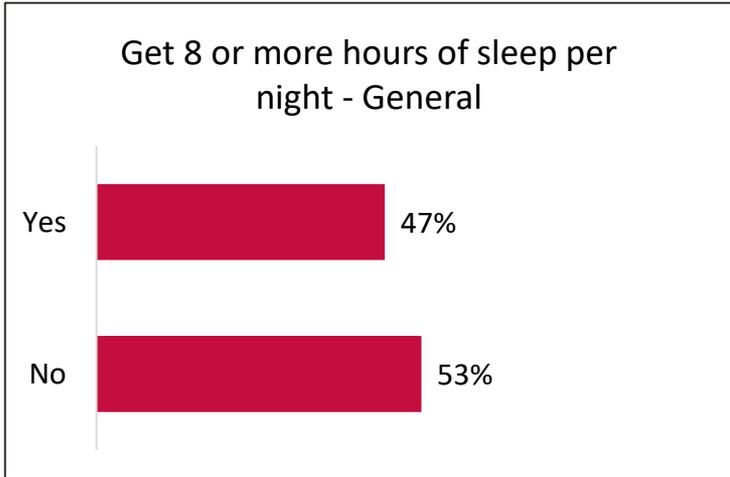
Bottom Line

Maryland teens are spending a significant amount of time in front of a screen.

Teens 17 or younger are significantly more likely to have 3 or more hours of screentime per day compared to older teens.

Physical Activity and Wellbeing

Q12: On an average school night, how many hours of sleep do you get? (n=608)



Get 8 or more hours of sleep per night by LGBT	% Yes
LGBT	39%
Non-LGBT	48%

Get 8 or more hours of sleep per night Race/Ethnicity	% Yes
Asian	36%
Black or African American	39%
White	52%
Hispanic/Latino	† 64%
Other/Multiple races	16%

Get 8 or more hours of sleep per night Region	% Yes
Capital	42%
Central	45%
Eastern Shore	59%
Southern	44%
Western	58%

† Data is significantly higher than the overall percentage

Summary

Less than half (47%) of high schoolers in Maryland get 8 or more hours of sleep per night.

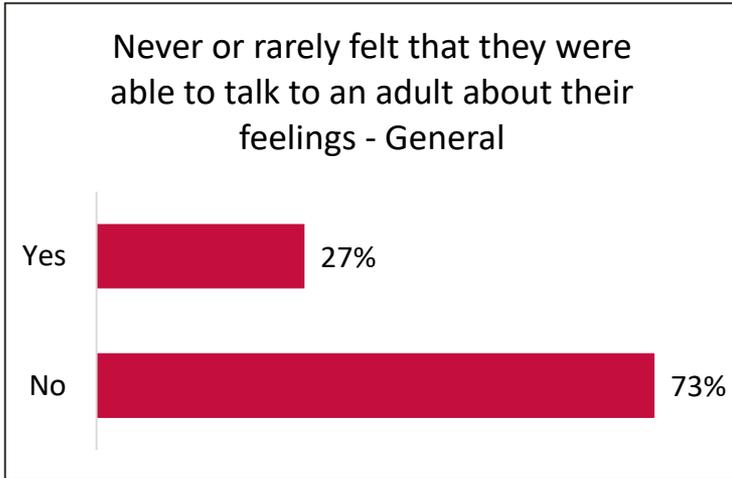
Hispanic/Latino students are more likely to get at least 8 hours of sleep (64%).

Bottom Line

Maryland high school students need better sleep hygiene.

Emotional Support

Q13: During your life, how often have you felt that you were able to talk to an adult in your family or another caring adult about your feelings? (n=607)



Never or Rarely Talking to an Adult by LGBT	% Yes
LGBT	† 53%
Non-LGBT	23%

Never or Rarely Talking to an Adult by Race/Ethnicity	% Yes
Asian	22%
Black or African American	39%
White	18%
Hispanic/Latino	29%
Other/Multiple races	36%

Never or Rarely Talking to an Adult by Region	% Yes
Capital	33%
Central	27%
Eastern Shore	27%
Southern	23%
Western	14%

† Data is significantly higher than the overall percentage

Summary

More than one-quarter (27%) of Maryland teens feel like they are not able to share their feelings with an adult.

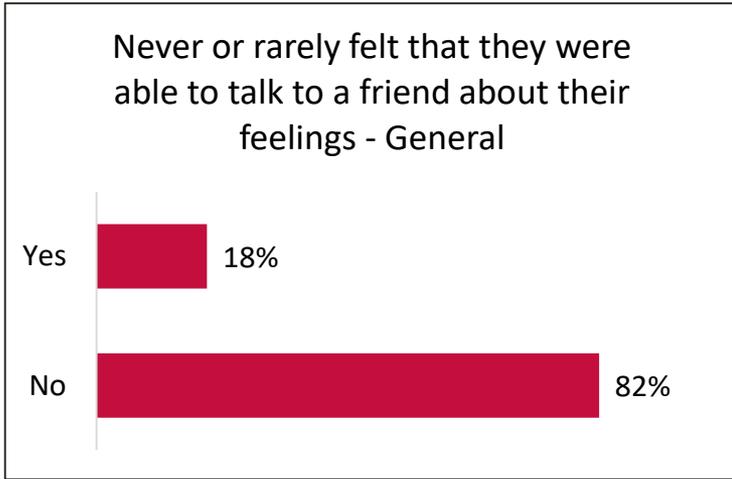
LGBT teens are significantly more likely (53%) to feel like there is not an adult they can confide in.

Bottom Line

There are many Maryland high school students who have an adult in their life they can reach out to, but there are still a group of students missing this type of relationship. This is especially concerning with LGBT students.

Emotional Support

Q14: During your life, how often have you felt that you were able to talk to a friend about your feelings? (n=606)



Never or Rarely Talking to a Friend by LGBT	% Yes
LGBT	34%
Non-LGBT	15%

Never or Rarely Talking to a Friend by Race/Ethnicity	% Yes
Asian	16%
Black or African American	29%
White	11%
Hispanic/Latino	23%
Other/Multiple races	7%

Never or Rarely Talking to a Friend by Region	% Yes
Capital	22%
Central	18%
Eastern Shore	17%
Southern	6%
Western	15%

Summary

82% of teens in Maryland feel like they can talk to a friend about their lives.

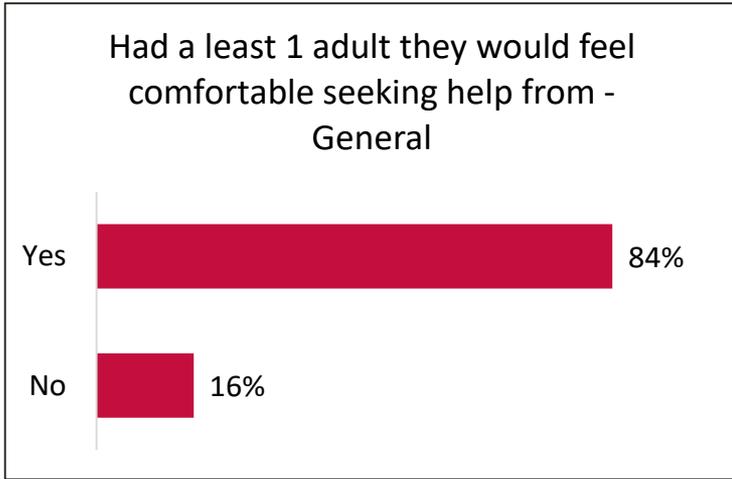
Black or African American students (29%) are significantly less likely to feel comfortable reaching out to friends compared to White students.

Bottom Line

Overall friend communication among teens in Maryland is high.

Emotional Support

Q15: Besides your parents, how many adults would you feel comfortable seeking help from if you had an important question affecting your life? (n=608)



Had at Least 1 Adult to Seek Help From by LGBT	% Yes
LGBT	71%
Non-LGBT	86%

Had at Least 1 Adult to Seek Help From by Race/Ethnicity	% Yes
Asian	78%
Black or African American	76%
White	90%
Hispanic/Latino	81%
Other/Multiple races	96%

Had at Least 1 Adult to Seek Help From by Region	% Yes
Capital	80%
Central	83%
Eastern Shore	93%
Southern	90%
Western	87%

Summary

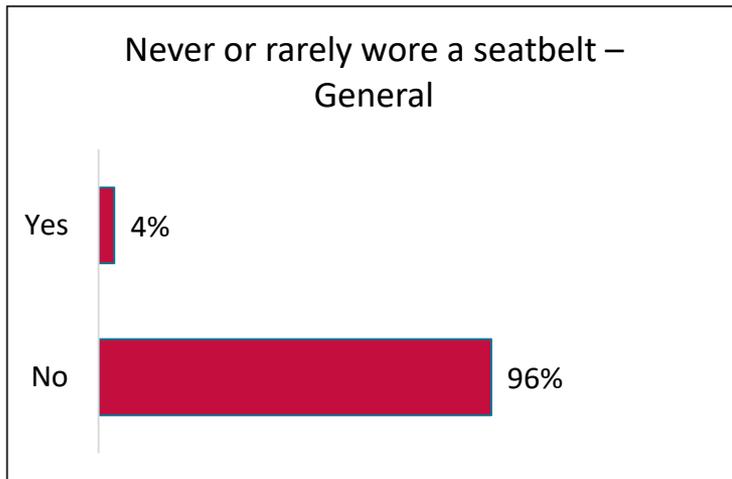
84% of teens have at least one adult besides their parents they can seek help from.

Bottom Line

Most Maryland high school students have supportive adults in their lives.

Vehicle Safety

Q16: How often do you wear a seat belt when riding in a car driven by someone else? (n=608)



Never or Rarely Wore a Seatbelt by LGBT	% Yes
LGBT	7%
Non-LGBT	3%

Never or Rarely Wore a Seatbelt by Age	% Yes
15 years old or younger	2%
16 or 17 years old	3%
18 years old or older	† 10%

Never or Rarely Wore a Seatbelt by Race/Ethnicity	% Yes
Asian	4%
Black or African American	3%
White	4%
Hispanic/Latino	7%
Other/Multiple races	-

Never or Rarely Wore a Seatbelt by Region	% Yes
Capital	2%
Central	4%
Eastern Shore	9%
Southern	2%
Western	5%

† Data is significantly higher than the overall percentage

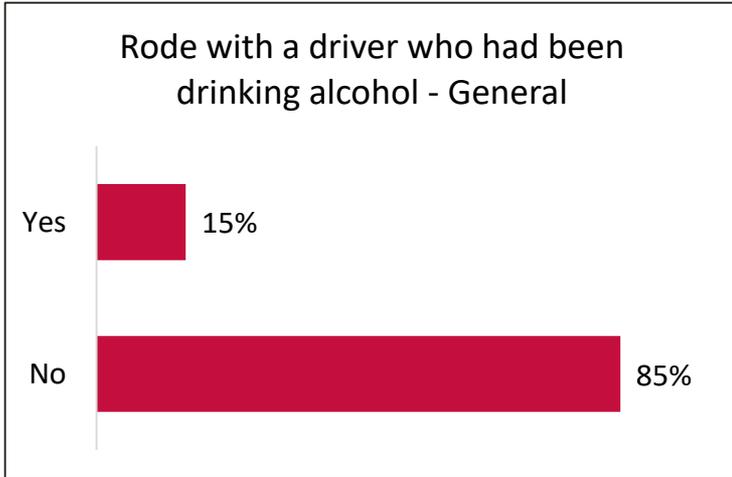
Summary

Almost all high students (96%) in Maryland wear their seatbelt when riding in a car driven by someone else.

18-year-old students are significantly less likely to wear their seatbelt (10%).

Vehicle Safety

Q17: During the past 30 days, how many times did you ride in a car or other vehicle driven by someone who had been drinking alcohol? (n=605)



Rode With a Driver Who Was Drinking by LGBT	% Yes
LGBT	14%
Non-LGBT	15%

Rode With a Driver Who Was Drinking by Race/Ethnicity	% Yes
Asian	7%
Black or African American	† 5%
White	24%
Hispanic/Latino	15%
Other/Multiple races	3%

Rode With a Driver Who Was Drinking by Region	% Yes
Capital	† 5%
Central	18%
Eastern Shore	15%
Southern	10%
Western	29%

† Data is significantly lower than the overall percentage

Summary

85% of Maryland teens have not recently ridden in a car where the driver was drinking alcohol.

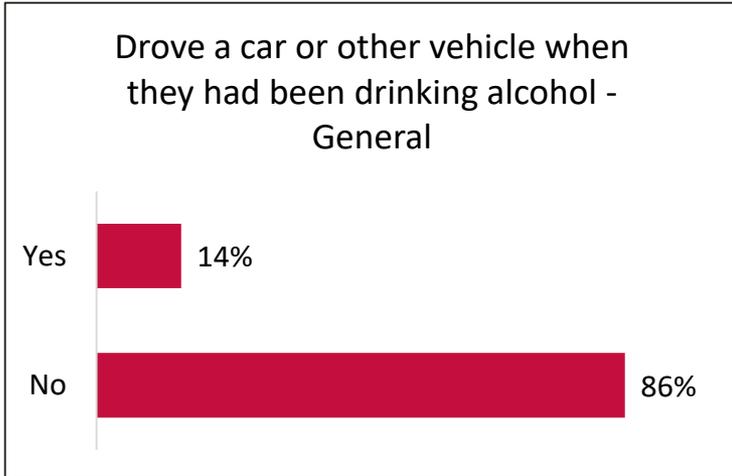
Black or African American students and students from the Capital region are significantly less likely (5%) to drive with someone who is under the influence of alcohol.

Bottom Line

Maryland teens are not likely to drive in a car with someone who is intoxicated.

Vehicle Safety

Q18: During the past 30 days, how many times did you drive a car or other vehicle when you had been drinking alcohol? (n=278)



Drove a car or other vehicle when they had been drinking alcohol by LGBT	% Yes
LGBT	13%
Non-LGBT	14%

Drove a car or other vehicle when they had been drinking alcohol by Race/Ethnicity	% Yes
Asian	6%
Black or African American	7%
White	18%
Hispanic/Latino	24%
Other/Multiple races	-

Drove a car or other vehicle when they had been drinking alcohol by Region	% Yes
Capital	10%
Central	11%
Eastern Shore	30%
Southern	16%
Western	21%

Summary

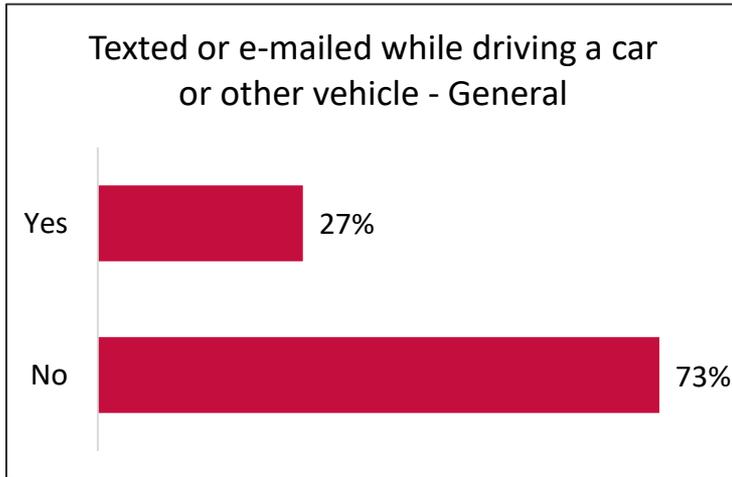
86% of Maryland high school students who drive have not recently driven a car while under the influence of alcohol.

Bottom Line

Maryland high school students are not likely to drive while drinking alcohol.

Vehicle Safety

Q19: During the past 30 days, on how many days did you text or e-mail while driving a car or other vehicle? (n=294)



Texted or Emailed While Driving a Car by LGBT	% Yes
LGBT	31%
Non-LGBT	26%

Texted or Emailed While Driving a Car by Age	% Yes
15 years old or younger	9%
16 or 17 years old	24%
18 years old or older	† 46%

Texted or Emailed While Driving a Car by Race/Ethnicity	% Yes
Asian	13%
Black or African American	16%
White	30%
Hispanic/Latino	† 56%
Other/Multiple races	5%

Texted or Emailed While Driving a Car by Region	% Yes
Capital	18%
Central	27%
Eastern Shore	39%
Southern	27%
Western	32%

† Data is significantly higher than the overall percentage

Summary

More than one-quarter (27%) of Maryland teens have texted or e-mailed while driving a car the past 30 days.

Hispanic/Latino students are significantly more likely (56%) to text and drive.

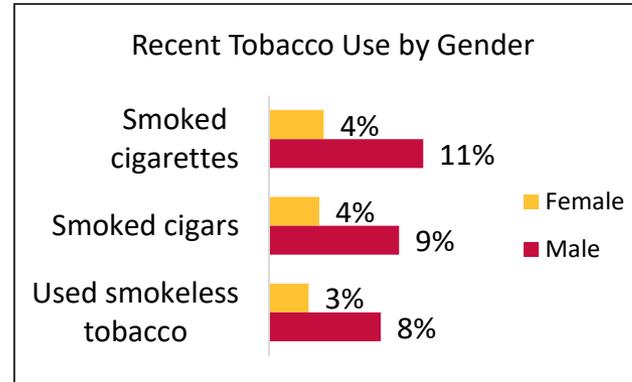
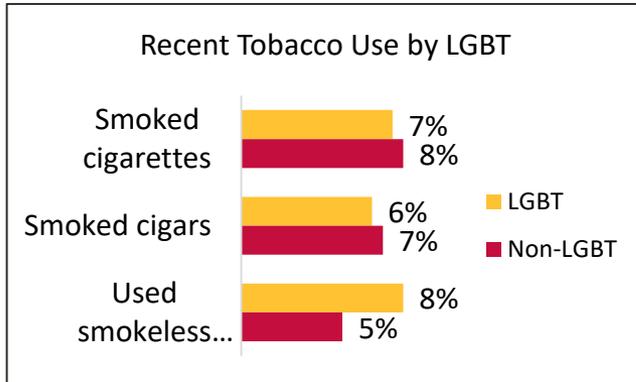
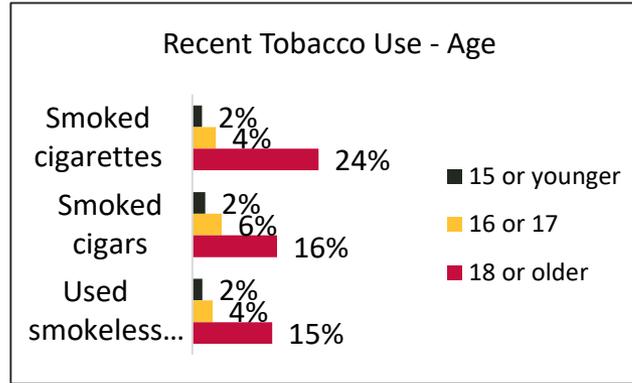
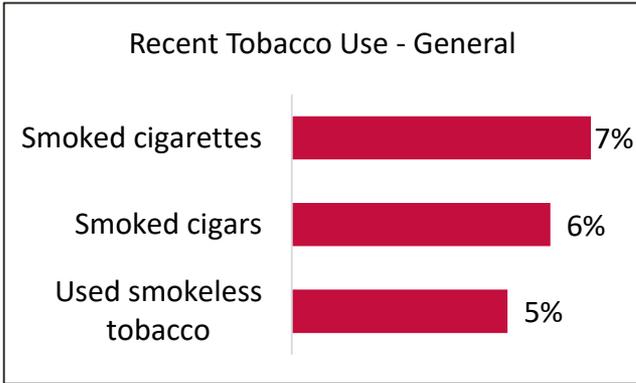
Bottom Line

Even though many Maryland students do not text while driving, there are still a good number of students using their phones while driving a vehicle.

18-year-old teens are significantly more likely to text and drive compared to younger teens (46%).

Tobacco

Q20, Q22, Q23: During the past 30 days, on how many days did you smoke cigarettes, smoke cigars, or use smokeless tobacco? (n=600, 604, 603)



Summary

7% of Maryland high schoolers recently smoked cigarettes, 6% smoked cigars, and 5% used smokeless tobacco.

Males are more likely to smoke cigarettes, cigars, or use smokeless tobacco compared to females.

Bottom Line

High school students from Maryland are not likely to use these types of tobacco products.

18-year-old teens are significantly more likely to smoke cigarettes, cigars, and use smokeless tobacco.

Tobacco

Q20, Q22, Q23: During the past 30 days, on how many days did you...?
(n=600, 604, 603)

Recent Tobacco Use by Region % Yes	Smoked cigarettes	Smoked cigars	Used smokeless tobacco
Capital	3%	4%	2%
Central	8%	7%	5%
Eastern Shore	16%	15%	13%
Southern	11%	8%	8%
Western	8%	6%	8%

Recent Tobacco Use by Race/Ethnicity % Yes	Smoked cigarettes	Smoked cigars	Used smokeless tobacco
Asian	3%	4%	4%
Black or African American	3%	2%	2%
White	10%	10%	8%
Hispanic/Latino	† 15%	8%	9%
Other/Multiple races	-	-	-

† Data is significantly higher than the overall percentage

Summary

Hispanic/Latino students are more likely to smoke cigarettes (15%).

White students and Hispanic/Latino students are more likely to smoke cigarettes and use smokeless tobacco compared to African American or Black students.

Tobacco

Q21: When you bought or tried to buy cigarettes in a store during the past 30 days, were you ever asked to show proof of age? (n=606)

	I did not try to buy cigarettes in a store during the past 30 days	Yes, I was asked to show proof of age	No, I was not asked to show proof of age
General Population	92%	4%	4%
By Race/Ethnicity			
Asian	96%	4%	-
Black or African American	† 98%	-	2%
White	89%	4%	6%
Hispanic/Latino	84%	† 12%	4%
Other/Multiple races	100%	-	-
By LGBT			
Yes	92%	1%	7%
No	92%	4%	3%
By Region			
Capital	96%	3%	1%
Central	92%	4%	4%
Eastern Shore	86%	5%	9%
Southern	91%	1%	8%
Western	90%	5%	5%

† Data is significantly higher than the overall percentage

Summary

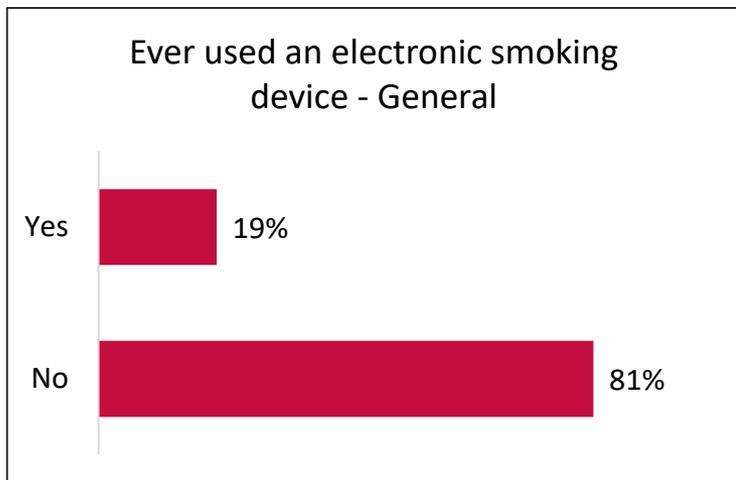
Most Maryland high students (92%) did not try to buy cigarettes in a store the past 30 days.

Black or African American students are even less likely to buy cigarettes (98%).

Out of those that have attempted to buy cigarettes, Hispanic/Latino students are asked to show proof of age significantly more (12%).

Electronic Smoking Devices

Q24: Have you ever used an electronic smoking device? (n=602)



Ever Used an Electronic Smoking Device by LGBT	% Yes
LGBT	33%
Non-LGBT	17%

Ever Used an Electronic Smoking Device by Age	% Yes
15 years old or younger	12%
16 or 17 years old	21%
18 years old or older	† 32%

Ever Used an Electronic Smoking Device by Race/Ethnicity	% Yes
Asian	10%
Black or African American	16%
White	21%
Hispanic/Latino	28%
Other/Multiple races	17%

Ever Used an Electronic Smoking Device by Region	% Yes
Capital	11%
Central	21%
Eastern Shore	26%
Southern	39%
Western	23%

† Data is significantly higher than the overall percentage

Summary

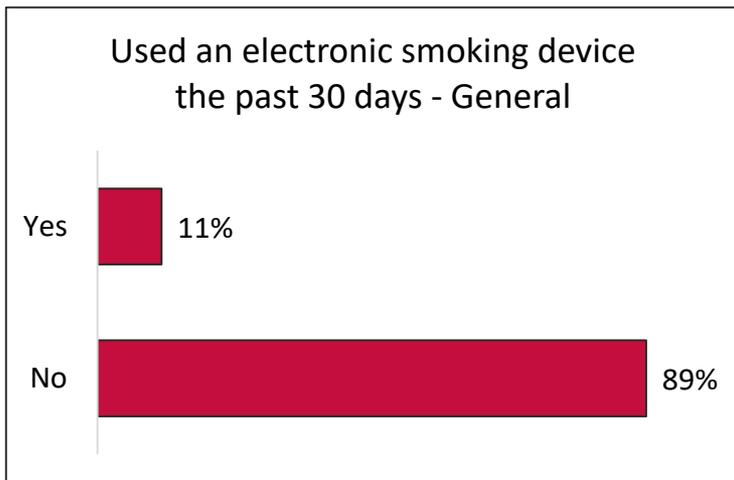
19% of Maryland high schoolers have used an electronic smoking device.

Students from the Southern Region (Calvert, Charles and St. Mary's counties) are more likely to have tried an ESD (39%).

18-year-old teens are significantly more likely to have ever used ESDs compared younger students.

Electronic Smoking Devices

Q25: During the past 30 days, on how many days did you use an electronic smoking device? (n=591)



Used an Electronic Smoking Device the Past 30 Days by LGBT	% Yes
LGBT	11%
Non-LGBT	10%

Used an Electronic smoking Device the Past 30 Days by Race/Ethnicity	% Yes
Asian	4%
Black or African American	5%
White	15%
Hispanic/Latino	17%
Other/Multiple races	-

Used an Electronic Smoking Device the Past 30 Days by Region	% Yes
Capital	5%
Central	11%
Eastern Shore	14%
Southern	17%
Western	18%

Summary

Maryland teens use ESDs nearly 60% more than cigarettes, over 80% more than cigars and over two times more than smokeless tobacco.

Electronic Smoking Devices

**Q26: What is the main reason you have used electronic smoking devices?
(n=150)**

	%
I was curious about them	39%
Friend or family member used them	19%
I was feeling anxious, stressed, or depressed	16%
To get a high or buzz from nicotine	11%
They are available in flavors, such as mint, candy, fruit, or chocolate	9%
They are less harmful than other forms of tobacco	3%
I used them for some other reason	2%

Summary

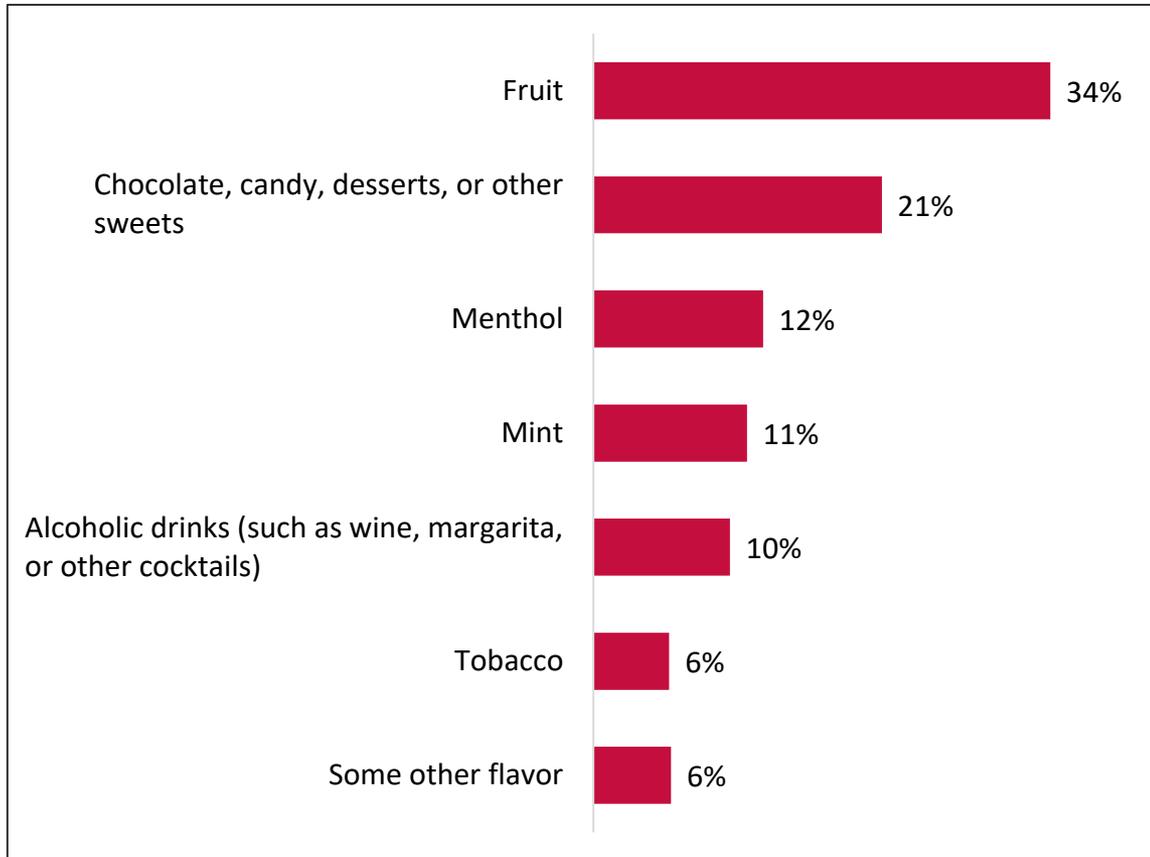
Maryland teens mainly use electronic vapor products out of curiosity (39%) or because a friend or family member used them (19%).

Bottom Line

High school students from Maryland are drawn to vaping due to curiosity and influence from those close to them.

Electronic Smoking Devices

Q27: During the past 30 days, what flavor of electronic smoking device did you use most often? (n=100)



Summary

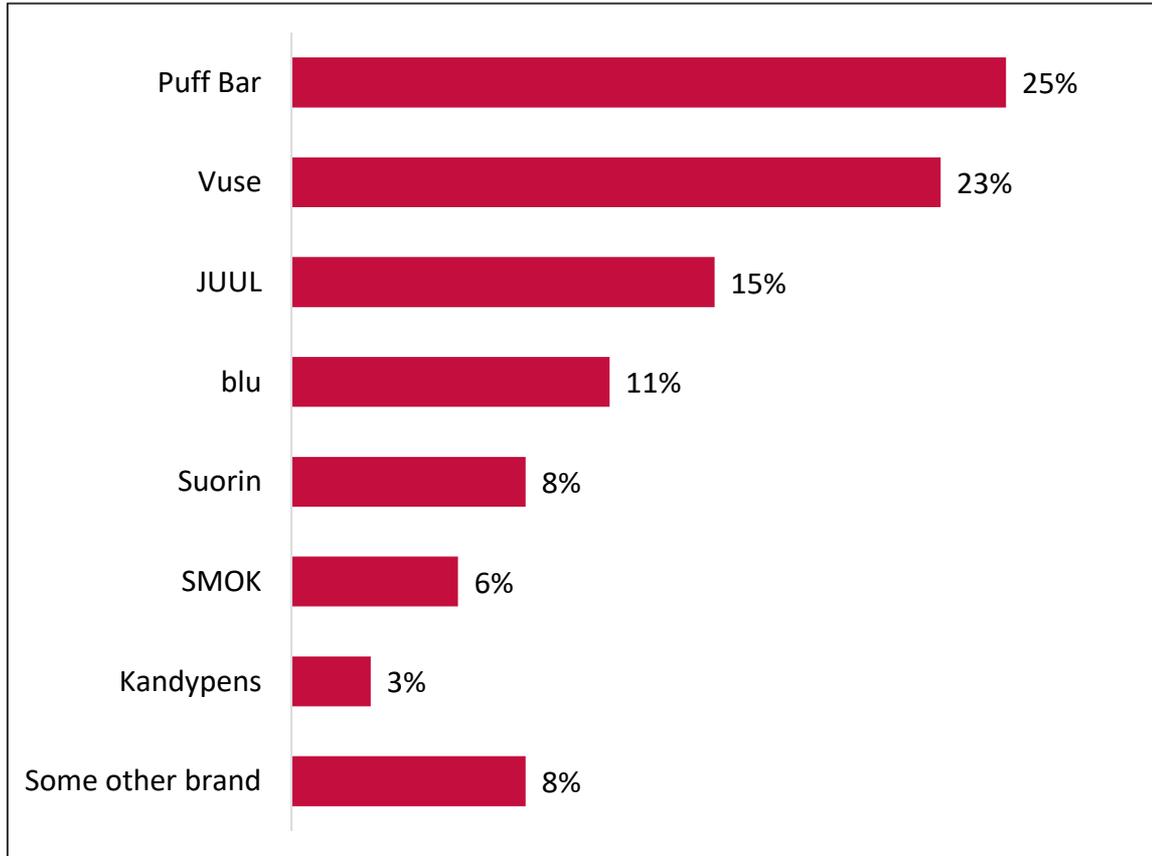
Fruit is the most popular ESD flavor for Maryland teens. A second common flavor is chocolate, candy, desserts, or sweet flavor.

Bottom Line

Maryland teens that use ESDs are more attracted to sweet vaping flavors such as fruit and candy.

Electronic Smoking Devices

Q28: During the past 30 days, what brand of electronic smoking device did you use most often? (n=98)



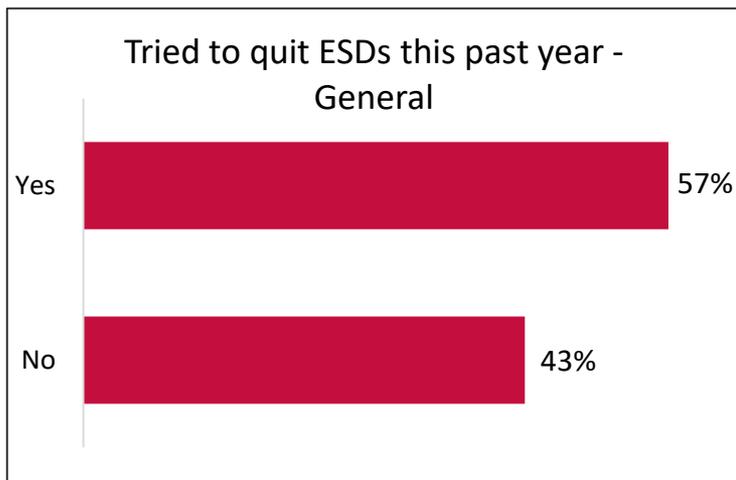
Summary

Puff Bar is the ESD used the most among Maryland teens (25%) followed closely by Vuse (23%).

75% of teens use just four brands of ESDs (Puff Bar, Vuse, JUUL, and blu).

Electronic Smoking Devices

Q29: During the past 12 months, did you ever try to quit using electronic smoking devices? (n=120)



Tried to Quit ESDs this Past Year by LGBT	% Yes
LGBT	54%
Non-LGBT	57%

Tried to Quit ESDs this Past Year by Race/Ethnicity	% Yes
Asian	100%
Black or African American	71%
White	60%
Hispanic/Latino	34%
Other/Multiple races	25%

Tried to Quit ESDs this Past Year by Region	% Yes
Capital	† 17%
Central	57%
Eastern Shore	50%
Southern	† 92%
Western	83%

† Data is significantly higher or lower than the overall percentage

Summary

57% of Maryland high school students who use ESDs have tried to quit the past year.

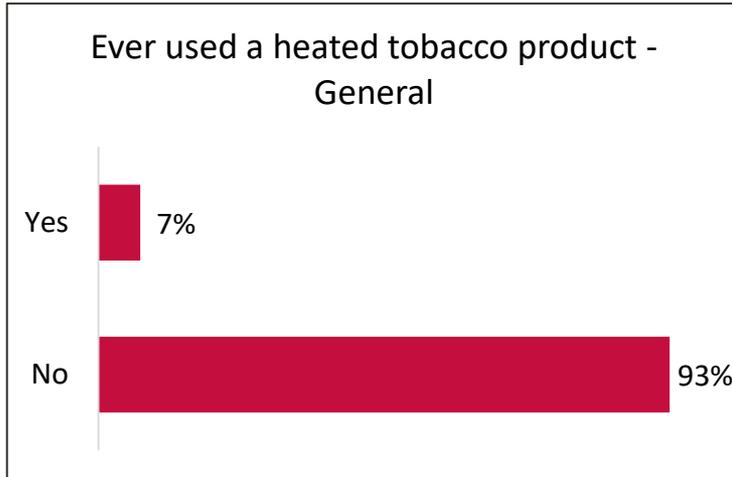
Students from the Capital region were significantly less likely to quit during the past year (17%) while teens from Southern Maryland have the highest quit rates by far (92%).

Bottom Line

Many Maryland teens who use ESDs are interested in quitting.

Electronic Smoking Devices

Q30: Have you ever used a heated tobacco product, even one or two times?
(n=607)



Ever Used a Heated Tobacco Product by LGBT	% Yes
LGBT	12%
Non-LGBT	6%

Ever Used a Heated Tobacco Product by Race/Ethnicity	% Yes
Asian	3%
Black or African American	7%
White	7%
Hispanic/Latino	13%
Other/Multiple races	-

Ever Used a Heated Tobacco Product by Region	% Yes
Capital	6%
Central	6%
Eastern Shore	10%
Southern	8%
Western	6%

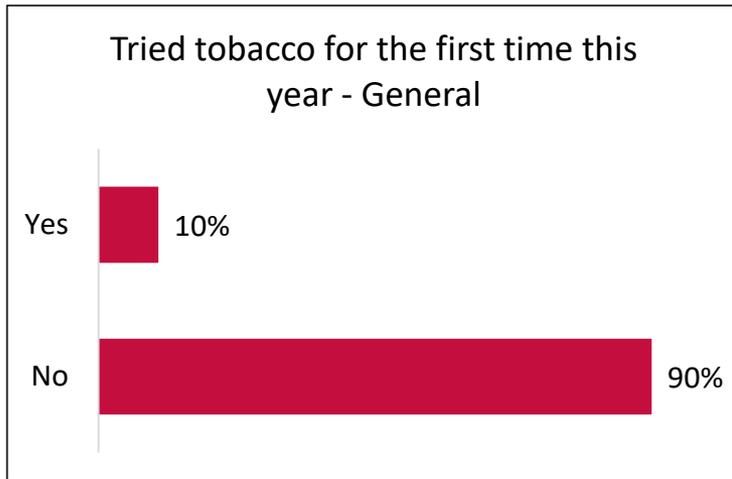
Summary

Most Maryland high school students have not used a heated tobacco product (93%).

**Heated tobacco products such as IQOS, glo, and Eclipse are known as heated cigarettes or “heat-not-burn” tobacco products. Heated tobacco products heat tobacco sticks (“heatsticks”) or capsules to produce a vapor. They are different from e-cigarettes, which heat a liquid to produce a vapor. There is currently insufficient research on heated tobacco products.*

Tobacco Use

Q31: During the past 12 months, did you try or use tobacco products for the first time? (n=607)



Tried Tobacco for the First Time This Year by LGBT	% Yes
LGBT	15%
Non-LGBT	9%

Tried Tobacco for the First Time This Year by Age	% Yes
15 years old or younger	9%
16 or 17 years old	5%
18 years old or older	16%

Tried Tobacco for the First Time This Year by Race/Ethnicity	% Yes
Asian	3%
Black or African American	10%
White	9%
Hispanic/Latino	13%
Other/Multiple races	14%

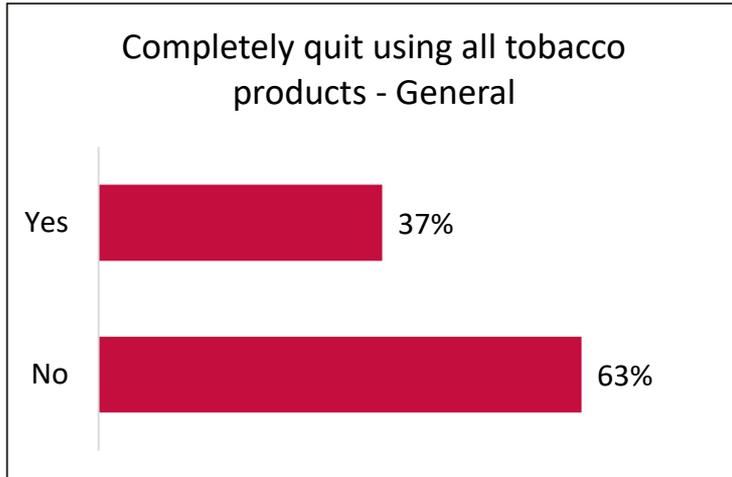
Tried Tobacco for the First Time This Year by Region	% Yes
Capital	8%
Central	8%
Eastern Shore	18%
Southern	9%
Western	16%

Summary

10% of Maryland high school students have tried a tobacco product for the first time this past year.

Tobacco Use

Q32: During the past 12 months, did you completely quit using all tobacco products? (n=125)



Completely Quit Using Tobacco Products by LGBT	% Yes
LGBT	45%
Non-LGBT	35%

Completely Quit Using Tobacco Products by Race/Ethnicity	% Yes
Asian	60%
Black or African American	68%
White	26%
Hispanic/Latino	27%
Other/Multiple races	-

Completely Quit Using Tobacco Products by Region	% Yes
Capital	43%
Central	31%
Eastern Shore	33%
Southern	22%
Western	56%

Summary

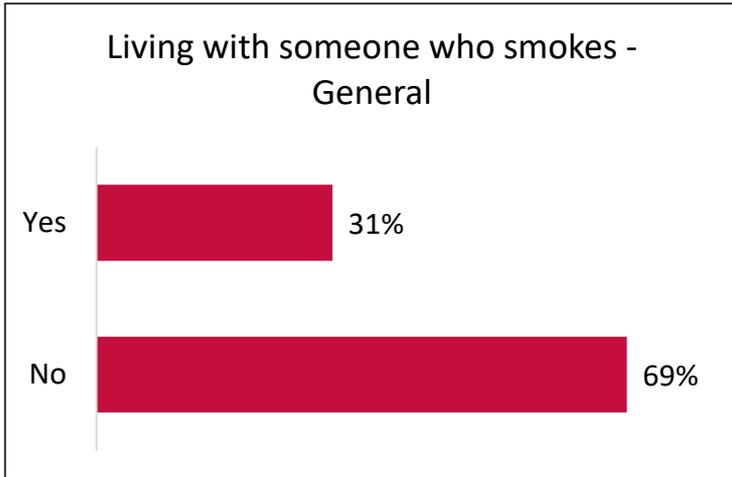
37% of Maryland teens who use tobacco products were able to completely quit within the past 12 months.

Bottom Line

Maryland high school students need more support and assistance to quit tobacco.

Secondhand Smoke

Q33: Does anyone who lives with you now smoke cigarettes or cigars? (n=604)



Living With Someone Who Smokes by LGBT	% Yes
LGBT	32%
Non-LGBT	30%

Did Living With Someone Who Smokes by Race/Ethnicity	% Yes
Asian	† 10%
Black or African American	30%
White	33%
Hispanic/Latino	30%
Other/Multiple races	44%

Living With Someone Who Smokes by Region	% Yes
Capital	† 17%
Central	34%
Eastern Shore	45%
Southern	18%
Western	45%

† Data is significantly lower than the overall percentage

Summary

Almost one-third (31%) of Maryland teens live with someone who currently smokes cigarettes or cigars.

Asian students are less likely to live with someone who smokes (10%) and students from the Capital region are also not as likely to live with a person that smokes (17%).

Bottom Line

A fair amount of high school students in Maryland live with a person that smokes.

Secondhand Smoke

Q34: Which statement best describes the rules about smoking inside your home? (Do not count decks, garages, or porches.) (n=603)

	%
Smoking is not allowed anywhere inside my home	63%
Smoking is allowed in some places or at some times inside my home	18%
Smoking is allowed anywhere inside my home	7%
There are no rules about smoking inside my home	12%

Hispanic/Latino high school student households are more likely to allow smoking anywhere in their home compared to the general population.
(† 46%)

† Data is significantly lower than the overall percentage

Summary

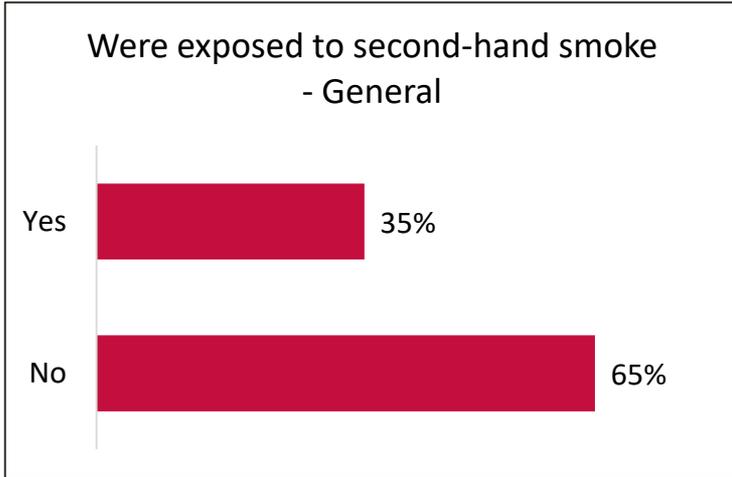
63% of Maryland high students homes do not allow smoking anywhere near the home.

Bottom Line

Almost 40% of Maryland teens do not have strict rules about smoking in their home.

Secondhand Smoke

Q35: During the past 7 days, on how many days were you in the same room with someone who was smoking? (n=603)



Were Exposed to Secondhand Smoke by LGBT	% Yes
LGBT	35%
Non-LGBT	35%

Were Exposed to Secondhand Smoke by Race/Ethnicity	% Yes
Asian	16%
Black or African American	26%
White	40%
Hispanic/Latino	43%
Other/Multiple races	44%

Were Exposed to Secondhand Smoke by Region	% Yes
Capital	† 21%
Central	37%
Eastern Shore	56%
Southern	28%
Western	49%

† Data is significantly lower than the overall percentage

Summary

More than one-third (35%) of Maryland high school students were exposed to second-hand smoke in the past week.

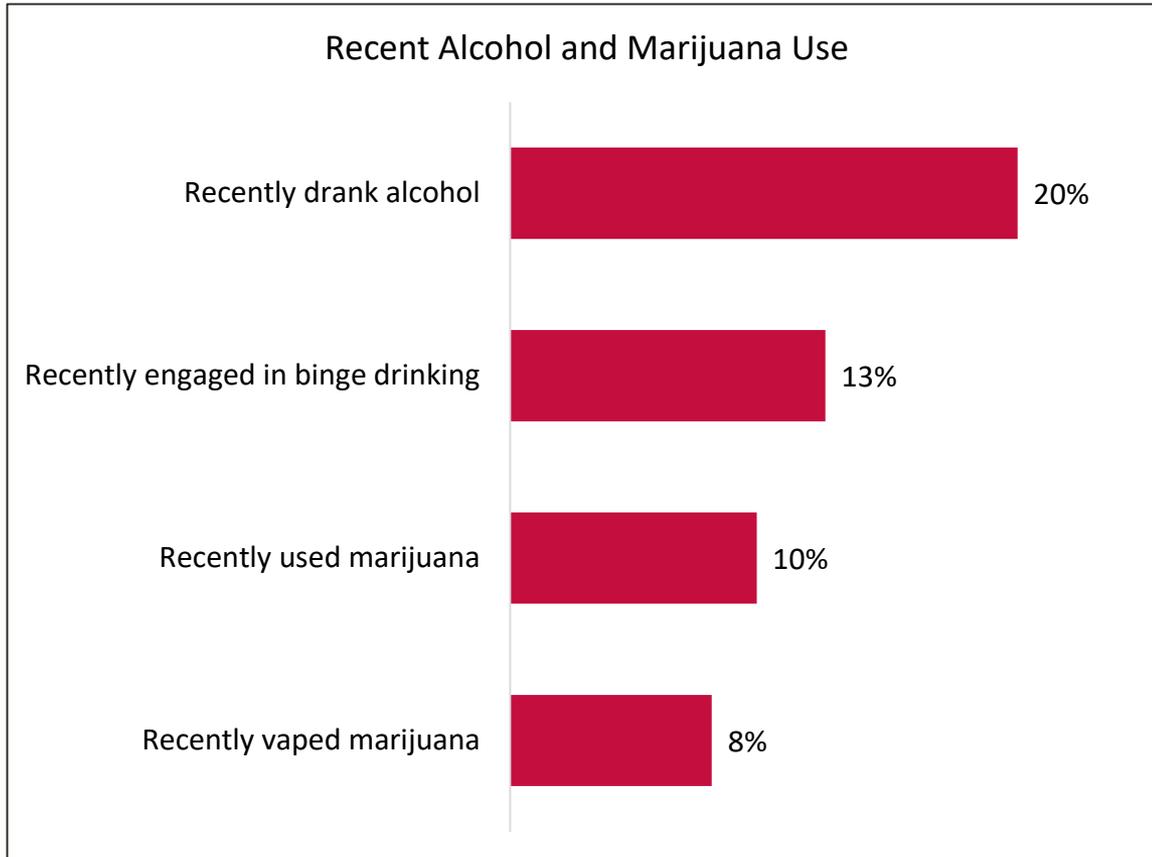
Students from the Capital region (21%) are less likely to be exposed to second-hand smoke.

Bottom Line

More education on the harm of second-hand smoke is needed to protect over 1 in 3 Maryland teens.

Alcohol and Marijuana

Q36, Q37, Q38, Q39: During the past 30 days, on how many days did you...
(n=589, 604, 587, 600)



Summary

20% of high school students from Maryland recently drank alcohol and 10% of students recently used marijuana.

Bottom Line

Maryland high school students are more likely to use alcohol than marijuana.

Alcohol and Marijuana

Q36, Q37, Q38, Q39: During the past 30 days, on how many days did you...
(n=589, 604, 587, 600)

	Recently drank alcohol	Recently engaged in binge drinking	Recently used marijuana	Recently vaped marijuana
General Population:	20%	13%	10%	8%
By Race/Ethnicity				
Asian	6%	† 1%	4%	4%
Black or African American	16%	5%	8%	5%
White	23%	17%	10%	8%
Hispanic/Latino	26%	† 22%	13%	12%
Other/Multiple races	23%	3%	15%	15%
By LGBT				
Yes	23%	13%	19%	16%
No	20%	13%	8%	7%
By Region				
Capital	13%	8%	† 3%	† 2%
Central	22%	14%	14%	11%
Eastern Shore	† 40%	24%	14%	15%
Southern	23%	15%	14%	5%
Western	17%	10%	9%	8%

† Data is significantly higher or lower than the overall percentage

Summary

Hispanic/Latino high school students in Maryland have been more likely to binge drink during the past 30 days (22%).

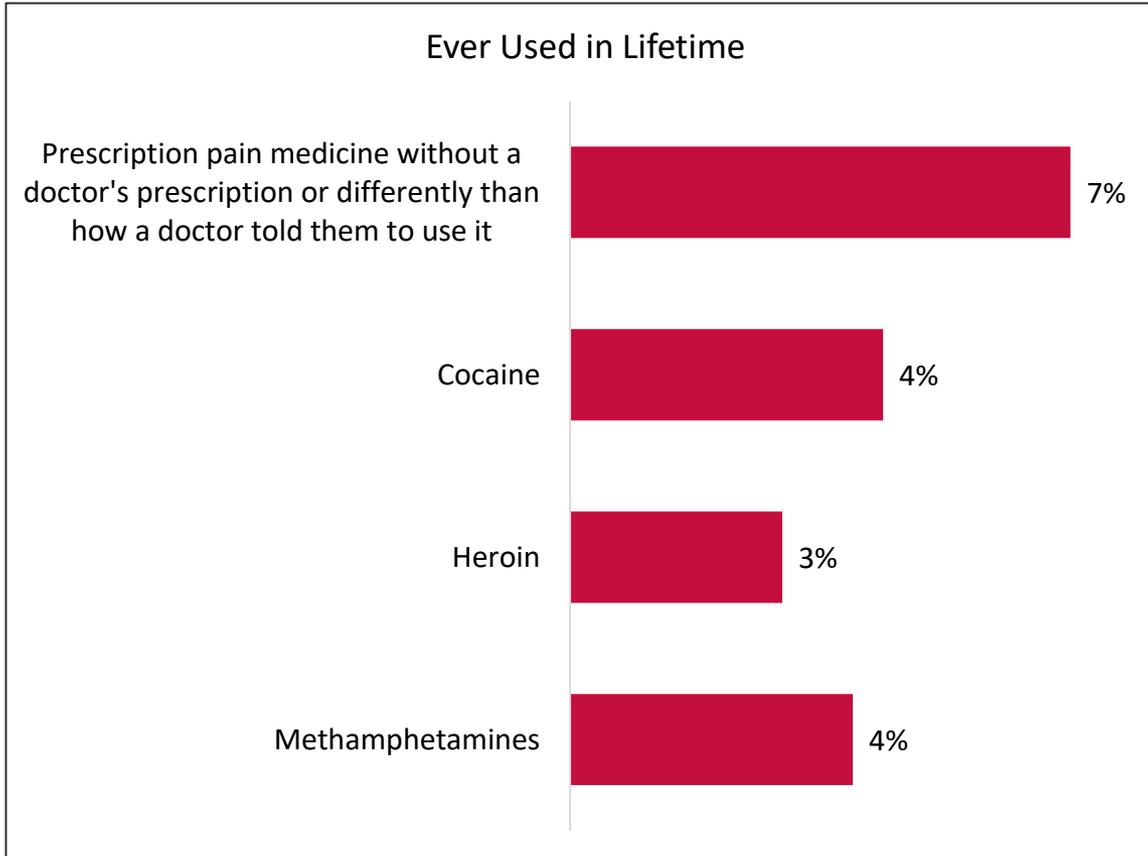
Students from the Eastern Shore region (Caroline, Cecil, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester) have been drinking alcohol significantly more compared to the general population (40%).

Students from the Capital region are less likely to use marijuana (3%).

Asian students are less likely to engage in binge drinking (1%).

Other Drugs

Q40, Q41, Q42, Q43: During your life, how many times have you taken...
(n=548, 601, 600, 601)



Summary

Less than 10% of Maryland teens have used drugs such as prescription pain medicine (7%), cocaine (4%), heroin (3%) or methamphetamines (4%) in their life.

Bottom Line

Prescription pain medicine is a more commonly used drug among Maryland teens compared to cocaine, methamphetamines, and heroin.

Other Drugs

Q40, Q41, Q42, Q43: During your life, how many times have you taken...
(n=548, 601, 600, 601)

	Prescription pain medicine	Cocaine	Heroin	Methamphetamines
General Population	7%	4%	3%	4%
By Race/Ethnicity				
Asian	-	4%	3%	3%
Black or African American	8%	2%	-	-
White	6%	6%	4%	5%
Hispanic/Latino	13%	8%	6%	7%
Other/Multiple races	3%	-	-	-
By LGBT				
Yes	12%	5%	2%	6%
No	6%	4%	3%	3%
By Region				
Capital	3%	† 1%	† 0%	† 0%
Central	10%	5%	3%	4%
Eastern Shore	14%	† 18%	† 12%	† 13%
Southern	3%	3%	2%	2%
Western	5%	4%	2%	4%

† Data is significantly higher or lower than the overall percentage

Percentages in table are based on 1 or more times of drug use

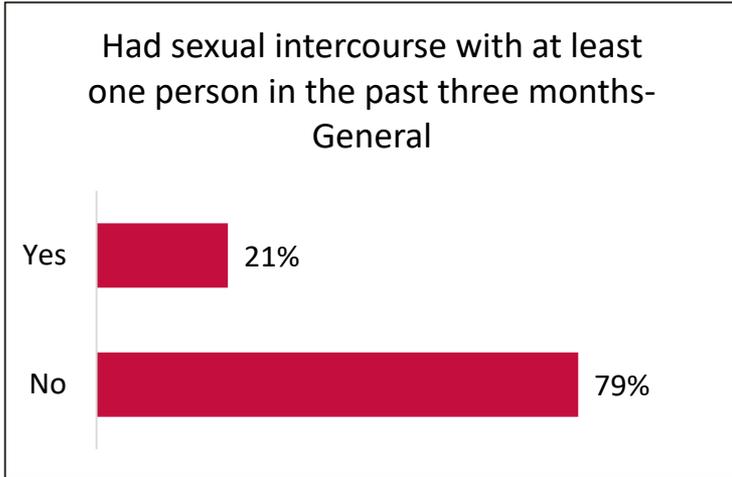
Summary

Eastern Shore teens are significantly more likely to have tried cocaine (18%), heroin (12%), and methamphetamines (13%).

Teens from the Capital region are significantly less likely to have tried these types of drugs (1% or less).

Sexual Behavior

Q44: During the past 3 months, with how many people did you have sexual intercourse? (n=596)



Had sexual intercourse with at least one person in the past three months by LGBT	% Yes
LGBT	26%
Non-LGBT	21%

Had sexual intercourse with at least one person in the past three months by Race/Ethnicity	% Yes
Asian	11%
Black or African American	13%
White	27%
Hispanic/Latino	26%
Other/Multiple races	28%

Had sexual intercourse with at least one person in the past three months by Region	% Yes
Capital	17%
Central	21%
Eastern Shore	† 44%
Southern	22%
Western	19%

† Data is significantly higher than the overall percentage

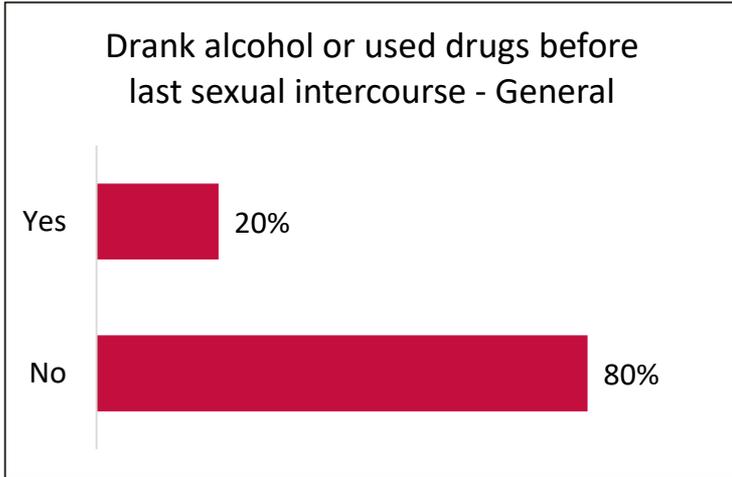
Summary

21% of Maryland high school students have had sexual intercourse with at least one person in the past three months.

Students from the Eastern Shore region (Caroline, Cecil, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester) are more likely to have had sexual intercourse with at least one person in the past three months (44%).

Sexual Behavior

Q45: Did you drink alcohol or use drugs before you had sexual intercourse the last time? (n=224)



Drank Alcohol or Used Drugs Before Last Sexual Intercourse by LGBT	% Yes
LGBT	41%
Non-LGBT	14%

Drank Alcohol or Used Drugs Before Last Sexual Intercourse by Race/Ethnicity	% Yes
Asian	9%
Black or African American	26%
White	17%
Hispanic/Latino	29%
Other/Multiple races	-

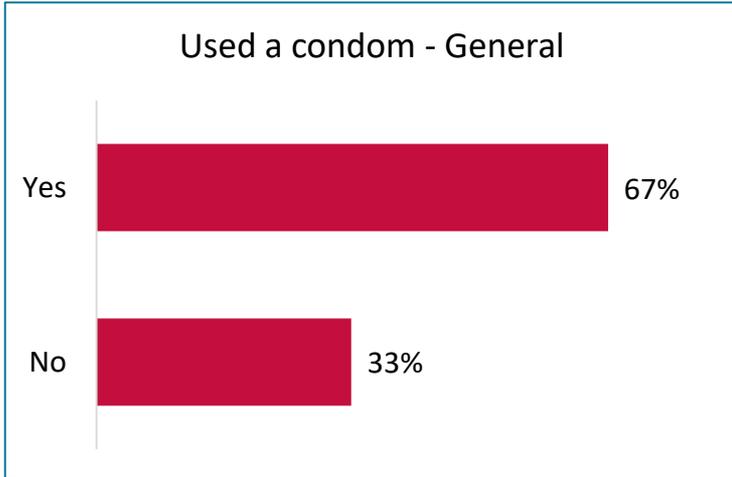
Drank Alcohol or Used Drugs Before Last Sexual Intercourse by Region	% Yes
Capital	27%
Central	18%
Eastern Shore	23%
Southern	7%
Western	15%

Summary

Out of those students who have been sexually active, 20% used alcohol or drugs before their recent sexual intercourse experience.

Sexual Behavior

Q46: The last time you had sexual intercourse, did you or your partner use a condom? (n=223)



Used a Condom by LGBT	% Yes
LGBT	37%
Non-LGBT	33%

Used a Condom by Race/Ethnicity	% Yes
Asian	52%
Black or African American	43%
White	34%
Hispanic/Latino	20%
Other/Multiple races	19%

Used a Condom by Region	% Yes
Capital	24%
Central	44%
Eastern Shore	25%
Southern	20%
Western	36%

Summary

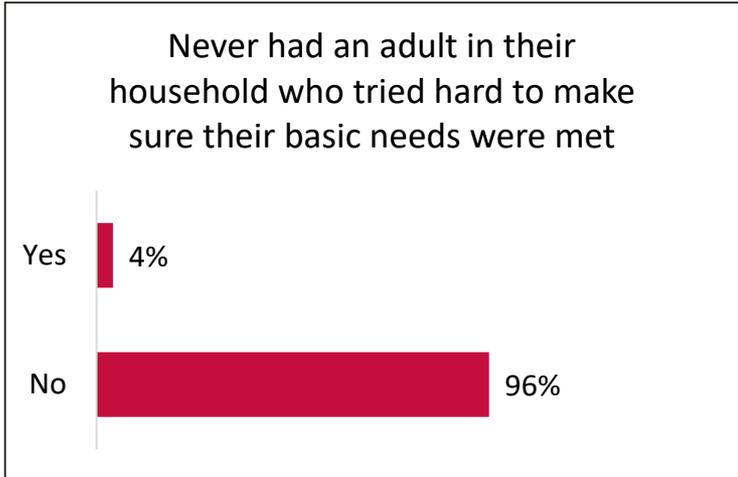
A little more than two-thirds (67%) of students who are sexually active used a condom the last time they had sexual intercourse.

Bottom Line

Some Maryland high school students may benefit from more sex education related to condoms.

Home Life

Q47: During your life, how often has there been an adult in your household who tried hard to make sure your basic needs were met, such as looking after your safety and making sure you had clean clothes and enough to eat? (n=599)



Never Had an Adult That Met Their Basic Needs by LGBT	% Yes
LGBT	11%
Non-LGBT	2%

Never Had an Adult That Met Their Basic Needs by Race/Ethnicity	% Yes
Asian	11%
Black or African American	8%
White	1%
Hispanic/Latino	3%
Other/Multiple races	-

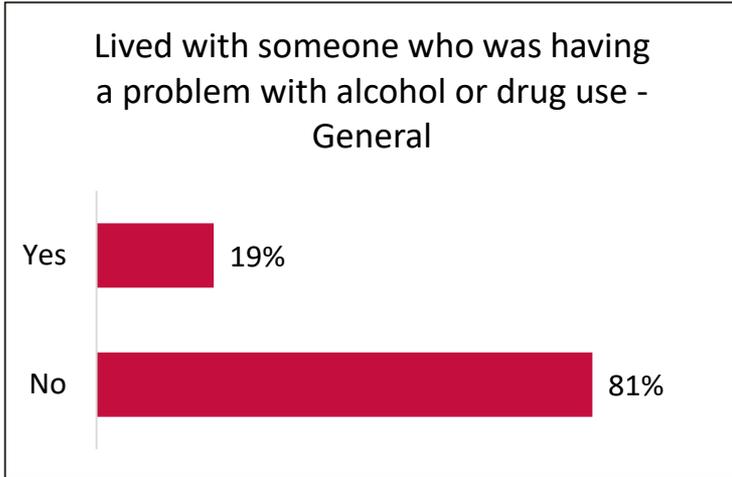
Never Had an Adult That Met Their Basic Needs by Region	% Yes
Capital	7%
Central	3%
Eastern Shore	2%
Southern	1%
Western	-

Summary

4% of Maryland high school students have never had an adult in their household that takes care of their basic needs.

Home Life

Q48: Have you ever lived with someone who was having a problem with alcohol or drug use? (n=598)



Lived With Someone who was Having a Problem with Alcohol or Drugs by LGBT	% Yes
LGBT	32%
Non-LGBT	17%

Lived With Someone who was Having a Problem with Alcohol or Drugs by Race/Ethnicity	% Yes
Asian	† 4%
Black or African American	20%
White	17%
Hispanic/Latino	22%
Other/Multiple races	34%

Lived With Someone who was Having a Problem with Alcohol or Drugs by Region	% Yes
Capital	11%
Central	24%
Eastern Shore	31%
Southern	28%
Western	10%

† Data is significantly lower than the overall percentage

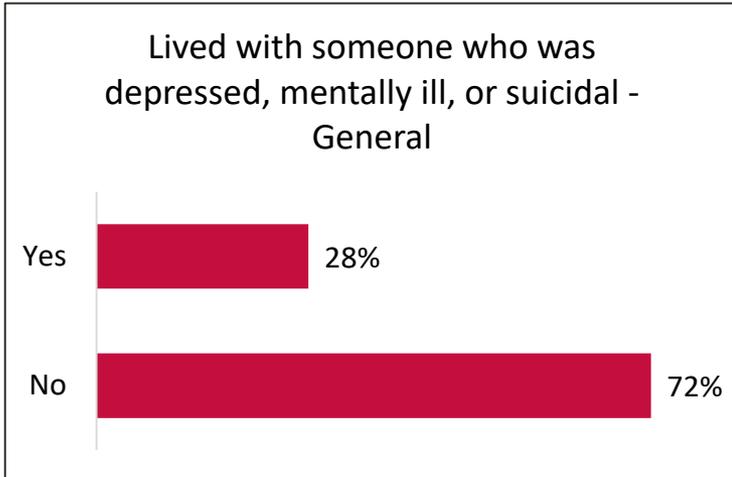
Summary

Even though most Maryland high school students have not lived with someone who has a problem with alcohol or drugs, 19% have had this experience.

Asian students are significantly less likely to live with someone who has an alcohol or drug problem (4%).

Home Life

Q49: Have you ever lived with someone who was depressed, mentally ill, or suicidal? (n=596)



Lived With Someone who was Depressed, Mentally Ill, or Suicidal by LGBT	% Yes
LGBT	† 54%
Non-LGBT	23%

Lived With Someone who was Depressed, Mentally Ill, or Suicidal by Race/Ethnicity	% Yes
Asian	23%
Black or African American	41%
White	22%
Hispanic/Latino	† 13%
Other/Multiple races	36%

Lived With Someone who was Depressed, Mentally Ill, or Suicidal by Region	% Yes
Capital	31%
Central	32%
Eastern Shore	17%
Southern	31%
Western	13%

† Data is significantly higher or lower than the overall percentage

Summary

28% of Maryland teens have lived with someone who was depressed, mentally ill, or suicidal.

LGBT students are significantly more likely to live with someone who is mentally ill or suicidal (54%).

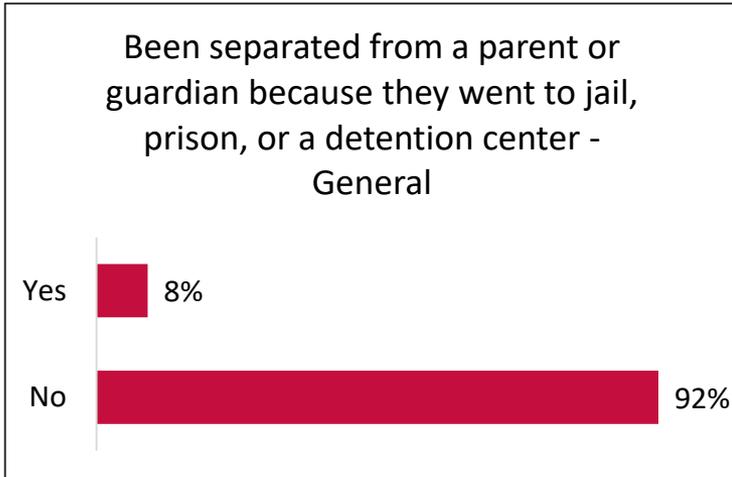
Bottom Line

Maryland high school students could benefit from more mental health education including how to manage living with a loved one who is mentally ill or suicidal.

African American students are more likely to live with someone who is mentally ill or suicidal compared to White and Hispanic/Latino students.

Home Life

Q50: Have you ever been separated from a parent or guardian because they went to jail, prison, or a detention center? (n=598)



Been Separated From a Parent or Guardian That Went to Jail, Prison, or a Detention Center by LGBT	% Yes
LGBT	12%
Non-LGBT	8%

Been Separated From a Parent or Guardian That Went to Jail, Prison, or a Detention Center by Race/Ethnicity	% Yes
Asian	-
Black or African American	9%
White	8%
Hispanic/Latino	7%
Other/Multiple races	20%

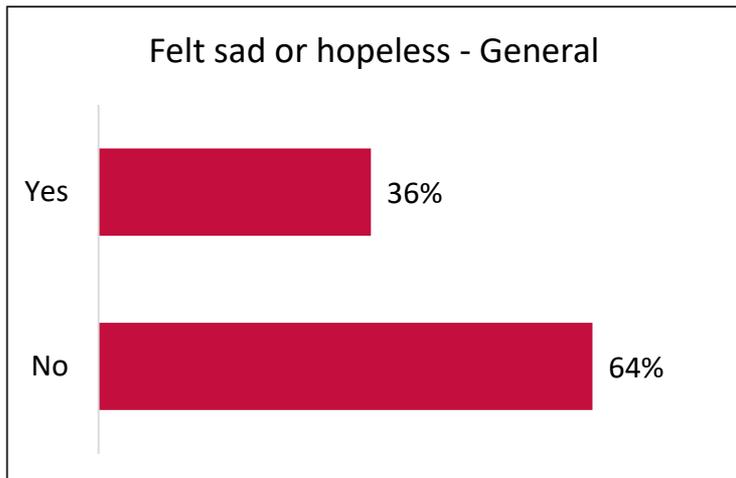
Been Separated From a Parent or Guardian That Went to Jail, Prison, or a Detention Center by Region	% Yes
Capital	6%
Central	10%
Eastern Shore	14%
Southern	6%
Western	5%

Summary

8% of Maryland teens have experienced separation from a parent or guardian because they went to jail, prison, or a detention center.

Mental Health and Bullying

Q51: During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities? (n=599)



Felt Sad or Hopeless by LGBT	% Yes
LGBT	† 75%
Non-LGBT	29%

Felt Sad or Hopeless by Gender	% Yes
Female	48%
Male	24%

Felt Sad or Hopeless by Race/Ethnicity	% Yes
Asian	† 15%
Black or African American	† 52%
White	28%
Hispanic/Latino	† 21%
Other/Multiple races	58%

Felt Sad or Hopeless by Region	% Yes
Capital	38%
Central	38%
Eastern Shore	20%
Southern	43%
Western	28%

† Data is significantly higher or lower than the overall percentage

Summary

36% of Maryland high school students have felt sad or hopeless every day for two weeks in a row the past 12 months.

Black or African American students (52%) and LGBT students (75%) have felt significantly sadder and more hopeless the past year.

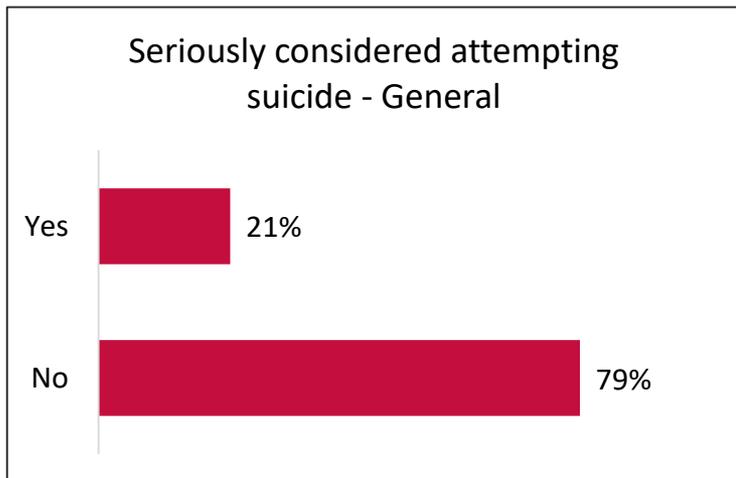
Bottom Line

Mental health is a critical concern among high school students.

Females (48%) are more likely to feel sad or hopeless compared to males (25%).

Mental Health and Bullying

Q52: During the past 12 months, did you ever seriously consider attempting suicide? (n=598)



Seriously Considered Attempting Suicide by LGBT	% Yes
LGBT	† 57%
Non-LGBT	15%

Seriously Considered Attempting Suicide by Race/Ethnicity	% Yes
Asian	† 6%
Black or African American	37%
White	12%
Hispanic/Latino	14%
Other/Multiple races	44%

Seriously Considered Attempting Suicide by Region	% Yes
Capital	28%
Central	23%
Eastern Shore	16%
Southern	19%
Western	† 5%

† Data is significantly higher or lower than the overall percentage

Summary

Approximately 1 out of 5 Maryland teens have seriously considered attempting suicide the past year.

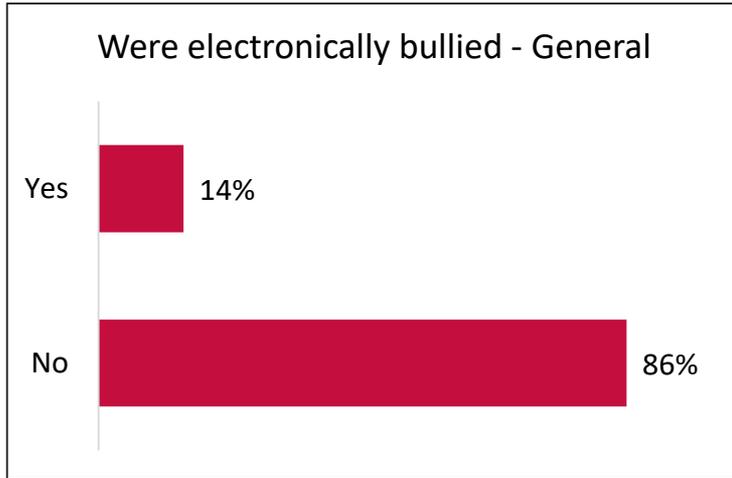
Asian students are less likely the past year to consider suicide (6%) while LGBT students are significantly more likely to consider suicide (57%).

Bottom Line

Suicidal ideations are alarmingly high among Maryland teens, especially within the LGBT community. There is an opportunity for more mental health support and resources.

Mental Health and Bullying

Q53: During the past 12 months, have you ever been electronically bullied? (Count being bullied through texting, Instagram, Facebook, or other social media.) (n=599)



Were Electronically Bullied by LGBT	% Yes
LGBT	13%
Non-LGBT	14%

Were Electronically Bullied by Gender	% Yes
Female	16%
Male	12%

Were Electronically Bullied by Race/Ethnicity	% Yes
Asian	18%
Black or African American	14%
White	14%
Hispanic/Latino	15%
Other/Multiple races	3%

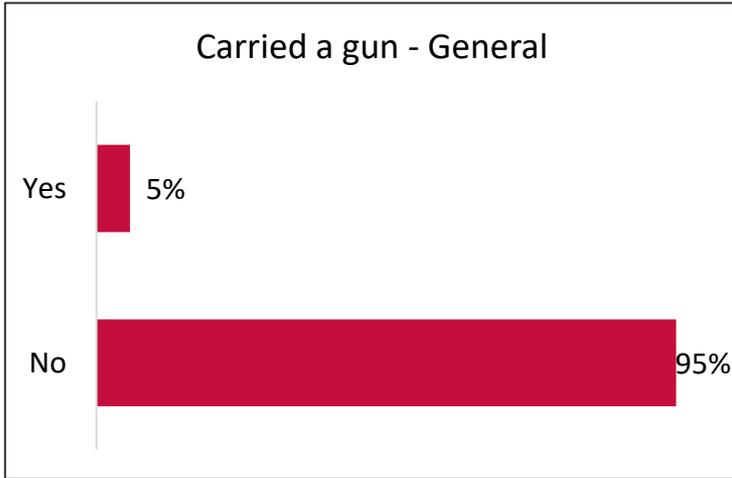
Were Electronically Bullied by Region	% Yes
Capital	16%
Central	15%
Eastern Shore	9%
Southern	9%
Western	11%

Summary

14% of Maryland teens have been electronically bullied the past year.

Violence

Q54: During the past 12 months, on how many days did you carry a gun? (Do not count the days when you carried a gun only for hunting or for a sport, such as target shooting.) (n=599)



Carried a Gun by LGBT	% Yes
LGBT	6%
Non-LGBT	5%

Carried a Gun by Race/Ethnicity	% Yes
Asian	4%
Black or African American	1%
White	9%
Hispanic/Latino	7%
Other/Multiple races	-

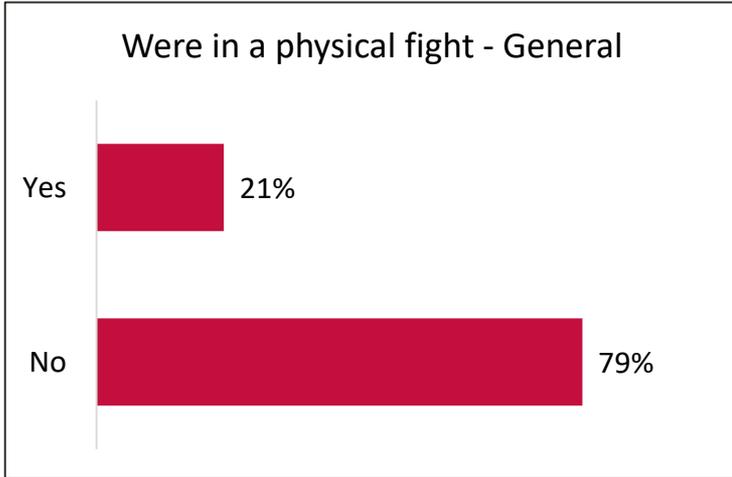
Carried a Gun by Region	% Yes
Capital	2%
Central	7%
Eastern Shore	13%
Southern	2%
Western	2%

Summary

Most Maryland high school students have not carried a gun within the past year (95%).

Violence

Q55: During the past 12 months, how many times were you in a physical fight? (n=598)



Were in a Physical Fight by LGBT	% Yes
LGBT	19%
Non-LGBT	21%

Were in a Physical Fight by Race/Ethnicity	% Yes
Asian	8%
Black or African American	15%
White	29%
Hispanic/Latino	22%
Other/Multiple races	3%

Were in a Physical Fight by Region	% Yes
Capital	15%
Central	22%
Eastern Shore	31%
Southern	† 4%
Western	32%

† Data is significantly lower than the overall percentage

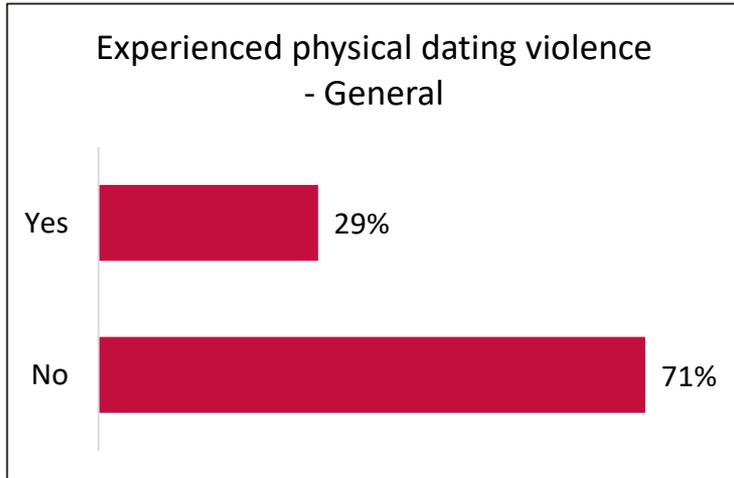
Summary

21% of Maryland high school students were in a physical fight this past year.

Students from the Southern region (Calvert, Charles and St. Mary's counties) are significantly less likely to be in a physical fight (4%).

Violence

Q56: During 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.) (n=342)



Experienced Physical Dating Violence by LGBT	% Yes
LGBT	50%
Non-LGBT	25%

Experienced Physical Dating Violence by Race/Ethnicity	% Yes
Asian	10%
Black or African American	30%
White	30%
Hispanic/Latino	27%
Other/Multiple races	24%

Experienced Physical Dating Violence by Region	% Yes
Capital	29%
Central	30%
Eastern Shore	20%
Southern	12%
Western	38%

Summary

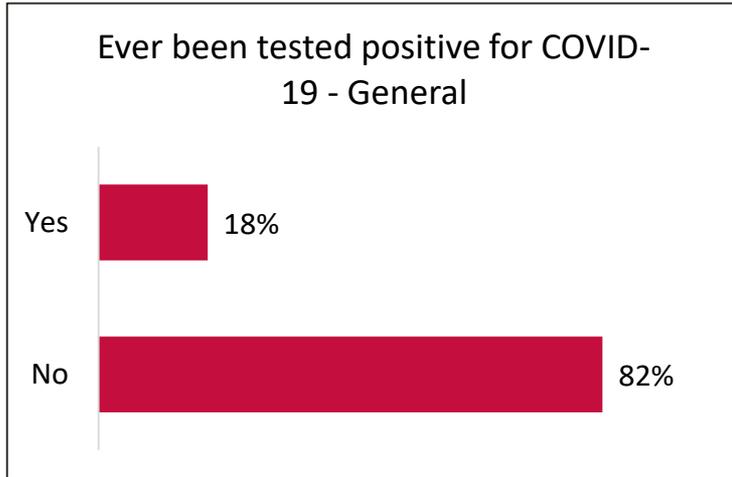
Almost 30% of Maryland high school students who have been dating someone the past year experienced physical abuse such as being hit, slammed into something, or injured with an object or weapon.

Bottom Line

Physical abuse among Maryland high schoolers is a serious concern.

COVID-19

Q57: Have you or anyone in your home tested positive for COVID-19? (n=598)



Ever Tested Positive for COVID-19 by LGBT	% Yes
LGBT	19%
Non-LGBT	17%

Ever Tested Positive for COVID-19 by Race/Ethnicity	% Yes
Asian	12%
Black or African American	25%
White	15%
Hispanic/Latino	13%
Other/Multiple races	18%

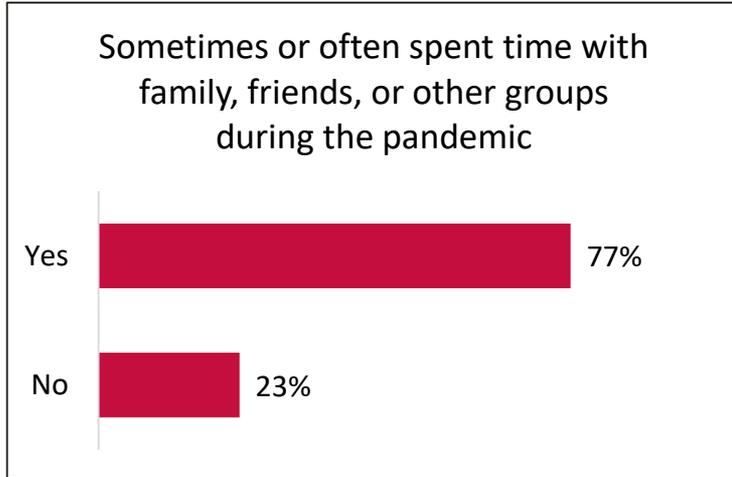
Ever Tested Positive for COVID-19 by Region	% Yes
Capital	25%
Central	15%
Eastern Shore	11%
Southern	17%
Western	13%

Summary

18% of Maryland teens have either tested positive for COVID-19 or someone in their household has tested positive.

COVID-19

Q58: During the COVID-19 pandemic, how often were you able to spend time with family, friends, or other groups, such as clubs or religious groups, by using a computer, phone, or other device? (Do not count attending school online.) (n=598)



Sometimes or Often Spent Time With Family or Friends or Other Groups by LGBT	% Yes
LGBT	30%
Non-LGBT	22%

Sometimes or Often Spent Time With Family or Friends or Other Groups by Race/Ethnicity	% Yes
Asian	81%
Black or African American	74%
White	83%
Hispanic/Latino	80%
Other/Multiple races	† 42%

Sometimes or Often Spent Time With Family or Friends or Other Groups by Region	% Yes
Capital	75%
Central	81%
Eastern Shore	67%
Southern	81%
Western	77%

† Data is significantly lower than the overall percentage

Summary

77% of Maryland sometimes or often spent time with family, friends, or other groups during the pandemic.

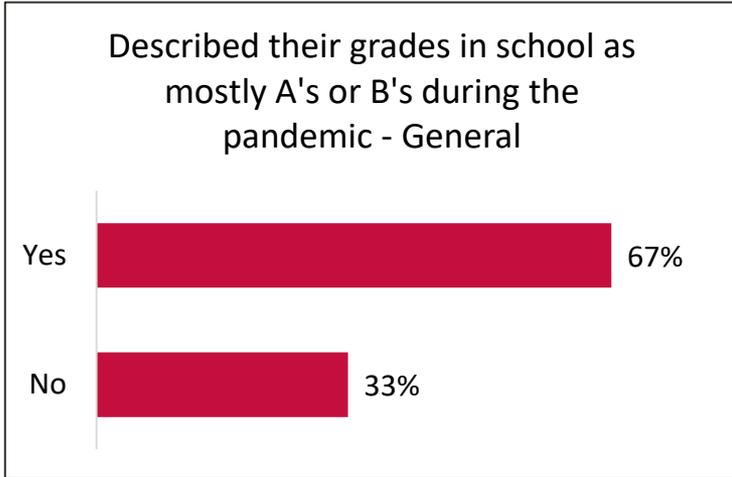
Other or multiple race students were significantly less likely to spend time with these groups (42%).

Bottom Line

Many high school students in Maryland have been able to virtually socialize during the pandemic.

COVID-19

Q59: During the COVID-19 pandemic, how would you describe your grades in school? (n=599)



Described Their Grades as A's or B's During the Pandemic by LGBT	% Yes
LGBT	49%
Non-LGBT	71%

Summary

Two-thirds (67%) of Maryland high schoolers describe their grades as mostly A's or B's during the pandemic.

Asian students were significantly more likely to report good grades during the pandemic (98%).

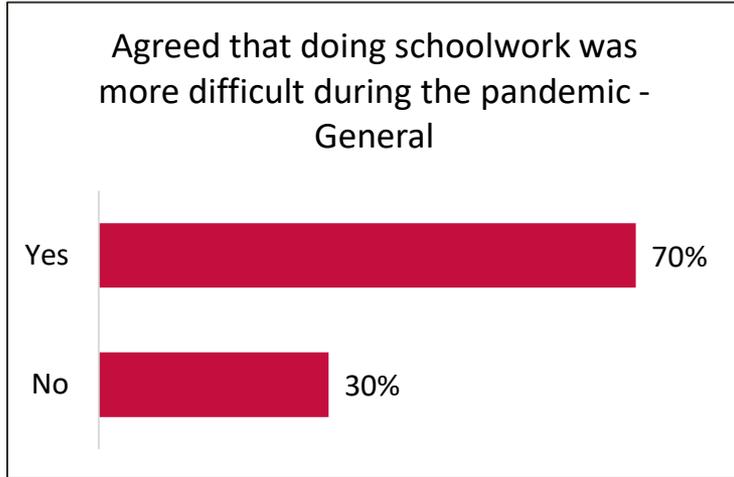
Described Their Grades as A's or B's During the Pandemic by Race/Ethnicity	% Yes
Asian	† 98%
Black or African American	64%
White	67%
Hispanic/Latino	66%
Other/Multiple races	56%

Described Their Grades as A's or B's During the Pandemic by Region	% Yes
Capital	74%
Central	62%
Eastern Shore	61%
Southern	77%
Western	70%

† Data is significantly higher than the overall percentage

COVID-19

Q60: Do you agree or disagree that doing your schoolwork was more difficult during the COVID-19 pandemic than before the pandemic started? (n=599)



Agreed that Schoolwork was More Difficult During the Pandemic by LGBT	% Yes
LGBT	83%
Non-LGBT	68%

Agreed that Schoolwork was More Difficult During the Pandemic by Race/Ethnicity	% Yes
Asian	56%
Black or African American	69%
White	67%
Hispanic/Latino	80%
Other/Multiple races	88%

Agreed that Schoolwork was More Difficult During the Pandemic by Region	% Yes
Capital	71%
Central	72%
Eastern Shore	69%
Southern	79%
Western	56%

Summary

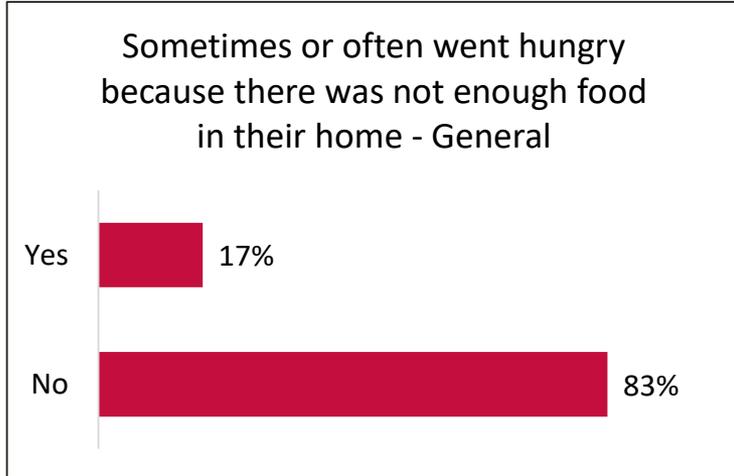
70% of Maryland high school students report that schoolwork was more difficult during the pandemic.

Bottom Line

The pandemic caused additional stress for high school students related to schoolwork.

COVID-19

Q61: During the COVID-19 pandemic, how often did you go hungry because there was not enough food in your home? (n=597)



Sometimes or Often Went Hungry Because There Was Not Enough Food in Their Home During the Pandemic by LGBT	% Yes
LGBT	33%
Non-LGBT	13%

Sometimes or Often Went Hungry Because There Was Not Enough Food in Their Home During the Pandemic by Race/Ethnicity	% Yes
Asian	12%
Black or African American	29%
White	7%
Hispanic/Latino	23%
Other/Multiple races	17%

Sometimes or Often Went Hungry Because There Was Not Enough Food in Their Home During the Pandemic by Region	% Yes
Capital	21%
Central	18%
Eastern Shore	12%
Southern	7%
Western	8%

Summary

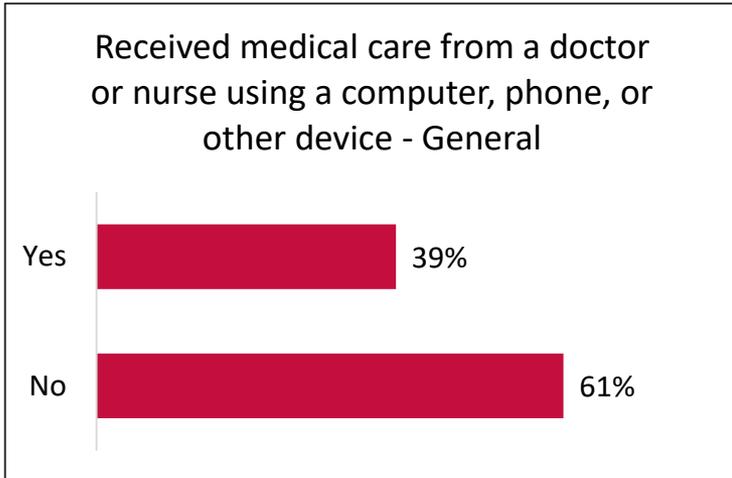
17% of Maryland teens went hungry because there wasn't enough food in their home during the pandemic.

Black (29%) or Hispanic/Latino students (23%) were more likely to go hungry because there was not enough food in their home the past year compared to white students.

LGBT students (33%) were more likely to go hungry during the pandemic compared to non-LGBT students.

COVID-19

Q62: During the COVID-19 pandemic, did you get medical care from a doctor or nurse using a computer, phone, or other device (also called telemedicine)? (n=596)



Received Medical Care from a Doctor or Nurse Using a Computer, Phone, or Other Device by LGBT	% Yes
LGBT	39%
Non-LGBT	39%

Received Medical Care from a Doctor or Nurse Using a Computer, Phone, or Other Device by Race/Ethnicity	% Yes
Asian	† 18%
Black or African American	27%
White	46%
Hispanic/Latino	53%
Other/Multiple races	34%

Received Medical Care from a Doctor or Nurse Using a Computer, Phone, or Other Device by Region	% Yes
Capital	32%
Central	42%
Eastern Shore	53%
Southern	49%
Western	33%

† Data is significantly lower than the overall percentage

Summary

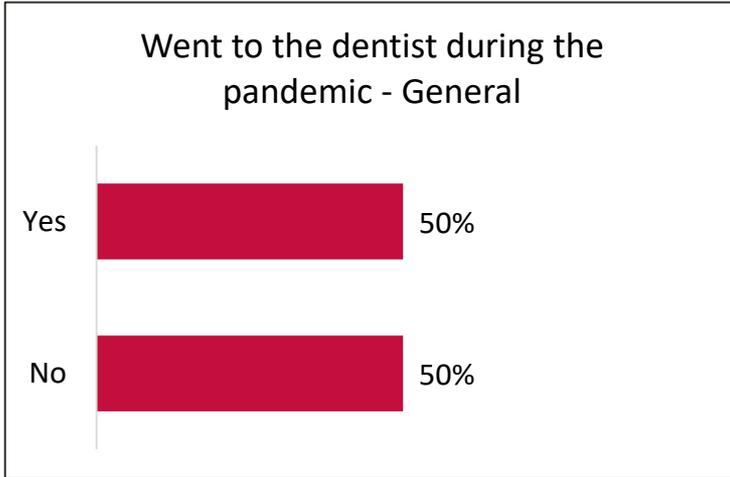
Almost 40% of Maryland high schoolers used telemedicine during the pandemic.

Bottom Line

Some high students in Maryland used telemedicine during the pandemic.

COVID-19

Q63: During the COVID-19 pandemic, did you go to dentist for a check-up, exam, teeth cleaning, or other dental work? (n=595)



Went to the Dentist During the Pandemic by LGBT	% Yes
LGBT	56%
Non-LGBT	50%

Went to the Dentist During the Pandemic by Race/Ethnicity	% Yes
Asian	55%
Black or African American	55%
White	49%
Hispanic/Latino	‡ 33%
Other/Multiple races	72%

Went to the Dentist During the Pandemic by Region	% Yes
Capital	57%
Central	54%
Eastern Shore	49%
Southern	53%
Western	23%

‡ Data is significantly lower than the overall percentage

Summary

Half (50%) of Maryland teens were able to see a dentist during the pandemic.

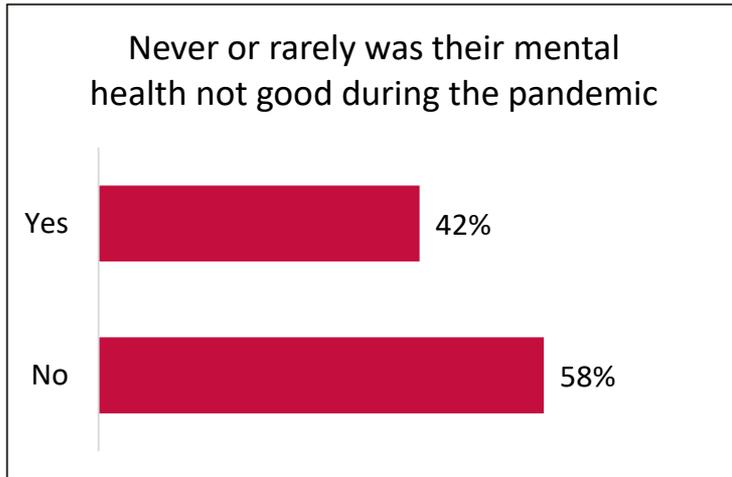
Hispanic/Latino students were less likely to see a dentist (33%).

Bottom Line

Despite the pandemic, many high school students in Maryland were able to see a dentist for a check-up, cleaning, or dental work.

COVID-19

Q64: During the COVID-19 pandemic, how often was your mental health not good? (Poor mental health includes stress, anxiety, and depression.) (n=597)



Never or Rarely Was Their Mental Health Not Good During the Pandemic by LGBT	% Yes
LGBT	† 8%
Non-LGBT	48%

Never or Rarely Was Their Mental Health Not Good During the Pandemic by Race/Ethnicity	% Yes
Asian	33%
Black or African American	† 26%
White	49%
Hispanic/Latino	† 59%
Other/Multiple races	41%

Never or Rarely Was Their Mental Health Not Good During the Pandemic by Region	% Yes
Capital	37%
Central	37%
Eastern Shore	62%
Southern	34%
Western	62%

† Data is significantly higher or lower than the overall percentage

Summary

More than half (58%) of Maryland high school students struggled with their mental health during the pandemic.

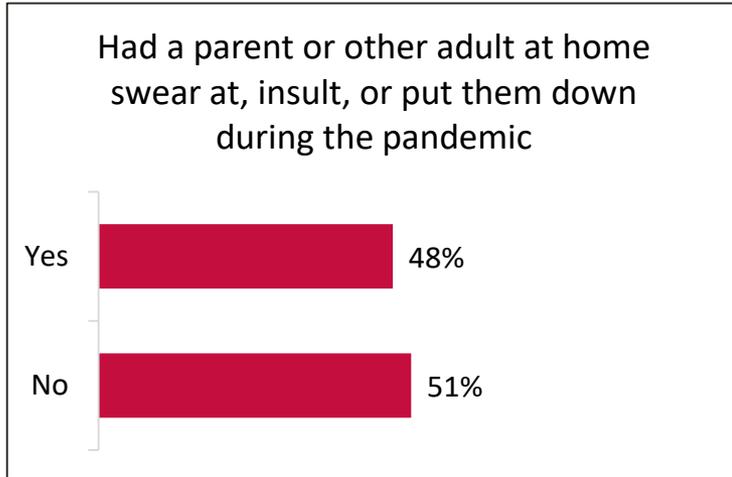
Black or African American students and LGBT students report their mental health was not good significantly more during the pandemic compared to the general population.

Bottom Line

The pandemic has contributed to serious mental health struggles for high school students in Maryland. This has been especially difficult for LGBT students and Black students.

COVID-19

Q65: During the COVID-19 pandemic, how often did a parent or other adult in your home swear at you, insult you, or put you down? (n=596)



Had a Parent or Other Adult at Home Swear at, Insult, or Put Them Down During the Pandemic by LGBT	% Yes
LGBT	† 86%
Non-LGBT	42%

Had a Parent or Other Adult at Home Swear at, Insult, or Put Them Down During the Pandemic by Race/Ethnicity	% Yes
Asian	41%
Black or African American	† 65%
White	41%
Hispanic/Latino	37%
Other/Multiple races	55%

Had a Parent or Other Adult at Home Swear at, Insult, or Put Them Down During the Pandemic by Region	% Yes
Capital	57%
Central	52%
Eastern Shore	34%
Southern	48%
Western	27%

† Data is significantly higher than the overall percentage

Summary

48% of Maryland teens experienced an adult at home swear at, insult, or put them down during the pandemic.

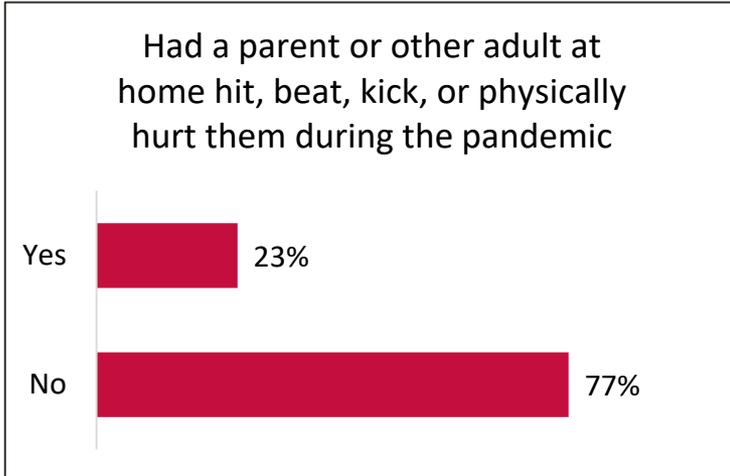
LGBT students (86%) and Black or African American (65%) students were more likely to have a parent insult them or put them down the past year.

Bottom Line

The pandemic may have an affect on Maryland parents or adults taking out their frustration and anger toward youth in the form of insults, put-downs, and swearing.

COVID-19

Q66: During the COVID-19 pandemic, how often did a parent or other adult in your home hit, beat, kick, or physically hurt you in any way? (n=593)



Had a Parent or Other Adult at Home Hit, Beat, Kick, or Physically Hurt You During the Pandemic by LGBT	% Yes
LGBT	‡ 46%
Non-LGBT	19%

Had a Parent or Other Adult at Home Hit, Beat, Kick, or Physically Hurt You During the Pandemic by Race/Ethnicity	% Yes
Asian	10%
Black or African American	33%
White	16%
Hispanic/Latino	20%
Other/Multiple races	36%

Had a Parent or Other Adult at Home Hit, Beat, Kick, or Physically Hurt You During the Pandemic by Region	% Yes
Capital	27%
Central	21%
Eastern Shore	29%
Southern	13%
Western	16%

‡ Data is significantly higher than the overall percentage

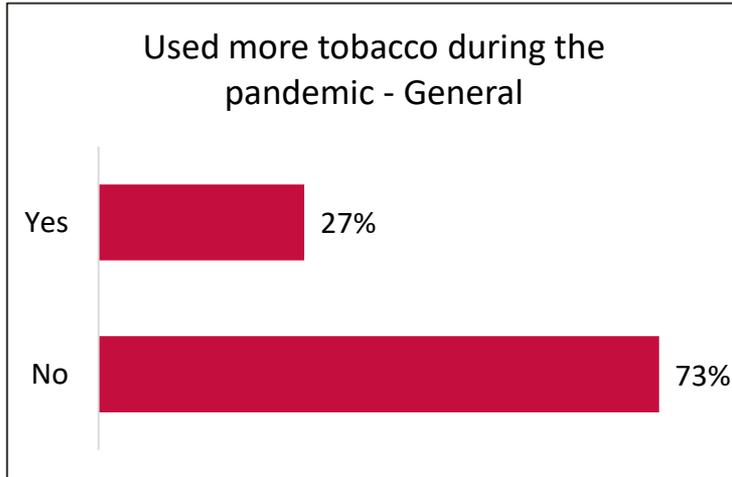
Summary

23% of Maryland teens have experienced a parent or adult at home hit beat, kick, or physically hurt them during the pandemic.

LGBT students (46%) were more likely to experience a parent or adult at home hit beat, kick, or physically hurt them during the pandemic.

COVID-19

Q67: How would you describe your tobacco use during the COVID-19 pandemic compared to before the pandemic started? (n=116)



Used More Tobacco During the Pandemic by LGBT	% Yes
LGBT	41%
Non-LGBT	24%

Used More Tobacco During the Pandemic by Race/Ethnicity	% Yes
Asian	-
Black or African American	44%
White	24%
Hispanic/Latino	20%
Other/Multiple races	-

Used More Tobacco During the Pandemic by Region	% Yes
Capital	7%
Central	34%
Eastern Shore	17%
Southern	9%
Western	41%

Summary

More than one-quarter (27%) of Maryland teens that use tobacco used more tobacco during the pandemic.

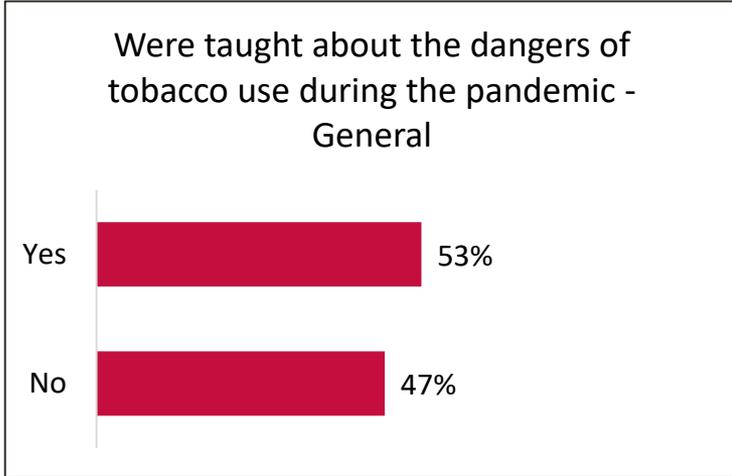
5% of students that use tobacco used less tobacco during the pandemic.

Bottom Line

There has been an increase in tobacco use for some Maryland high school students.

COVID-19

Q68: During the COVID-19 pandemic, were you taught in any of your classes about the dangers of tobacco use? (n=594)



Were Taught About the Dangers of Tobacco Use During the Pandemic by LGBT	% Yes
LGBT	53%
Non-LGBT	53%

Were Taught About the Dangers of Tobacco Use During the Pandemic by Race/Ethnicity	% Yes
Asian	54%
Black or African American	52%
White	52%
Hispanic/Latino	59%
Other/Multiple races	49%

Were Taught About the Dangers of Tobacco Use During the Pandemic by Region	% Yes
Capital	56%
Central	52%
Eastern Shore	42%
Southern	42%
Western	64%

Summary

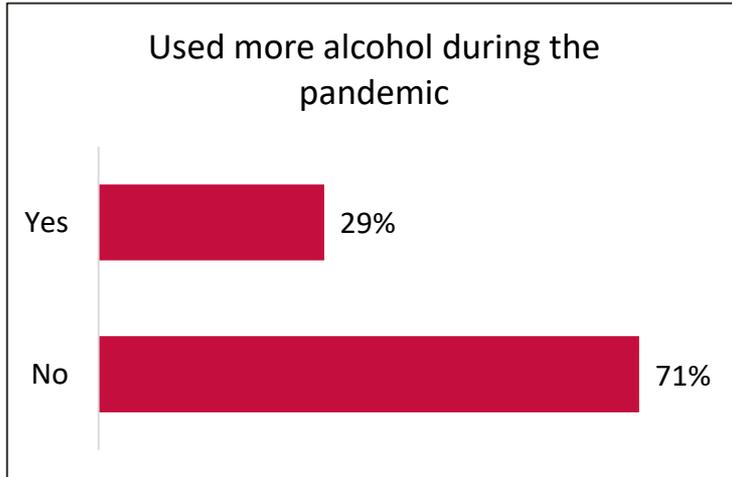
53% of Maryland high school students were taught about the dangers of tobacco use during the pandemic.

Bottom Line

Even though many students learned about the dangers of tobacco use the past year, there are still a significant amount of Maryland students that did not learn about the dangers of tobacco use.

COVID-19

Q69: How would you describe your alcohol use during the COVID-19 pandemic compared to before the pandemic started? (n=184)



Used More Alcohol During the Pandemic by LGBT	% Yes
LGBT	47%
Non-LGBT	26%

Used More Alcohol During the Pandemic by Race/Ethnicity	% Yes
Asian	31%
Black or African American	33%
White	31%
Hispanic/Latino	24%
Other/Multiple races	13%

Used More Alcohol During the Pandemic by Region	% Yes
Capital	25%
Central	33%
Eastern Shore	24%
Southern	12%
Western	41%

Summary

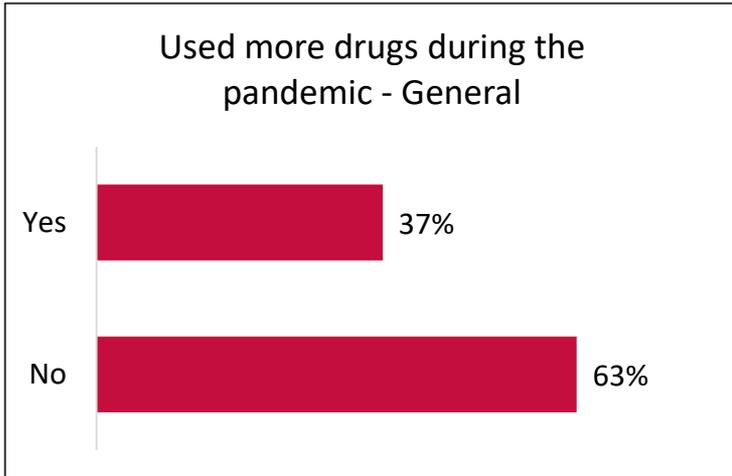
29% of Maryland teens have used more alcohol during the pandemic.

Bottom Line

There has been an increase in alcohol use for some Maryland high school students.

COVID-19

Q70: How would you describe your drug use during the COVID-19 pandemic compared to before the pandemic started? (Count using marijuana, synthetic marijuana, cocaine, prescription pain medicine without a doctor's prescription, and other illegal drugs.) (n=99)



Used More Drugs During the Pandemic by LGBT	% Yes
LGBT	56%
Non-LGBT	30%

Used More Drugs During the Pandemic by Race/Ethnicity	% Yes
Asian	-
Black or African American	54%
White	35%
Hispanic/Latino	† 10%
Other/Multiple races	51%

Used More Drugs During the Pandemic by Region	% Yes
Capital	16%
Central	48%
Eastern Shore	10%
Southern	10%
Western	52%

† Data is significantly lower than the overall percentage

Summary

37% of those students who use drugs have reported an increase in usage since the pandemic started.

Hispanic/Latino students are less likely to have used more drugs the past year (10%).

Bottom Line

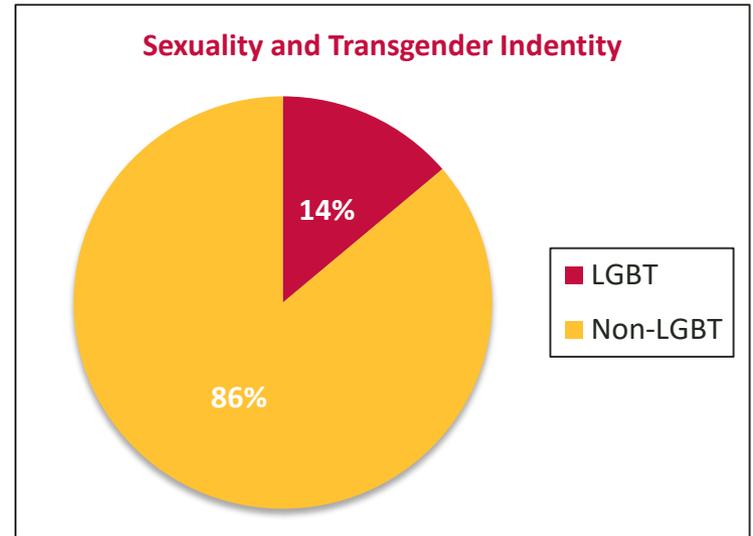
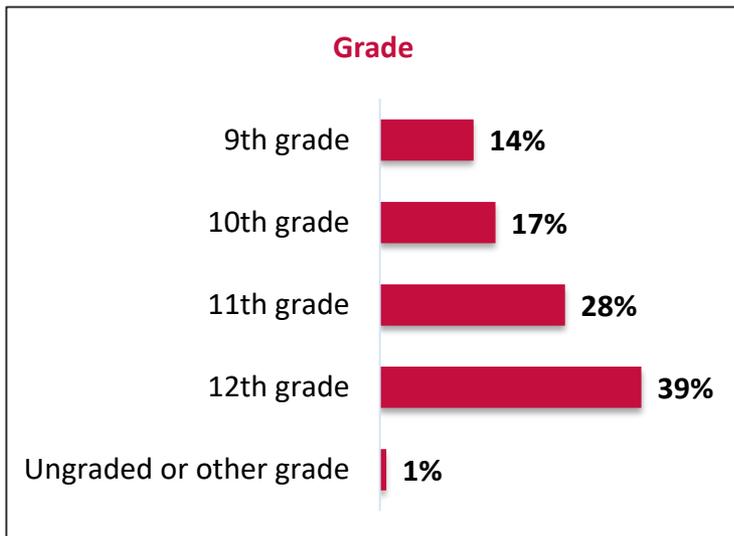
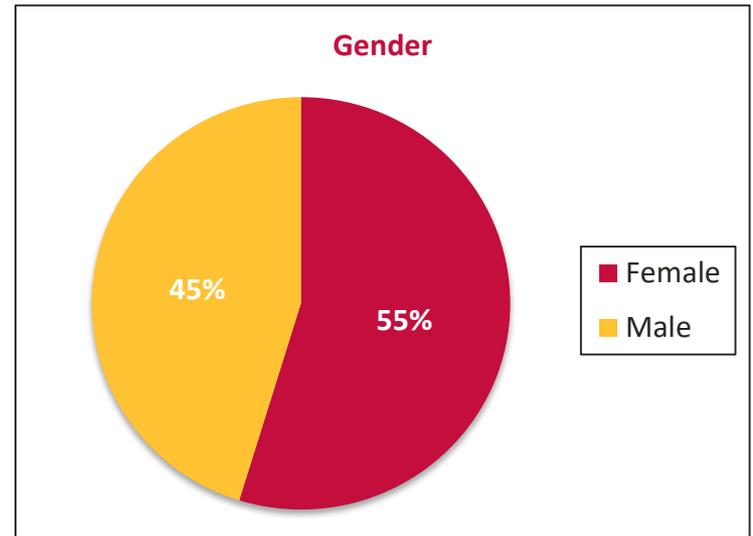
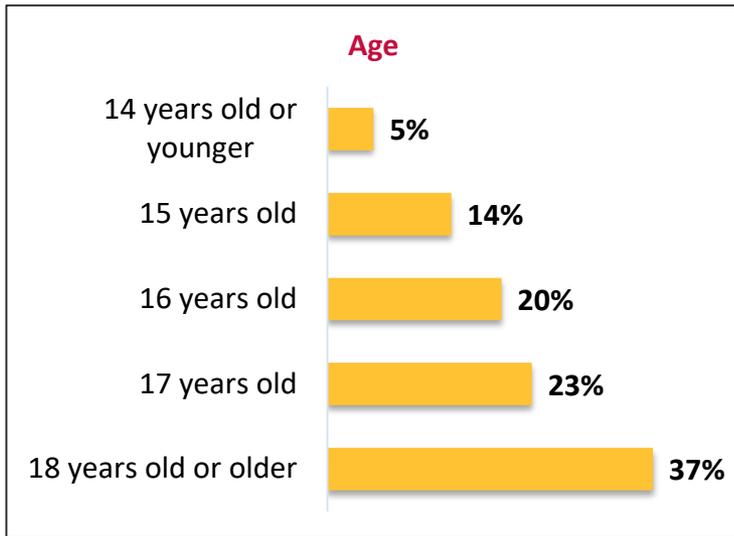
Some students have experienced more drug use since the start of the pandemic.



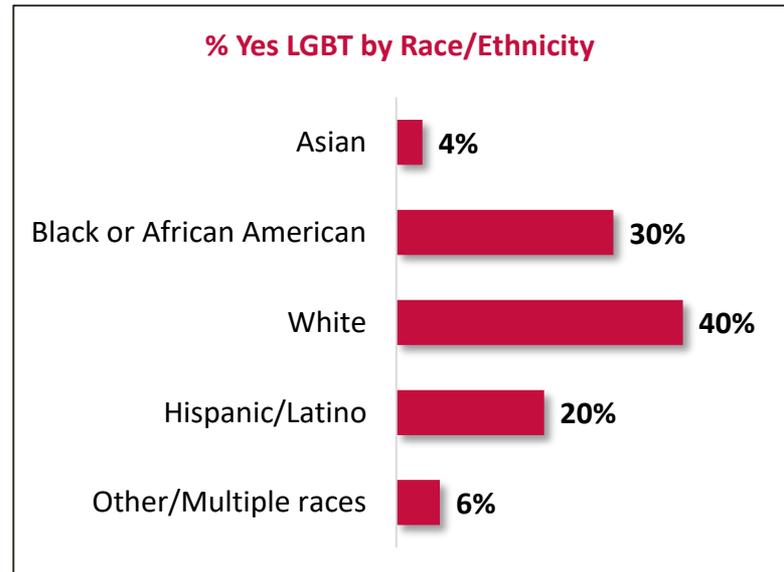
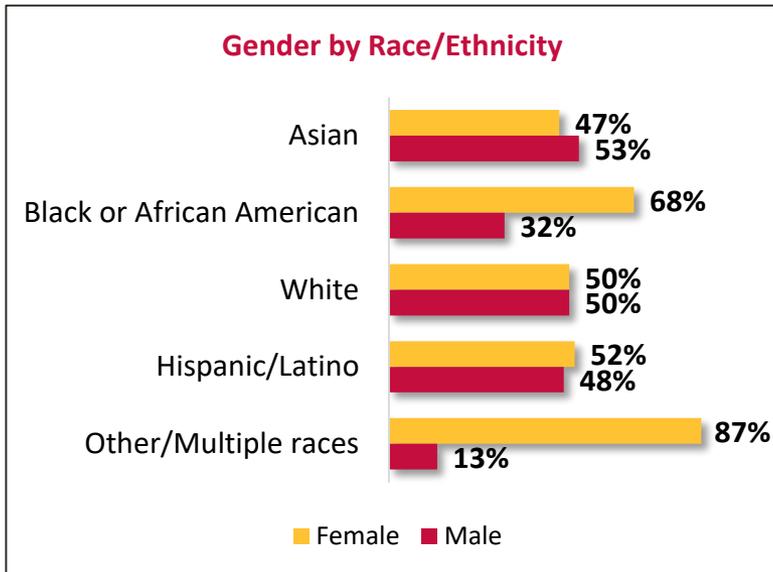
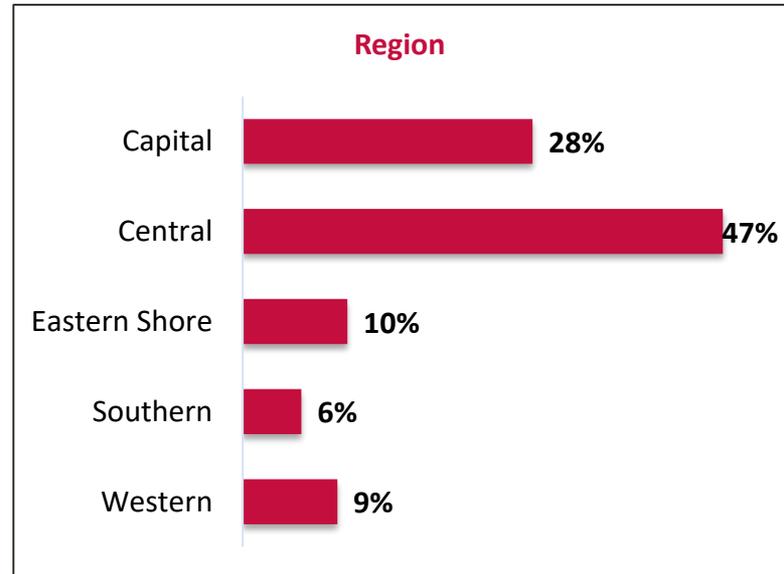
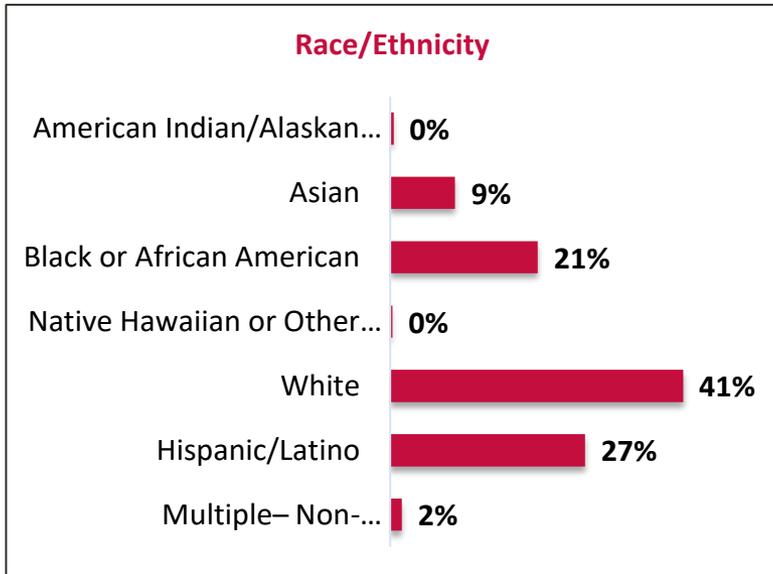
Demographic Information



Demographic Characteristics (Unweighted)



Demographic Characteristics (Unweighted)





Methodology



Methodology

Background

MDH regularly conducts the Maryland Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS) during the fall of every even calendar year among Maryland middle school and high school students. The Maryland YRBS/YTS is a Centers for Disease Control and Prevention (CDC) sponsored anonymous survey that collects data on youth health risk behaviors that contribute to the leading causes of mortality and morbidity and tracks those behaviors over time. MDH uses this data to effectively plan and evaluate programs, interventions, and policies that address negative risk factors and behaviors and promote positive behaviors.

Due to the COVID-19 pandemic and virtual school schedules, MDH was not able to administer the classroom-based Maryland YRBS/YTS during the 2020-2021 school year. In place of the YRBS survey, MDH opted to conduct a smaller web survey for Maryland high school students in the Spring of 2021 that focused on how students are coping with the pandemic. The survey also utilized a subset of questions from previous YRBS administrations.

MDH and MDR worked together to develop and implement the MD YPBS-21 survey, conduct data collection, and complete a thorough analysis of the results.

The pandemic has had a worldwide impact on numerous risk behaviors, including physical health, safety, substance use, mental health, food insecurity, and adverse childhood experiences (ACEs). The survey instrument was designed by MDH to learn more about these risk behaviors among Maryland high school students during the COVID-19 pandemic in 2020 and 2021.

To create a comprehensive survey tool for this novel survey, questions were pulled from previous Maryland YRBS/YTS survey instruments, the CDC YRBS, and the CDC Adolescent Behavior and Experiences Survey (ABEs). Additional questions related to COVID-19 were also developed for the survey. Internal Review Board (IRB) approval was obtained at the start of the project to ensure the research has sufficient protections in place for participants.

The YPBS-21 contained 70 total survey items of which 9 items assessed demographics, 10 items assessed exercise and vehicle safety, 16 items assessed tobacco and electronic vapor products, 8 items assessed alcohol, marijuana, and other drugs, 3 items assessed sexual behavior, 4 items assessed home life, 3 items assessed mental health and bullying, 3 items assessed violence, and 14 questions assessed COVID-19. MDR programmed the survey instrument in Qualtrics, an industry leading online survey platform, for data collection.

Methodology (cont'd)

Website, Consent Forms, and Screening Questions

Youth under the age of 18 are required to have a signed parental or guardian consent form before participating in research. To address this, MDR created a YPBS-21 website where interested youth could easily find more information about the survey and project. MDR designed a separate consent form for both the student and parent to electronically sign. A link to the consent form was provided on the YPBS-21 website. The consent form was programmed in Qualtrics as a separate survey and did not allow participants to proceed to the main survey until they signed the consent form and had it signed by a parent/guardian (for those under the age of 18). All consent forms were saved separately from the survey data.

To track participants while maintaining confidentiality, each participant was given a unique PIN number after signing their consent form. This PIN number was generated randomly by Qualtrics and was not linked to a participant's survey data. If a participant had issues with the consent process, survey, or incentives they could contact the MDR team and provide their PIN number for follow-up. This allowed the student's information to remain anonymous while providing a mechanism to provide technical assistance and track their progress in the survey.

The consent form included several screening questions to ensure that the participant met the eligibility criteria for the

survey. This included questions about age, grade level, and geographic location. If an individual was located outside Maryland, not in high school, or outside the range of 14-19 years old, they were screened out of the consent form and survey.

Sample and Recruitment

The sample for the survey consisted of youth from ages 14-19 living in Maryland who attend a public or private high school. Survey participants were recruited via interest-based targeted Facebook/Instagram ads. The audience specifications for the ads were Maryland residents between the ages of 14-19. If a person clicked on one of the ads, they were taken to the YPBS-21 website.

To encourage participation and thank teens for their time, MDR provided respondents a \$10 gift card incentive after completing the survey. Participants were rescreened at the start of the survey to ensure they met the eligibility criteria.

The incentives were handled through a reward site called Rybbon. Rybbon handles US gift cards, international gift cards, Virtual Visa prepaid cards, and e-donations to reward survey respondents and market research participants. Rybbon delivers rewards by email anywhere in the world and provides different gift card options. Incentives were not sent to participants unless their survey was validated by MDR's security measures.

Methodology (cont'd)

Data Collection

The data collection strategy for administering the YPBS-21 survey involved recruiting eligible teens using targeted social media ads on Facebook and Instagram. This approach has several benefits over alternative methods of recruitment, including access to a larger and more diverse and representative sampling frame than consumer panels, the ability to specifically target hard-to-reach populations that are often underrepresented in surveys (such as racial minorities, those with lower socioeconomic status, and youth who experience adverse childhood experiences).

Data collection launched on May 10th, 2021 and ran until June 13th, 2021. A total of 2,327 individuals clicked on one of the social media ads to access the YPBS-21 website. A total of 7,645 consent forms were submitted while 5,978 participants completed the main survey. Of the surveys completed, a total of 608 were validated completes. Validated completes were surveys that passed MDR's data security measures. These measures are described in more detail in the analysis section. survey.

Response Rate

Due to the type of convenience sample that was used for this project, an overall response rate cannot be calculated

because the overall size of the sampling frame is unknown. However, of the 2,327 click throughs generated on social media, a total of 608 surveys were completed, for a survey completion rate of 26%.

Issue with Data Collection

Soon after the ads and survey were launched on social media, there was an unusual number of surveys completed per day. MDR and MDH's goal was to complete 600 surveys. Using this methodology and based on the targeted number completed surveys, we anticipated that data collection would take 4-6 weeks. The survey had reached over 600 completes in less than a week.

MDR investigated the preliminary data more closely and noticed some of the data showed rates of drug use that were exceedingly different from previously reported YRBS surveys. MDR expected some differences in health behaviors due to the pandemic, but some of the preliminary data was showing rates that were multiple times higher than the 2019 MD YRBS.

MDR also completed frequent email checks and saw some participants were creating duplicate emails and attempting to take the survey more than once to receive additional incentives.

Methodology (cont'd)

Issues and Limitations with Data Collection Cont'd

As data collection continued, it became apparent that the project had a problem with a survey “bot”. This is a type of software application or script that performs automated tasks on command. They can impersonate people by interacting with computer systems and can independently complete a wide range of online operations such as clicking through an online survey for compensation. Bots can be useful in certain situations, but in survey research they affect data integrity.

While MDR had data security and data quality protocols in place from the beginning of the project, some invalid participants, professional survey takers, and bots managed to pass these data security checks. This type of problem has been growing in online survey research and can happen to any well-established research panel.

To solve this issue, MDR implemented more comprehensive data security measures to catch fraudulent survey completes. With the new measures in place, the number of validated completes dropped precipitously. It became apparent the new, stricter data criteria were leaving out valid responses. MDR made final adjustments to the data security protocols to more effectively identify bots, duplicate responses, and other bad faith respondents.

Having these measures in place did not stop bots or bad-faith survey respondents, but it does help identify them and remove them from the dataset.

During the last week of data collection MDH shared a copy of the survey link with several youth groups in Maryland and in a youth newsletter. This led to a few more validated completes.

Statistical Analysis

All statistical analyses were performed using weighted data and comparisons were made between certain subgroups of interest using IBM SPSS 24 ©. Tests were conducted to identify statistically significant differences between survey results when comparing by demographic characteristics of survey respondents.

Tests of Significance

Throughout the analysis, tests of significance were performed. These tests serve to distinguish between differences in measurements that can be attributed to normal error associated with sampling approaches and data collection from those that exceed the normal error associated with such measurements. For this survey, all tests were conducted using confidence interval comparisons.

Methodology (cont'd)

Limitations

While precautions were taken to ensure that the results and findings presented in the data compendia and infographics are sound and based upon statistically valid methods and analyses, there are some limitations to note. Due to the use of a non-probability sample in the sampling design, it is important to use caution when assessing significant differences between subgroups in the survey. Margin of errors (which are based on the assumptions of a random probability sample and normality) cannot be approximated appropriately and variance statistics are likely to be underestimated.

Data Quality Checks

To ensure the integrity of the data collected for the YPBS-21 survey, MDR developed a comprehensive set of data quality checks to identify potentially suspicious, fraudulent, and invalid surveys that may have been completed by surveys bots, professional survey takers, or in bad-faith by legitimate respondents seeking one or multiple gift cards.

Surveys were considered complete and retained in the dataset if at least 20% of the questions have been answered. Any partial surveys less than 20% complete, invalid surveys and surveys that do not pass the quality checks listed below were removed from the final dataset.

Cases were flagged as invalid if they met one or more of the following criteria:

- **Incomplete surveys:** <20% of the questions were answered.
- **Identified as a likely bot:**
 - Surveys with a reCaptcha score <0.6. The reCaptcha score is a system variable calculated by Qualtrics that estimates the likelihood the respondent is a human. Rated on a 0 to 1 scale where 0 = 0% chance respondent is human, 1 = 100% likelihood respondent is human.
 - Cases that entered the consent form from the end of the survey (indicating they were redoing the survey after already completing it).
 - Surveys specifying their age as 19 in the screener with a reCaptcha score <0.9. Note: These cases were excluded because they showed abnormally high levels of risk factors (including tobacco, alcohol, and marijuana use) compared to other students in the dataset as well as established YRBS rates.

- **Survey “speeders”:** surveys that were completed in less than 120 seconds.

- **Surveys from duplicate and suspicious email addresses.**

- **Surveys that failed the following logic check question:**

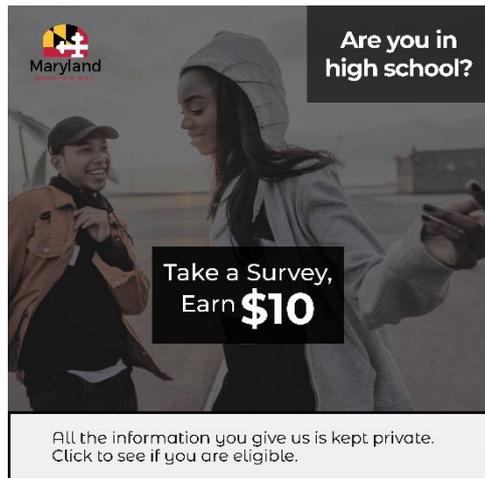
It is important for us to ensure that the answers that we collect are accurate. For these reasons, please select disagree a lot from the options below to continue taking the survey.

(Note, this check was added midway through data collection.)

- **Cases of “speeding” where respondents rushed through the questionnaire without providing valid or consistent responses:**

- Surveys with implausible values for height, weight, or Body Mass Index (BMI).
- Flag for weight, height, or BMI less than 1st percentile by gender and age.
- Flag for Grade vs Age discrepancy: surveys with implausible values for grade based on the respondent age (e.g., 18-year-old freshmen).
- Flag for age in screener does not match age in survey: surveys from respondents who provided inconsistent answers for the age question between the screener and the survey.
- Flag for county in screener does not match county in survey: surveys from respondents who provided inconsistent answers for the county question between the screener and the survey. (Note, this check was added midway through data collection)

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Thank you!

If you have any questions, please reach out to mdh.tobaccocontrol@maryland.gov

