

**Youth Risk
Behavioral Survey
(YRBS)
Durham County**

2019

Introduction

Overview

The Durham County Youth Risk Behavior Survey (YRBS) is a part of a national school-based survey produced by the Centers for Disease Control and Prevention (CDC) and administered every other year by the Durham Public Schools (DPS). The purpose of this survey is to assess health risk behaviors that can contribute to injury and leading causes of death among the adolescent population.

The YRBS measures specific behaviors that fall into six categories:

1. Behaviors that contribute to unintentional injuries and violence;
2. Sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases, including HIV infection;
3. Alcohol and other drug use;
4. Tobacco use;
5. Unhealthy dietary behaviors; and
6. Inadequate physical activity.

The results are often used by state and local education and public health officials to develop and track goals, seek funding for programs, implement strategies, and inform policies that promote prevention and health promotion among youth.

Acknowledgements

The Durham County Department of Public Health (DCoDPH) and DPS collaborated with the North Carolina Department of Public Instruction to create a survey sample and collect surveys. CDC and DCoDPH analyzed the data and created the report with input from community partners.

A special thanks is owed to DPS students who participated in the 2019 survey and DPS staff who supported the data collection. In addition, leadership and support from the following people is gratefully acknowledged:

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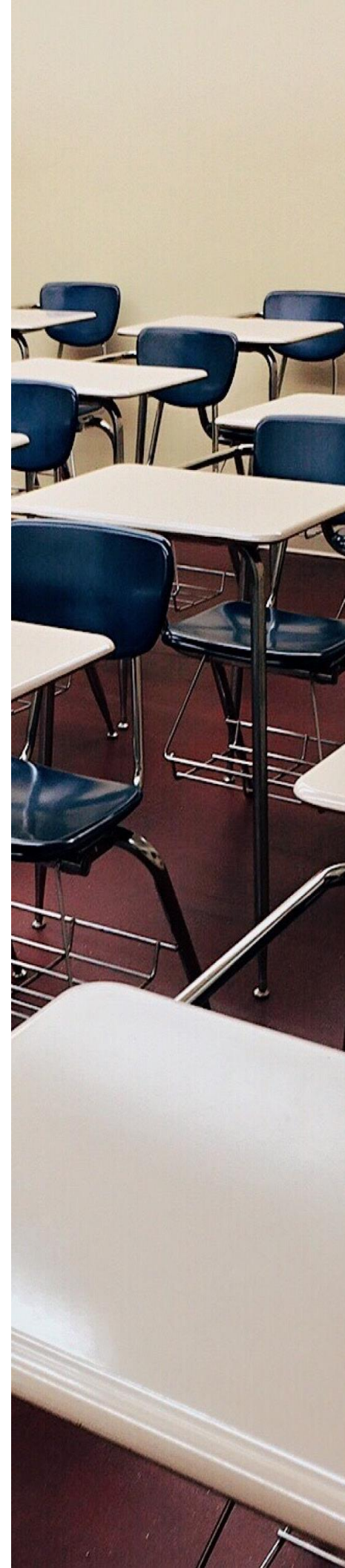
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Methods

Questionnaire

The 2019 Durham County middle school YRBS consisted of 70 questions, while the high school YRBS consisted of 99 questions. All questions were designed and validated by the CDC. At least two thirds of the questions on each survey must come from the national core set of questions. The remaining one third of the questions were selected by a multi-sector team at the State. Surveys were administered on paper.

Sampling

In the spring of 2019, the Durham County YRBS was administered to randomly selected middle and high school classes from charter and public schools. Systematic equal probability sampling with a random start was used to select classes from 12 middle schools and 11 high schools. Survey responses were anonymous and voluntary. Prior to survey administration, parents and guardians were provided with a permission form to allow students to opt out of the survey. Students who participated in the survey recorded responses during their second period classes.

Analysis

All survey responses were sent to the CDC. The CDC cleaned the data and provided weighted middle and high school data to Durham Public Schools (DPS). Once received, DPS transferred the data to DCoDPH to perform further analysis using SAS 9.4 and develop the official YRBS report. Weighting accounted for race, ethnicity, sex, survey design, and nonresponse. Both middle school and high school data are reported as weighted percentages in this report. Tests for statistical significance were performed for each survey question. Data are disaggregated by race, ethnicity, and sex throughout the report when differences are statistically significant. Due to CDC and DCoDPH’s focus on COVID-19 surveillance, there was a delay in receiving the YRBS results and issuing this report.

Analysis Notes:

- In some cases, percentages may not add up to 100% due to rounding.
- If the number of students in a particular group was less than 10, results were excluded to protect identities.
- For analysis purposes, the “Other” race category includes students who reported being Asian, Native American, Alaska Native, Native Hawaiian, Pacific Islander, and multiracial.
- In this report, students who answered yes to the question on the survey that asked if they are Hispanic or Latino are included in the Hispanic or Latinx race and ethnicity category. Therefore, Black or African American, Hispanic or Latinx, and white should be understood as mutually exclusive categories throughout the report.
- If there were fewer than 100 students in a particular subgroup, weighted percentages were not calculated. As a result, Other race data is not always reported or included in the analysis.

Limitations

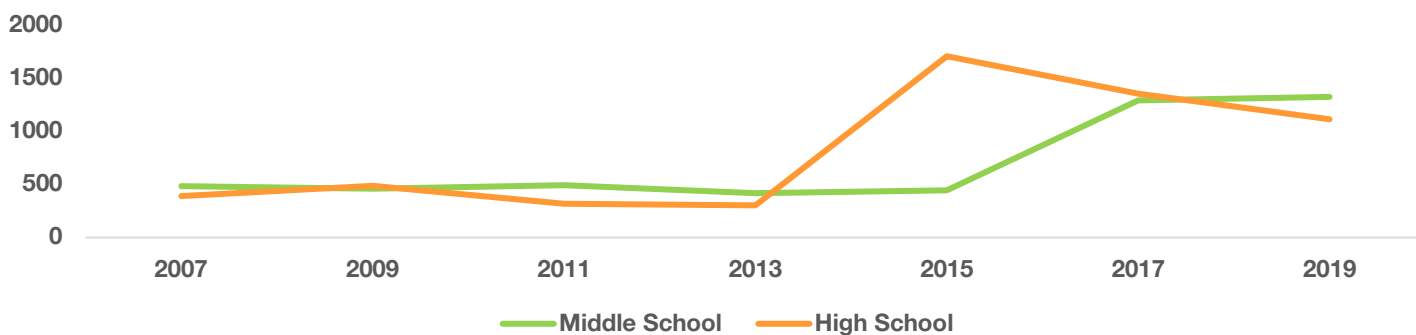
YRBS results do not include information from youth who attend private, alternative, vocational, and special education schools, and therefore cannot be generalized to all students in Durham. Responses are limited to students who attended class on survey days. All data are self-reported and may be under- or over-represented.

Survey Participant Characteristics

Responses were collected from 12 middle schools in the sample and 9 of the 11 high schools selected. Response rates account for the percent of schools and students who responded to the surveys. The overall response rate for the middle school survey was 70% (n=1,329) and 48% (n=1,117) for the high school survey.

The trend in the number of survey participants since 2007 is reflected in the chart below. The sampling methods changed in 2015 to draw a large enough sample to produce representative data for Durham. The change is visualized in Figure 1 with a substantial increase in the sample size for high school students in 2015 compared to previous years. When considering the number of 2017 YRBS participants, there was a slight increase in the number of middle school students (3%) completing the survey and a greater decrease (18%) in high school student participation.

Figure 1. Number of YRBS Student Participant by Year, 2007 - 2019



The weighted high school and middle school survey results are representative of the overall DPS middle school and high school students in terms of race, ethnicity, and sex. Figures 2 and 3 below depict the reported race and ethnicity breakdown of students who participated in the 2019 surveys as well as the overall DPS student population for middle school and high school students enrolled during the 2018-2019 school year. Differences in race/ethnicity among the survey populations and student populations for the middle school and high school surveys were not statistically significant. Sex is not displayed, as weighted data yielded equivalent distributions of males and females in the high school survey (50%). The number of males completing the middle school survey (51%) was slightly higher than females (49%).

Figure 2. Race and Ethnicity, Middle School

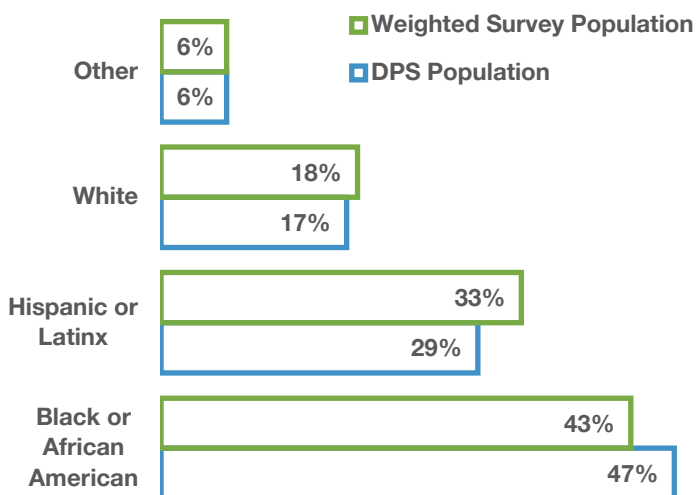
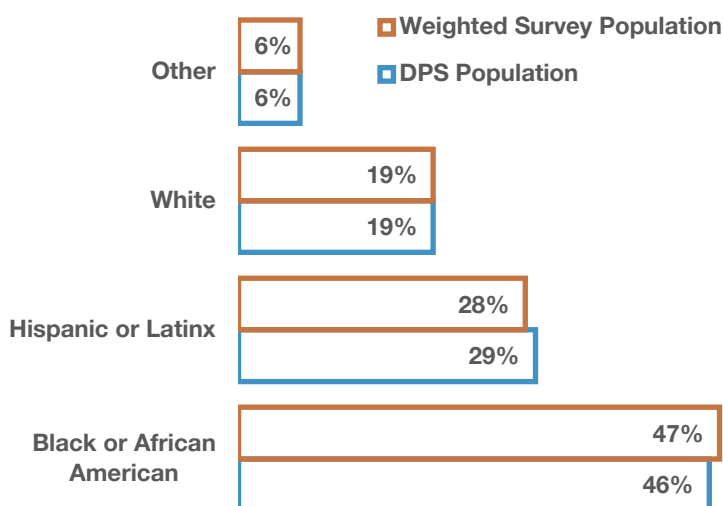
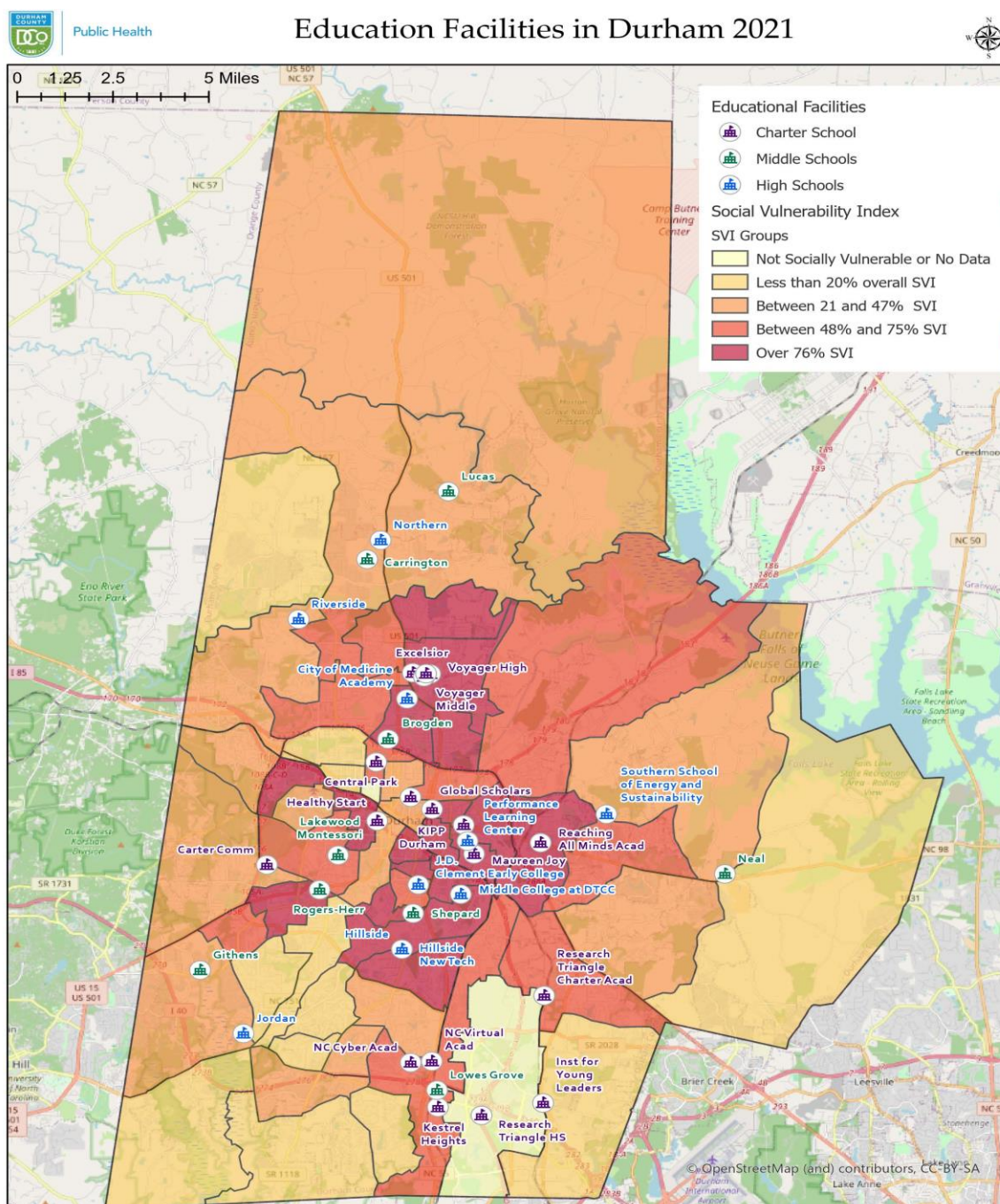


Figure 3. Race and Ethnicity, High School



Survey Participant Characteristics

Responses were collected from 12 middle schools in the sample and 9 of the 11 high schools selected. Many of the schools are in areas with a high Social Vulnerability Index (SVI) score. The SVI was developed by the Centers for Disease Control and Prevention (CDC) to examine community vulnerability to natural disasters and diseases based on various factors such as socioeconomic status, household composition, minority status, housing type and transportation. A higher SVI percentage means that there is greater vulnerability in a particular area. Students attending school in these areas likely live nearby and may experience some of the negative effects of residing in vulnerable communities. Studies have indicated an association between poverty and obesity,¹ suicide,² low physical activity,³ poor mental health,⁴ and low sexual health knowledge among adolescents.⁵ This association may be a driver of some of the risky behaviors documented throughout the report.



Survey Participant Characteristics

Age

Age follows more of a normal distribution for middle school students, and there was some overlap between ages for both middle and high school survey respondents. Middle school students ranged from less than 10 to 16 years old or older, with the greatest percentage of the population being age 13 (34%). High school students ranged from less than 12 to 18 years old or older, and 17 was the most represent age among this sample (26%). Age shows a more complete picture of the population since students may have been held back or advanced to a higher grade.

Figure 4. Middle School Survey Respondents by Age

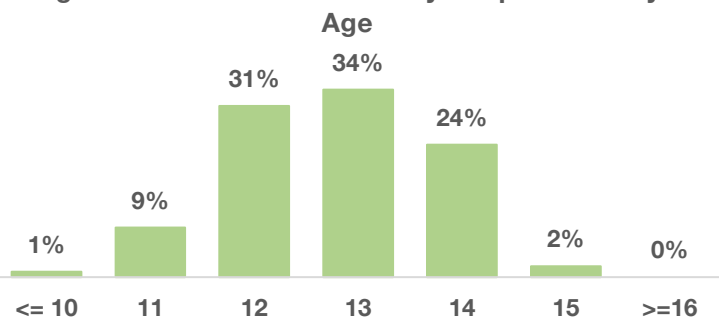
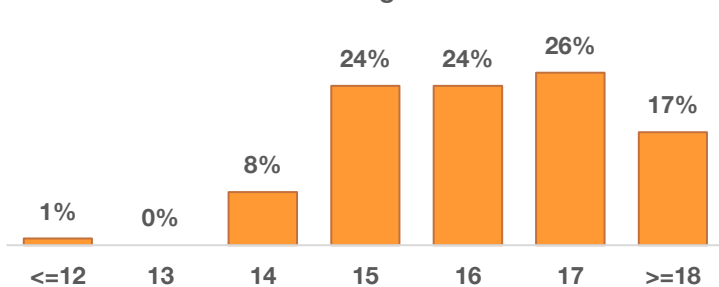


Figure 5. High School Survey Respondents by Age



Grade Level

Despite the variation in ages, the percentage of middle and high survey respondents were mostly evenly distributed across their respective levels. Ninth grade students (27%) were slightly over-represented compared to high school seniors (21%).

Figure 6. Percent of Middle School Survey Respondents by Grade

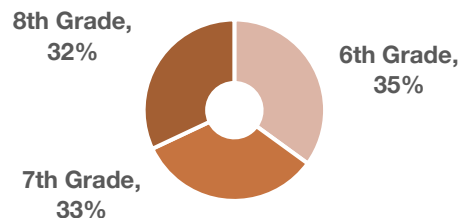
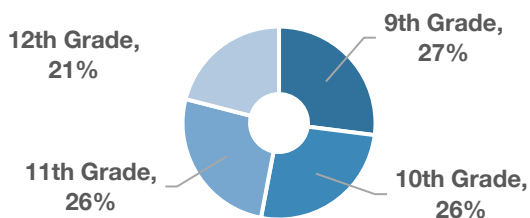


Figure 7. Percent of High School Survey Respondents by Grade



Sexual Orientation

High school students were asked about their sexual orientation. A total of 81% of students reported being heterosexual, 4% of students reported being gay or lesbian, and 11% of students reported being bisexual. The remaining 5% of students reported they were unsure of their sexual orientation. Sexual orientation varied by race and ethnicity. Graphs showing sexual orientation among high school students are displayed below.

Figure 8. Sexual Orientation Among High School Students

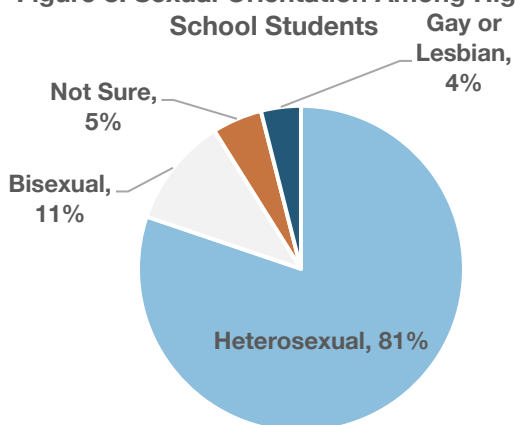
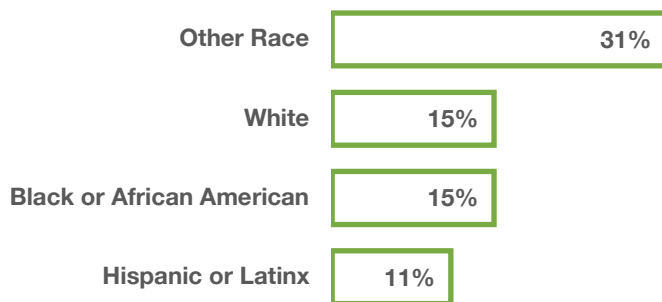


Figure 9. High School Students Identifying as Gay, Lesbian, or Bisexual by Race and Ethnicity



Racial Inequities

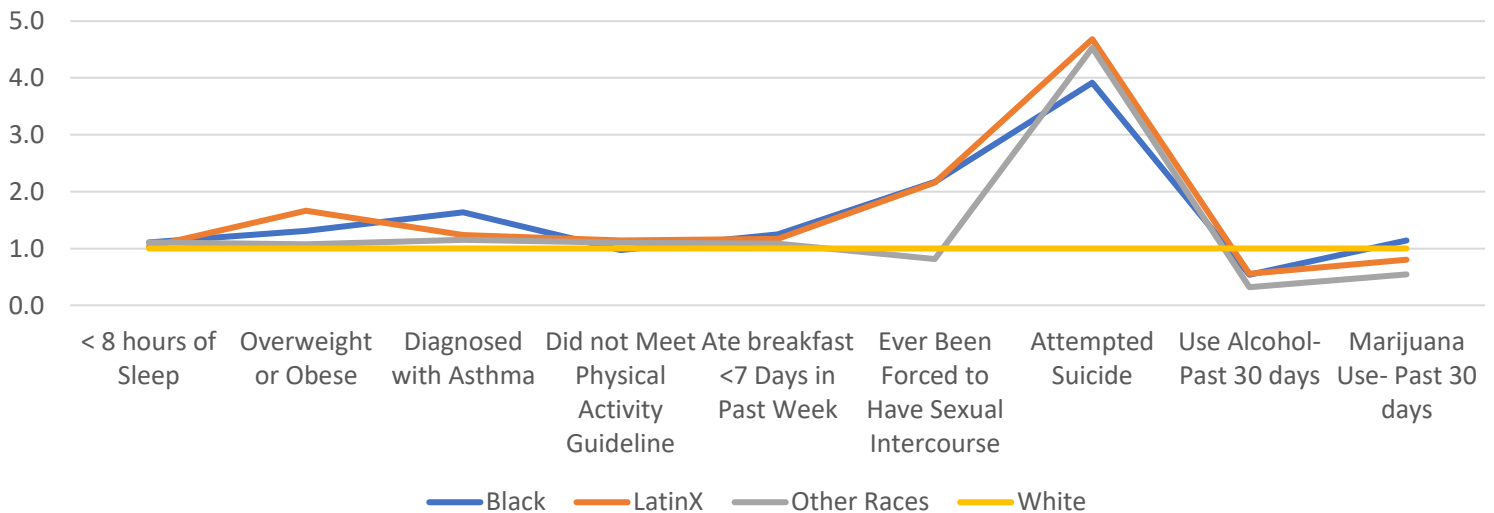
Health Disparities versus Health Inequities

Health disparities are defined as differences in health outcomes between two groups of people. In contrast, health equity refers to “the fair distribution of health determinants, outcomes, and resources within and between segments of the population, regardless of social standing”.⁶ When differences between two groups are unjust and avoidable, these differences are called inequities.⁷

Populations of color are often disproportionately burdened by poor health outcomes. Since the beginning of this nation’s history, policies leading to slavery, mass incarceration, segregated schools, forced sterilization, redlining, the environment, and many others have operated to withhold wealth, power, and health from people of color. These systems, social forces, institutions, ideologies, and processes may interact to perpetuate inequities within populations of color and is formally known as structural racism.⁸ Structural racism results in good outcomes for whites in every system compared to people of color – which persist today even as these policies are overturned.⁹

Figure 10 below shows student behaviors by race for various YRBS questions. Behaviors and experiences for each race are shown as relative risk as compared to whites to highlight system level inequities. Except for alcohol use and marijuana, outcomes for students of color are worse compared to whites in every area. For example, the chart shows Black, Latinx and other races are four times as likely to have attempted suicide as compared to white youth. This points to a systemic issue and indicates that the differences are avoidable, unjust, and inequitable.

Figure 10. Relative Rate Risk Index of Reported High School Outcomes by Race



Racism is a Public Health Crisis

While racism has existed for centuries, more recently across the country, local and state leaders including Durham Board of County Commissioners have declared racism as public health crisis or emergency.¹⁰⁻¹¹ Racism impacts health inequities. There is growing body of studies that show an association between racial discrimination and suicidality among people of color.¹²⁻¹³ Racism negatively affects the mental and physical health of marginalized people, preventing them from attaining their highest level of health.¹⁴

Whiles this report does not provide an exhaustive list of all health outcomes, structural racism can be used as an example to illustrate high attempted suicide rate among students of color and to explain why inequities exist across health indicators.

Report Highlights

Physical Health

- Approximately 43% of middle school students and 22% of high school students reported getting 8 or more hours of sleep per night.
- A total of 25% of middle school students and 28% of high school students described themselves as slightly or very overweight.
- A total of 59% of middle school students had a routine physical exam and 65% saw a dentist for a check-up, exam, teeth cleaning, or other dental work in the past year. High school students were not asked these questions.
- Overall, 25% of middle school students and 28% of high school students reported being told by a doctor or nurse that they had asthma during their lifetime.

Physical Activity

- Nearly half of middle school students (45%) and roughly a third (31%) of high school students reported being physically active for at least 60 minutes per day on 5 or more days in the past week.

Nutrition

- A total of 35% of middle school students and 25% of high school students reported eating breakfast on all 7 days prior to taking the survey.
- Among high school students, 18% reported drinking a sugar sweetened beverage at least once per day. This was a decrease of 42% since 2017. Middle school students were not asked about sugar sweetened beverage consumption.

Safety

- Approximately 7% of middle school students and 12% of high school students reported that they did not go to school at least once in the past month leading up to the survey because they felt unsafe at school or going to or from school.
- A total of 19% of middle school students and 34% of high school students reported gang activity in their schools.
- A total of 12% of students reported that they had carried a weapon such as a gun, knife, or club at least once during the past 30 days. This is a 300% increase in the percentage of high school students carrying a weapon compared to the 2017 YRBS (3%). Middle school students were not asked this question.

Sexual Health

- A total of 12% of middle school students and 43% of high school students reported that they had ever had sexual intercourse.
- A total of 10% of high school students reported being physically forced to have sexual intercourse. Middle school students were not asked this question.

Bullying

- A total of 40% of middle school students and 16% of high school students reported being bullied on school property.
- A total of 59% of middle school students and 51% of high school students reported seeing another student bullied at school.
- A total of 24% of middle school students and 12% of high school students reported being teased or called names because someone thought they were lesbian, gay, or bisexual.

Mental Health

- A total of 32% of middle school students and 35% of high school students reported feelings of depression in the past year.

Substance Use

- Marijuana was reported as the most used substance among high school students while e-vaping was the product most used by middle school students.
- A total of 10% of middle school students and 26% of high school students reported current use of marijuana.
- A total of 13% of middle school students and 24% of high school students reported current use of e-vaping.

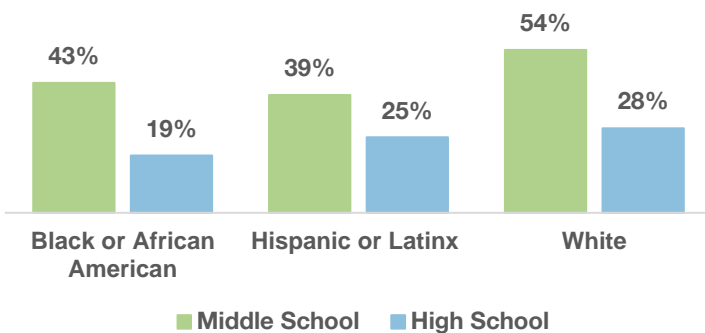
Physical Health

Sleep

The CDC still recommends that teenagers get 8 to 10 hours of sleep each night.¹⁵ To help increase sleep among high school students, DPS previously changed the bell schedule at the start of the 2016-2017 school year. Despite this change, the number of students reporting 8 or more hours of sleep per night decreased for both middle and high school students. On average, more middle school students are getting 8 or more hours of sleep compared to high school students.

- Among middle school students, the percentage getting 8 or more hours of sleep per night decreased from 48% in 2017 to 43% in 2019. Black or African American and Hispanic or Latinx students were less likely than White students to get at least 8 hours of sleep a night. Information on other races were not included in Figure 13 for middle or high school students since there were fewer than 100 students in this subgroup. There were no statistically significant differences by sex.
- Among high school students, only 22% reported getting 8 or more hours of sleep on an average school night in 2019 compared to 28% in 2017. However, Black and Latinx students were significantly less likely than white students to get 8 or more hours of sleep. Differences by sex were not statistically significant.

Figure 13. Students Reporting 8+ Hours of Sleep on Average School Day by Race/Ethnicity



Why are there health inequities in overweight and obesity?

Several factors may contribute to weight gain or obesity that include a sedentary lifestyle, poor dietary patterns, medication use, and genetics.¹⁶ Obesity in children is often associated with negative health outcomes, such as breathing problems, joint problems, fatty liver disease, bullying stigma, low self-esteem, anxiety, and depression.¹⁷⁻¹⁸ Inequities by race and ethnicity may exist due to place-based factors, since an individual's neighborhood may determine level of access to healthy foods and opportunities for physical activity.¹⁸⁻¹⁹

Overweight and Obesity

Overall, 28% of high school students and 25% of middle school students described themselves as slightly or very overweight. Black or African American and Hispanic or Latinx students were more likely than whites to be overweight or obese. Information on other races were not included in Figures 14 – 15 for middle or high school students since there were fewer than 100 students in that specific subgroup. There were no statistically significant differences by sex.

Figure 14. Overweight and Obesity by Race/Ethnicity among Middle School Students

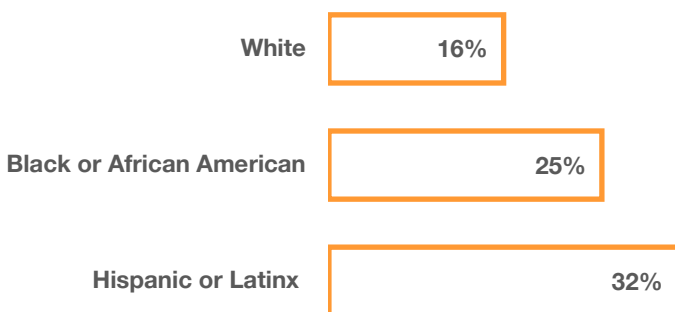
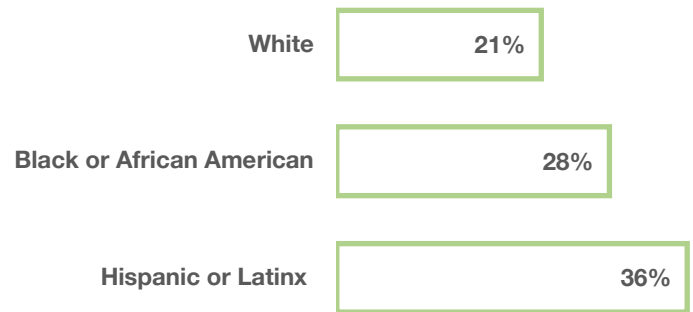


Figure 15. Overweight and Obesity by Race/Ethnicity among High School Students



Physical Health

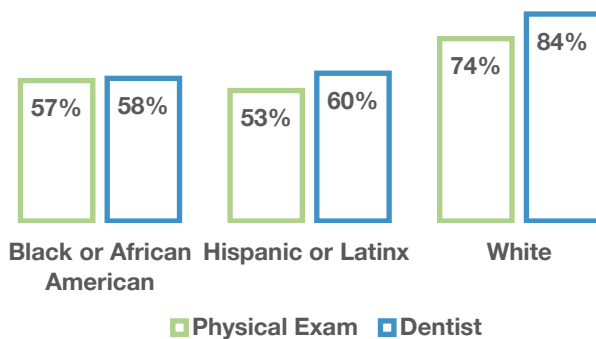
Why are there inequities in overweight and obese populations?

People of color are exposed to more fast food marketing due to inequitable targeted marketing practices and are more likely to have fast food restaurants in their neighborhoods.¹⁹⁻²¹ This is compounded by the fact that they are more likely to live in areas without a nearby grocery store and have lower levels of access to fresh produce compared to whites.²² People of color are also more likely to live in areas without access to parks, playgrounds, and recreational centers due to policies like redlining and inequitable practices in the mortgage industry.²³⁻²⁶

Routine Check-Ups

Middle school students were asked about routine check-ups. A total of 59% of middle school students had a routine physical exam, which was consistent with YRBS results reported in 2017. There was a 3% increase in the percentage of middle students who saw a dentist for a check-up, exam, teeth cleaning, or other dental work in the past year (65%) compared to findings in 2017. Black or African American and Hispanic or Latinx students were less likely than White students to have seen a doctor or dentist in the past year. Data are not presented for the Other Races category since there were less than 100 respondents in that subgroup. Differences by sex were not statistically significant.

Figure 16. Middle School Students who Visited a Medical Provider in the Past 12 Months



Why are there inequities?

As a result of workforce discrimination, people of color are less likely to be interviewed for a job than whites with the same credentials.²⁷ People of color are also more likely to have low wage and hourly jobs.²⁸⁻³⁰ Often these types of jobs do not include employer sponsored health insurance, which was one of the most common barriers to accessing health care in Durham in 2016.³¹ Low paying jobs can make it hard to afford health insurance for themselves and their children.²⁸ Parents with hourly jobs may also not have sick leave benefits, which can mean missing work and losing income in order to take their child to the doctor.³²

Asthma

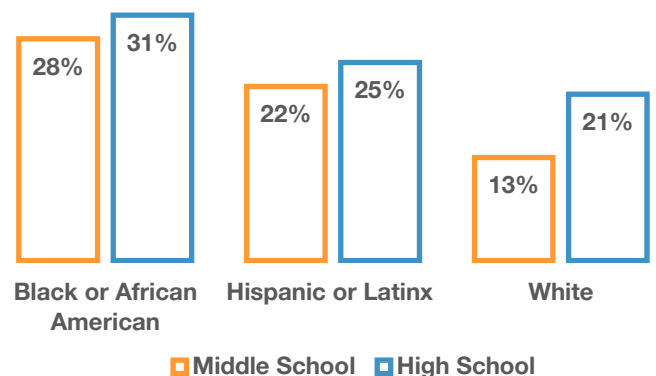
Overall, 25% of middle school students and 28% of high school students reported being told by a doctor or nurse that they had asthma during their lifetime. Among middle and high school students, Black or African American and Hispanic and Latinx students were more likely than White students to have been diagnosed with asthma during their lifetime. Data are not presented for the Other Races category since there were less than 100 respondents in that subgroup. Differences by sex were not statistically significant.

Why are there inequities?

People of color are often exposed to more pollution compared to whites.³³ This stems from racist policies, like redlining, that banned people of color from being able to access loans and homes available to whites, and from federally funded highways which were primarily built in neighborhoods where people of color lived.³⁴ Exposure to pollution and environmental contaminants has been linked to an increased likelihood of developing asthma.³⁵

Black children are also exposed to more secondhand smoke compared to any other race or ethnicity, which has been linked to asthma development in children.³⁶⁻³⁷

Figure 17. Students who Were Diagnosed with Asthma During their Lifetime



Physical Activity

Sports Participation

Middle school students were asked about sports participation within the past year. About half of students (53%) reported participating in sports. Males, Black or African American students, and white students were significantly more likely than their peers to participate.



Physical Activity

The CDC recommends 60 minutes (1 hour) or more of daily physical activity for adolescents.³⁸ The DPS wellness policy requires schools to provide a minimum of 30 minutes of vigorous physical activity for all K-8 students each day, which may contribute to higher levels of physical activity among middle school students.

- Nearly half of middle school students (45%) and roughly a third (31%) of high school students reported being physically active for at least 60 minutes per day on 5 or more days in the past week.
- Males in high school and middle school were significantly more likely to meet the physical activity recommendation than females.
- Black or African American and Hispanic or Latinx middle school students were less likely to meet the recommendation compared to White students.

Why are there inequities?

A study of parks in Durham found that physical activity varied depending on park characteristics like presence of basketball courts, water features, shelters, and picnic areas.³⁹ Lower quality parks in neighborhood where youth of color live may contribute to lower levels of physical activity.⁴⁰⁻⁴¹

Figure 18. Middle School Students who were Physically Active (≥60 Minutes ≥5 Days per Week)

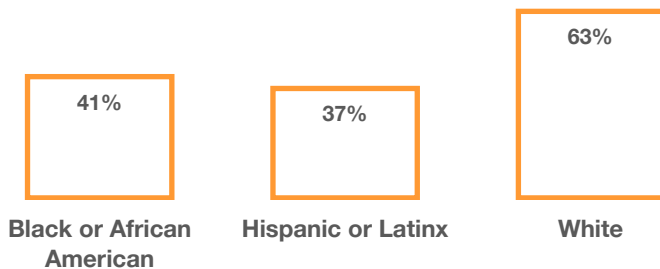
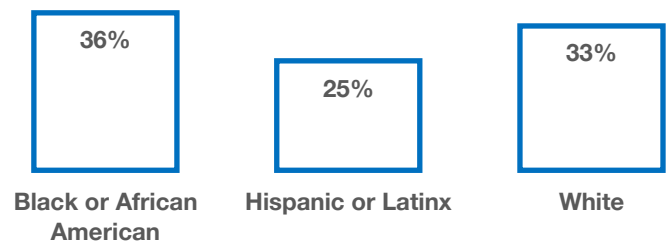


Figure 19. High School Students who were Physically Active (≥60 Minutes ≥5 Days per Week)



TV and Computer Screen Time

Screen time, which accounts for watching TV, playing video or computer games, and using a smartphone or tablet, was similar among all school levels. Overall, 29% of middle school students reported watching 3 or more hours of TV and 52% reported spending 3 or more hours engaged in all other forms of screen time a day on an average school day doing things unrelated to school. A total of 22% of high school students reported watching 3 or more hours of TV and 46% reported spending 3 or more hours per day engaged in all other forms of screen time on an average school day.

- Among middle school students, White and Hispanic or Latinx students were less likely to watch 3 or more hours of TV compared to Black or African American students. Black or African American students were more likely to engage in other forms of screen time compared to White students. Differences by sex were only found for all other forms of screen time.
- Among high school students, Black or African Americans were more likely to watch 3 or more hours of TV compared to whites and Hispanic or Latinx students. Females were more likely to watch 3 or more hours of TV compared to males. No significant differences were reported for all other forms of screen time by race, ethnicity or sex.

Nutrition

Breakfast

A total of 35% of middle school students and 25% of high school students reported eating breakfast on all 7 days prior to taking the survey. This was a 13% and 22% decrease among middle and high school students who reported eating breakfast on all 7 days prior to taking the survey in 2017. The percentage of students who ate breakfast varied significantly by race, ethnicity, and sex as indicated below.

- Males in middle school and high school were more likely than females to eat breakfast on all 7 days.
- Among middle school and high school students, Black or African American and Hispanic or Latinx students were less likely than their White peers to eat breakfast on all 7 days.



Figure 20. Middle School Students who Ate Breakfast Every Day in Past Week

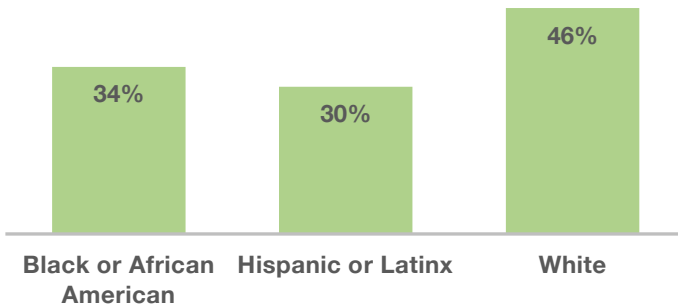
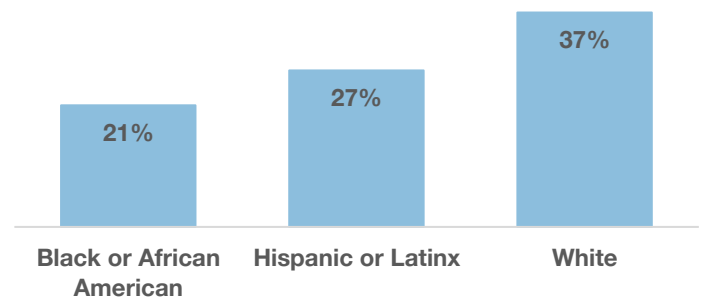


Figure 21. High School Students who Ate Breakfast Every Day in the Past Week



Why are there inequities?

DPS offers free breakfast to all students on school days,⁴² but disparities in the proportion of students eating breakfast by race, ethnicity, and sex still exist, even when looking at the proportion of students who ate breakfast 5 days a week. Research shows that participation in school breakfast programs decreases when parents perceive the nutritional value of meals to be substandard. Breakfast programs are also seen by students and parents as being intended for use among low-income students, which may contribute to stigma among students who participate in the breakfast program.⁴³⁻⁴⁴ Thus, stigma associated with the breakfast program may be a barrier to eating breakfast at school. Additional research is needed to understand why there are disparities among students who eat breakfast every day.

Sugar Sweetened Beverages

High school students were asked about their consumption of soda and other sugar-sweetened beverages, including sports drinks, energy drinks, lemonade, sweetened tea or coffee drinks, flavored milk, Snapple, and Sunny Delight. Responses from these questions were combined to provide a general understanding of sugar sweetened beverage consumption among high school students. Beverage consumption questions were not included in the middle school survey.

Among high school students, 17% reported drinking a sugar sweetened beverage at least once per day. This was a decrease of 42% since 2017.



Safety

Feelings of Safety at School

Approximately 7% of middle school students and 12% of high school students reported that they did not go to school at least once in the past month leading up to the survey because they felt unsafe at school or going to or from school. Among middle and high school students, there were no significant differences by gender.

Figure 24. Middle School Students who Missed at Least Once in the Past Month Because They Felt Unsafe at School

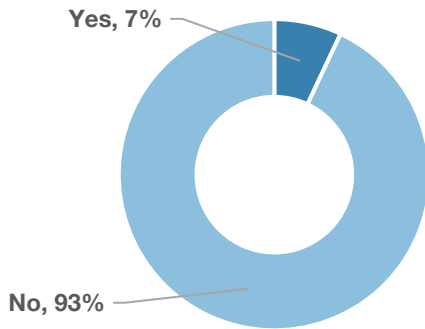
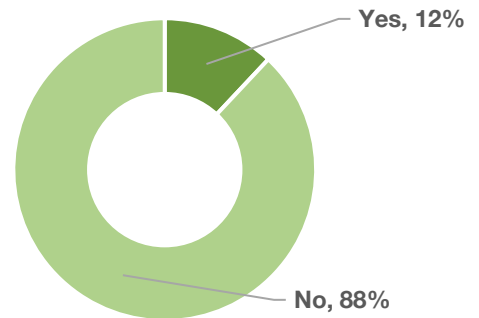


Figure 25. High School Students who Missed at Least Once in the Past Month Because They Felt Unsafe at School



Gang Activity at School

A total of 19% of middle school students and 34% of high school students reported gang activity in their schools.

- Significant differences in reports of gang activity by race and ethnicity were found among middle school students, but not by sex. Black or African American and Hispanic or Latinx students were more likely than white students to report gang activity.
- There were significant differences by race and sex only among high school students who reported gang activity. Black or African American high school students were more likely than white students to report gang activity.

Figure 26. Middle School Students who Reported Gang Activity in School

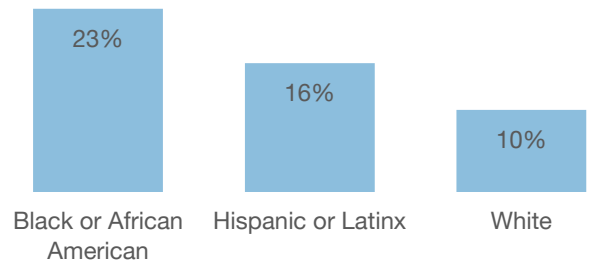
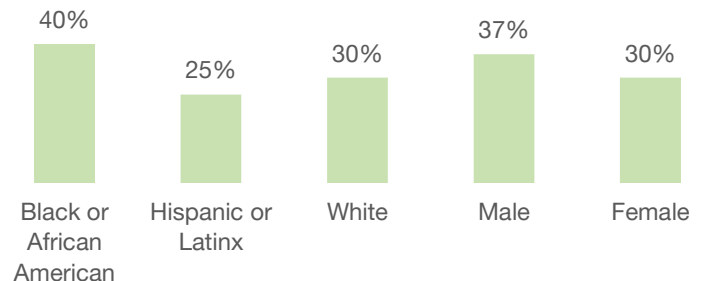


Figure 27. High School Students who Reported Gang Activity in School



Carrying Weapons on School Property

High school students were asked whether they carried a weapon at school in the 30 days leading up to the survey. A total of 2.4% of students reported that they had carried a weapon such as a gun, knife, or club at least once during that time period. Males were significantly more likely than females to have carried a weapon to school. Differences by race were not significant.



Sexual Behavior

Sexual Activity

In 2019, 12% of middle school students and 43% of high school students reported that they had ever had sexual intercourse. This equates to a 14% decrease in the percentage of middle school reporting sexual intercourse and 19% increase in the percentage of high school students reporting sexual activity. Statistically significant differences are highlighted below.

- Among middle school students, males (14%) were more likely to report ever having sexual intercourse compared to females (10%). Black or African American and Hispanic or Latinx students were also more likely to report ever having sexual intercourse compared to white students.
- Similarly, among high school students, males (47%) were more likely to report ever having sexual intercourse compared to females (40%). Differences by race and ethnicity were also statistically significant.

Why are there inequities?

Research shows that adults perceive young black girls as having more knowledge about sex compared to white girls.⁴⁵ Adults also perceive Black girls as young as five years old as being older than they are. As a direct result of this false perception, Black girls are expected to behave more like adults than girls of other races.⁴⁵ These misperceptions and expectations may contribute to differences in sexual activity by race and ethnicity.⁴⁶

Figure 20. Percent of Middle School Students who Reported Ever Having Sexual Intercourse

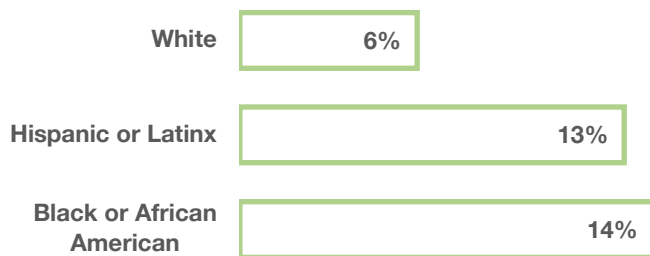
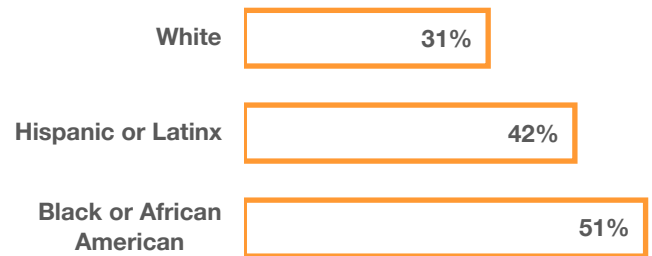


Figure 21. Percent of High School Student who Reported Ever Having Sexual Intercourse



Rape

A total of 10% of high school students reported being physically forced to have sexual intercourse. Females (12%) were significantly more likely than males (7%) to have been raped. Black or African American and Hispanic or Latinx students were significantly more likely to have been raped compared to Whites. Further research is needed to determine why these populations have a higher risk of being raped compared to White students.

Figure 22. High School Students who Reported being Forced to have Sexual Intercourse

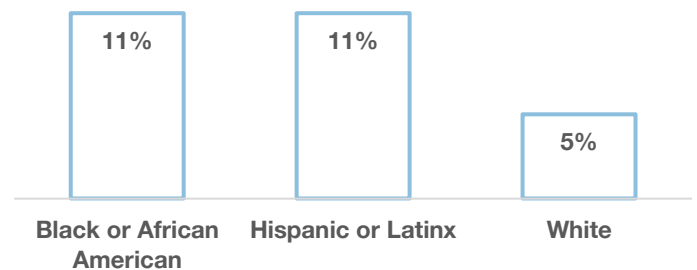
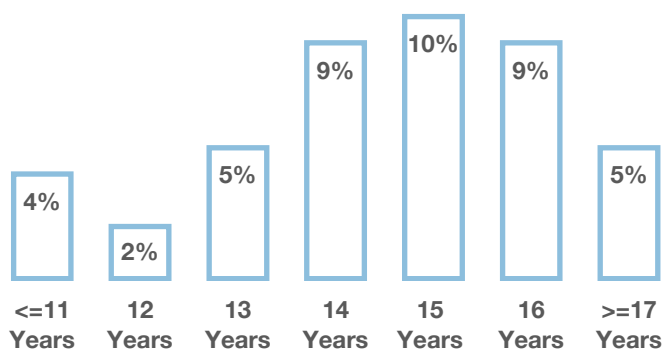


Figure 23. High School Students' Age of First Sexual Intercourse



Age at First Sexual Encounter

High school students were asked the age of their first sexual intercourse. Sample sizes were too small to make comparisons by sex, race and ethnicity. However, overall percentages are displayed below. Among students who reported having sex, most students had sex for the first time between the ages of 14 to 16. More students had their first sexual intercourse encounter at age 15, which is consistent with results from the 2017 YRBS.

Bullying

Bullying at School

Bullied at School

Both middle school and high school students reported being bullied more in person compared to being bullied online. A total of 40% of middle school students and 16% of high school students reported being bullied on school property. Compared to 2017 YRBS finding, this equates to a 5% increase in middle school and 19% decrease in high school students who reported being bullied on school property.

- Among middle school students, females were significantly more likely to be bullied on school property compared to males. There were no significant differences by race and ethnicity.
- Among high school students, differences by sex were not statistically significant. Black or African American and Hispanic or Latinx students were more likely to be bullied than their white peers.

Figure 25. High School Students who have ever seen Other Students Bullied in School

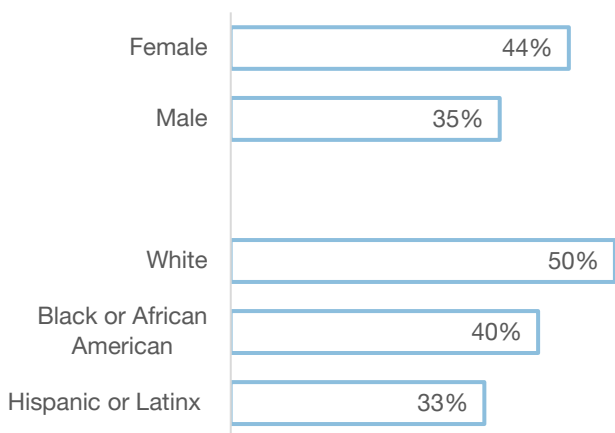
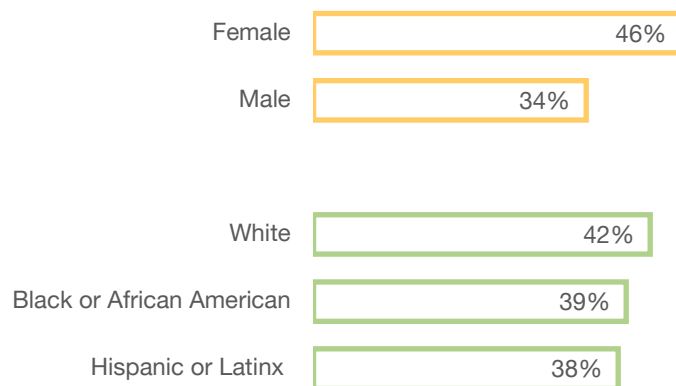


Figure 24. Middle School Students who were Bullied on School Property



Saw Other Students Bullied

In 2019, 59% of middle school students and 40% of high school students reported seeing another student bullied at school. High school students were asked specifically about seeing bullying that occurred during the 12 months leading up to the survey, while middle school students were asked more generally about ever witnessing bullying occur. Because of these differences, middle school and high school results should not be compared.

- For both middle school and high school students, females were more likely to report seeing bullying compared to males.
- Differences by race and ethnicity among middle school students were not significant. However, there were significant differences among high school students. White students (50%) were significantly more likely to have seen other students being bullied at school compared to Black or African American (40%) and Hispanic or Latinx (33%) students. This reflects a 22% decrease among Whites, 23% decrease among Blacks or African Americans and 15% decrease among Hispanic or Latinx (15%) since the 2017 YRBS.

Bullied due to Sexual Orientation

Overall, 24% of middle school students and 12% of high school students reported being teased or called names because someone thought they were lesbian, gay or bisexual (LGB). Differences by sex, race and ethnicity were not significant for middle or high school students this year.



Mental Health

Feelings of Depression

Depression was defined in the YRBS as feeling so sad or helpless that you stopped doing usual activities almost every day for two weeks or more. In 2019, 1 in 3 middle school students (32%) and high school (35%) high school students reported feelings of depression. For both middle and high school students, females were significantly more likely than males to report feelings of depression. Differences by race were significant for middle school students only.



Figure 26. Middle School Students with Feelings of Depression

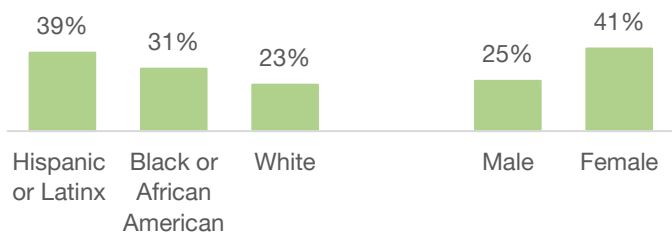
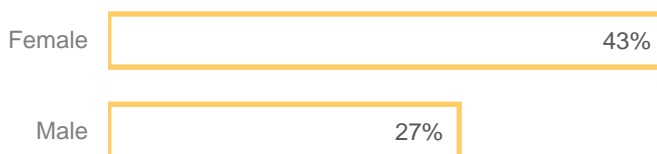


Figure 27. High School Students with Feelings of Depression



Suicide

Approximately 27% of middle school students reported that they considered committing suicide at some time during their lifetime, representing a slight increase compared to 2017 (25%). A total of 19% of high school students reported that they considered committing suicide during the 12 months leading up to the survey, which equates to a 19% increase compared to 2017. Differences by sex were significant for both middle and high school students; however, race and ethnicity were only significant for high school students. A breakdown by race and ethnicity of high school students who considered, planned, and attempted suicide are shown below.

Among middle school students, females were more likely to consider committing, planning, and attempting suicide. White students were significantly less likely than their peers to consider committing and attempting suicide. There were no significant differences by race and ethnicity among high school students considering suicide; however, there were significant differences among students planning and attempting to commit suicide.

Figure 28. Middle School Students who Considered Suicide, Made a Suicide Plan, and Attempted Suicide

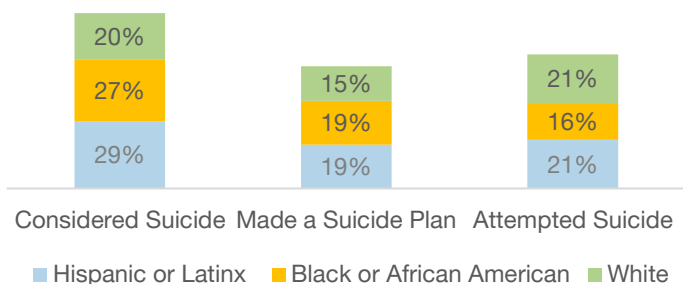
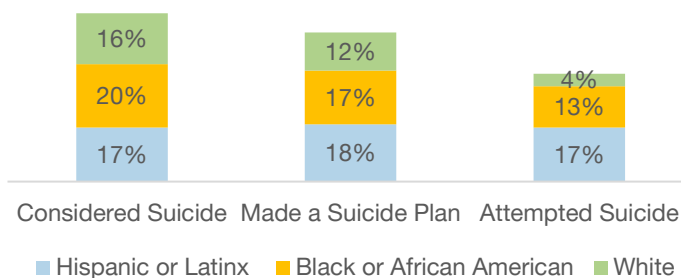


Figure 29. High School Students who Considered Suicide, Made a Suicide Plan, and Attempted Suicide



Why are there inequities?

White Americans are less resilient than Black or African American and Hispanic or Latinx Americans to stress.⁴⁷ Rates of suicide consideration may be higher among students of color compared to white students due to differences in access to mental health services.⁴⁸ Research shows that racism is positively associated with depression and anxiety in people of color. More research is being performed to better understand this relationship.⁴⁹

Substance Use

Current Substance Use

The YRBS assessed current use of cigarettes, electronic vape or (e-vape) products, and marijuana for middle and high school students. High school students were also asked about current alcohol use. E-vape products were reported as the most used substance within the month leading up to the survey for all middle school students, while marijuana was most used among high school students. The use of e-vape products increase by 30% among middle school students and marijuana use increased by 18% among high school student since the 2017 YRBS. Figures 30 and 31 show current substance use among middle and high school students.

Figure 30. Middle School Students who Reported Substance Use in the Past Month

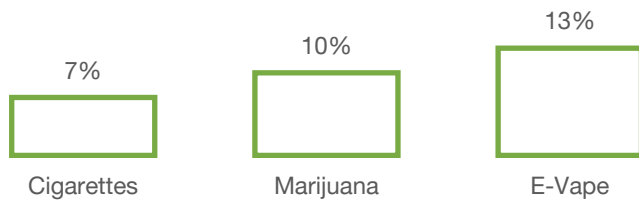
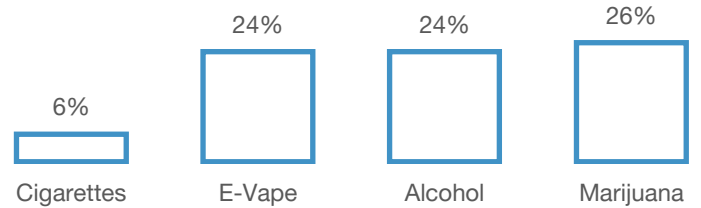


Figure 31. High School Students who Reported Substance Use in the Past Month

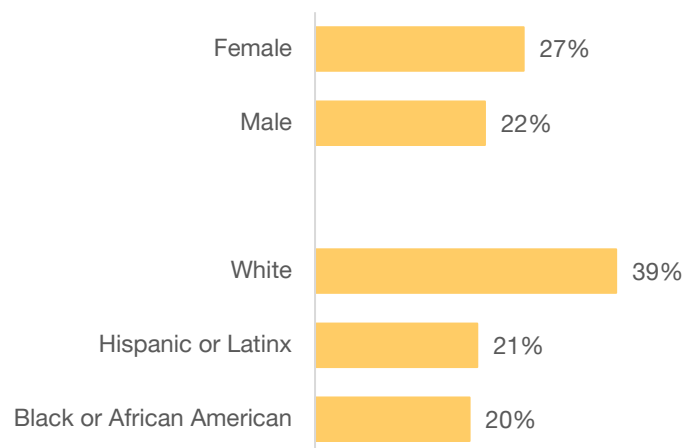


Alcohol Use

Middle school students were asked whether they had ever drunk more than a few sips of alcohol. Almost 1 in 4 (23%) of these students responded “yes”. Black or African American and Hispanic or Latinx students were significantly more likely than white students to have tried alcohol during their lifetime. Differences by sex were not statistically significant.

Current use of alcohol was assessed among high school students. White students were significantly more likely than their peers to report drinking alcohol within the past month (see Figure 32). The percentage of white students reporting current alcohol use increased by 26% since the 2017 YRBS. Females were significantly more likely to report drinking alcohol within the past month compared to males.

Figure 32. High School Students who Reported Current Alcohol Use



Cigarette Use

A total of 7% of middle school students and 6% of high school students reported current cigarette use (smoked at least once in the past month). Current cigarette use decreased by 40% among high school students since 2017.

- High school males (7%) were more likely than females (4%) to report current cigarette use. White students were less likely to report current cigarette use compared to Black or African American and Hispanic or Latinx students.
- The difference between males and females who reported current cigarette use was not significant for middle school students. Hispanic or Latinx middle school students were more likely to report current cigarette use than their white peers.



Substance Use

E-Vape Products

Questions assessing use of e-vaping products were initially added to the YRBS in 2015. Overall, current use of e-vaping devices has increased among high school students from 14% in 2017 to 24% in 2019. There was also an increase reported among middle school students who e-vape at 10% in 2017 to 13% in 2019. Vaping varied significantly by race and ethnicity among middle school students; however, only differences by race were found among high school students. Differences by sex were not significant among either school level.

Figure 33. Middle School Students who Reported Current E-Vape Use

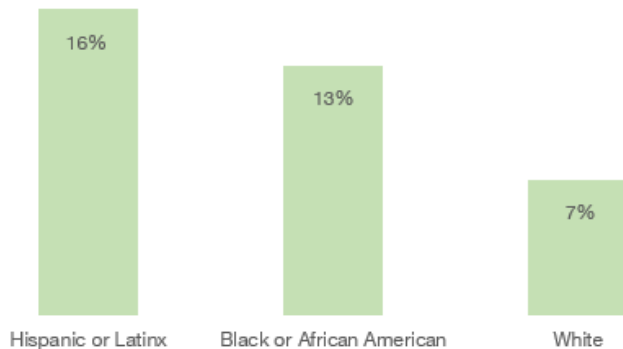
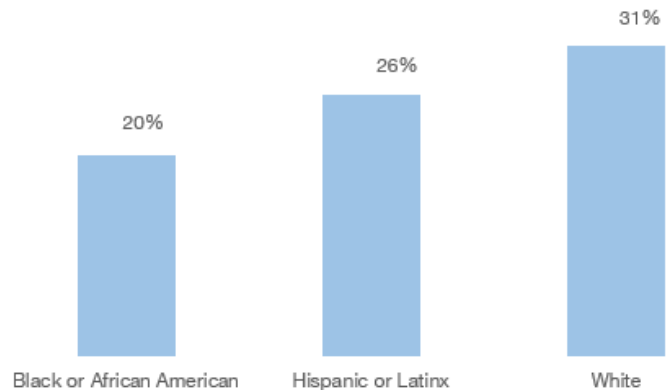


Figure 34. High School Students who Reported Current E-Vape Use



Why are there inequities?

The density of vape shops is higher in census tracts with larger proportions of people of color, which contributes to more access and higher exposure to vaping ads among people of color in the U.S.⁵⁰

Vape shops in Latinx communities also used “ethnic specific marketing materials” more than in other communities.⁵¹ These targeted marketing tactics may contribute to increased e-vaping among youth of color.

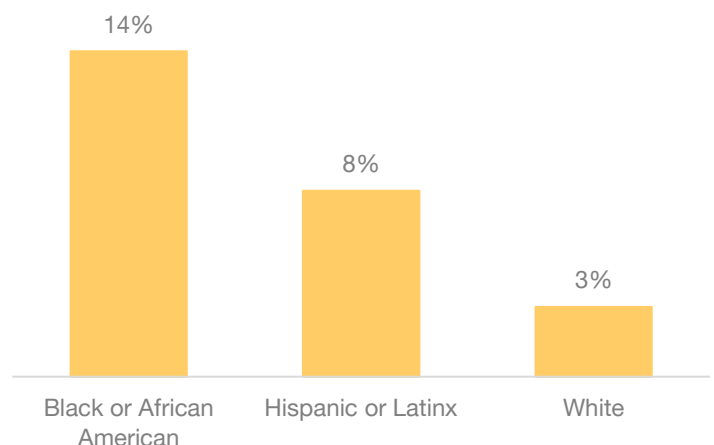


Marijuana Use

A total of 10% of middle school students and 26% of high school students reported current use of marijuana, which is defined as at least one use in the past month. There was a 17% decrease in current marijuana use among middle school students since the 2017 YRBS while high school students increased their marijuana use by 18%. Differences by sex were not statistically significant for middle school or high school students.

Differences by race and ethnicity among middle school students were statistically significant, where Black or African American students were more likely to report current marijuana use compared to their peers. Current marijuana use by race and ethnicity were not statistically significant among high school students.

Figure 35. Middle School Students who Reported Current Marijuana Use



Substance Use

Cocaine

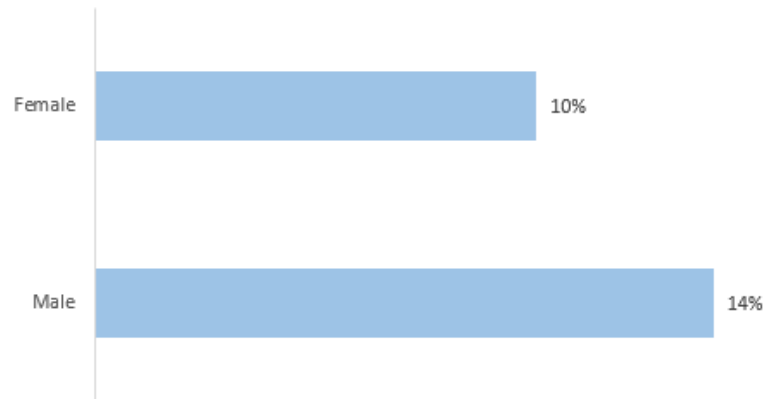
A total of 2% of middle school students and 5% of high school students reported trying cocaine at least once in their lifetime. The number of middle school students who had tried cocaine was too small to compare differences by sex, race, or ethnicity. The sample size for high school students was also too small to look at differences by race and ethnicity, and sex.

Inhalants

The YRBS asks about using inhalants, which includes sniffing glue, breathing the contents of aerosol spray cans, and inhaling paints to get high. A total of 7% of middle school students and 8% of high school students reported using an inhalant at least once in their lifetime. This represents a 75% increase in the percentage of middle school students using inhalants compared to the 2017 YRBS. For middle and high school students, the number of students who reported using an inhalant was too small to compare by race and ethnicity. There was no difference by sex for middle school students. The sample size was too small to compare inhalant use by sex for high school students.



Figure 36. High School Students who Reported Ever Taken a Prescription Drug Without a Prescription



Prescription Drug Use

A total of 7% of middle school students and 12% of high school students have used a prescription medication without a doctor's prescription or differently than how a doctor told them to use it. The sample size for middle and high school students was too small to look for differences by race, and ethnicity. Differences by sex were not significant for middle school students; however, high school males were more likely to take a prescription drug without a prescription compared to females.

Why are there inequities?

Black children are less likely to receive pain medications and opioids for severe pain compared to white children.⁵² The same is true for adults.⁵² Since black patients are less likely than white patients to get appropriate pain medication even for severe pain, they may have less access to prescription pain medications and prescription pills in general compared to people of other races.



Resources

Durham Together for Resilient Youth (TRY)

Together for Resilient Youth (TRY) is a coalition of youth and adults working together to prevent substance use among adolescents, with long term impacts on reduction in substance use in adults. The coalition focuses on advocacy, education, mobilization, and collective action. TRY facilitates work within many domains, including Youth Living in Future Tense (LIFT), young adults (CollegeTRY), parents, faith community, Forward Together (Community Support for Recovering), Resilient Together (family members that have lost loved ones due to overdose or substance use) and Achieving Health Hand in Hand (AHHH - ACE's and Resilience). For more information on TRY or to get involved, contact Dr. Wanda Boone at 919-491-7811 or visit www.DurhamTRY.org.

Co-Located Mental Health Services at Durham Public Schools

Durham Public Schools provides co-located mental health services at all of its public schools. Service offerings include a comprehensive assessment, individual therapy, group therapy, family therapy, and training for school staff and support teams. In order to receive care, students must bring written consent from a parent and must not already be receiving mental health care from another provider. All mental health service records are confidential and are not shared with school staff.

Co-located mental health services are insurance based, which means that if a student has insurance that covers mental health services, their insurance will be billed for services provided in school. However, pro bono care is also available for students without insurance coverage and for students with high copays or deductibles.

In order to receive mental health services at school, students can contact a school social worker, counselor, principal, DPS mental health specialist, or Beatrice Laney. Beatrice Laney can be reached at 919-560-2208 extension 30223. Students can also be referred by parents, teachers, or other individuals who are familiar with the student's needs. More information can also be found online at tinyurl.com/DPSmentalhealth.

Universal Free Breakfast

Free breakfast is available to all students enrolled in DPS. Students are not required to complete any forms or documents.

To receive a free breakfast on school days, students must go to their school cafeteria. Students are given a choice of four items and are asked to choose three of the four items for breakfast.

Breakfast offerings vary throughout the week; however, cereal, juice, fresh fruit, and milk are always available.



Project BUILD

Project BUILD outreach workers engage with representatives from the education, social service, mental health, substance use, and criminal justice sectors to provide coordinated case management to youth between the ages of 14 and 21 who are at high risk for gang involvement. Outreach workers provide one-on-one coaching for youth to help them make positive decisions, connect them with employment, encourage academic success, and support involvement in extracurricular activities.

Project BUILD outreach workers are available to meet students at school, home, or in the community. They facilitate weekly group meetings and voluntary summer and holiday camps when school is out. Participation in Project BUILD programming is free. For more information on Project BUILD, contact Arkeem Brooks at the Durham County Department of Public Health. Mr. Brooks can be reached at 919-560-7725 or visit tinyurl.com/projectBUILDDurham.

Resources

Made in Durham's Durham Work-based Learning Collaborative

This Collaborative is a partnership of nineteen organizations working to align a system that will be easier to navigate for employers and youth and their families. Goals include the rollout of the Durham's Public School's 3-2-1 Work-based Learning Initiative and the expansion of the Youth Work Summer Internship Program. More information can be found at <https://madeindurham.org/strategies/work-based-learning/>

Durham Parks and Recreation Department

Durham Parks and Recreation Department continues to provide residents with affordable and fun physical activities both indoors and outdoors across the city. One initiative of DPR, "MyDurham," aims to engage youth in afterschool activities for peer support, health promotion, and physical activity in a developmental setting.

DPR also continues to partner with Duke Children's to deliver "Bull City Fit" at the Edison Johnson Recreation Center. Bull City Fit is a free program for low-income families who have at least one child with obesity. The program offers family-centered and peer-based group physical fitness, cooking classes, and outdoor recreation opportunities.

DPR hosts numerous fitness classes and coordinates a wide variety of sports for all ages, from young children to older adults. Their "Play More" guide includes information about their programs, and it also includes other trails and greenways in the area where Durham residents can go to be physically active. More information can be found at <https://www.dprplaymore.org/200/Play-More-Guide> and <https://www.dprplaymore.org/>

SmokefreeTeen

SmokefreeTeen is a specific program to help teens quit vaping. There is also a SmokefreeTXT program and the quitStart App. All these resources are provided by National Cancer Institute as part of the Smokefree.gov series. More information can be found at <https://teen.smokefree.gov/quit-vaping>

Carolina Outreach Behavioral Health Urgent Care

Carolina Outreach Behavioral Health Urgent Care is a walk-in clinic for children and adults experiencing a mental health crisis and/or substance use issues. For more information, visit <https://carolinaoutreachbhuc.com/>

Durham Community Collaborative

Durham Community Collaborative is a group of community members and organizations who collaborate to implement a System of Care approach and build an array of services, supports and linkages to assist children and families. More information can be found at <https://www.alliancehealthplan.org/consumers-families/system-of-care/community-collaborative/>

Durham Crisis Response Center

This Center offers free, confidential services to victims of sexual assault. Services include 24-hour help lines in English (919-403-6562) and Spanish (919-519-3735), information and referrals, case management, crisis intervention and ongoing emotional support, support groups in English and Spanish, advocacy, and accompaniment to the police, court, hospital and follow-up medical appointments. For more information, visit www.durhamcrisisresponse.org

The Child and Adolescent Gender Care Clinic

This Clinic provides family-centered care to transgender and gender non-binary youth children and adolescents, as well as treatment for children with differences of sex development. The clinic staff includes pediatric mental health professionals with expertise in gender-affirming mental health care. There are also services available for spiritual care. For more information, visit <https://www.dukehealth.org/locations/duke-child-and-adolescent-gender-care>

Middle School Summary

| Durham County YRBS Highlights: Middle School | Durham '19 | Change 17' - 19' | NC '19 | Change 17' - 19' |
|---|------------|------------------|--------|------------------|
| Physical Health | | | | |
| Students who get 8 or more hours of sleep on an average school night | 43% | ↓ | 50% | == |
| Students who have seen a doctor or nurse for routine health check-up in past year | 59% | == | NA | NA |
| Students who have seen a dentist for a routine check-up in the past year | 65% | ↑ | NA | NA |
| Students who have ever been told by a doctor or nurse that they had asthma | 21% | ↓ | 23% | == |
| Physical Activity | | | | |
| Students who played on a sports team in the past year | 53% | == | 56% | ↓ |
| Students who were physically active 60 minutes or more at least 5 days a week | 45% | ↓ | 55% | ↓ |
| Students who engaged in 3 hours or more of screen time on an average school day | 66% | == | 49% | ↑ |
| Students who watched television 3 or more hours on an average school day | 29% | ↓ | 26% | ↓ |
| Nutrition | | | | |
| Students who ate breakfast every day in the past week | 35% | ↓ | 43% | ↓ |
| Safety | | | | |
| Students who did not feel safe at school or going to or from school in the past 30 days | 7% | ↑ | NA | NA |
| Students who reported gang activity in their school | 19% | ↓ | NA | NA |
| Sexual Behavior | | | | |
| Students who have ever had sexual intercourse | 12% | ↓ | 10% | == |
| Bullying | | | | |
| Students who have ever been bullied at school | 40% | ↑ | 43% | ↓ |
| Students who have been teased or called names because someone thought they were gay, lesbian, or bisexual | 24% | ↑ | NA | NA |
| Mental Health | | | | |
| Students who reported depression in the past year | 32% | ↑ | NA | NA |
| Students who considered suicide during their lifetime | 27% | ↑ | 23% | ↑ |
| Students who attempted suicide in their lifetime | 17% | ↑ | 12% | ↑ |
| Substance Use | | | | |
| Students who have smoked cigarettes in the past 30 days | 7% | == | 4% | ↓ |
| Students who have used electronic vapor products in the past 30 days | 13% | ↑ | 14% | ↑ |
| Students who have smoked marijuana in the past 30 days | 10% | ↓ | NA | NA |
| Students who have ever had more than a few sips of alcohol | 23% | ↑ | 20% | ↓ |
| Students who have ever used cocaine, including powder, crack or freebase | 2% | ↓ | NA | NA |
| Students who have ever taken a prescription drug without a prescription | 7% | ↑ | 8% | ↑ |

High School Summary

| Durham County YRBS Highlights: High School | Durham '19 | Change 17' – 19' | NC | Change 17' – 19' |
|---|------------|------------------|-----|------------------|
| Physical Health | | | | |
| Students who get 8 or more hours of sleep on an average school night | 22% | ↓ | 18% | ↓ |
| Students who described themselves as slightly or very overweight | 28% | ↓ | 30% | ═ |
| Students who have ever been told by a doctor or nurse that they had asthma | 28% | ↑ | 26% | ↓ |
| Physical Activity | | | | |
| Students who were physically active 60 minutes or more at least 5 days a week | 31% | ↓ | 38% | ↓ |
| Students who engaged in 3 hours or more of screen time on an average school day | 46% | ═ | 46% | ↑ |
| Students who watched television 3 or more hours on an average school day | 22% | ↓ | 20% | ↓ |
| Nutrition | | | | |
| Students who ate breakfast every day in the past week | 25% | ↓ | 28% | ↓ |
| Students who had at least one sugar-sweetened beverage per day | 18% | ═ | NA | NA |
| Safety | | | | |
| Students who did not feel safe at school or going to or from school in the past 30 days | 12% | ↓ | 14% | ↑ |
| Students who reported gang activity in their school | 34% | ↓ | NA | NA |
| Students who carried a weapon on school property in the past 30 days | 12% | ↑ | 3% | ═ |
| Sexual Behavior | | | | |
| Students who have ever had sexual intercourse | 43% | ↑ | 41% | ↑ |
| Students who have been physically forced to have sexual intercourse | 10% | ↑ | 8% | ═ |
| Bullying | | | | |
| Students who have been bullied at school | 16% | ↓ | 19% | ═ |
| Students who have been teased or called names because someone thought they were gay, lesbian, or bisexual | 12% | ↓ | NA | NA |
| Mental Health | | | | |
| Students who reported depression in the past year | 35% | ↑ | 36% | ↑ |
| Students who considered suicide in the past year | 19% | ↑ | 19% | ↑ |
| Students who attempted suicide in the past year | 13% | ↑ | 10% | ↑ |
| Substance Use | | | | |
| Students who have smoked cigarettes in the past 30 days | 6% | ↑ | 8% | ↓ |
| Students who have used electronic vapor products in the past 30 days | 14% | ═ | 52% | ↑ |
| Students who have smoked marijuana in the past 30 days | 26% | ↑ | 22% | ↑ |
| Students who have had one or more drinks of alcohol in the past 30 days | 24% | ↑ | 24% | ↓ |
| Students who have ever used cocaine, including powder, crack or freebase | 5% | ↓ | 5% | ═ |
| Students who have ever taken a prescription drug without a prescription | 12% | ↓ | 17% | ↑ |

Glossary

Disparities^{1,2} – differences between groups at social, economic, and environmental levels. Examples of health disparities include diabetes rates, infectious disease rates, and presence of environmental toxins that are higher in some groups more than others.

Equity³ - the quality of being fair or impartial.

Equality³ - the state of being equal, especially in status, rights, and opportunities.

Equity v. Equality

Equity is the new standard for public health. **Equality** provides the *same resources* for everyone to achieve a health outcome while **equity** provides each individual with the *appropriate resources* needed to achieve a health outcome. For example, equality will provide everyone with COVID-19 vaccines in the mornings Monday-Friday. Equity will ensure that anyone can get COVID-19 vaccines at any time.

Equity puts resources where they are most needed. For example, offering vaccines during the work week that disadvantages people who cannot get time off work, people without transportation to the clinic, and people who mistrust the health care system. Mistrust of health care systems is not uncommon, especially among people of color who have historically been exploited by white healthcare workers. Policies and programs can work together to address these concerns to provide everyone with the opportunity to receive a vaccine(s). Examples of these include expanding the hours and days that the vaccine is available (after work hours, weekends), providing free transportation to vaccine clinics from locations throughout the county, especially historically marginalized neighborhoods, and increasing education about the safety and efficacy of the vaccines from trusted sources.

Inequities² – differences between groups as a result of unfairness or injustice. Examples of inequities include differences in access to healthcare and quality of care as a result of systemic racism or socioeconomic status. Inequities are undesirable and are often rooted in racism. By removing race/ethnicity as a factor, all community members can have access to the same healthcare and thus achieve an equitable system.

Redlining^{1,5,6} – a racist method used to segregate housing by race and ethnicity that was implemented by the Federal Housing Administration to refuse to offer loans or provide worse rates for people of color. Though outlawed in 1968, the result of this practice continues today in the form of wealth gaps and health disparities. For example, in Durham County Whites are more likely to own their homes than Blacks or African Americans.

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