

YOUTH RISK BEHAVIOR SURVEY

DATA SUMMARY &
TRENDS REPORT



Centers for Disease
Control and Prevention
National Center for HIV, Viral
Hepatitis, STD, and TB Prevention

2011-2021

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EXECUTIVE SUMMARY

The *Youth Risk Behavior Survey Data Summary & Trends Report: 2011-2021* provides the most recent surveillance data, as well as 10-year trends, on health behaviors and experiences among high school students in the United States (U.S.) related to adolescent health and well-being. These include sexual behaviors, substance use, suicidal thoughts and behaviors, experiences such as violence and poor mental health, social determinants of health such as unstable housing, and protective factors such as school connectedness and parental monitoring. We also highlight disparities in these important outcomes by sex, race and ethnicity, sexual identity, and sex of sexual contacts.

This report is developed by the Centers for Disease Control and Prevention's (CDC) Division of Adolescent and School Health (DASH) to highlight the national Youth Risk Behavior Survey (YRBS) data collected every two years among a nationally representative sample of U.S. high school students. DASH's vision is one where young people in the U.S. have the knowledge, skills, and resources for healthy adolescence and adulthood. To work toward this vision, DASH:

- ✓ **Maintains high-quality surveillance systems.**
- ✓ **Conducts and translates scientific research on what works to help youth.**
- ✓ **Supports school districts in implementing quality health education, establishing systems that connect students to needed services, and creating safer and more supportive school environments.**

Collected in fall 2021, these data also represent the first YRBS data collected since the start of the COVID-19 pandemic. Although most schools had returned to in-person instruction by that time, the time spent out of school for many students may have impacted the school-related YRBS variables. Disruptions in daily life also remained common during the time of collection. Other research and surveys have described the impact of the pandemic on adolescent health and well-being, which was severe.^{1,2} We continue to document, through the 2021 YRBS, the ongoing challenges young people face. The summary below highlights key findings, with greater detail in the body of the report.

KEY FINDINGS ON TRENDS FROM 2011 TO 2021

As we have seen in our previous reports, several areas of adolescent health and well-being are continuing to improve overall, including risky sexual behavior (i.e., ever and current sexual activity and having four or more lifetime sexual partners) and substance use (i.e., ever used select illicit drugs, ever misused prescription opioids, current alcohol use, and current marijuana use). We also saw a decrease in the proportion of youth who were bullied at school.

Unfortunately, almost all other indicators of health and well-being in this report including protective sexual behaviors (i.e., condom use, sexually transmitted disease (STD) testing, and HIV testing), experiences of violence, mental health, and suicidal thoughts and behaviors worsened significantly.

Several experiences of violence are increasing, especially for certain groups of youth. These data show increases in the proportion of youth who did not go to school because of safety concerns, increases among female students experiencing sexual violence by anyone and being forced to have sex, and increases among male students experiencing electronic bullying.

As we saw in the 10 years prior to the COVID-19 pandemic, mental health among students overall continues to worsen, with more than 40% of high school students feeling so sad or hopeless that they could not engage in their regular activities for at least two weeks during the previous year—a possible indication of the experience of depressive symptoms. We also saw significant increases in the percentage of youth who seriously considered suicide, made a suicide plan, and attempted suicide.

KEY FINDINGS ON DISPARITIES

Although these trends highlight progress and challenges during the past decade, a closer look at 2021 data reveals that subsets of students have very different experiences, some better and some far worse.

Across almost all measures of substance use, experiences of violence, mental health, and suicidal thoughts and behaviors, female students are faring more poorly than male students. These differences, and the rates at which female students are reporting such negative experiences, are stark.

In 2021, nearly 30% of female students drank alcohol during the past 30 days. Almost 20% of female students experienced sexual violence

by anyone during the past year and 14% had ever been physically forced to have sex. Although these numbers are high, the rates of poor mental health and suicidal thoughts and behaviors are even higher. In 2021, almost 60% of female students experienced persistent feelings of sadness or hopelessness during the past year and nearly 25% made a suicide plan.

As in previous reports, we continue to see disparities among students who identify as lesbian, gay, bisexual, questioning, or another non-heterosexual identity (LGBQ+) or who have had any same-sex sexual partners compared to their peers (see “A Note on Sexual and Gender Identity” on page 8 for more information about how sexual identity is defined in this report). LGBQ+ students and those who have any same-sex partners were more likely than their peers to have used or misused all substances included in this report (i.e., ever used select illicit drugs, ever or current prescription opioid misuse, and current alcohol, marijuana, and electronic vapor product use). They were also significantly more likely to experience all forms of violence. The differences in terms of mental health, compared to their peers, are substantial. Close to 70% of LGBQ+ students experienced persistent feelings of sadness or hopelessness during the past year and more than 50% had poor mental health during the past 30 days. Almost 25% attempted suicide during the past year.

Although we see differences in students’ behaviors and experiences when the data are examined by race and ethnicity, the patterns are less consistent. Sexual behaviors have been improving for all students, but especially for Black and Hispanic students. Disparities among





groups have lessened, and the proportion of Asian students who engage in risky sexual behaviors is significantly lower than their peers from other racial and ethnic groups.

In terms of substance use, White students were more likely than Asian and Black students to have ever used select illicit drugs; Black and Hispanic students were more likely than Asian and White students to currently misuse prescription opioids; and Black students were less likely than almost all other students to currently use alcohol, but more likely than Asian, Hispanic, or White students to currently use marijuana.

The data on experiences of violence by racial and ethnic groups show that Black and Hispanic students were more likely to not go to school because of safety concerns, suggesting exposure to environmental violence in communities and schools. However, Black students were less likely than most other groups to experience bullying at school. In terms of sexual violence, White students were more likely than students from some other racial or ethnic groups to experience sexual violence by anyone and were the only group with an increase in that measure. American Indian or Alaska Native youth were more likely than most other groups to experience forced sex.

There were few consistent patterns of racial and ethnic differences across measures of mental health and suicidal thoughts and behaviors. Large percentages of students across all racial and ethnic groups experienced persistent feelings of sadness or hopelessness during the past year, and there were increases in this experience for all groups from 2011 to

2021. Among nearly all groups of students, percentages of students who seriously considered suicide, made a suicide plan, or attempted suicide were high and have increased. Of note, although Black students were less likely to report poor mental health and persistent feelings of sadness or hopelessness than some other groups of students, they were significantly more likely than Asian, Hispanic, and White students to have attempted suicide.

KEY FINDINGS ON SOCIAL DETERMINANTS OF HEALTH AND PROTECTIVE FACTORS

For the first time in the national YRBS, we included questions to measure social determinants of health (i.e., unstable housing) and factors that are protective for youth (i.e., school connectedness and parental monitoring).

Unstable housing is defined in this report as not having a usual place to sleep or sleeping in the home of a friend, family member, or other person because they had to leave their home or their parent or guardian cannot afford housing; in a shelter or emergency housing; in a motel or hotel; or in a car, park, campground, or other public place. Experiencing unstable housing is a key measure of disruption with significant implications for health and well-being. In 2021, although only 3% of students experienced unstable housing, a higher percentage of American Indian or Alaska Native and Black students experienced unstable housing, compared to Asian, Hispanic, and White students. LGBTQ+ students and those with any same-sex partners were also more likely than their peers to experience unstable housing.

School connectedness, defined in this report as feeling close to people at school, has a long-lasting, protective impact for adolescents well into adulthood on

almost all the behaviors and experiences included in this report. In 2021, female students, students of color, LGBTQ+ students, and students who had any same-sex partners were least likely to feel connected at school, indicating less protection for these groups.

Parental monitoring, defined here as parents or other adults in their family knowing where students are going and who they are with, is another key protective factor for adolescent health and well-being. Although there were some differences in this measure by sex, race and ethnicity, sexual identity, and sex of sexual contacts, students overwhelmingly said that their parents mostly or always knew where they were and who they were with.

ACTIONS TO IMPROVE ADOLESCENT HEALTH AND WELL-BEING

These data make it clear that young people in the U.S. are collectively experiencing a level of distress that calls on us to act. This report focused on a select set of YRBS questions, not only because they represent leading indicators of health and well-being for young people, but also because they share a common set of protective factors that can be enabled through schools. Although the primary goal of schools is academic learning, they also play a critical role in shaping mental, physical, and social growth. More than 95% of children and adolescents in the U.S. spend much of their daily lives in school, providing a considerable opportunity to foster the knowledge and skills to shape behaviors and experiences, but also the responsibility to ensure that all learning is done in a safe and supportive school environment.

Supporting schools in efforts to reverse these negative trends and ensure that youth have the support they need to be healthy and thrive will require partnership. The following actions can help ensure success.

Increase school connectedness across all grades and for all youth. The benefits of school connectedness are well demonstrated and long-lasting. However, youth who are from racial and ethnic minority groups, who experience racism, and who identify as LGBTQ+* often feel less connected at school. School connectedness strategies should be inclusive with an emphasis on reducing health disparities. Schools can improve students' sense of connectedness starting with social and emotional learning programs in early grades and youth development programs in middle and high school. Across all grades, schools can increase connectedness by providing professional development to educators on classroom management. Making school environments safer and more inclusive for LGBTQ+ students, by having gender and sexuality alliances (GSAs), identifying safe spaces and safe people, ensuring anti-harassment policies are in place and enforced, and providing professional development for educators on the importance of inclusivity, not only improves health and well-being for LGBTQ+ youth but also for their peers.

Increase access to needed services by improving school-based services and connecting youth and families to community-based sources of care. Schools are the gateway to needed services for many young people. Schools can provide health, behavioral, and mental health services directly or establish referral systems to connect to community sources of care. The COVID-19 pandemic severely disrupted access to services for young people. In addition to schools increasing access to on-site services and referrals, training staff and teaching students how to access services will increase the likelihood that they can and will.

Implement quality health education for all grades. Health education that is grounded in science, medically accurate, developmentally

appropriate, and culturally and LGBTQ+ inclusive is effective in teaching students needed skills to understand their mental and physical health and make thoughtful health decisions. Schools can implement quality health education by having policies that foster supportive environments for quality health education, using content that promotes healthy development, and equipping staff with the knowledge and skills needed to deliver quality health education. Health education succeeds when parents, community partners, and young people are engaged in developing and planning health education programming in schools.

Scaling up these actions will take time and resources and will not alleviate all the difficulties that young people face. However, every adolescent deserves to go to a school that gives them the knowledge and skills they need to make healthy decisions; have access to the services they need; and feel safe, supported, and included.



***What Works in Schools* combines the three key strategies above to improve adolescent health and well-being.**

CDC's [*What Works in Schools*](#) program is an evidence-based approach with demonstrated impact on many behaviors and experiences presented in this report. The program supports school districts in **implementing quality health education, connecting young people to needed services, and making school environments safer and more supportive, with a strong focus on improving school connectedness.** After implementing the What Works in Schools program, participating schools have seen improvements in sexual behavior, decreases in marijuana use, decreases in the proportion of students who missed school because of safety concerns, and decreases in forced sex. Schools that implemented policies and practices to support LGBTQ+ youth not only saw improvements in health and well-being for young people who identify as lesbian, gay, or bisexual but also their heterosexual peers.

*Because the 2021 national YRBS did not have a question assessing gender identity, this report does not highlight data specifically on students who identify as transgender. Therefore, the T commonly used in the acronym LGBTQ+ is not included when referring to the data. However, strategies to improve adolescent health should be inclusive of all students who identify as LGBTQ+, so the full acronym is used when highlighting actions.

INTRODUCTION

CDC developed the Youth Risk Behavior Surveillance System to monitor health-related behaviors and experiences that contribute to the leading causes of death and disability among youth and adults. As part of this system, CDC conducts the national Youth Risk Behavior Survey (YRBS) every two years, most recently in 2021, among a nationally representative sample of U.S. public and private high school students.

In this report, multiple years of national YRBS data are used to highlight focus areas with important implications for adolescent health and well-being: sexual behavior, substance use, experiencing violence, and mental health and suicidal thoughts and behaviors. Health behaviors and experiences related to these areas contribute to substantial health problems for adolescents.³⁻¹⁵ Consequences of these risks extend beyond health and well-being during adolescence and are related to future opportunities for positive outcomes in adulthood.^{16,17}

This year's report also includes a section highlighting new and emerging national data related to protective factors and social determinants of health among adolescents. CDC is continuously adapting the national YRBS to ensure that it is effectively collecting data on the most important issues related to today's adolescents while maintaining its ability to track adolescent behaviors and experiences over time.

Within the focus areas, this report breaks down 29 variables by sex, race and ethnicity, sexual identity, and sex of sexual contacts to highlight disparities and areas for improvement in adolescent health and well-being. It also provides 10-year trends (2011–2021), when available.

YRBS SUMMARY FOCUS AREAS AND PRIORITY VARIABLES

The 29 variables in this report reflect questions and composite variables from the 2021 national YRBS questionnaire. The full questions are listed in the appendix.

Sexual Behavior

The eight YRBS sexual behavior variables included in this report address well-established risk (ever had sex, four or more lifetime partners, currently sexually active) and protective factors (used a condom during last sexual intercourse, effective hormonal birth control use, condom and effective hormonal birth control use, ever tested for HIV, tested for STDs) for HIV, STDs, and unintended teen pregnancy. Adolescents who engage in sexual risk behaviors have a greater likelihood of contracting HIV or STDs and of becoming pregnant.

Substance Use

The substance use variables reported here include current use of alcohol, marijuana, and electronic vapor products, as well as lifetime use by adolescents of select illicit drugs (i.e., cocaine, heroin, methamphetamines, inhalants, hallucinogens, or ecstasy), lifetime prescription opioid misuse, and current prescription opioid misuse. Adolescent substance use is associated with sexual risk behavior, experiencing violence, and mental health problems.^{3-7,18,34}

Experiencing Violence

The six violence-related variables included in this report are all linked to poor health outcomes. Three of these—being threatened or injured with a weapon at school, not going to school because of feeling unsafe at or on the way to or from school, and being bullied at school—are indicators of disruption in the school setting that can also impact academic success.^{19,20} Adolescents who are bullied, whether at school or electronically, are more likely to have multiple sexual partners, to have sex without a condom, to use substances, and to experience depression.^{1,10-14} Forced sex and sexual violence are directly related to HIV and STD risk,²¹ but also to the experience of trauma, which research has linked to substance use, mental health problems, and suicide risk.²²

Mental Health and Suicidality

The YRBS assesses mental health with two questions. One question assesses persistent feelings of sadness or hopelessness and is a proxy measure for depressive symptoms. The other question assesses adolescents' perceptions of their mental health during the past 30 days. The YRBS also includes several measures of suicidal thoughts and behaviors. Poor mental health is associated with a host of health risks, both during adolescence and into adulthood. Young people who feel hopeless about their future are more likely to engage in behaviors that put them at risk for HIV, STDs, and unintended pregnancy.^{23,24} Suicide risk, measured in the YRBS by increasing levels of suicidal ideation, plans, and attempts, not only places the life of the adolescent at risk but is also a marker for experience with trauma and other mental health issues.^{8,24}

New and Emerging National Data

The national YRBS included three new measures for the first time in 2021: school connectedness, parental monitoring, and unstable housing. These measures will increase our understanding of protective factors for youth and social determinants of health. Both are critical to improving adolescent health. School connectedness and parental monitoring are important protective factors for sexual behavior, substance use, violence, and suicidal thoughts and behaviors.²⁵⁻²⁸ Experiencing unstable housing, however, can increase students' risk. Youth who experience unstable housing are more likely than their stably housed peers to experience violence, use substances, and have higher rates of poor mental health.²⁹

WHAT IS NEW?

Expanded Race and Ethnicity Data

To understand and reduce health disparities, it is critical to describe the prevalence of behaviors and experiences among diverse populations of adolescents.³⁰ The 2021 report expands the racial and ethnic groups for which 2021 and trend data are presented. Data from 2021 are presented for American Indian or Alaska Native, Asian, Black, Hispanic, Native Hawaiian or other Pacific Islander, White, and multiracial (students of multiple races) students. Trend data are not presented for American Indian or Alaska Native and Native Hawaiian or other Pacific Islander students because of concerns with statistical power due to small sample sizes for some years.



A Note on Sexual and Gender Identity

In this report, sexual identity has two categories, students who identify as heterosexual and students who identify as lesbian, gay, bisexual, questioning, or another non-heterosexual identity (LGBQ+). In the 2021 national YRBS, students were asked which of the following terms best describes them: "heterosexual (straight)," "gay or lesbian," "bisexual," "questioning" or "I describe my sexual identity in some other way." These answer options were changed from the 2019 survey to provide more inclusive options for students to describe their sexual identity. However, this change also means that trend data for sexual identity are not provided in the 2021 report. Because the 2021 national YRBS did not have a question assessing gender identity, this report does not highlight data specifically on students who identify as transgender. Therefore, the T commonly used in the acronym LGBTQ+ is not included. Future versions of the national YRBS will include a question on gender identity.

ORGANIZATION OF THIS REPORT




This report is organized into five chapters:

- 1 **sexual behavior,**
- 2 **substance use,**
- 3 **experiencing violence,**
- 4 **mental health and suicidality,** and
- 5 **new and emerging national data.**

It is a priority to highlight the behaviors and experiences of as many groups of adolescents as possible, while maintaining the quality of the data. Therefore, the type of data presented in each chapter will differ. Each chapter provides 2021 data for adolescents overall and described

by sex, race and ethnicity, sexual identity, and sex of sexual contacts. The first four chapters provide trend data (when available) described by sex, race, and ethnicity. Data summaries are presented to help highlight key points from the data. These summaries are not exhaustive. Tables showing the complete set of significant demographic differences are in the appendix.

The trends included in this report are categorized as

-  **green**
(moving in the right direction),
-  **yellow**
(no change), or
-  **red**
(moving in the wrong direction).

While many green categories show where adolescents are being supported to improve their behaviors or reduce their negative experiences, the red and yellow categories show where adolescents are not receiving sufficient support from adults, their communities, and society at large. Many of the red and yellow categories represent experiences beyond individual control, but these experiences could be prevented through school, community, and family support. This approach shows that while progress has been made in multiple categories, there is much work to be done to ensure that adolescents have the support they need to mature into healthy, successful adults.



HOW CAN YOU USE THE DATA FROM THIS REPORT?

Data from this report can be used to:

- ✓ Guide conversations with key partners and decision-makers (e.g., public health organizations, education organizations, community groups, parent groups) who can help improve adolescent health behaviors.
- ✓ Identify and address adolescent health disparities related to sex, race and ethnicity, and sexual identity.
- ✓ Inform the development of evidence-based policies to address sexual risk, substance use, violence, and mental health among youth.
- ✓ Inform resource discussions for school-based or community programs that protect and support student health and provide needed services.
- ✓ Promote awareness and bring the community together to address gaps in the health needs of adolescents.

FOCUS AREA







SEXUAL BEHAVIOR

Progress At-A-Glance for Sexual Behavior Variables	11
Summary of Results for Sexual Behavior	12
Ever Had Sex	13
Four or More Lifetime Sexual Partners	15
Currently Sexually Active	17
Used a Condom during Last Sexual Intercourse	19
Effective Hormonal Birth Control Use	21
Condom and Effective Hormonal Birth Control Use (Dual Method Use)	22
Ever Tested for HIV	23
Tested for Sexually Transmitted Diseases	25

PROGRESS AT-A-GLANCE FOR SEXUAL BEHAVIOR VARIABLES

Many young people engage in sexual behaviors that can result in adverse health outcomes, such as unintended pregnancy and STDs, including HIV. In 2020, young people aged 13-24 accounted for 20% of all new HIV diagnoses in the United States.³¹ More than half of the nearly 20 million new STDs reported in 2020 were among young people aged 15-24.³² Other behaviors can protect against STDs, including HIV, and unintended pregnancy, such as condom use and hormonal birth control use. Although teen birth rates are currently at their lowest recorded levels, there were still more than 145,000 infants born to adolescent females in 2021.³³

Questions related to sexual behaviors include those assessing sexual activity, numbers of sexual partners, use of condoms and effective hormonal birth control, and HIV and STD testing. Not all variables were available for 10 years of trends.




The Percentage of High School Students Who:*	2011 Total	2013 Total	2015 Total	2017 Total	2019 Total	2021 Total	Trend
Ever had sex	47	47	41	40	38	30	
Had four or more lifetime sexual partners	15	15	11	10	9	6	
Were currently sexually active	34	34	30	29	27	21	
Used a condom during last sexual intercourse [†]	60	59	57	54	54	52	
Used effective hormonal birth control ^{†,‡}	–	–	–	–	–	33	–
Used a condom and effective hormonal birth control (dual use) ^{†,‡}	–	–	–	–	–	10	–
Were ever tested for HIV	13	13	10	9	9	6	
Were tested for STDs during the past year [§]	–	–	–	–	9	5	

*For the complete wording of YRBS questions, refer to the appendix.

[†]Among sexually active students.

[‡]Survey question changed in the 2021 national YRBS; therefore, trends are not available.

[§]Variable introduced in 2019.

	In wrong direction
	No change
	In right direction

SUMMARY OF RESULTS FOR SEXUAL BEHAVIOR



The proportion of high school students who engaged in sexual behaviors that increase their risks for HIV, STDs, and unintended pregnancy decreased from 2011 to 2021. Data also highlight concerning decreases in condom use, STD testing, and HIV testing.



IN 2021

Only about half of sexually active students used a condom the last time they had sex.

Despite the differences in prior years across racial and ethnic groups in the percentage of students who ever had sex, had four or more lifetime sexual partners, and were currently sexually active, there were no significant differences between groups in 2021, except for Asian students who were less likely than nearly all other groups to engage in these sexual behaviors.

Nearly 1/3 of students had ever had sex and more than 20% were currently sexually active.

TRENDS

From 2011 to 2021, fewer students engaged in sexual activity. The percentage of students who had ever had sex, were currently sexually active, and had four or more lifetime sexual partners all decreased.

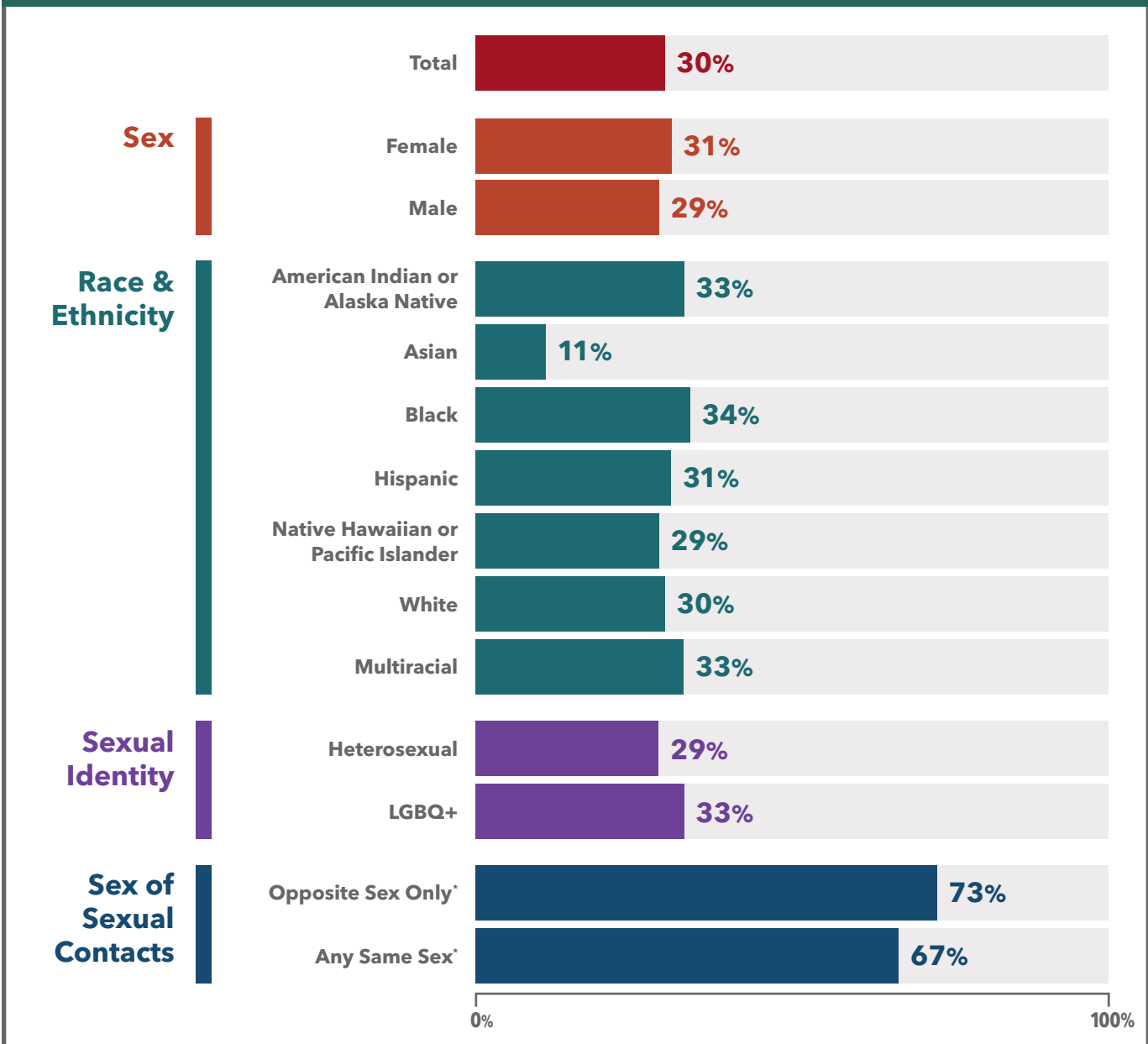
The percentage of sexually active students who used condoms decreased from 2011 to 2021.

The percentage of students who had ever been tested for HIV decreased from 2011 to 2021, and the percentage of students who were tested for STDs decreased from 2019 to 2021.

EVER HAD SEX

In 2021, 30% of high school students had ever had sexual intercourse. Asian students were less likely than students from nearly all other racial and ethnic groups to have ever had sex.

Percentage of High School Students Who Had Ever Had Sex, by Demographic Characteristics, United States, YRBS, 2021



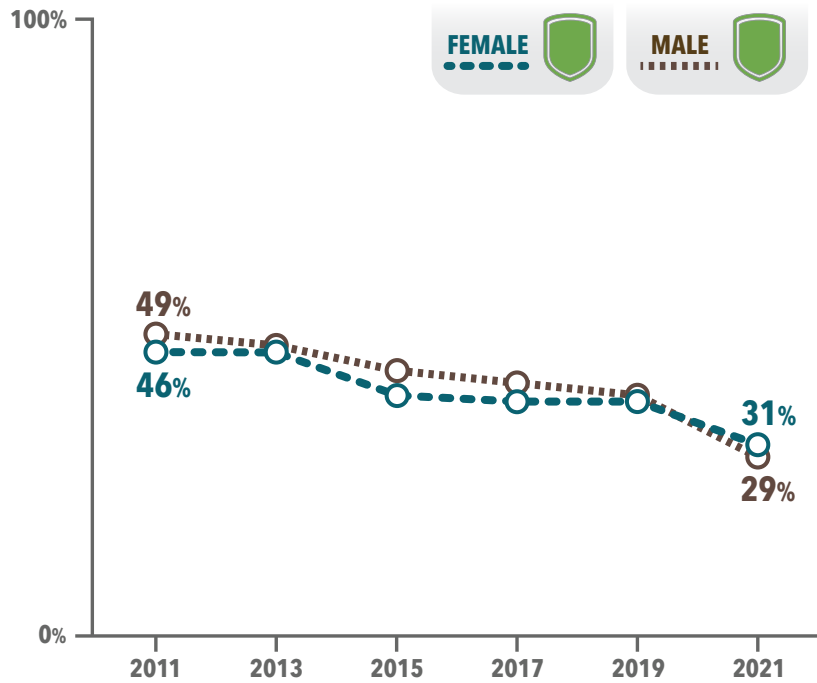
*"Sex of sexual contacts" groups were derived from responses to the question regarding whom students had sexual contact with during their life, a separate question from lifetime sexual intercourse.

Trends in the Percentage of High School Students Who

Had Ever Had Sex, United States, YRBS, 2011-2021

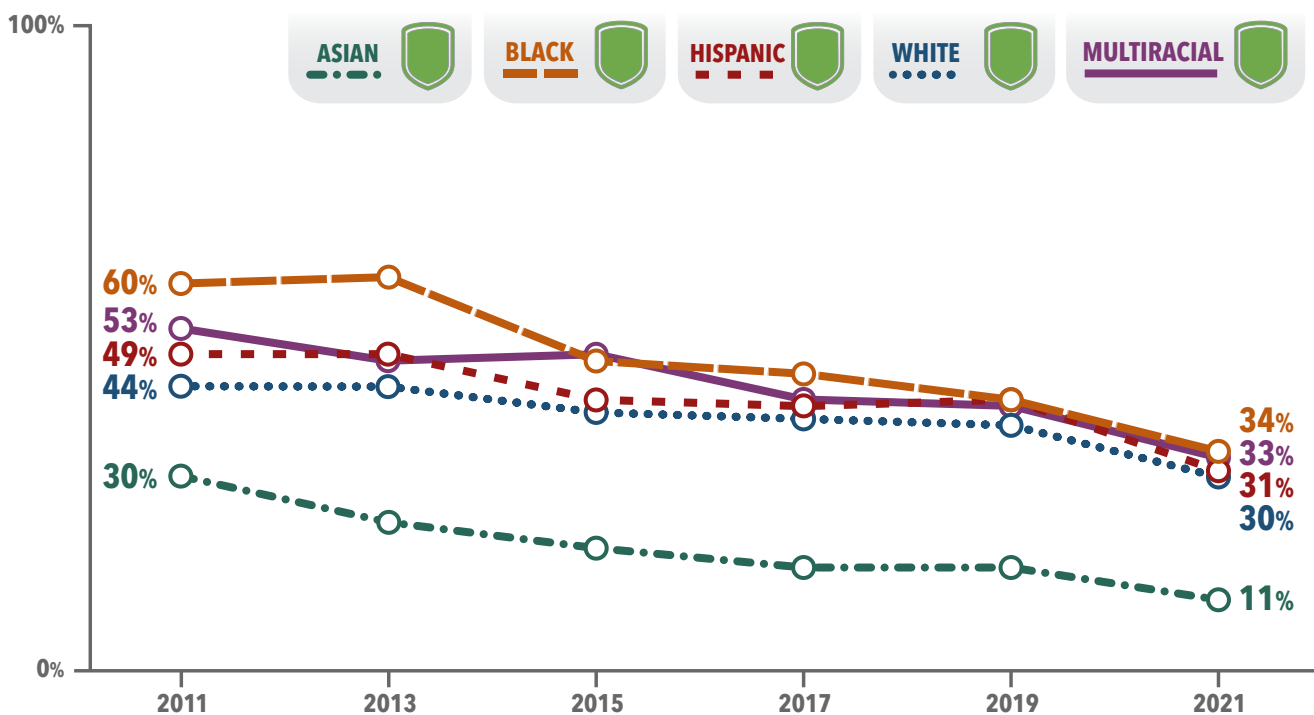
10-Year Trend Description by Sex

The percentage of female and male students who had ever had sex decreased from 2011 to 2021.



10-Year Trend Description by Race & Ethnicity

The percentage of students from each racial and ethnic group who had ever had sex decreased from 2011 to 2021.



In right direction



No change



In wrong direction



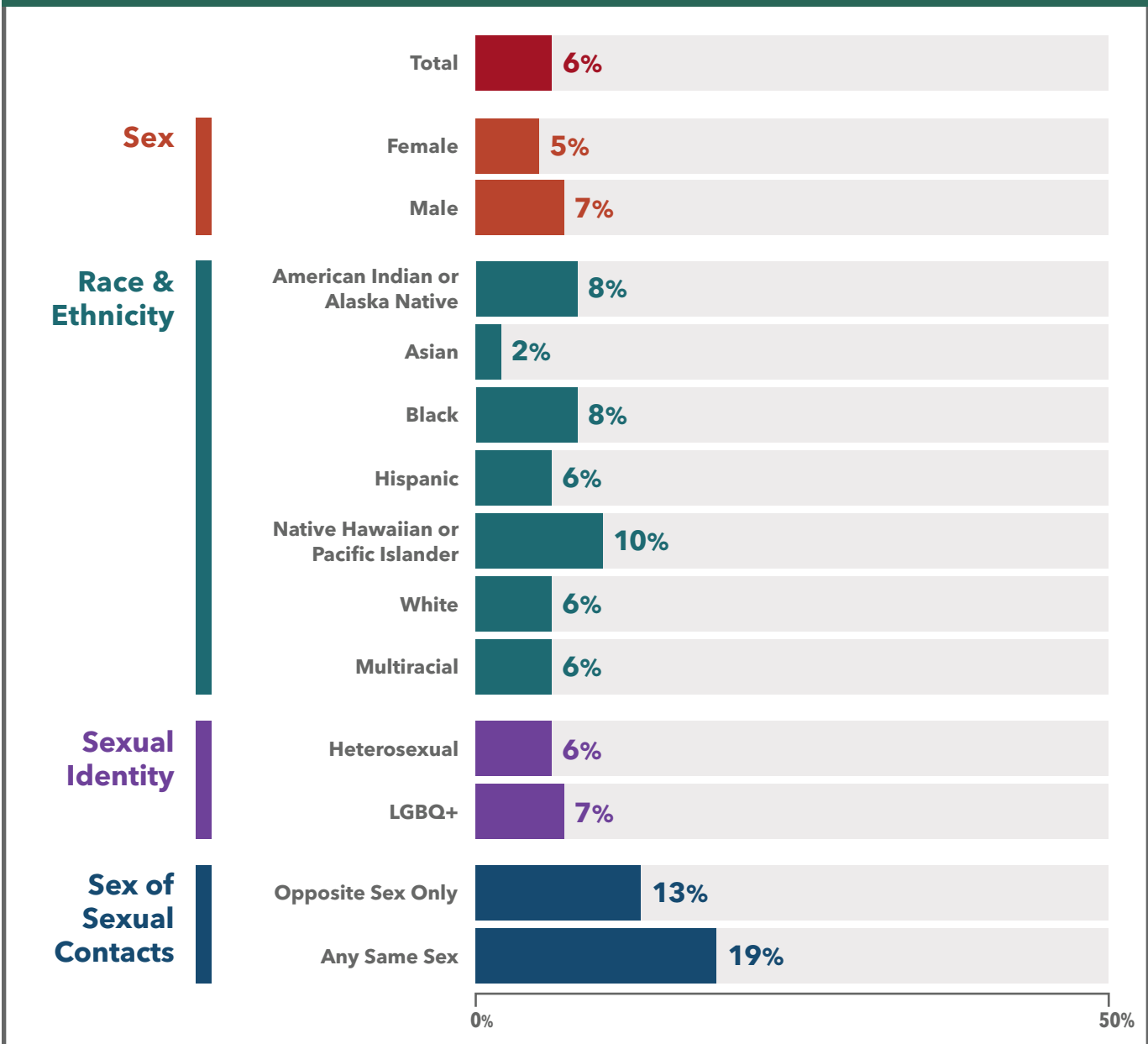
SEXUAL BEHAVIOR

FOUR OR MORE LIFETIME SEXUAL PARTNERS

In 2021, 6% of high school students had had sexual intercourse with four or more partners during their life. Male students were more likely than female students to have sex with four or more partners during their life. Asian students were less likely than students from nearly all other racial and ethnic groups to have sex with four or more partners during their life.

Percentage of High School Students Who

Had Sex With Four or More Partners during Their Life, by Demographic Characteristics, United States, YRBS, 2021

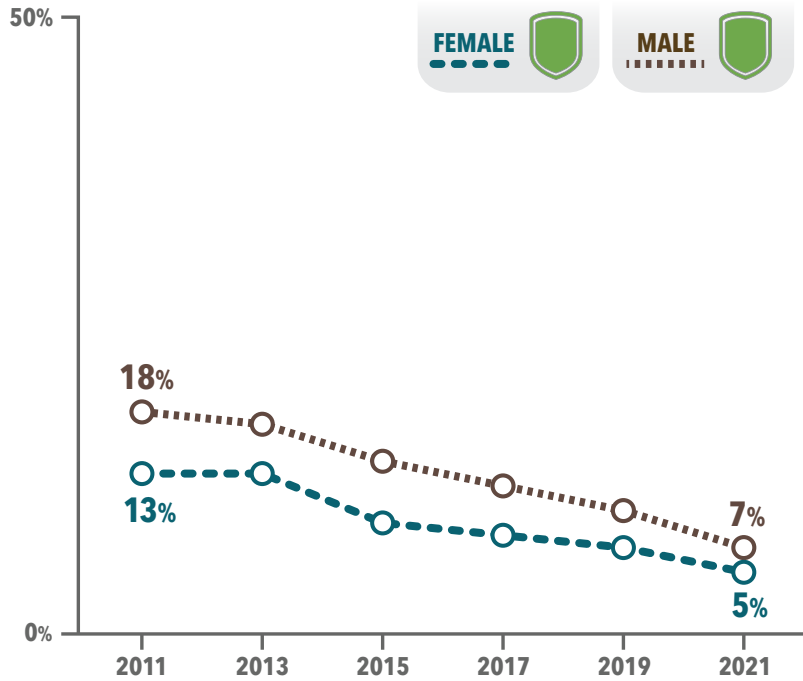


Trends in the Percentage of High School Students Who

Had Sex With Four or More Partners during Their Life, United States, YRBS, 2011-2021

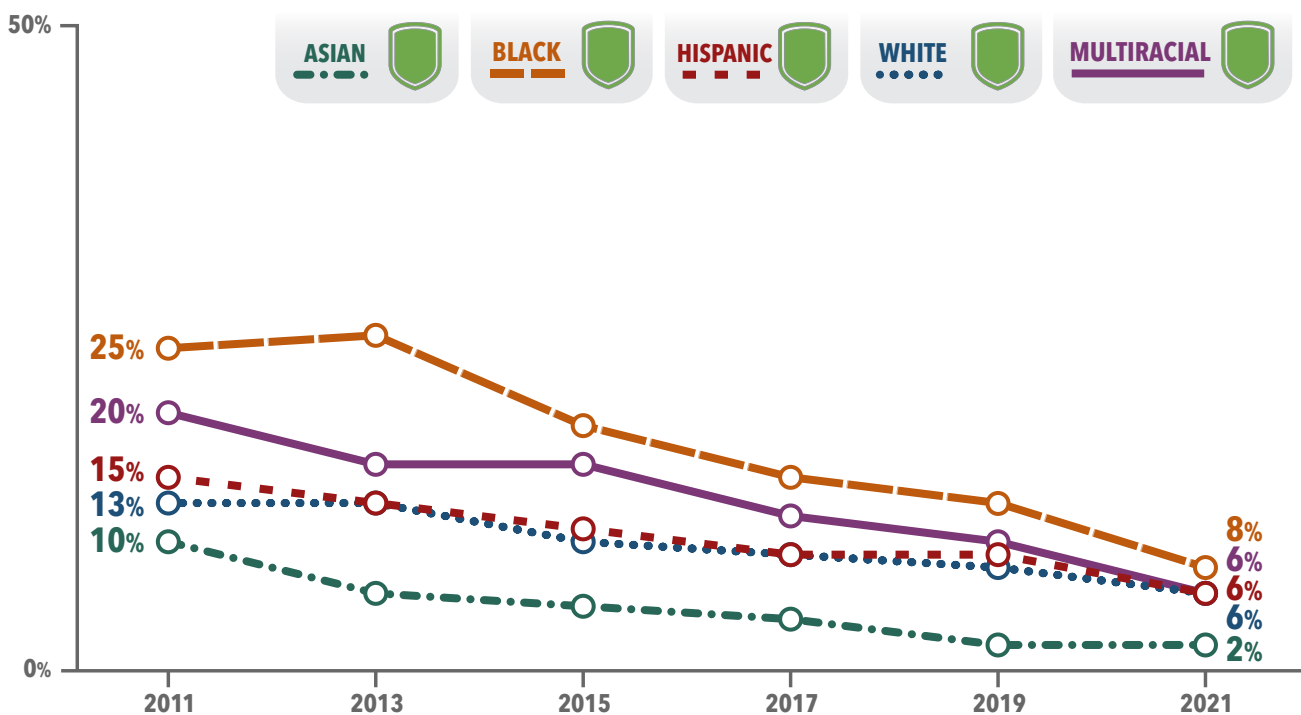
10-Year Trend Description by Sex

The percentage of female and male students who had sex with four or more partners during their life decreased from 2011 to 2021.



10-Year Trend Description by Race & Ethnicity

The percentage of students from each racial and ethnic group who had sex with four or more partners during their life decreased from 2011 to 2021.



In right direction



No change



In wrong direction

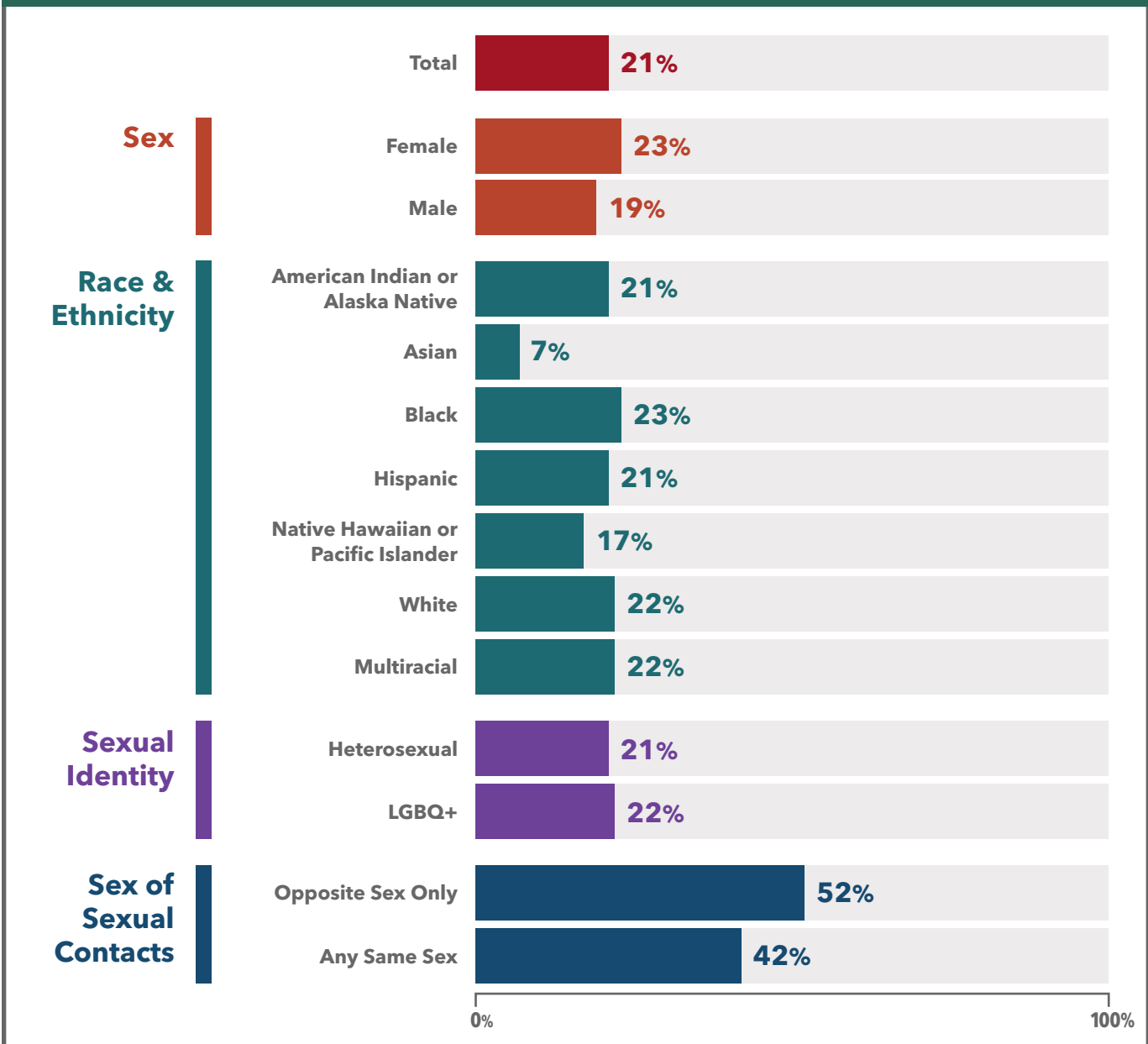


SEXUAL BEHAVIOR

CURRENTLY SEXUALLY ACTIVE

In 2021, 21% of high school students were currently sexually active (i.e., they had sexual intercourse with at least one person during the past three months). Female students were more likely than male students to be currently sexually active. Asian students were less likely than students from other racial and ethnic groups to be currently sexually active.

Percentage of High School Students Who Were Currently Sexually Active, by Demographic Characteristics, United States, YRBS, 2021

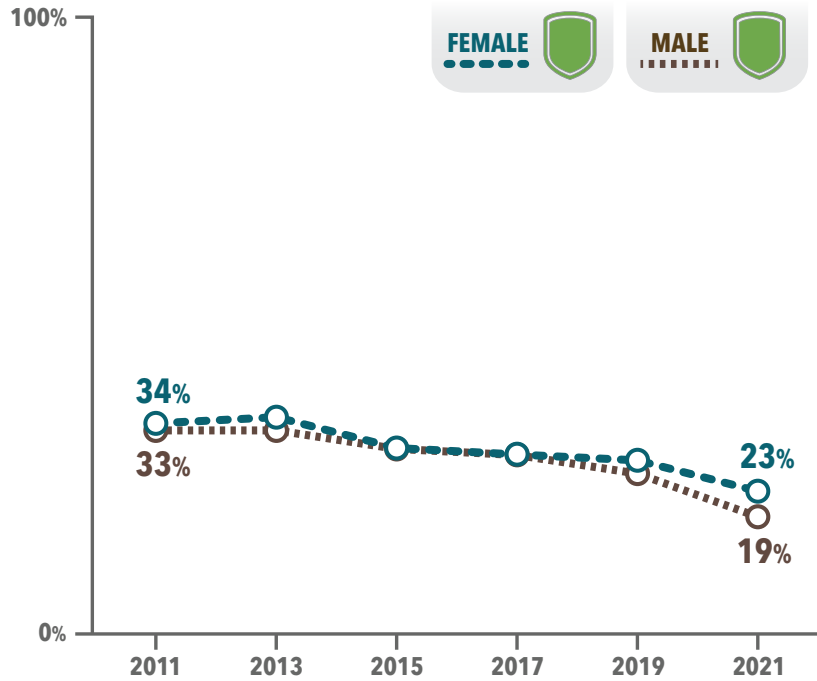


Trends in the Percentage of High School Students Who

Were Currently Sexually Active, United States, YRBS, 2011-2021

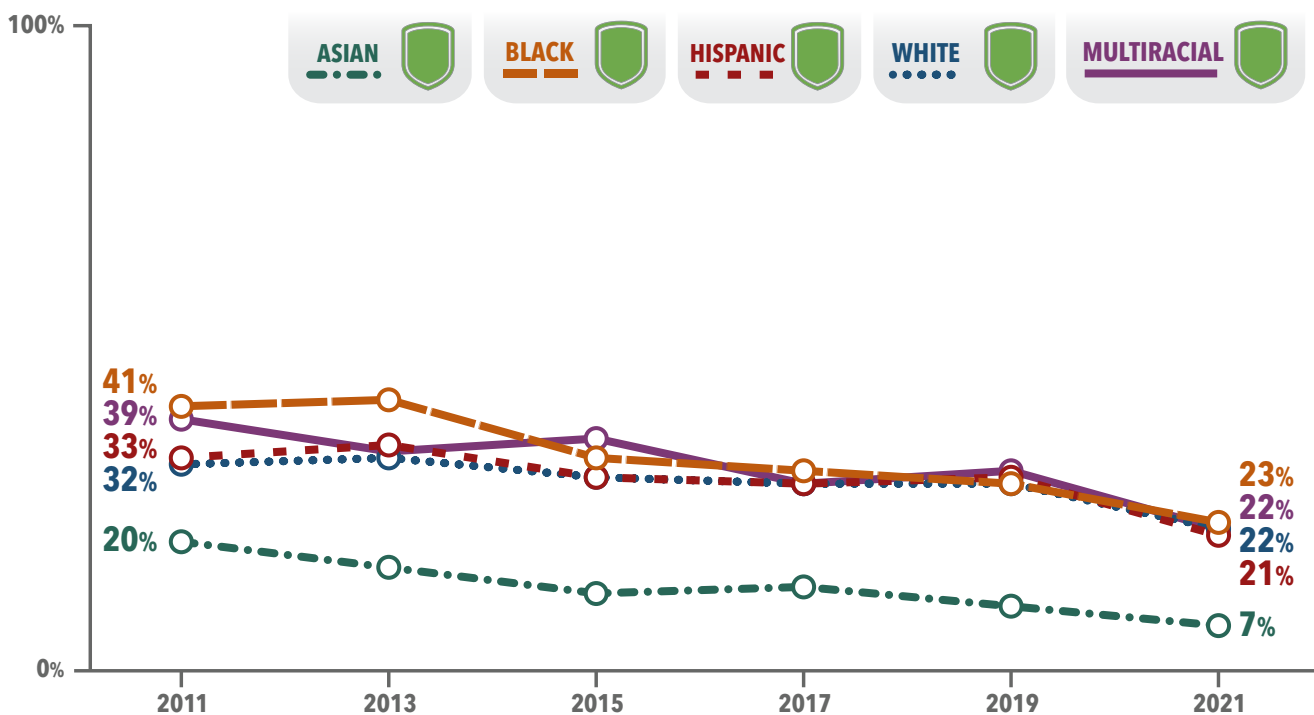
10-Year Trend Description by Sex

The percentage of female and male students who were currently sexually active decreased from 2011 to 2021.



10-Year Trend Description by Race & Ethnicity

The percentage of students from each racial and ethnic group who were currently sexually active decreased from 2011 to 2021.



In right direction



No change



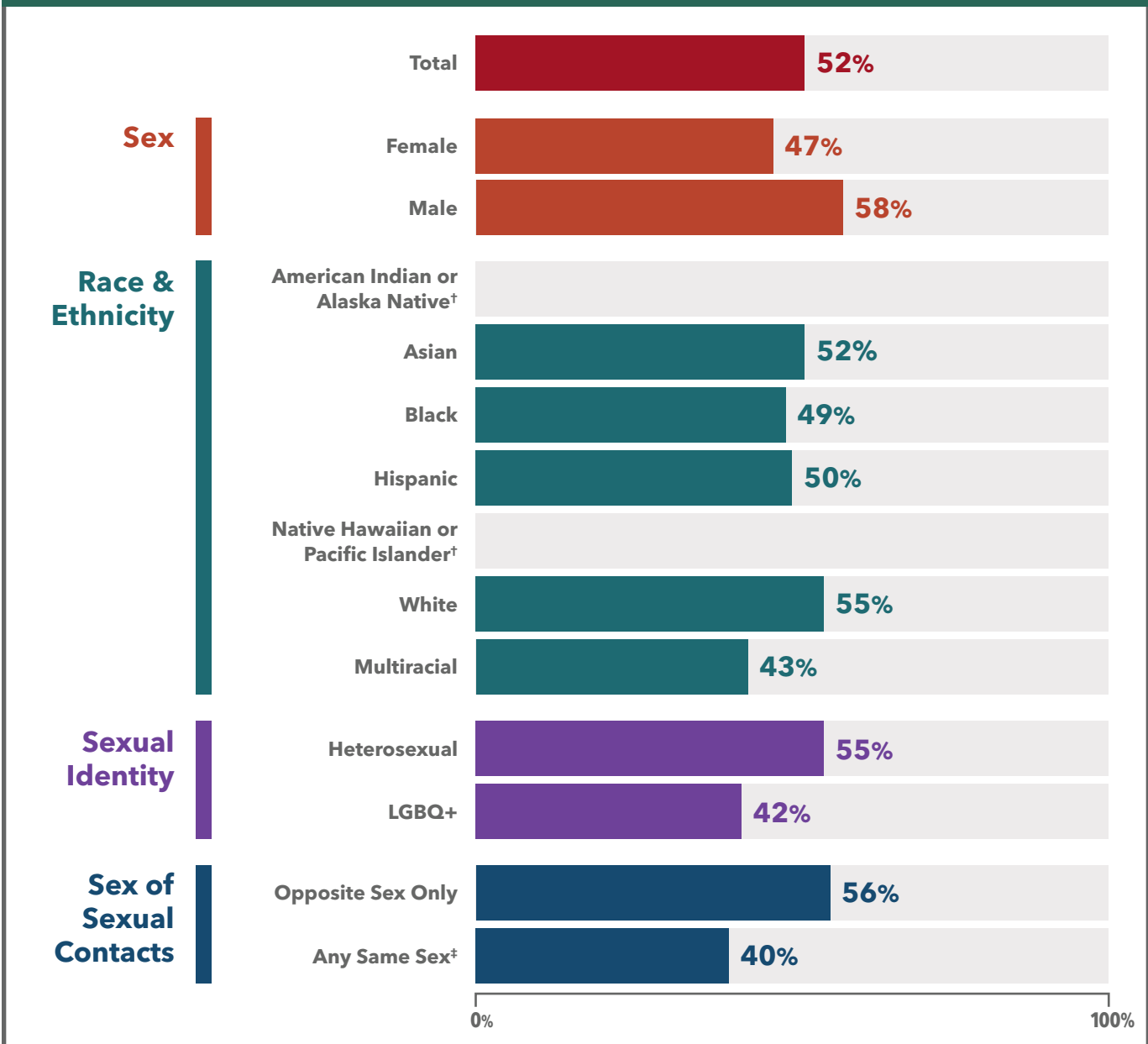
In wrong direction



USED A CONDOM DURING LAST SEXUAL INTERCOURSE

In 2021, 52% of currently sexually active high school students used a condom the last time they had sexual intercourse.

Percentage of High School Students Who Used a Condom the Last Time They Had Sex,* by Demographic Characteristics, United States, YRBS, 2021



*Among currently sexually active students.

†Estimates are suppressed when there are fewer than 30 respondents for the subgroup.

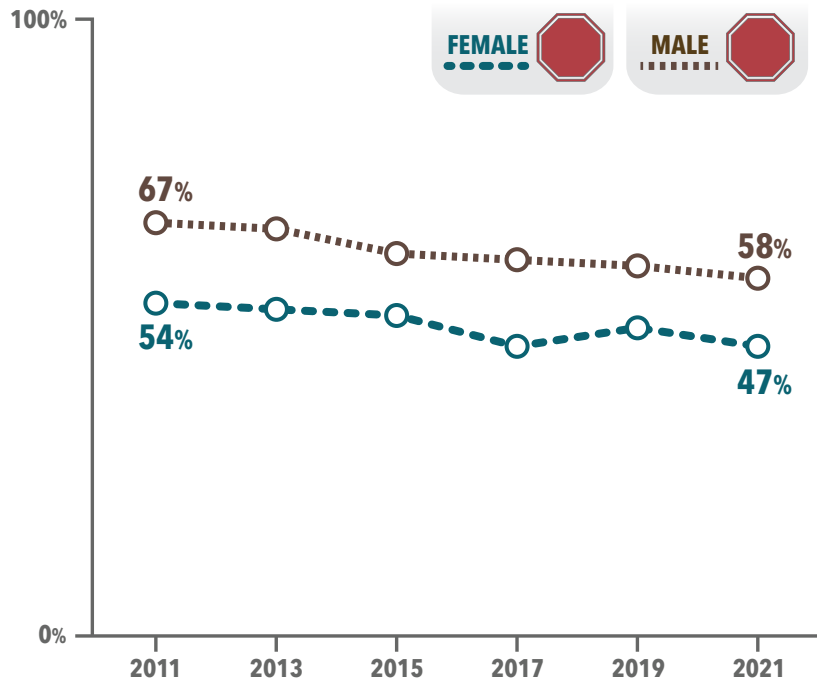
‡Female students who had sexual contact with only females are excluded from this analysis by sex of sexual contacts.

Trends in the Percentage of High School Students Who

Used a Condom the Last Time They Had Sex, United States, YRBS, 2011-2021

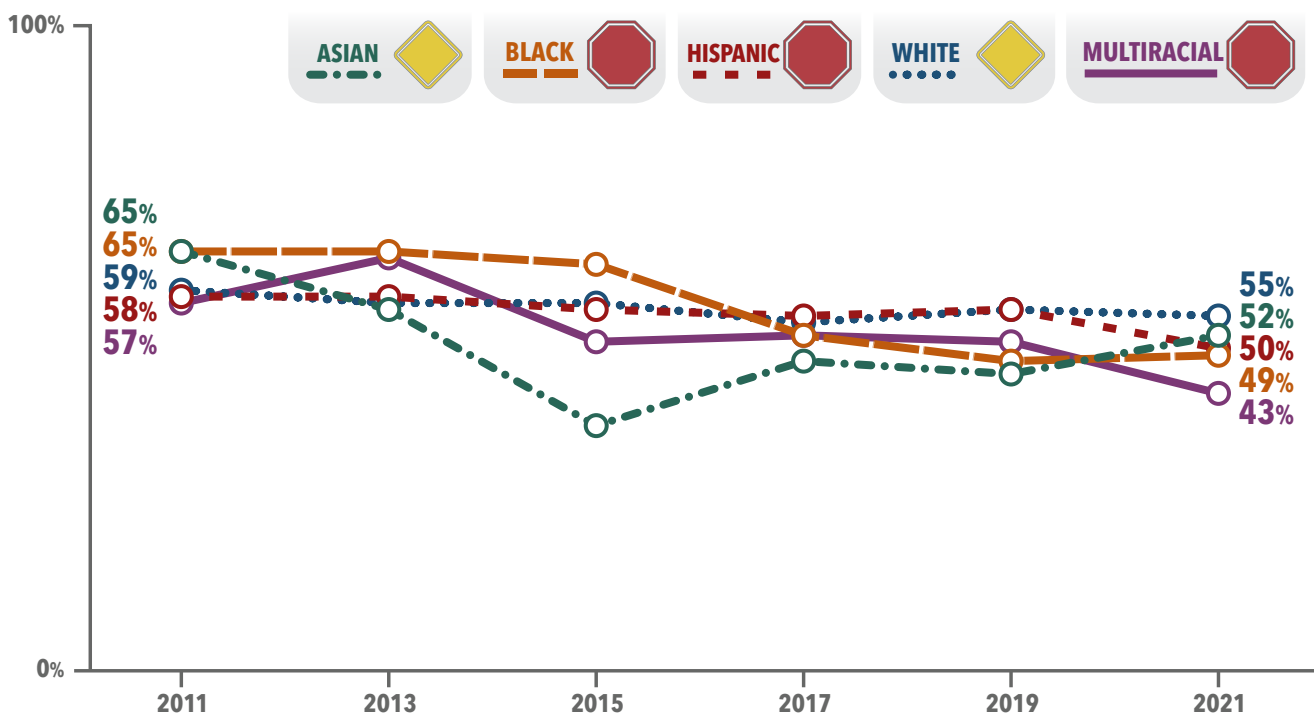
10-Year Trend Description by Sex

The percentage of female and male students who used a condom the last time they had sex decreased from 2011 to 2021.



10-Year Trend Description by Race & Ethnicity

The percentage of Black, Hispanic, and multiracial students who used a condom the last time they had sex decreased from 2011 to 2021. The percentage of Asian and White students who used a condom the last time they had sex did not change.



In right direction



No change

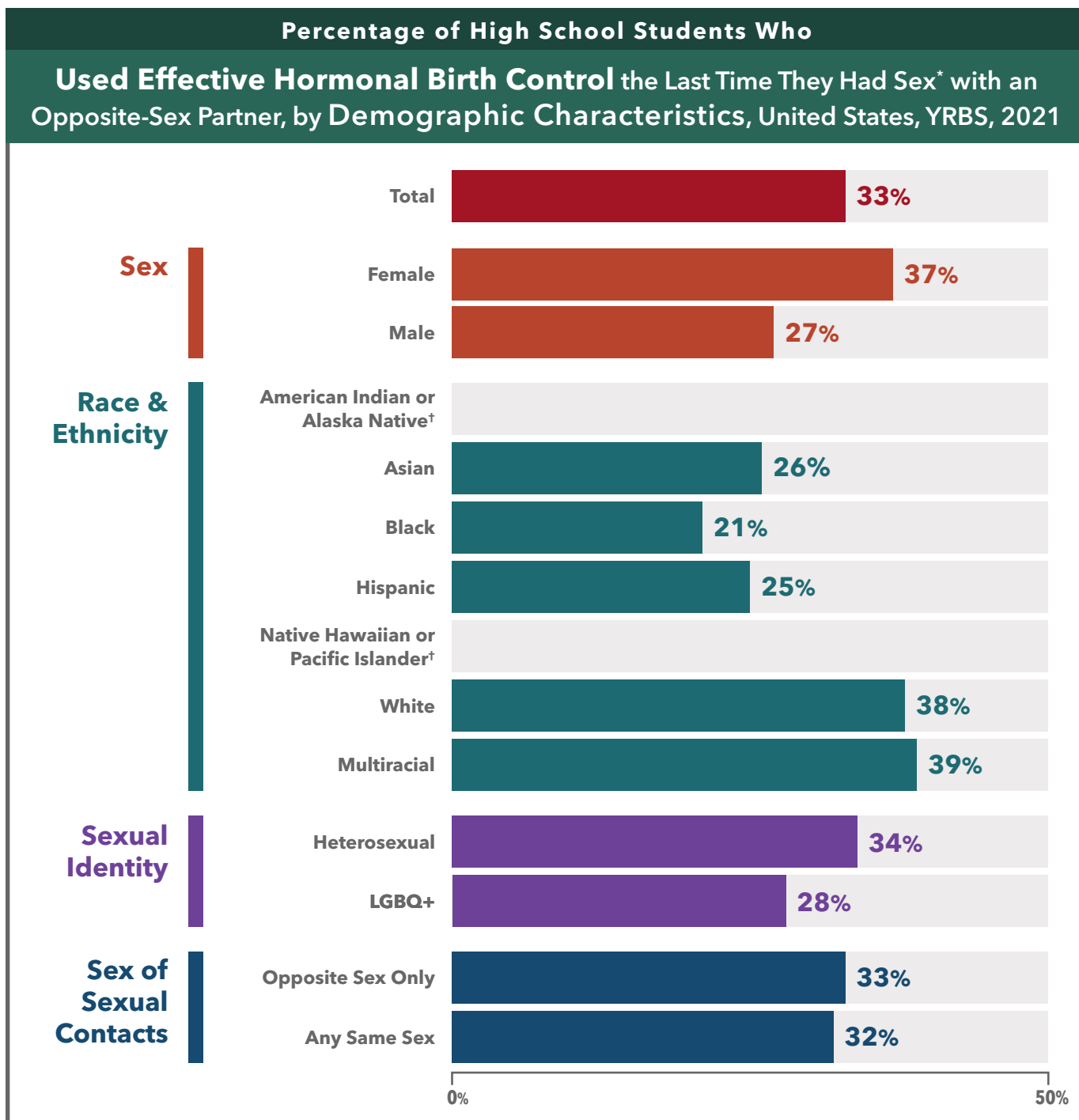


In wrong direction



EFFECTIVE HORMONAL BIRTH CONTROL USE

In 2021, one-third of high school students who were currently sexually active used effective hormonal birth control (defined as birth control pills, an IUD or implant, a shot, a patch, or a birth control ring) the last time they had sex with an opposite-sex partner. White and multiracial students were more likely than Black and Hispanic students to use effective hormonal birth control.



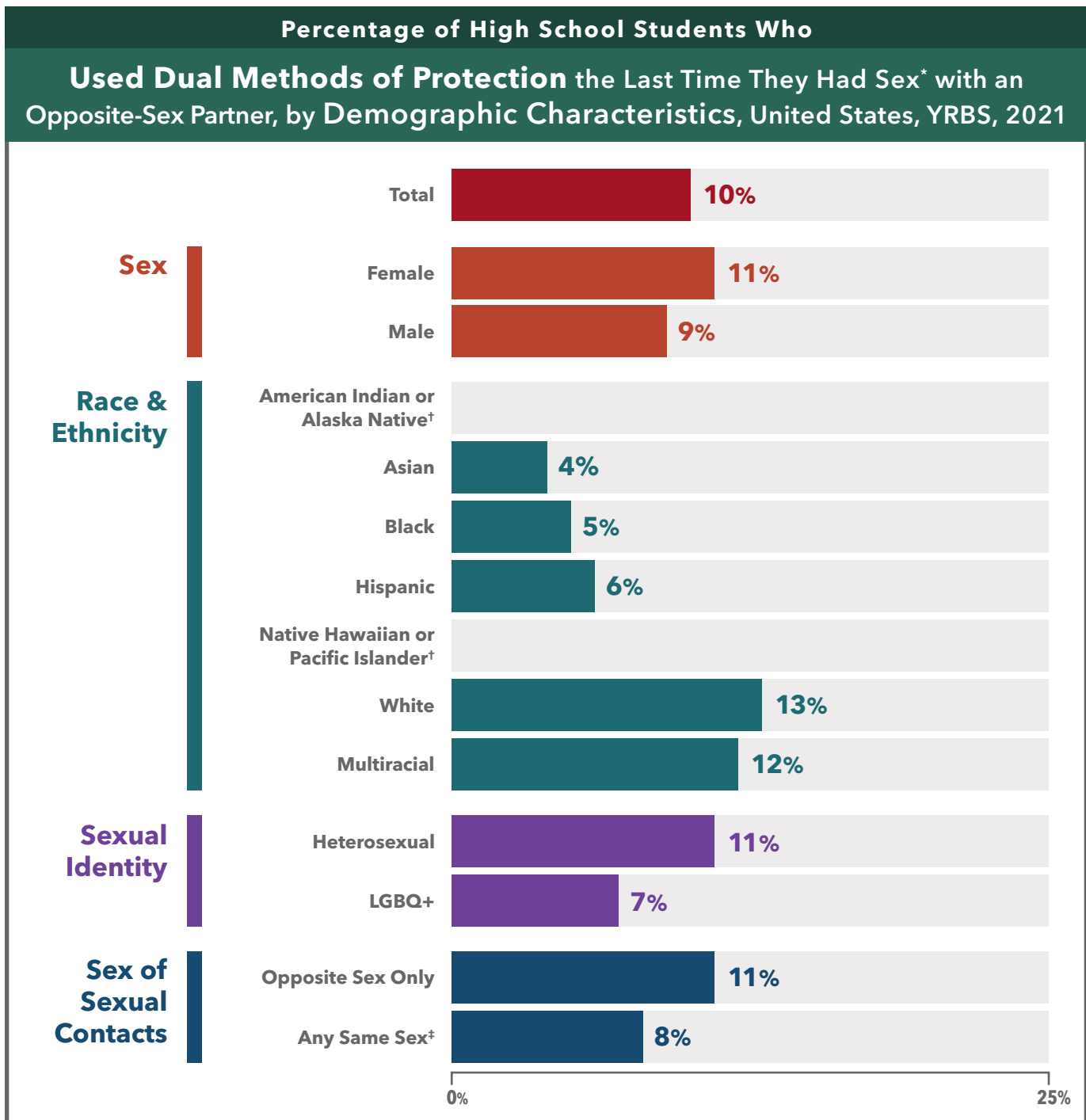
Note: The "effective hormonal birth control use" survey question changed in the 2021 national YRBS; therefore, trends are not available.

*Among currently sexually active students.

†Estimates are suppressed when there are fewer than 30 respondents for the subgroup.

CONDOM AND EFFECTIVE HORMONAL BIRTH CONTROL USE (DUAL METHOD USE)

In 2021, 10% of currently sexually active high school students used dual methods of protection the last time they had sex with an opposite-sex partner. Dual methods of protection include both a condom and effective hormonal birth control (defined as birth control pills, an IUD or implant, a shot, a patch, or a birth control ring). White students were more likely than Asian, Black, and Hispanic students to use dual methods of protection.



Note: The "effective hormonal birth control use" survey question changed in the 2021 national YRBS; therefore, trends are not available.

*Among currently sexually active students

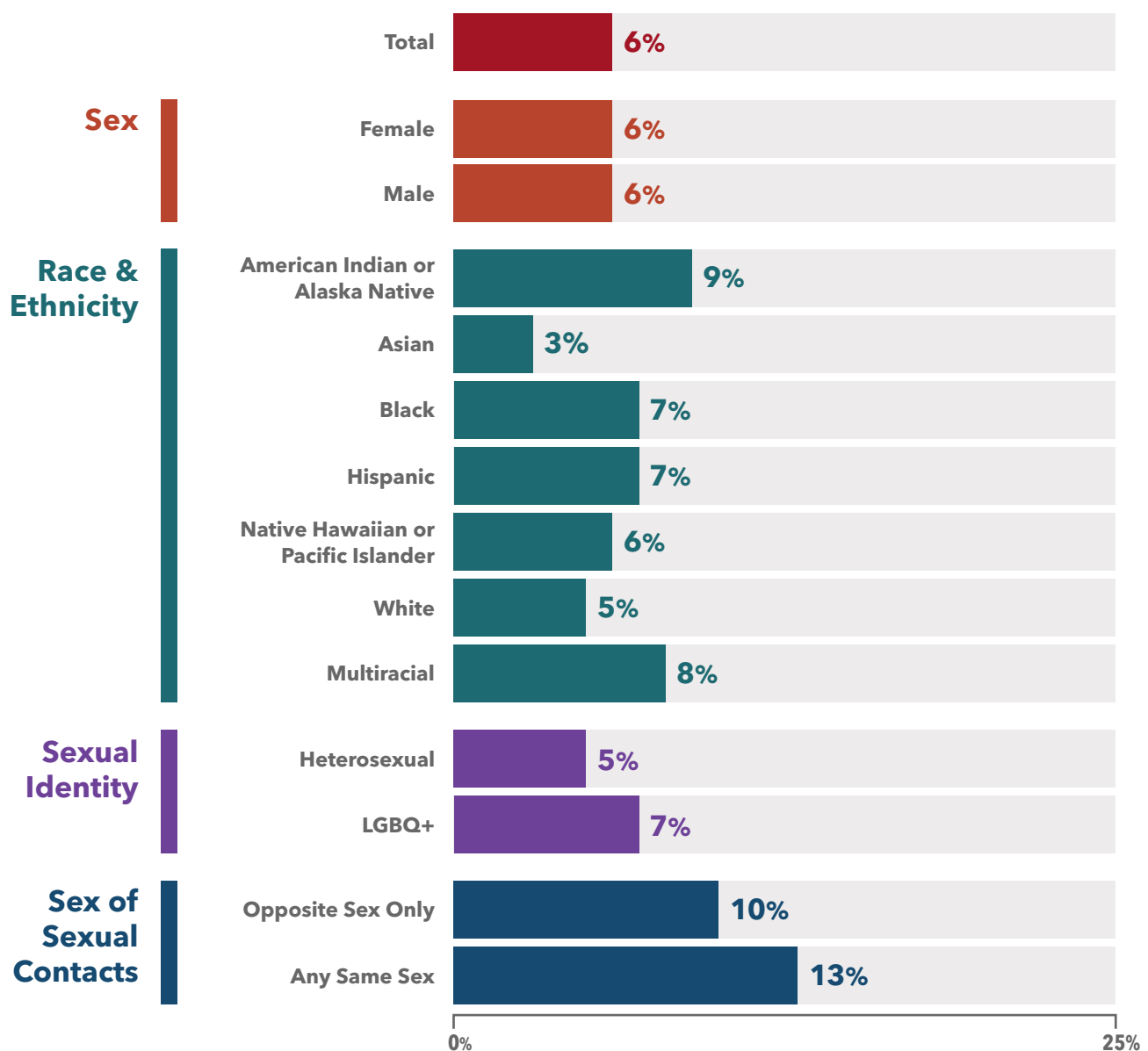
†Estimates are suppressed when there are fewer than 30 respondents for the subgroup.

‡Female students who had sexual contact with only females and male students who had sexual contact with only males were excluded from this analysis by sex of sexual contacts.

EVER TESTED FOR HIV

In 2021, 6% of high school students had ever been tested for HIV. Asian students were less likely than Black, Hispanic, and multiracial students to have ever been tested for HIV.

Percentage of High School Students Who Had Ever Been Tested for HIV, by Demographic Characteristics, United States, YRBS, 2021

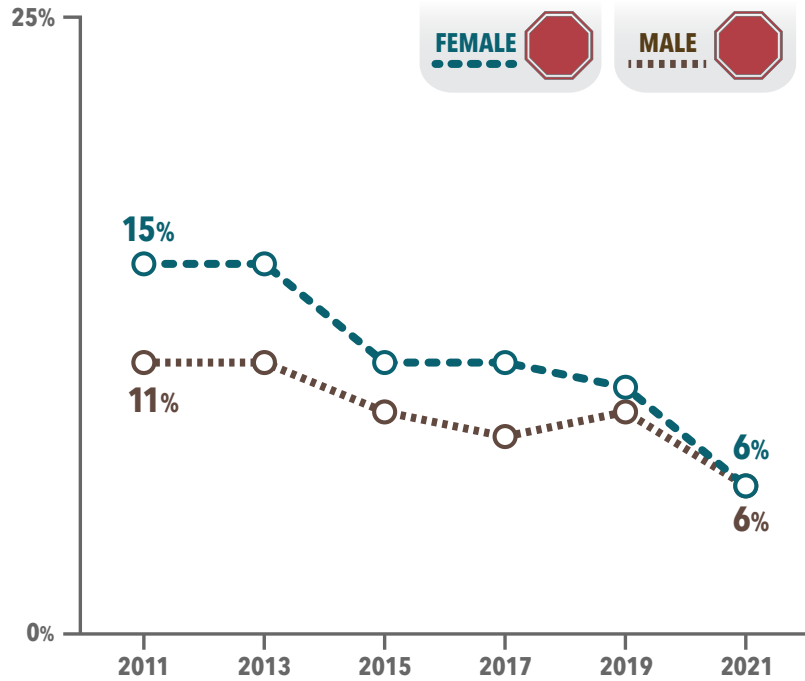


Trends in the Percentage of High School Students Who

Had Ever Been Tested for HIV, United States, YRBS, 2011-2021

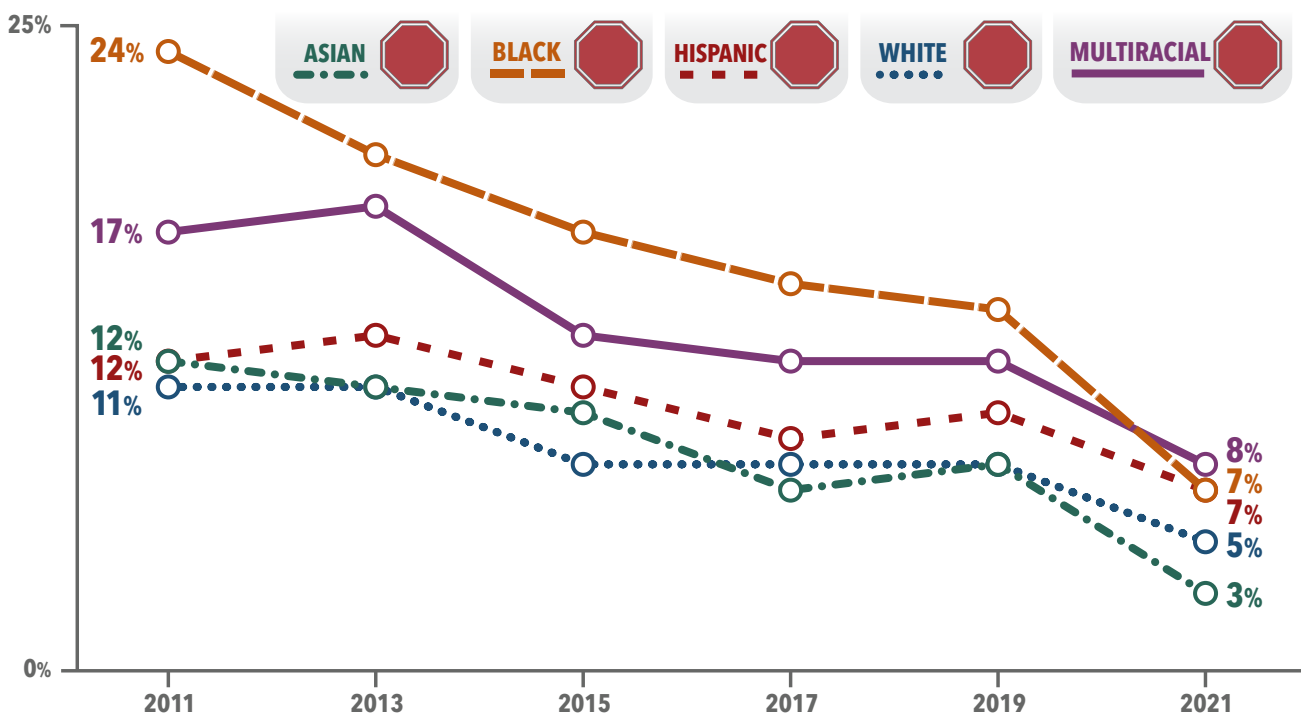
10-Year Trend Description by Sex

The percentage of female and male students who had ever been tested for HIV decreased from 2011 to 2021.



10-Year Trend Description by Race & Ethnicity

The percentage of students from each racial and ethnic group who had ever been tested for HIV decreased from 2011 to 2021.



In right direction



No change



In wrong direction



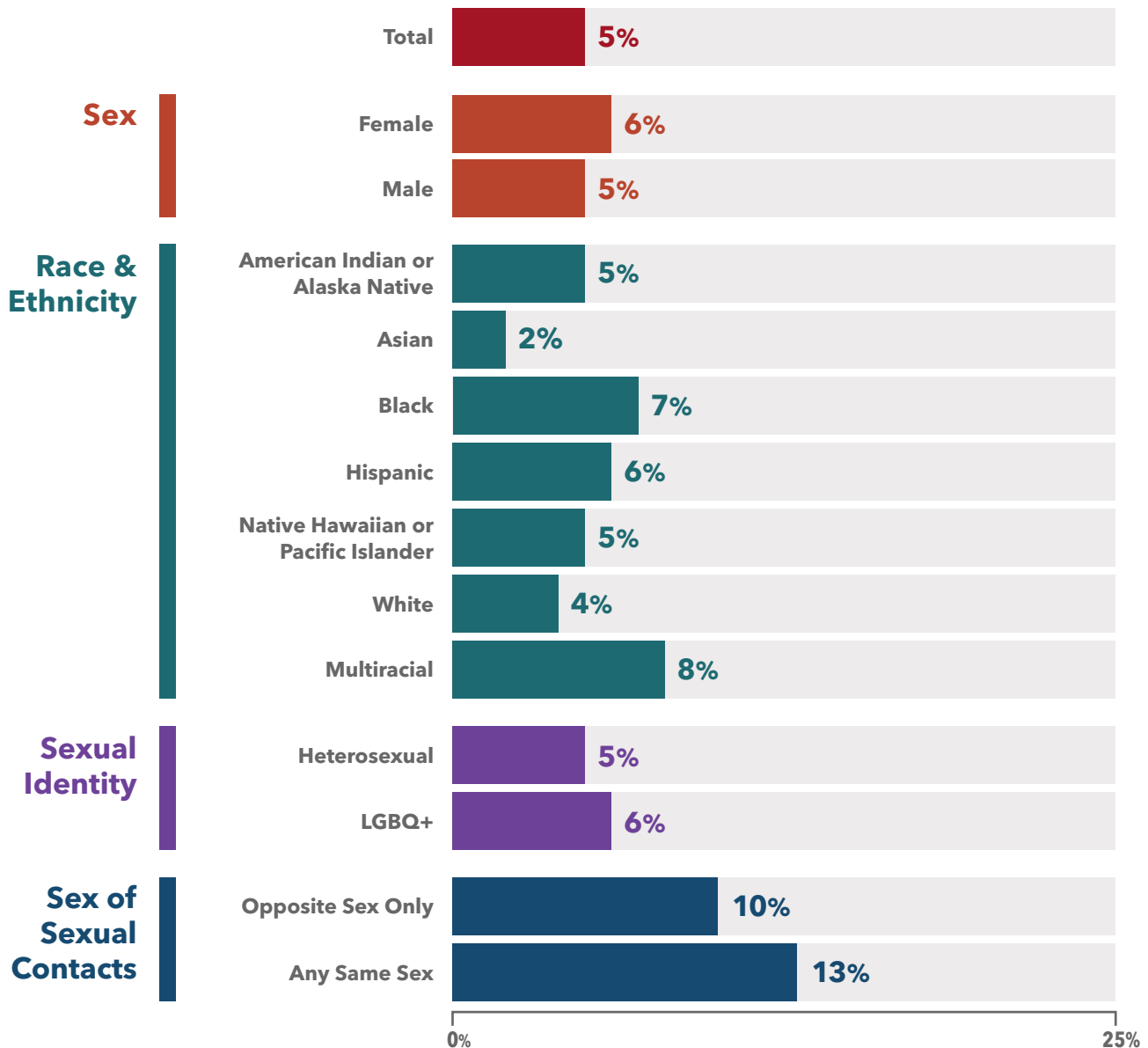
SEXUAL BEHAVIOR

TESTED FOR SEXUALLY TRANSMITTED DISEASES

In 2021, 5% of high school students were tested for STDs other than HIV during the past year. Female students were more likely than male students to be tested for STDs. Asian and White students were less likely than Black, Hispanic, and multiracial students to be tested for STDs. LGBTQ+ students were more likely than heterosexual students to be tested for STDs.

Percentage of High School Students Who

Were Tested for Sexually Transmitted Diseases during the Past Year, by Demographic Characteristics, United States, YRBS, 2021

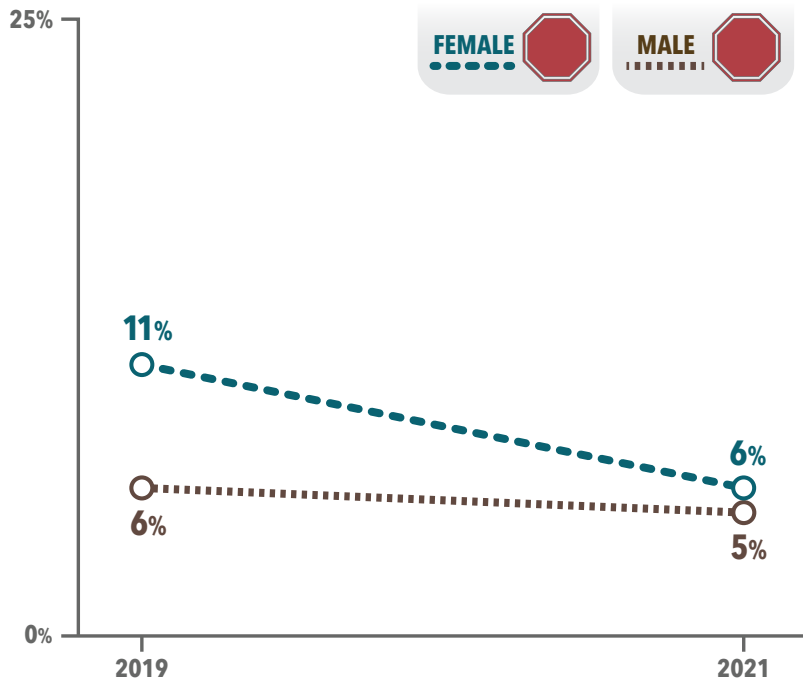


Trends in the Percentage of High School Students Who

Were Tested for Sexually Transmitted Diseases during the Past Year, United States, YRBS, 2019-2021

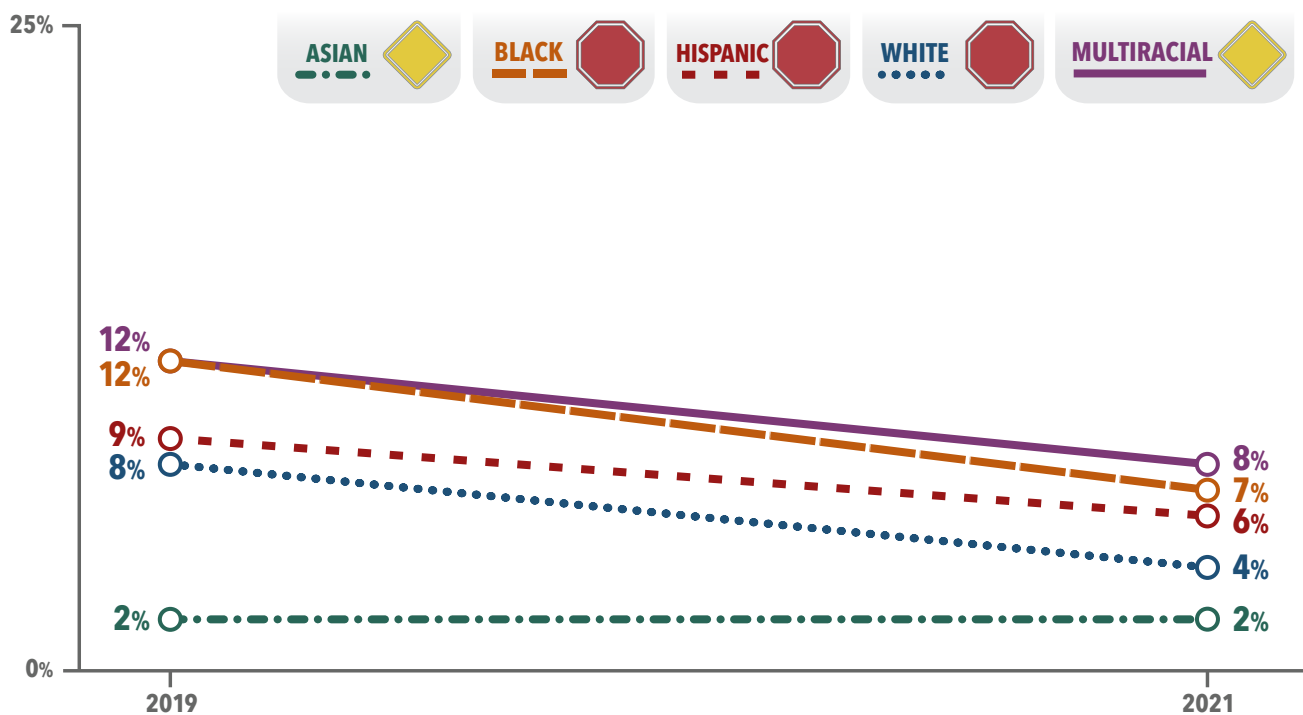
2-Year Trend Description by Sex

The percentage of female and male students who were tested for STDs decreased from 2019 to 2021.



2-Year Trend Description by Race & Ethnicity

The percentage of Black, Hispanic, and White students who were tested for STDs decreased from 2019 to 2021. The percentage of Asian and multiracial students who were tested for STDs did not change.



In right direction



No change



In wrong direction









FOCUS AREA

SUBSTANCE USE

Progress At-A-Glance for Substance Use Variables	28
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Current Marijuana Use	32
Current Electronic Vapor Product Use	34
Ever Used Select Illicit Drugs	36
Ever Misused Prescription Opioids	38
Current Prescription Opioid Misuse	40

PROGRESS AT-A-GLANCE FOR SUBSTANCE USE VARIABLES

Substance use during adolescence is associated with sexual risk behaviors, experiencing violence, poor mental health, and suicidality.^{3-7,34} Preventing substance use in young people can reduce these risks as well as the risk for later use of substances.³⁵ Substance use variables included the percentage of high school students who drank alcohol, used marijuana, or used electronic vapor products during the past 30 days (i.e., current use); the percentage of students who ever used select illicit drugs, defined as cocaine, inhalants, heroin, methamphetamines, hallucinogens, or ecstasy; and the percentage of students who misused prescription opioids, either ever in their lifetime or during the past 30 days. Students who used electronic vapor products may have used them to deliver nicotine, cannabis, or other substances. Misusing prescription opioids was defined as having used prescription pain medication, such as codeine, Vicodin, OxyContin, Hydrocodone, or Percocet, without a prescription or differently than indicated by a doctor.

The Percentage of High School Students Who:*	2011 Total	2013 Total	2015 Total	2017 Total	2019 Total	2021 Total	Trend
Currently drank alcohol	39	35	33	30	29	23	
Currently used marijuana	23	23	22	20	22	16	
Currently used an electronic vapor product†	–	–	24	13	33	18	
Ever used select illicit drugs	19	16	13	13	13	13	
Ever misused prescription opioids‡	–	–	–	14	14	12	
Currently misused prescription opioids§	–	–	–	–	7	6	

*For the complete wording of YRBS questions, refer to the appendix.

†Variable introduced in 2015.

‡Variable introduced in 2017.

§Variable introduced in 2019.

	In wrong direction
	No change
	In right direction

SUMMARY OF RESULTS FOR SUBSTANCE USE



Substance use among high school students decreased for some substances from 2011 to 2021. However, many students still used substances and the lack of progress in adolescents' use of some substances is concerning. The percentage of students who used electronic vapor products did not change from 2015 to 2021 and the percentage of students who currently misused prescription opioids did not change from 2019 to 2021.

In 2021

Female students, LGBTQ+ students, and students with any same-sex partners were more likely than their peers to engage in every substance use behavior.

- Nearly 30% of female students currently drank alcohol and nearly 20% currently used marijuana.
- Approximately 20% of LGBTQ+ students had ever used select illicit drugs and 20% had ever misused prescription opioids.

Asian and Black students were less likely than students from nearly every other racial and ethnic group to have ever used select illicit drugs.

White students were more likely than Asian, Black, and Hispanic students to currently drink alcohol.

Black students were more likely than Asian, Hispanic, and White students to currently use marijuana.

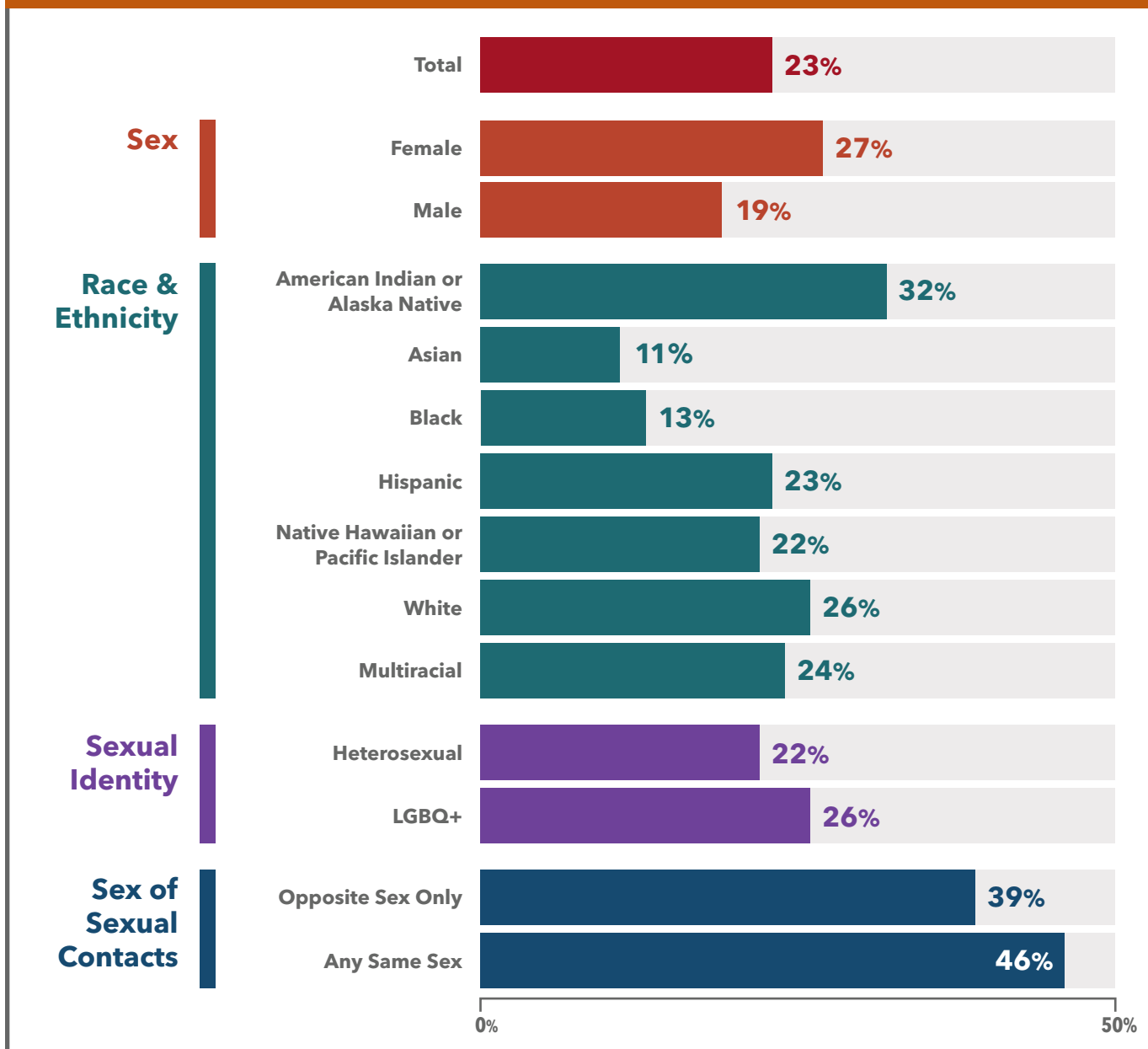
TRENDS

Although the percentage of high school students who currently used marijuana decreased overall from 2011 to 2021, the percentage of female students who currently used marijuana did not change. This same pattern can be seen in the percentage of students who had ever misused prescription opioids from 2017 to 2021.

CURRENT ALCOHOL USE

In 2021, 23% of high school students drank alcohol during the past 30 days. Female students were more likely than male students to currently drink alcohol. White students were more likely than Asian, Black, and Hispanic students to currently drink alcohol. Black students were less likely than students from nearly all other racial and ethnic groups to currently drink alcohol. LGBTQ+ students and students with any same-sex partners were more likely than their peers to currently drink alcohol.

Percentage of High School Students Who Drank Alcohol during the Past 30 Days, by Demographic Characteristics, United States, YRBS, 2021

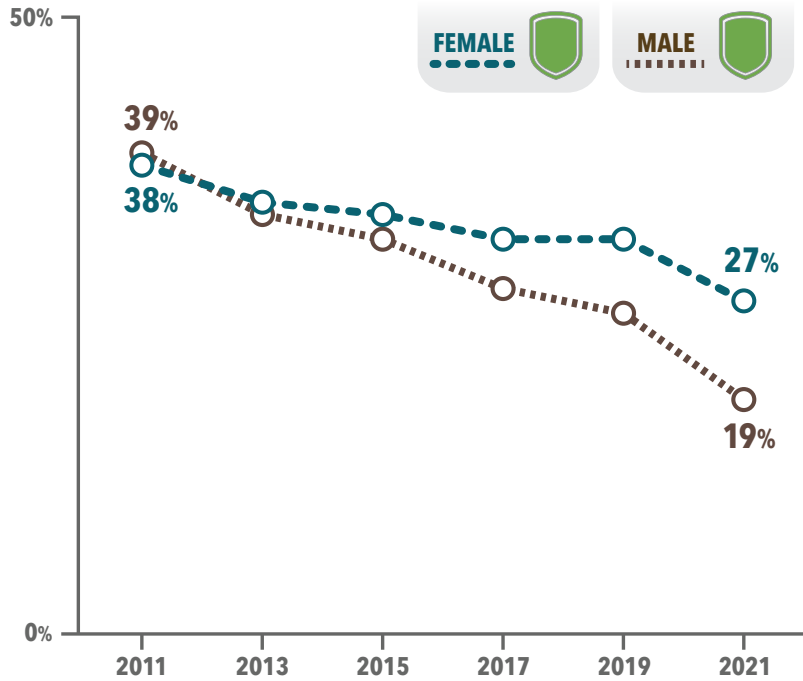


Trends in the Percentage of High School Students Who

Drank Alcohol during the Past 30 Days, United States, YRBS, 2011-2021

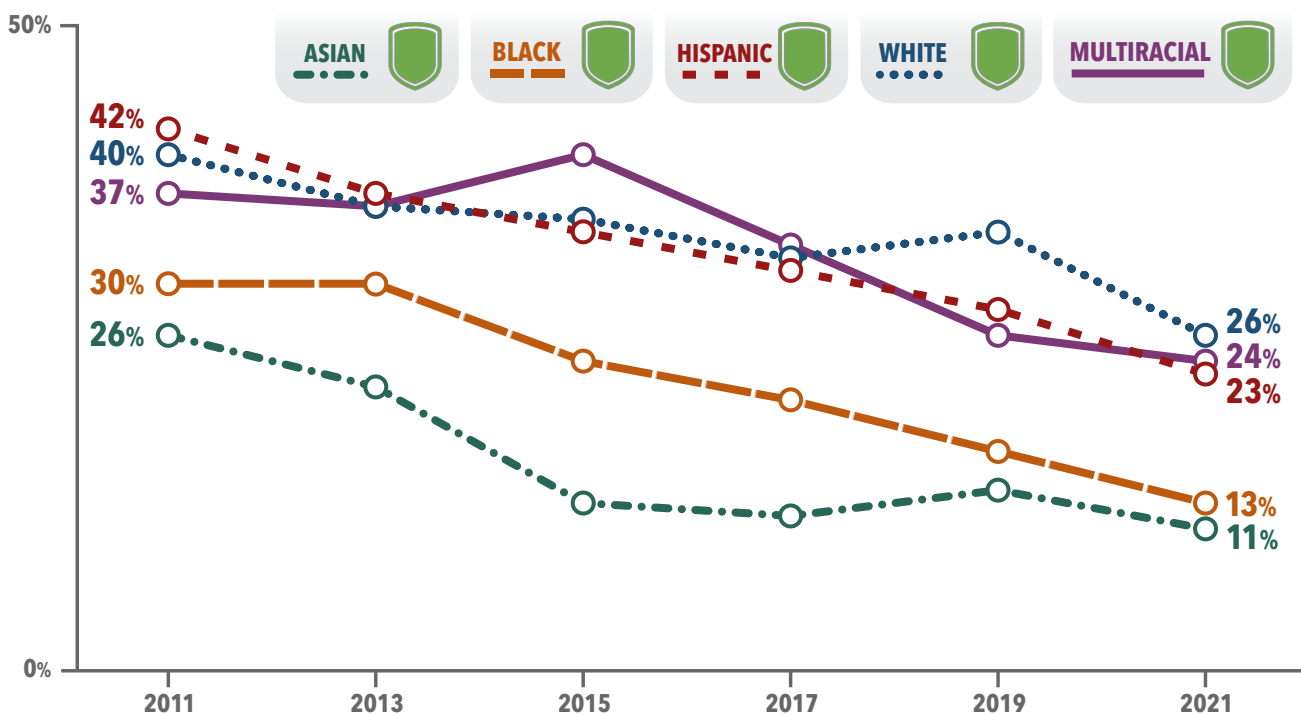
10-Year Trend Description by Sex

The percentage of female and male students who currently drank alcohol decreased from 2011 to 2021.



10-Year Trend Description by Race & Ethnicity

The percentage of students across each racial and ethnic group who currently drank alcohol decreased from 2011 to 2021.



In right direction



No change



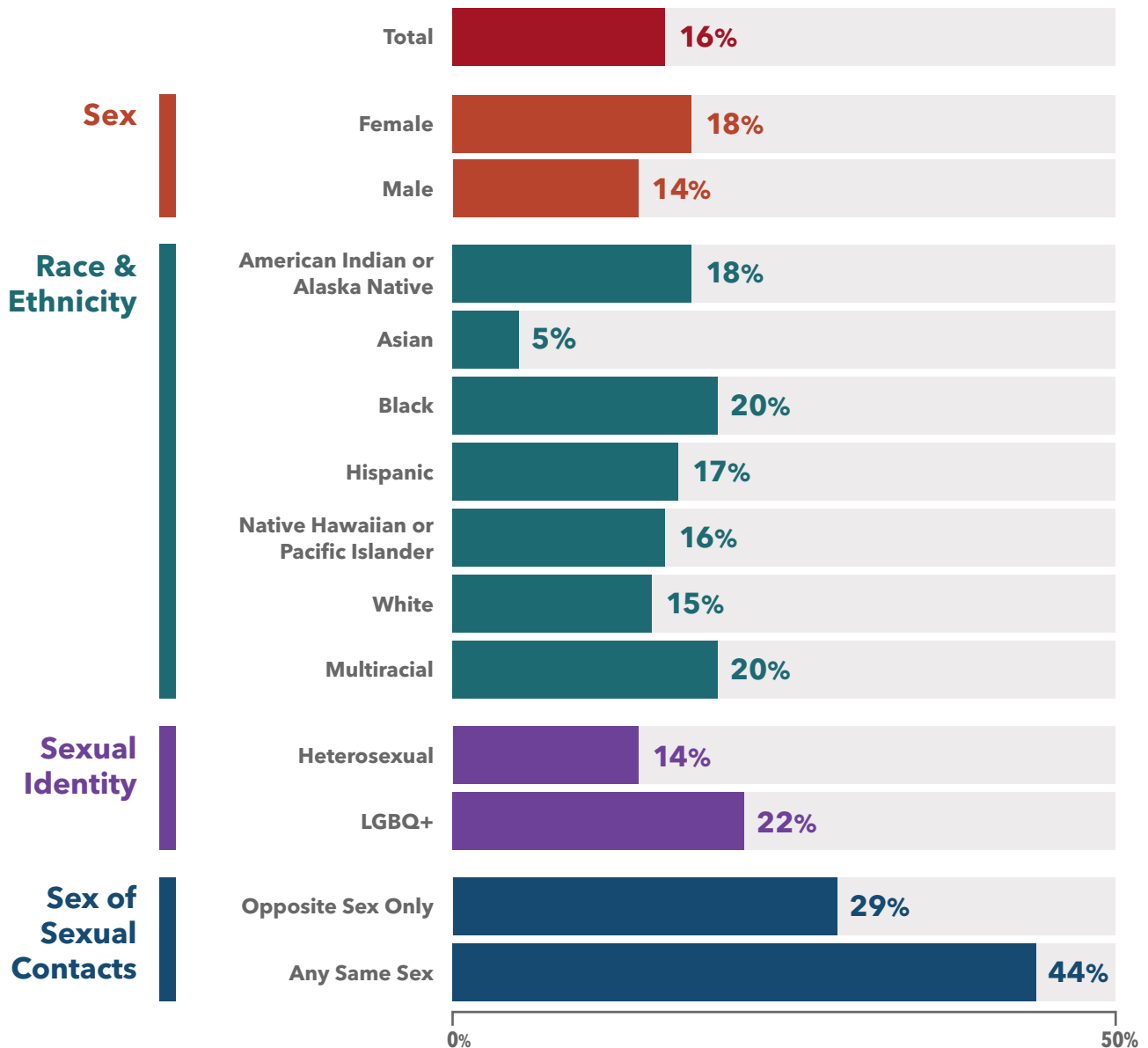
In wrong direction



CURRENT MARIJUANA USE

In 2021, 16% of high school students used marijuana during the past 30 days. Female students were more likely than male students to currently use marijuana. Black students were more likely than Asian, Hispanic, and White students to currently use marijuana. LGBTQ+ students and students with any same-sex partners were more likely than their peers to currently use marijuana.

Percentage of High School Students Who Used Marijuana during the Past 30 Days, by Demographic Characteristics, United States, YRBS, 2021

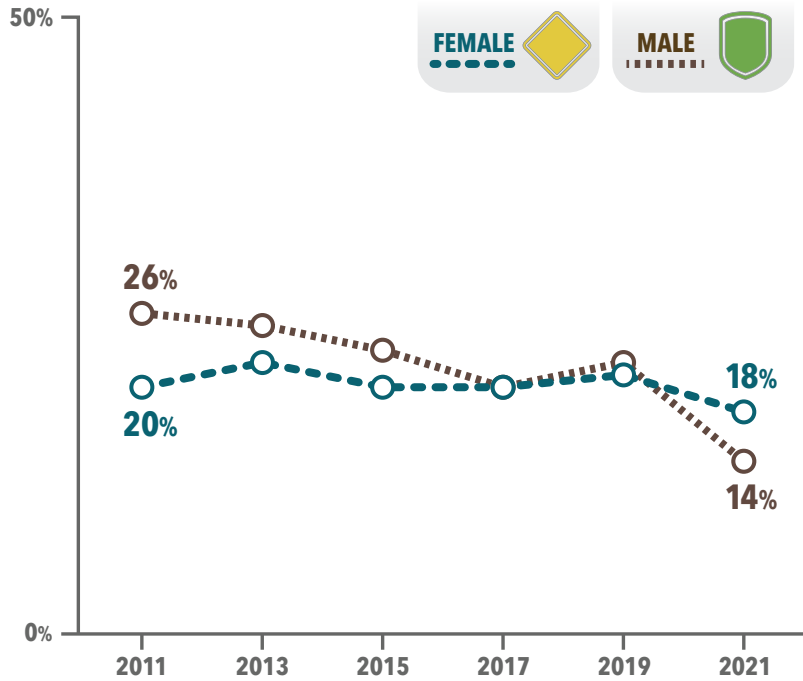


Trends in the Percentage of High School Students Who

Used Marijuana during the Past 30 Days, United States, YRBS, 2011-2021

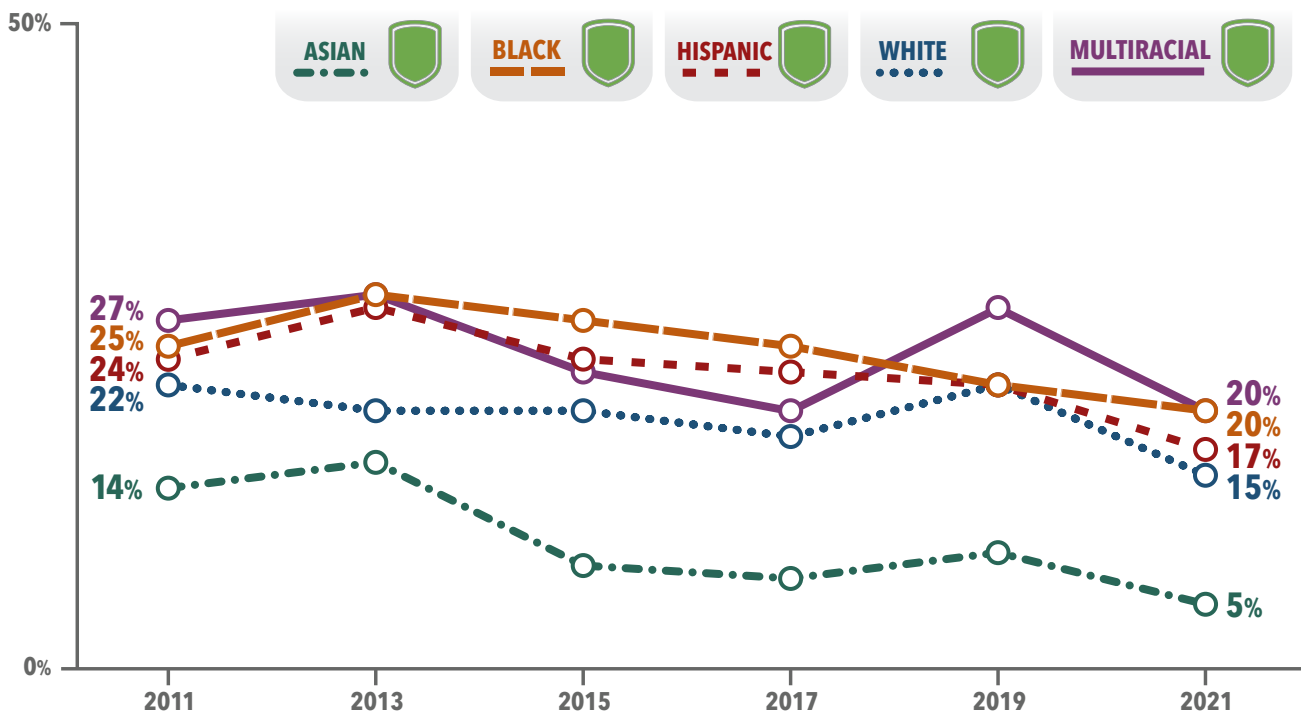
10-Year Trend Description by Sex

The percentage of male students who currently used marijuana decreased from 2011 to 2021. The percentage of female students who currently used marijuana did not change.



10-Year Trend Description by Race & Ethnicity

The percentage of students from each racial and ethnic group who currently used marijuana decreased from 2011 to 2021.



In right direction



No change



In wrong direction



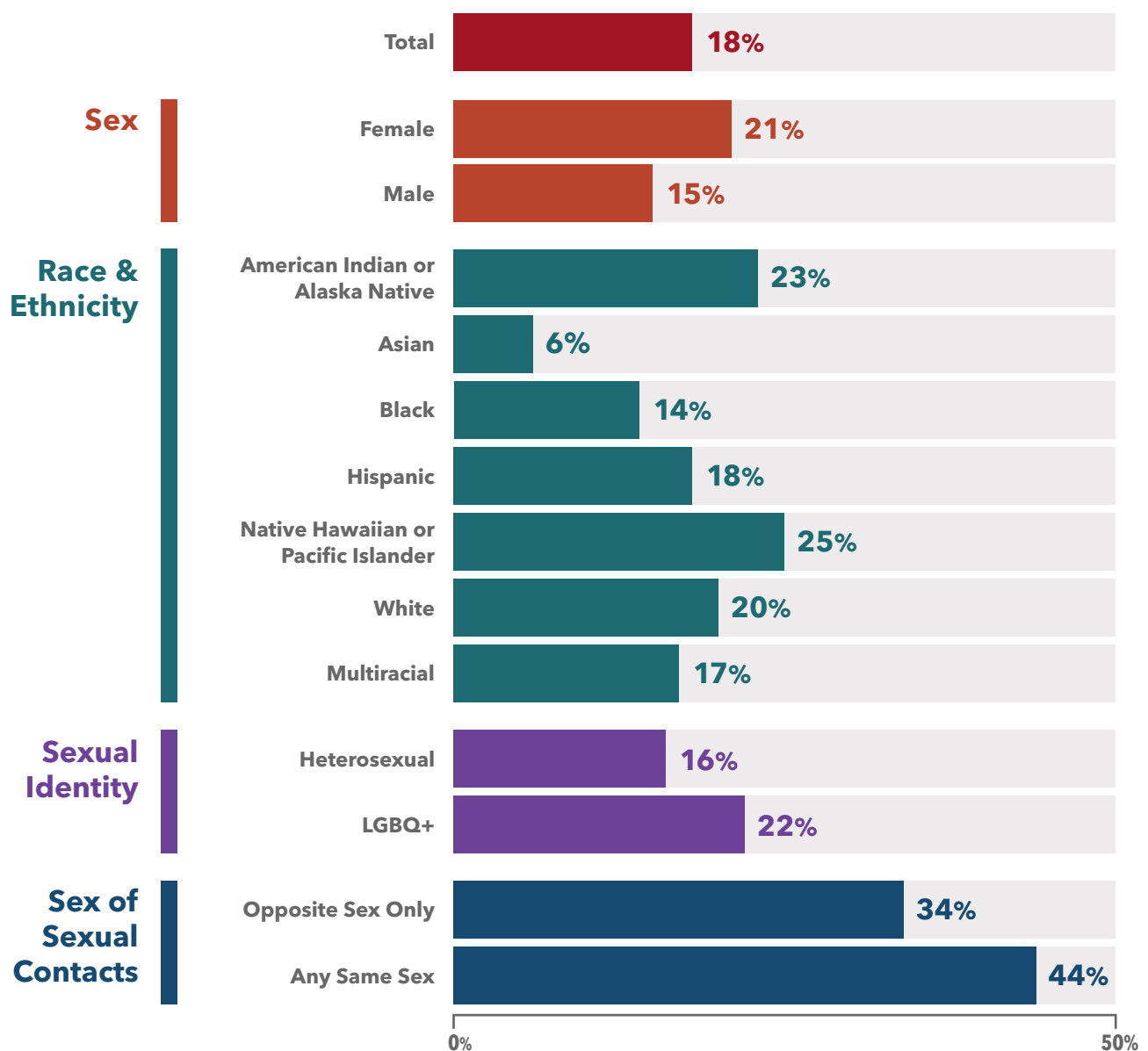
SUBSTANCE USE

CURRENT ELECTRONIC VAPOR PRODUCT USE

In 2021, 18% of high school students used an electronic vapor product during the past 30 days. Female students were more likely than male students to currently use electronic vapor products. White students were more likely than Asian and Black students to currently use electronic vapor products. LGBTQ+ students and students with any same-sex partners were more likely than their peers to currently use electronic vapor products.

Percentage of High School Students Who

Used Electronic Vapor Products during the Past 30 Days, by Demographic Characteristics, United States, YRBS, 2021

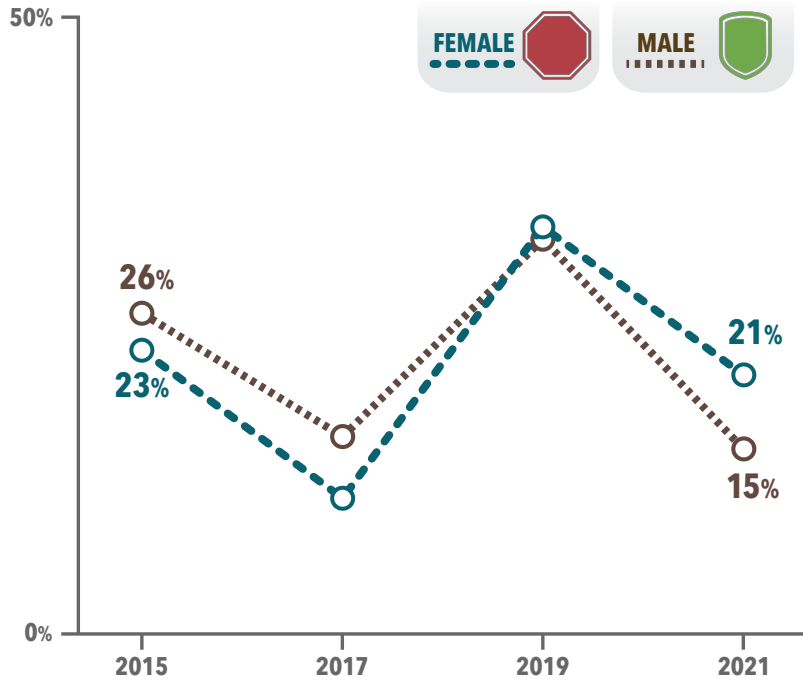


Trends in the Percentage of High School Students Who

Used Electronic Vapor Products during the Past 30 Days, United States, YRBS, 2015-2021

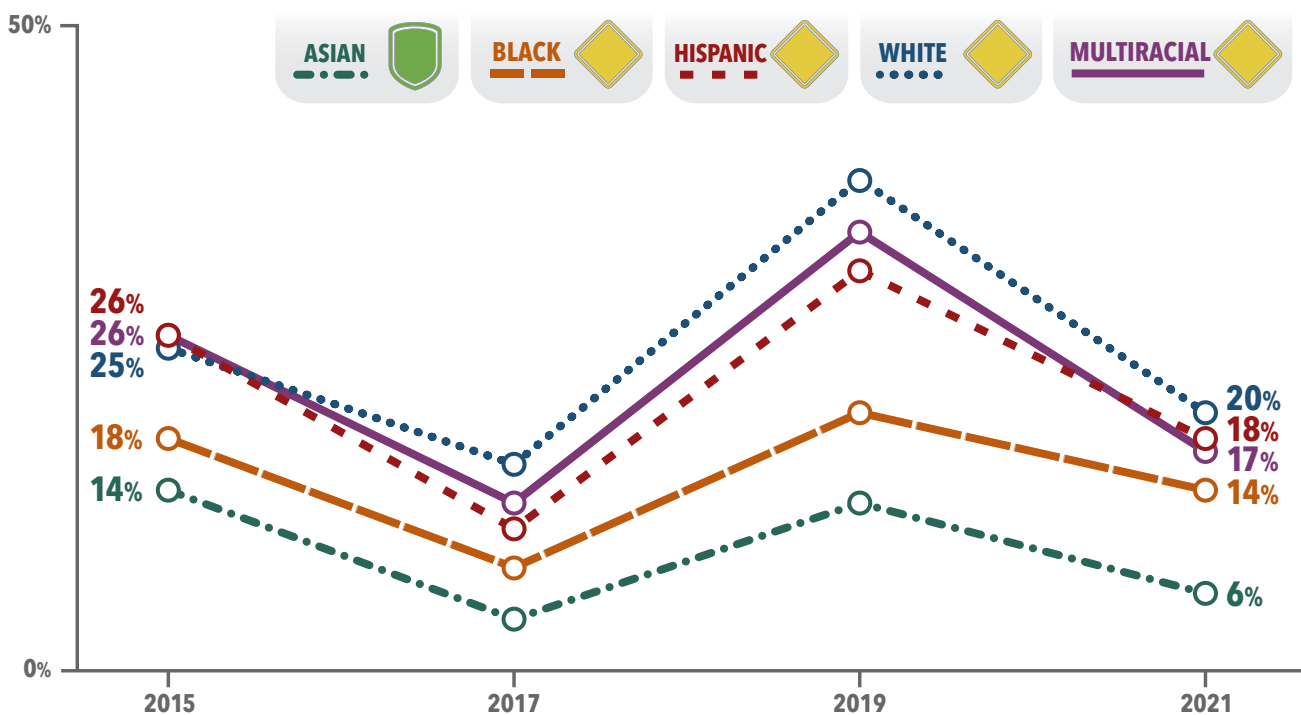
6-Year Trend Description by Sex

The percentage of female students who currently used electronic vapor products increased from 2015 to 2021. The percentage of male students who currently used electronic vapor products decreased.



6-Year Trend Description by Race & Ethnicity

The percentage of Asian students who currently used electronic vapor products decreased from 2015 to 2021. The percentage of students from each other racial and ethnic group who currently used electronic vapor products did not change.



In right direction



No change



In wrong direction

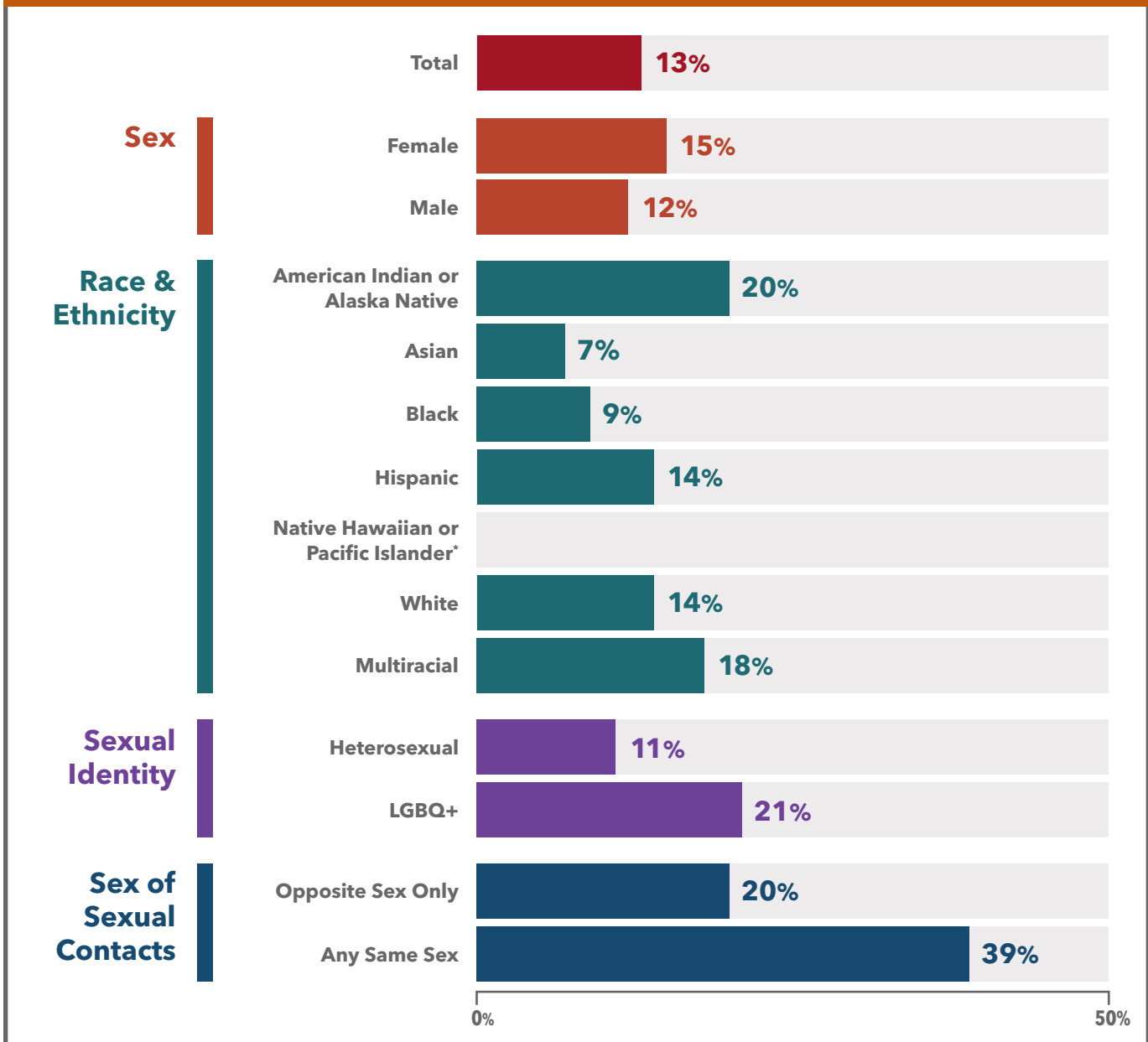


SUBSTANCE USE

EVER USED SELECT ILLICIT DRUGS

In 2021, 13% of high school students had ever used certain illicit drugs (defined as cocaine, inhalants, heroin, methamphetamines, hallucinogens, or ecstasy). Female students were more likely than male students to have ever used select illicit drugs. Asian and Black students were less likely than students from nearly all other racial and ethnic groups to have ever used select illicit drugs. LGBTQ+ students and students with any same-sex partners were more likely than their peers to have ever used select illicit drugs.

**Percentage of High School Students Who
Had Ever Used Select Illicit Drugs,
by Demographic Characteristics, United States, YRBS, 2021**



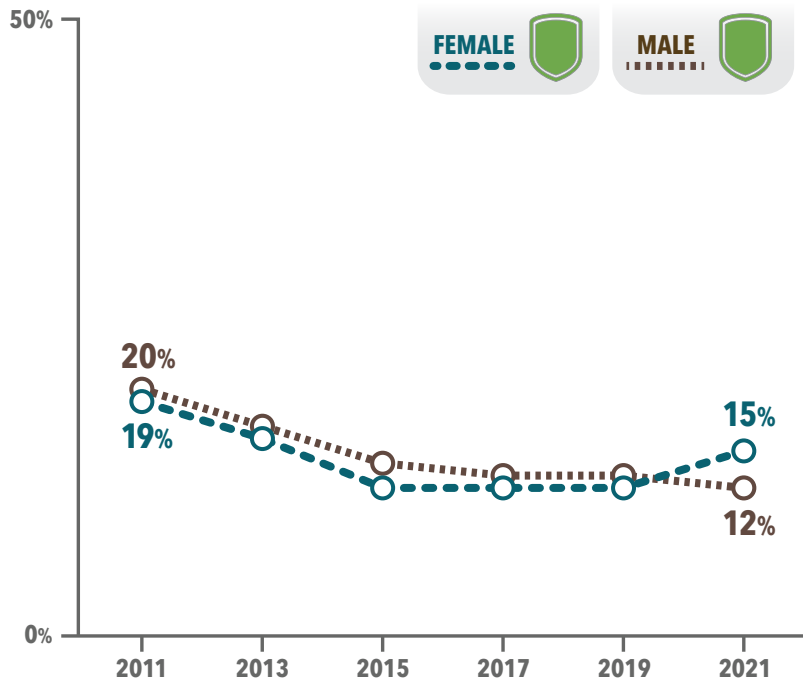
*Estimates are suppressed when there are fewer than 30 respondents for the subgroup.

Trends in the Percentage of High School Students Who

Had Ever Used Select Illicit Drugs, United States, YRBS, 2011-2021

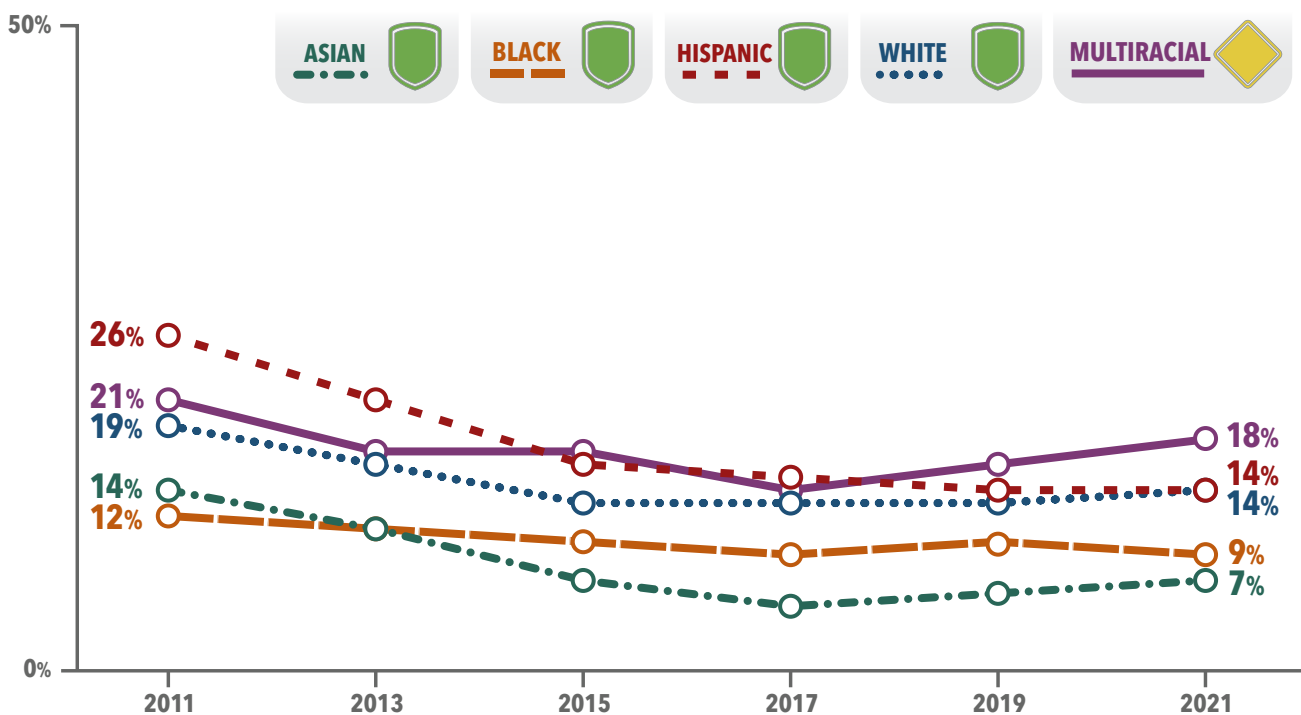
10-Year Trend Description by Sex

The percentage of female and male students who had ever used select illicit drugs decreased from 2011 to 2021.



10-Year Trend Description by Race & Ethnicity

The percentage of multiracial students who had ever used select illicit drugs did not change from 2011 to 2021. The percentage of students from each other racial and ethnic group who had ever used select illicit drugs decreased.



In right direction



No change



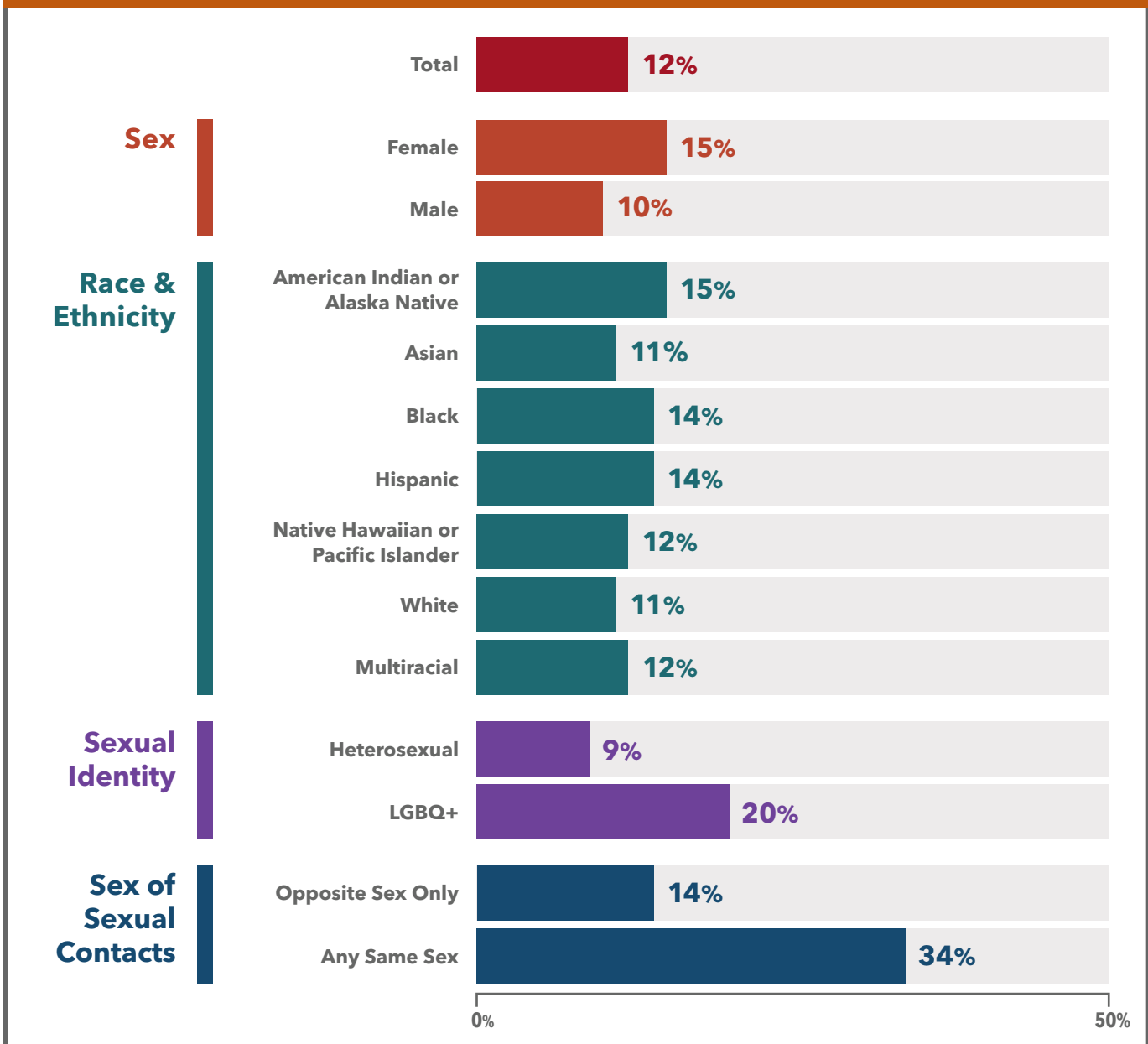
In wrong direction



EVER MISUSED PRESCRIPTION OPIOIDS

In 2021, 12% of high school students had ever taken prescription pain medicine, such as codeine, Vicodin, OxyContin, Hydrocodone, or Percocet, without a doctor’s prescription or differently than how a doctor told them to use it. Female students were more likely to have ever misused prescription opioids than male students. LGBTQ+ students and students with any same-sex partners were more likely than their peers to have ever misused prescription opioids.

**Percentage of High School Students Who
Had Ever Misused Prescription Opioids,
by Demographic Characteristics, United States, YRBS, 2021**

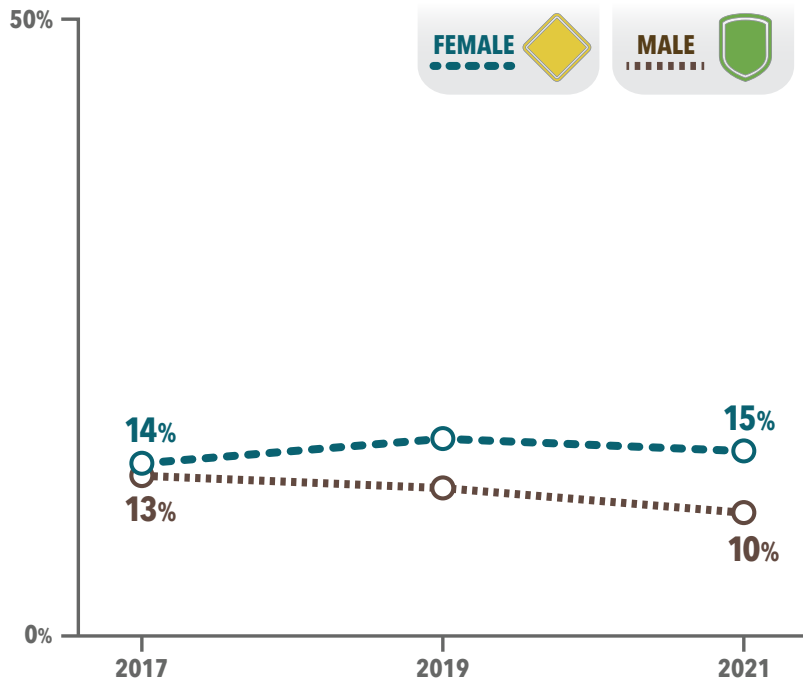


Trends in the Percentage of High School Students Who

Had Ever Misused Prescription Opioids, United States, YRBS, 2017-2021

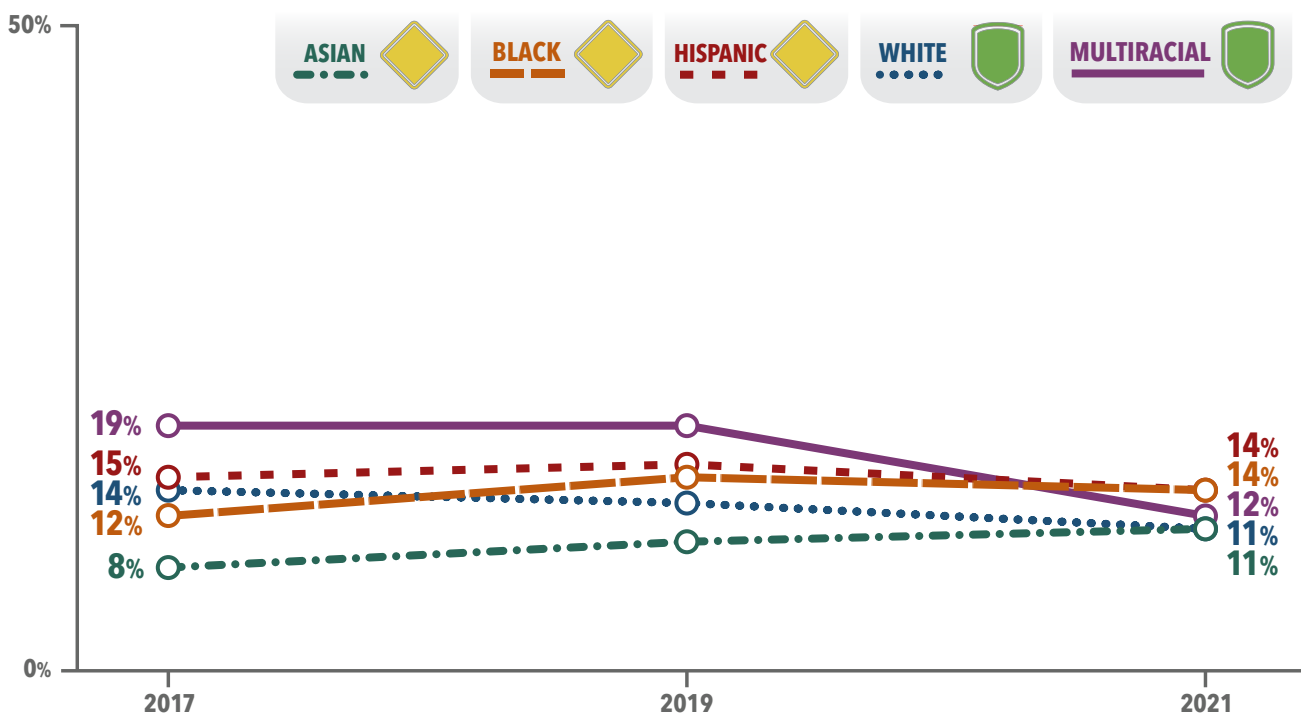
4-Year Trend Description by Sex

The percentage of male students who had ever misused prescription opioids decreased from 2017 to 2021. The percentage of female students who had ever misused prescription opioids did not change.



4-Year Trend Description by Race & Ethnicity

The percentage of White and multiracial students who had ever misused prescription opioids decreased from 2017 to 2021. The percentage of students from each other racial and ethnic group who had ever misused prescription opioids did not change.



In right direction



No change



In wrong direction

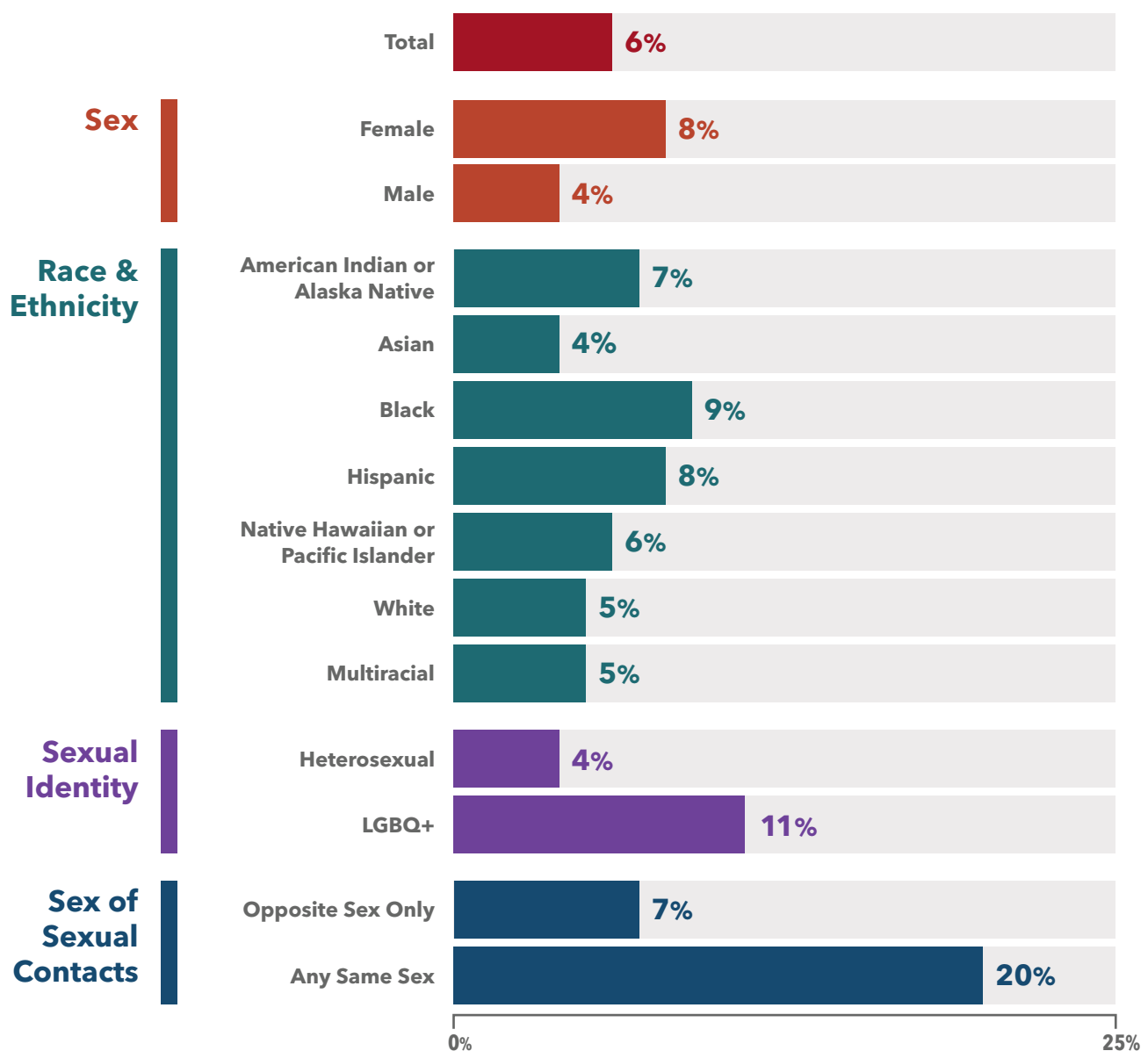


CURRENT PRESCRIPTION OPIOID MISUSE

In 2021, 6% of high school students misused prescription opioids, such as codeine, Vicodin, OxyContin, Hydrocodone, or Percocet, during the past 30 days. Female students were more likely than male students to currently misuse prescription opioids. Black and Hispanic students were more likely than Asian and White students to currently misuse prescription opioids. LGBTQ+ students and students who had any same-sex partners were more likely than their peers to currently misuse prescription opioids.

Percentage of High School Students Who

Misused Prescription Opioids during the Past 30 Days, by Demographic Characteristics, United States, YRBS, 2021

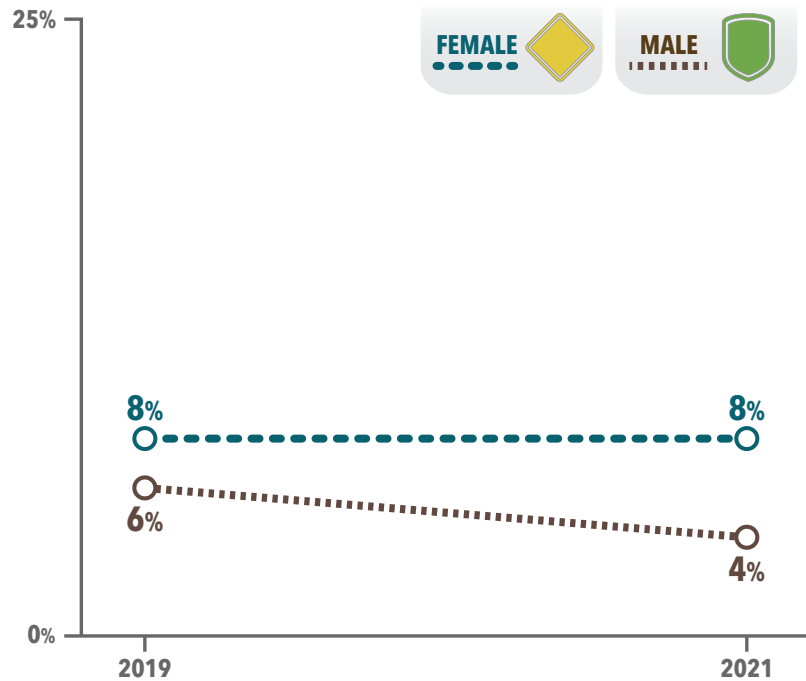


Trends in the Percentage of High School Students Who

Misused Prescription Opioids during the Past 30 Days, United States, YRBS, 2019-2021

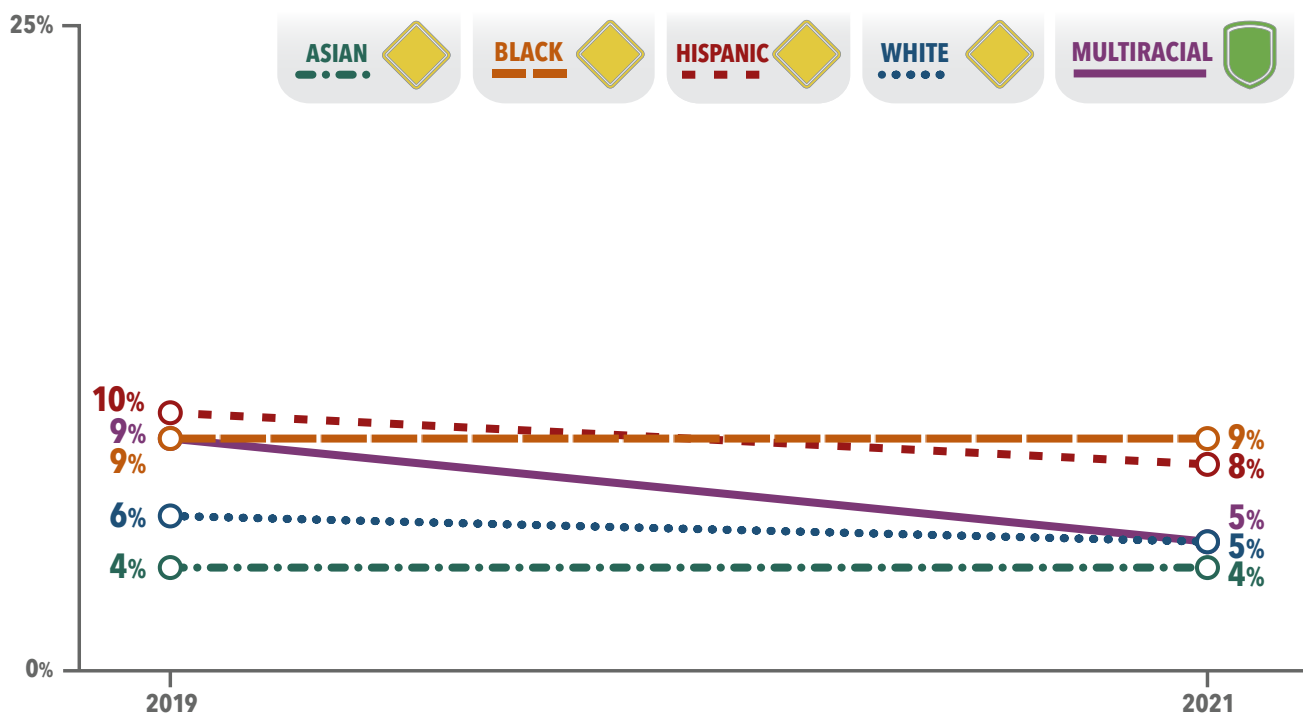
2-Year Trend Description by Sex

The percentage of male students who currently misused prescription opioids decreased from 2019 to 2021. The percentage of female students who currently misused prescription opioids did not change.



2-Year Trend Description by Race & Ethnicity

The percentage of multiracial students who currently misused prescription opioids decreased from 2019 to 2021. The percentage of students from each other racial and ethnic group who currently misused prescription opioids did not change.



In right direction



No change



In wrong direction



FOCUS AREA







EXPERIENCING VIOLENCE

Progress At-A-Glance for Experiencing Violence Variables	43
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Sexual Violence by Anyone	55

PROGRESS AT-A-GLANCE FOR EXPERIENCING VIOLENCE VARIABLES




Violence is a leading cause of death and nonfatal injuries among adolescents in the United States. Violence places the lives of adolescents at risk, and experiencing violence may be associated with mental health problems, diminished academic success, sexual risk behavior, and substance use.^{8,18,21,34}

The YRBS includes several measures of experiences of violence, including feeling unsafe at school, bullying, forced sex, and sexual violence by anyone. Two questions assessed experiences and perceptions of school safety, including being threatened or injured with a weapon at school during the past year and missing school because of safety concerns during the past 30 days. Two questions assessed bullying during the past year, including bullying at school and electronic bullying. Two questions assessed experiences of sexual violence, including whether students had ever been physically forced to have sex or forced by anyone to do sexual things.

The Percentage of High School Students Who:*	2011 Total	2013 Total	2015 Total	2017 Total	2019 Total	2021 Total	Trend
Were threatened or injured with a weapon at school	7	7	6	6	7	7	
Did not go to school because of safety concerns	6	7	6	7	9	9	
Were electronically bullied	16	15	16	15	16	16	
Were bullied at school	20	20	20	19	20	15	
Were ever forced to have sex	8	7	7	7	7	8	
Experienced sexual violence by anyone†	–	–	–	10	11	11	

*For the complete wording of YRBS questions, refer to the appendix.

†Variable introduced in 2017.

	In wrong direction
	No change
	In right direction

SUMMARY OF RESULTS FOR EXPERIENCING VIOLENCE



Although experiences of bullying at school decreased from 2011 to 2021, it is concerning that all other experiences of violence increased or did not change. The percentage of students who missed school because of safety concerns and experienced sexual violence by anyone increased. The percentage of students who were threatened or injured with a weapon at school, were electronically bullied, and were forced to have sex did not change.

In 2021

Female students, LGBTQ+ students, and students who had any same-sex partners were more likely than their peers to experience violence.

- Nearly 20% of female students experienced sexual violence by anyone, and nearly 15% had ever been forced to have sex.
- Nearly one-quarter of LGBTQ+ students were bullied at school and nearly 30% were electronically bullied.

American Indian or Alaska Native students were more likely than students from nearly every other racial and ethnic group to have ever been forced to have sex.

Black and Hispanic students were more likely than Asian, White, and multiracial students to miss school because of safety concerns.

TRENDS

Although there was no change in the percentage of students overall who had ever been forced to have sex from 2011 to 2021, the percentage of female students and of White students who had ever been forced to have sex increased.

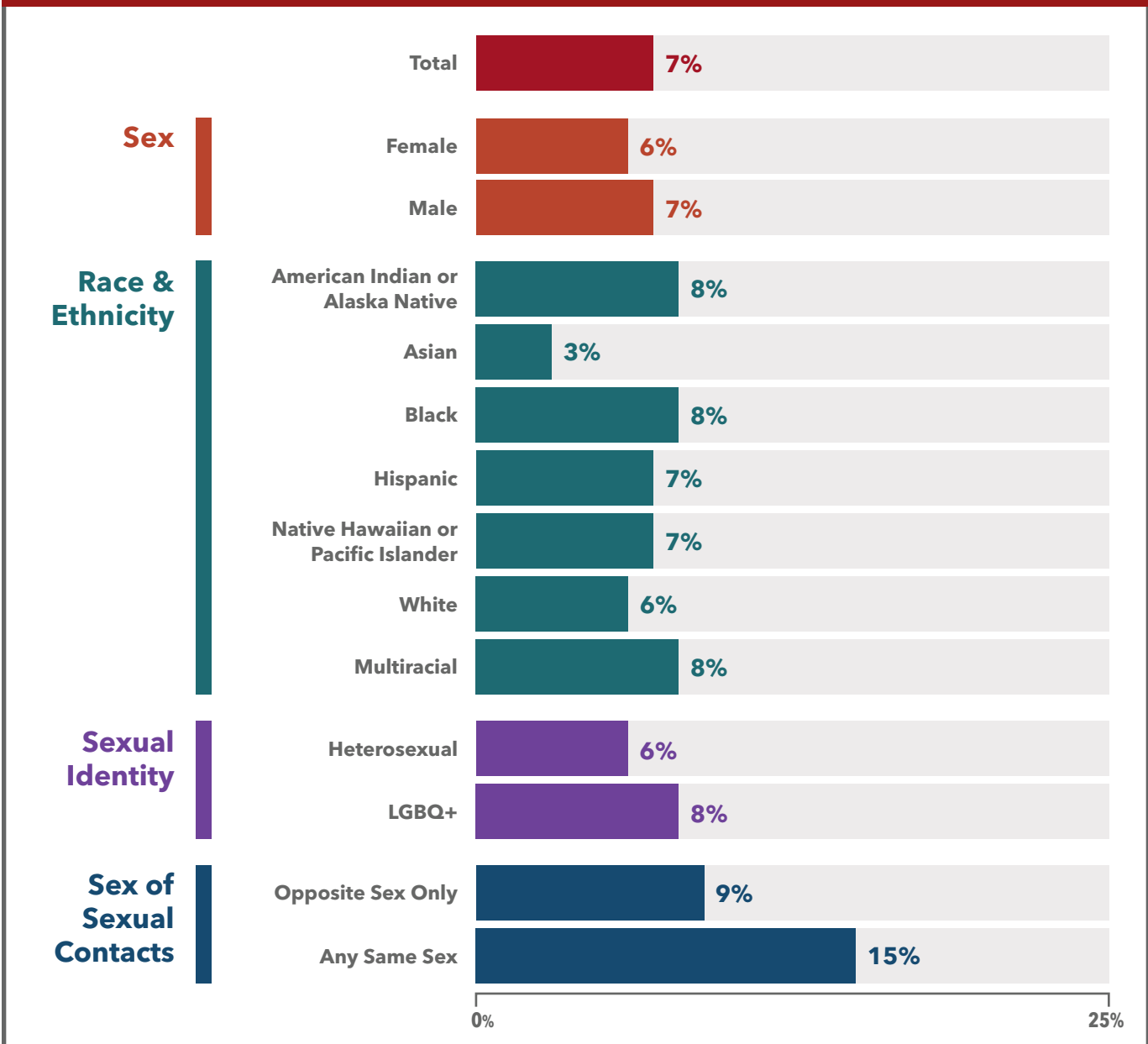
The percentage of female students who experienced sexual violence by anyone increased from 2017 to 2021.

THREATENED OR INJURED WITH A WEAPON AT SCHOOL

In 2021, 7% of high school students were threatened or injured with a weapon, such as a gun, knife, or club, on school property during the past year. Asian students were less likely than students from most other racial and ethnic groups to be threatened or injured with a weapon at school. LGBTQ+ students and students who had any same-sex partners were more likely than their peers to be threatened or injured with a weapon at school.

Percentage of High School Students Who

Were Threatened or Injured with a Weapon at School during the Past Year, by Demographic Characteristics, United States, YRBS, 2021

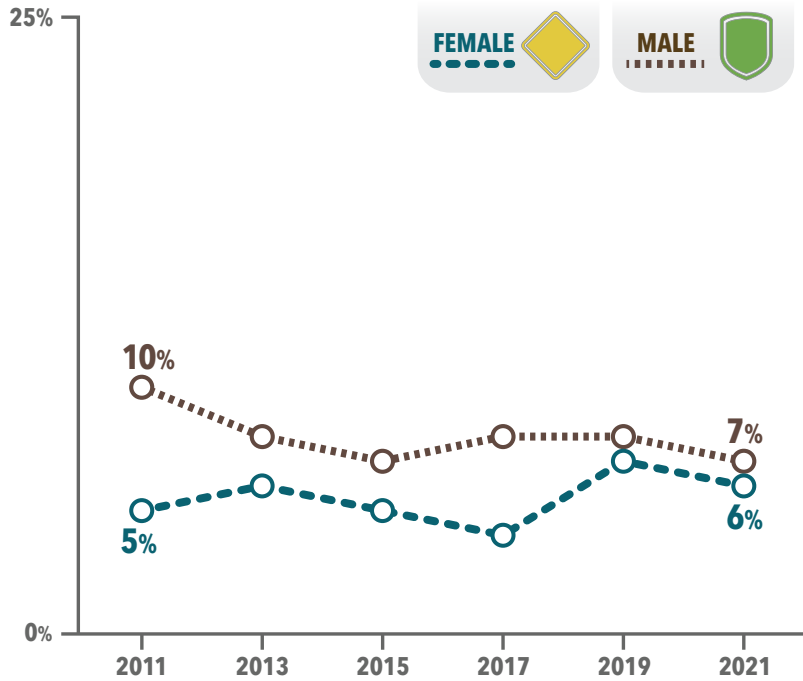


Trends in the Percentage of High School Students Who

Were Threatened or Injured with a Weapon at School during the Past Year, United States, YRBS, 2011-2021

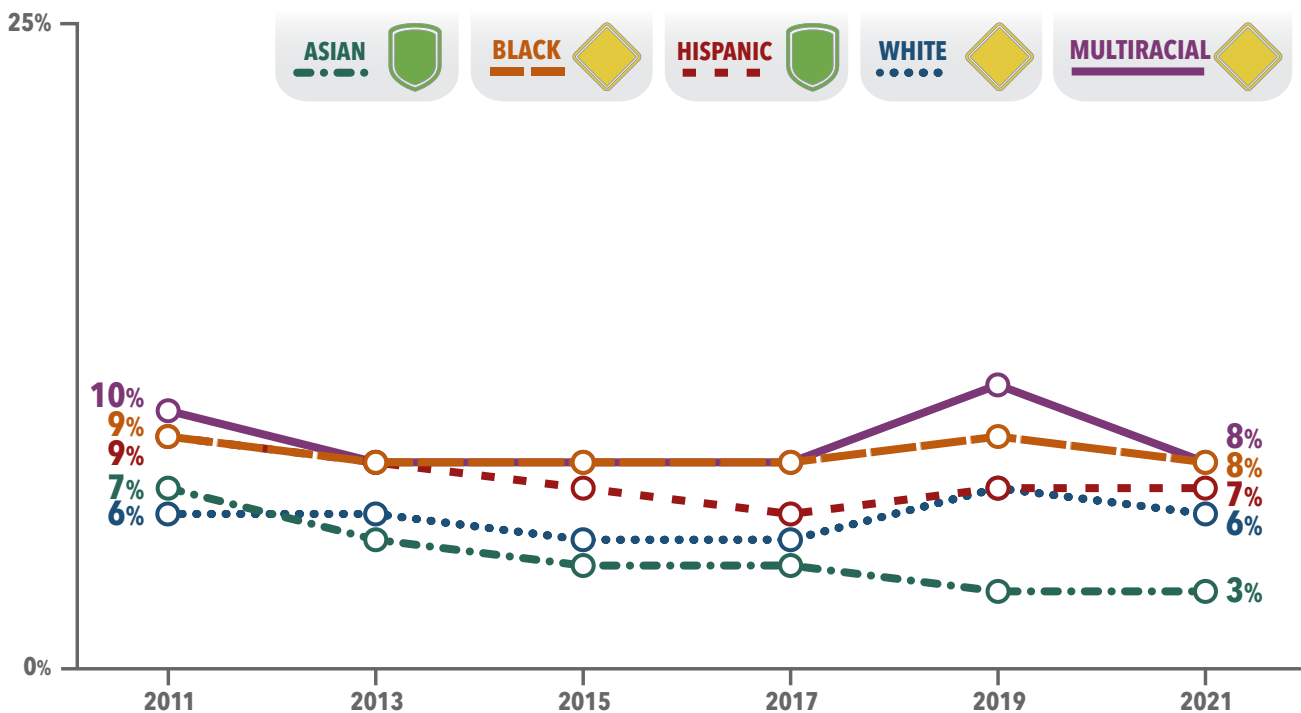
10-Year Trend Description by Sex

The percentage of male students who were threatened or injured with a weapon at school decreased from 2011 to 2021. The percentage of female students who were threatened or injured with a weapon at school did not change.



10-Year Trend Description by Race & Ethnicity

The percentage of Asian and Hispanic students who were threatened or injured with a weapon at school decreased from 2011 to 2021. The percentage of Black, White, and multiracial students who were threatened or injured with a weapon at school did not change.



In right direction



No change



In wrong direction

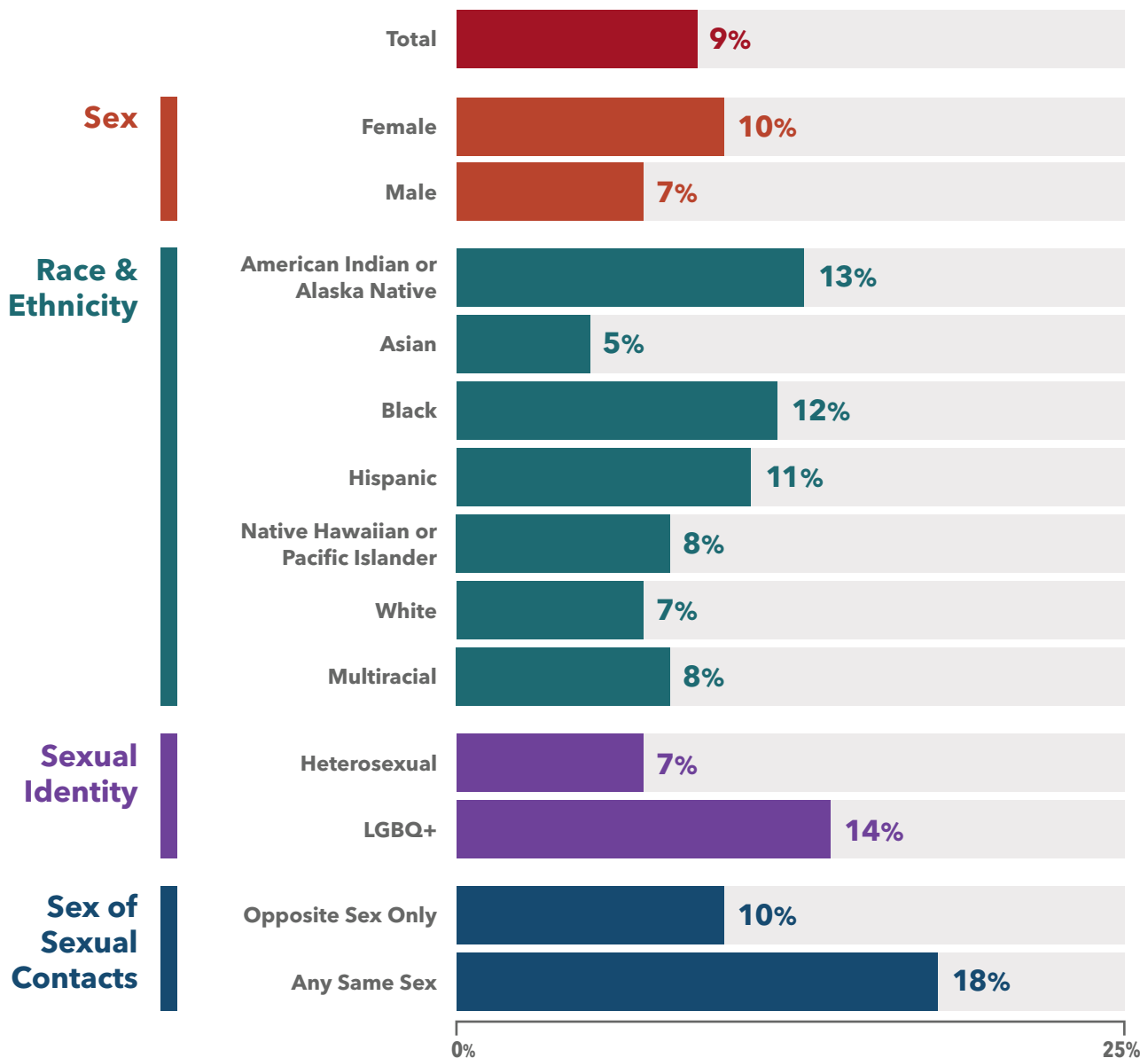


DID NOT GO TO SCHOOL BECAUSE OF SAFETY CONCERNS

In 2021, 9% of high school students did not go to school because they felt unsafe either at school or on their way to or from school at least once during the past 30 days. Female students were more likely than male students to miss school because of safety concerns. Black and Hispanic students were more likely than Asian, White, and multiracial students to miss school because of safety concerns. LGBTQ+ students and students who had any same-sex partners were more likely than their peers to miss school because of safety concerns.

Percentage of High School Students Who

Did Not Go to School Because of Safety Concerns during the Past 30 Days, by Demographic Characteristics, United States, YRBS, 2021

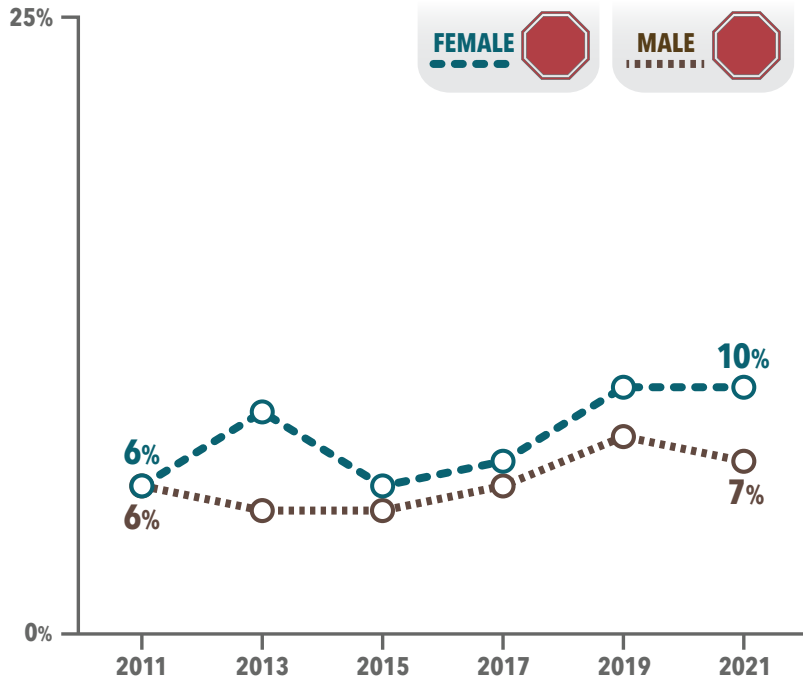


Trends in the Percentage of High School Students Who

Did Not Go to School Because of Safety Concerns during the Past 30 Days, United States, YRBS, 2011-2021

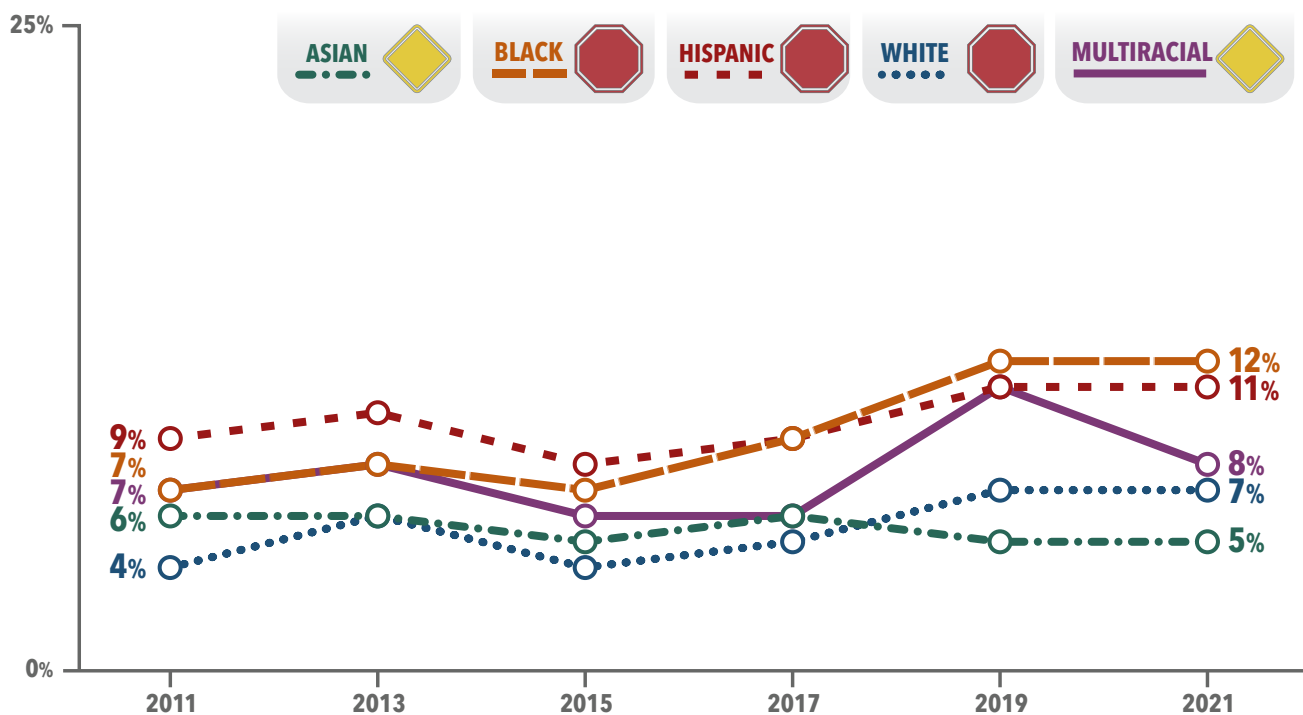
10-Year Trend Description by Sex

The percentage of female and male students who missed school because of safety concerns increased from 2011 to 2021.



10-Year Trend Description by Race & Ethnicity

The percentage of Black, Hispanic, and White students who missed school because of safety concerns increased from 2011 to 2021. The percentage of Asian and multiracial students who missed school because of safety concerns did not change.



In right direction



No change



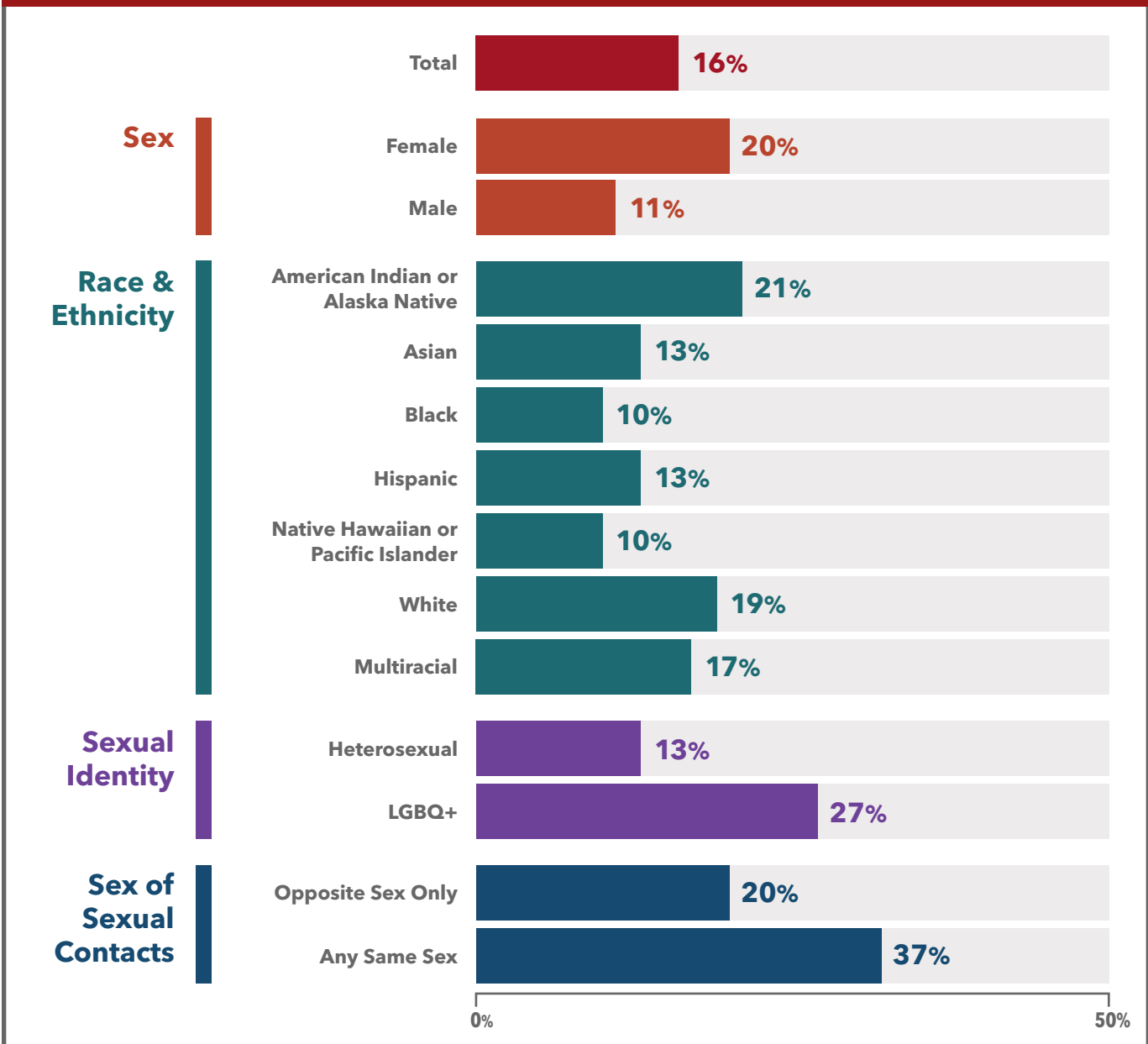
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ELECTRONICALLY BULLIED

In 2021, 16% of high school students were electronically bullied, including through texting, Instagram, Facebook, or other social media, during the past year. Female students were more likely than male students to be electronically bullied. American Indian or Alaska Native and White students were more likely than students from most other racial and ethnic groups to be electronically bullied. LGBTQ+ students and students who had any same-sex partners were more likely than their peers to be electronically bullied.

Percentage of High School Students Who Were Electronically Bullied during the Past Year, by Demographic Characteristics, United States, YRBS, 2021

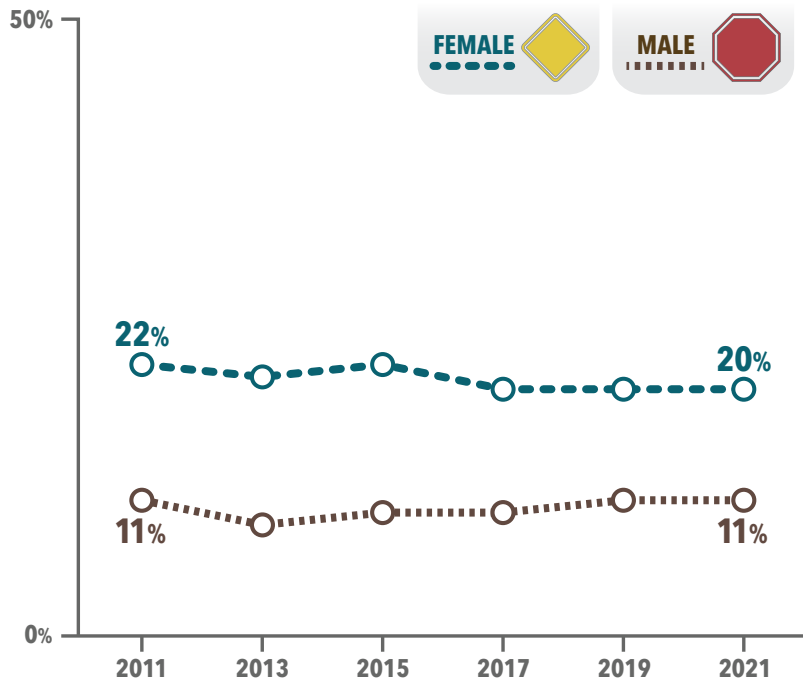


Trends in the Percentage of High School Students Who

Were **Electronically Bullied** during the Past Year, United States, YRBS, 2011-2021

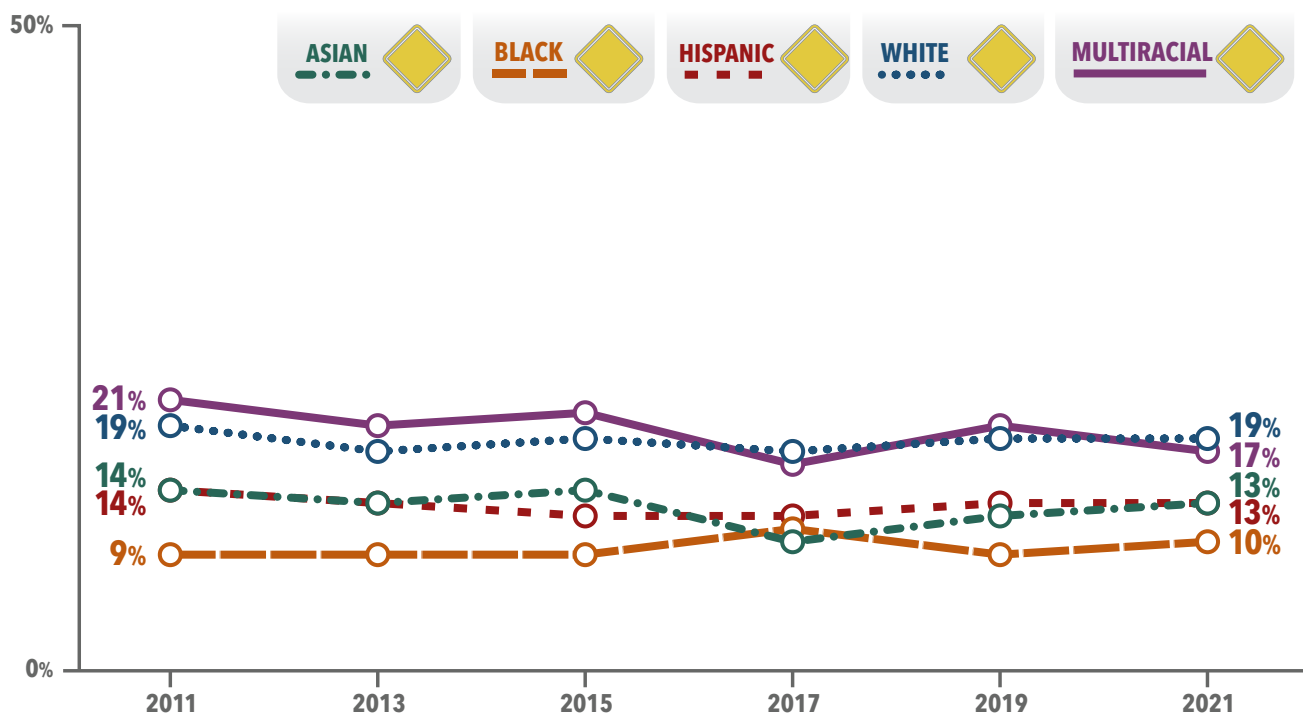
10-Year Trend Description by Sex

The percentage of male students who were electronically bullied increased from 2011 to 2021. The percentage of female students who were electronically bullied did not change.



10-Year Trend Description by Race & Ethnicity

The percentage of students across each racial and ethnic group who were electronically bullied did not change from 2011 to 2021.



In right direction



No change



In wrong direction

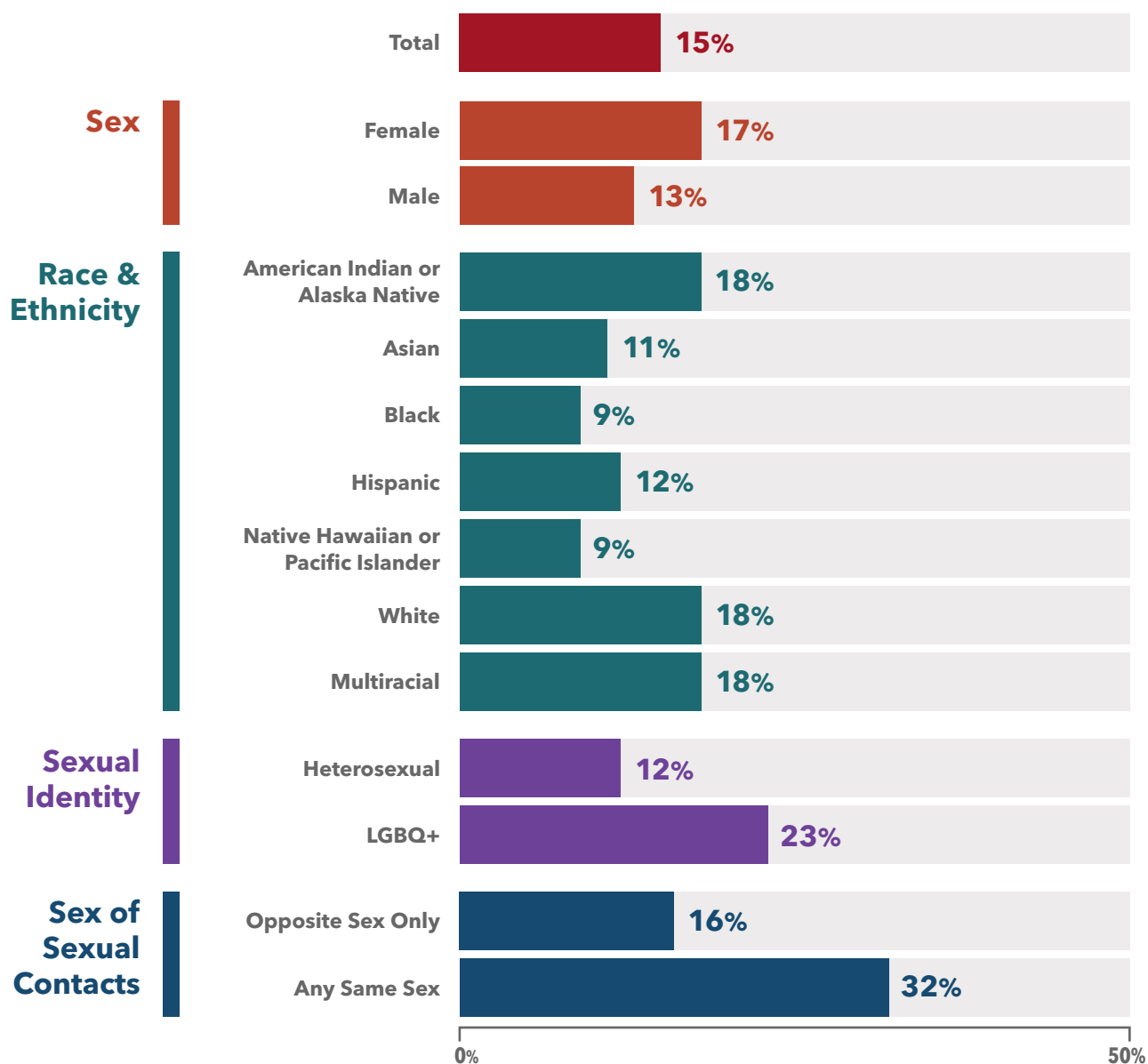


EXPERIENCING VIOLENCE

BULLIED AT SCHOOL

In 2021, 15% of high school students were bullied on school property during the past year. Female students were more likely than male students to be bullied at school. Black students were less likely than students from most other racial and ethnic groups to be bullied at school. LGBTQ+ students and students who had any same-sex partners were more likely than their peers to be bullied at school.

Percentage of High School Students Who Were Bullied at School during the Past Year, by Demographic Characteristics, United States, YRBS, 2021

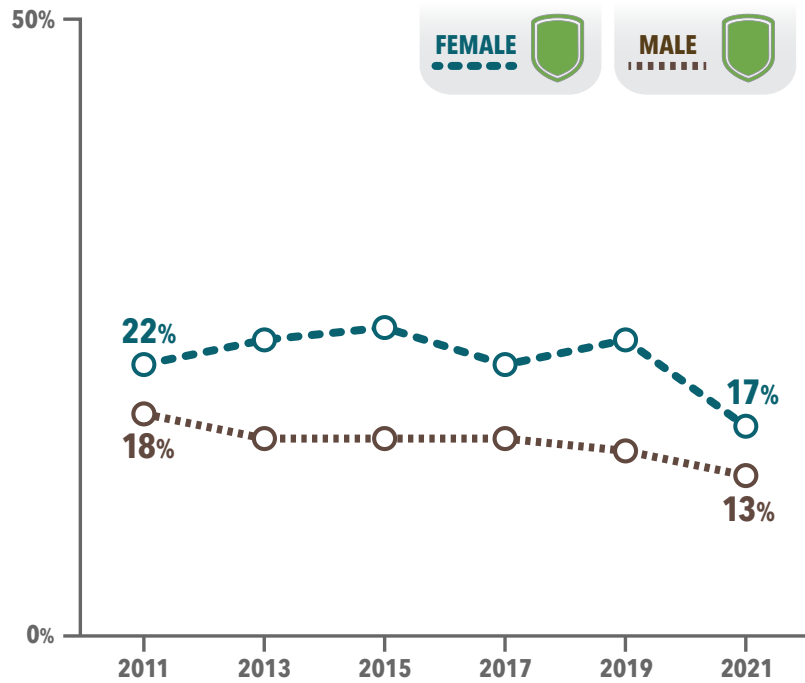


Trends in the Percentage of High School Students Who

Were Bullied at School during the Past Year, United States, YRBS, 2011-2021

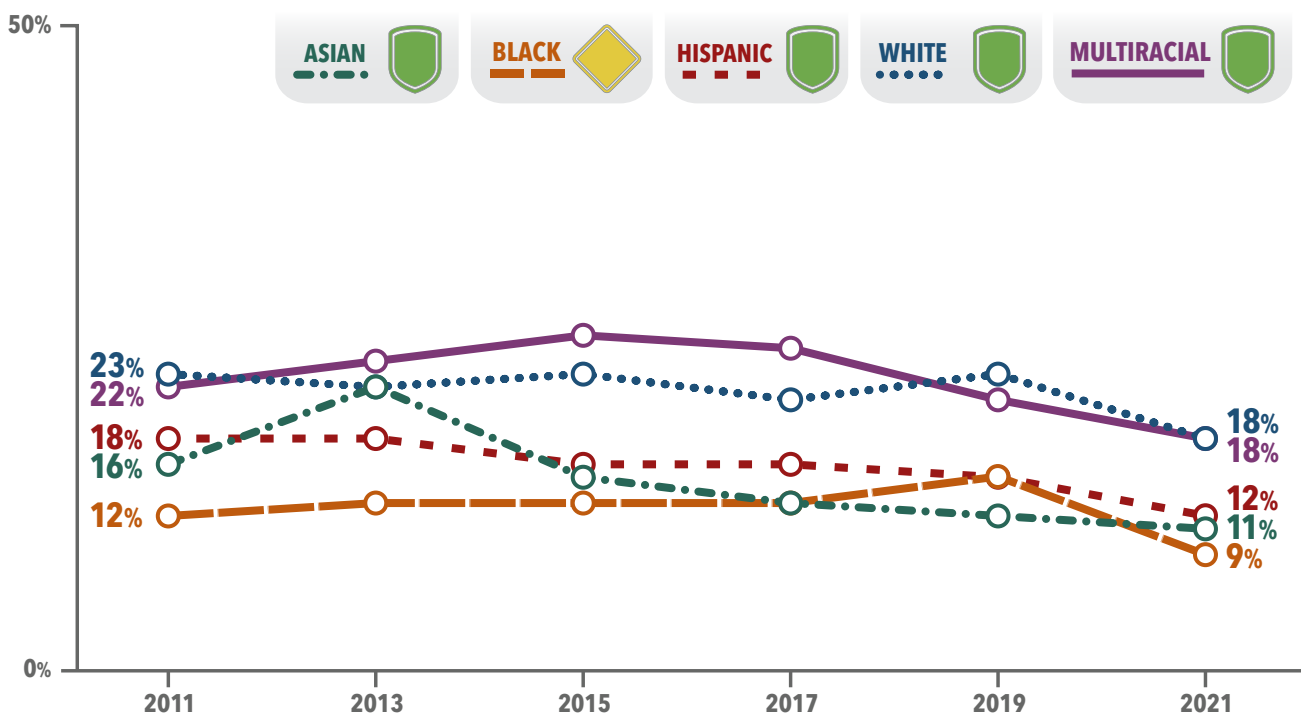
10-Year Trend Description by Sex

The percentage of female and male students who were bullied at school decreased from 2011 to 2021.



10-Year Trend Description by Race & Ethnicity

Although the percentage of students from most racial and ethnic groups who were bullied at school decreased, the percentage of Black students who were bullied at school did not change from 2011 to 2021.



In right direction



No change



In wrong direction

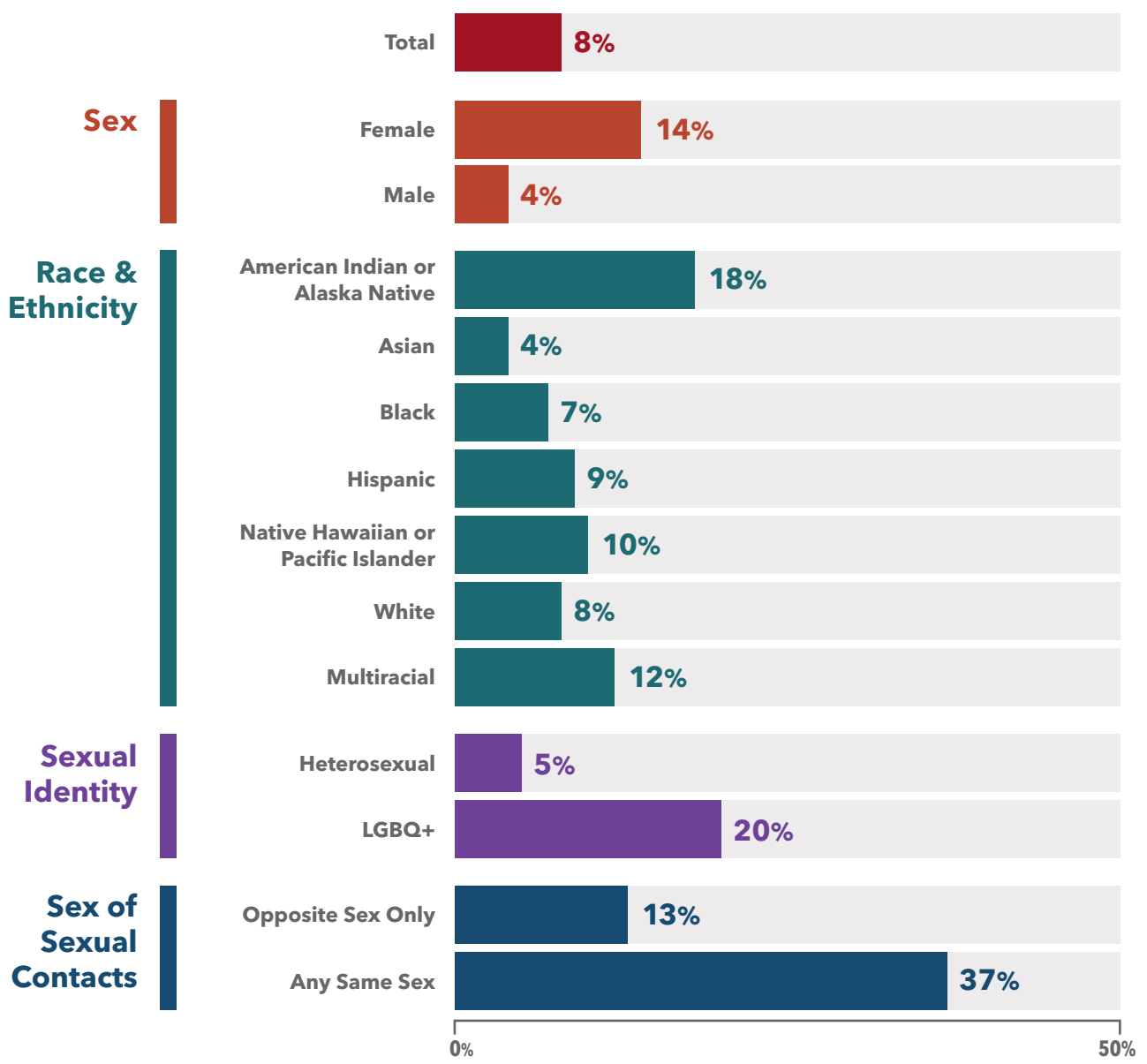


EXPERIENCING VIOLENCE

EVER FORCED TO HAVE SEX

In 2021, 8% of high school students had ever been physically forced to have sexual intercourse when they did not want to. Female students were more likely than male students to have ever been forced to have sex. American Indian or Alaska Native students were more likely than students from most other racial and ethnic groups to have ever been forced to have sex. LGBTQ+ students and students who had any same-sex partners were more likely than their peers to have ever been forced to have sex.

Percentage of High School Students Who Had Ever Been Forced to Have Sex, by Demographic Characteristics, United States, YRBS, 2021

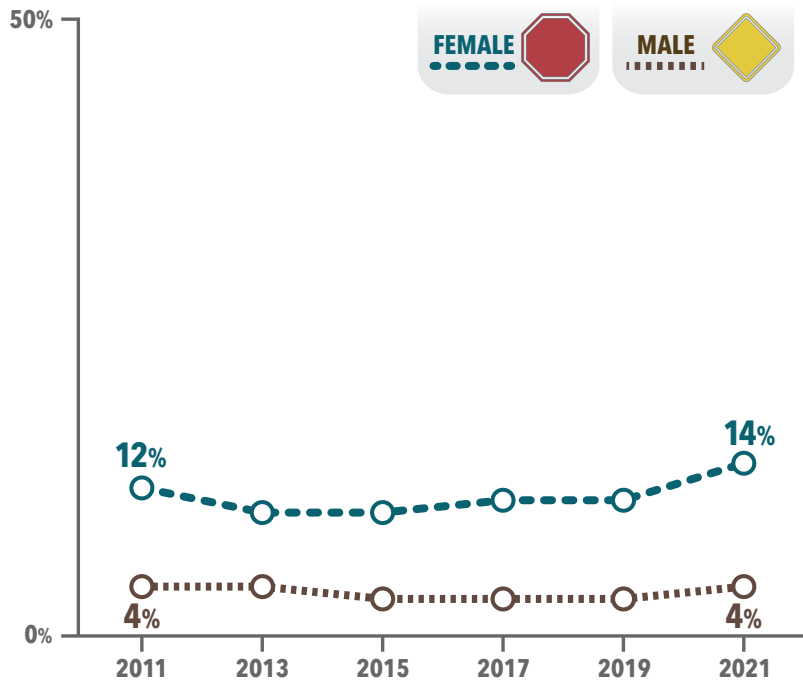


Trends in the Percentage of High School Students Who

Had Ever Been Forced to Have Sex, United States, YRBS, 2011-2021

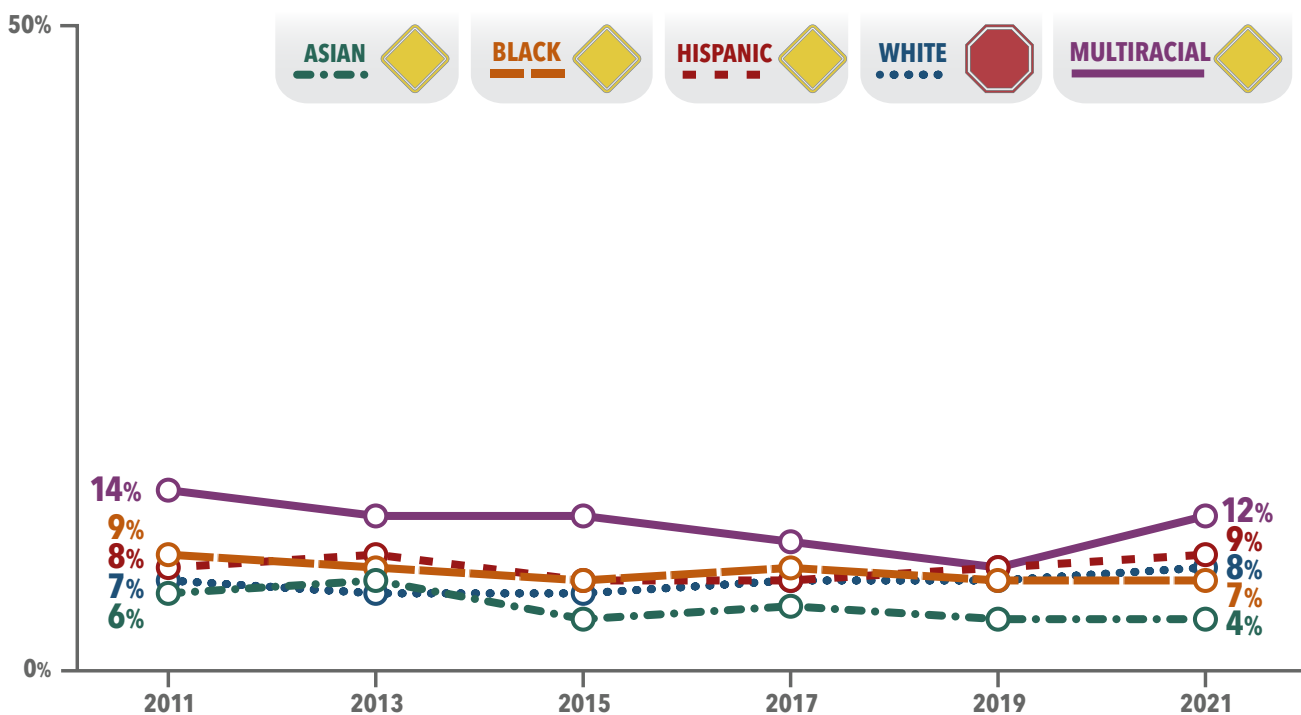
10-Year Trend Description by Sex

The percentage of female students who had ever been forced to have sex increased from 2011 to 2021. The percentage of male students who had ever been forced to have sex did not change.



10-Year Trend Description by Race & Ethnicity

The percentage of White students who had ever been forced to have sex increased from 2011 to 2021. The percentage of students from every other racial and ethnic group who had ever been forced to have sex did not change.



In right direction



No change



In wrong direction

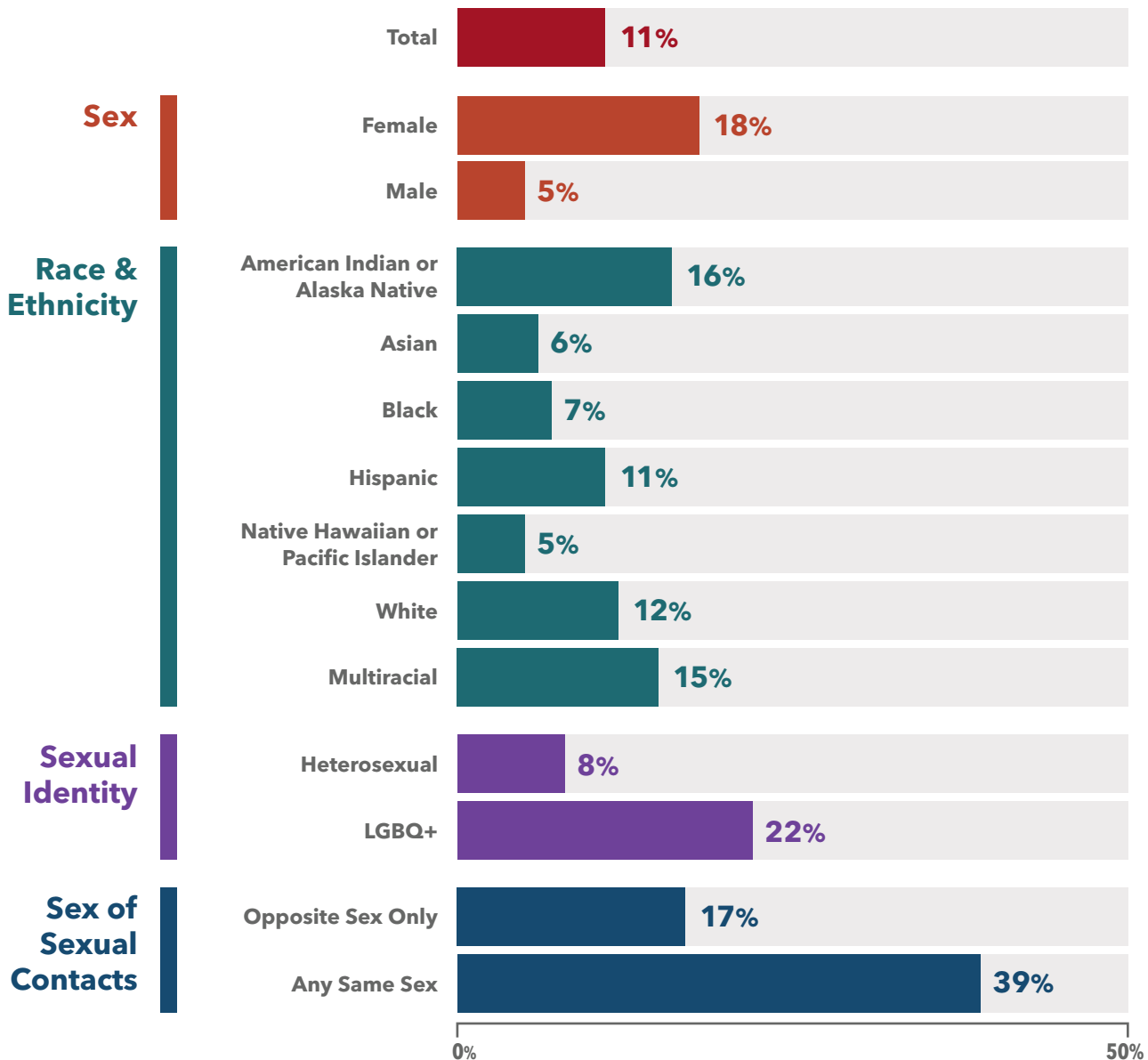


SEXUAL VIOLENCE BY ANYONE

In 2021, 11% of high school students were forced by anyone to do sexual things (including kissing, touching, or being physically forced to have sexual intercourse) when they did not want to during the past year. Female students were more likely than male students to experience sexual violence by anyone. American Indian or Alaska Native, Hispanic, White, and multiracial students were more likely than students from other racial or ethnic groups to experience sexual violence by anyone. LGBTQ+ students and students who had any same-sex partners were more likely than their peers to experience sexual violence by anyone.

Percentage of High School Students Who

Experienced **Sexual Violence by Anyone** during the Past Year, by Demographic Characteristics, United States, YRBS, 2021

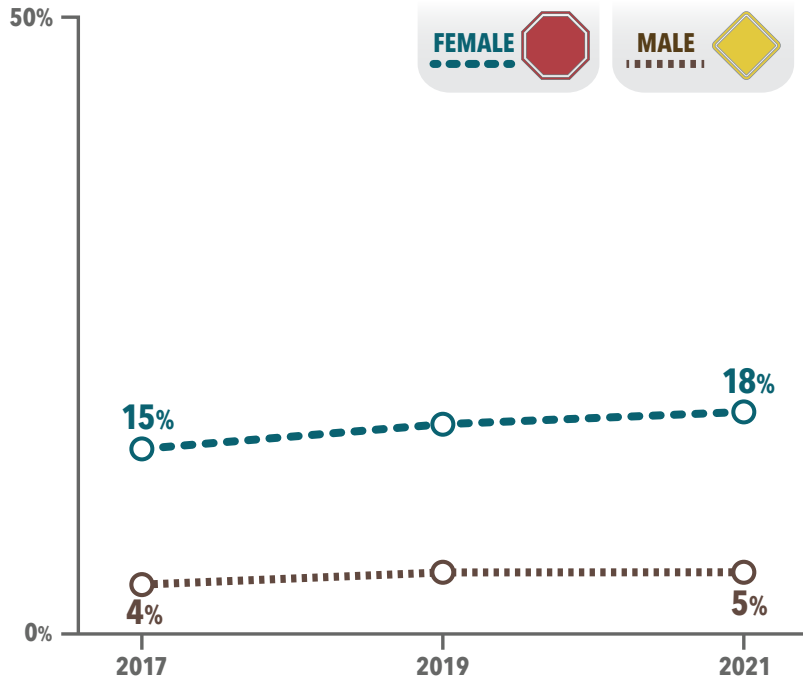


Trends in the Percentage of High School Students Who

Experienced Sexual Violence by Anyone during the Past Year, United States, YRBS, 2017-2021

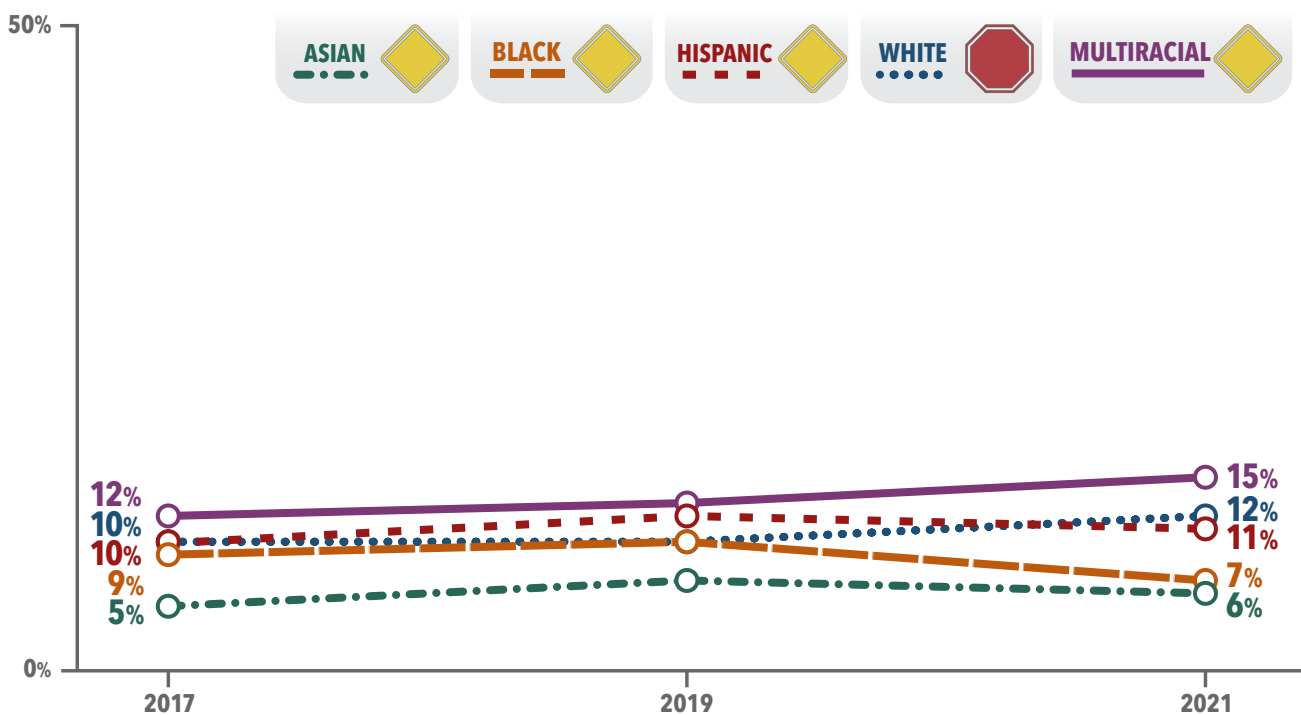
4-Year Trend Description by Sex

The percentage of female students who experienced sexual violence by anyone increased from 2017 to 2021. The percentage of male students who experienced sexual violence by anyone did not change.



4-Year Trend Description by Race & Ethnicity

The percentage of White students who experienced sexual violence by anyone increased from 2017 to 2021. The percentage of students from every other racial and ethnic group who experienced sexual violence by anyone did not change.



In right direction



No change



In wrong direction



EXPERIENCING VIOLENCE

FOCUS AREA






MENTAL HEALTH AND SUICIDALITY

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PROGRESS AT-A-GLANCE FOR MENTAL HEALTH AND SUICIDALITY VARIABLES




Poor mental health can result in serious negative outcomes for the health and development of adolescents, which can last into adulthood. Young people who feel hopeless about their future are more likely to engage in behaviors that put them at risk for HIV, STDs, and unintended pregnancy.^{23,24} Suicide risk, measured here by increasing levels of suicide ideation, plans, and attempts, not only places the life of the adolescent at risk but is also a marker for experience with trauma and other mental health issues.²⁴

Mental health is measured in the YRBS with one question addressing persistent feelings of sadness or hopelessness that affect students' abilities to participate in their daily activities and another question assessing poor mental health during the past 30 days. YRBS also includes four questions on suicidal thoughts and behaviors: seriously considering suicide, making a suicide plan, attempting suicide, and being medically treated for a suicide attempt.

The Percentage of High School Students Who:*	2011 Total	2013 Total	2015 Total	2017 Total	2019 Total	2021 Total	Trend
Experienced persistent feelings of sadness or hopelessness	28	30	30	31	37	42	
Experienced poor mental health†	–	–	–	–	–	29	–
Seriously considered attempting suicide	16	17	18	17	19	22	
Made a suicide plan	13	14	15	14	16	18	
Attempted suicide	8	8	9	7	9	10	
Were injured in a suicide attempt that had to be treated by a doctor or nurse	2	3	3	2	3	3	

*For the complete wording of YRBS questions, refer to the appendix.

†Variable introduced in 2021.

	In wrong direction
	No change
	In right direction

SUMMARY OF RESULTS FOR

MENTAL HEALTH AND SUICIDALITY



Nearly all indicators of poor mental health and suicidal thoughts and behaviors increased from 2011 to 2021. The percentage of students who experienced persistent feelings of sadness or hopelessness, seriously considered attempting suicide, made a suicide plan, and attempted suicide increased. The percentage of students who were injured in a suicide attempt did not change.

In 2021

Female students, LGBTQ+ students, and students who had any same-sex partners were more likely than their peers to experience poor mental health and suicidal thoughts and behaviors.

- Nearly 60% of female students and nearly 70% of LGBTQ+ students experienced persistent feelings of sadness or hopelessness.
- 10% of female students and more than 20% of LGBTQ+ students attempted suicide.

Hispanic and multiracial students were more likely than Asian, Black, and White students to have persistent feelings of sadness or hopelessness.

Black students were more likely than Asian, Hispanic, and White students to attempt suicide.

TRENDS

The percentage of students across every racial and ethnic group who felt persistently sad or hopeless increased.

The percentage of female students who seriously considered attempting suicide, made a suicide plan, and attempted suicide increased.

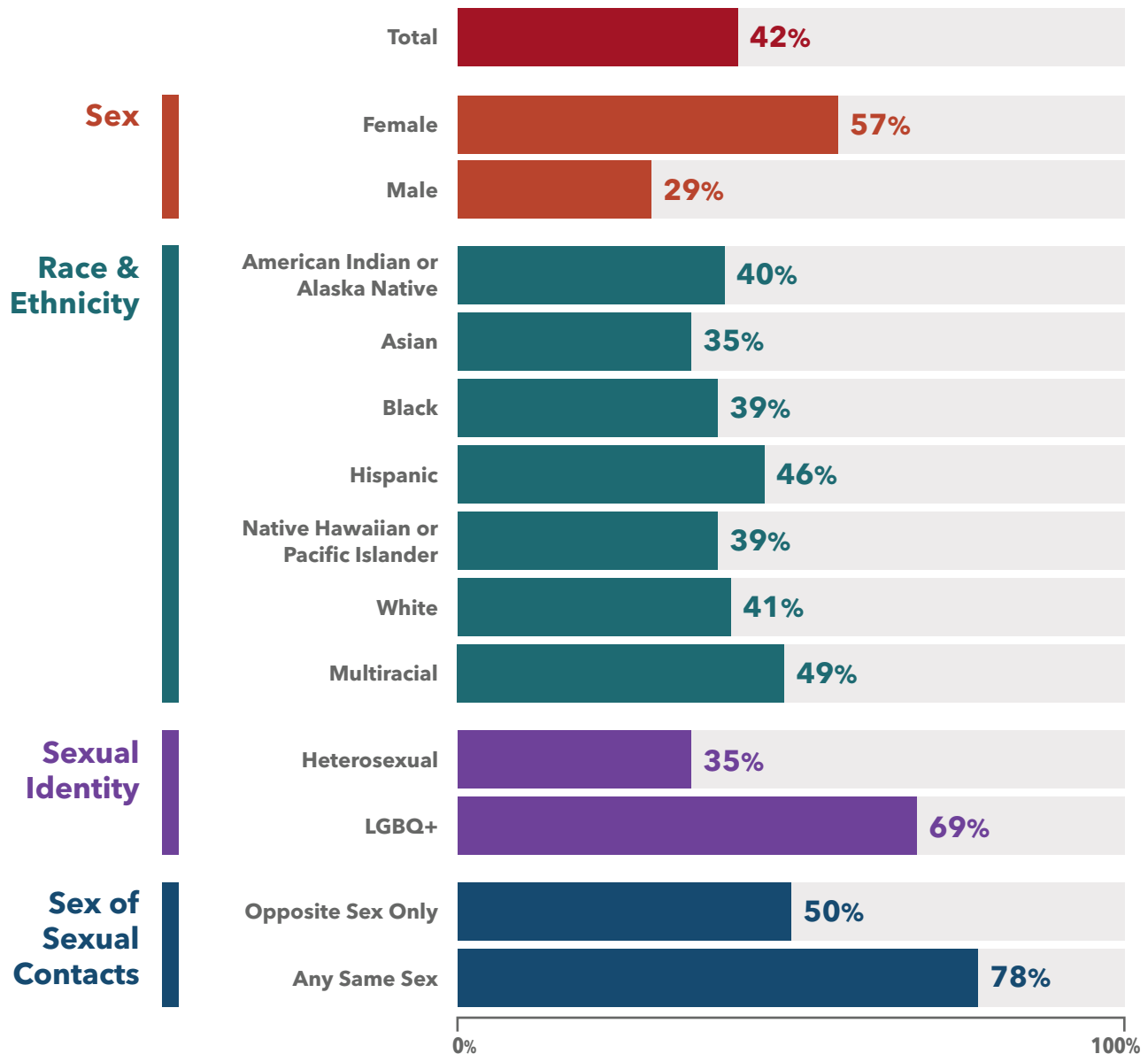
While the percentage of Black and White students who attempted suicide increased, the percentage of Asian students who attempted suicide decreased, and the percentage of Hispanic and multiracial students who attempted suicide did not change.

PERSISTENT FEELINGS OF SADNESS OR HOPELESSNESS

In 2021, 42% of high school students felt so sad or hopeless almost every day for at least two weeks in a row that they stopped doing their usual activities. Female students were more likely than male students to experience persistent feelings of sadness or hopelessness. Hispanic and multiracial students were more likely than Asian, Black, and White students to experience persistent feelings of sadness or hopelessness. LGBTQ+ students and students who had any same-sex partners were more likely than their peers to experience persistent feelings of sadness or hopelessness.

Percentage of High School Students Who

Experienced **Persistent Feelings of Sadness or Hopelessness** during the Past Year, by Demographic Characteristics, United States, YRBS, 2021

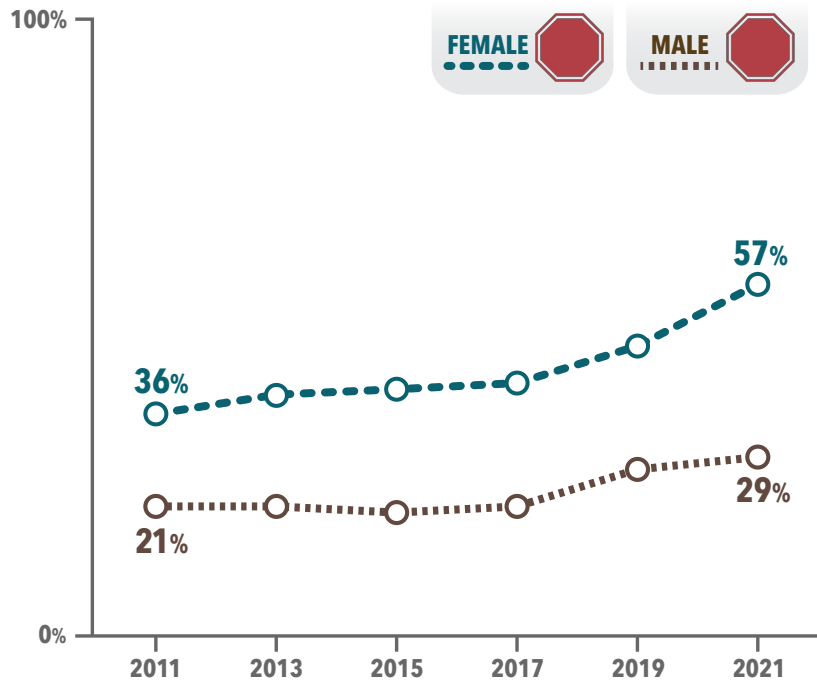


Trends in the Percentage of High School Students Who

Experienced Persistent Feelings of Sadness or Hopelessness during the Past Year, United States, YRBS, 2011-2021

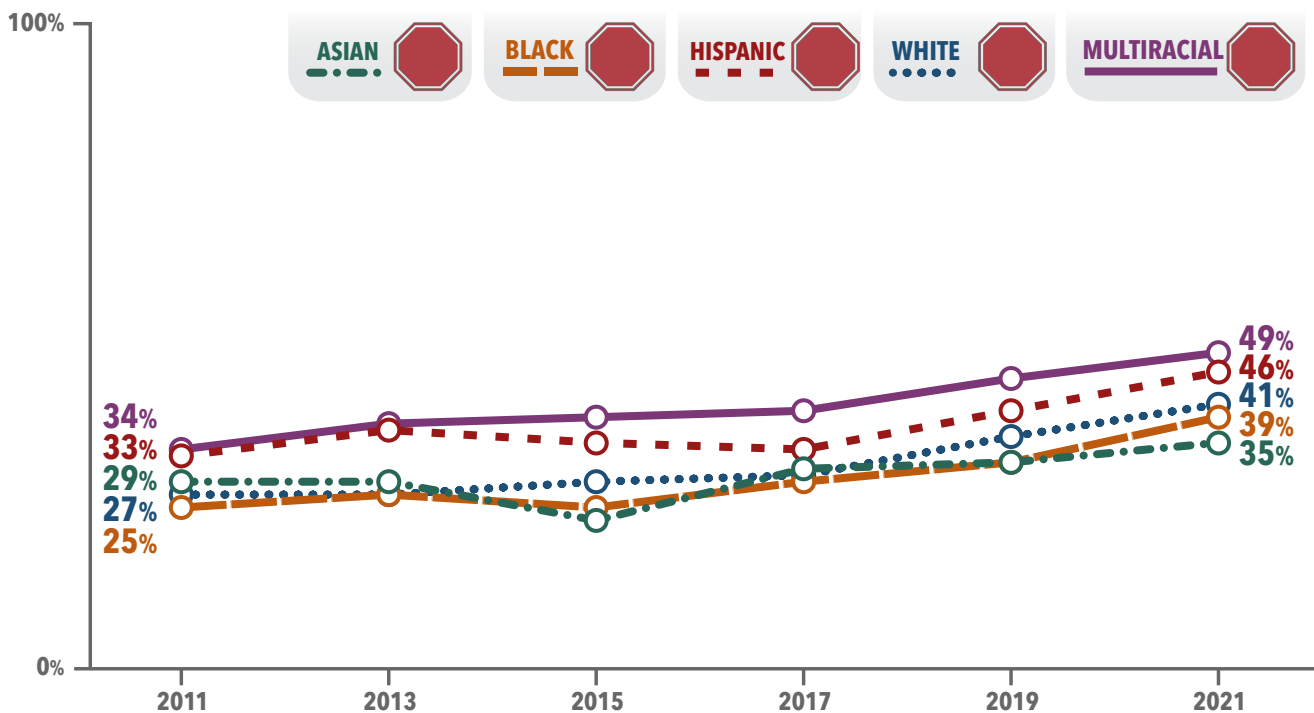
10-Year Trend Description by Sex

The percentage of female and male students who experienced persistent feelings of sadness or hopelessness increased from 2011 to 2021.



10-Year Trend Description by Race & Ethnicity

The percentage of students in each racial and ethnic group who experienced persistent feelings of sadness or hopelessness increased from 2011 to 2021.



In right direction



No change



In wrong direction

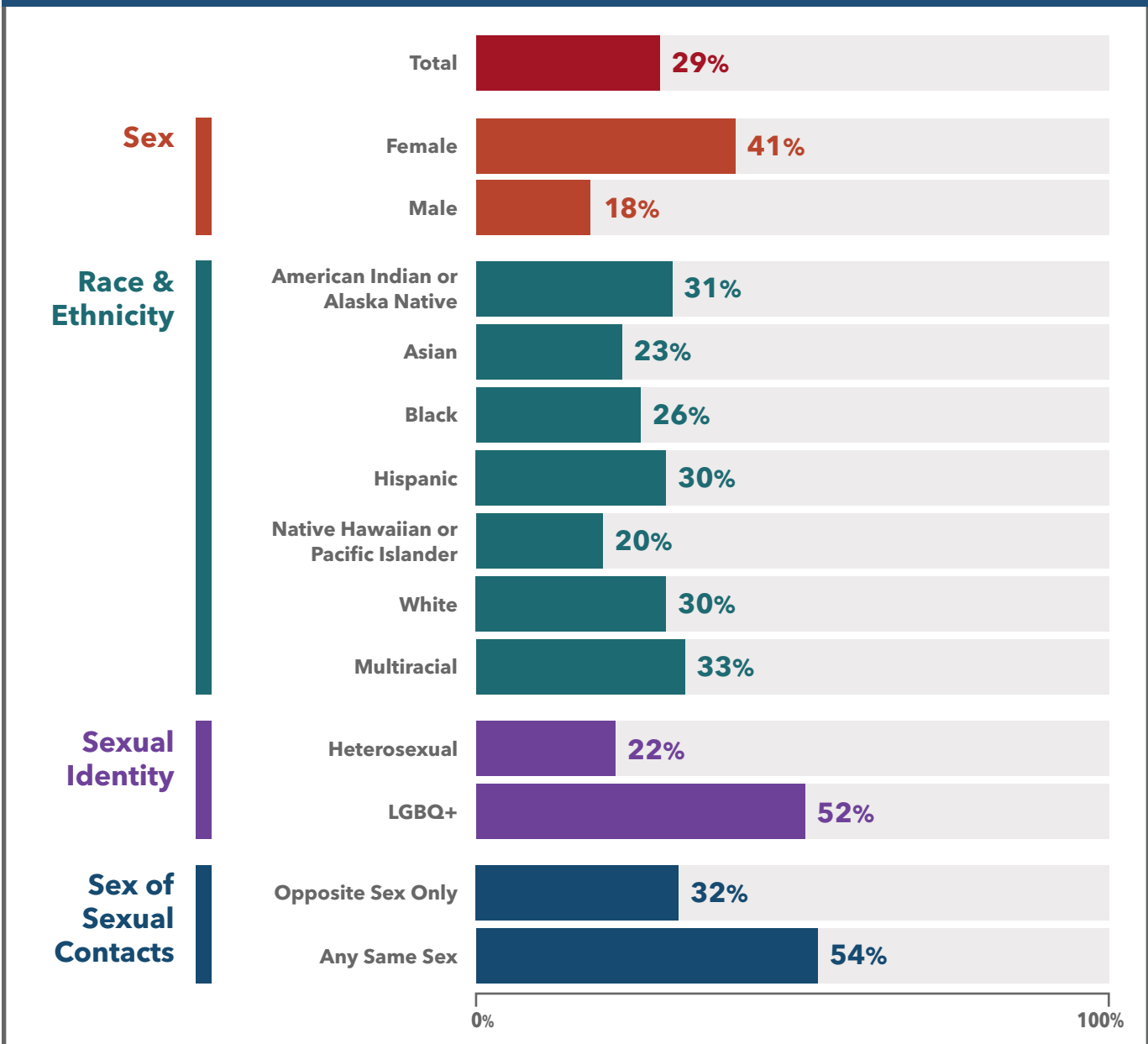


POOR MENTAL HEALTH

In 2021, 29% of high school students experienced poor mental health during the past 30 days. Female students were more likely than male students to experience poor mental health. Asian and Black students were less likely than Hispanic and multiracial students to experience poor mental health. Asian students were also less likely than White students to experience poor mental health. LGBTQ+ students and students who had any same-sex partners were more likely than their peers to experience poor mental health.

Percentage of High School Students Who

Experienced **Poor Mental Health** during the Past 30 Days, by Demographic Characteristics, United States, YRBS, 2021



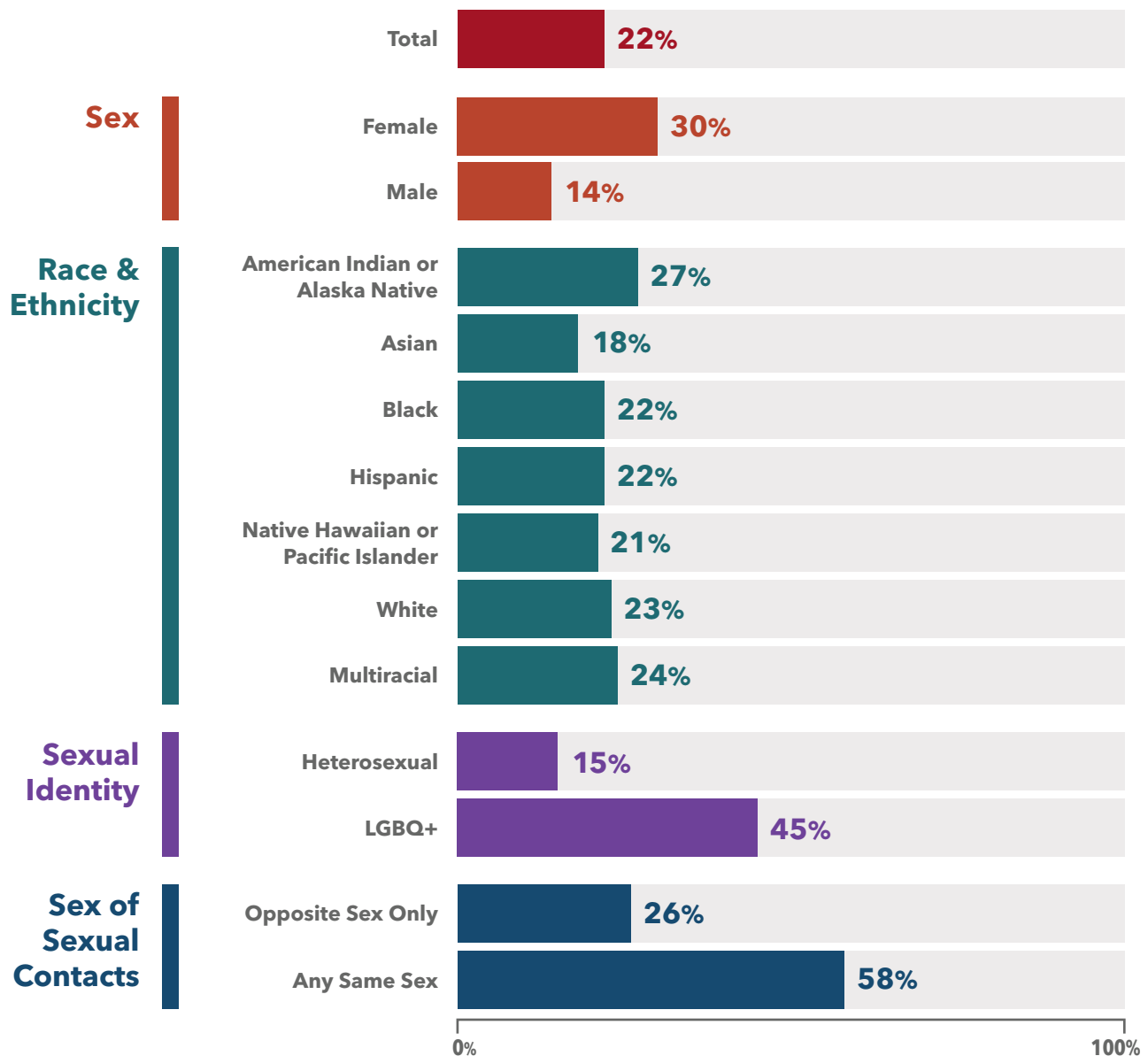
Note: The "poor mental health" variable was added to the national YRBS in 2021; therefore, trends are not available.

SERIOUSLY CONSIDERED ATTEMPTING SUICIDE

In 2021, 22% of high school students seriously considered attempting suicide during the past year. Female students were more likely than male students to seriously consider attempting suicide. Asian students were less likely than students from most other racial and ethnic groups to seriously consider attempting suicide. LGBTQ+ students and students who had any same-sex partners were more likely than their peers to seriously consider attempting suicide.

Percentage of High School Students Who

Seriously Considered Attempting Suicide during the Past Year, by Demographic Characteristics, United States, YRBS, 2021

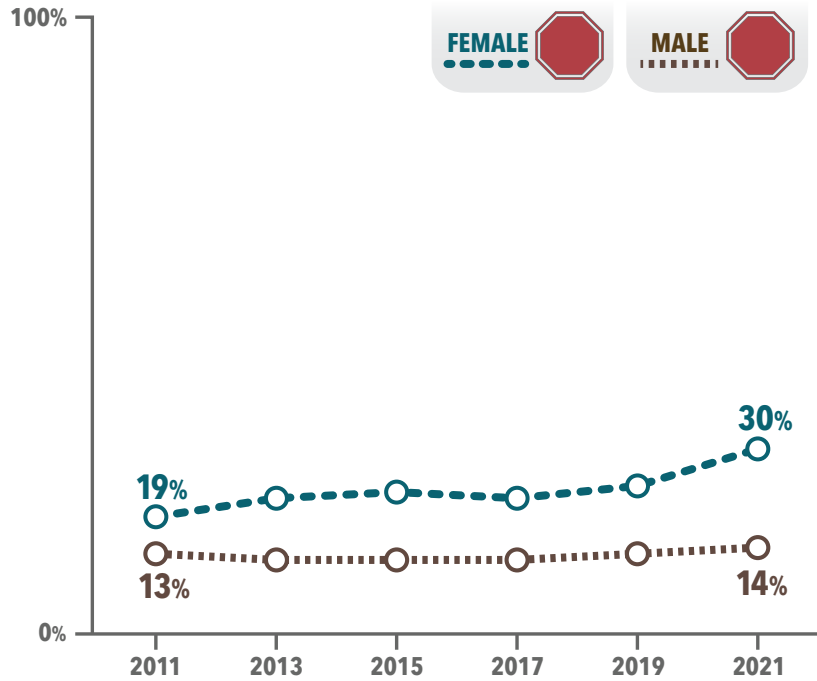


Trends in the Percentage of High School Students Who

Seriously Considered Attempting Suicide during the Past Year, United States, YRBS, 2011-2021

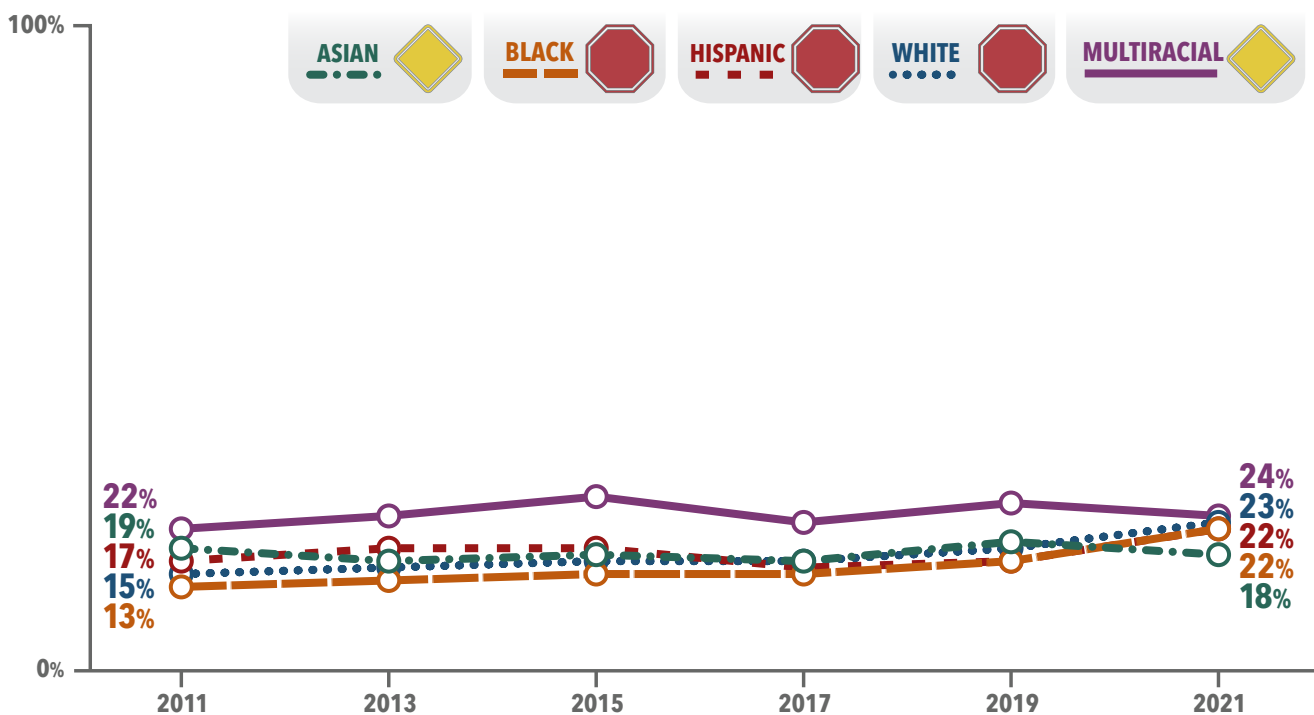
10-Year Trend Description by Sex

The percentage of female and male students who seriously considered attempting suicide increased from 2011 to 2021.



10-Year Trend Description by Race & Ethnicity

The percentage of Black, Hispanic, and White students who seriously considered attempting suicide increased from 2011 to 2021. The percentage of Asian and multiracial students who seriously considered attempting suicide did not change.



In right direction



No change



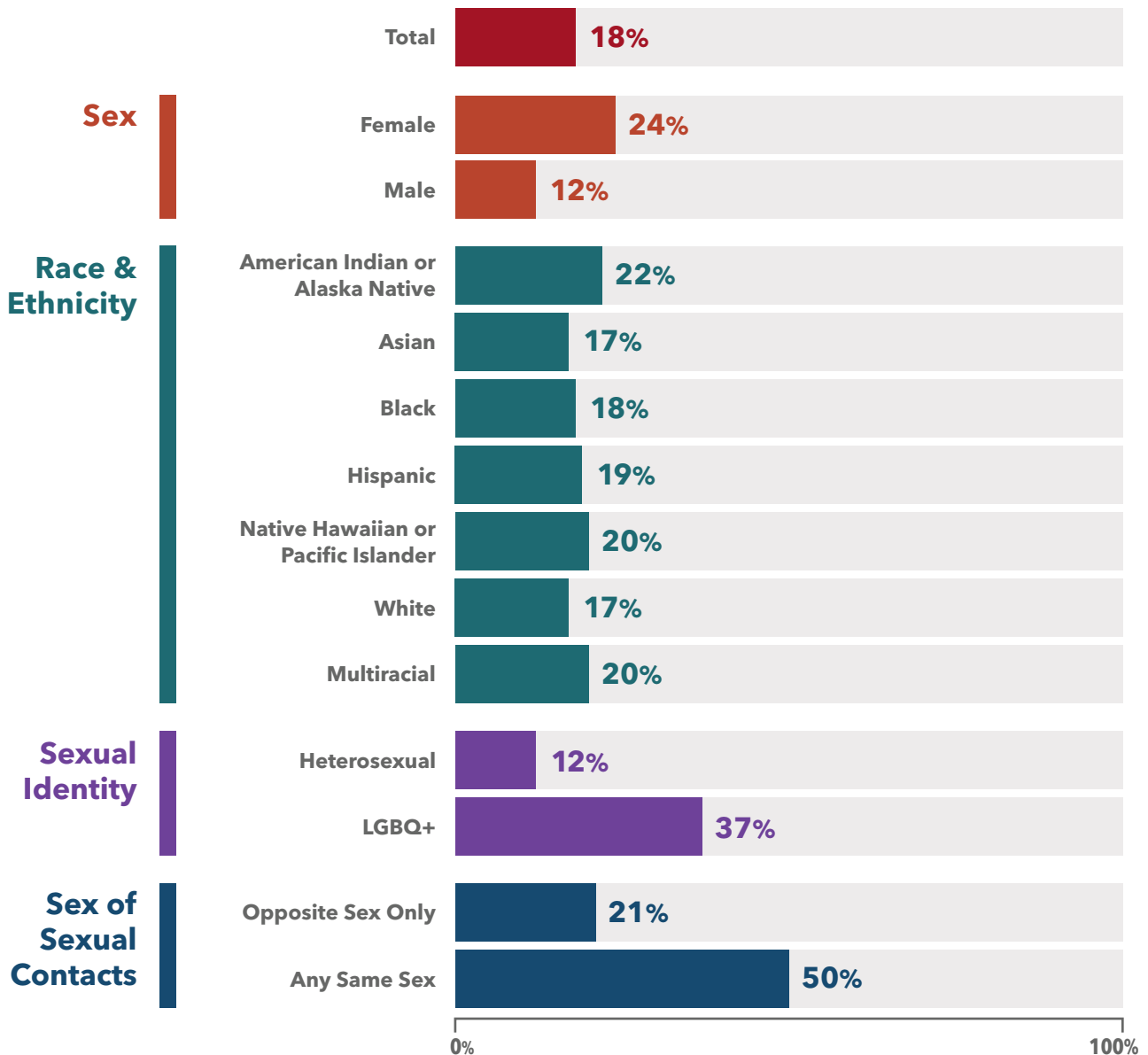
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MADE A SUICIDE PLAN

In 2021, 18% of high school students made a suicide plan during the past year. Female students were more likely than male students to make a suicide plan. LGBTQ+ students and students who had any same-sex partners were more likely than their peers to make a suicide plan.

Percentage of High School Students Who Made a Suicide Plan during the Past Year, by Demographic Characteristics, United States, YRBS, 2021

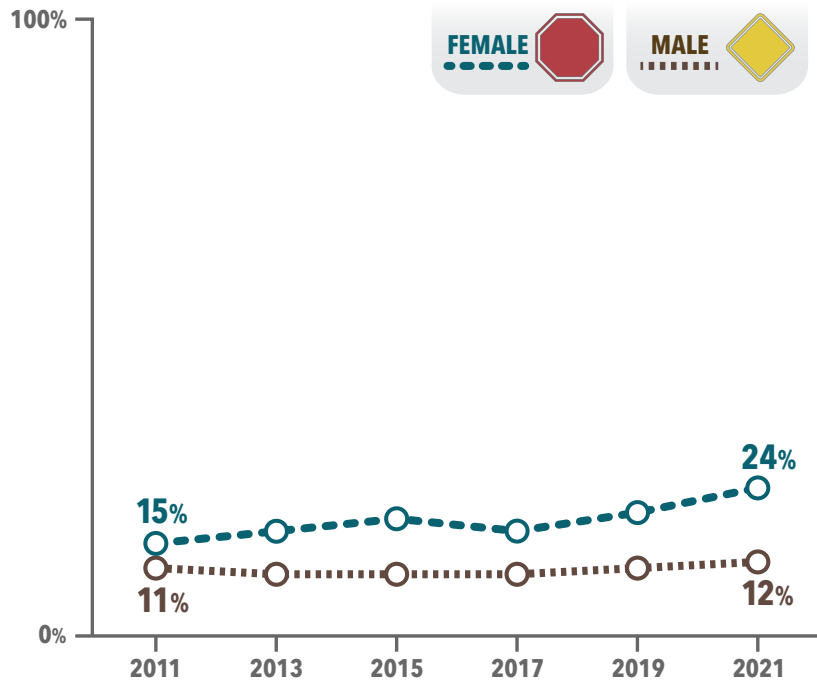


Trends in the Percentage of High School Students Who

Made a Suicide Plan during the Past Year, United States, YRBS, 2011-2021

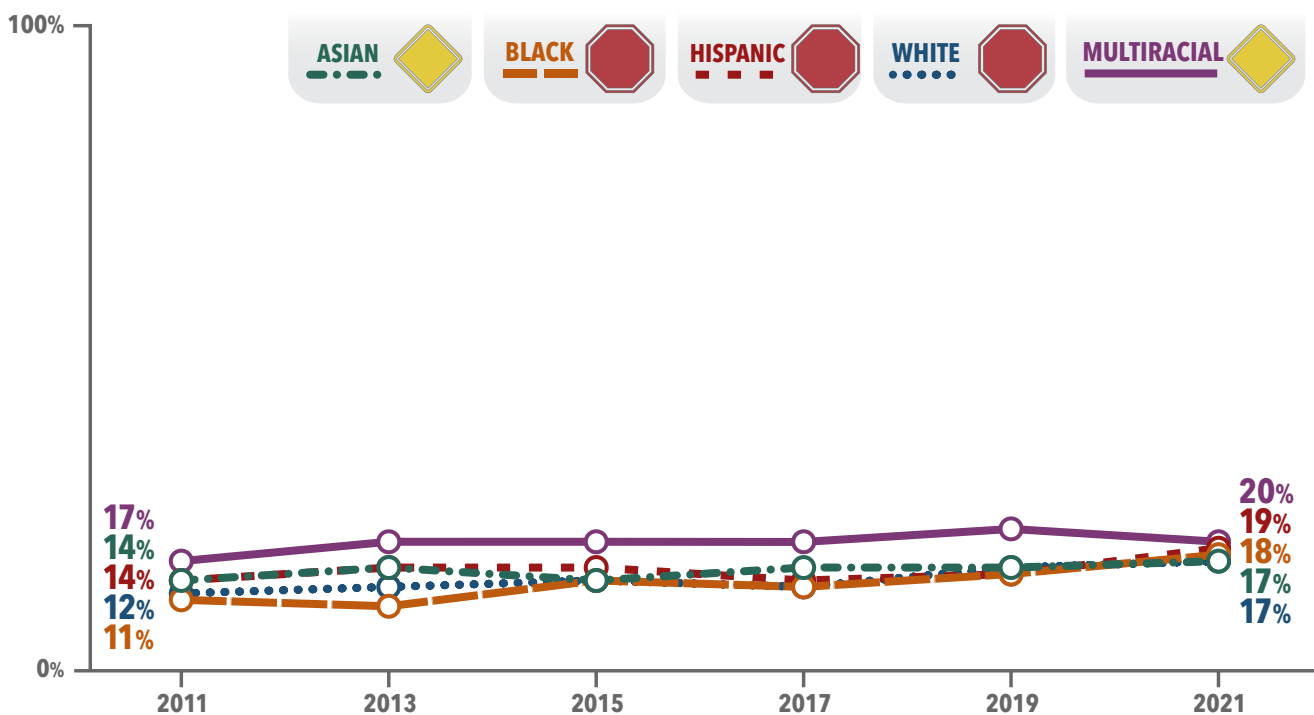
10-Year Trend Description by Sex

The percentage of female students who made a suicide plan increased from 2011 to 2021. The percentage of male students who made a suicide plan did not change.



10-Year Trend Description by Race & Ethnicity

The percentage of Black, Hispanic, and White students who made a suicide plan increased from 2011 to 2021. The percentage of Asian and multiracial students who made a suicide plan did not change.



In right direction



No change



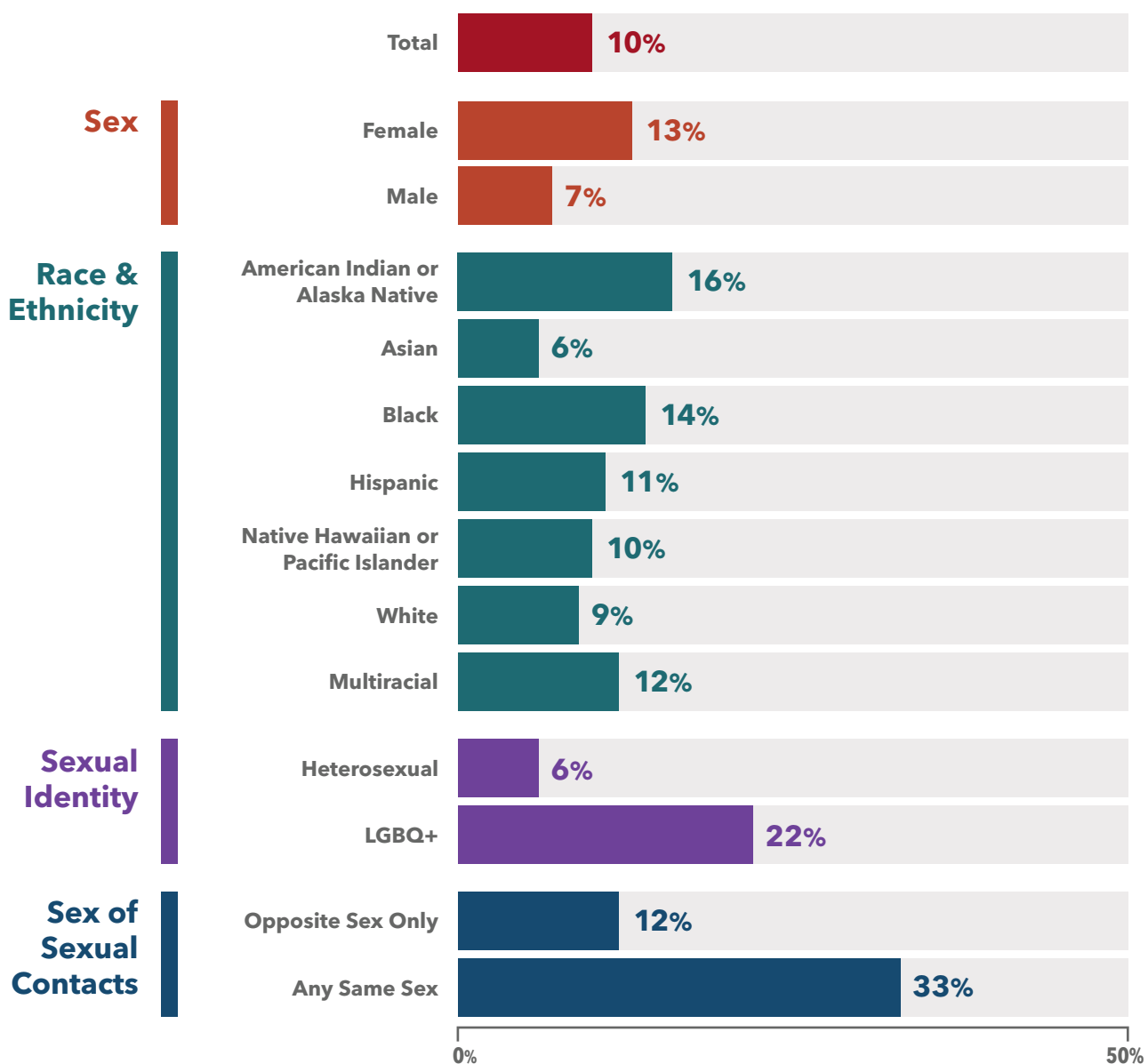
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ATTEMPTED SUICIDE

In 2021, 10% of high school students attempted suicide one or more times during the past year. Female students were more likely than male students to attempt suicide. Black students were more likely than Asian, Hispanic, and White students to attempt suicide. LGBTQ+ students and students who had any same-sex partners were more likely than their peers to attempt suicide.

Percentage of High School Students Who Attempted Suicide during the Past Year, by Demographic Characteristics, United States, YRBS, 2021

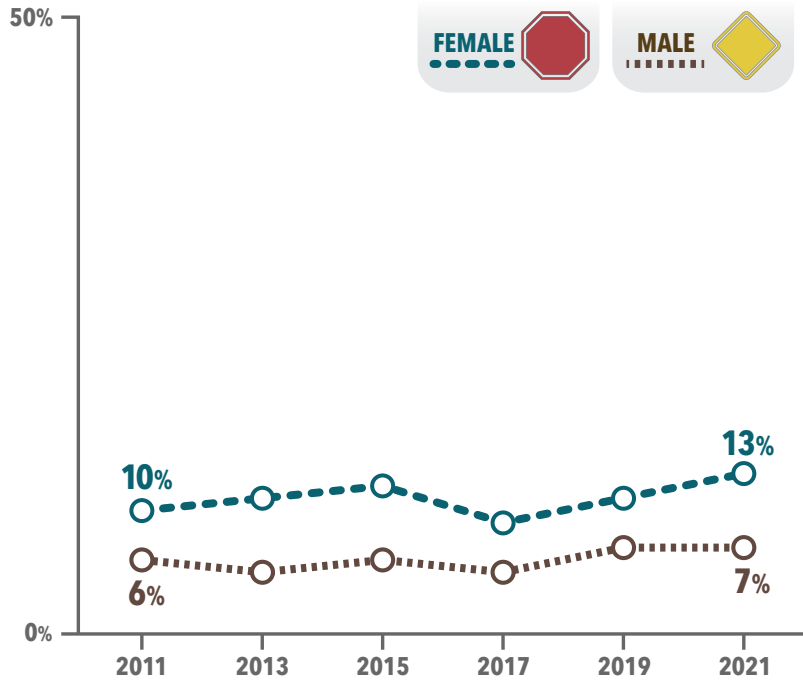


Trends in the Percentage of High School Students Who

Attempted Suicide during the Past Year, United States, YRBS, 2011-2021

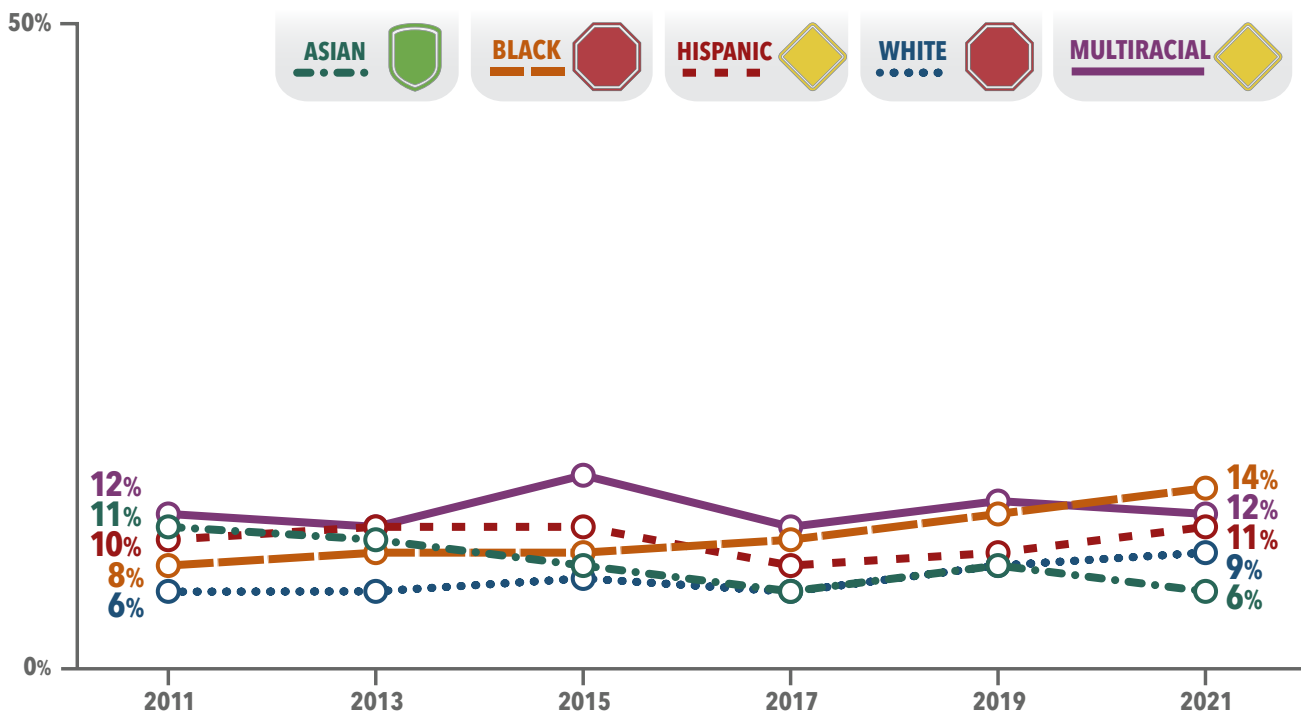
10-Year Trend Description by Sex

The percentage of female students who attempted suicide increased from 2011 to 2021. The percentage of male students who attempted suicide did not change.



10-Year Trend Description by Race & Ethnicity

The percentage of Black and White students who attempted suicide increased from 2011 to 2021. The percentage of Asian students who attempted suicide decreased. The percentage of Hispanic and multiracial students who attempted suicide did not change.



In right direction



No change



In wrong direction

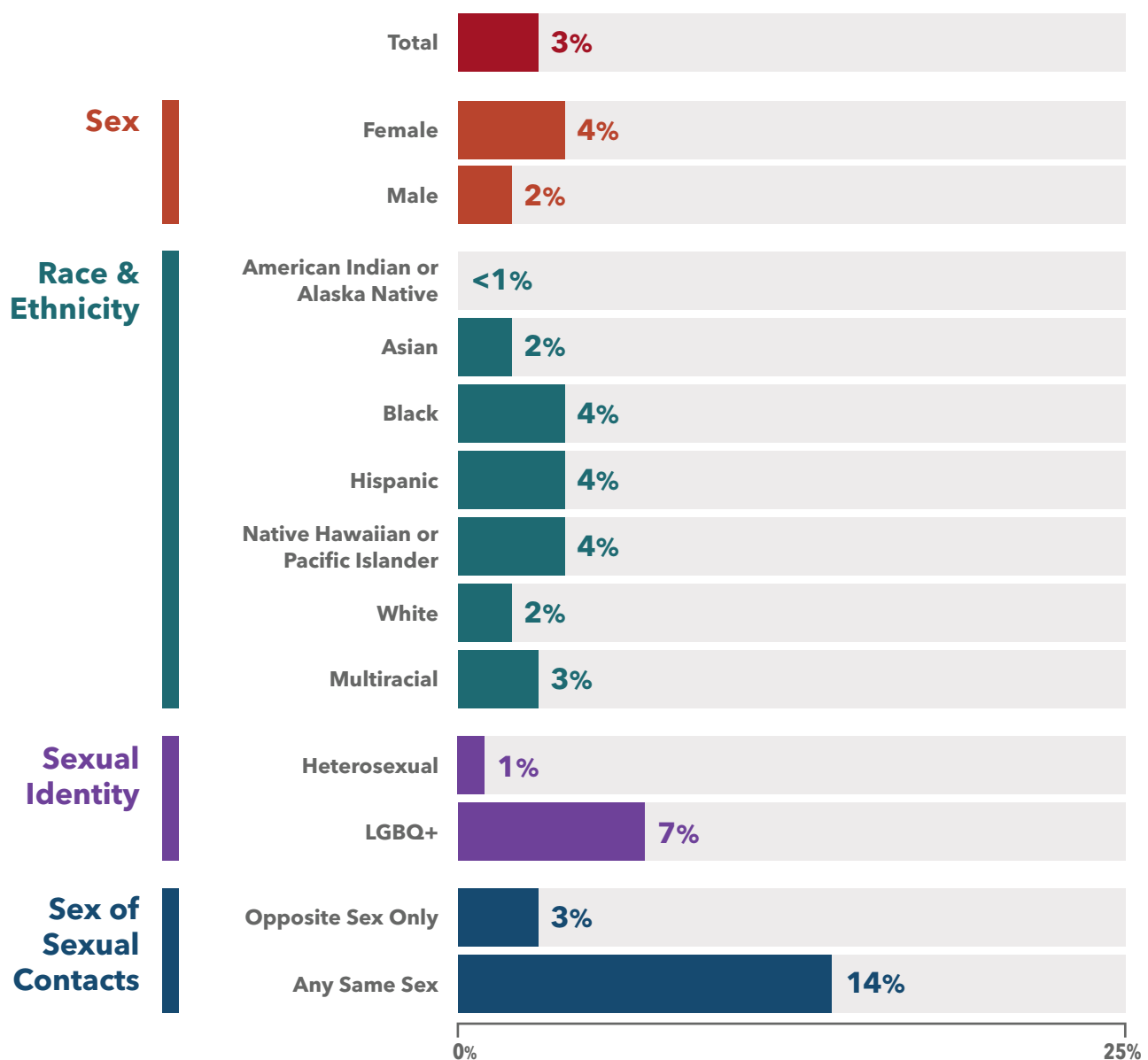


INJURED IN A SUICIDE ATTEMPT

In 2021, 3% of high school students made a suicide attempt that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse during the past year. Female students were more likely than male students to be injured in a suicide attempt. American Indian or Alaska Native students were less likely than students from most other racial and ethnic groups to be injured in a suicide attempt. Black and Hispanic students were more likely than Asian and White students to be injured in a suicide attempt. LGBTQ+ students and students who had any same-sex partners were more likely than their peers to be injured in a suicide attempt.

Percentage of High School Students Who

Were **Injured in a Suicide Attempt** during the Past Year, by Demographic Characteristics, United States, YRBS, 2021

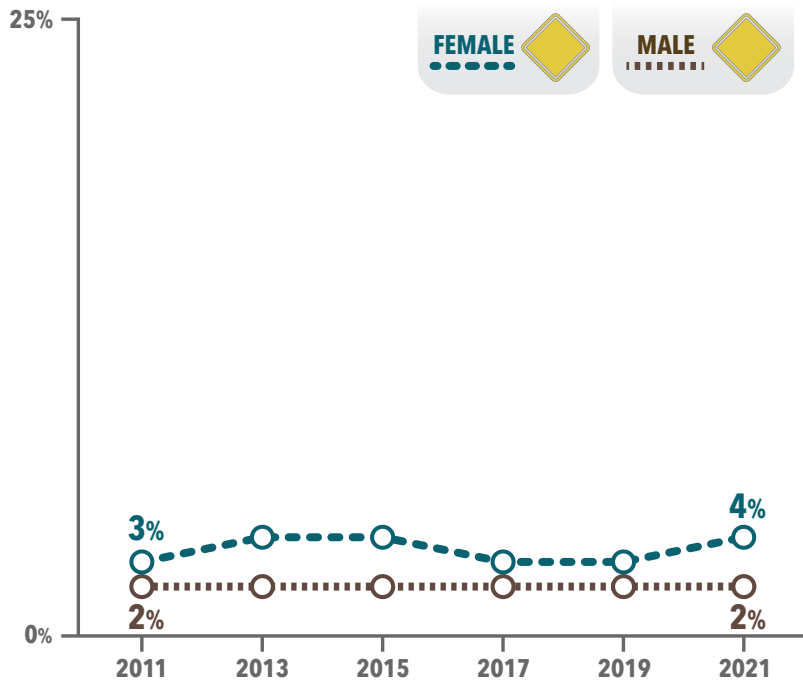


Trends in the Percentage of High School Students Who

Were Injured in a Suicide Attempt during the Past Year, United States, YRBS, 2011-2021

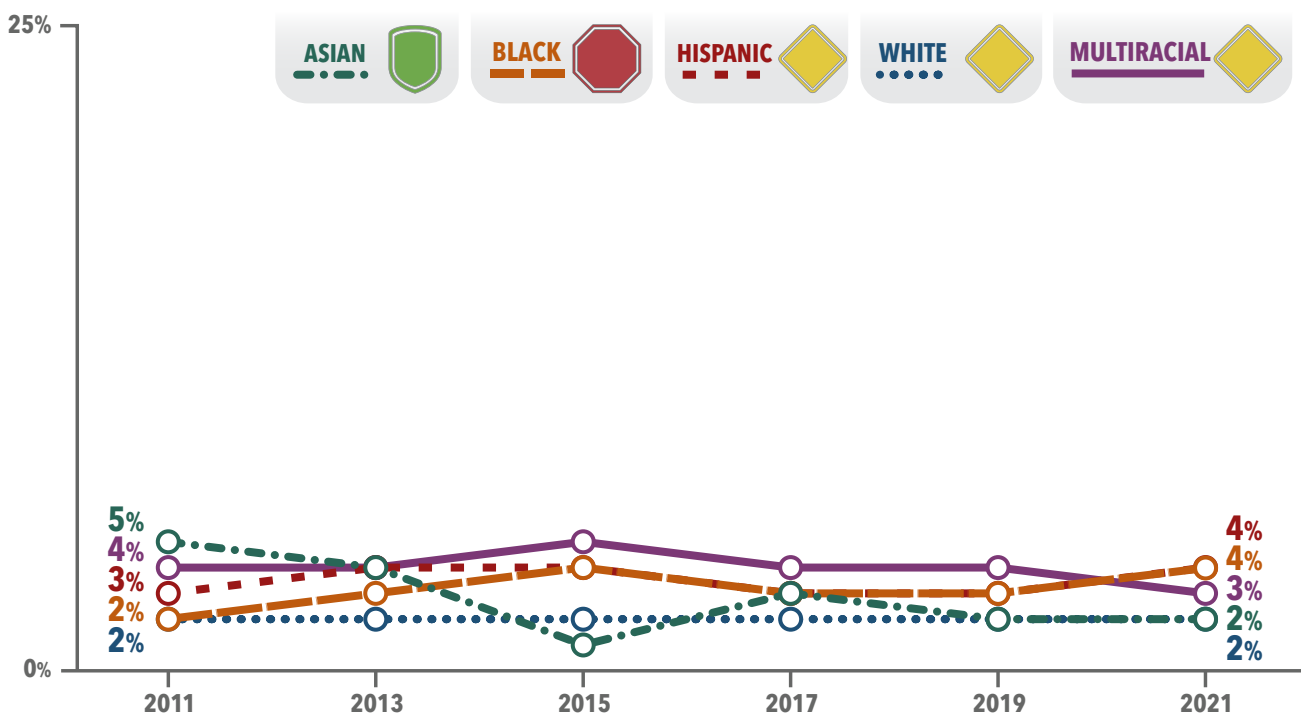
10-Year Trend Description by Sex

The percentage of female and male students who were injured in a suicide attempt did not change from 2011 to 2021.



10-Year Trend Description by Race & Ethnicity

The percentage of Black students who were injured in a suicide attempt increased from 2011 to 2021. The percentage of Asian students who were injured in a suicide attempt decreased. The percentage of Hispanic, White, and multiracial students who were injured in a suicide attempt did not change.



In right direction



No change



In wrong direction



FOCUS AREA

NEW AND EMERGING NATIONAL DATA

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INTRODUCTION TO NEW AND EMERGING NATIONAL DATA VARIABLES

Improving adolescent health requires an understanding of young people’s environments and how these environments affect their behaviors and experiences. The 2021 national YRBS questionnaire included three new questions to assess adolescents’ environments with a focus on protective factors and social determinants of health. Two questions assess known protective factors—school connectedness and parental monitoring. One question assesses a known social determinant of health—unstable housing. Because they were included for the first time in 2021, trend data are not available.

Protective factors are the characteristics, conditions, and behaviors that improve health outcomes or reduce the effects of stressful life events and other risk factors. School connectedness, which is the feeling among adolescents that people at their school care about them, their well-being, and success, has long-lasting protective effects for adolescents.³⁶ Youth who feel connected at school are less likely to experience risks related to substance use, mental health, violence, and sexual behavior. School connectedness also protects against the co-occurrence of these risks.²⁵ School connectedness was assessed by asking whether students felt close to people at their school. Parental monitoring is another important protective factor for adolescents. High parental monitoring, defined as parents or other adults in a student’s family most of the time or always knowing where they were going or who they would be with, is associated with decreased sexual risk, substance use, experiences of violence, and suicidal thoughts and behaviors.²⁶⁻²⁸ Parental monitoring was assessed by asking students whether their parents or other adults in their home most of the time or always knew where they were going and who they would be with.

Social determinants of health are the conditions in people’s environments that affect their health. Housing stability is one important social determinant of health. Youth who are unstably housed are more likely than their stably housed peers to experience violence, use substances, and have higher rates of poor mental health.²⁹ Unstable housing was assessed by asking students where they usually slept during the past 30 days.

These new national data begin to describe two areas that mitigate and increase risk and will be expanded as questions assessing additional protective factors and social determinants of health are added to the national YRBS questionnaire in future survey administrations.

SUMMARY OF RESULTS FOR NEW AND EMERGING NATIONAL DATA



In 2021

61% of high school students felt close to people at school and 86% reported that their parents or other adults in their family most of the time or always knew who they were with and where they were going. Only 3% of students experienced unstable housing. However, we see disparities in these data among some groups of students.

Male students were more likely than female students to feel close to people at school.

Heterosexual students and students who had only opposite-sex partners were more likely than their peers to feel close to people at school.

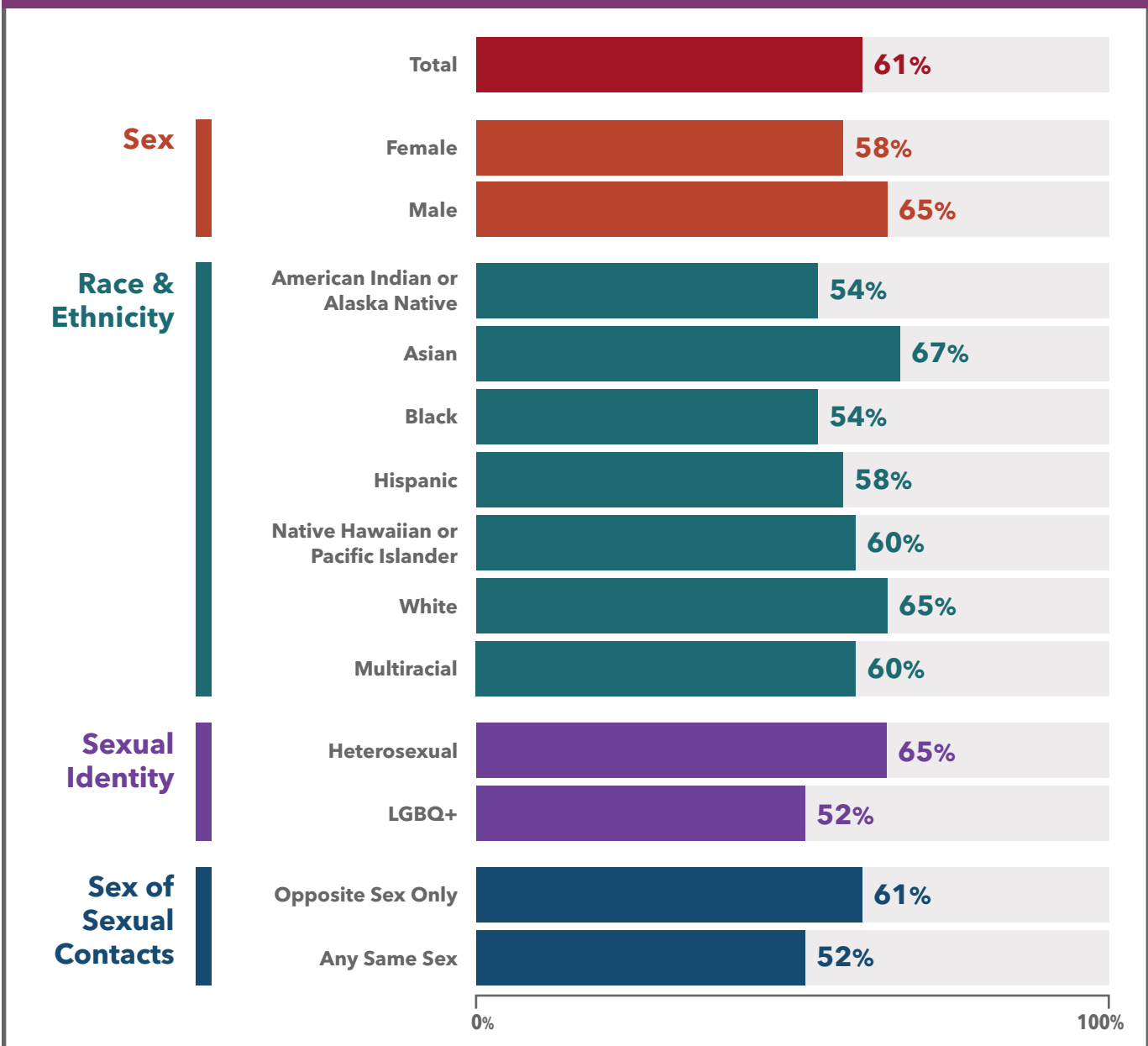
White students were more likely than students from most other racial and ethnic groups to feel close to people at school.

LGBQ+ students and students who had any same-sex partners were more likely than their peers to experience unstable housing.

SCHOOL CONNECTEDNESS

In 2021, 61% of high school students felt a sense of school connectedness, measured by agreeing or strongly agreeing that they felt close to people at school. Male students were more likely than female students to feel close to people at school. White students were more likely than students from most other racial and ethnic groups to feel close to people at school. Heterosexual students and students who had only opposite-sex partners were more likely than their peers to feel close to people at school.

Percentage of High School Students Who Felt Close to People at School, by Demographic Characteristics, United States, YRBS, 2021

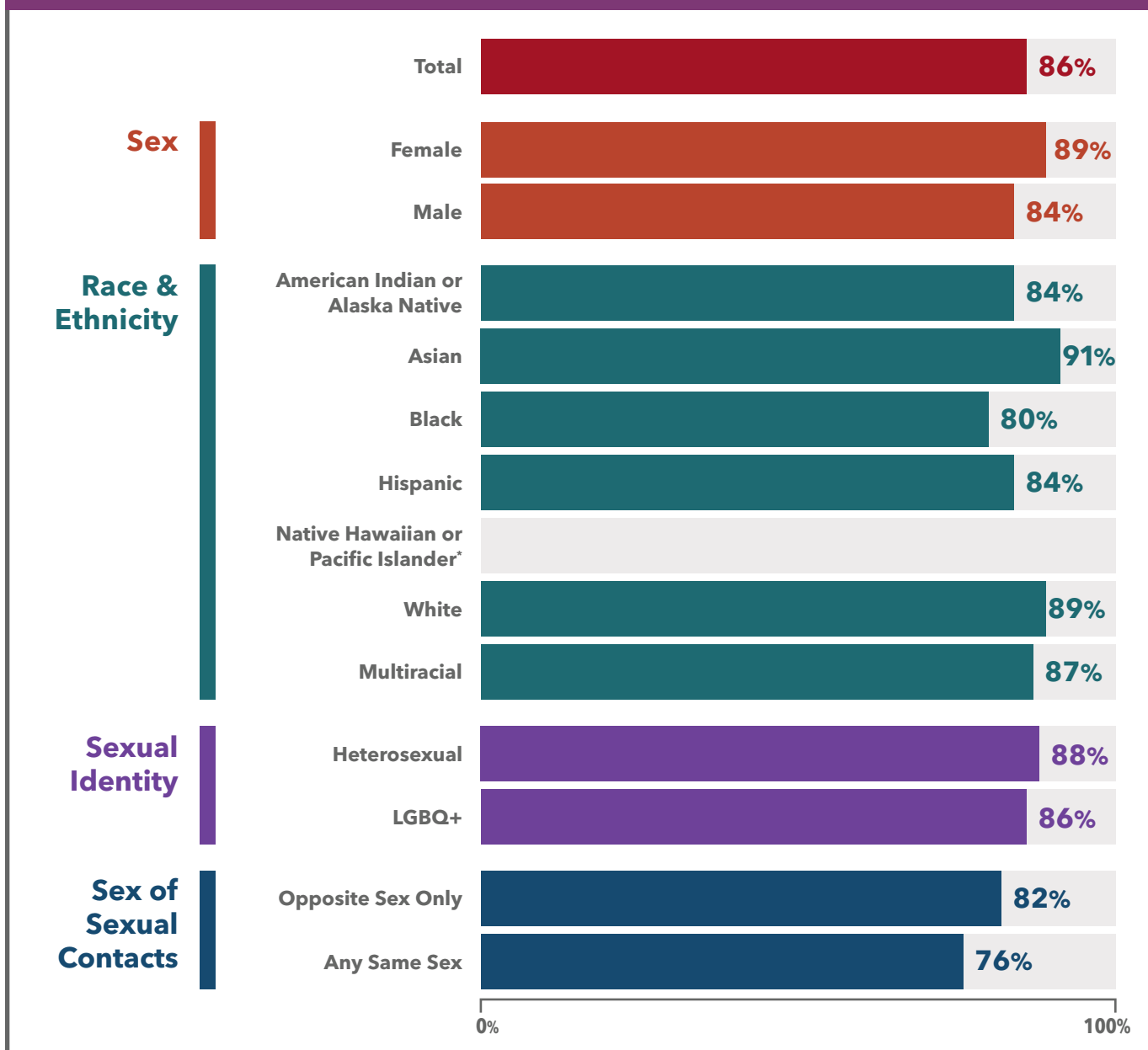


Note: The "school connectedness" variable was added to the national YRBS in 2021; therefore, trends are not available.

PARENTAL MONITORING

In 2021, 86% of high school students reported that their parents or other adults in their family most of the time or always knew where they were going or whom they would be with, also referred to as high parental monitoring. Female students were more likely than male students to report high parental monitoring. Black students were less likely than students from most other racial and ethnic groups to report high parental monitoring. Students who had only opposite-sex partners were more likely to report high parental monitoring.

Percentage of High School Students Who Experienced High Parental Monitoring, by Demographic Characteristics, United States, YRBS, 2021



Note: The "parental monitoring" variable was added to the national YRBS in 2021; therefore, trends are not available.

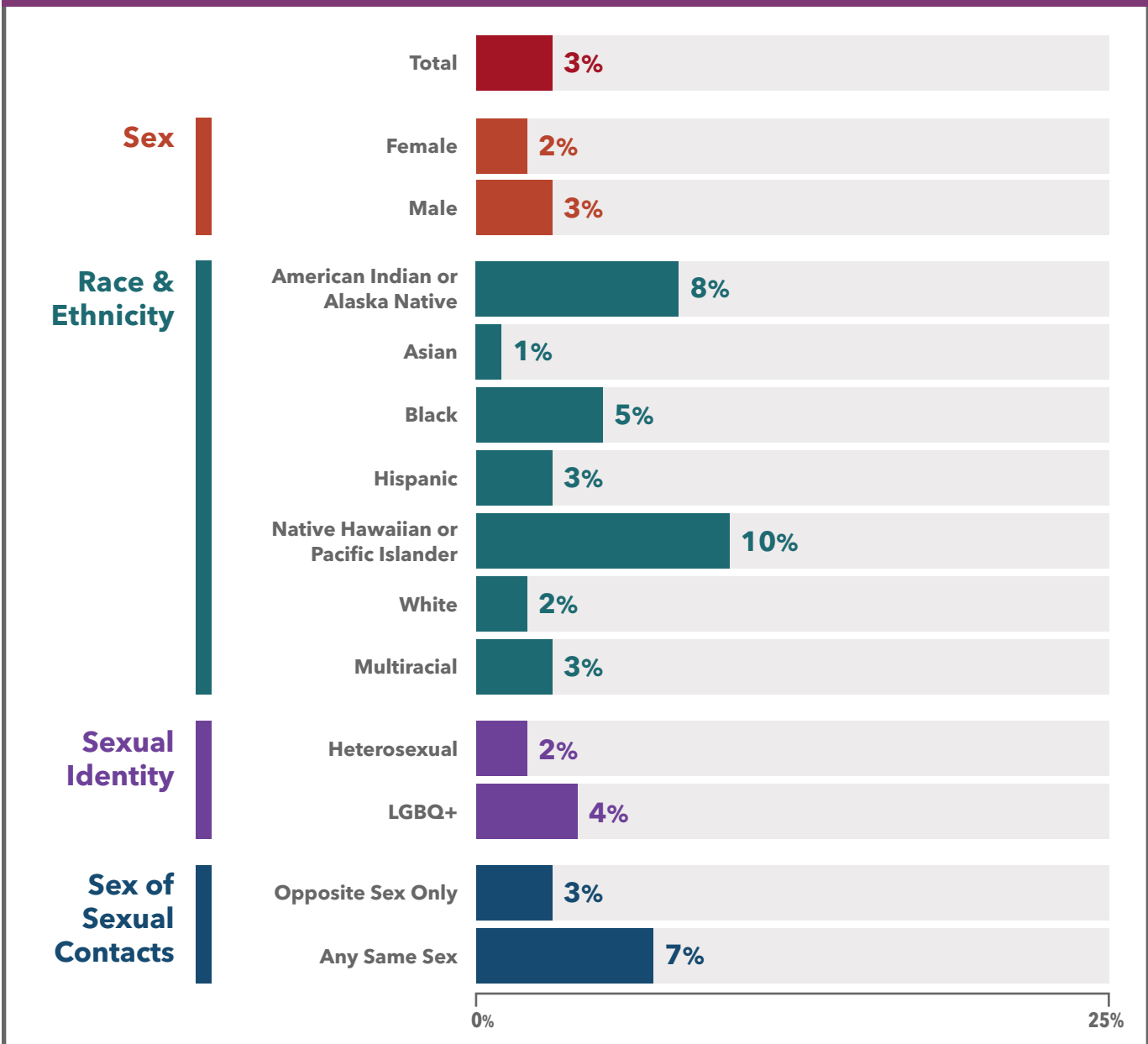
*Estimates are suppressed when there are fewer than 30 respondents for the subgroup.

UNSTABLE HOUSING

In 2021, 3% of high school students experienced unstable housing, measured by not having a usual place to sleep or sleeping in the home of a friend, family member, or other person because they had to leave their home or their parent or guardian cannot afford housing; in a shelter or emergency housing; in a motel or hotel; or in a car, park, campground, or other public place during the past 30 days. American Indian or Alaska Native and Black students were more likely than Asian, Hispanic, and White students to experience unstable housing. LGBTQ+ students and those who had any same-sex partners were more likely than their peers to experience unstable housing.

Percentage of High School Students Who

Experienced **Unstable Housing** during the Past 30 Days, by Demographic Characteristics, United States, YRBS, 2021



Note: The "unstable housing" variable was added to the national YRBS in 2021; therefore, trends are not available

REFERENCES

1. Hertz MF, Kilmer G, Verlenden J, et al. Adolescent mental health, connectedness, and mode of school instruction during COVID-19. *J Adolesc Health*. 2022;70(1):57-63.
2. Jones SE, Ethier KA, Hertz M, et al. Mental health, suicidality, and connectedness among high school students during the COVID-19 pandemic—Adolescent Behaviors and Experiences Survey, United States, January–June 2021. *MMWR Suppl*. 2022;71(Suppl-3):16-21.
3. Hallfors DD, Waller MW, Ford CA, Halpern CT, Brodish PH, Iritani B. Adolescent depression and suicide risk association with sex and drug behavior. *Am J Prev Med*. 2004;27(3):224-231.5.
4. Clayton HB, Lowry R, August E, Everett Jones S. Nonmedical use of prescription drugs and sexual risk behaviors. *Pediatrics*. 2016;137(1):e20152480.
5. Clayton HB, Lowry R, Basile KC, Demissie Z, Bohm MK. Physical and sexual dating violence and nonmedical use of prescription drugs. *Pediatrics*. 2017;140(6):e20172289.
6. Tapert SF, Aarons GA, Sedlar GR, Brown SA. Adolescent substance use and sexual risk-taking behavior. *J Adolesc Health*. 2001;28(3):181-189.
7. Lowry R, Holtzman D, Truman BI, Kann L, Collins JL, Kolbe LJ. Substance use and HIV-related sexual behaviors among US high school students: are they related? *Am J Public Health*. 1994;84(7):1116-1120.
8. Bentivegna F, Patalay P. The impact of sexual violence in mid-adolescence on mental health: a UK population-based longitudinal study. *Lancet Psychiatry*. 2022;9(11):874-883.
9. Gini G, Pozzoli T. Bullied children and psychosomatic problems: a meta-analysis. *Pediatrics*. 2013;132(4):720-729.
10. Copeland WE, Wolke D, Angold A, Costello EJ. Adult psychiatric outcomes of bullying and being bullied by peers in childhood and adolescence. *JAMA Psychiatry*. 2013;70(4):419-426.
11. Dane AV, Marini ZA, Volk AA, Vaillancourt T. Physical and relational bullying and victimization: differential relations with adolescent dating and sexual behavior. *Aggress Behav*. 2017;43(2):111-122.
12. Hong JS, Voisin DR, Cho S, Espelage DL. Association among subtypes of bullying status and sexually-risky behaviors of urban African American adolescents in Chicago. *J Immigr Minor Health*. 2016;18(5):1007-1016.
13. Okumu M, Mengo C, Ombayo B, Small E. Bullying and HIV risk among high school teenagers: the mediating role of teen dating violence. *J Sch Health*. 2017;87(10):743-750.
14. Connell CM, Gilreath TD, Hansen NB. A multiprocess latent class analysis of the co-occurrence of substance use and sexual risk behavior among adolescents. *J Stud Alcohol Drugs*. 2009;70(6):943-951.
15. Niolon PH, Vivolo-Kantor AM, Latzman N E, et al. Prevalence of teen dating violence and co-occurring risk factors among middle school youth in high-risk urban communities. *J Adolesc Health*. 2015;56(2):S5-S13.
16. Markham CM, Lormand D, Gloppen KM, Peskin MF, Flores B, Low B, House LD. Connectedness as a predictor of sexual and reproductive health outcomes for youth. *J Adolesc Health*. 2010;46(3 Suppl):S23-41.
17. Aspy CB, Vesely SK, Oman RF, Tolma E, Rodine S, Marshall L, Fluhr J. School-related assets and youth risk behaviors: alcohol consumption and sexual activity. *J Sch Health*. 2012;82(1):3-10.
18. Campbell JC, Lucea MB, Stockman JK, Draughon JE. Forced sex and HIV risk in violent relationships. *Am J Reprod Immunol*. 2013;60(1):41-44.
19. Rasberry CN, Tiu GF, Kann L, et al. Health-related behaviors and academic achievement among high school students—United States, 2015. *MMWR Morb Mortal Wkly Rep*. 2017;66:921-927.

20. Busch V, Loyen A, Lodder M, et al. The effects of adolescent health-related behavior on academic performance: a systematic review of the longitudinal evidence. *Rev Educ Res*. 2014;84(2):245-274.
21. Draucker CB, Mazurczyk J. Relationships between childhood sexual abuse and substance use and sexual risk behaviors during adolescence: an integrative review. *Nurs Outlook*. 2013;61(5):291-310.
22. Raiford JL, Herbst JH, Carry M, Brown F, Doherty I, Wechsberg WM. Low prospects and high risk: structural determinants of health associated with sexual risk among young African American women residing in resource-poor communities in the South. *Am J Community Psychol*. 2014;54(3-4):243-250.
23. Fedorowicz, Hellerstedt WI, Schreiner PJ, Bolland JM. Associations of adolescent hopelessness and self-worth with pregnancy attempts and pregnancy desire. *Am J Public Health*. 2014;104(8):e133-140.
24. Waldrop AE, Hanson RF, Resnick HS, Kilpatrick DG, Naugle AE, Saunders BE. Risk factors for suicidal behavior among a national sample of adolescents: implications for prevention. *J Traumatic Stress*. 2007;20(5):869-879.
25. Rose ID, Lesesne CA, Sun J, Johns MM, Zhang X, Hertz M. The relationship of school connectedness to adolescents' engagement in co-occurring health risks: A meta-analytic review. *J Sch Nurs*. 2022;0(0):1-16.
26. Ryan J, Roman NV, Okwany A. The effects of parental monitoring and communication on adolescent substance use and risky sexual activity: a systematic review. *Open Fam Stud J*. 2015;7(1).
27. Khetarpal SK, Szoko N, Culyba AJ, Ragavan M. The role of parental monitoring as a protective factor against youth violence victimization. *J Adolesc Health*. 2021;68 Suppl 2:S51-S52.
28. MacPherson HA, Wolff J, Nestor B, et al. Parental monitoring predicts depressive symptom and suicidal ideation outcomes in adolescents being treated for co-occurring substance use and psychiatric disorders. *J Affect Disord*. 2021;284:190-198.
29. Smith-Grant J, Kilmer G, Brener N, Robin L, Underwood JM. Risk behaviors and experiences among youth experiencing homelessness—Youth Risk Behavior Survey, 23 U.S. states and 11 local school districts, 2019. *J Community Health*. 2022;47(2):324-333.
30. Jones SE, Satter DE. Implications for coding race and ethnicity for American Indian and Alaska Native high school students in a national survey. *J Health Care Poor Underserved*. 2022;33(3):1245-1257.
31. Centers for Disease Control and Prevention. *Diagnoses of HIV infection in the United States and dependent areas, 2020*. HIV Surveillance Report;33. <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published May 2022. Accessed October 28, 2022.
32. Centers for Disease Control and Prevention. *Sexually transmitted disease surveillance 2020*. <https://www.cdc.gov/std/statistics/2020/overview.htm>. Published April 12, 2022. Accessed October 28, 2022.
33. Hamilton BE, Martin JA, Osterman MJK. *Births: provisional data for 2021*. Vital Statistics Rapid Release; no 20. <https://www.cdc.gov/nchs/data/vsrr/vsrr020.pdf>. Published May 2022. Accessed October 28, 2022.
34. Decker MR, Benning L, Weber KM, et al. Physical and sexual violence predictors: 20 years of the women's interagency HIV study cohort. *Am J Prev Med*. 2016;51(5):731-742.
35. Jones CM, Clayton HB, Deputy NP, et al. Prescription opioid misuse and use of alcohol and other substances among high school students—Youth Risk Behavior Survey, United States, 2019. *MMWR Suppl*. 2020;69(Suppl-1):38-46.
36. Steiner RJ, Sheremenko G, Lesesne C, Dittus PJ, Sieving RE, Ethier KA. Adolescent connectedness and adult health outcomes. *Pediatrics*. 2019;144(1):e20183766.

TECHNICAL NOTES

The source of all data in this report is the 2011 to 2021 cycles of the national Youth Risk Behavior Survey (YRBS), a school-based survey conducted biennially by the Centers for Disease Control and Prevention. The survey monitors six categories of health risk behaviors among a nationally representative sample of high school students. These categories include (1) behaviors that contribute to unintentional injuries and violence; (2) tobacco use; (3) alcohol and other drug use; (4) sexual behaviors related to unintended pregnancy and sexually transmitted diseases (STDs), including HIV infection; (5) unhealthy dietary behaviors; and (6) physical inactivity. In addition, the YRBS monitors the prevalence of obesity and other health-related behaviors and experiences.

SAMPLING

In each survey cycle, the national YRBS uses a three-stage cluster sample design to produce a nationally representative sample of students in grades 9–12 attending public (including charter schools), Catholic, and other non-public schools in the 50 states and the District of Columbia. For the first stage of sampling, the frame consists of primary sampling units (PSUs). These PSUs are either counties; groups of smaller, adjacent counties; or parts of larger counties. The PSUs are categorized into 16 strata according to their metropolitan statistical area (MSA) status (i.e., urban or nonurban) and the percentages of non-Hispanic Black and Hispanic students in the PSU. PSUs are sampled with probability proportional to overall school enrollment size for the PSU.

For the second stage of sampling, secondary sampling units (SSUs) are identified. An SSU is defined as a physical school with grades 9–12 or a school created by combining nearby schools to provide all four grades. From the selected PSUs, SSUs are sampled with probability proportional to school enrollment size.

For the third stage of sampling, one or two classrooms in each of grades 9–12 from either

a required subject (e.g., English or social studies) or a required period (e.g., homeroom or second period) are randomly sampled. All students in sampled classes who can complete the questionnaire independently are eligible to participate. Schools, classes, and students that refuse to participate are not replaced.

DATA COLLECTION PROCEDURES AND QUESTIONNAIRE

Survey procedures are designed to protect students' privacy by allowing for anonymous and voluntary participation. Before survey administration, local parental permission procedures are followed. Students complete the self-administered questionnaire during one class period and record their responses directly on a computer-scannable booklet.

DATA PROCESSING PROCEDURES AND RESPONSE RATES

For the 2021 national YRBS, 17,508 questionnaires were completed in 152 schools. The data set was cleaned and edited for inconsistencies. Missing data were not statistically imputed. After editing, 17,232 questionnaires were usable. The school response rate was 73%, the student response rate was 79%, and the overall response rate, which is the product of the school and student response rates, was 58%.

QUESTIONNAIRE

In 2021, the national YRBS questionnaire consisted of 99 questions. The questionnaire included questions to identify student demographic characteristics. Student sex was assessed with the question, "What is your sex?" Response options were "Female" and "Male."

Race and ethnicity were ascertained from two questions: (1) "Are you Hispanic or Latino?" (response options were "yes" or "no"), and (2) "What is your race?" Response options were "American Indian or Alaska Native," "Asian,"

“Black or African American,” “Native Hawaiian or other Pacific Islander,” or “White.” For the second question, students could select more than one response option. Students were classified into the following seven racial and ethnic categories: non-Hispanic American Indian or Alaska Native (AI/AN), Hispanic or Latino, non-Hispanic Asian (Asian), non-Hispanic Black (Black), non-Hispanic Native Hawaiian or other Pacific Islander (NH/OPI), non-Hispanic White (White), and non-Hispanic persons of multiple races (multiracial).

Two questions measured sexual identity and sex of sexual contacts. Sexual identity was ascertained with the following question: “Which of the following best describes you?” Response options were “heterosexual (straight),” “gay or lesbian,” “bisexual,” “I describe my sexual identity in some other way,” “I am not sure about my sexual identity (questioning),” and “I do not know what this question is asking.” For this report, students who responded “heterosexual (straight)” were classified as heterosexual. Students who responded “gay or lesbian,” “bisexual,” “I describe my sexual identity in some other way,” or “I am not sure about my sexual identity (questioning),” were classified as LGBTQ+.

Sex of sexual contacts was ascertained with, “During your life, with whom have you had sexual contact?” Response options were “I have never had sexual contact,” “females,” “males,” and “females and males.” No definition was provided for sexual contact. For this report, students who had ever had sexual contact were dichotomized into “opposite-sex only” and “any same sex,” which included students with either same-sex only or both sex sexual partners. For this report, female students who had sexual contact with only females were excluded from analyses on condom use and dual use of condoms and birth control, and male students who had sexual contact with only males were excluded from analyses on dual use of condoms and birth control use.

The wording of each question used to create the variables included in this report can be found in the appendix.

WEIGHTING

A weight based on student sex, race/ethnicity, and grade was applied to each record to adjust for school and student nonresponse and oversampling of Black and Hispanic students. The overall weights were scaled so that the weighted count of students equals the total sample size, and the weighted proportions of students in each grade match the national population proportions. Therefore, weighted estimates are representative of all students in grades 9–12 attending public and non-public schools in the United States.

ANALYTIC METHODS

Statistical analyses were conducted on weighted data using SAS and SUDAAN software to account for the complex sampling design. T-tests were used to determine pairwise differences between subpopulations. Differences between prevalence estimates were considered statistically significant if the t-test p-value was <0.05 .

To identify temporal trends in behaviors from 2011 to 2021, only variables assessed with identically worded questions were examined. Logistic regression analyses were used to assess linear trends while accounting for any changes in the prevalence of sex, grade, and race or ethnicity over time. A p-value associated with the regression coefficient that was <0.05 was considered statistically significant.

More information about the national YRBS methodology is available at www.cdc.gov/yrbs.

APPENDIX

SURVEY QUESTION WORDING FOR VARIABLES IN REPORT

Sexual Behavior

1. Have you ever had sexual intercourse?
2. During your life, with how many people have you had sexual intercourse?
3. During the past 3 months, with how many people did you have sexual intercourse?
4. The last time you had sexual intercourse, did you or your partner use a condom?
5. The last time you had sexual intercourse with an opposite-sex partner, what one method did you or your partner use to prevent pregnancy?
6. During the past 12 months, have you been tested for a sexually transmitted disease (STD) other than HIV, such as chlamydia or gonorrhea?
7. Have you ever been tested for HIV, the virus that causes AIDS? (Do not count tests done if you donated blood.)

Substance Use

1. During the past 30 days, on how many days did you have at least one drink of alcohol?*
2. During the past 30 days, how many times did you use marijuana?*
3. During the past 30 days, on how many days did you use an electronic vapor product?*
4. During your life, how many times have you used any form of cocaine, including powder, crack, or freebase?†
5. During your life, how many times have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?†
6. During your life, how many times have you used heroin (also called smack, junk, or China White)?†
7. During your life, how many times have you used methamphetamines (also called speed, crystal meth, crank, ice, or meth)?†
8. During your life, how many times have you used hallucinogenic drugs, such as LSD, acid, PCP, angel dust, mescaline, or mushrooms?†
9. During your life, how many times have you used ecstasy (also called MDMA or Molly)?†
10. During your life, how many times have you taken prescription pain medicine without a doctor's prescription or differently than how a doctor told you to use it?*
11. During the past 30 days, how many times have you taken prescription pain medicine without a doctor's prescription or differently than how a doctor told you to use it?*

Experiencing Violence

1. During the past 12 months, how many times has someone threatened or injured you with a weapon such as a gun, knife, or club on school property?
 2. During the past 30 days, on how many days did you not go to school because you felt you would be unsafe at school or on your way to or from school?
 3. During the past 12 months, have you ever been electronically bullied?
(Count being bullied through texting, Instagram, Facebook, or other social media.)*
 4. During the past 12 months, have you ever been bullied on school property?*
 5. Have you ever been physically forced to have sexual intercourse when you did not want to?
 6. During the past 12 months, how many times did anyone force you to do sexual things that you did not want to do? (Count such things as kissing, touching, or being physically forced to have sexual intercourse.)
-

Mental Health and Suicidality

1. 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?*
 2. During the past 30 days, how often was your mental health not good?
(Poor mental health includes stress, anxiety, and depression.)
 3. During the past 12 months, did you ever seriously consider attempting suicide?*
 4. During the past 12 months, did you make a plan about how you would attempt suicide?*
 5. During the past 12 months, how many times did you actually attempt suicide?*
 6. If you attempted suicide during the past 12 months, did any attempt result in an injury, poisoning, or overdose that had to be treated by a doctor or nurse?*
-

New and Emerging National Data

1. Do you agree or disagree that you feel close to people at your school?
2. How often do your parents or other adults in your family know where you are going and with whom you will be?
3. During the past 30 days, where did you usually sleep?

*This question was preceded by an introduction. More information on YRBS and full questionnaires are available at: www.cdc.gov/yrbs.

†Question included in "select illicit drug use" variable.

ALL SIGNIFICANT DIFFERENCES BY DEMOGRAPHIC CHARACTERISTICS

Sexual Behavior

2021	Ever Had Sex	4+ Lifetime Partners	Currently Sexually Active	Condom Use at Last Sex	Effective Hormonal Birth Control Use	Dual Method Use	Ever Tested for HIV	Tested for STDs
Sex: Female (F), Male (M)								
Pairwise Comparison	No significant difference	M>F	F>M	M>F	F>M	No significant difference	No significant difference	F>M
Race and Ethnicity: American Indian or Alaska Native (AI/AN), Asian (A), Black (B), Hispanic (H), Native Hawaiian or other Pacific Islander (NH/OPI), White (W), Multiracial (MR)								
Pairwise Comparison	A<AI/AN, B,H,W,MR	A<AI/AN, B,H,W,MR	A<AI/AN, B,H,NH/OPI, W,MR B>NH/OPI	W>MR	W>B,H MR>B,H	W>A,B,H MR>A,B	A<B,H,MR W<H,MR	A<B,H,W,MR W<B,H,MR
Sexual Identity: Lesbian, Gay, Bisexual, Questioning, Other Non-Heterosexual Identity (LGBQ+), Heterosexual (H)								
Pairwise Comparison	LGBQ+>H	LGBQ+>H	No significant difference	H>LGBQ+	No significant difference	H>LGBQ+	LGBQ+>H	LGBQ+>H
Sex of Sexual Contacts: Opposite Sex Only (O), Any Same Sex (S)								
Pairwise Comparison	O>S	S>O	O>S	O>S	No significant difference	No significant difference	S>O	No significant difference

Substance Use

2021	Current Alcohol Use	Current Marijuana Use	Current Electronic Vapor Product Use	Ever Used Select Illicit Drugs	Ever Misused Prescription Opioids	Current Prescription Opioid Misuse
Sex: Female (F), Male (M)						
Pairwise Comparison	F>M	F>M	F>M	F>M	F>M	F>M
Race and Ethnicity: American Indian or Alaska Native (AI/AN), Asian (A), Black (B), Hispanic (H), Native Hawaiian or other Pacific Islander (NH/OPI), White (W), Multiracial (MR)						
Pairwise Comparison	A<AI/AN,H, NH/OPI,W,MR B<AI/AN,H,W,MR W>A,B,H	A<AI/AN, B,H,W,MR B>A,H,W	A<AI/AN,B,H, NH/OPI,W,MR B<AI/AN, H,NH/OPI,W W>A,B	A<AI/AN,H,W,MR B< AI/AN,H,W,MR W>A,B	H>A	B>A,W H>A,W,MR
Sexual Identity: Lesbian, Gay, Bisexual, Questioning, Other Non-Heterosexual Identity (LGBQ+), Heterosexual (H)						
Pairwise Comparison	LGBQ+>H	LGBQ+>H	LGBQ+>H	LGBQ+>H	LGBQ+>H	LGBQ+>H
Sex of Sexual Contacts: Opposite Sex Only (O), Any Same Sex (S)						
Pairwise Comparison	S>O	S>O	S>O	S>O	S>O	S>O

Experiencing Violence

2021	Threatened or Injured with a Weapon at School	Did Not Go to School Because of Safety Concerns	Electronically Bullied	Bullied at School	Ever Forced to Have Sex	Sexual Violence by Anyone
Sex: Female (F), Male (M)						
Pairwise Comparison	No significant difference	F>M	F>M	F>M	F>M	F>M
Race and Ethnicity: American Indian or Alaska Native (AI/AN), Asian (A), Black (B), Hispanic (H), Native Hawaiian or other Pacific Islander (NH/OPI), White (W), Multiracial (MR)						
Pairwise Comparison	A<B,H,W,MR	A<AI/AN,B,H,MR B>A,W,MR H>A,W,MR	AI/AN>B,H,NH/OPI H>B W>A,B,H,NH/OPI MR>B,NH/OPI	B<AI/AN,H,W,MR W>A,B,H MR>A,B	AI/AN>A,B,H,W, NH/OPI A<AI/AN,H,W,MR MR>A,B,W	AI/AN>A,B,NH/OPI H>A,B,NH/OPI W>A,B,NH/OPI MR>A,B,NH/OPI
Sexual Identity: Lesbian, Gay, Bisexual, Questioning, Other Non-Heterosexual Identity (LGBQ+), Heterosexual (H)						
Pairwise Comparison	LGBQ+>H	LGBQ+>H	LGBQ+>H	LGBQ+>H	LGBQ+>H	LGBQ+>H
Sex of Sexual Contacts: Opposite Sex Only (O), Any Same Sex (S)						
Pairwise Comparison	S>O	S>O	S>O	S>O	S>O	S>O

Mental Health and Suicidality

2021	Persistent Feelings of Sadness or Hopelessness	Poor Mental Health	Seriously Considered Attempting Suicide	Made a Suicide Plan	Attempted Suicide	Injured in a Suicide Attempt
Sex: Female (F), Male (M)						
Pairwise Comparison	F>M	F>M	F>M	F>M	F>M	F>M
Race and Ethnicity: American Indian or Alaska Native (AI/AN), Asian (A), Black (B), Hispanic (H), Native Hawaiian or other Pacific Islander (NH/OPI), White (W), Multiracial (MR)						
Pairwise Comparison	A<H,W,MR H>A,B,W MR>A,B,W	A<H,W,MR B<H,MR	A<B,H,W,MR	MR>A	B>A,H,W A<AI/AN,B,H,MR	A<B,H AI/AN<B,H,W,MR W<B,H
Sexual Identity: Lesbian, Gay, Bisexual, Questioning, Other Non-Heterosexual Identity (LGBQ+), Heterosexual (H)						
Pairwise Comparison	LGBQ+>H	LGBQ+>H	LGBQ+>H	LGBQ+>H	LGBQ+>H	LGBQ+>H
Sex of Sexual Contacts: Opposite Sex Only (O), Any Same Sex (S)						
Pairwise Comparison	S>O	S>O	S>O	S>O	S>O	S>O

New and Emerging National Data

2021	School Connectedness	Parental Monitoring	Unstable Housing
Sex: Female (F), Male (M)			
Pairwise Comparison	M>F	F>M	No significant difference
Race and Ethnicity: American Indian or Alaska Native (AI/AN), Asian (A), Black (B), Hispanic (H), Native Hawaiian or other Pacific Islander (NH/OPI), White (W), Multiracial (MR)			
Pairwise Comparison	B<A,MR,W W>AI/AN,B,H,MR	B<A,W,H,MR H<A,W	AI/AN>A,H,W A<AI/AN,B,H,NH/OPI,W,MR B>A,H,W
Sexual Identity: Lesbian, Gay, Bisexual, Questioning, Other Non-Heterosexual Identity (LGBQ+), Heterosexual (H)			
Pairwise Comparison	H>LGBQ+	No significant difference	LGBQ+>H
Sex of Sexual Contacts: Opposite Sex Only (O), Any Same Sex (S)			
Pairwise Comparison	O>S	O>S	S>O

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