

Youth Risk Behavior Survey (YRBS)
Selected Sexual Risk Behaviors
California,
2015, 2017, 2019

Slides prepared for the
Adolescent Sexual Health Work Group (ASHWG) by:

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What is YRBS?

YRBS is part of a multi-survey surveillance system launched by CDC in 1990. YRBS monitors six categories of health-related behaviors that contribute to the leading causes of death and disability among youth and adults, including:

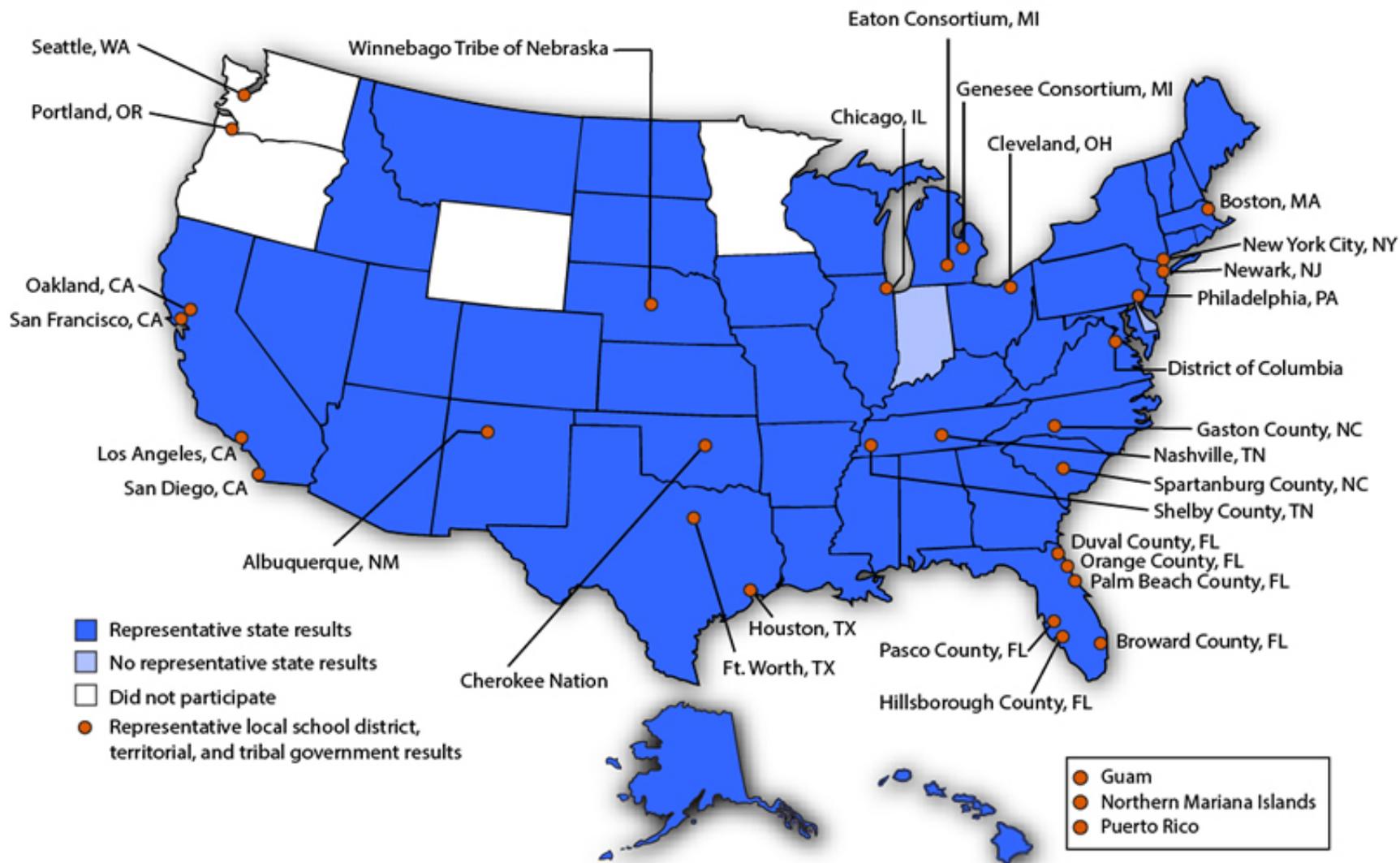
- Behaviors that contribute to unintentional injuries and violence
- Sexual behaviors related to unintended pregnancy and sexually transmitted diseases, including HIV infection
- Alcohol and other drug use
- Tobacco use
- Unhealthy dietary behaviors
- Inadequate physical activity

YRBS also measures the prevalence of obesity and asthma and other health-related behaviors plus sexual identity and sex of sexual contacts.

YRBS includes a national school-based survey conducted by CDC and state, territorial, tribal, and local surveys conducted by state, territorial, and local education and health agencies and tribal governments.

<https://www.cdc.gov/healthyouth/data/yrbs/overview.htm>

States Participating in the 2019 YRBS





Accessing California's Data

www.cdc.gov/healthyyouth/data/yrbs

- Full datasets can be requested from the Centers for Disease Control and Prevention (CDC)
- CDC developed an online analysis tool to query response frequencies and stratify results by race/ethnicity, sex, or grade in school, creating the ability to:
 - Compare national and state-level data
 - See whether differences are significant
 - See which sample sizes are too small to report

Data Collection Notes

2019 Survey

- The California Department of Education (CDE) contacted schools selected for participation by the CDC for YRBS to request their participation. Students were surveyed in the Spring semester.
- Trained surveyors from CDE, California Department of Public Health, and other key partners administered the survey at selected school sites.
- YRBS is a paper-and-pencil survey, completed on a scantron form. Students were provided paper to cover their answer sheets.

Data Collection Notes

2019 Survey

- Students were given instructions before the survey began on how to complete the survey. Students were told they could skip any questions they did not wish to answer.
- Race/ethnicity was the only question where multiple response options were allowed. All other questions were single response only.
- During administration, if students asked about the meaning of a specific survey question they were instructed to answer based on their interpretation of the question.

California YRBS Sample

2019 Survey

Eligibility criteria:

- District operated public high school serving grades 9-12

Exclusion criteria:

- Private, public charter, virtual, or alternative schools

Participation Rate:

- 40 schools were selected
- 25 (66%) schools participated
- 1,334 (91%) students from selected classrooms participated

School Response Rate x Student Response Rate > 60%*

*60% is the minimum school response rate x student response rate required to calculate a weighted sample.



Data Analysis Notes

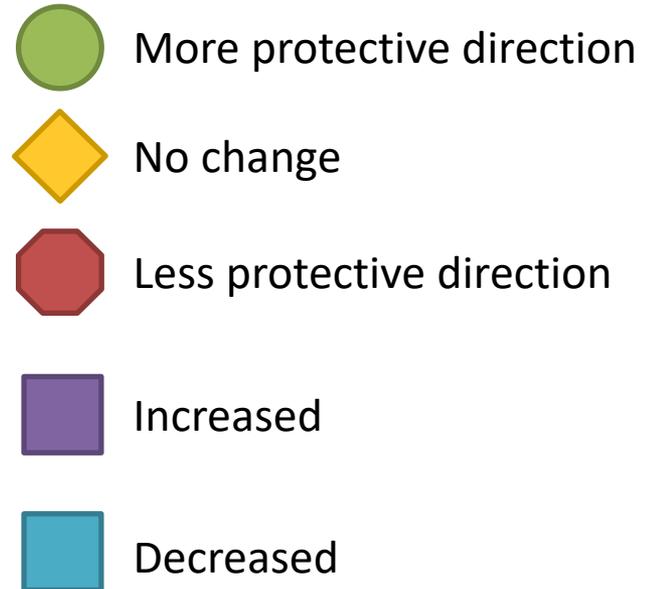
2019 Survey

- Results have been weighted to reflect the population of students in California schools eligible to be selected for this survey.
- Weights are applied based on:
 - Grade in school
 - Gender
 - Race/Ethnicity
- Any increase, decrease, or difference in data points that is stated on the slide is statistically significant.
 - Some trend slides may appear to change over time, but unless the slide states there was an increase/decrease/move in specific direction, the difference in numbers is due to chance and not significant.

Data Analysis Notes

2019 Survey

- Trends are presented for selected questions with data from the 2015, 2017, and 2019 California surveys.
- Trends are examined by linear trend analyses using logistic regression models controlling for sex, race/ethnicity, and grade in school ($p < 0.05$).
- For trends with clear goals in a certain direction (i.e. increase condom use) we use the scale of green to red icons to designate significance over time.
 - For trends without a clear goal we use the scale of purple to blue icons to designate significance over time.
 - These scales are adapted from the trend categories used by CDC in their YRBS Executive Summary of Trends, 2009-2019.





Data Analysis Notes

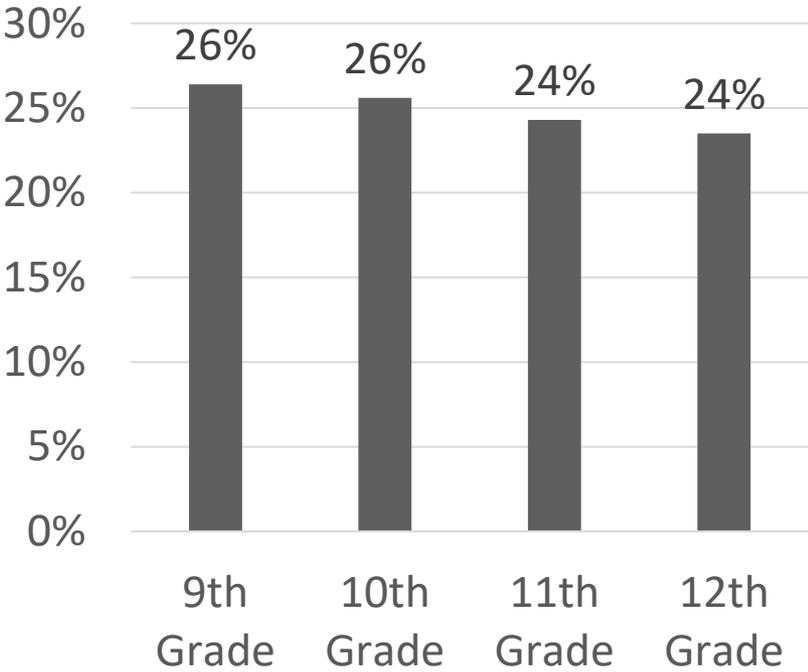
2019 Survey

- Data is largely not reported by race/ethnicity due to small sample sizes.
- In many cases, the small sample of high schoolers within particular race or ethnic groups made the estimates unstable and therefore not reportable.
- We are exploring options to better report data on race and ethnicity, including:
 - Combining YRBS survey years to increase sample size
 - Oversampling high schoolers from race or ethnic groups with historically small numbers in YRBS

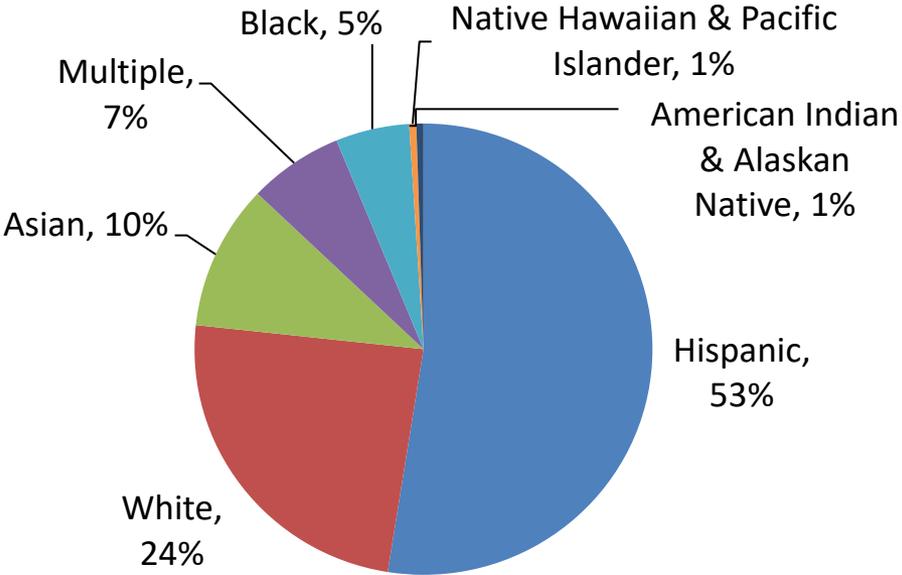
Who are California's 1.6 million high school students?

YRBS is weighted to represent all students enrolled in California's district operated public schools serving grades 9 through 12.

Grade Level



Race or Ethnicity



Source: California Department of Education



Who are California's 1.6 million high school students?



When asked about their sex, students report:

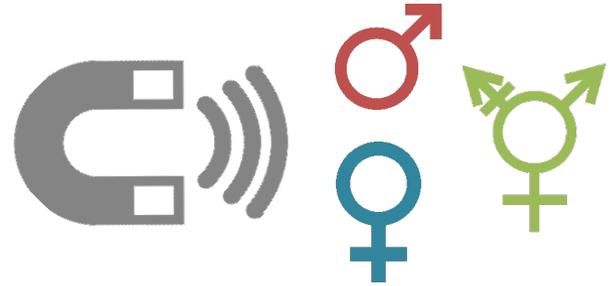
Female = 49%

Male = 51%

When asked if they are transgender, students report:

Transgender = 3.0%

Not sure = 3.1%



When asked about sexual orientation, students describe themselves as:

Gay or Lesbian = 2%

Bisexual = 9%

Heterosexual = 83%

Not sure = 6%



When applied to California's student population, we estimate there are:



Between **737,376 - 833,042** female students

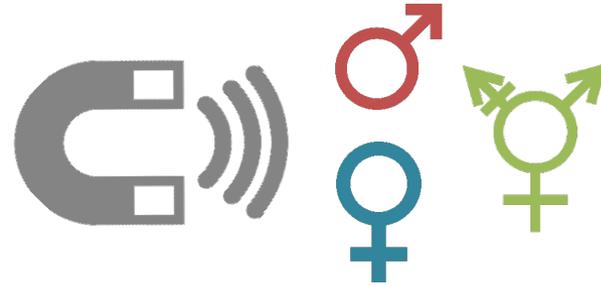
Between **766,958 - 862,624** male students

Between **571 - 96,542** transgender students

Between **24,930 - 74,842** students are not sure if they are transgender



When applied to California's student population, we estimate there are:



Between **19,037 - 48,841** gay/lesbian students

Between **124,592 - 164,926** bisexual students

Between **1,299,339 - 1,363,070** heterosexual students

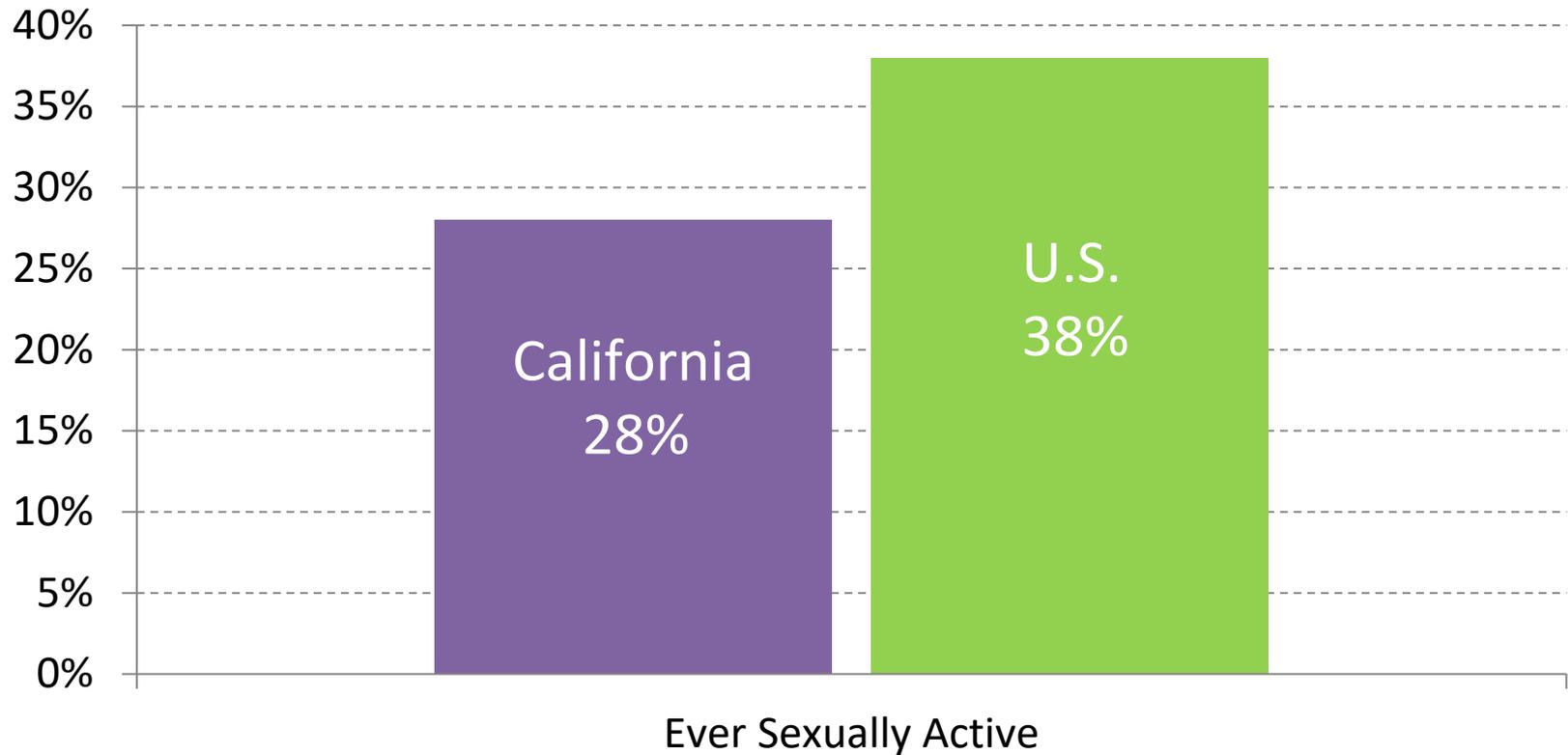
Between **57,634 - 122,373** students who are not sure of their sexual identity

How often do students report sexual activity
and does it differ by demographic?

YRBS 2015, 2017, 2019



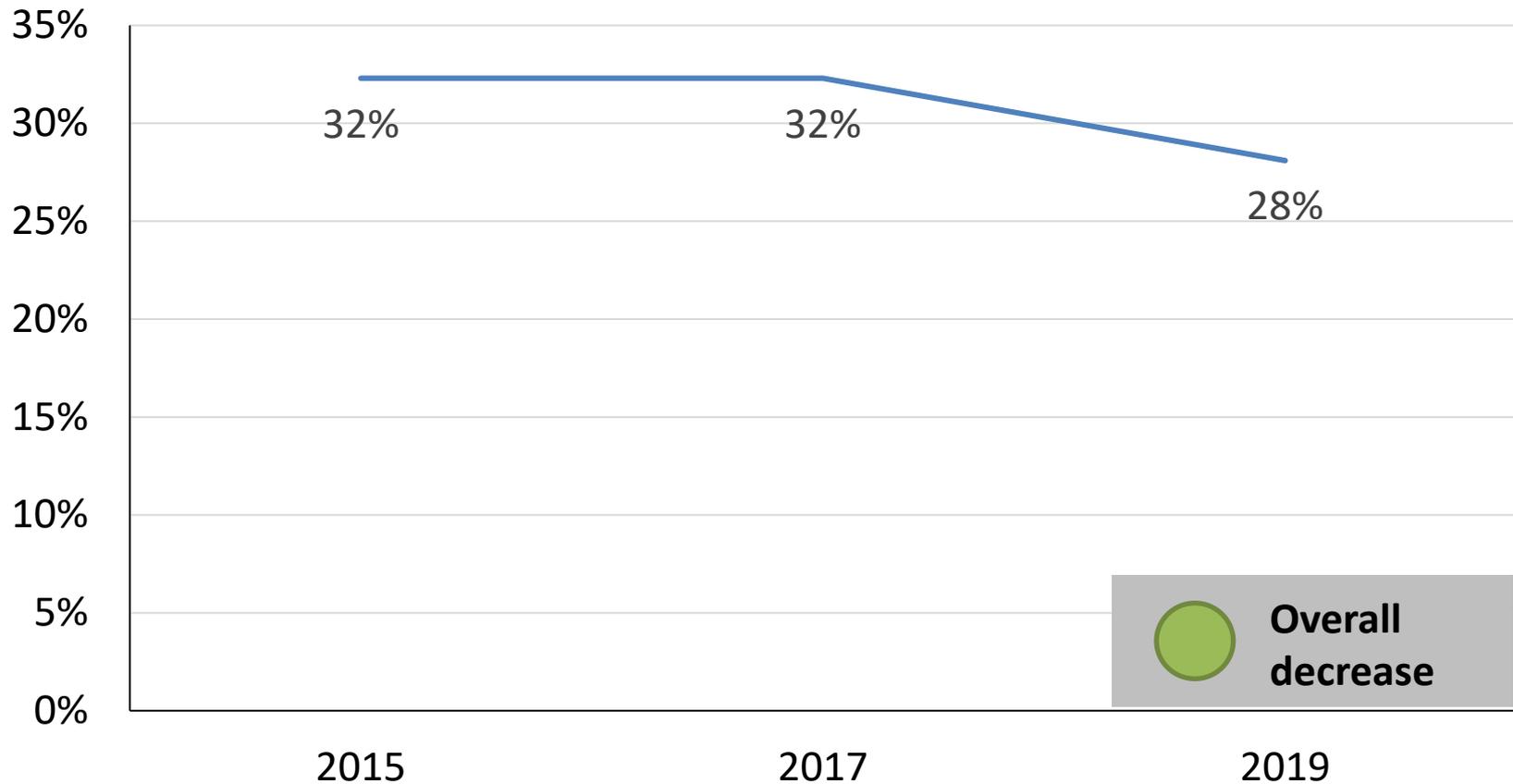
California students are less likely to report ever having sex* than students nationwide



*Have you ever had sexual intercourse?

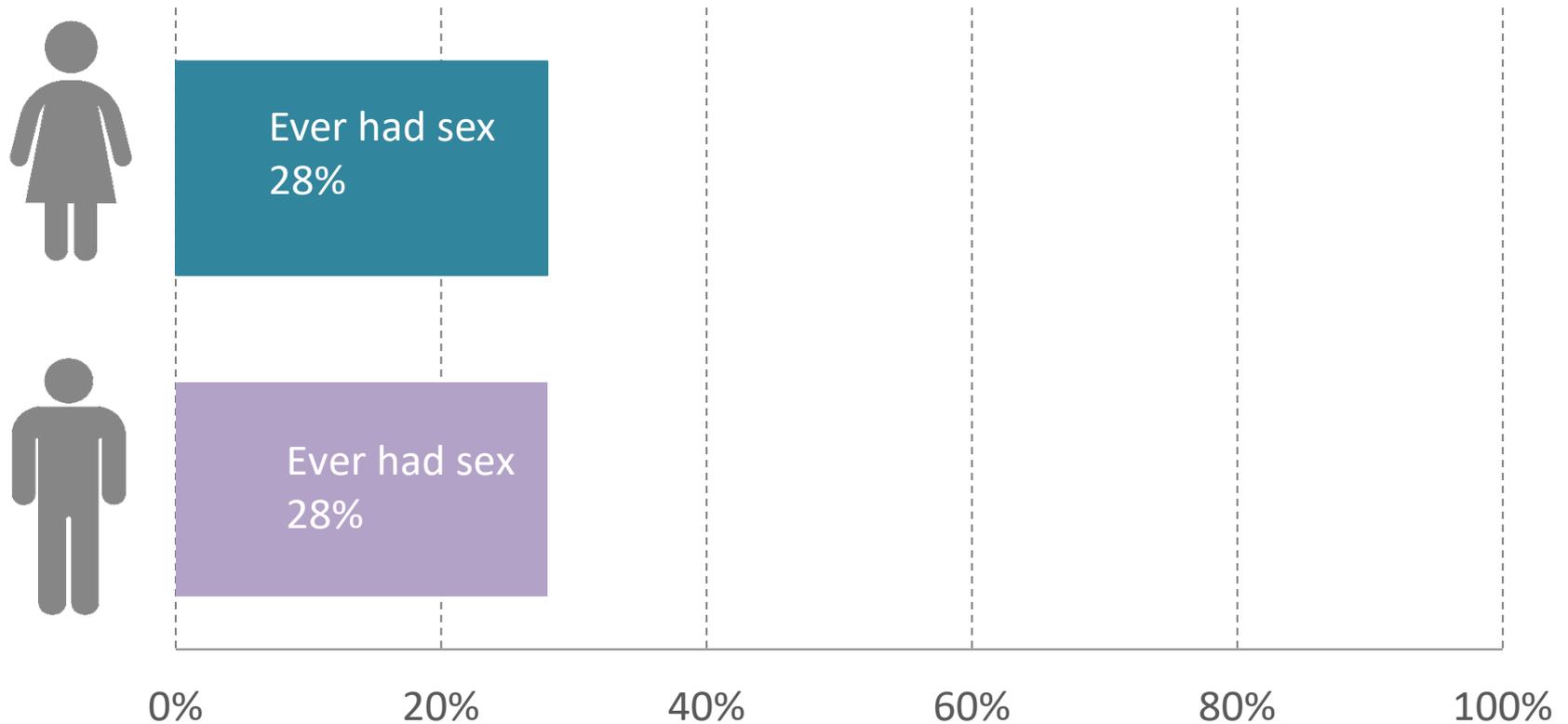


The percentage of California high school students who have ever had sex* has decreased over time



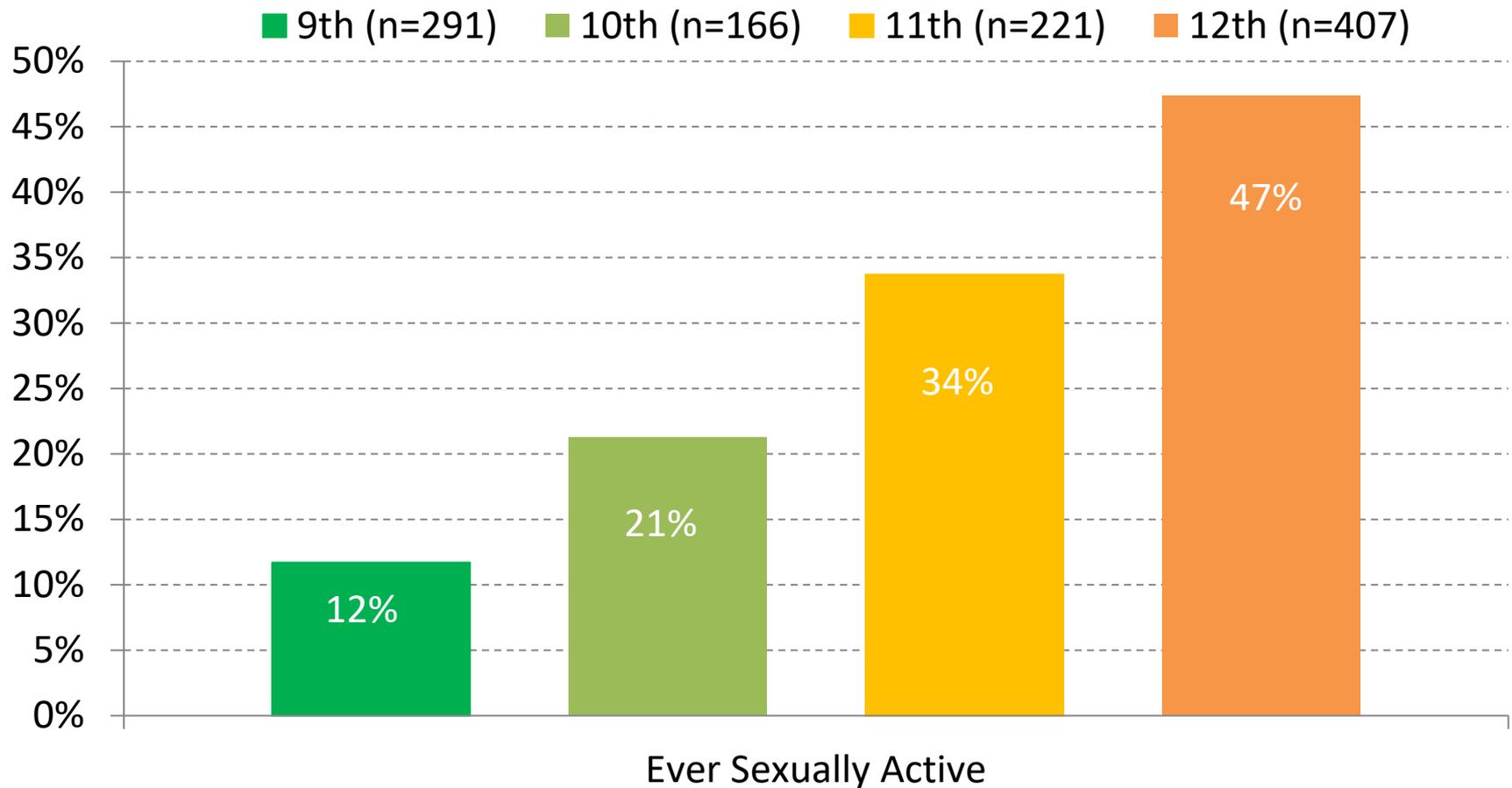
*Have you ever had sexual intercourse?

There are no differences by gender in students reporting ever having sex*



*Have you ever had sexual intercourse?

The percentage of students who report ever having sex* increases by grade level



*Have you ever had sexual intercourse?

There are minor differences in reported sexual activity by race/ethnicity. Most are not significant.

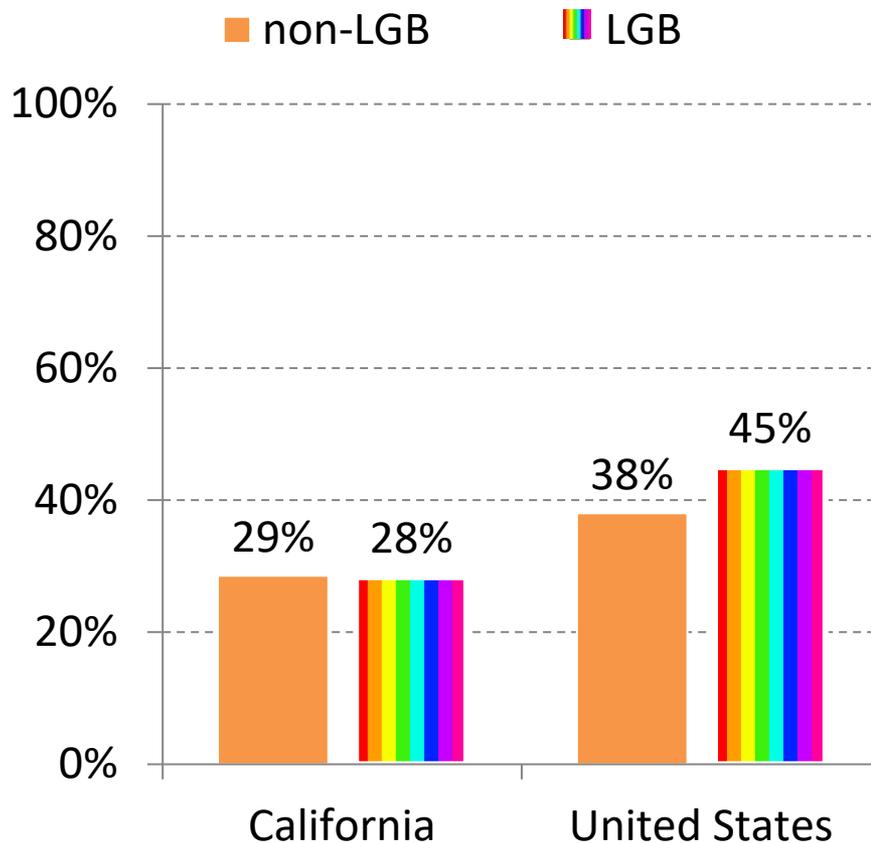


Except, Asian students report significantly lower percentages of ever having sex compared to other racial and ethnic groups.

To note, YRBS race/ethnicity response options are limited and Asian is a broad category. We are unable to assess differences across subgroups categorized as Asian.

*Have you ever had sexual intercourse?

LGB students* report higher rates of sexual activity** in the national survey, but not in California



- In California, there is no significant difference in the percentage of LGB versus non-LGB students who report ever having sex, however the number of LGB students surveyed was small.
- Nationally, a significantly higher percentage of LGB students report ever having sexual intercourse compared to non-LGB students.

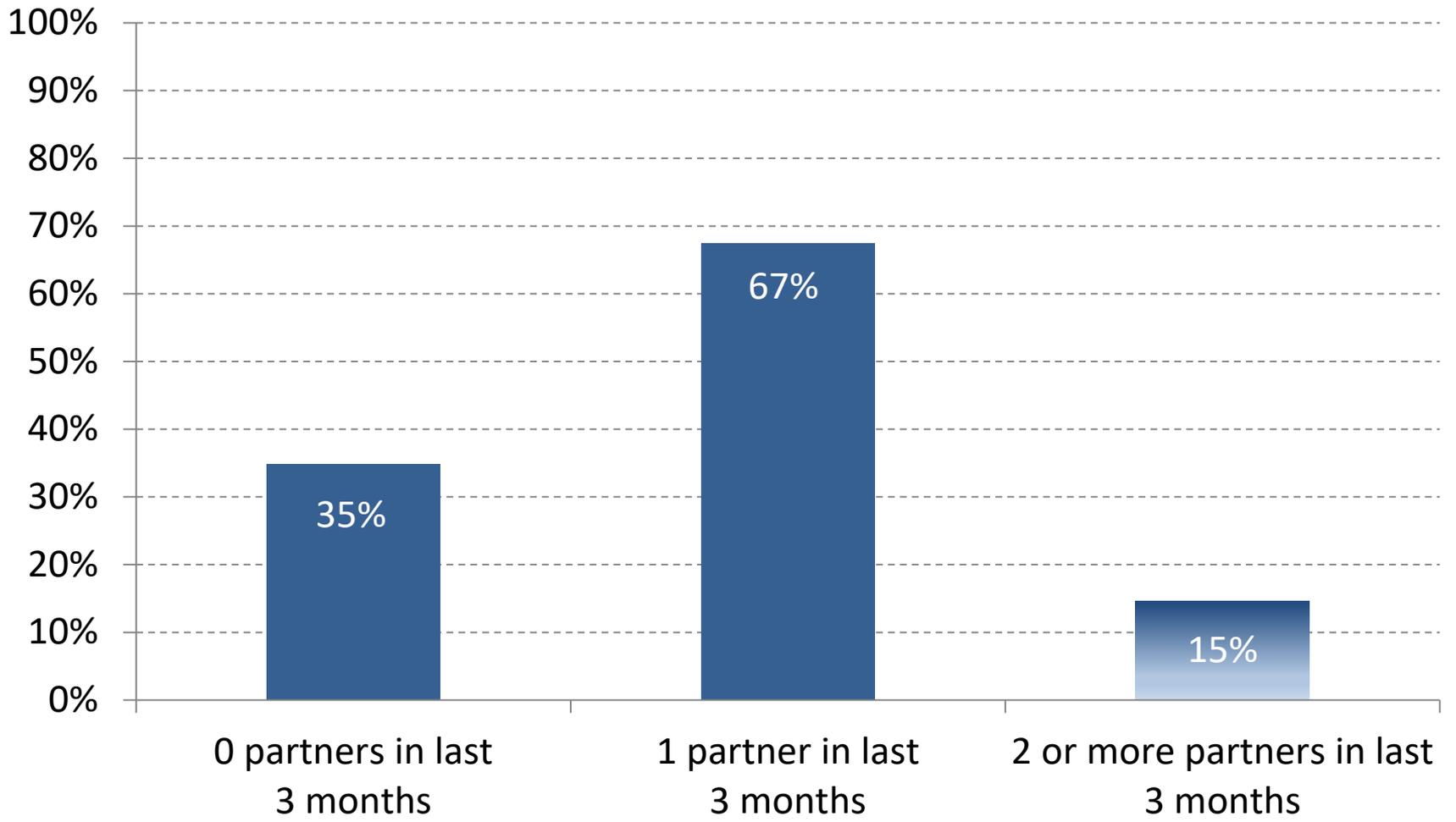
*Which of the following best describes you? (non-LGB=Heterosexual (straight); LGB=Gay or Lesbian, Bisexual, Not sure)

**Have you ever had sexual intercourse?



Preliminary data; not for further distribution.

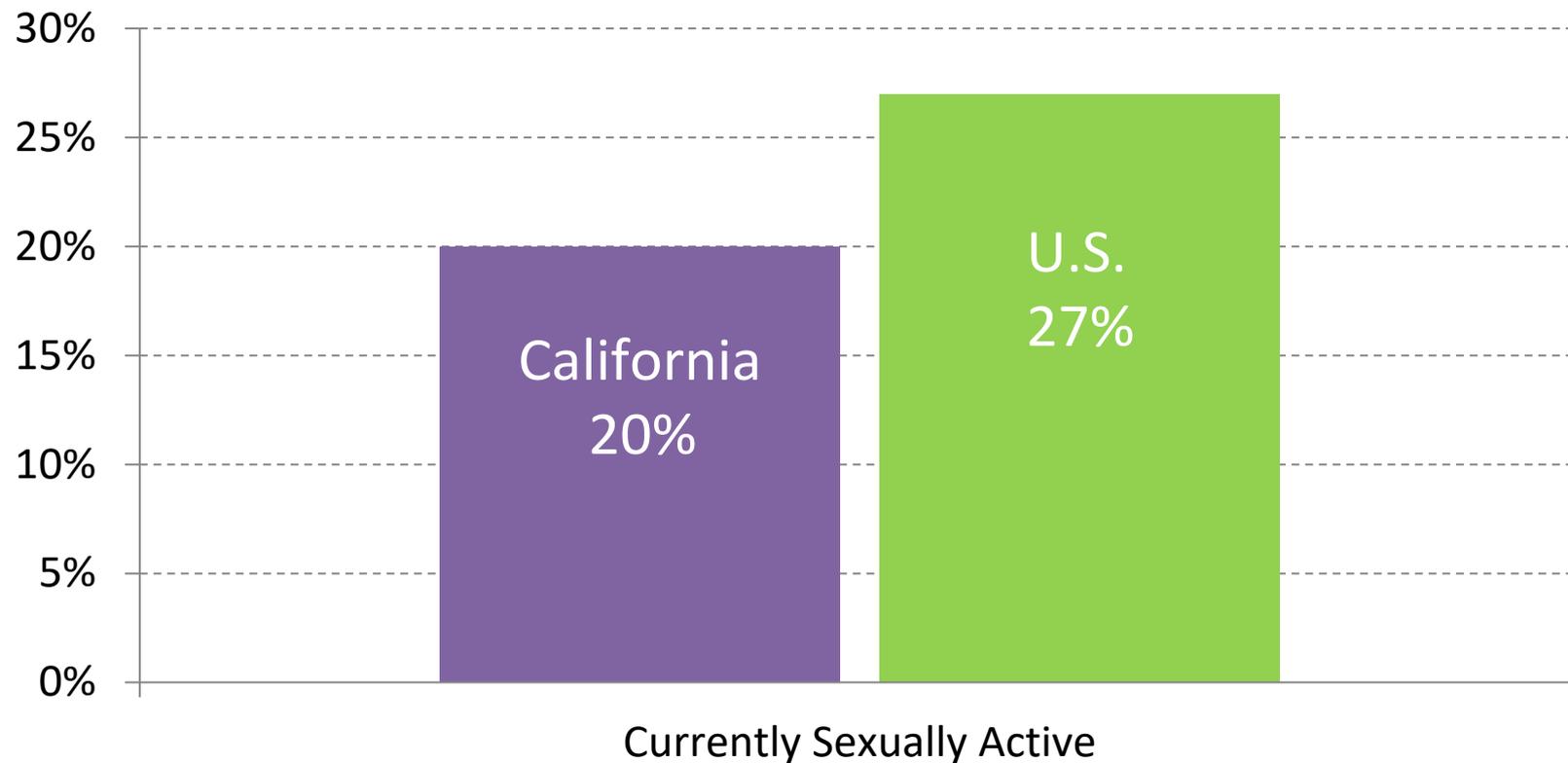
Among students who have ever had sex, most report having only one current partner*



*During the past 3 months, with how many people did you have sexual intercourse?



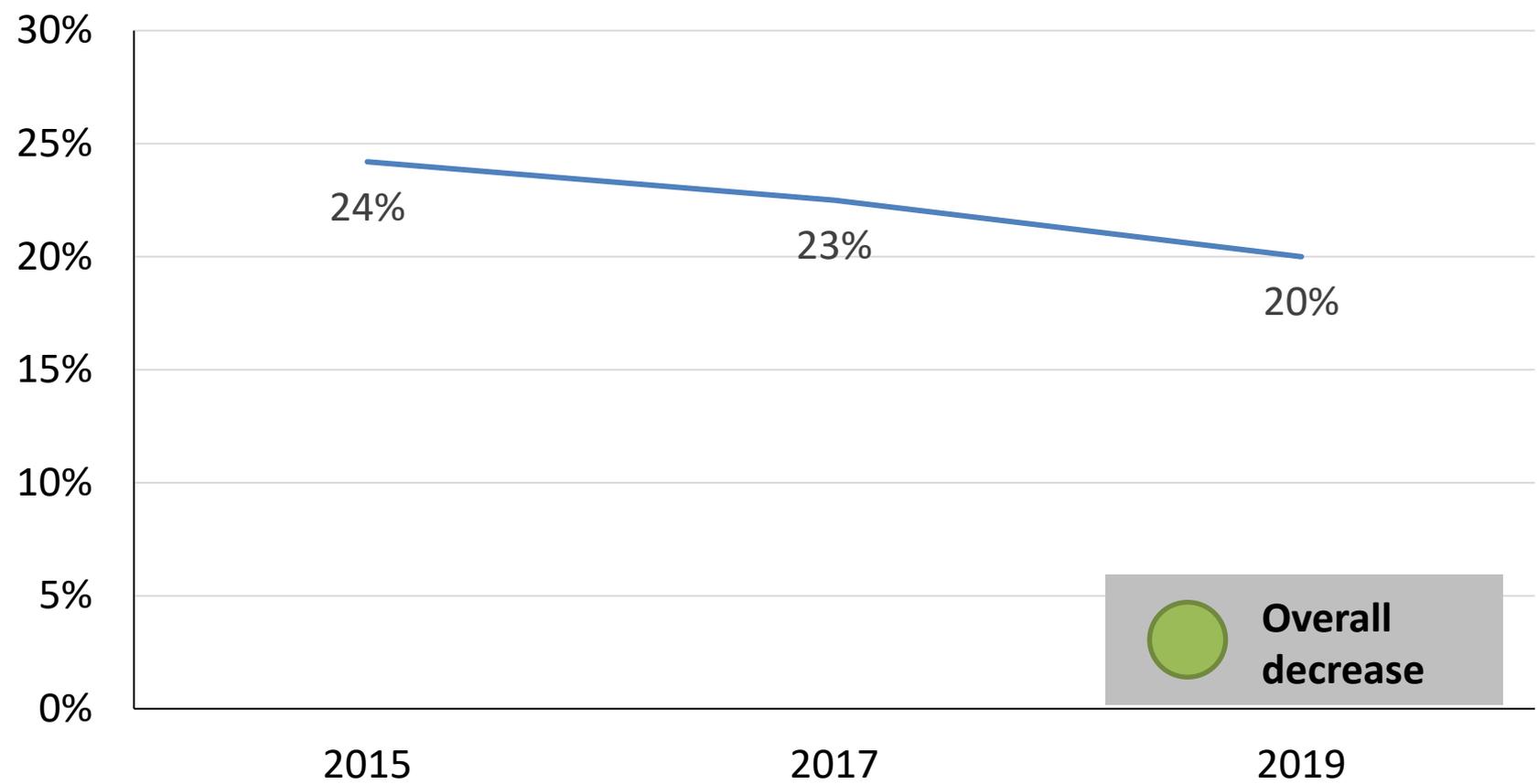
California students are less likely to report being currently sexually active* than students nationwide



*During the past 3 months, with how many people did you have sexual intercourse?

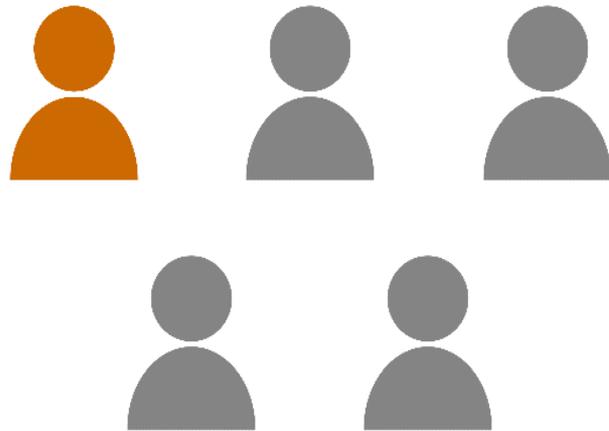


The percentage of California high school students who report being currently sexually active* has decreased over time



*During the past 3 months, with how many people did you have sexual intercourse?

About 1 in 5 sexually active students report sexual contact with partners of their same sex or with both sexes*

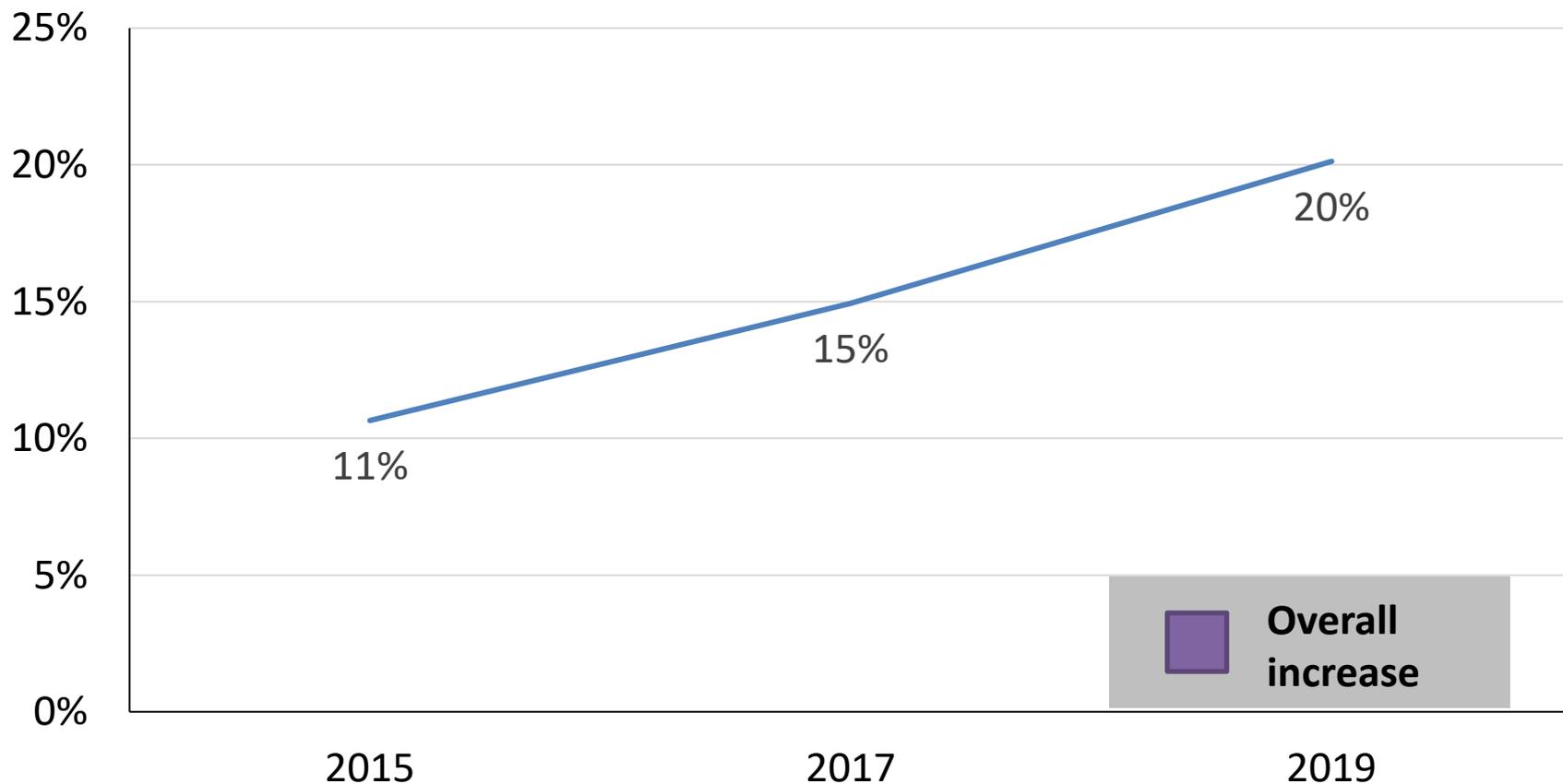


- The proportion of students reporting same sex or both sex partners is not significantly different between students identifying as female and male.

*During your life, with whom have you had sexual contact?



The percentage of high school students reporting sexual contact* with partners of same or both sexes** has increased over time



*Have you ever had sexual intercourse?

**During your life, with whom have you had sexual contact?



Trend Summary – Sexual Activity

| Percentage of High School Students Who: | 2015 | 2017 | 2019 | Trend |
|---|------|------|------|---|
| Ever Sexually Active | 32% | 32% | 28% |  |
| Currently Sexually Active | 24% | 23% | 20% |  |
| Had Sexual Contact with Partner of Same or Both Sexes Among Sexually Active | 11% | 15% | 20% |  |

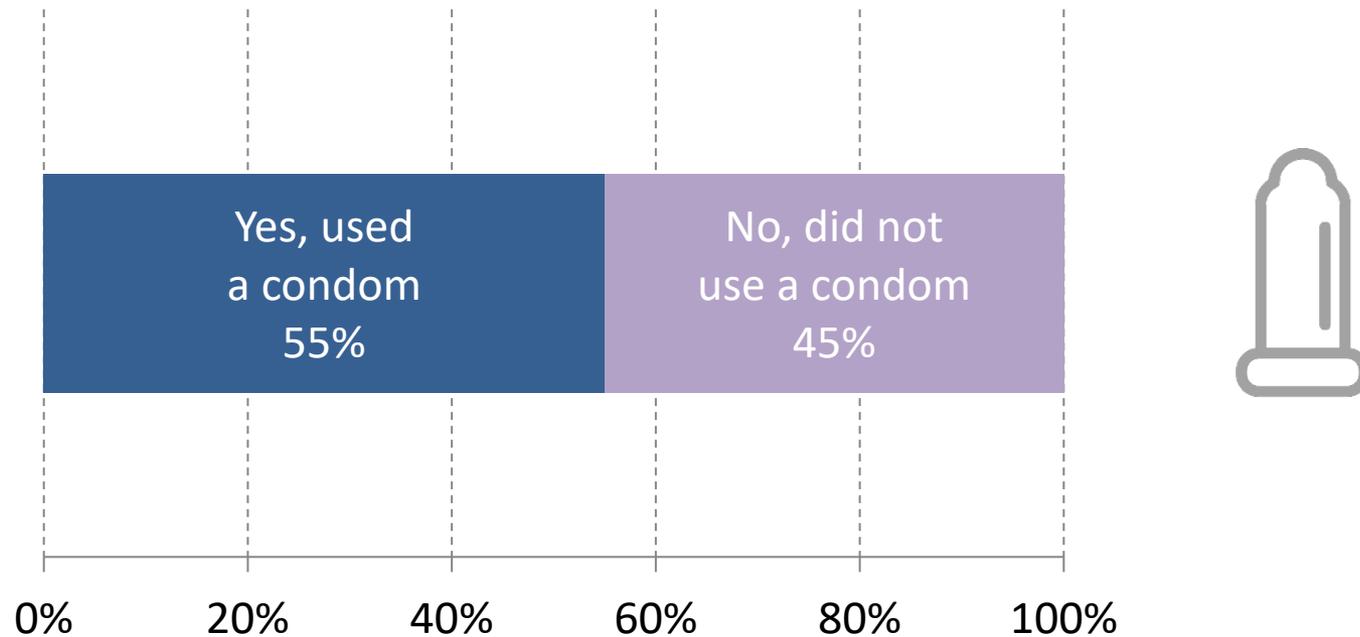
Trend Key

-  More protective direction
-  No change
-  Less protective direction
-  Increased
-  Decreased

What STD prevention behaviors are
youth engaging in?

California YRBS 2019

Just over half of currently sexually active students* report using a condom the last time they had sex**

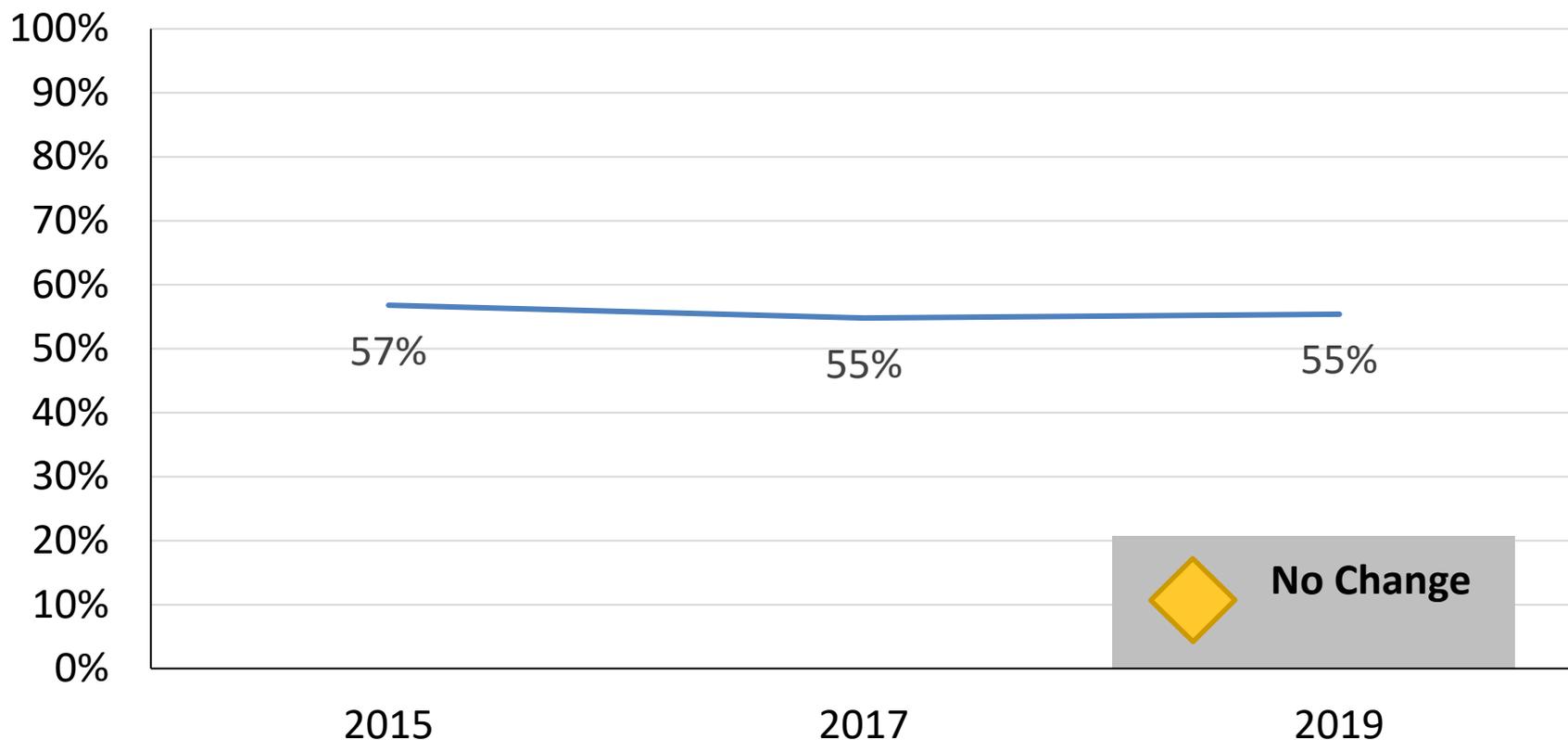


*During the past 3 months, with how many people did you have sexual intercourse?

**The last time you had sexual intercourse, did you or your partner use a condom?



There has been no change over time in the percentage of high school students who report using a condom* the last time they had sex**



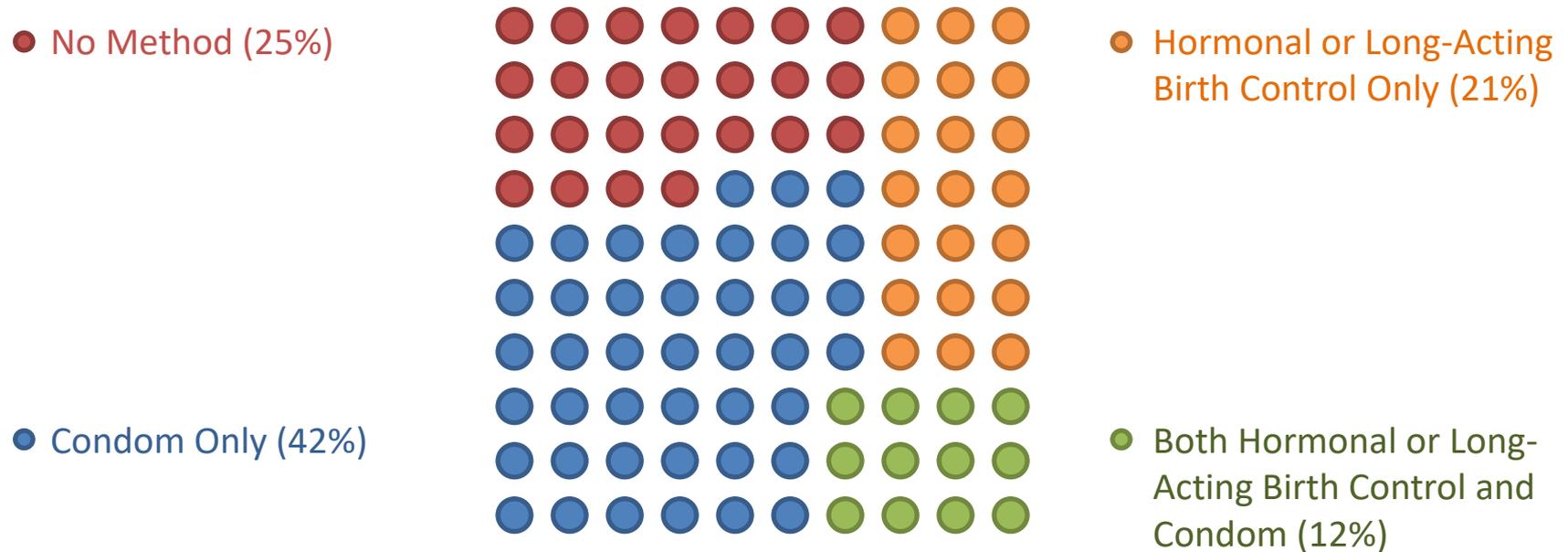
*The last time you had sexual intercourse, did you or your partner use a condom?

**During the past 3 months, with how many people did you have sexual intercourse?

What pregnancy and STD prevention methods do high school students report using*?

Out of all students, 20% are currently sexually active.

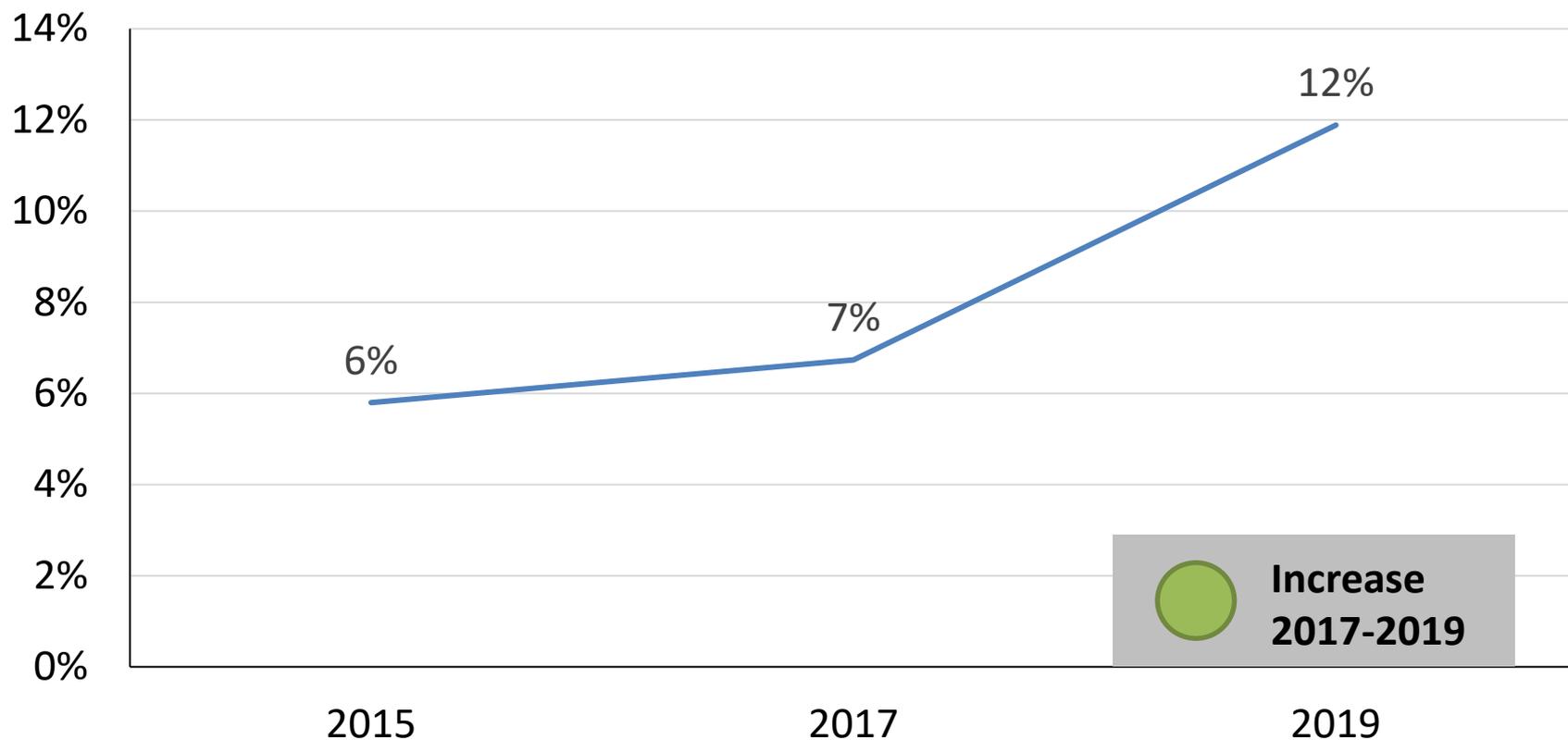
The last time these students had sex...



*The last time you had sexual intercourse, what one method did you or your partner use to prevent pregnancy? *and* The last time you had sexual intercourse, did you or your partner use a condom?



The percentage of high school students reporting use of both hormonal/long-acting birth control & condom during last sexual intercourse increased from 2017 to 2019 only*

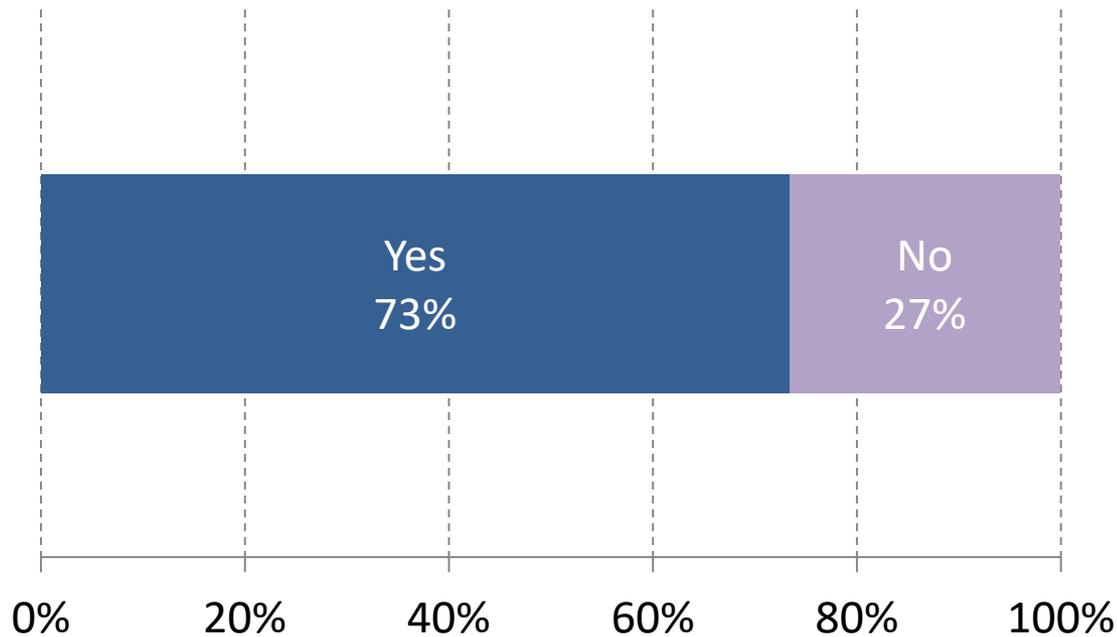


*The last time you had sexual intercourse, what one method did you or your partner use to prevent pregnancy? *and* The last time you had sexual intercourse, did you or your partner use a condom?

Source: 2015, 2017, 2019 California YRBS, weighted percentages



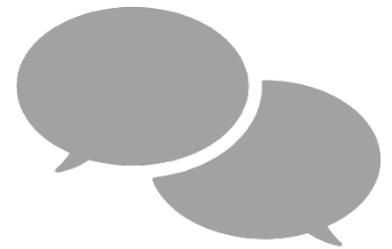
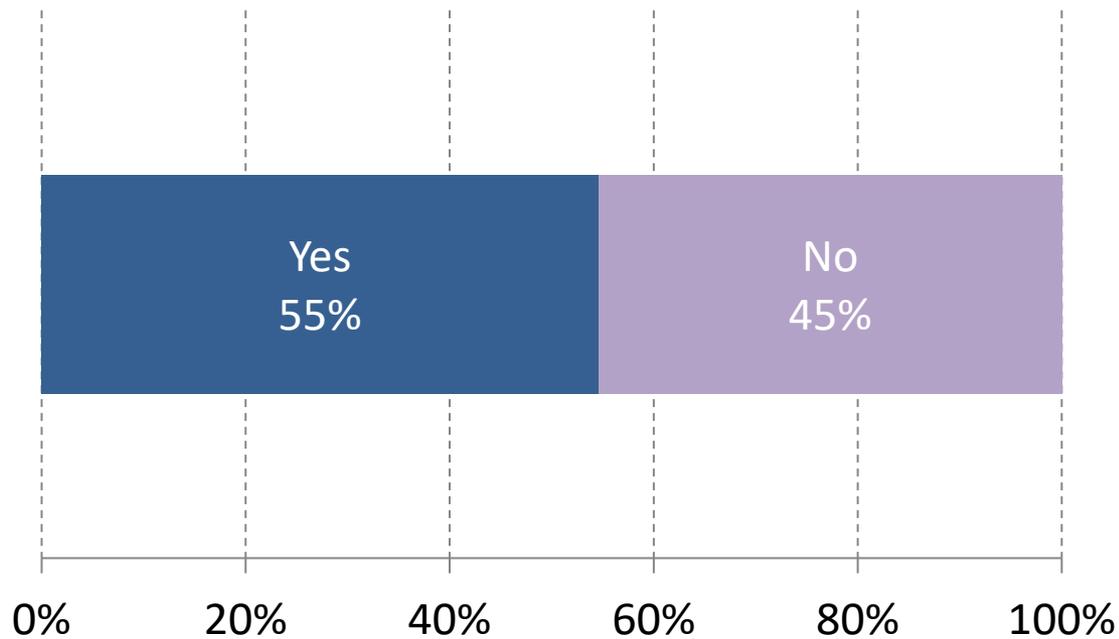
Almost 3 out of 4 high school students were taught in school where to access sexual health services*



*Have you ever been taught in school about where you could get sexual health services, such as birth control, condoms, or HIV or other sexually transmitted disease (STD) testing or treatment?



Just over half of students reported their parents or other adults in the family talked with them about their expectations around sex*

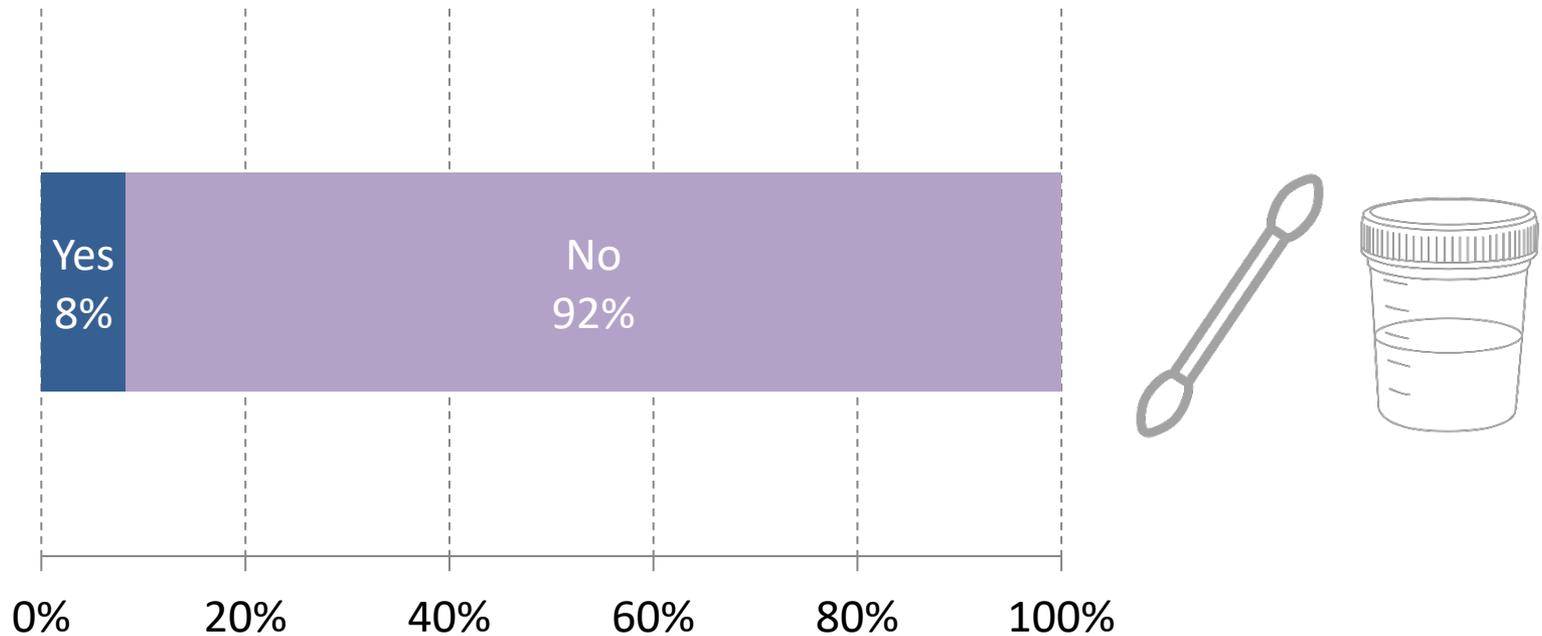


*Have your parents or other adults in your family ever talked with you about what they expect you to do or not to do when it comes to sex?



Less than 1 in 10 students were tested for an STD in the last 12 months*

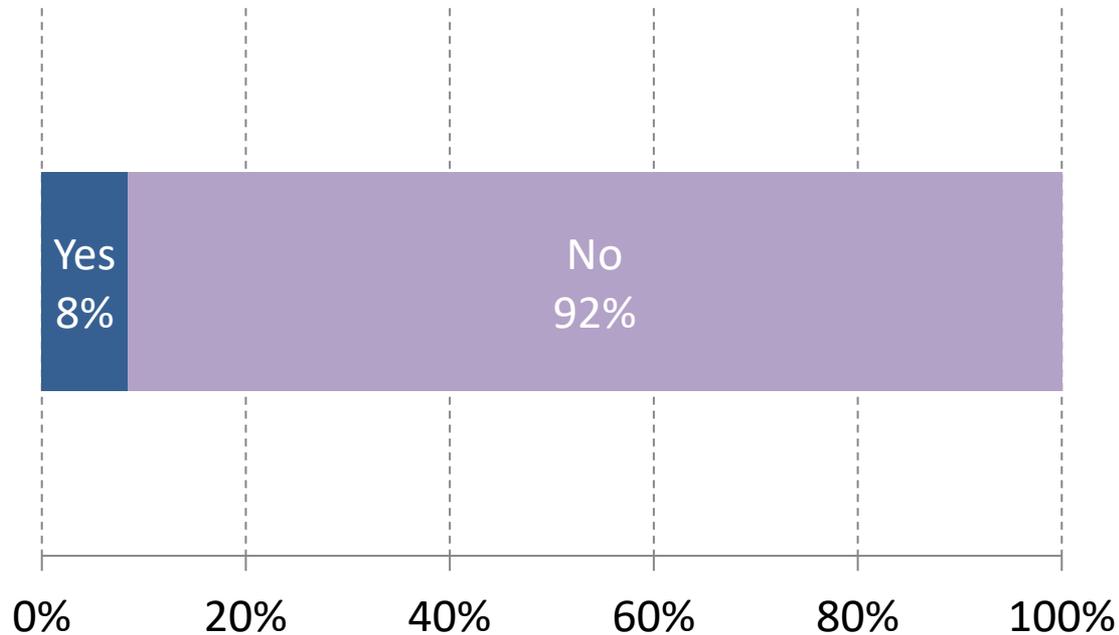
This is for all students. The percentage of students reporting testing does not change when looking just at students who are sexually active.



*During the past 12 months, have you been tested for a sexually transmitted disease (STD) other than HIV, such as chlamydia or gonorrhea?



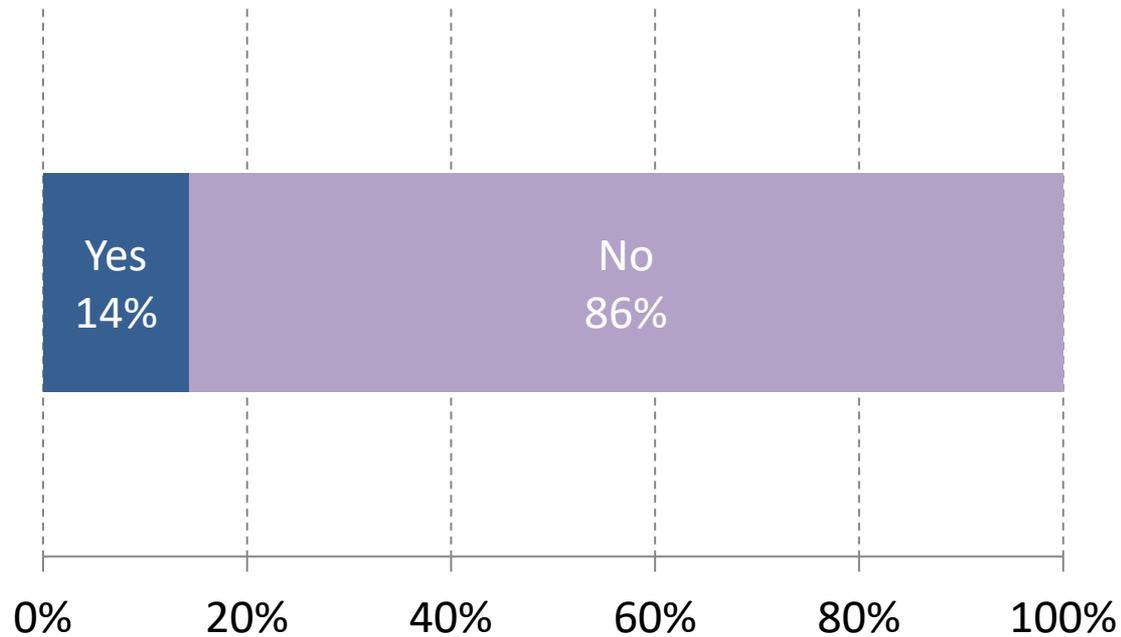
Among all students
about 1 in 12 has ever been tested for HIV*



*Have you ever been tested for HIV, the virus that causes AIDS? (Do **not** count tests done if you donated blood.)



Among sexually active students* more than 1 in 7 has ever been tested for HIV **

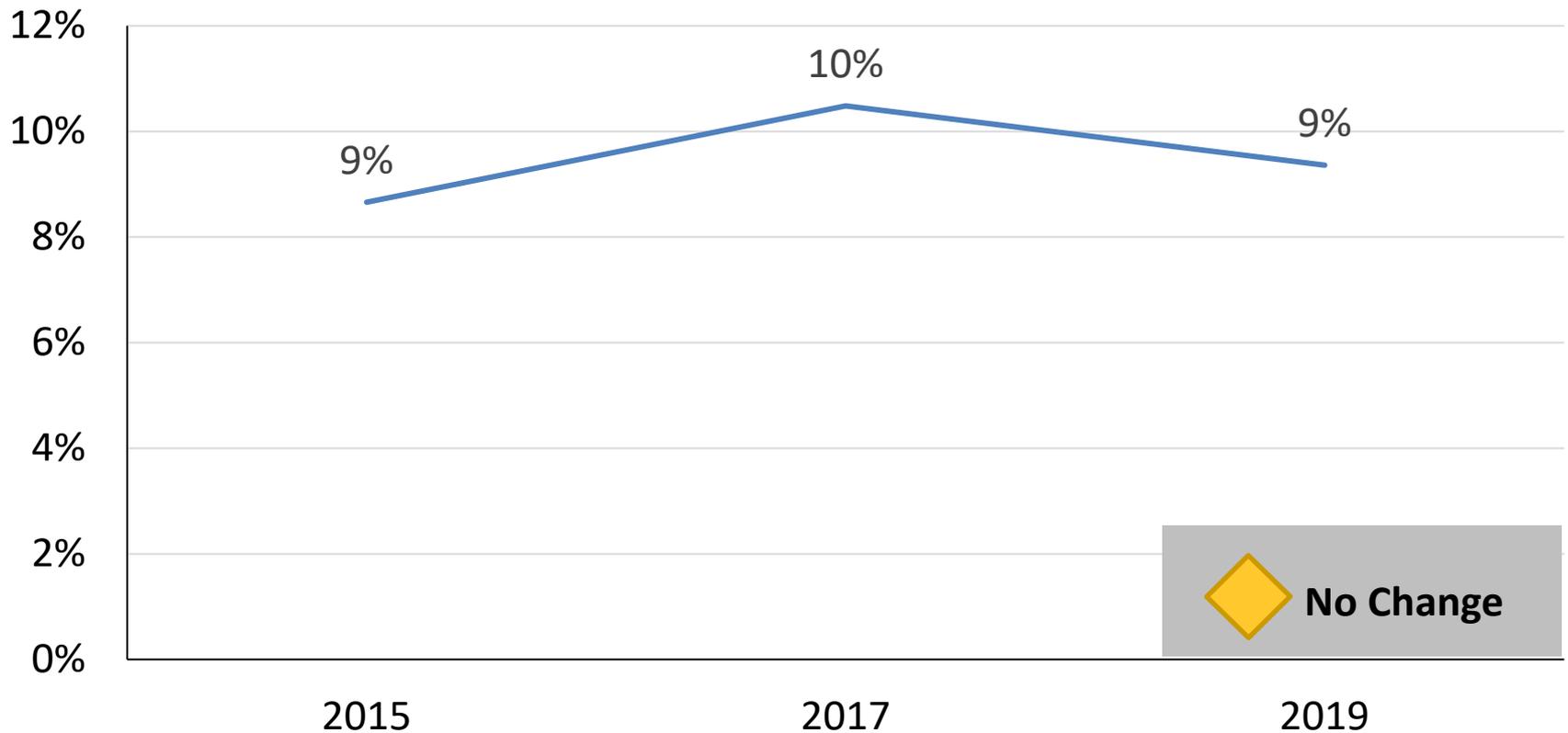


Have you ever been tested for HIV, the virus that causes AIDS? (Do **not count tests done if you donated blood.)

*Have you ever had sexual intercourse?



The percentage of all students who have ever been tested for HIV did not change over time*



*Have you ever been tested for HIV, the virus that causes AIDS? (Do **not** count tests done if you donated blood.)



Trend Summary – STD Prevention

| Percentage of High School Students Who: | 2015 | 2017 | 2019 | Trend |
|--|------|------|------|---|
| Used a condom during last sexual intercourse | 57% | 55% | 55% |  |
| Used both hormonal birth control and condoms during last intercourse | 6% | 7% | 12% |  |
| Ever HIV tested | 9% | 10% | 9% |  |

Trend Key

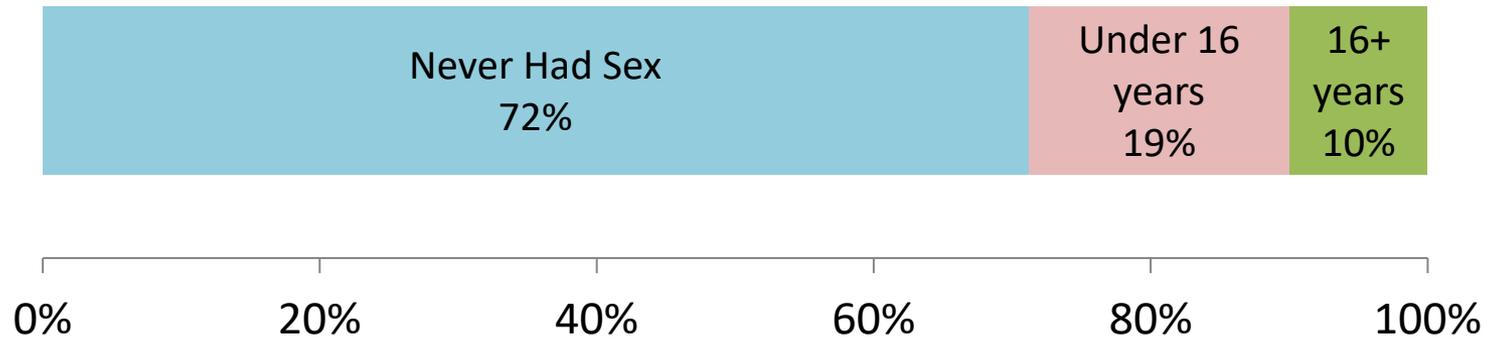
-  More protective direction
-  No change

How often are students engaging in behaviors that are known to increase the risk of STDs and unintended pregnancy?

California YRBS 2015, 2017, 2019

Early sexual debut:

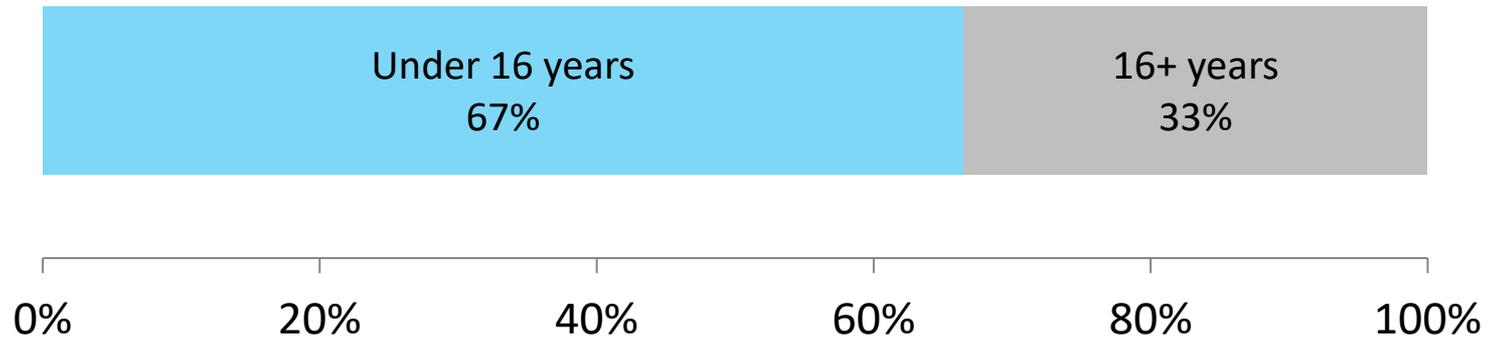
Among all students, about 2 in 10 report having sex for the first time before age 16*



*How old were you when you had sexual intercourse for the first time?

Early sexual debut:

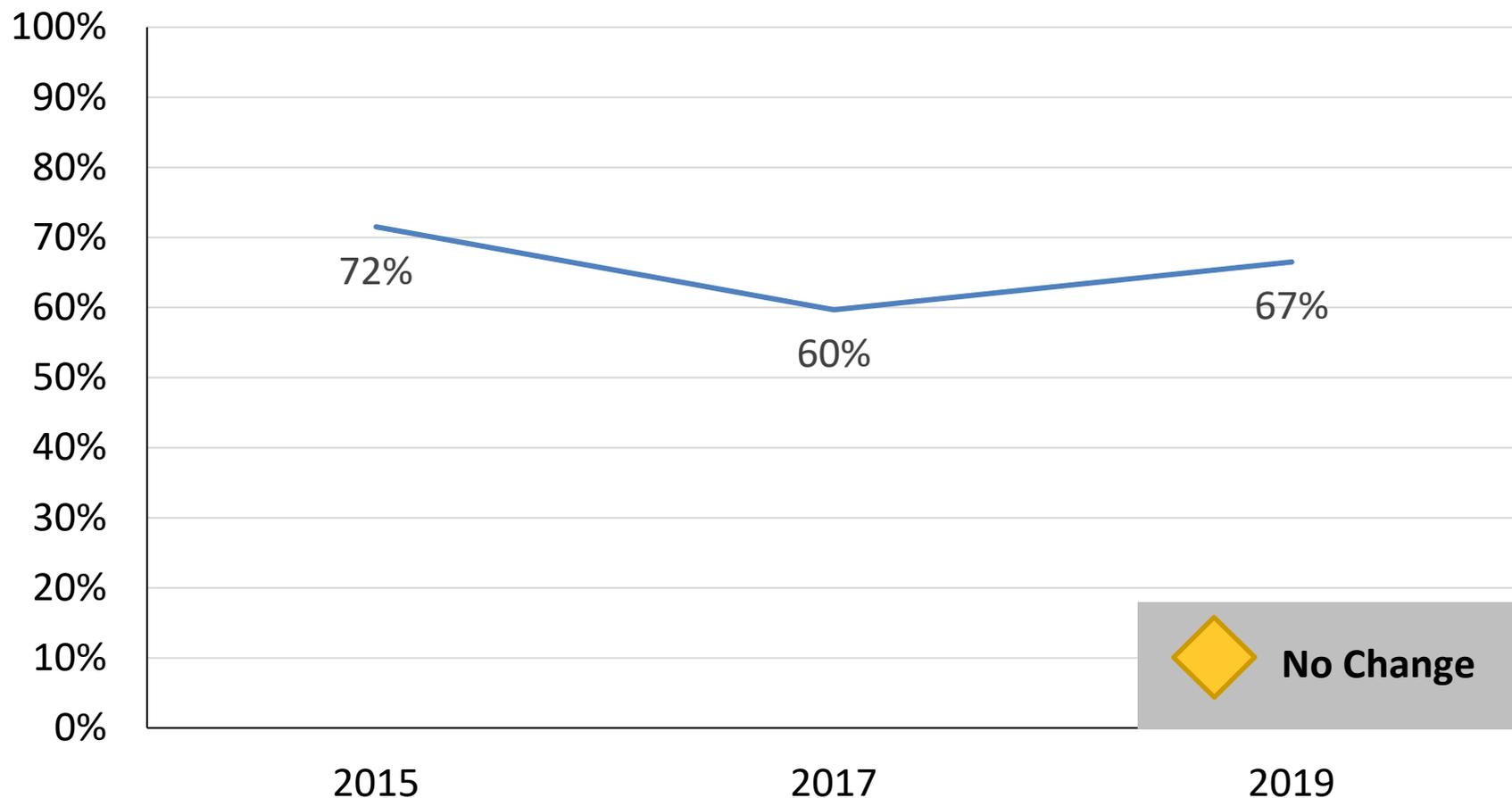
Among sexually active students, almost 2 in 3 report having sex for the first time before age 16*



*How old were you when you had sexual intercourse for the first time?



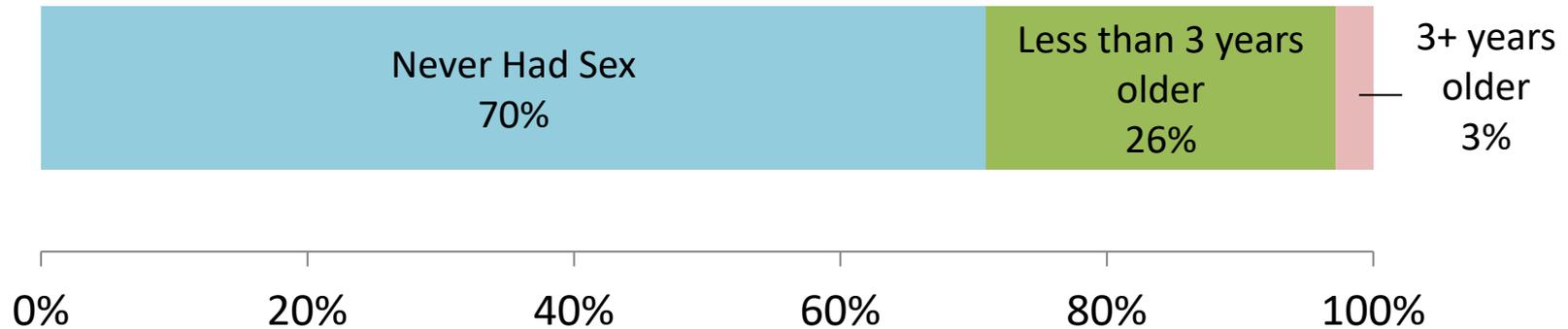
The percentage of sexually active high school students with a sexual debut before age 16 did not change over time*



*How old were you when you had sexual intercourse for the first time?

Older first sexual partner:

Among all students, fewer than 1 in 30 report that their first partner was 3+ years older*

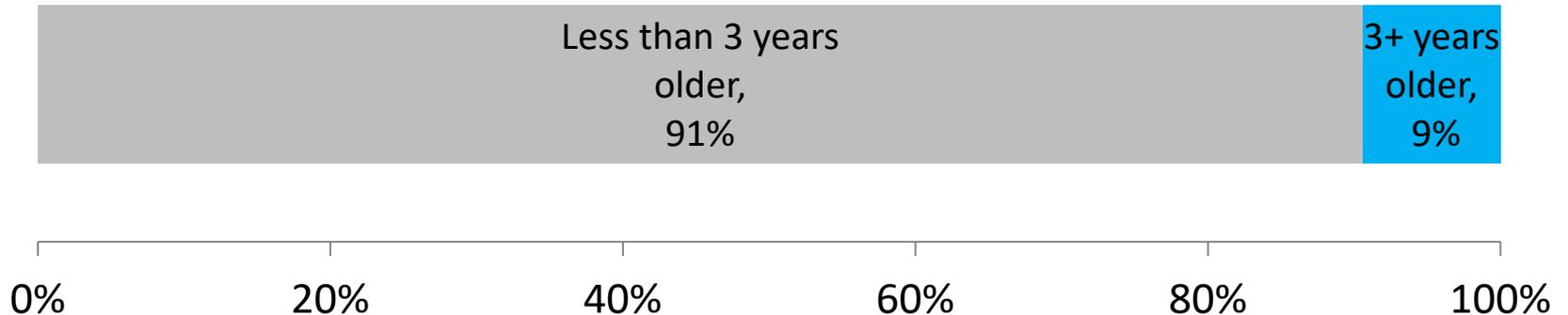


*The first time you had sexual intercourse, how many years younger or older than you was your partner?

Not shown: 1% "Not sure"

Older first sexual partner:

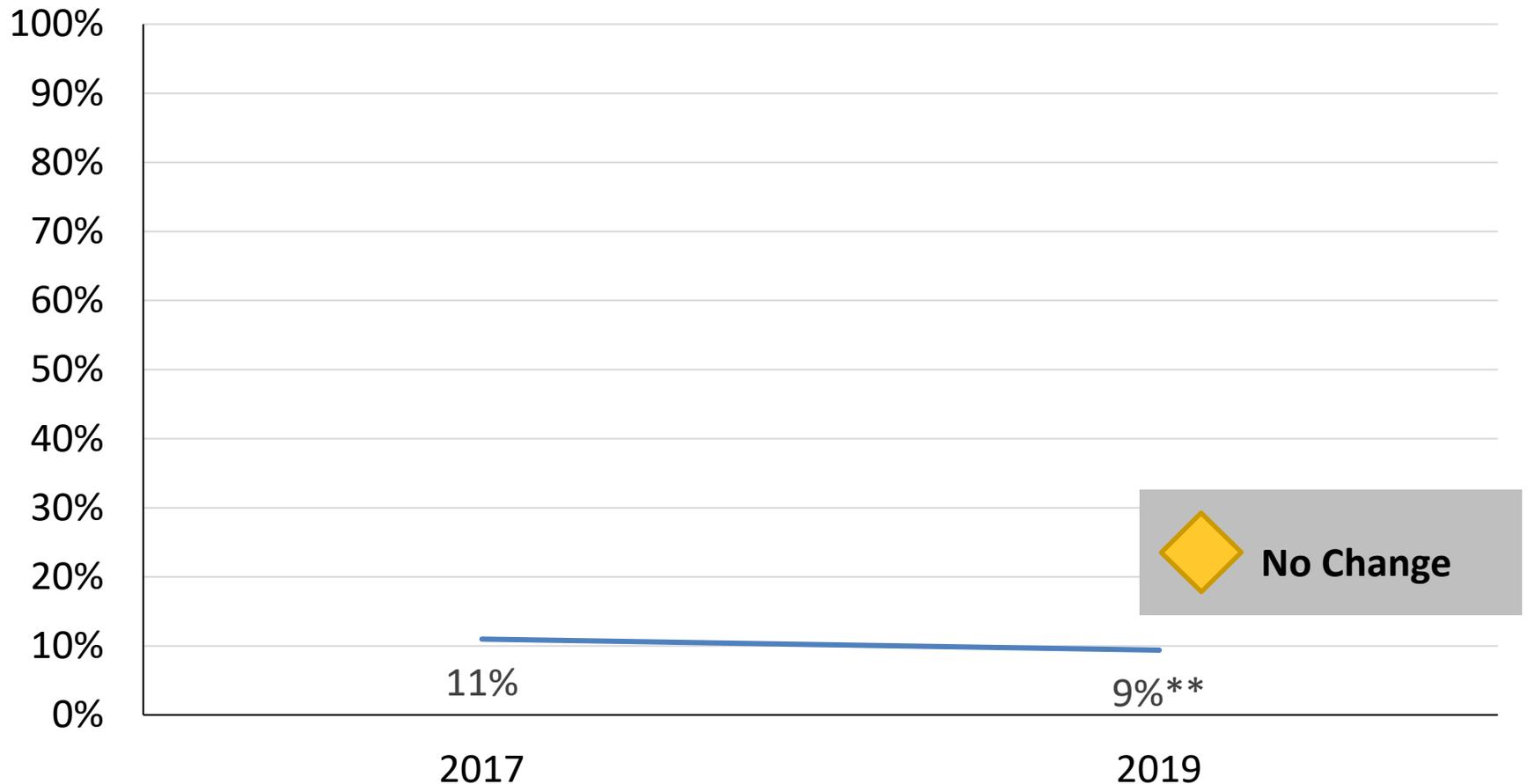
Among sexually active students, less than 1 in 10 report that their first partner was 3+ years older*



*The first time you had sexual intercourse, how many years younger or older than you was your partner?



The percentage of sexually active high school students reporting their first sexual partner was 3+ years older did not change over time*



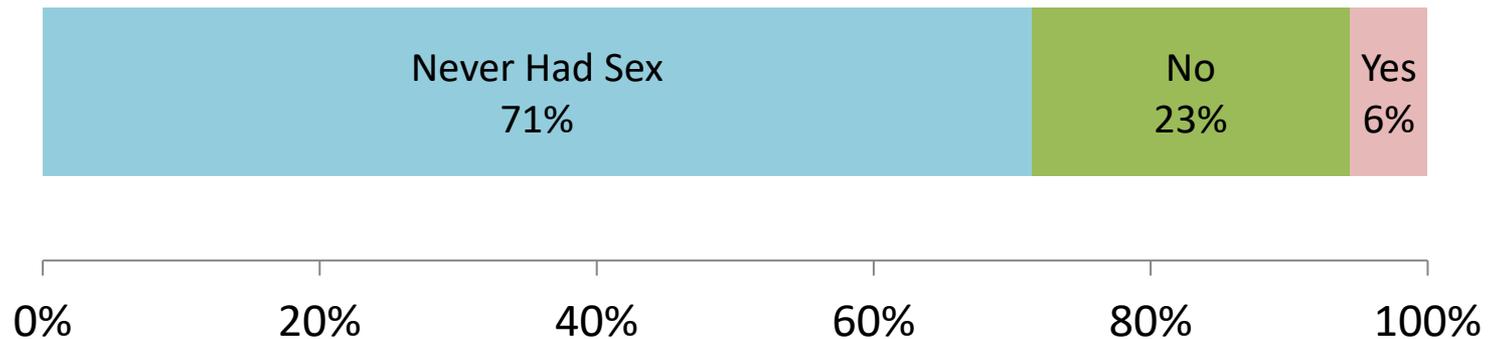
*The first time you had sexual intercourse, how many years younger or older than you was your partner?

**Only two data points are shown because question was not included in 2015 survey. Intention is to show trend data over time as more data is collected.

Source: 2017 & 2019 California YRBS, weighted percentages

Alcohol or drug use before sex:

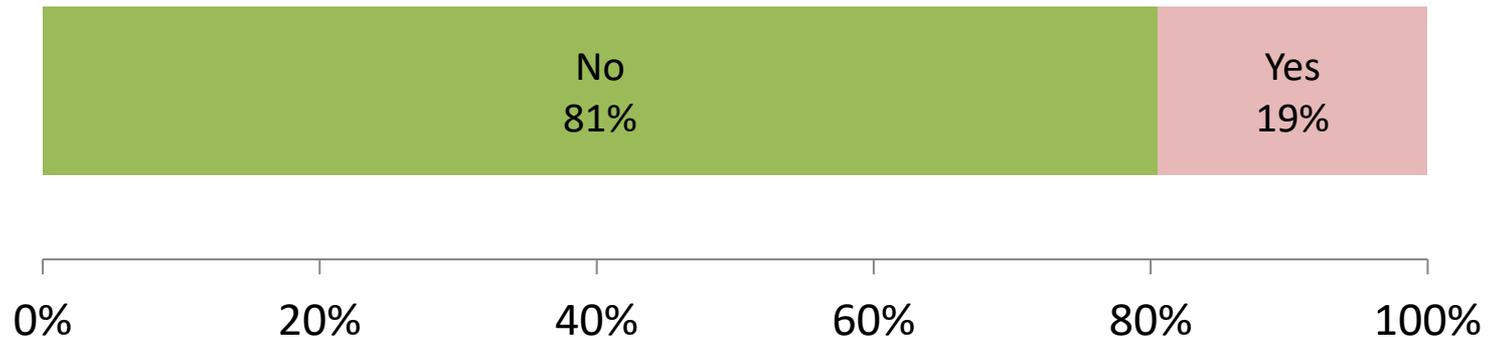
Among all students, about 1 in 20 report using substances before the last time they had sex*



*Did you drink alcohol or use drugs before you had sexual intercourse the last time?

Alcohol or drug use before sex:

Among currently sexually active students*, nearly 1 in 5 report using substances before the last time they had sex**

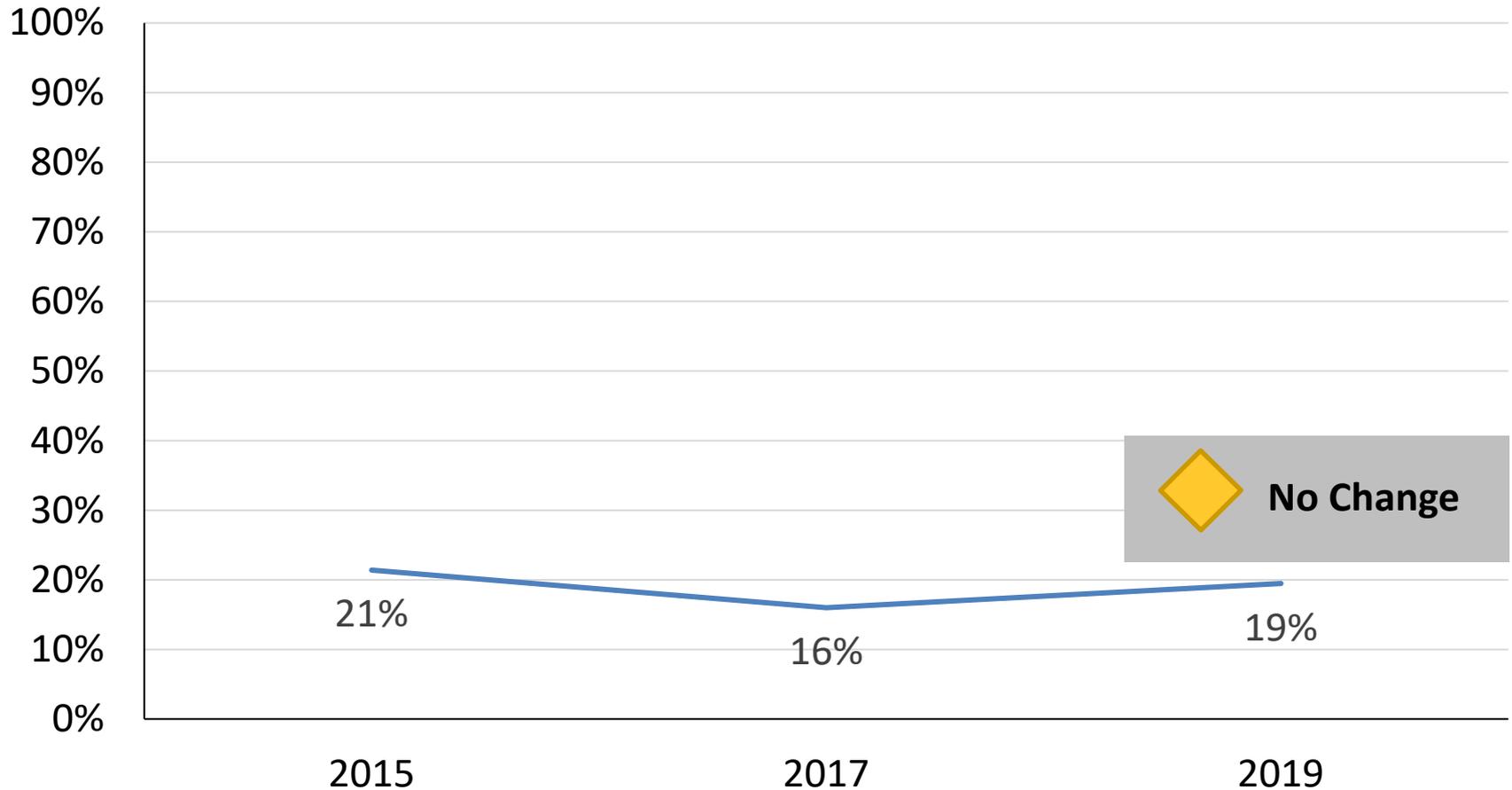


*During the past 3 months, with how many people did you have sexual intercourse?

**Did you drink alcohol or use drugs before you had sexual intercourse the last time?



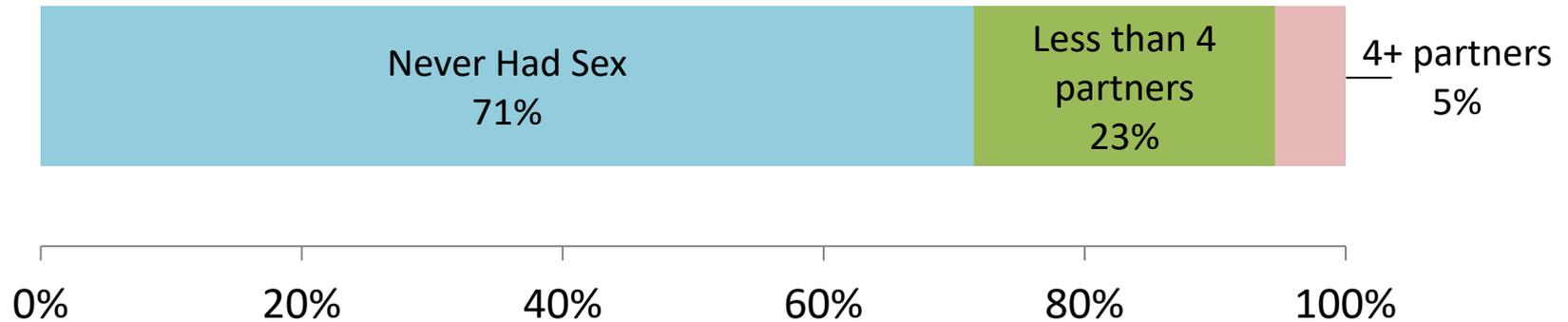
The percentage of sexually active high school students using alcohol or drugs before sex did not change over time*



*Did you drink alcohol or use drugs before you had sexual intercourse the last time?

Multiple sex partners:

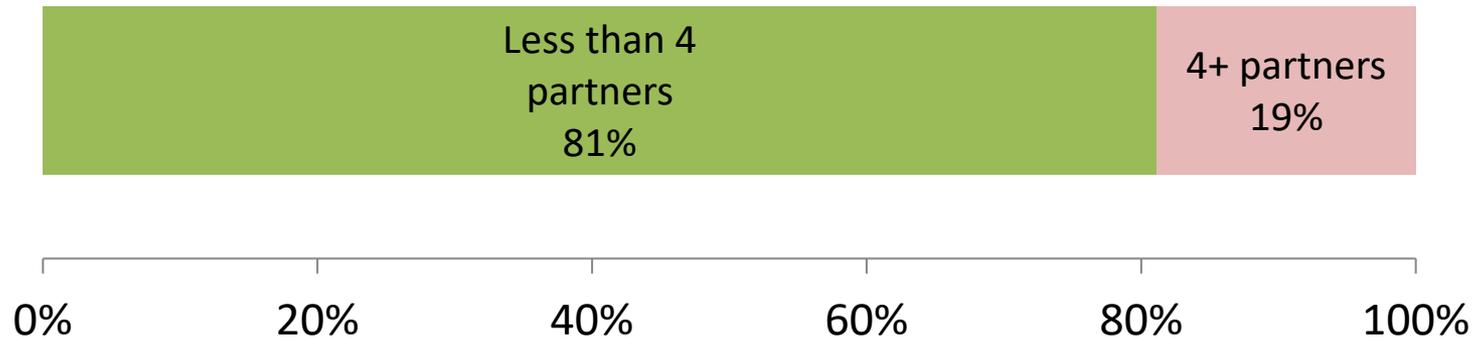
Among all students, about 1 in 20 report having sex with 4+ people during their lifetime*



*During your life, with how many people have you had sexual intercourse?

Multiple sex partners:

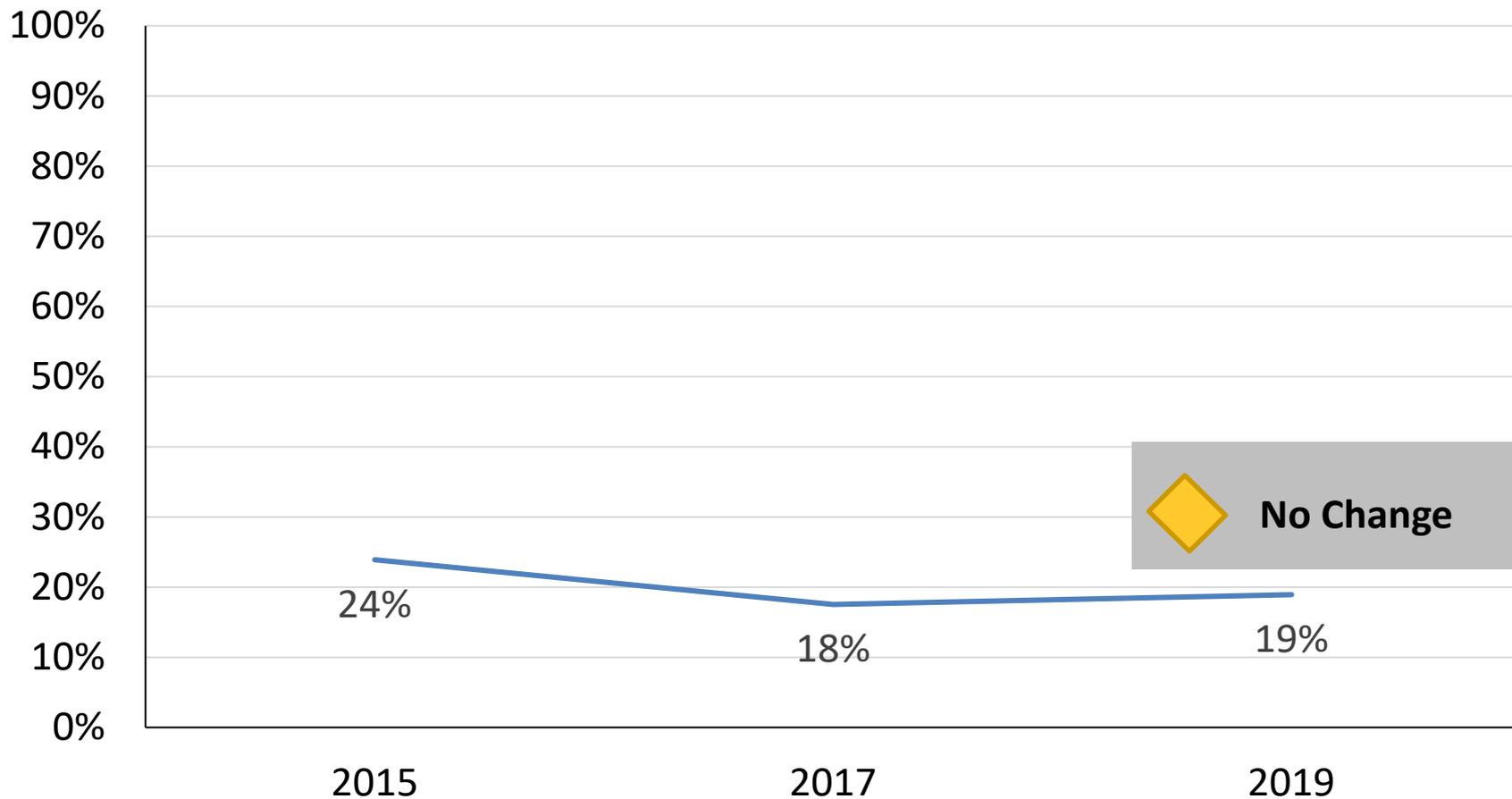
Among sexually active students,
almost 2 in 10 report 4+ lifetime partners*



*During your life, with how many people have you had sexual intercourse?



The percentage of high school students who reported more than 4 lifetime sex partners did not increase over time*



*During your life, with how many people have you had sexual intercourse?

As many as 1 in 20 high school students reported ever using a needle to inject an illegal drug*



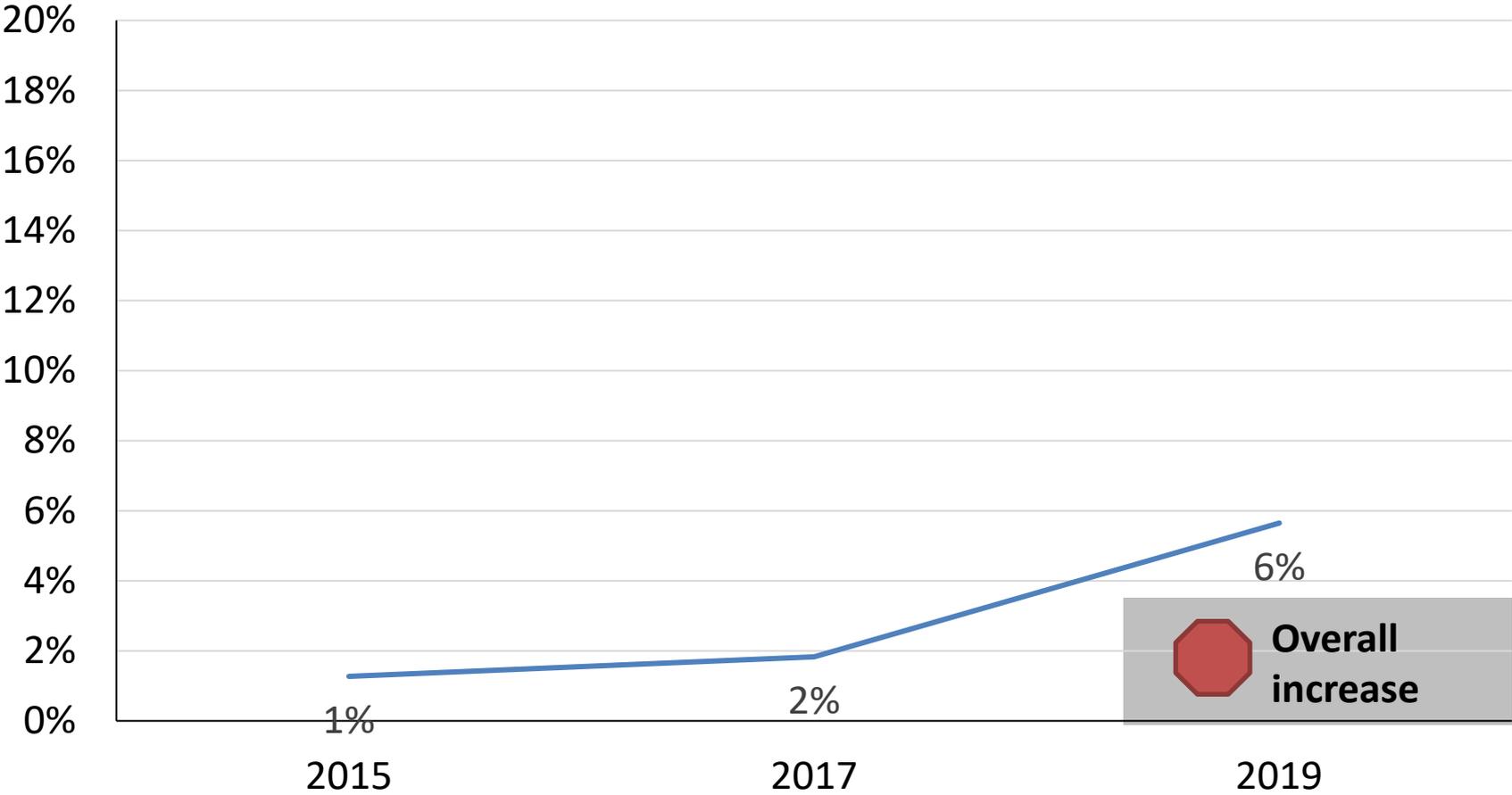
- The percentage of students reporting injection drug use is based on a small sample size and may be unstable.
- California's numbers are similar to national numbers.
- There are no differences in reported injection drug use by gender, grade in school, or sexual activity.

*During your life, how many times have you used a needle to inject any illegal drug into your body?



DID YOU KNOW? Injection drug use and sharing needles increases the risk of HIV and hepatitis C transmission

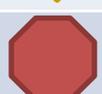
The percentage of high school students reporting injection drug use has increased over time*



*During your life, how many times have you used a needle to inject any illegal drug into your body?



Trend Summary – STD Risk Behavior

| Percentage of High School Students Who: | 2015 | 2017 | 2019 | Trend |
|---|------|------|------|---|
| Sexual debut before age 16 | 72% | 60% | 67% |  |
| First sexual partner 3+ years older | | 11% | 9% |  |
| Used alcohol or drugs before last sex | 21% | 16% | 19% |  |
| Had 4+ lifetime sexual partners | 24% | 18% | 19% |  |
| Ever injected illegal drugs | 1% | 2% | 6% |  |

Trend Key

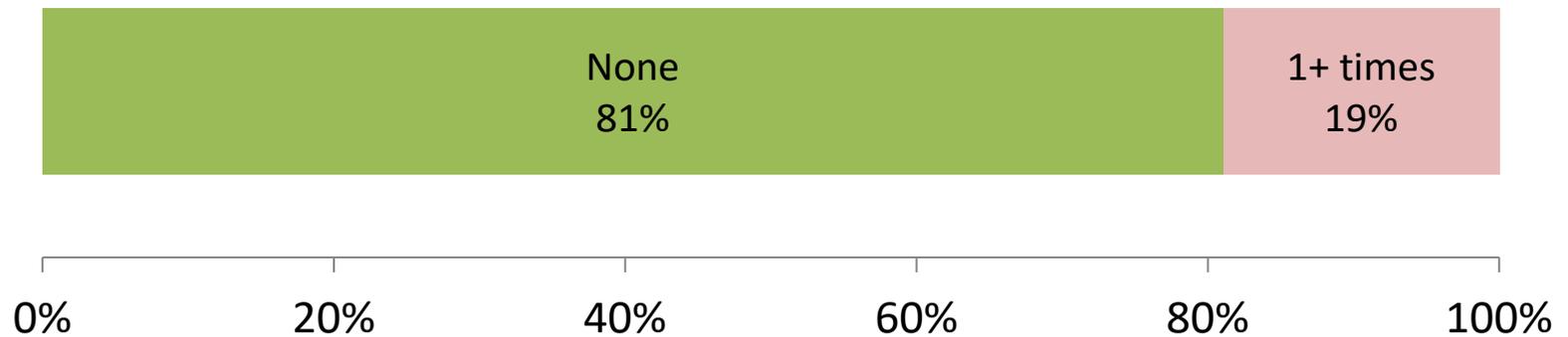
-  Less protective direction
-  No change

How often are students engaging in or experiencing sexual violence, dating violence, and bullying?

California YRBS 2015, 2017, 2019

Forced to do sexual things in the past year:

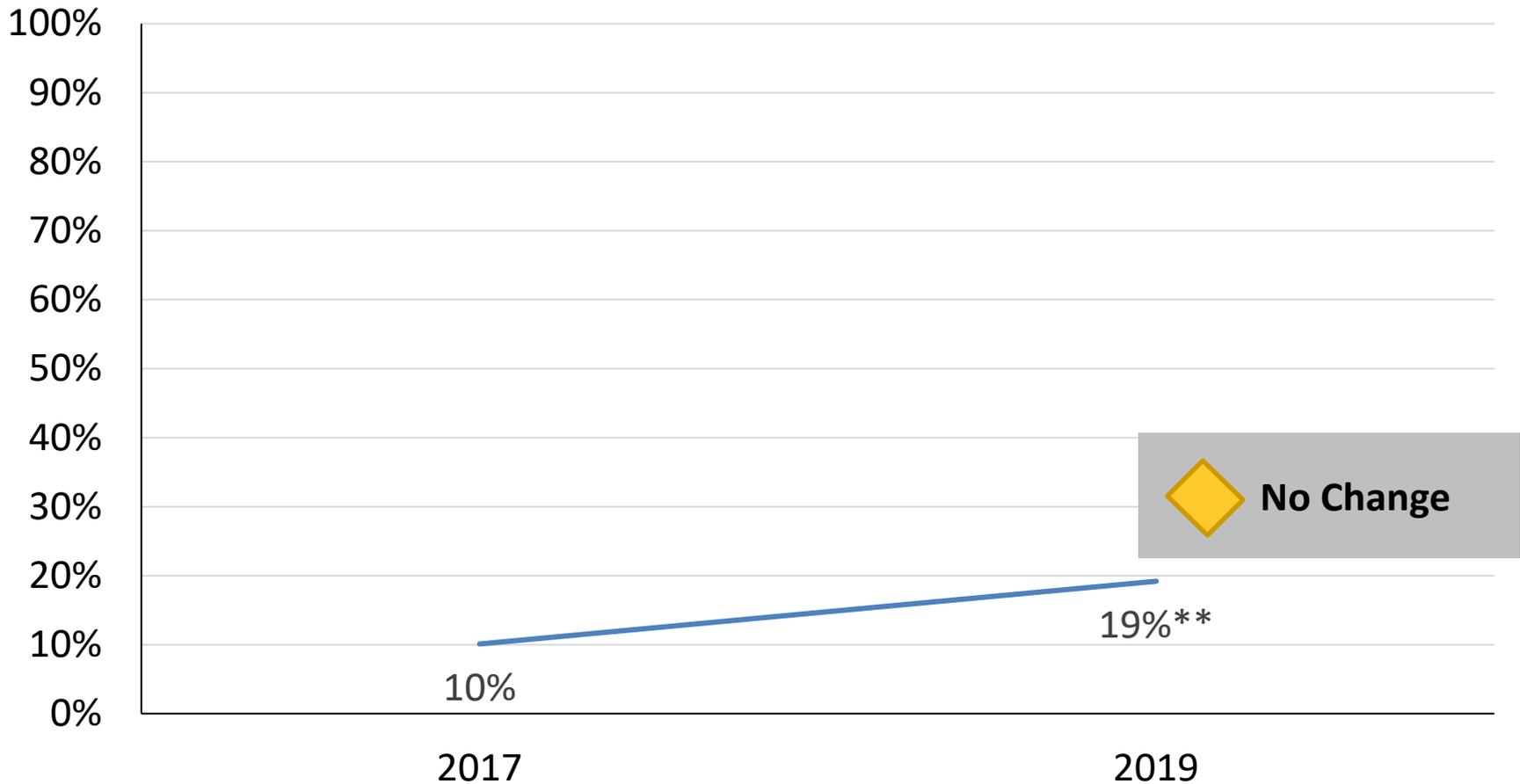
Among all students, 1 in 5 report that they have been forced to do sexual things when they did not want to*



*During the past 12 months, how many times did anyone force you to do sexual things that you did not want to do?



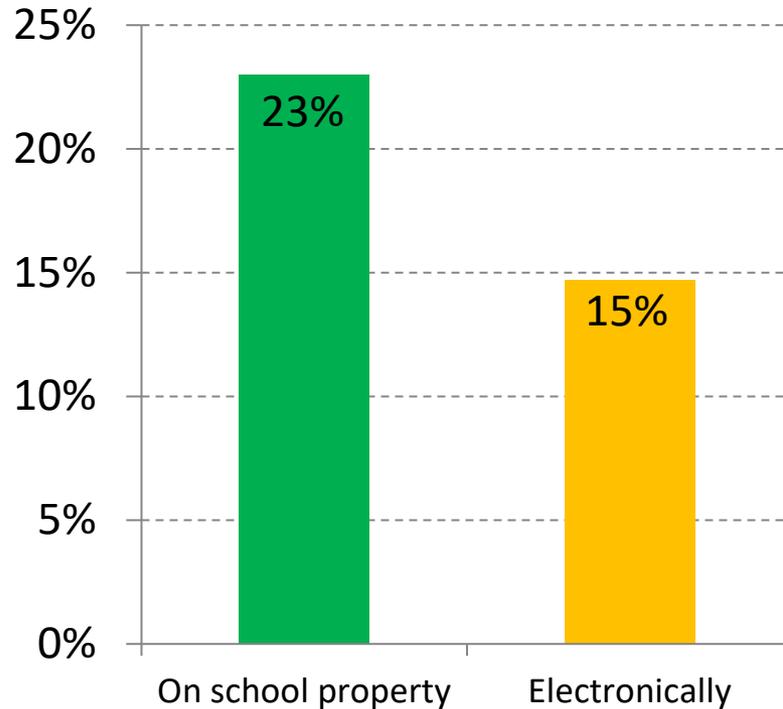
The percentage of high school students experiencing sexual violence has not increased over time*



*During the past 12 months, how many times did anyone force you to do sexual things that you did not want to do?
**Only two data points are shown because question was not included in 2015 survey. Intention is to show trend data over time as more data is collected.



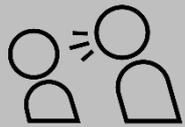
Bullying in the past year:



- 23% of students said they have been bullied on school property in the past 12 months*
- 15% of students said they had been electronically bullied in the past 12 months**

*During the past 12 months, have you ever been bullied on school property?

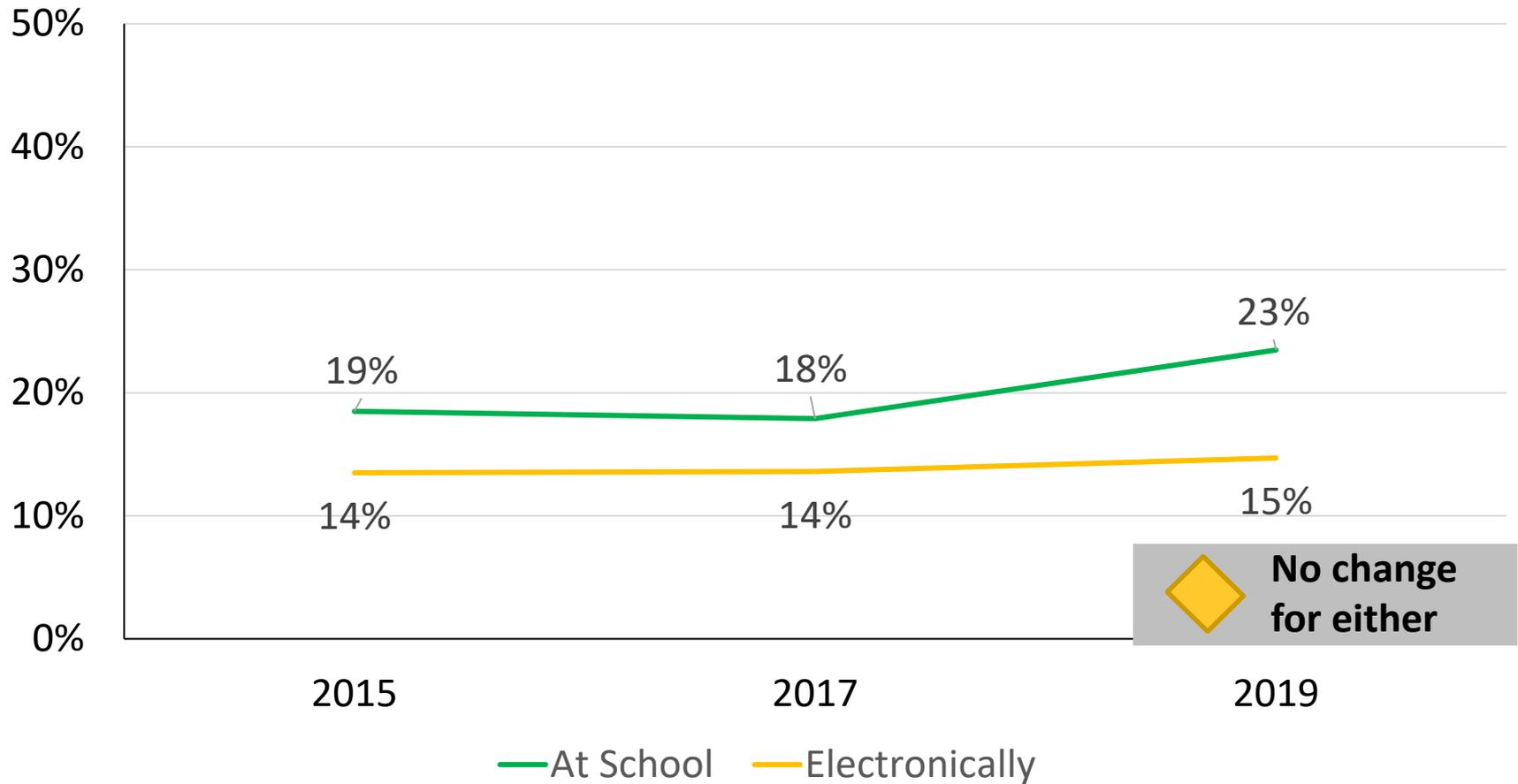
**During the past 12 months, have you ever been electronically bullied? (Count being bullied through texting, Instagram, Facebook, or other social media.)



DID YOU KNOW? Bullying is considered a precursor to sexual and teen dating violence both for perpetrators and victims.



The percentage of high school students experiencing at school* or electronic bullying has not increased over time**

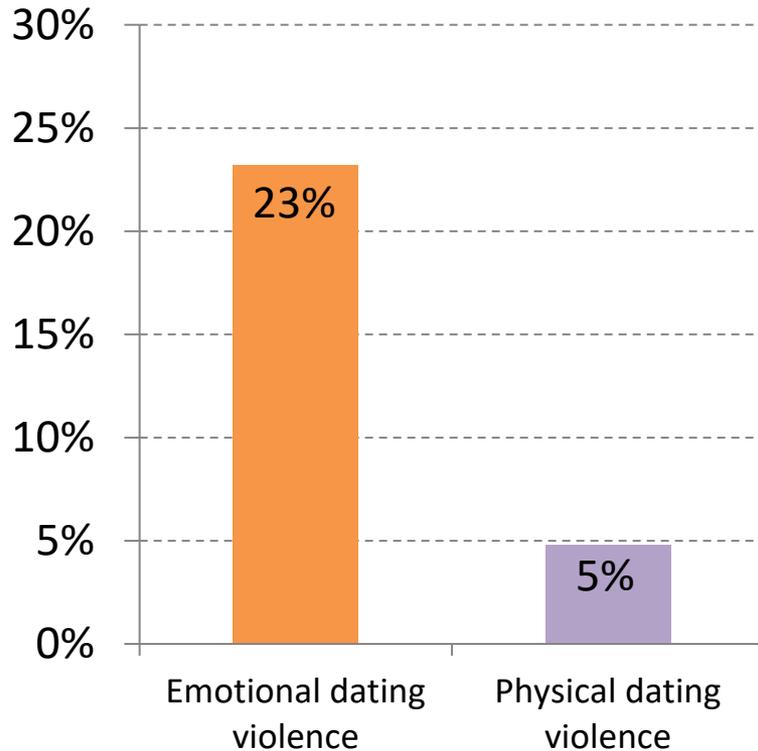


*During the past 12 months, have you ever been bullied on school property?

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

Source: 2015, 2017, 2019 California YRBS, weighted percentages

Dating violence victimization in the past year:



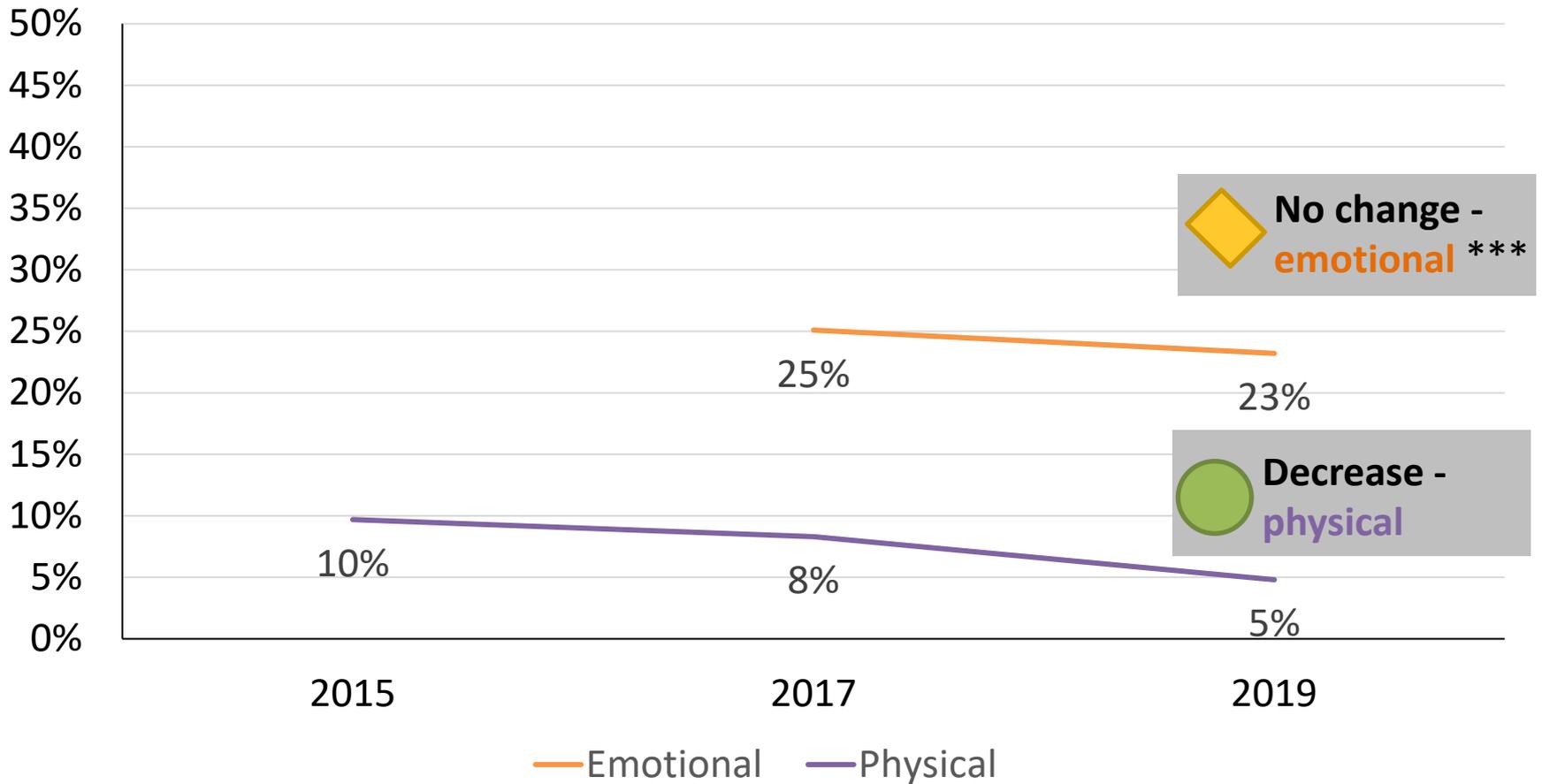
- Almost 1 in 4 students report that someone they had been dating had tried to control or emotionally hurt them during the past 12 months*
- 1 in 20 students reported that someone they had been dating physically had hurt them during the past 12 months**

*During the past 12 months, how many times did someone you were dating or going out with purposely try to control you or emotionally hurt you?

**During the past 12 months, how many times did someone you were dating or going out with physically hurt you on purpose?



The percentage of high school students experiencing physical dating* violence has decreased over time. There has been no change in students experiencing emotional dating violence**.



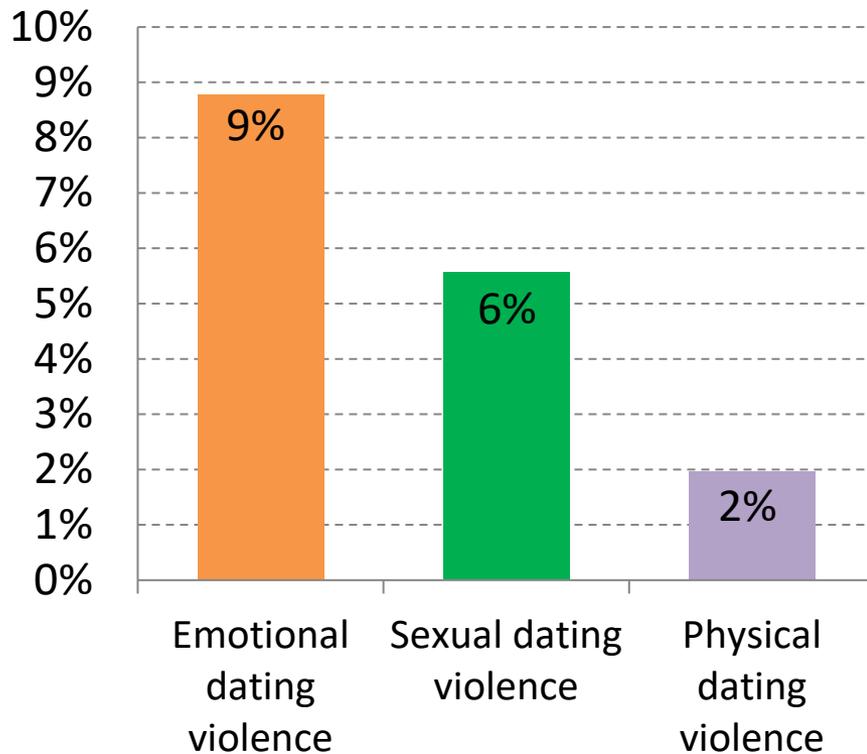
*During the past 12 months, how many times did someone you were dating or going out with purposely try to control you or emotionally hurt you?

**During the past 12 months, how many times did someone you were dating or going out with physically hurt you on purpose?

***Only two data points are shown because question was not included in 2015 survey. Intention is to show trend data over time as more data is collected.

Source: 2015, 2017, 2019 California YRBS, weighted percentages

Dating violence perpetration in the past year:



- Almost 1 in 10 students said they had tried to control or emotionally hurt someone they were dating in the past 12 months*
- Over 1 in 20 students said they had forced someone they were dating to do sexual things they did not want to do in the past 12 months**
- 1 in 50 students said they had physically hurt someone they were dating on purpose in the past 12 months^

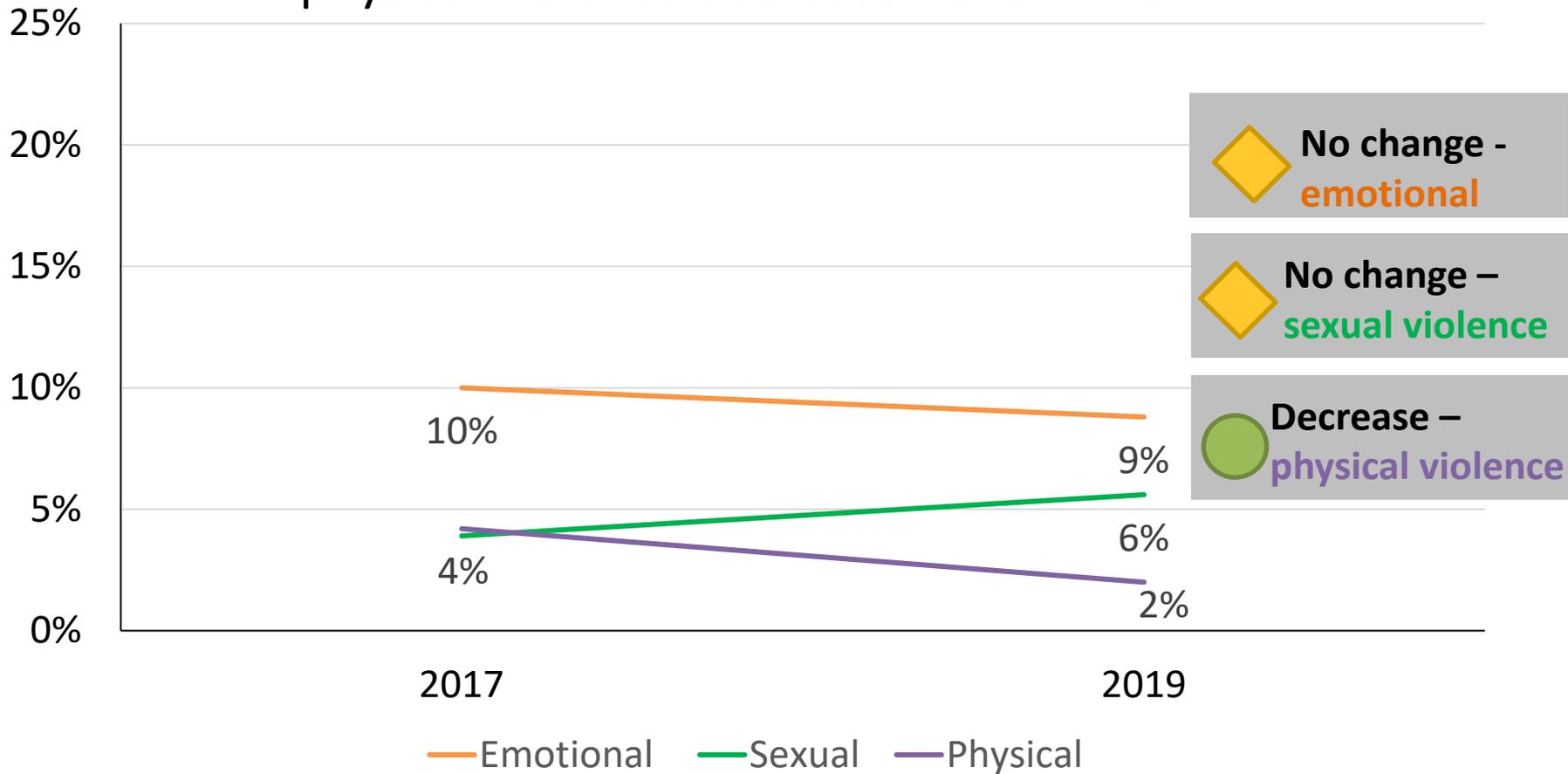
*During the past 12 months, how many times did you purposely try to control or emotionally hurt someone you were dating or going out with?

**During the past 12 months, did you ever force someone you were dating or going out with to do sexual things that they did not want to do?

^During the past 12 months, how many times did you physically hurt on purpose someone you were dating or going out with?



There has been no change in the percentage of high school students perpetrating emotional* and sexual violence** over time. The percentage of high school students perpetrating physical violence decreased over time^.



*During the past 12 months, how many times did you purposely try to control or emotionally hurt someone you were dating or going out with?

**During the past 12 months, did you ever force someone you were dating or going out with to do sexual things that they did not want to do?

^ During the past 12 months, how many times did you physically hurt on purpose someone you were dating or going out with?

^^ Only two data points are shown because question was not included in 2015 survey. Intention is to show trend data over time as more data is collected.

Source: 2015, 2017, 2019 California YRBS, weighted percentages



Trend Summary – Bullying and Sexual Violence, Experiencing Sexual or Dating Violence

| Percentage of High School Students Who: | 2015 | 2017 | 2019 | Trend |
|---|------|------|------|---|
| Experienced sexual violence | | 10% | 19% |  |
| Experienced bullying at school | 19% | 18% | 23% |  |
| Experienced emotional dating violence | | 25% | 23% |  |
| Experienced physical dating violence | 10% | 8% | 5% |  |

Trend Key

-  More protective direction
-  No change

Source: 2015, 2017, 2019 California YRBS, weighted percentages

Trend Summary – Perpetration of Dating Violence

| Percentage of High School Students Who: | 2015 | 2017 | 2019 | Trend |
|---|------|------|------|---|
| Perpetrated emotional dating violence | | 10% | 9% |  |
| Perpetrated sexual dating violence | | 4% | 6% |  |
| Perpetrated physical dating violence | | 4% | 2% |  |

Trend Key

 More protective direction

 No change

Resources

- [Youth Online](#) – data analysis tool for national, state, and local YRBS data
- [ASHWG.org/data](#) – related data products analyzing adolescent sexual health outcomes
- [STD Control Branch data webpage](#) – California specific STD data
- [MCAH Adolescent Health Data and Statistics](#)- California specific data on adolescent birth rates and other sexual health outcomes
- [CA Dept of Education YRBS webpage](#) – information on California YRBS survey administration

Note: Next YRBS data collection data collection will be in Fall of 2021 with data available in Spring of 2022